



**Planning and Community
Development Department**
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DEVIATION REQUEST AND DECISION FORM

Updated: 6/26/2019

PROJECT INFORMATION

Project Name : SF193: Lorson Ranch East Filing 3

Schedule No.(s) : #:5500000411

Legal Description : A PARCEL OF LAND BEING A PORTION OF THE SOUTH HALF (S 1/2) SECTION 13, IN TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO.

BASIS OF BEARING: THE NORTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 13, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING MONUMENTED AT THE QUARTER CORNER COMMON TO SECTIONS 13 AND 14 WITH A 3"GALVANIZED H20 SCREW ON CAP AND AT THE CENTER QUARTER CORNER OF SECTION 13 WITH A 3-1/4"ALUMINUM CAP STAMPED "PLS23044". SAID LINE IS ASSUMED TO BEAR N89°32'23"E A DISTANCE OF 2654.23 FEET.

BEGINNING AT THE CENTER QUARTER CORNER OF SECTION 13; THENCE, N89°31'43"E A DISTANCE OF 32.00 FEET TO THE EASTERLY LINE OF THAT CERTAIN EASEMENT DESCRIBED UNDER RECEPTION NUMBER 218025811 IN THE ELPASO COUNTY RECORDS; THENCE ALONG THE EASTERLY LINES OF SAID EASEMENT THE FOLLOWING TWO (2) COURSES; (1) THENCE S00°52'02"E A DISTANCE OF 267.05 FEET TO A POINT OF CURVE; (2) THENCE 241.50 FEET ALONG THE ARC OF A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 533.00 FEET, A CENTRAL ANGLE OF 25°57'39", (THE CHORD OF WHICH BEARS S13°50'51"E A DISTANCE OF 239.44 FEET); THENCE, S65°49'40"W A DISTANCE OF 232.85 FEET; THENCE, S67°51'09"W A DISTANCE OF 113.39 FEET; THENCE, S63°33'19"W A DISTANCE OF 194.38 FEET TO A POINT OF CURVE; THENCE 304.41 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 730.00 FEET, A CENTRAL ANGLE OF 23°53'32", (THE CHORD OF WHICH CHORD BEARS S75°30'05"W A DISTANCE OF 302.21 FEET); THENCE, S87°26'51"W A DISTANCE OF 11.92 FEET TO THE SOUTHEAST RIGHT-OF-WAY CORNER OF LAMPREY DRIVE AS RECORDED IN "LORSON RANCH EAST FILING NO. 1" UNDER RECEPTION NUMBER 219714288 IN THE RECORDS OF EL PASO COUNTY, COLORADO; THENCE ALONG THE BOUNDARY OF "LORSON RANCH EAST FILING NO. 1" THE FOLLOWING SEVEN (7) COURSES:

1. THENCE, N02°33'09"W A DISTANCE OF 60.00 FEET;
2. THENCE, S87°26'51"W A DISTANCE OF 15.33 FEET;
3. THENCE, N02°33'09"W A DISTANCE OF 34.59 FEET;
4. THENCE, S87°26'51"W A DISTANCE OF 50.00 FEET;
5. THENCE, S02°33'09"E A DISTANCE OF 14.59 FEET;
6. THENCE, S42°26'51"W A DISTANCE OF 28.28 FEET;
7. THENCE, S87°26'51"W A DISTANCE OF 355.00 FEET TO THE SOUTHEAST CORNER OF LOT 58 AS RECORDED IN "LORSON RANCH EAST FILING NO. 2" UNDER RECEPTION NUMBER 220714468 IN THE RECORDS OF EL PASO COUNTY, COLORADO; THENCE ALONG THE BOUNDARY OF "LORSON RANCH EAST FILING NO. 2" THE FOLLOWING FOUR (4) COURSES:

1. THENCE, N02°33'09"W A DISTANCE OF 160.00 FEET;
2. THENCE, S87°26'51"W A DISTANCE OF 9.30 FEET;
3. THENCE, N02°33'09"W A DISTANCE OF 136.79 FEET;
4. THENCE, N00°28'00"W A DISTANCE OF 454.28 FEET TO THE EAST-WEST CENTERLINE OF SECTION 13;.

THENCE N89°32'23"E ALONG SAID CENTERLINE 1171.44 FEET TO POINT OF BEGINNING.

SAID PARCEL CONTAINS A CALCULATED AREA OF 849,292 S.F. (19.497 ACRES) MORE OR LESS

APPLICANT INFORMATION

Company : Eagle Development Company

Name : Jeff Mark

☒ Owner ☐ Consultant ☐ Contractor

Mailing Address : 212 N. Wasatch Avenue, Suite 301, Colorado Springs, CO 80903

Phone Number : (303) 210-7747

FAX Number :

Email Address : jmark@landhuisco.com

ENGINEER INFORMATION

Company : Basecamp AEC, Inc.

Name : Steven Meiggs, PE

Colorado P.E. Number : 64496

Mailing Address : PO Box 2196, Edwards, CO 81632

600 Corporate Circle, Suite A, Golden, CO 80401

Phone Number : 813-422-0931

FAX Number :

Email Address : steve@basecampaec.com

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

08/14/2026
Date

Engineer's Seal, Signature
And Date of Signature



Steven Meiggs

8/14/2026

DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section **El Paso County Standard Drawing of the Engineering Criteria Manual (ECM) Detail SD 4-20**, is requested.

Identify the specific ECM standard which a deviation is requested:

The ECM manual does not include chemical grout as a repair method for roadways and utility trenches. Currently, the ECM standard drawings, previously found in Appendix F, Detail SD_4-20, outline the process for utility trench repair in asphalt pavement. This process involves excavating down to the bottom of the utility line, compacting the soil in 6-inch lifts, and then placing a new base course followed by new pavement.

State the reason for the requested deviation:

Deviation request for the use of the chemical grout to stabilize the soils within the roadway and utility trenches where settlement and distress were observed and to lift and relevel pavement, concrete flatwork, and stormwater catch basins. The deviation request is requested for Lorson Ranch East Filing 3 (File# SF193)

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The proposed alternative of chemical grouting to stabilize the observed settlement/distress is a less invasive methodology that doesn't require excavation and replacement of asphalt, sidewalks, or curb/gutters. El Paso County – Engineering Criteria Manual, Revision 6. December 13, 2016, utility trench repair detail for asphalt pavement (File name SD_4-20) was utilized in the northern half of Lorson Ranch Hills Filing 1. However, more than half of the repaired locations are exhibiting ongoing settlement. The proposed chemical grout injection alternative addresses the settlement by injecting an initial stabilizing layer/lens at a depth of approximately 4', approximately 1' above the existing water lateral, and a second lifting layer/lens at approximately a depth of 1.5' to 2'. The initial stabilizing layer minimizes overburden pressure/stresses from further compacting the soils below 4'. The second lifting injection works similarly but also mitigates surficial dynamic loads from further compacting underlying soils. Together, the multiple layers of injection, when controlled and monitored, can effectively stabilize, lift, and relevel pavement, stormwater structures, and concrete flatwork in minimal time without excavation and its associated disturbance and disruption. Chemical grout injection as a repair method to stabilize soils and lift/relevel foundations/roads/concrete has been utilized in the construction industry since the 1980s and is considered common and customary.

The chemical grout injection should be high-density polymer resins that, when mixed, will create a rapidly expanding (full rise time of between approximately 15 to 30 seconds or less at the intended injection temperature [115 to 130 degrees Fahrenheit]) polyurethane foam that can lift, realign, and fill voids under concrete slabs and asphalt being supported by base soils. Hydrophilic or permeation-type chemical grouts should not be utilized. In addition, the resulting polyurethane foam should be a closed-cell material that is hydro-insensitive and should have an unconfined expansion ratio of between 15:1 and 20:1 and 4-5 pounds per cubic foot (pcf) free rise density. Once injected, the recommended resin mixture should rapidly expand into the composite material (foam), binding and densifying soils, filling voids, and exerting a controlled compressive uplift force under a limited area of the slab/pavement. The foam should then cure to 90 percent of its compressive strength within 25 minutes of injection into a stable replacement base material.

The chemical grout should initially be injected approximately 4 feet on center within the utility trenches through a 1/2" injection rod advanced to a depth no greater than 4 feet below land surface (bls) through 5/8" diameter drilled holes. After an initial stabilizing injection volume that will be determined on a case-by-case basis, the injection rod tip will be raised to approximately 1.5' to 2' bls or within 0' to 1' ft bls of the base of the cement-treated subgrade (CTS) to lift and relevel the concrete slabs or pavement. When being utilized to relevel installed stormwater vaults, concrete sidewalks, or concrete curbs, the material will be injected directly beneath the concrete. The elevations of the pavement/slabs should be monitored continuously during the chemical grouting

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

process.

The proposed materials will consist of Utah Foam Products, Inc., AT-840-8 or AT-840-10, or NCFI Polyurethanes NCFI-4RH (formerly 24-003). The material utilized will depend on the outside temperature, pavement temperature (colder pavement will deflect/bend less), the presence/absence of CTS, and/or product availability. Note that the rate of expansion can be adjusted via the injection plant preheating temperature, with high temperatures resulting in quicker reaction/rise times. The contractor is offering a two-year warranty on the injected areas, such that if some additional settlement of significance occurs, the contractor will return to reinject that area. The 2-year warranty shall also be for the County to execute should there be any additional settlement. The intent is for the developer and the County to be able to call on the contractor for any issues. A copy of the Concrete Stabilization Technologies (CST) Method & Deep Injection Process Overview and Warranty will be attached along with all the materials' cutsheets and specifications, which states:

"Project Warranty – For a period of two (2) years following work completion, CST warrants that the lifted pavements will not settle more than ½". For additional settlement of the injected area CST shall re-lift the subject pavements one time during the warranty period, by drilling and re-injecting material below the pavement, free of charge. If settlement occurs more than once in the injected areas, or in deeper or other untreated soils during the warranty period, CST will reinject at the original contract price during the warranty period.

The soil injection process entails injecting expanding structural polymer through multiple probes at directly below the pavement and into the 4' zone of soils to increase the bearing capacity of the soils where injected.

If additional settlement occurs due to improper drainage of water, a water leak of any kind, or excessive weight put on the pavements, this warranty is void.

Material Warranty – For a period of two (2) years following work completion, CST warrants the polyurethane material against significant shrinkage or deterioration. During the warranty period, CST shall replace by re-injection any materials that fail to perform as warranted including, shrinkage, or deterioration.

All original CST contract agreement language and terms and conditions apply in any warranty work.

CST does NOT warrant that its process or material will prevent or control erosion of non-treated surrounding soils. Further, CST assumes no liability for pavement movement caused by non-treated soil settlement."

Contacts for Warranty:

Clint Mathis

Phone: 303-306-9191

Fax: 303-306-9099

Email: cmathis@cststabilization.com

Project: Lorson Ranch, East NO. 2&3, Skyline NO. 1, The Hills, The Ridge

The roadway load capacity will be increased/strengthened by using this product. The placed and cured material (polyurethane) is generally considered non-reactive. Polyurethane material injected below the surface of the soil will remain as injected, and any degradation would be negligible. Under normal conditions, when buried in soil or beneath pavement/concrete, the material will not degrade. The polyurethane material will not degrade unless exposed to UV light.

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☐ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☒ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

The proposed alternative of chemical grouting to stabilize the observed settlement/distress is much quicker and less invasive methodology that doesn't require excavation and replacement of asphalt, sidewalks, or curb/gutters. El Paso County – Engineering Criteria Manual, Revision 6. December 13, 2016, utility trench repair detail for asphalt pavement (File name SD_4-20) was utilized in the northern half of Lorson Ranch Hills Filing 1. However, more than half of the repaired locations are exhibiting ongoing settlement.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The requested deviation will achieve the intended results of repair by stabilizing and lifting/releveling roadways, concrete flatwork, and stormwater structures to meet criteria and the approved plans that have been affected by ground settlement with a reduced risk to the underlying utilities when compared to the current standard of excavation and backfill. Additionally, the requested deviation will be accomplished in far less time (hours compared to days), with minimal disturbance to the public. .

The deviation will not adversely affect safety or operations.

The deviation will not affect safety or operations. The chemical grout repair is non-invasive and causes minimal disturbance to the public. The injected material (structural polyurethane foam) is safe (inert and non-reactive) and can be excavated, by hand, or machine, if necessary, and disposed of as normal waste.

The deviation will not adversely affect maintenance and its associated cost.

The deviation will not affect maintenance and its associated cost. The chemical grout can be hand-excavated and excavated without issues and can be disposed as normal waste

The deviation will not adversely affect aesthetic appearance.

The deviation will not affect aesthetic appearance. The chemical grout is injected into the subsurface soils and helps reduce observed settlement by re-leveling roadways and sidewalks. This method will reduce the number of locations that will require surficial patching and, therefore, will improve aesthetic appearance when compared to the current method of excavation and patching.

The deviation meets the design intent and purpose of the ECM standards.

The deviation is a common industry repair and stabilization method and, based on previous attempts of repair by the design content of Detail SD_4-20 that still show signs of ongoing settlement, will improve upon the intent and purpose of the ECM standard.

The deviation meets the control measure requirements of Part I.E.3 and Part I.E.4 of the County's MS4 permit, as applicable.

Not Applicable

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

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1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2. BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3. APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4. APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

1.5. TECHNICAL GUIDANCE

The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

1.6. LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

1.7. REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC.

Exhibit showing Chemical
Grout Locations on Lorson
Ranch East Filing 3

LORSON RANCH EAST FILING NO. 3

A PORTION OF THE S 1/2 SECTION 13,
TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
EL PASO COUNTY, COLORADO

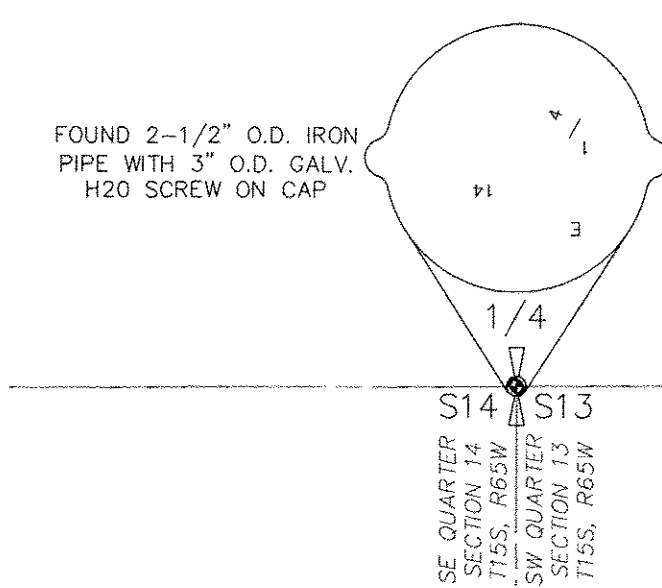
UNPLATTED
REC. NO. 216067718

LORSON RANCH EAST FILING NO. 3
TOTAL AREA = 849,292 S.F.
19.497 ACRES +/-

14474

POINT OF COMMENCING/
POINT OF BEGINNING
N89°31'43"E
32.00'

- Sinking Road/Sidewalk - Area to be treated with chemical grout
- ADA Ramp/Sidewalk Issues
- Missing Signs, Stop and Street Names
- ▨ Mill and Overlay



HALIFAX DRIVE			
N89°32'00"E	24.16'	0.00'	
N00°28'00"W	12.08'	12.08'	S00°28'00"E
7.50'	12.08'	12.08'	7.50'
S89°32'00"W	24.16'		
LOT 14	6,994 SF	LOT 15	7,064 SF

MAIL KIOSK
EASEMENT DETAIL KE-1
LOTS 14 & 15
SCALE: 1" = 20'

LEGEND:

- SF SQUARE FEET
- (R) RADIAL
- (xxxx) ADDRESS
- CH CHORD
- CH L CHORD LENGTH
- SET ORANGE PLASTIC SURVEYORS CAP ON NO. 4 REBAR, CAP IS STAMPED "M&S CIVIL PLS 25966"
- FOUND ORANGE PLASTIC SURVEYORS CAP ON NO. 4 REBAR, CAP IS STAMPED "M&S CIVIL PLS 25966"
- FOUND MONUMENT AS NOTED
- BOUNDARY LINE
- PROPERTY LINE
- RIGHT OF WAY LINE
- CENTERLINE
- EASEMENT LINE
- ADJACENT SUBDIVISION LINE
- ADJACENT PROPERTY LINE
- EXISTING RIGHT OF WAY LINE
- EXISTING CENTERLINE
- EXISTING EASEMENT
- *NOT A PART* PARCELS INDICATED WITH ASTERISK "*" ARE NOT A PART OF THIS SUBDIVISION

RIGHT-OF-WAY LINE TABLE

LINE #	DISTANCE	BEARING
RL1	7.24	N87°26'51"E
RL2	7.24	S87°26'51"W
RL3	14.99	S26°26'41"E
RL4	15.20	N26°26'41"W

RIGHT-OF-WAY CURVE TABLE

CURVE #	RADIUS	DELTA	LENGTH
C3	225.00	3°03'06"	11.98
RC1	20.00	90°00'00"	31.42
RC2	20.00	90°00'00"	31.42
RC3	20.00	90°00'00"	31.42
RC4	20.00	90°00'00"	31.42
RC5	20.00	91°41'51"	32.01
RC6	20.00	90°00'00"	31.42
RC7	60.00	23°33'23"	24.67
RC8	27.00	90°00'00"	42.41
RC9	60.00	23°33'23"	24.67
RC10	20.00	90°00'00"	31.42
RC11	20.00	90°00'00"	31.42
RC12	60.00	23°33'23"	24.67
RC13	27.00	90°00'00"	42.41
RC14	60.00	23°33'23"	24.67
RC15	395.00	2°05'09"	14.38
RC16	345.00	2°05'09"	12.56
RC17	20.00	90°00'00"	31.42
RC18	20.00	90°00'00"	31.42
RC19	225.00	2°05'09"	8.19
RC20	175.00	2°05'09"	6.37

RADIAL BEARING TABLE

LINE #	BEARING
(R)1	N11°53'28"W
(R)2	N48°10'12"W
(R)3	S78°11'39"E
(R)4	S78°47'52"W
(R)5	S59°36'35"W
(R)6	S17°06'47"E
(R)7	S10°57'02"E
(R)8	S45°02'24"E
(R)9	S80°19'29"E
(R)10	N86°09'59"E

LOT & TRACT CURVE TABLE

CURVE #	RADIUS	DELTA	LENGTH
C1	670.00	0°24'19"	4.74
C2	560.00	0°24'19"	3.96
C3	225.00	3°03'06"	11.98
C4	60.00	14°16'21"	14.95
C5	60.00	9°17'02"	9.72
C6	60.00	19°11'17"	20.09
C7	60.00	6°54'37"	7.24
C8	60.00	16°38'47"	17.43
C9	60.00	20°11'23"	21.14
C10	60.00	3°22'00"	3.53

CENTERLINE CURVE TABLE

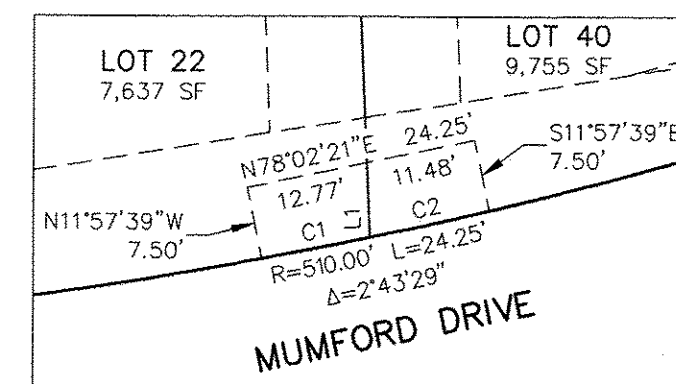
CURVE #	RADIUS	DELTA	LENGTH
CL1	370.00	2°05'09"	13.47
CL2	270.00	2°05'09"	7.28

EASEMENT LINE TABLE

LINE #	DISTANCE	BEARING
L1	7.75	S02°33'09"E

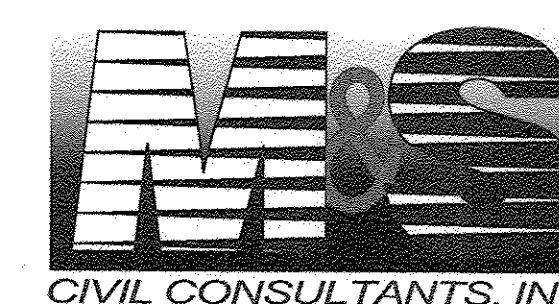
EASEMENT CURVE TABLE

CURVE #	RADIUS	DELTA	ARC LENGTH
C1	510.00	1°17'33"	11.50
C2	510.00	1°25'56"	12.75



MAIL KIOSK
EASEMENT DETAIL KE-2
LOTS 22 & 40
SCALE: 1" = 20'

FINAL PLAT
LORSON RANCH EAST
FILING NO. 3
JOB NO. 43-127
DATE PREPARED: 03/05/2019
DATE REVISED: 12/30/2019



20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485