

HAMMERS CONSTRUCTION, INC.

1411 Woolsey Heights • Colorado Springs, Colorado 80915-5400 (719) 570-1599 • FAX (719) 570-7008 • www.hammersconstruction.com • SPECIALIZING IN DESIGN / BUILD •

REVISION RESPONSE LETTER

RE: BC Smith Inc. DBA Crackerjack Mud Jacking

Site Development Plan File Number PPR-17-031

DATE: August 23, 2017

TO: Gabe Sevigny

Project Manager Development Review

El Paso County Development Services 2880 International Circle, Suite 110 Colorado Springs, CO 80910

O: (719) 520-7943

F: (719)-520-6695

FROM: APPLICANT

Hammers Construction, Inc.

Lisa Peterson Designer

1411 Woolsey Heights

Colorado Springs, CO 80915

O: (719)-570-1599 F: (719)-570-7008

Dear Gabe

Upon receipt and review of your comments provided to us on August 7, 2017, we offer the following response. We have incorporated comments received from the development services department into these minor revisions. Please review and call with any questions you might have.



EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Current Planning

- 1. See Redlines for comments
 - Redlines Updated, Raingarden added as per Civil Plans.
- 2. Applicant is required to apply for a Building Permit with PPRBD Noted.
- 3. Applicant is required to apply for a Driveway Permit Noted.
- 4. Schedule a pre-construction meeting with Inspections Noted.
- 5. Landscaping must be installed prior to Certificate of Occupancy. **Noted.**

Landscaping Comments

- Trees adjusted for min. 6' separation from electric and gas lines and easements. Only small shrubs in electric easement.
- "Headlight screen" shrubs are noted as 3' ht. Does not apply anyway since chainlink fence has PVC slats. Refer to site plan.
- County file number shown on each sheet

Engineering Division

Comment 1: The SDI worksheet and MS4 Post Construction worksheet are not required. Per the UDFCD Memo Bioretention with WQ storage but no flood control storage does not require notification per SB-212. See noted plans attached from Galloway.

Comment 2: Attachment: Comment_PPR-17-031_2.pdf See the attached checklist for items missing from the SWMP report. Return the checklist identifying the page where each missing item is located in the SWMP report. See noted plans attached from Galloway.

Comment 3: Engineering redline comments on the following pdf documents will be uploaded by the project manager: Drainage Letter, Financial Assurance Estimates, Grading and Erosion Control, Building Elevation, SWMP and Site Development Plan. See noted plans attached from Galloway.

ELPASO COUNTY ATTORNEY'S OFFICE

Comment: The Detention Pond Maintenance Agreement is the wrong template. The Developer/Owner template should be used, rather than the Developer/HOA template. Please see the recently approved agreement submitted by Hammers for Lot 45a. No changes needed.

COLORADO SPRINGS UTILITIES

Utility Comments (electric, gas)

Action Items:

- 1. Show and label the proposed locations for the electric and gas meters on the Utility Service Plan Sheet. **Revised as requested.**
- 2. Show and Label the existing easement located along McClain Point with size and reception number or book and page. **Updated.**



- 3. Ensure that you are not proposing landscaping within utility easements or located over proposed utility service lines. **Updated.**
- 4. Please add the general notes located at https://www.csu.org/CSUDocuments/preliminaryutilityplans.pdf to the utility plan sheet with the exception of #7 and #8. Also remove the water and wastewater verbiage from #1 and #3. Revised as requested.
- 5. Acknowledge information items #2 and #3 below. Specifically for information item #2, prior to construction, contact the Field Engineer for Gas & Electric in your area, Ms. Ginny Halvorson, to discuss gas and electric service for your proposed addition. She can be reached at ghalvorson@csu.org or 719-668-5567. **Noted.**

Information Items:

- 1. The applicant or their engineer should contact Utilities Development Services at 719.668.8111 for an estimate of any system development charges, fees, Recovery Agreement Charges or other costs that may apply to this development.
- 2. CSU requires an Application for Gas and Electric Line Extension to be submitted along with a Load Data form or an Application for Gas Service Line Approval and/or Application for Elevated Pressure Approval prior to electric and natural gas system design for service to the project. Refer to the CSU Line Extension and Service Standards or contact Field Engineering at 719-668-4985.
- 3. CSU may require an extension contract and payment of contributions-in-aid of construction (or a Revenue Guarantee Contract) for the extension of electric facilities needed to serve the development. With regard to natural gas extensions, CSU may require an extension contract and an advance payment for the estimated cost to construct the necessary gas extensions.
- 4. Improvements, structures and trees must not be located directly over or within 6 feet of any underground gas or electric distribution facilities and shall not violate any provision of the National Electric Safety Code (NESC) or any applicable natural gas regulations or Colorado Springs Utilities' policies.
- 5. Improvements, structures and trees shall not be located under any overhead utility facility, shall not violate NESC clearances, and shall not impair access or the ability to maintain utility facilities.
- 6. Landscaping shall be designed to provide the required clearances for utility facilities, to allow continuous access for utility equipment, and to minimize conflicts with such facilities. If you have any questions, please contact Ethan Widrick at ewidrick@csu.org.

PIKES PEAK REGIONAL BUILDING DEPARTMENT

Enumerations

No comment.

Floodplain

No comment.

No changes need to be made after reviewing comments from this department.



COLORADO SPRINGS AIRPORT ADVISORY COMMISSION

Airport staff recommends **no objection** with the following conditions: • Provide proof of previous avigation easement recordation or Airport Activity Notice and Disclosure for this property.

- The proposed development is within the Accident Potential Zone 2 (APZ-2) subzone of the Commercial Airport Overlay District, as adopted by El Paso County. The proposed use associated with this development (office/warehouse) appears to be permissible in the APZ-2 subzone.
- Based on elevation data, the Airport requests that the applicant file Federal Aviation Administration (FAA) Form 7460-1 "Notice of Proposed Construction or Alteration" for any new vertical development at this site, including temporary construction equipment, and provide FAA documentation to the Airport before the commencement of construction activities.
- More information about the airspace evaluation submittal process is available on the FAA's

Obstruction Evaluation/Airport Airspace Analysis website at: https://oeaaa.faa.gov/oeaaa/external/portal.jsp

Form 7460-1 has been submitted. No avigation easement needed per previously avigation easement recorded under Reception # 206095824.

CENTRAL MARKSHEFFEL METRO

Comment: In response to the proposed project this parcel will be subject to the Central Marksheffel Metropolitan Commercial District fee's and mill levies. At time of Building Permit, the following fee is due \$1.50/square foot of the building.

Made Payable to Central Marksheffel Metro District

3750 sq ft x \$1.50 = \$5625.00

Tax Id 54081-02-025

Fees will be pay at the time of permit.

CHEROKEE METRO DISTRICT

Comment: This development is within the service boundary of the Cherokee Metropolitan District and the developer is aware of the District's development process. Jonathon Smith.

No changes need to be made after reviewing comments from this department.

CIMARRON HILLS FIRE PROTECTION

The Cimarron Hills Fire Department submitted an electronic development plan to PEAK Consulting Services, Inc. for a fire code compliance review of a proposed commercial building for the NEW CRACKERJACK MUD JACKING BUILDING located at 1411 Woolsey Heights within the Cimarron Hills Fire Protection District. This scope of work includes: A new 3,750 square foot single story industrial building.

Upon detailed review of the submittal, Peak Consulting has determined that the design appears to meet the minimum requirements established forth by the International Fire Code and the Cimarron Hills Fire Department.



The Cimarron Hills Fire Protection District recommends APPROVAL of this Development Plan.

The following are a list of comments for your informational purposes only. It is highly recommended that you review the following comments to limit delays in the future.

FEES: The Cimarron Hills Fire Department collects a cost recovery fee of \$429.00 per plan associated with development plan reviews. The payment shall be made to the Cimarron Hills Fire Department located at 1835 Tuskegee Place in Colorado Springs, CO 80915. Please be advised that neither the fire hydrant/water plans nor the construction permit documents will be reviewed by the Cimarron Hills Fire Department until this fee is received.

WIDTH: Fire apparatus access roads shall have an unobstructed width of not less than 20-feet except for approved security gates.

VERTICAL CLEARANCE: Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13-feet 6-inches.

LOADING: Fire apparatus access roads shall be designed, constructed and maintained to support the imposed loads of fire apparatus weighing at least 75,000-pounds.

TURNING RADIUS – The East End of this development indicates that there will be RV parking. NOTE: Turning Radius requirements shall be maintained and not impeded upon parked RV's.

FIRE HDRANTS – Fire hydrant(s) and adequate water supply shall be provided in accordance with the IFC based upon the buildings total square footage and construction classification. Be advised a reduction in required fire flow will be granted for fully fire sprinklered buildings.

SURFACE: Fire apparatus access roads shall be surfaced so as to provide all-weather driving capabilities by means of asphalt, concrete or other approved driving surfaces. Gravel roads or other alternatives may beacceptable; however, PE stamped engineered specifications for such alternatives, showing that the loading specifications and all weather surface capabilities have been met or exceeded must be submitted to the Fire Department for review.

DEAD-END ACCESS: Dead-end fire apparatus access roads in excess of 150-feet shall be provided with a turnaround meeting the requirements of IFC.

BRIDGES AND ELEVATED SURFACES: Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface shall be constructed and maintained in accordance with AASHTO-Standard Specification for Highway Bridges.

GRADES: Grades for fire apparatus access roads shall be no more than 10% maximum grades.

GATES: Gates securing the fire apparatus access roads shall comply with all of the following criteria:



- 1. The minimum gate width shall be 20 feet or as wide as necessary to facilitate the required minimum turning radius.
- 2. Gates shall be of the swinging or sliding type.
- 3. Construction of gates shall be of materials that allow manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a KNOX (TM) key system installed in an approved manner. Electronically operated gates shall have a fail-safe, manually operated, KNOX (TM) key override switch.
- 6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or a KNOX TM padlock.
- 7. Locking device specifications shall be submitted for approval by the fire code official.

KNOX (TM) KEY: This fire jurisdiction requires a KNOX TM Entry Box be installed on all commercial properties with a Fire Sprinkler or Fire Alarm System. This box must be mounted at the main front entrance 7-feet above the ground. The Box shall be ordered directly through the applicable fire jurisdiction and shall be installed prior to requesting for a final fire inspection.

WATER SUPPLY: Required water supplies for fire protection either temporary or permanent shall be made available as soon as combustible material arrives on site.

TIMING OF INSTALLATION: Fire department access roads shall be made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided.

ACCESS FOR FIREFIGHTING: Approved vehicle access for firefighting shall be provided to all construction/demolition sites. Vehicle access shall be provided to within 100-feet of temporary or permanent fire department connections (FDC). Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

STREET SIGNS: Temporary or permanent street signs shall be installed at each street intersection when construction of roadways allows passage by vehicles.

No changes need to be made after reviewing comments from this department.

The following agencies have not provided review comments to-date:

Central CO Conservation District

Comments received from any of the above non-responding agencies following the issuance of this letter will be forwarded to the applicant/applicant's representative and will be added to the end of this letter for record keeping purposes.



If you have any further questions, please give me a call.

Respectfully submitted,

Lisa A. Peterson Designer/Applicant

CONSTRUCTION DOCUMENTS - GRADING CBP, F2-LOT #21 - CRACKERJACK MUD JACKING, INC 7315 McCLAIN POINT, COLORADO SPRINGS, CO

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.

JENNIFER IRVINE, P.E.

COUNTY ENGINEER / ECM ADMINISTRATOR

Add after the 2nd paragraph

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 Directors discretion.

REVISED AS REQUESTED. OWNERS'S STATEMENT

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

NAME

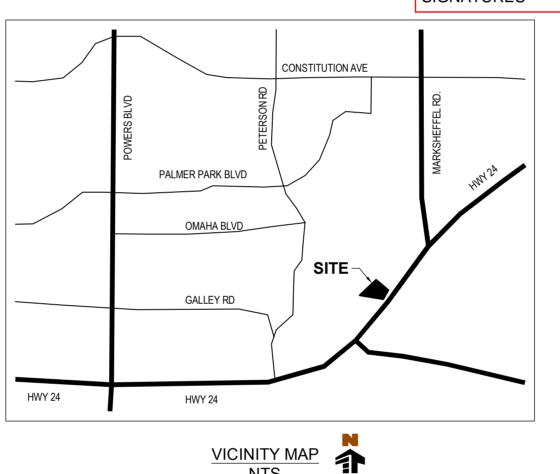
DATE

Replace with the following:
[Name, Title]
[Business Name]

REVISED AS
REQUESTED.

Note: Provide the actual information.

WILL BE PROVID
WHEN WE GET
SIGNATURES



CIVIL SHEET INDEX

SHEET NO.	DESCRIPTION
C0.0	GRADING COVER SHEET
C2.1	GRADING PLAN
C2.2	EROSION CONTROL PLAN
C2.3	EROSION CONTROL DETAILS
C2.4	EROSION CONTROL DETAILS
C2.5	RAIN GARDEN DETAILS

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 STABLISHED 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 REPORT.

TODD CARTWRIGHT, COLORADO P.E. NO. 33365

Replace with "Grading and Erosion Control Plan"

REVISED AS REQUESTED.

Include Contact Informations such as:
Owner, Design Engineer, El Paso County Planning and
Community Development, Utility companies, Contractor

REVISED AS REQUESTED.

CAUTION - NOTICE TO CONTRACTOR

1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS
PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND
FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO
BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE
CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD
LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER
SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION.
REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO
CONSTRUCTION.

2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE

ENGINEER PRIOR TO CONSTRUCTION.

Know what's Below.

Call before you dig.

REVISED AS REQUESTED.

Add: PCD Project No. PPR-17-031

COVER SHEET

Galloway
Planning. Architecture. Engineering.
1755 Telstar Drive, Suite 107

1755 Telstar Drive, Suite 107 Colorado Springs, Co 80920 719.900.7220 O www.gallowayUS.com



NOT RUCTION CONSTRUCTION

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JMENTS ACKING INC.

315 McCLAIN POINT

#	Date	Issue / Description	Init.
00	06/XX/17	AGENCY SUBMITTAL	TAC
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_			
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 Project No:
 HCl003.1

 Drawn By:
 RCG

 Checked By:
 TAC

 Date:
 JUNE 2017

GRADING COVER SHEET

C0.0

DIAMETERS OF PIPES

CONTRACTOR TO VERIFY ALL UTILITY CONNECTIONS WITH POTHOLE (LOCATION, SIZE, AND ELEVATION) PRIOR TO CONSTRUCTION.

CHEROKEE METROPOLITAN DISTRICT

WATER AND SANITARY SEWER SYSTEM CONSTRUCTION NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS NOTED OTHERWISE. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE METROPOLITAN DISTRICT STANDARDS AND SPECIFICATIONS SHALL GOVERN.

THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE PROVISIONS OF THE
APPLICABLE AGENCY HAVING JURISDICTION OVER THE ROADWAY WHICH MAY INCLUDE, BUT IS NOT LIMITED
TO, THE EL PASO COUNTY PUBLIC SERVICES DIVISION, CITY OF COLORADO SPRINGS, AND/OR THE COLORADO
DEPARTMENT OF TRANSPORTATION.

3. ALL STREET SURFACE RESTORATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE AGENCY HAVING JURISDICTION OVER THE ROADWAY.

4. SHOP DRAWING SUBMITTALS SHALL BE MADE FOR ALL MATERIALS TO BE INCORPORATED INTO THIS PROJECT.

5. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH

 THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
 THE CONTRACTOR IS TO UNDERTAKE HIS WORK IN ACCORDANCE WITH OSHA'S CONFINED SPACE ENTRY REQUIREMENTS.

 THE SUBGRADE UNDERNEATH ALL STRUCTURES SHALL BE ADEQUATELY STABILIZED.
 POSITIVE DRAINAGE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES. FINAL GRADING IS SUBJECT TO REVIEW AND APPROVAL

REVIEW AND APPROVAL.

9. ALL WATER SYSTEM MAINS PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 200 (DR-14) PER AWWA C-900 AND ASTM D241 SPECIFICATIONS, EXCEPT WHERE NOTED. SPECIFICALLY, SECTIONS OF WATER PIPE THAT CROSS UNDER MAJOR DRAINAGE WAYS (SAND CREEK) OR MAJOR THOROUGHFARES SHALL BE

10. ALL FITTINGS SHALL BE CONSTRUCTED OF GRAY-IRON MATERIAL AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL BE WRAPPED WITH A 9-MIL THICKNESS POLYETHYLENE MATERIAL PER AWWA STANDARD C105. ALL FITTINGS SHALL HAVE ANODES CAD WELDED.

11. ALL WATER PIPES SHALL BE INSTALLED AT A MINIMUM DEPTH OF FIVE (5) FEET BELOW FINISHED GRADE.

12. ALL BENDS, TEE, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD END MAINS SHALL BE INSTALLED WITH CONCRETE THRUST BLOCKS

CONCRETE THRUST BLOCKS.

13. VALVE BOXES SHALL BE TYLER SLIP; TYPE "C" CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160

OVAL BASE OR APPROVED EQUAL.

14. ALL WATER SYSTEM COMPONENTS SHALL BE FLUSHED AND CHLORINATED PER AWWA C-601, "DISINFECTING WATER MAINS" PRIOR TO ACCEPTANCE. THE CONTRACTOR SHALL PRODUCE A 25 MG/L SOLUTION BY ADHERING CHLORINE TABLETS TO THE PIPE SECTION WITH PERMATEX CLEAR TRV INSIDE THE SYSTEM. CHLORINATION SHALL OCCUR PRIOR TO HYDROSTATIC TESTING. THE CONTRACTOR SHALL OBTAIN A BACTERIOLOGICAL SAMPLE AFTER THE SYSTEM HAS BEEN FLUSHED. A CLEAN BACTERIOLOGICAL SAMPLE MUST BE OBTAINED PRIOR TO THE SYSTEM BEING PLACED INTO SERVICE.

15. HYDROSTATIC TESTING: ALL WATER SYSTEM MAINS SHALL BE FIELD PRESSURE TESTED TO A MINIMUM OF 150 PSI OR 1½ TIMES THE STATIC OPERATING PRESSURE, WHICH EVER IS GREATER. MAXIMUM ALLOWABLE LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING: *10 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY.

CONTRACTOR SHALL INSURE A MINIMUM CLEARANCE OF 18" WHERE POSSIBLE BETWEEN THE OUTSIDE

16. ALL VALVES SHALL CONFORM TO OPEN LEFT CONVENTION PER CHEROKEE METROPOLITAN DISTRICT STANDARDS.

17. WHEN IT IS NECESSARY TO RAISE OR LOWER WATER MAINS AT OTHER UTILITY CROSSINGS THE

18. WHILE CONSTRUCTING THE WATER AND WASTE WATER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR CONSTRUCTION: SET OF UPDATED PLANS AT ALL TIMES. APPROVED FIELD MODIFICATIONS TO PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE WATER SYSTEM.

19.PRIOR TO TAPPING ANY EXISTING WATER MAIN THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL

FOR SAID TAP IN ACCORDANCE WITH THE CHEROKEE METROPOLITAN DISTRICT STANDARDS.

20. ALL NONMETALLIC PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE NO 12 COPPER CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERVALS. THE TRACER WIRE SHALL ALSO BE PERMANENTLY CONNECTED TO ALL FIRE HYDRANT TEE, METALLIC PIPE BENDS, MAIN VALVE AND OTHER METALLIC FITTINGS AND APPURTENANCES. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. GROUND TRACER WIRES TO SURFACE AT ALL VALVE BOXES.

21. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK.
PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT
LEAST TWO WORKING DAYS PRIOR TO DIGGING.

 SANITARY SEWER PIPE SHALL CONFORM TO ASTM D3034 SDR35 PVC.
 CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF NEW SANITARY SEWER SYSTEM.

THE PIPELINE INSTALLATION SHALL GENERALLY BE UNDERTAKEN FROM THE DOWNHILL PORTION OF THE PROJECT PROCEEDING UPHILL.
 ALL SANITARY SEWER MANHOLES, LIDS, BASES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH (IAW) COLORADO SPRINGS DETAILS STANDARD MANHOLE DETAIL 1. EXCEPT AS NOTED ON THESE PLANS. WHERE REQUIRED ON THESE PLANS, WATER TIGHT MANHOLES, LIDS AND CONNECTIONS SHALL BE PROVIDED

IAW COLORADO SPRINGS STANDARDS.

26. SANITARY SEWER SERVICE LINES SHALL BE LOCATED PER THE DETAIL ON THE UTILITY SERVICE PLAN, OR AT THE DIRECTION OF THE INSPECTOR.

27. FLAT TOP LIDS ON PRECAST CONCRETE MANHOLES ARE REQUIRED FOR ALL MANHOLES 5.0 FEET AND LESS IN DEPTH. ECCENTRIC CONES ARE TO BE INSTALLED ON ALL MANHOLES WITH DEPTHS GREATER THAN 5.0

28. THE SANITARY SEWER PIPELINE SHALL BE INSTALLED IN STRAIGHT ALIGNMENTS BETWEEN MANHOLES UNLESS OTHERWISE APPROVED BY THE CHEROKEE METROPOLITAN DISTRICT.

THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING WASTEWATER PIPELINES OR MANHOLES AS A RESULT OF THEIR CONSTRUCTION ACTIVITY.
 ALL PIPELINES SHALL BE "AS BUILT" SURVEYED AND "AS BUILT" DRAWINGS SUBMITTED TO THE CHEROKEE

METROPOLITAN DISTRICT FOR REVIEW AND ACCEPTANCE.

31. MANHOLE ENTRY PERMIT: THE CHEROKEE METROPOLITAN DISTRICT WILL AUTHORIZE THE CONTRACTOR TO ENTER DISTRICT-OWNED MANHOLES, HOWEVER, THE DISTRICT WILL NOT ISSUE AN "ENTRY PERMIT" TO THE CONTRACTOR FOR ANY CONFINED SPACE. PRIOR TO ANY ENTRY, THE CONTRACTOR SHALL PROVIDE HIS OWN PERSONNEL CAPABLE AND QUALIFIED TO ISSUE AN ENTRY PERMIT AND SHALL BE EQUIPPED FOR ENTRY INTO CONFINED SPACES. THE CHEROKEE METROPOLITAN DISTRICT WILL ASSUME NO RESPONSIBILITY FOR THE

CONTRACTOR'S ENTRY INTO DISTRICT-OWNED MANHOLES.

32. OVER LOT GRADING AND STREET SUB GRADE MUST BE WITHIN ± ONE (1) FOOT PRIOR TO ANY UTILITY

INSTALLATION.

33. TRACER WIRE IS TO BE INSTALLED WITH ALL SANITARY SEWER MAIN LINES AND SERVICES (FROM THE MAN LINE TO THE BUILDING STRUCTURE). AS OUTLINED IN COMMENT #13

34. MINIMUM DEPTH OF SANITARY SEWER IS 6 FEET OF COVER, IF THIS MINIMUM CANNOT BE ACHIEVED DO TO

SHALLOW SEWER STUB THEN THE FOLLOWING APPLIES; OTHER WISE THE SEWER SERVICE MUST HAVE 6 FEET

-DEPTH GREATER THAN 6 FEET; MATERIAL TYPE SDR 35 - DEPTH BETWEEN 4 FEET AND 6 FEET; MATERIAL TYPE SCH 40 OR CAST IRON PIPE (CIP)

- DEPTH LESS THAN 4 FEET; MATERIAL TYPE SCH 40 OR CIP WITH CONCRETE CAP.

35. WATER SERVICE MUST BE OVER THE SEWER AT ALL TIMES. SEWER SERVICE PIPE LOCATED WITHIN ONE

FOOT OF THE WATER SERVICE LINE MUST BE CONSTRUCTED WITH SCH 40 PIPE OR CIP

36. ALL EXTERIOR SEWER CLEAN OUTS (CO) MUST HAVE A CAST IRON, TRAFFIC RATED COVER, OR EQUIVALENT WITH CONCRETE COLLAR.

SPECIFIC SIZE APPLICATION OF THE SAND/OIL AND OR GREASE TRAP TO BE DETERMINED BY CHEROKEE METRO DISTRICT, WITH THE MINIMUM SIZE TO BE 1500 GALLON.
 UPON COMPLETION OF CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE DISTRICT, TWO (2) COPIES OF "AS-CONSTRUCTED" PLANS AND TWO (2) SETS OF ELECTRONIC DATA FILES OF THE PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR RECORD.

a. THE TWO (2) COPIES SHALL BE COMPLETE WITH ALL "AS-CONSTRUCTED" INFORMATION TOGETHER WITH A CERTIFICATION BY THE PARTY RESPONSIBLE FOR CONSTRUCTION THAT ALL DATA THEREON IS ACCURATE AND REPRESENTS ACTUAL CONSTRUCTED CONDITIONS.

c. THE PLAN SET SHALL BE ON A DURABLE MEDIA THAT CAN BE RUN THROUGH PHOTOCOPYING EQUIPMENT.
d. THE TWO ELECTRONIC DATA FORMATS SHALL BE SUBMITTED. THE FIRST ELECTRONIC DATA FILE SET SHALL BE IN AUTOCAD 2006 OR NEWER FORMAT WITH NO EXTERNAL REFERENCE DRAWINGS. ALL EXTERNAL REFERENCES MUST BE BOUND INTO THE DRAWING SET. THE SECOND SET OF ELECTRONIC DATA FILES SHALL BE IN ADOBE ACROBAT .PDF FORMAT.
e. "AS-CONSTRUCTED" PLANS SHALL BE SUBMITTED WITHIN TWO WEEKS OF COMPLETION OF THE WATER

b. THE TWO PLAN SETS SHALL BE SUBMITTED ON SHEETS THAT ARE 24" X 36" IN SIZE.

AND/OR SANITARY SEWER UTILITIES.

f. NO AUTHORIZATION TO CONNECT TO THE SYSTEM OR DISCHARGE TO THE SYSTEM WILL BE ALLOWED UNTIL THE "AS-CONSTRUCTED" DOCUMENTS HAVE BEEN RECEIVED AND ACCEPTED BY THE DISTRICT.

THE "AS-CONSTRUCTED" DOCUMENTS HAVE BEEN RECEIVED AND ACCEPTED BY THE DISTRICT.

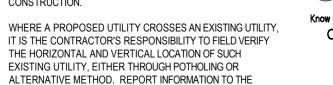
g. ALL PLANS, SPECIFICATIONS AND SUPPORTING DOCUMENTS SHALL BE PREPARED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF COLORADO. ALL PLANS AND SPECIFICATIONS SHALL BEAR THE SEAL AND SIGNATURE OF SAID LICENSED PROFESSIONAL ENGINEER.

39. THE CONTRACTOR'S WARRANTY SHALL EXTEND FOR A TWO-YEAR PERIOD FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT.

CAUTION - NOTICE TO CONTRACTOR

ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO

ENGINEER PRIOR TO CONSTRUCTION.



M THE

CIMARRON HILLS FIRE DEPARTMENT

ACCORDING TO THE MODELED CALCULATIONS REVIEWED BY THE GOVERNING WATER DISTRICT AND/OR COLORADO REGISTERED CIVIL ENGINEER/DESIGNER; THE THEORECTICAL AVAILABLE FIRE FLOW AT NODE "A" IS XXXX GALLONS PER MINUTE UNDER MAXIMUM DAILY DEMAND CONDITIONS AT 20 PSI RESIDUAL. THE ACTUAL FIRE FLOW MAY VARY DUE TO VARIOUS PARAMETERS. UPON DETAILED REVIEW OF THE AVAILABLE WATER SUPPLY, FIRE HYDRANT LOCATIONS AND HOSE LAY DISTANCES, THESE PLANS ARE HEREBY CONSIDERED APPROVED.

FIRE DEPARTMENT SIGNATURE: ______ DATE:____

PRIVATE WATER MAIN EXTENSIONS

THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THE INSTALLATION OF THESE PROPOSED WATER FACILITIES WILL BE MADE IN ACCORDANCE WITH THE DISTRICTS SPECIFICATIONS AND SHALL PROVIDE A MINIMUM OF FIVE FEET (5' 0") AND A MAXIMUM OF SIX (6' 0") OF COVER OVER THE WATER MAIN(S). THE UNDERSIGNED UNDERSTANDS THAT ALL WATER MAINS, FIRE HYDRANTS, AND APPURTENANCES AS INDICATED ON THIS INSTALLATION PLAN SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE MAINTAINED BY THE OWNER.

SIGNED:

DBA: HAMMERS CONSTRUCTION

ADDRESS: 1411 WOOSELY HEIGHTS, COLORADO SPRINGS, CO 80915

DESIGN PROFESSIONAL STATEMENT

THESE WATER/WASTEWATER PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH COLORADO SPRINGS UTILITIES CRITERIA.

TODD CARTWRIGHT, COLORADO P.E. NO. 33365

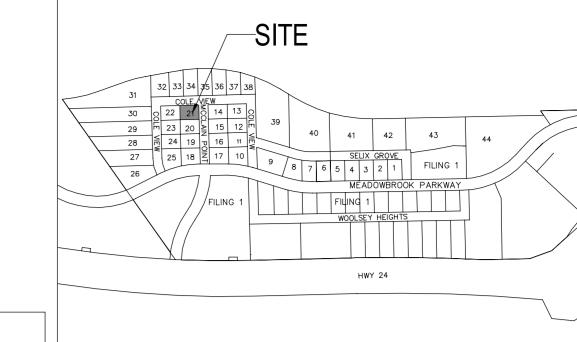
WATER INSTALLATION CORROSION CONTROL REQUIREMENTS

REQUIRED, DESCRIBES AS FOLLOWS: PROVIDE CATHODIC PROTECTION & WRAP ALL METAL JOINTS, VALVES, PIPES AND HYDRANTS.

(CHEROKEE METROPOLITAN DISTRICT)

WATER WASTEWATER PLAN APPROVAL

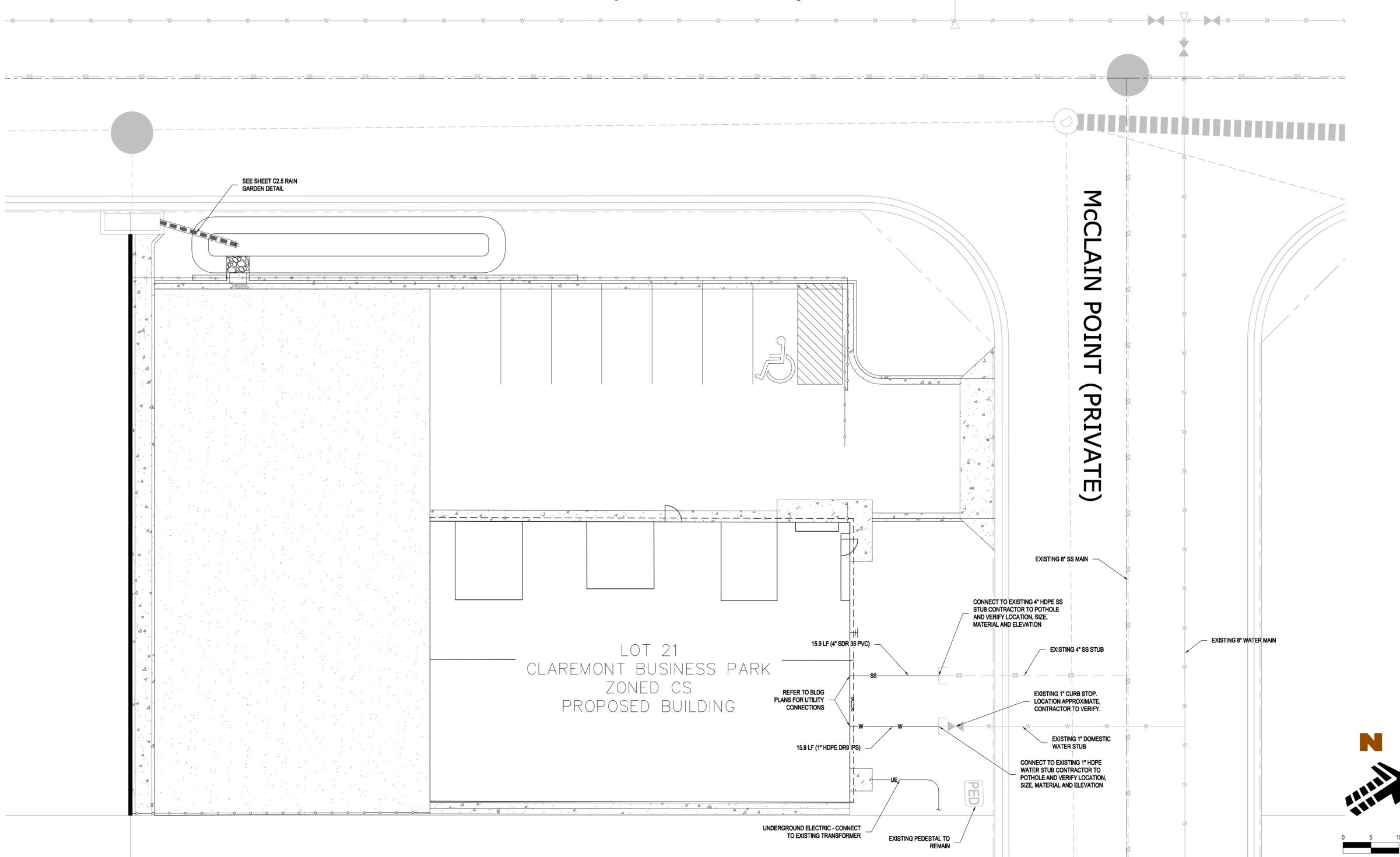
	BUILDING DATA TABLE							
BLDG.	BLDG. TYPE	SQ.FT.	FIRE WALL	SPRINKLER	FIRE FLOW REQ.	MIN. # HYDRANTS	AVERAGE SPACING	
CRACKERJACK	2B	3,834	NO	NO	1,500	1	500'	250'



SITE MA NTS

ODE A

COLE VIEW (PRIVATE ROAD)





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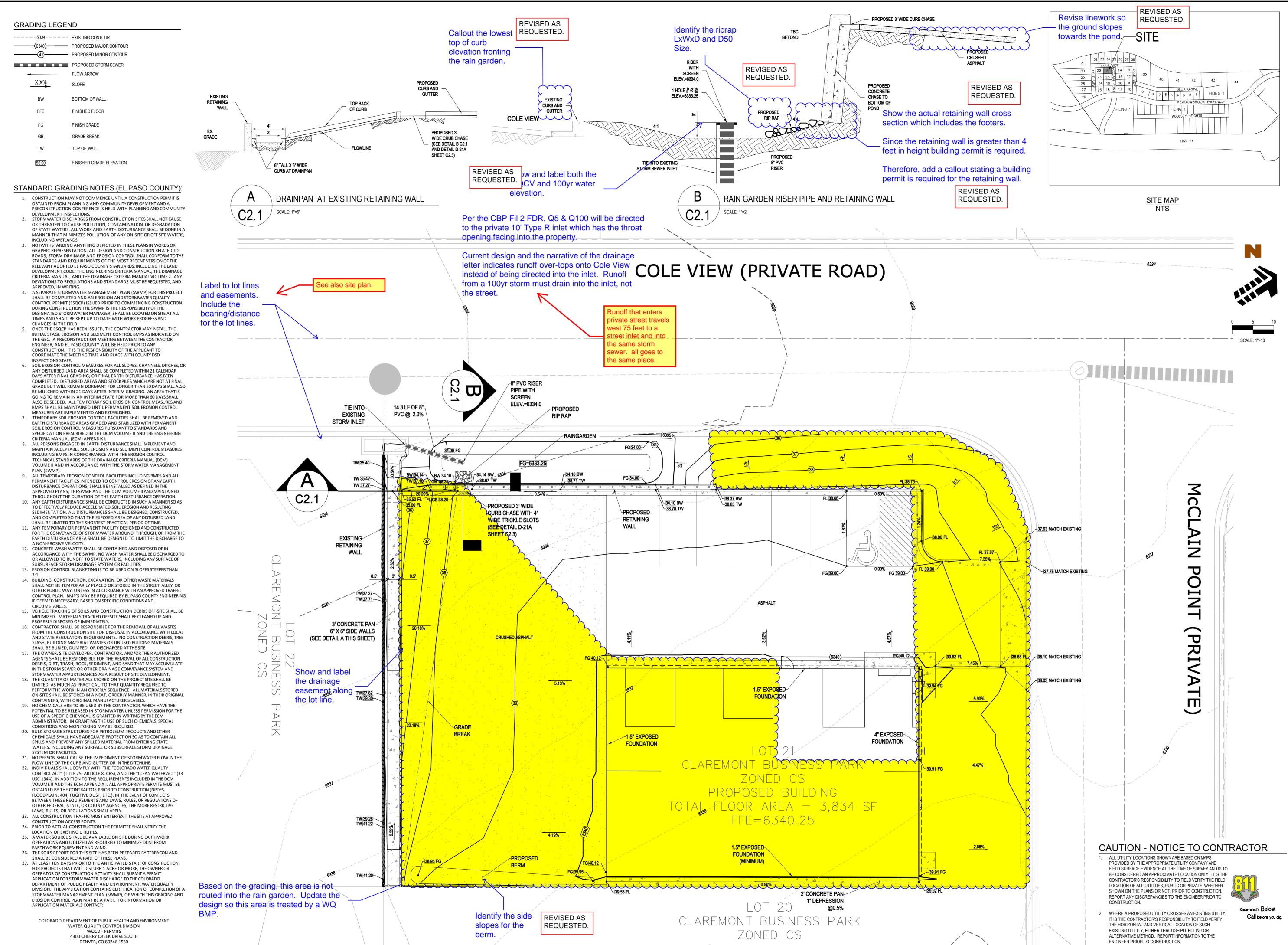
UCTION DOCUMENTS RJACK MUD JACKING IN LOT #21

Date	Issue / Description	Init.
06/XX/17	AGENCY SUBMITTAL	TAC
		_

roject No:	HCI003.1
rawn By:	RCG
hecked By:	TAC
ate:	JUNE 2017

UTILITY SERVICE PLAN

C1.1



Planning. Architecture. Engineering.

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CONSTRUCTION

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ONSTRUCTION DOCUMENTS RACKERJACK MUD JACKING BP, F2 - LOT #21

Project No: HCI003.1

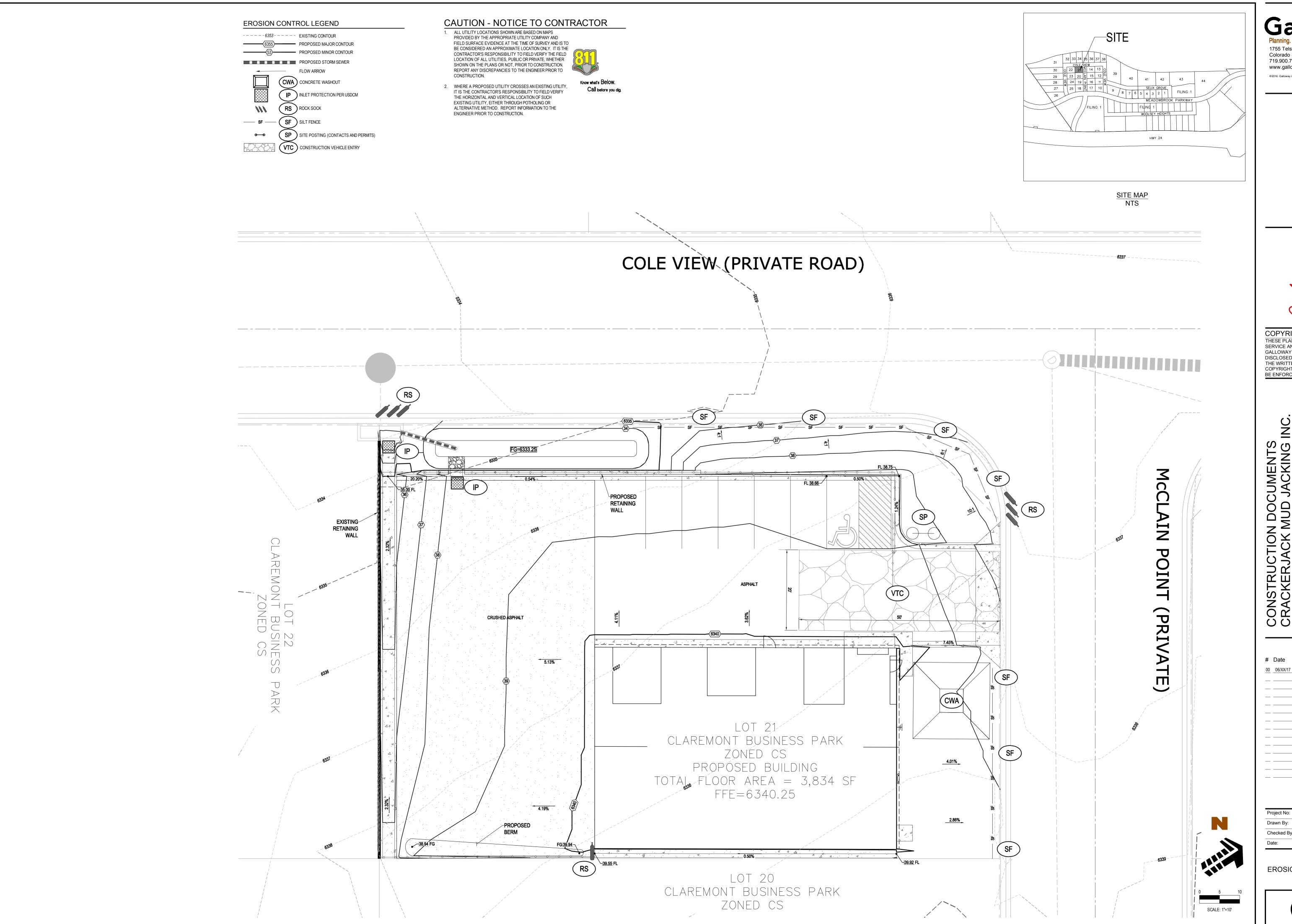
Drawn By: RCG

Checked By: TAC

Date: JUNE 2017

GRADING PLAN

C2.1





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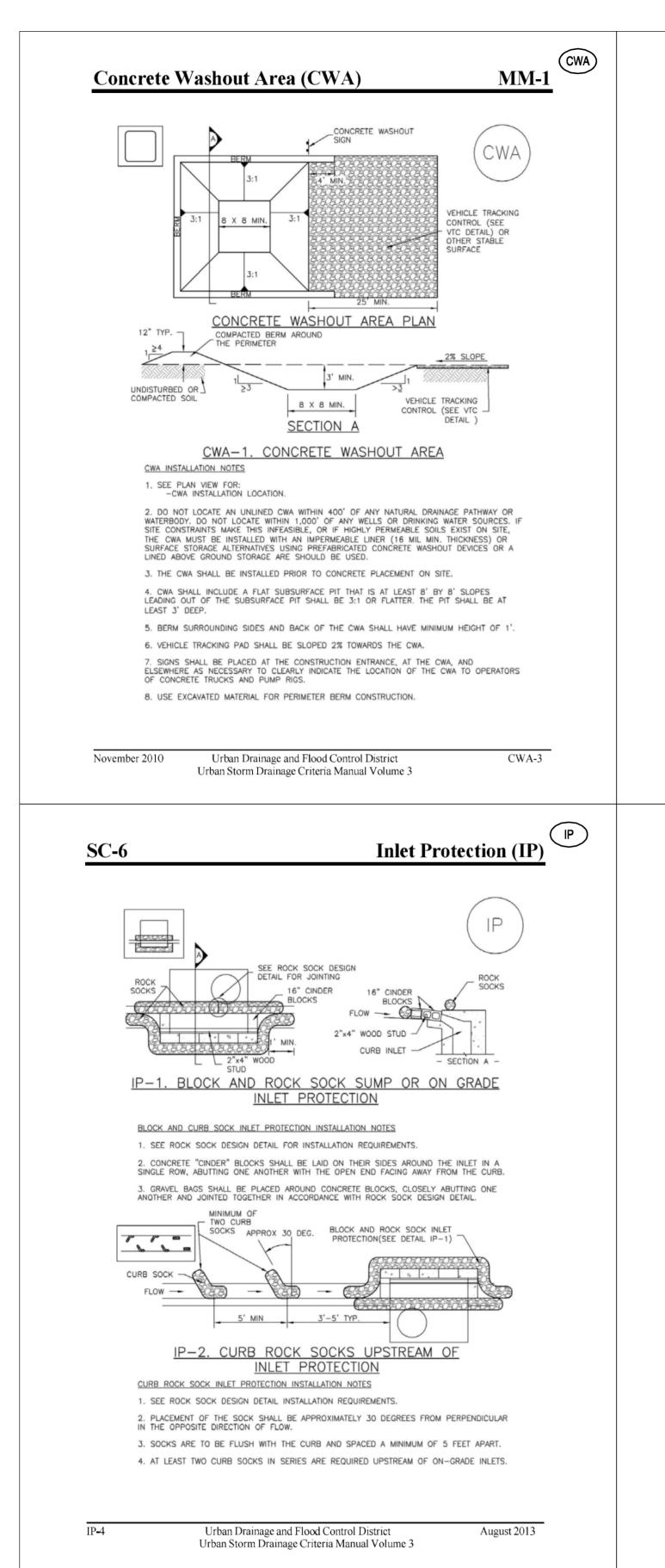
CNSTRUCTION DOCUME RACKERJACK MUD JACK BP, F2 - LOT #21

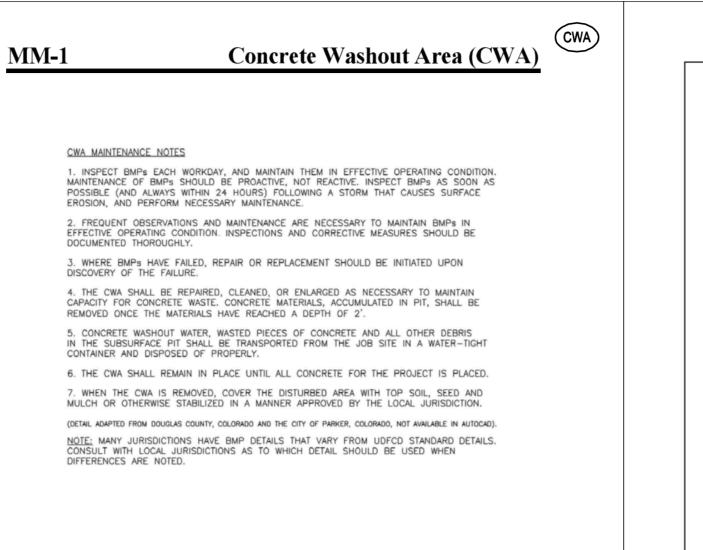
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Project No:	HCI003.1
Drawn By:	RCG
Checked By:	TAC
Date:	JUNE 2017

EROSION CONTROL PLAN

C2.2





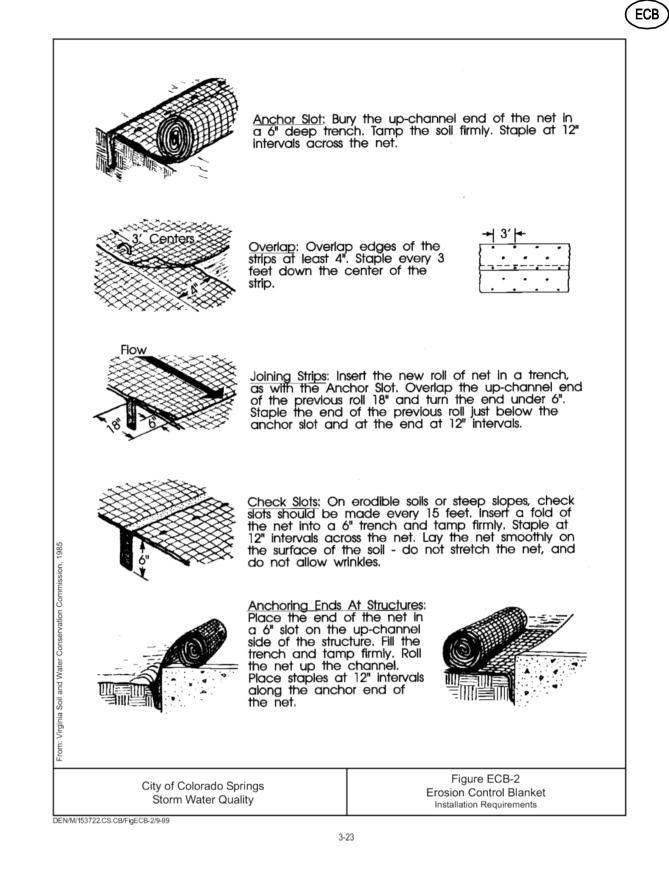
On shallow slopes, strips of netting may be applied across the slope. Where there is a berm at the top of the slope, bring the netting over the berm and anchor it behind the berm. On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely. Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals. In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch. City of Colorado Springs **Erosion Control Blanket** Storm Water Quality Application Examples DEN/M/153722.CS.CB/FigECB-1/9-99 3-22

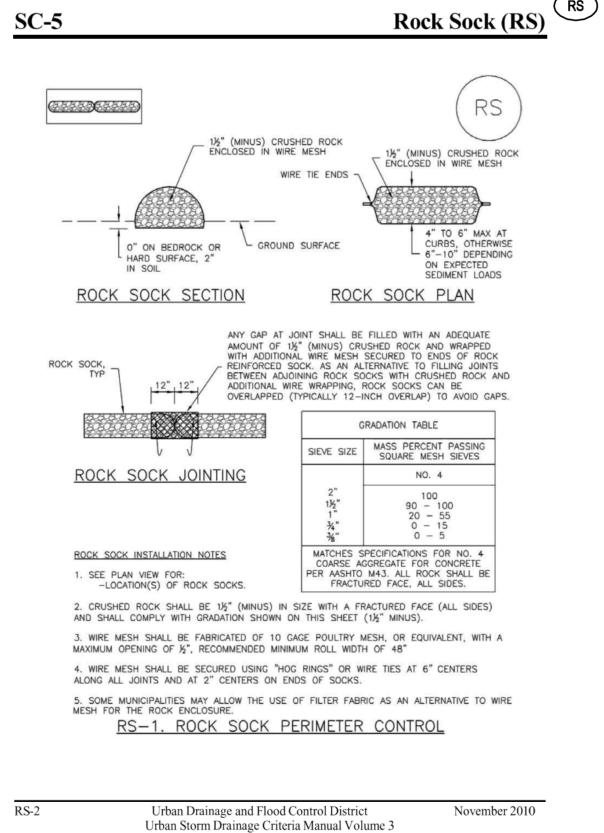
ECB

(RS)

SC-5

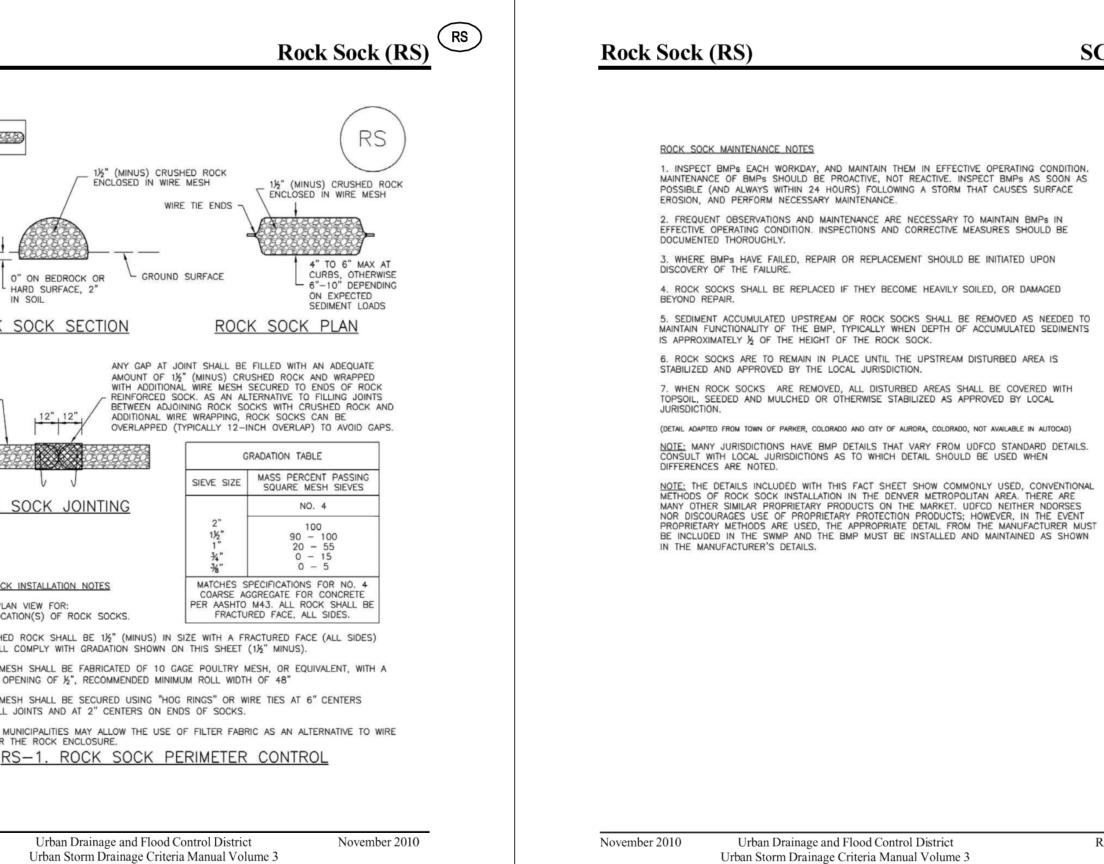
RS-3



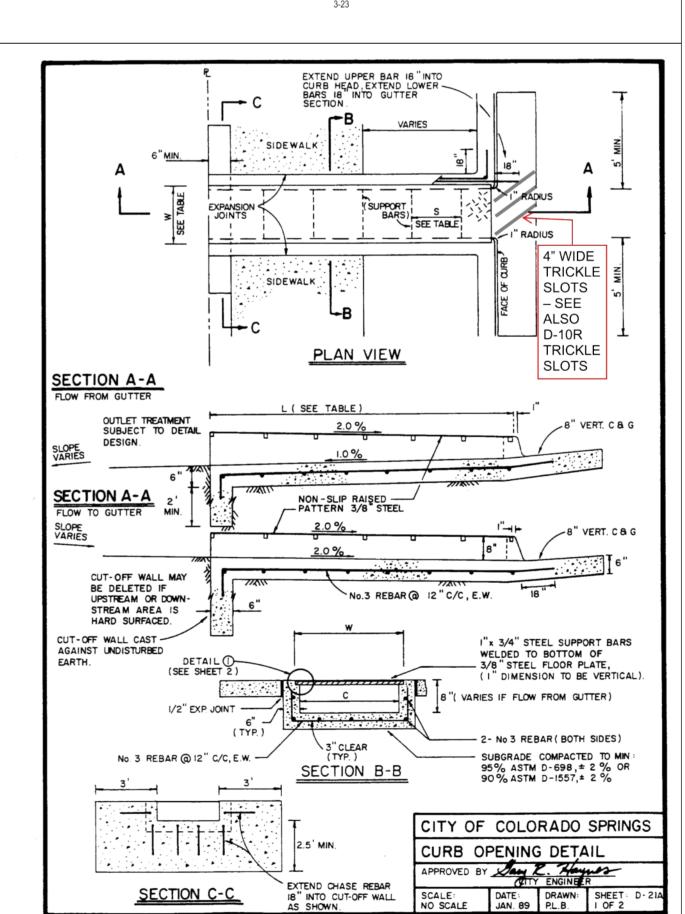


Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3



November 2010



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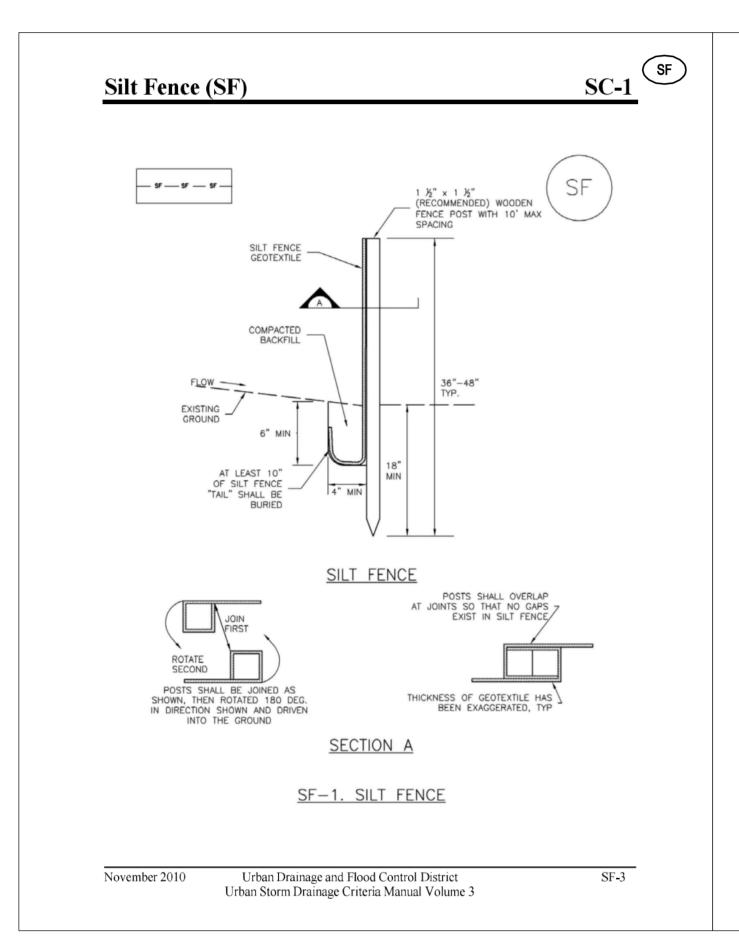
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Date Issue / Description Init. 00 06/XX/17 AGENCY SUBMITTAL

HCI003.1 Project No: Drawn By: RCG TAC Checked By: JUNE 2017 Date:

EROSION CONTROL DETAILS



Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

SC-1

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR

 A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED. 3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING.

COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND. 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20'). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE

EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON

DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED

SEDIMENTS IS APPROXIMATELY 6". 5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING,

TEARING, OR COLLAPSE.

SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD) NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN

Urban Drainage and Flood Control District SF-4 November 2010 Urban Storm Drainage Criteria Manual Volume 3

Vehicle Tracking Control (VTC) SM-4 20 FOOT (WIDTH CAN BE LESS IF CONST. VEHICLES ARE PHYSICALLY CONFINED ON BOTH SIDES) SIDEWALK OR OTHER PAVED SURFACE 50 FOOT (MIN.) UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE - CDOT SECT. #703, AASHTO #3 MINUS ROCK NON-WOVEN GEOTEXTILE FABRIC BETWEEN SOIL AND ROCK UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE CDOT SECT. #703, AASHTO INSTALL ROCK FLUSH WITH OR BELOW TOP OF PAVEMENT OR 6" MINUS ROCK NON-WOVEN GEOTEXTILE COMPACTED SUBGRADE -SECTION A VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

Urban Drainage and Flood Control District

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November 2010

SM-4

Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

 A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED

CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

 $2.\ FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE$ DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING, SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6

VTC-3

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

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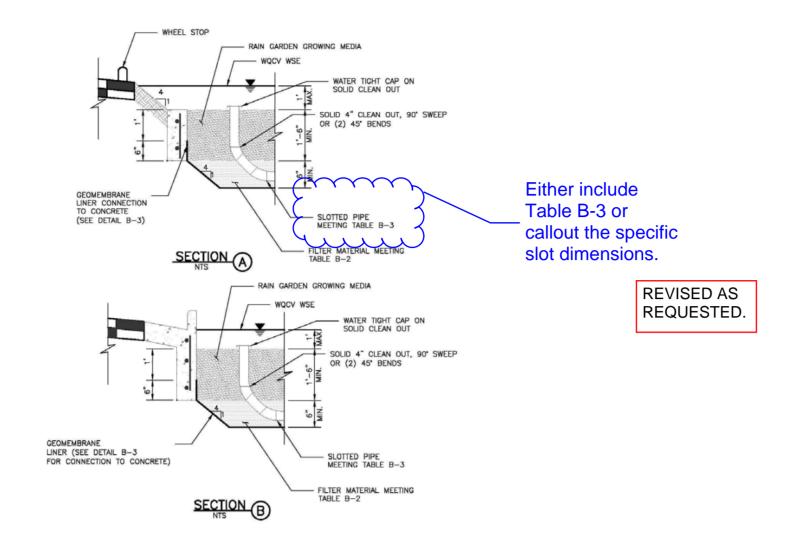
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ONSTRURACKEF BP, F2 -7315 COLC $\circ \circ \circ$

Date Issue / Description Init. 00 06/XX/17 AGENCY SUBMITTAL _ ____ _ ____ _ ____ _ ____

> HCI003.1 Proiect No: Drawn By: RCG Checked By: **JUNE 2017** Date:

EROSION CONTROL DETAILS



NO-INFILTRATION SECTIONS

B-16 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

November 2010

3

Bioretention

Table B-1. Class 1 Compost

Characteristic	Criteria		
Minimum Stability Indicator (Respirometry)	Stable to Very Stable		
Maturity Indicator Expressed as Ammonia N / Nitrate N Ratio	< 4		
Maturity Indicator Expressed as Carbon to Nitrogen Ratio	< 12		
Maturity Indicator Expressed as Percentage of Germination/Vigor	80+ / 80+		
pH – Acceptable Range	6.0 - 8.4		
Soluble Salts – Acceptable Range (1:5 by weight)	0 – 5 mmhos/cm		
Testing and Test Report Submittal Requirement	Seal of Testing Assurance (STA)/Test Methods for the Examination of Composting and Compost (TMECC)		
Chemical Contaminants	Equal or better than US EPA Class A Standard, 40 CFR 503.13, Tables 1 & 3 levels		
Pathogens	Meet or exceed US EPA Class A standard, 40 CFR 503.32(a) levels		

Show the Slotted Pipe Include a cross section detail for the and label the length and slotted pipe connection to the riser REVISED AS REQUESTED. pipe and orifice plate per the drainage REVISED AS REQUESTED. COLE VIEW (PRIVATE ROAD) √8" PVC RISER PIPE WITH **SCREEN** ELEV.=6334.0 - RAINGARDEN TIE INTO EXISTING STORM INLET INV. ELEV.=6331.0 **RIP RAP** PROPOSED 3' WIDE CURB CHASE

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UMENTS ACKING INC.

SACKERJACK MUD JAC 3P, F2 - LOT #21

SCALE: 1"=10'

Date Issue / Description Init.
00 06/XX/17 AGENCY SUBMITTAL TAC

Project No: HCI003.1

Drawn By: RCG

Checked By: TAC

Date: JUNE 2017

RAIN GARDEN DETAIL

C2.5

Urban Drainage and Flood Control District

November 2010

CAUTION - NOTICE TO CONTRACTOR

1 ALL LITTLETY LOCATIONS SHOWN ARE BASED ON MAPS

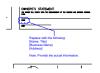
1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE FIELD LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

Know what's Below.

2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

Markup Summary

1 (5)



Subject: Cloud+ Page Label: 1 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:23 PM

Color:

Replace with the following:

[Name, Title] [Business Name] [Address]

Note: Provide the actual information.

NTS - GRADING MUD JACKING, INC IDO SPRINGS, CO Subject: Cloud+ Page Label: 1 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:21 PM

Color:

Replace with "Grading and Erosion Control Plan"

Include Contact Informations such as: Owner, Design Engineer, El Paso County Planning and Community Development, Utility companies, Contractor. Subject: Text Box Page Label: 1 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:24 PM

Color:

Include Contact Informations such as:

Owner, Design Engineer, El Paso County Planning and Community Development, Utility companies,

Contractor.



Subject: Callout Page Label: 1 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:22 PM

Color:

Add after the 2nd paragraph:

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 Directors discretion.

Add: PCD Project No. PPR-17-031

Subject: Text Box Page Label: 1 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:31 PM

Color:

Add: PCD Project No. PPR-17-031

3(10)



Subject: Callout Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked
Author: dsdlaforce

Date: 7/31/2017 2:33:56 PM

Color:

Show and label the drainage easement along the lot line.



Subject: Cloud+ Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:32 PM

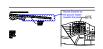
Color:

Show the actual retaining wall cross section which includes the footers.

Since the retaining wall is greater than 4 feet in height building permit is required.

Therefore, add a callout stating a building permit is required for the retaining wall.

Revise linework so the ground slopes towards the pond.



Subject: Cloud+ Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:34 PM

Color:



Subject: Cloud+ Page Label: 3 Lock: Locked

Status: Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:46 PM

Color:

Identify the riprap LxWxD and D50 Size.



Subject: Callout Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:35 PM

Color:

Show and label both the WQCV and 100yr water

elevation.



Subject: Cloud+ Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:43 PM

Color:

Callout the lowest top of curb elevation fronting the rain garden.



Subject: Text Box Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:36 PM

Color:

Per the CBP Fil 2 FDR, Q5 & Q100 will be directed to the private 10' Type R inlet which has the throat opening facing into the property.

Current design and the narrative of the drainage letter indicates runoff over-tops onto Cole View instead of being directed into the inlet. Runoff from a 100yr storm must drain into the inlet, not the street.



Subject: Callout Page Label: 3 Lock: Locked

Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:50 PM

Color:

Label to lot lines and easements.

Include the bearing/distance for the lot lines.

Subject: Callout Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:48 PM

Color:

Identify the side slopes for the berm.



Subject: Cloud+ Page Label: 3 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:45 PM

Color:

Based on the grading, this area is not routed into the rain garden. Update the design so this area is

treated by a WQ BMP.

7 (3)



Subject: Cloud+ Page Label: 7 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:57 PM

Color:

Either include Table B-3 or callout the specific slot dimensions.



Subject: Callout Page Label: 7 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:58 PM

Color:

Include a cross section detail for the slotted pipe connection to the riser pipe and orifice plate per

the drainage report.



Subject: Cloud+ Page Label: 7 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:56 PM

Color:

Show the Slotted Pipe and label the length and

diameter.

Markup Summary

Locked (18)



Subject: Cloud+ Page Label: 8 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:23 PM

Color:

Replace with the following:

[Name, Title] [Business Name] [Address]

Note: Provide the actual information.



Subject: Cloud+ Page Label: 8 Lock: Locked

Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:21 PM

Color:

Replace with "Grading and Erosion Control Plan"

Include Contact Informations such as: Owner, Design Engineer, El Paso County Planning and Community Development, Utility companies, Contractor. Subject: Text Box Page Label: 8 Lock: Locked

Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:24 PM

Color:

Include Contact Informations such as:

Owner, Design Engineer, El Paso County Planning and Community Development, Utility companies,

Contractor.



Subject: Callout Page Label: 8 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 8/15/2017 11:02:56 AM

Color:

Add after the 2nd paragraph:

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 Directors discretion.

Add: PCD Project No. PPR-17-031

Subject: Text Box Page Label: 8 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:31 PM

Color:

Add: PCD Project No. PPR-17-031



Subject: Callout Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:56 PM

Color:

Show and label the drainage easement along the lot line.



Subject: Cloud+ Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:32 PM

Color:

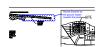
Show the actual retaining wall cross section which includes the footers.

Since the retaining wall is greater than 4 feet in height building permit is required.

Therefore, add a callout stating a building permit is required for the retaining wall.

Revise linework so the ground slopes towards the

pond.



Subject: Cloud+ Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:34 PM

Color:



Subject: Cloud+ Page Label: 10 Lock: Locked

Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:46 PM

Color:

Identify the riprap LxWxD and D50 Size.



Subject: Callout Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:35 PM

Color:

Show and label both the WQCV and 100yr water elevation.



Subject: Cloud+ Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:43 PM

Color:

Callout the lowest top of curb elevation fronting the rain garden.



Subject: Text Box Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:36 PM

Color:

Per the CBP Fil 2 FDR, Q5 & Q100 will be directed to the private 10' Type R inlet which has the throat opening facing into the property.

Current design and the narrative of the drainage letter indicates runoff over-tops onto Cole View instead of being directed into the inlet. Runoff from a 100yr storm must drain into the inlet, not the

street.



Subject: Callout Page Label: 10 Lock: Locked

Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:50 PM

Color:

Label to lot lines and easements.

Include the bearing/distance for the lot lines.

Subject: Callout Page Label: 10 Lock: Locked

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:48 PM

Color:

Status:

Identify the side slopes for the berm.



Subject: Cloud+ Page Label: 10 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:45 PM

Color:

Based on the grading, this area is not routed into the rain garden. Update the design so this area is

treated by a WQ BMP.



Subject: Cloud+ Page Label: 14 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce

Date: 7/31/2017 2:33:57 PM

Color:

Either include Table B-3 or callout the specific slot

dimensions.



Subject: Callout Page Label: 14 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:58 PM

Color:

Include a cross section detail for the slotted pipe connection to the riser pipe and orifice plate per

the drainage report.



Subject: Cloud+ Page Label: 14 Lock: Locked Status:

Checkmark: Unchecked Author: dsdlaforce Date: 7/31/2017 2:33:56 PM

Color:

Show the Slotted Pipe and label the length and

diameter.

Unlocked (18)

WILL BE PROVIDED WHEN WE GET SIGNATURES

Subject: Text Box Page Label: 8 Lock: Unlocked Status:

Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 11:12:59 AM

Color:

WILL BE PROVIDED WHEN WE GET

SIGNATURES

REVISED AS REQUESTED. Subject: Text Box Page Label: 8 Lock: Unlocked

Status: Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 11:12:33 AM

Color:

REVISED AS REQUESTED. Subject: Text Box Page Label: 8 Lock: Unlocked

Status:

Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 12:15:34 PM

Color:

REVISED AS REQUESTED.

REVISED AS REQUESTED.

REVISED AS REQUESTED. Subject: Text Box Page Label: 8 Lock: Unlocked

Status:

Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 11:09:08 AM

Color:

REVISED AS REQUESTED.

REVISED AS REQUESTED. Subject: Text Box Page Label: 8 Lock: Unlocked

Status:

Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 12:11:32 PM

Color:

REVISED AS REQUESTED.

REVISED AS REQUESTED. Subject: Text Box Page Label: 8 Lock: Unlocked

Status:

Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 10:53:11 AM

Color:

REVISED AS REQUESTED.

Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 1:07:04 PM Color: Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:31:00 PM Color: COLE VI Subject: Callout Runoff that enters private street travels west 75 Page Label: 10 feet to a street inlet and into the same storm Lock: Unlocked sewer. all goes to the same place. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/15/2017 10:00:40 AM Color: Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:30:54 PM Color: ■ Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: -SITE Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 12:27:52 PM Color:

Subject: Callout

Page Label: 10 Lock: Unlocked Status:

Checkmark: Unchecked Author: Todd Cartwright Date: 8/28/2017 7:26:39 PM

Color:

See also site plan.

Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:30:50 PM Color: Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: ryan_graham Date: 8/15/2017 1:51:27 PM Color: Subject: Text Box REVISED AS REQUESTED. Page Label: 10 REVISED AS REQUESTED. Lock: Unlocked Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:30:51 PM Color: Subject: Text Box REVISED AS REQUESTED. Page Label: 14 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:32:04 PM Color: ■ Subject: Text Box REVISED AS REQUESTED. Page Label: 14 REVISED AS Lock: Unlocked REQUESTED. Status: Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:32:00 PM Color:

REVISED AS REQUESTED.

Subject: Text Box Page Label: 14 Lock: Unlocked Status:

Checkmark: Unchecked Author: Todd_Cartwright Date: 8/28/2017 7:31:56 PM

Color:

REVISED AS REQUESTED.