LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

Sterling Ranch Phase 2 Preliminary Plan
Traffic Impact Analysis
(LSC #184660)
December 20, 2018

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Date 1/11/19

SP-19-001

LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

December 20, 2018

Mr. Jim Morley
Morley-Bentley Investments, LLC
20 Boulder Crescent, 1st Floor
Colorado Springs, CO 80903

RE: Sterling Ranch Phase 2 Preliminary Plan
El Paso County, CO
Traffic Impact Analysis
LSC #184660

Dear Mr. Morley:

LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the Sterling Ranch Phase 2 Preliminary Plan. As shown on Figure 1, Sterling Ranch is located east of Vollmer Road near Lochwinnoch Lane between the future extensions of Marksheffel Road and Briargate Parkway (formerly called Stapleton Drive) in El Paso County, Colorado. LSC prepared a traffic impact study (TIS) for the entire Sterling Ranch development dated June 5, 2008. LSC also prepared a traffic impact analysis for the first phase of the Sterling Ranch development dated March 16, 2015.

REPORT CONTENTS

This report presents:

- The existing roadway and traffic conditions in the site's vicinity including the roadway widths, surface conditions, lane geometries, traffic controls, and posted speed limits.
- Current traffic volume data.
- Estimates of projected intermediate-term (2025) traffic volumes.
- Comparison of the current Phase 2 land uses to those shown in the Sketch Plan and master traffic report for the same land area.
- The projected average weekday and peak-hour vehicle-trips to be generated by the proposed development.
- The assignment of the projected site-generated traffic volumes to the area roadways.
- The projected short-term total traffic volumes on the area roadways.
- The projected levels of service at the site access points and key intersections in the vicinity of the site.
- The recommended street classifications for the internal streets within the proposed development.

- Roadway capacity of the proposed Vollmer Road interim cross section.
- An evaluation of the ability of the short-term roadway improvements to accommodate the projected short-term traffic volumes.
- The project's obligation (if any) to the County roadway improvement fee program.

STUDY AREA

The study area for the June 2008 master traffic impact report was best shown on Figure 3 from that report, which has been attached for reference. The study area for this Phase 2 analysis includes only those intersections within that study area that exist today or are needed to accommodate the Phase 2 traffic. The study area for the future traffic studies of later phases of the Sterling Ranch development will reflect the appropriate existing conditions at that time and any additional roadway connections/ intersections needed to accommodate those specific phases. See comment letter.

LAND USE AND ACCESS

The currently proposed Sterling Ranch Phase 2 Preliminary Plan area was included in 2008 master plan TIS as Traffic Analysis Zones (TAZ) 5 and 6 and a portion of TAZ 2. Phase 2 is planned to contain 212 lots for single-family homes. The 2008 TIS assumed 219 single-family homes for this same area.

Full-movement access for Phase 2 is proposed to Sterling Ranch Boulevard aligning with Dines Boulevard and about 900 feet to the west. Additional access is proposed through Sterling Ranch Filing 2, which is located west of the Phase 2 Preliminary Plan area and north of Sterling Ranch Road.

ROADWAY AND TRAFFIC CONDITIONS

The roadways in the site's vicinity are shown on Figure 1 and are described below.

Vollmer Road is currently a five-lane urban street within the City of Colorado Springs limits between Black Forest Road and Cowpoke Road; and a two-lane, rural, paved roadway north of Cowpoke Road extending to north of Hodgen Road. In the southbound direction, Vollmer Road has a posted speed limit of 45 miles per hour (mph). South of Cowpoke Road, Vollmer Road has a 40-mph posted speed limit. The 2040 El Paso County *Major Transportation Corridors Plan* (MTCP) and the Sterling Ranch master traffic study show Vollmer Road as a four-lane Urban Minor Arterial in the vicinity of the site. In the interim, auxiliary turn lanes will be completed on Vollmer Road as shown in the attached exhibits and as per the attached memo by LSC dated October 2, 2017.

Marksheffel Road is a Principal Arterial extending north from the City of Fountain to Woodmen Road. Marksheffel Road is planned to ultimately be widened to six lanes and extended north and west from Woodmen Road to connect to Research Parkway at Black Forest Road. Marksheffel Road is shown as a six-lane Principal Arterial through the site on the El Paso County MTCP. Marksheffel Road is planned to be constructed north from Woodmen Road to Vollmer Road in the short-term future.

as a 4-lane road to be owned and maintained by the City of Colorado Springs

/Stapleton Drive

Briargate Parkway is a six-lane, Principal Arterial that extends east from I-25 to Grand Lawn Circle (about one-half mile east of Powers Boulevard). Briargate Parkway is planned to ultimately extend to Towner Drive. With the Sterling Ranch Phase 1 development, Stapleton Road is planned to be constructed as a two-lane roadway between Vollmer Road and the proposed first site access intersection 750 feet east of Vollmer. For this report of short-term conditions, it was assumed that only this section of Stapleton Road would not be constructed in the vicinity of the site.

Briargate/

This doesn't make sense.

Sterling Ranch Road is a planned Non-Residential Collector shown extending through the Sterling Ranch development between Marksheffel Road and Stapleton Drive. Sterling Ranch Road is planned to be constructed between Marksheffel Road and Dines Boulevard as part of Sterling Ranch Filing No. 2 now under review by the County.

EXISTING TRAFFIC VOLUMES

Figure 3 shows the existing daily and peak-hour traffic volumes on Vollmer Road in the vicinity of the site. The traffic volumes are from the attached traffic counts conducted adjacent to the site in September 2017. Figure 3 also shows the average weekday traffic volumes on Vollmer Road based on 24-hour machine (tube) counts conducted in September 2017.

2025 BACKGROUND TRAFFIC

Figure 4a shows the projected 2025 background traffic volumes. Background traffic is the traffic estimated to be on the roadways without the Sterling Ranch Phase 2 Preliminary Plan traffic. Background traffic includes the existing traffic volumes (from Figure 3) plus increases in through traffic due to regional growth plus traffic estimated to be generated by buildout of the residential portion of Sterling Ranch Phase 1 and the proposed Retreat at Timber Ridge development to be located generally northeast of the intersection of Vollmer Road and Poco Road. The 2025 background traffic volumes assume Marksheffel Road has been constructed between Woodmen Road and Vollmer Road but not west of Vollmer Road. The 2025 background volumes also assume only the short section of Briargate Parkway between Vollmer Road and Wheatland Drive has been constructed in the vicinity of the site.

Figure 4b shows the lane geometry, traffic control, and level of service at the key intersections based on the short-term background volumes.

TRIP GENERATION

The site-generated vehicle-trips were estimated using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 1 shows the current trip generation estimate. Table 1 also shows the trip generation estimate for this same area from the 2008 master plan TIS for comparison.

As shown in Table 1, Sterling Ranch Phase 2 is projected to generate about 2,001 new vehicle trips on the average weekday, with about one-half of the vehicles entering and one-half of the vehicles exiting

in a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 39 vehicles would enter and 118 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:30 and 6:30 p.m., about 132 vehicles would enter and 77 vehicles would exit the site.

SHORT-TERM DIRECTIONAL DISTRIBUTION AND ASSIGNMENT

The directional distribution of the site-generated traffic volumes on the street and roadway system serving the site is one of the most important factors in determining the site's traffic impacts. The specific distribution estimates are shown in Figure 5. The directional distribution estimates are based on the following factors: the location of the site with respect to the Colorado Springs metropolitan area, the planned access system for the site, the street and roadway system serving the site, and the land uses proposed for the site.

When the distribution percentages (from Figure 5) are applied to the trip generation estimates (from Table 1), the resulting site-generated traffic volumes can be determined. Figure 6 shows the short-term site-generated traffic volume estimate.

INTERMEDIATE-TERM (2025) TOTAL TRAFFIC

Figure 7a shows the projected total traffic volumes for the intermediate term. Total traffic volumes include 2025 background through traffic on Vollmer Road (from Figure 4a) plus the short-term site-generated traffic volumes (from Figure 6).

LONG-TERM TRAFFIC

Please refer to the master traffic report—the June 5, 2008 Sterling Ranch Updated Traffic Impact Analysis by LSC—for the long-term peak-hour traffic volume projections and level of service analysis. The original report is for the entire Sterling Ranch Sketch Plan.

ESTIMATED VOLLMER ROAD IMPROVEMENTS/CAPACITY

Currently the MTCP indicates a capacity of existing Vollmer Road to be about 6,000 vehicles per day. The El Paso County *Engineering Criteria Manual* (ECM) indicates the average daily traffic (ADT) capacity of an ECM-standard rural minor arterial (two lanes) to be 10,000 vehicles per day. However, the proposed interim cross section is a hybrid between urban and rural cross sections and would include auxiliary turn lanes. With the addition of ECM-standard auxiliary right- and left-turn deceleration lanes, LSC estimates the capacity to be about 14,000 vehicles per day through the area of the improved cross section. This is comparable to the fee study estimate of the capacity of Fontaine Boulevard west of Marksheffel, which has a two-lane cross section and auxiliary turn lanes.

The projected intermediate-term total traffic volume as shown in Figure 7a would be 8,945 vehicles per day just south of Marksheffel Road and 6,295 vehicles per day just south of Briargate Parkway. These volumes are below the estimated capacity of 14,000 vehicles per day for a roadway of this cross section.

PROJECTED INTERSECTION LEVELS OF SERVICE

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 2 shows the level of service delay ranges.

Table 2

Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections		Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	V/C[1]	Average Control Delay (seconds per vehicle)[2]
A	10.0 sec or less	less than 0.60	10.0 sec or less
B	10.1-20.0 sec	0.60-0.69	10.1-15.0 sec
C	20.1-35.0 sec	0.70-0.79	15.1-25.0 sec
D	35.1-55.0 sec	0.80-0.89	25.1-35.0 sec
E	55.1-80.0 sec	0.90-0.99	35.1-50.0 sec
F	80.1 sec or more	1.00 and greater	50.1 sec or more

(1) Source: *Transportation Research Circular 212*
(2) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The site access points and the key area intersections were analyzed to determine the projected levels of service for the intermediate-term background and total traffic volumes based on the unsignalized intersection analysis procedures from the *Highway Capacity Manual 6th Edition*. Figures 4b and 7b show the level of service analysis results. The level of service reports are attached.

All of the intersections analyzed are projected to operate at a level of service C or better for all movements as stop-sign-controlled intersections.

SUBDIVISION STREET CLASSIFICATIONS

Figure 8 shows the recommended street classifications for Sterling Ranch Road, Dines Boulevard, and the internal streets within the Sterling Ranch Phase 2 Preliminary Plan area.

ROADWAY IMPROVEMENTS

Vollmer Road

, Sterling Ranch Filing No. 2,

Based on the projected 2025 total traffic volumes, the criteria contained in the El Paso County *Engineering Criteria Manual*, and the classification of Vollmer Road as a Minor Arterial, northbound right-turn deceleration lanes would be required on Vollmer Road approaching Marksheffel Road, Alzada Drive, Dines Boulevard, and Briargate Parkway. A southbound left-turn lane would only be required approaching Marksheffel Road. **However, the road improvements required as part of the Subdivision Improvements Agreement (SIA) for Homestead at Sterling Ranch Filing No. 1 and Branding Iron at Sterling Ranch Filing No. 1 must be constructed. These include auxiliary turn lanes on Vollmer Road** as discussed in our October 2, 2017 transportation memorandum. The applicant will be constructing an interim cross section for Vollmer Road between Marksheffel Road and Briargate Parkway. The interim road improvement would widen the roadway to the east side. There would continue to be one through lane in each direction, but the interim road improvements would allow for southbound left-turn and northbound right-turn lanes at the Briargate Parkway/Vollmer and Dines/Vollmer intersections. An escrow agreement requires a fair share contribution be deposited towards these improvements with each plat or replat within Sterling Ranch.

Address Marksheffel Road from Vollmer to property boundary (see comment letter).

Sterling Ranch Road

Based on the projected 2025 total traffic volumes, the criteria contained in the El Paso County *Engineering Criteria Manual* and the classification of Sterling Ranch Road as an Urban Non-Residential Collector, an eastbound right-turn deceleration lane would be required approaching School House Drive. This lane should be 155 feet long plus a 160-foot taper.

Based on the projected 2025 total traffic volumes, the criteria contained in the El Paso County *Engineering Criteria Manual* and the classification of Sterling Ranch Road as an Urban Non-Residential Collector, a westbound right-turn deceleration lane would **not** be required approaching School House Drive.

Based on the projected 2025 total traffic volumes, the criteria contained in the El Paso County *Engineering Criteria Manual* and the classification of Sterling Ranch Road as an Urban Non-Residential Collector, an eastbound right-turn deceleration lane would **not** be required approaching Dines Boulevard.

Based on the projected 2025 total traffic volumes, the criteria contained in the El Paso County *Engineering Criteria Manual* and the classification of Sterling Ranch Road as an Urban Non-Residential Collector, left-turn lanes would **not** be required approaching School House Drive and Dines Boulevard. However, the Non-Residential Collector would provide one through lane in each direction plus a center two-way left-turn lane. This center painted median would accommodate left turns at these intersections.

Provide an improvements summary table including the improvements needed in S.R. Filing 2 to serve Phase II and Marksheffel Road adjacent to and south of the site.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E., PTOE
Principal

JCH:KDF:bjwb

Enclosures: Table 1
Figures 1-8
Traffic Count Reports
Level of Service Reports
Figure 3 from June 2008 Master Traffic Impact Report
Sterling Ranch – Vollmer Road Street Improvement Plans
Transportation Memo dated October 2, 2017

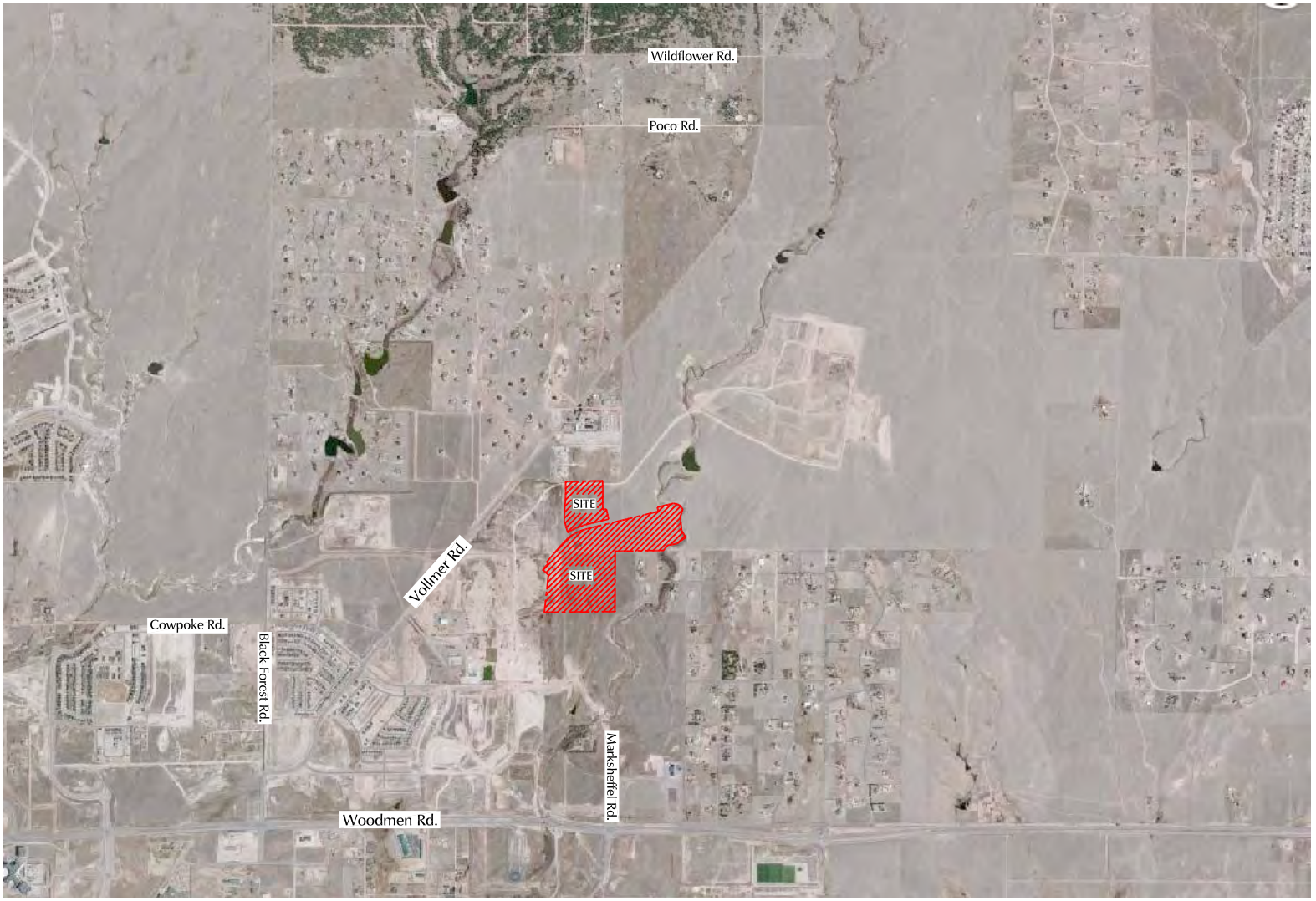
Table 1
Trip Generation Estimate
Sterling Ranch Phase 2

Traffic Analysis Zone	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates [1] Average Weekday Traffic	Trip Generation Rates [1] Morning Peak Hour In	Trip Generation Rates [1] Morning Peak Hour Out	Trip Generation Rates [1] Evening Peak Hour In	Trip Generation Rates [1] Evening Peak Hour Out	Total External Trips Generated Average Weekday Traffic	Total External Trips Generated Morning Peak Hour In	Total External Trips Generated Morning Peak Hour Out	Total External Trips Generated Evening Peak Hour In	Total External Trips Generated Evening Peak Hour Out
Currently Proposed Phase 2													
2	210	Single-Family Detached Housing	50 DU[2]	9.44	0.19	0.56	0.62	0.37	472	9	28	31	18
5&6	210	Single-Family Detached Housing	162 DU	9.44	0.19	0.56	0.62	0.37	1,529	30	90	101	59
			212 DU						**2,001**	**39**	**118**	**132**	**77**
Sterling Ranch Updated Traffic Impact Analysis June 5, 2008													
4[3]	210	Single-Family Detached Housing	34 DU	9.57	0.19	0.56	0.64	0.37	325	6	19	22	13
5	210	Single-Family Detached Housing	82 DU	9.57	0.19	0.56	0.64	0.37	785	15	46	52	31
6	210	Single-Family Detached Housing	103 DU	9.57	0.19	0.56	0.64	0.37	986	19	58	66	38
			219 DU						**2,096**	**40**	**123**	**140**	**82**

Notes:
(1) Source: "*Trip Generation, 10th Edition, 2017*" by the Institute of Transportation Engineers (ITE)
(2) DU = dwelling unit
(3) The land use quantities were adjusted by the ratio of the sketch plan TAZ areas to the land use area shown in Phase 2

Source: LSC Transportation Consultants, Inc.

Add school traffic (future).



N

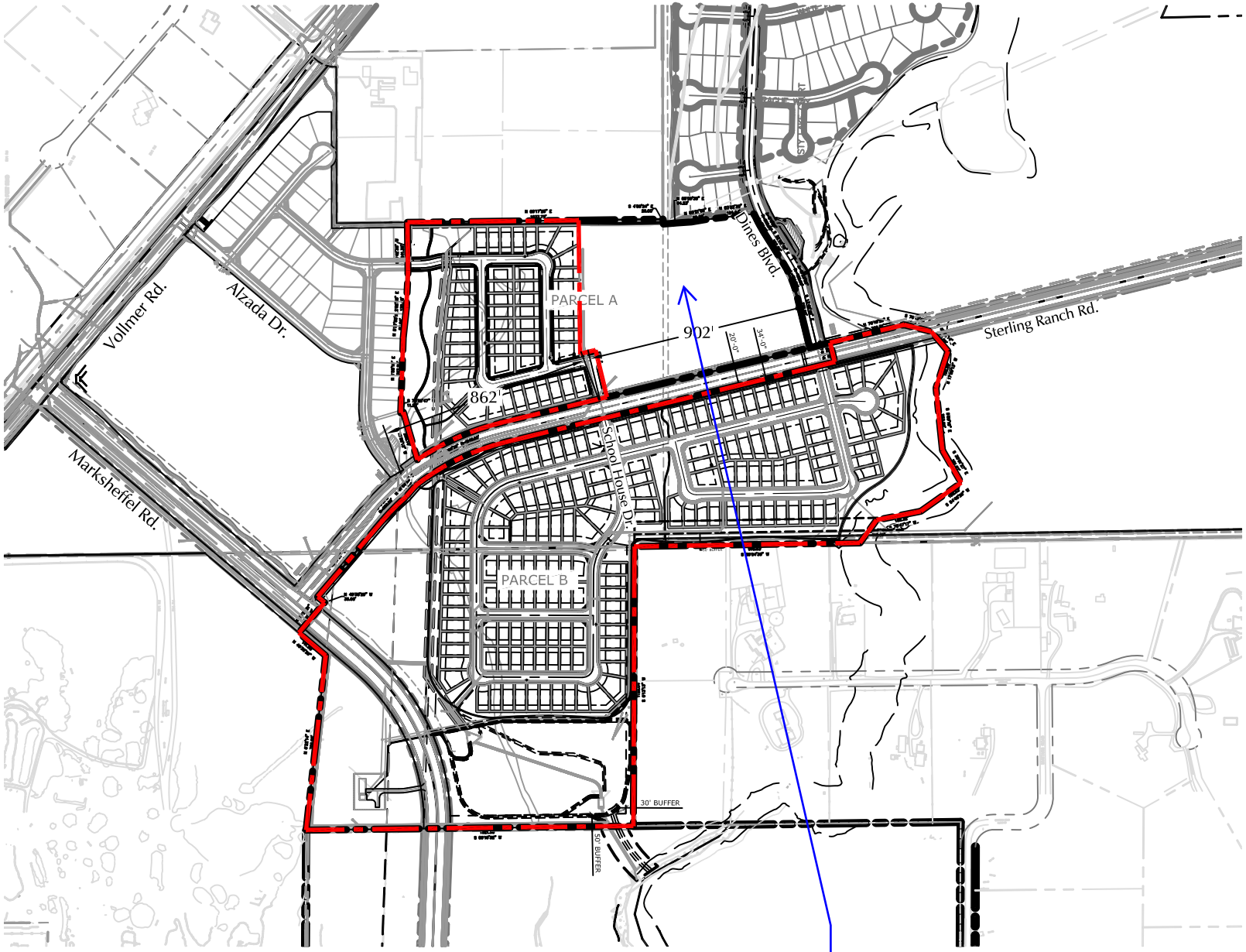
Approximate Scale
Scale: 1"= 3,000'

Figure 1

Vicinity Map

Sterling Ranch Phase 2 (LSC #184660)

LSC TRANSPORTATION CONSULTANTS, INC.



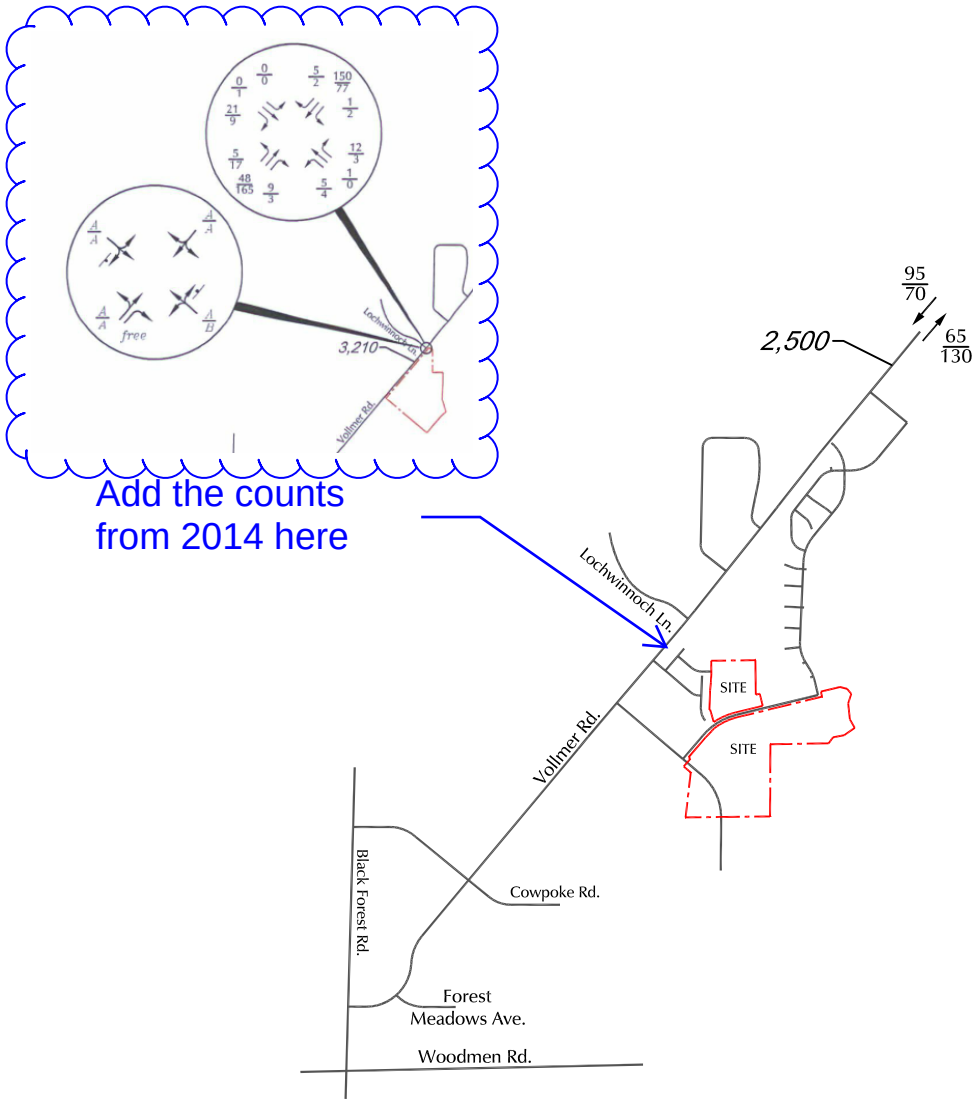
Approximate Scale
Scale: 1"= 600'

Figure 2

Site Plan

Sterling Ranch Phase 2 (LSC #184660)

TRANSPORTATION CONSULTANTS, INC.



Approximate Scale
Scale: 1"= 3,000'

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

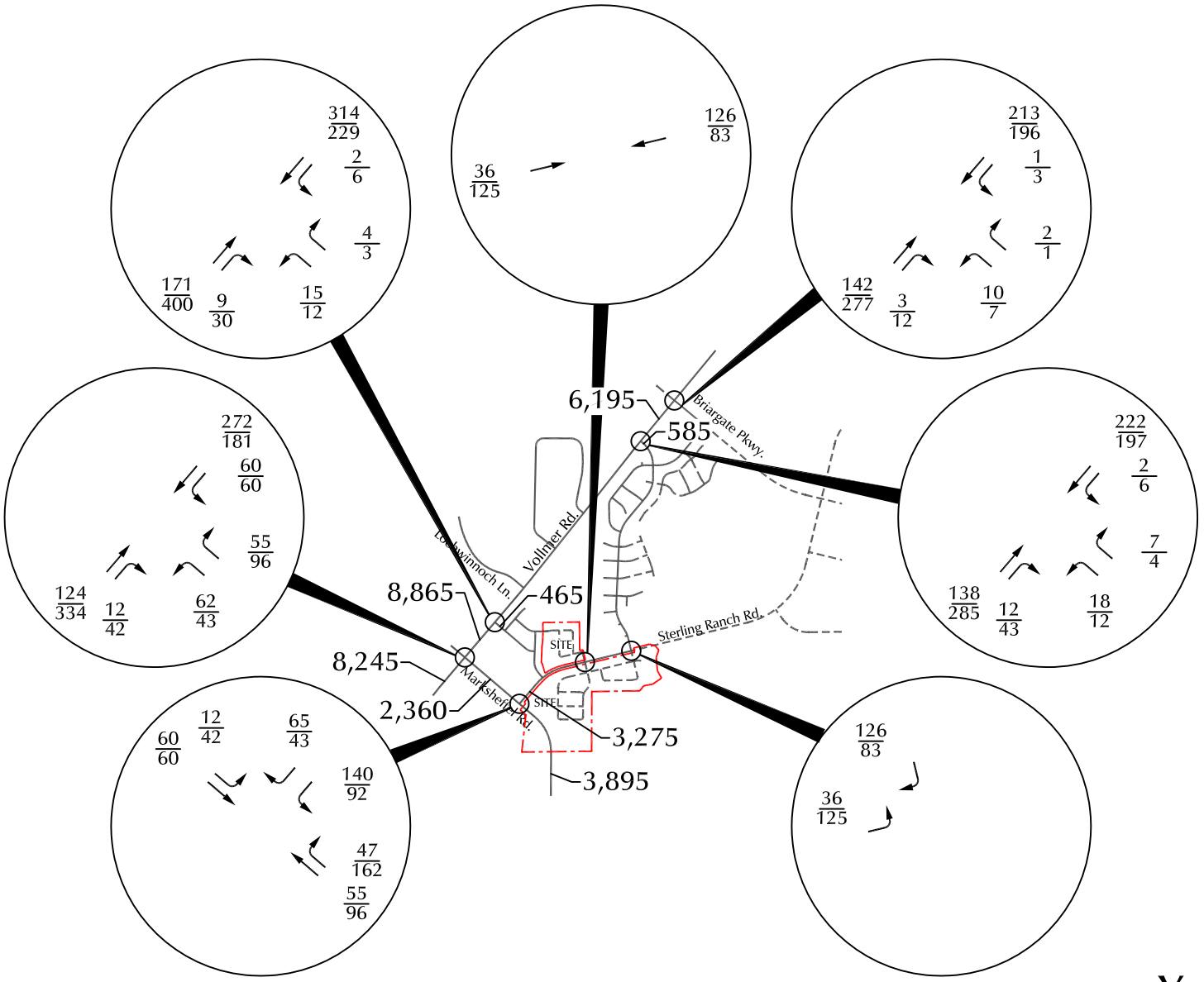
XXX = Average Weekday Traffic (vehicles per day) September 2017

TRANSPORTATION CONSULTANTS, INC.

Figure 3

Existing Traffic Volumes

Sterling Ranch Phase 2 (LSC #184660)



LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

500 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 4a

Year 2025 Background Traffic

Sterling Ranch Phase 2 (LSC #184660)

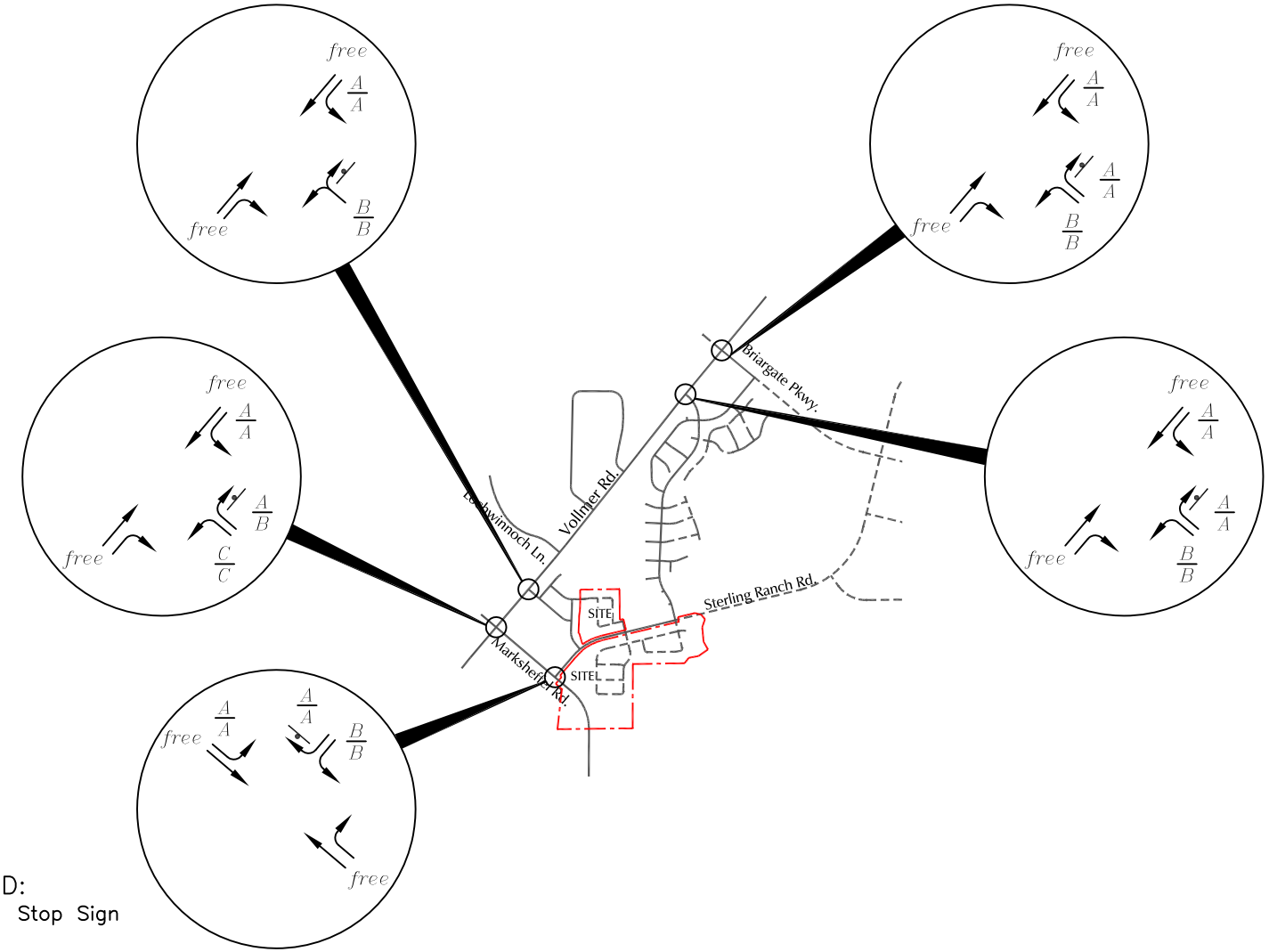
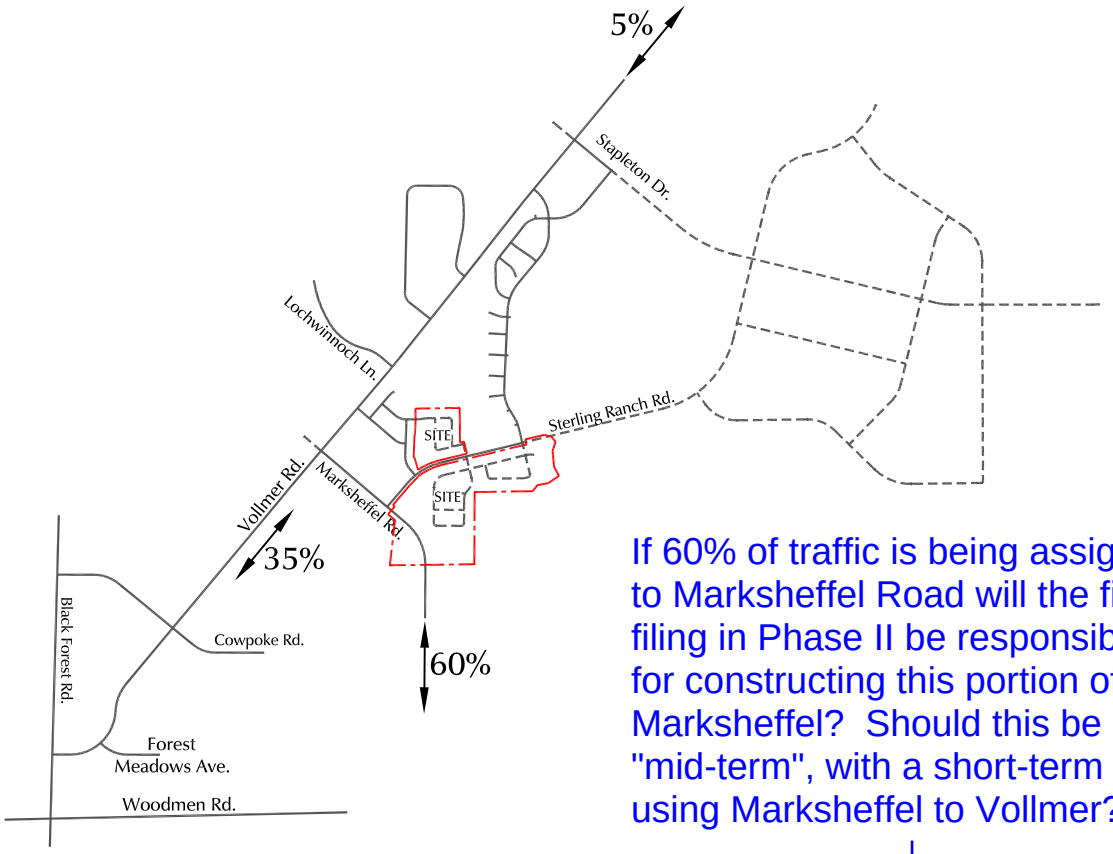


Figure 4b

Year 2025 Background Lane Geometry, Traffic Control and Levels of Service

Sterling Ranch Phase 2 (LSC #184660)



Approximate Scale
Scale: 1"= 3,000'

If 60% of traffic is being assigned to Marksheffel Road will the first filing in Phase II be responsible for constructing this portion of Marksheffel? Should this be "mid-term", with a short-term only using Marksheffel to Vollmer?

LEGEND:

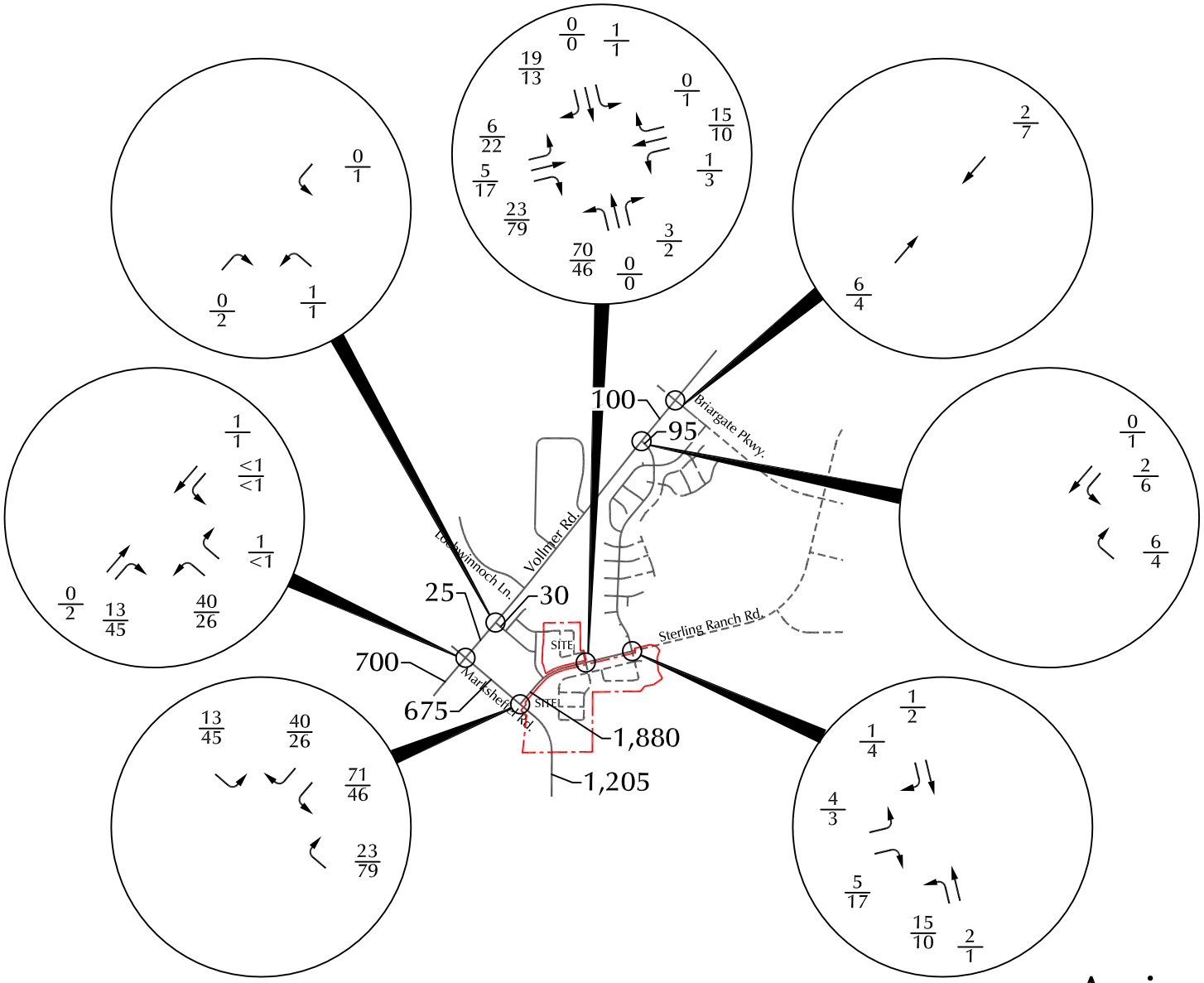
35% = Percent Directional Distribution Residential

TRANSPORTATION CONSULTANTS, INC.

Figure 5

Short-Term Directional Distribution of Site-Generated Traffic

Sterling Ranch Phase 2 (LSC #184660)



Approximate Scale
Scale: 1"= 3,000'

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

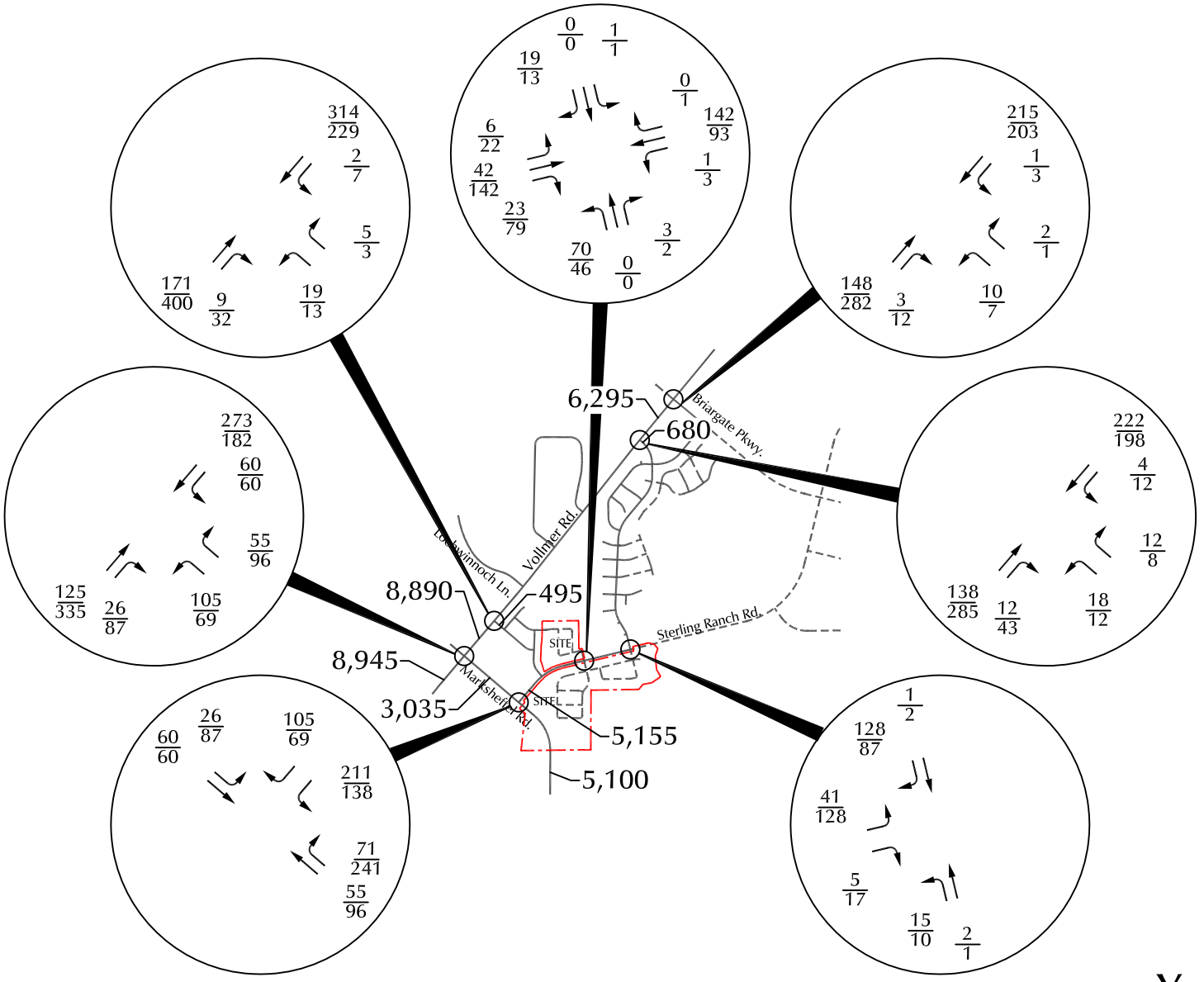
500 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 6

Assignment of Site-Generated Traffic

Sterling Ranch Phase 2 (LSC #184660)



Approximate Scale
Scale: 1"= 3,000'

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

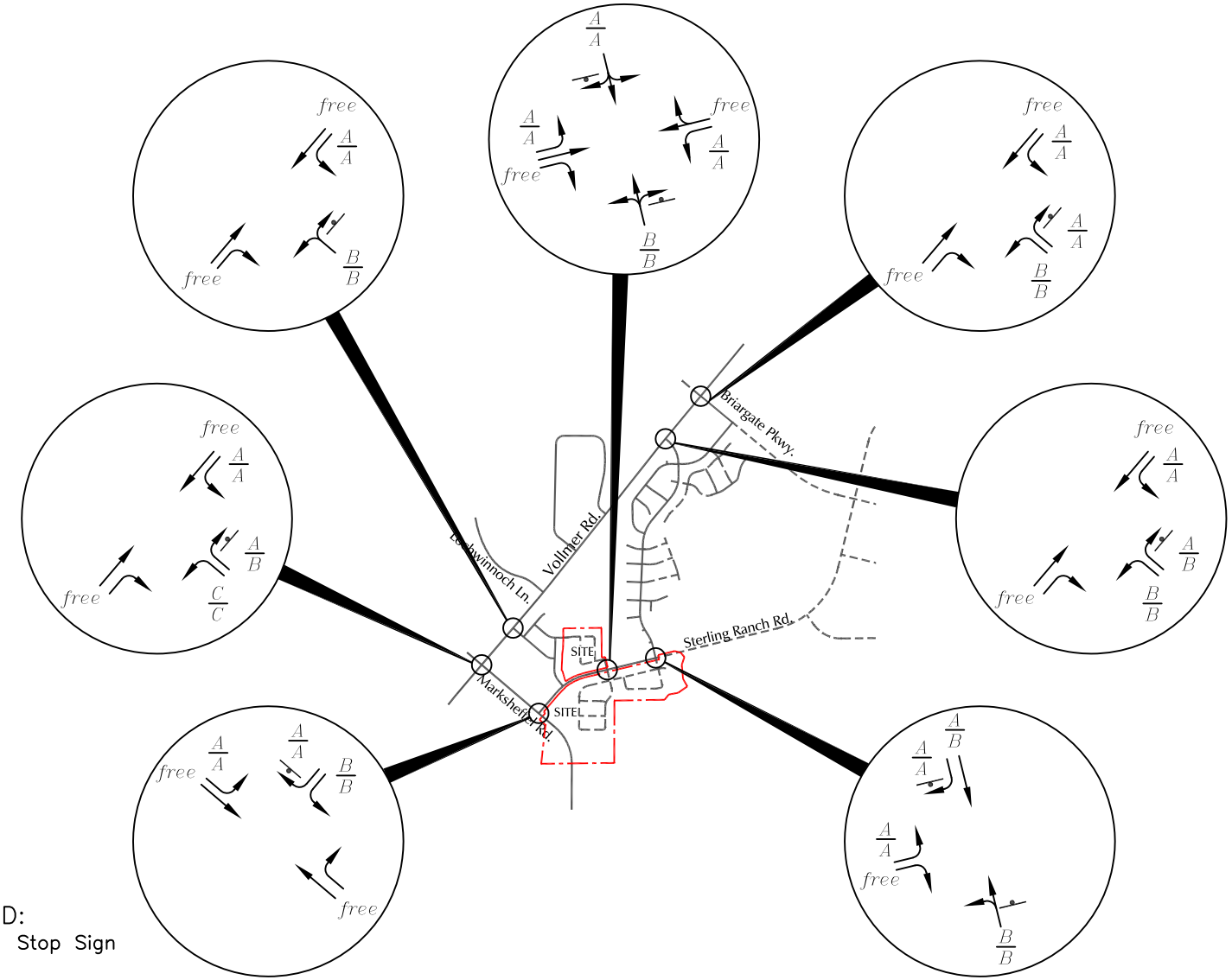
500 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 7a

Year 2025 Total Traffic

Sterling Ranch Phase 2 (LSC #184660)



N

Approximate Scale
Scale: 1"= 3,000'

LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

$\frac{C}{D}$ = AM Entire Intersection Peak–Hour Level of Service / PM Entire Intersection Peak–Hour Level of Service

TRANSPORTATION CONSULTANTS, INC.

Figure 7b

Year 2025 Total Lane Geometry, Traffic Control and Levels of Service

Sterling Ranch Phase 2 (LSC #184660)

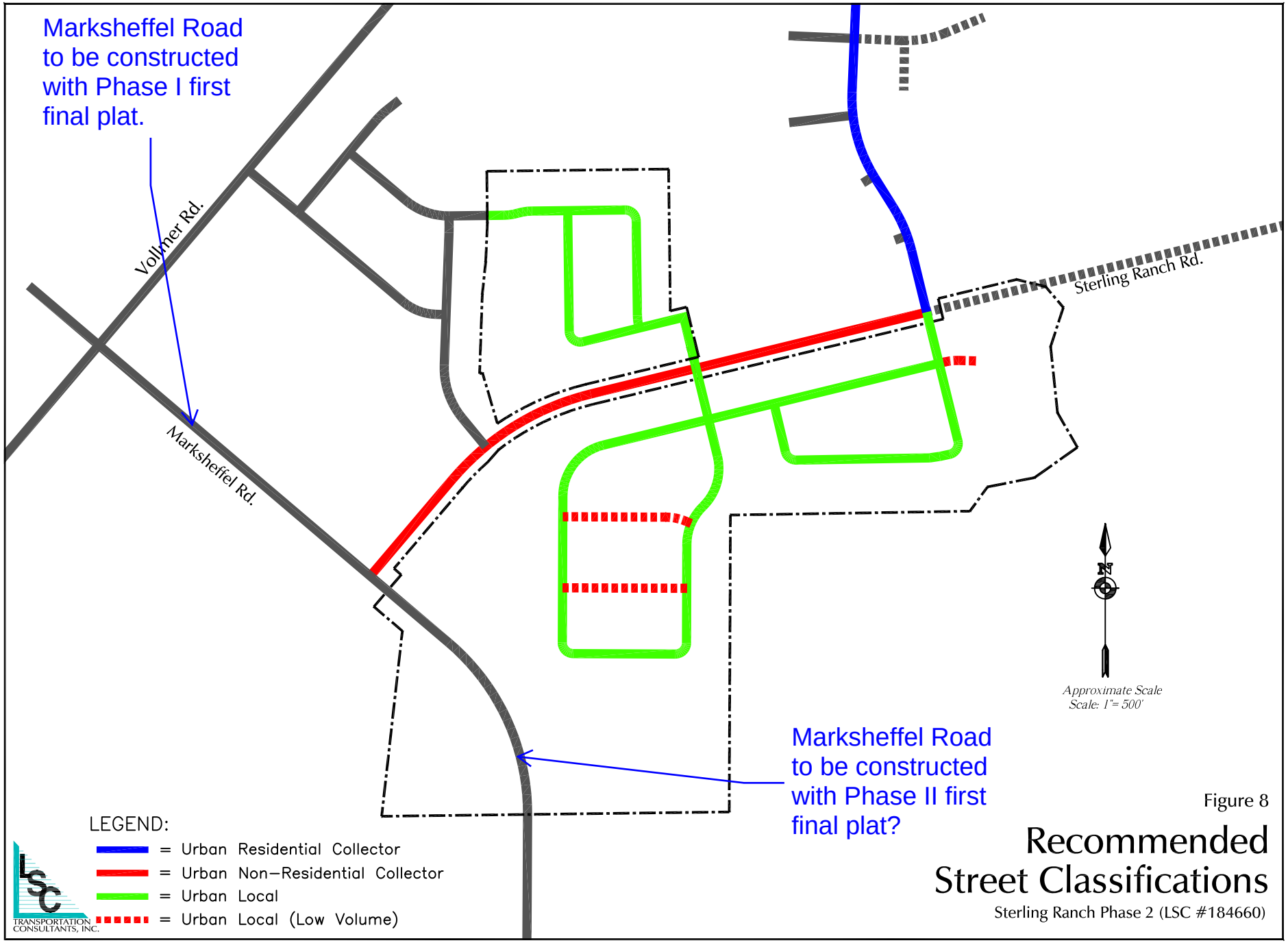


Figure 8

Recommended Street Classifications

Sterling Ranch Phase 2 (LSC #184660)

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: VOLLMER RD S/O POCO RD
City:
County: EL PASO
Direction: SOUTHBOUND-NORTHBOUND

Site Code: 092712
Station ID: 092712

Start	28-Sep-17	SB		NB		Combined		29-Sep	SB		NB		Combined	
Time	Thu	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	25	1	16	1	41		*	*	*	*	*	*
12:15		0	12	0	25	0	37		*	*	*	*	*	*
12:30		1	12	1	26	2	38		*	*	*	*	*	*
12:45		0	18	0	18	0	36		*	*	*	*	*	*
01:00		0	24	0	16	0	40		*	*	*	*	*	*
01:15		0	16	0	23	0	39		*	*	*	*	*	*
01:30		0	25	2	29	2	54		*	*	*	*	*	*
01:45		0	17	0	20	0	37		*	*	*	*	*	*
02:00		1	21	0	34	1	55		*	*	*	*	*	*
02:15		0	22	2	23	2	45		*	*	*	*	*	*
02:30		0	21	1	28	1	49		*	*	*	*	*	*
02:45		0	14	0	37	0	51		*	*	*	*	*	*
03:00		0	40	0	28	0	68		*	*	*	*	*	*
03:15		0	15	1	27	1	42		*	*	*	*	*	*
03:30		0	24	2	30	2	54		*	*	*	*	*	*
03:45		3	18	0	31	3	49		*	*	*	*	*	*
04:00		1	19	1	25	2	44		*	*	*	*	*	*
04:15		3	18	1	30	4	48		*	*	*	*	*	*
04:30		0	30	0	25	0	55		*	*	*	*	*	*
04:45		6	18	0	30	6	48		*	*	*	*	*	*
05:00		7	19	4	32	11	51		*	*	*	*	*	*
05:15		4	13	0	28	4	41		*	*	*	*	*	*
05:30		19	15	3	30	22	45		*	*	*	*	*	*
05:45		5	16	2	30	7	46		*	*	*	*	*	*
06:00		20	12	6	37	26	49		*	*	*	*	*	*
06:15		16	14	6	18	22	32		*	*	*	*	*	*
06:30		27	16	9	33	36	49		*	*	*	*	*	*
06:45		18	20	4	12	22	32		*	*	*	*	*	*
07:00		14	4	16	15	30	19		*	*	*	*	*	*
07:15		27	2	14	16	41	18		*	*	*	*	*	*
07:30		22	6	12	19	34	25		*	*	*	*	*	*
07:45		16	4	21	16	37	20		*	*	*	*	*	*
08:00		20	4	12	21	32	25		*	*	*	*	*	*
08:15		26	3	16	14	42	17		*	*	*	*	*	*
08:30		23	5	14	15	37	20		*	*	*	*	*	*
08:45		16	5	18	14	34	19		*	*	*	*	*	*
09:00		34	4	27	17	61	21		*	*	*	*	*	*
09:15		19	7	11	4	30	11		*	*	*	*	*	*
09:30		16	6	12	13	28	19		*	*	*	*	*	*
09:45		18	4	12	6	30	10		*	*	*	*	*	*
10:00		21	3	10	7	31	10		*	*	*	*	*	*
10:15		18	4	28	1	46	5		*	*	*	*	*	*
10:30		28	0	15	2	43	2		*	*	*	*	*	*
10:45		28	1	16	1	44	2		*	*	*	*	*	*
11:00		21	1	13	1	34	2		*	*	*	*	*	*
11:15		13	0	18	1	31	1		*	*	*	*	*	*
11:30		15	1	14	3	29	4		*	*	*	*	*	*
11:45		14	0	20	3	34	3		*	*	*	*	*	*
Total		540	598	365	930	905	1528		0	0	0	0	0	0
Day Total		1138		1295		2433			0		0		0	
% Total		22.2%	24.6%	15.0%	38.2%				0.0%	0.0%	0.0%	0.0%		
Peak	-	08:15	02:15	08:15	05:15	08:15	02:45	-	-	-	-	-	-	-
Vol.	-	99	97	75	125	174	215	-	-	-	-	-	-	-
P.H.F.		0.728	0.606	0.694	0.845	0.713	0.790							

ADT	ADT 2,433	AADT 2,433

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	55	124	12	60	272
Future Vol, veh/h	65	55	124	12	60	272
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	0	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	60	135	13	74	336

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	619	135	0	0	148	0
Stage 1	135	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	452	914	-	-	1434	-
Stage 1	891	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	428	914	-	-	1434	-
Mov Cap-2 Maneuver	428	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	620	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	428	914	1434	-
HCM Lane V/C Ratio	-	-	0.165	0.065	0.052	-
HCM Control Delay (s)	-	-	15.1	9.2	7.6	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.2	0.2	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	5	171	9	2	314
Future Vol, veh/h	18	5	171	9	2	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	5	186	10	2	388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	578	186	0	0	196	0
Stage 1	186	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	478	856	-	-	1377	-
Stage 1	846	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	478	856	-	-	1377	-
Mov Cap-2 Maneuver	478	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	683	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	529	1377	-
HCM Lane V/C Ratio	-	-	0.047	0.002	-
HCM Control Delay (s)	-	-	12.1	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	7	138	12	2	222
Future Vol, veh/h	18	7	138	12	2	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	8	150	13	2	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	428	150	0	0	163	0
Stage 1	150	-	-	-	-	-
Stage 2	278	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	584	896	-	-	1416	-
Stage 1	878	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	583	896	-	-	1416	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	769	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	583	896	1416	-
HCM Lane V/C Ratio	-	-	0.034	0.008	0.002	-
HCM Control Delay (s)	-	-	11.4	9.1	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	2	142	3	1	213
Future Vol, veh/h	10	2	142	3	1	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	2	154	3	1	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	419	154	0	0	157	0
Stage 1	154	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	591	892	-	-	1423	-
Stage 1	874	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	590	892	-	-	1423	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	590	892	1423	-
HCM Lane V/C Ratio	-	-	0.018	0.002	0.001	-
HCM Control Delay (s)	-	-	11.2	9	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	60	55	47	140	65
Future Vol, veh/h	12	60	55	47	140	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	235	235	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	65	60	51	152	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	111	0	-	0	151	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1479	-	-	-	841	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1479	-	-	-	833	1005
Mov Cap-2 Maneuver	-	-	-	-	833	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	933	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1479	-	-	-	833	1005
HCM Lane V/C Ratio	0.009	-	-	-	0.183	0.07
HCM Control Delay (s)	7.5	-	-	-	10.3	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0.2

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	96	334	42	60	181
Future Vol, veh/h	43	96	334	42	60	181
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	0	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	104	359	45	63	189

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	674	359	0	0	404	0
Stage 1	359	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	420	685	-	-	1155	-
Stage 1	707	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	397	685	-	-	1155	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	397	685	1155	-
HCM Lane V/C Ratio	-	-	0.118	0.152	0.054	-
HCM Control Delay (s)	-	-	15.3	11.2	8.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.5	0.2	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	3	400	30	6	229
Future Vol, veh/h	12	3	400	30	6	229
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	3	430	32	6	239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	681	430	0	0	462	0
Stage 1	430	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	416	625	-	-	1099	-
Stage 1	656	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	414	625	-	-	1099	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	444	1099	-
HCM Lane V/C Ratio	-	-	0.037	0.006	-
HCM Control Delay (s)	-	-	13.4	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	4	285	43	6	197
Future Vol, veh/h	12	4	285	43	6	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	4	306	46	6	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	523	306	0	0	352	0
Stage 1	306	-	-	-	-	-
Stage 2	217	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	514	734	-	-	1207	-
Stage 1	747	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	511	734	-	-	1207	-
Mov Cap-2 Maneuver	511	-	-	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	819	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	511	734	1207	-
HCM Lane V/C Ratio	-	-	0.026	0.006	0.005	-
HCM Control Delay (s)	-	-	12.2	9.9	8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	1	278	12	3	197
Future Vol, veh/h	7	1	278	12	3	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1	299	13	3	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	510	299	0	0	312	0
Stage 1	299	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	523	741	-	-	1248	-
Stage 1	752	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	522	741	-	-	1248	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	522	741	1248	-
HCM Lane V/C Ratio	-	-	0.015	0.001	0.003	-
HCM Control Delay (s)	-	-	12	9.9	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	60	96	162	92	43
Future Vol, veh/h	42	60	96	162	92	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	235	235	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	65	104	176	100	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	280	0	-	0	261	104
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1283	-	-	-	728	951
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1283	-	-	-	702	951
Mov Cap-2 Maneuver	-	-	-	-	702	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	SB
HCM Control Delay, s	3.3	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1283	-	-	-	702	951
HCM Lane V/C Ratio	0.036	-	-	-	0.142	0.049
HCM Control Delay (s)	7.9	-	-	-	11	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.2

Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	55	125	26	60	273
Future Vol, veh/h	105	55	125	26	60	273
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	0	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	60	136	28	74	337

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	621	136	0	0	164	0
Stage 1	136	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	451	913	-	-	1414	-
Stage 1	890	-	-	-	-	-
Stage 2	619	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	428	913	-	-	1414	-
Mov Cap-2 Maneuver	428	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	428	913	1414	-
HCM Lane V/C Ratio	-	-	0.267	0.065	0.052	-
HCM Control Delay (s)	-	-	16.4	9.2	7.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.2	0.2	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	5	171	9	2	314
Future Vol, veh/h	19	5	171	9	2	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	5	186	10	2	388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	578	186	0	0	196	0
Stage 1	186	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	478	856	-	-	1377	-
Stage 1	846	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	478	856	-	-	1377	-
Mov Cap-2 Maneuver	478	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	683	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	526	1377	-
HCM Lane V/C Ratio	-	-	0.05	0.002	-
HCM Control Delay (s)	-	-	12.2	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	12	138	12	4	222
Future Vol, veh/h	18	12	138	12	4	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	13	150	13	5	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	434	150	0	0	163	0
Stage 1	150	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	579	896	-	-	1416	-
Stage 1	878	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	577	896	-	-	1416	-
Mov Cap-2 Maneuver	577	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	764	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	577	896	1416	-
HCM Lane V/C Ratio	-	-	0.034	0.015	0.003	-
HCM Control Delay (s)	-	-	11.5	9.1	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	2	148	3	1	215
Future Vol, veh/h	10	2	148	3	1	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	2	161	3	1	265

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	428	161	0	0	164	0
Stage 1	161	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	584	884	-	-	1414	-
Stage 1	868	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	583	884	-	-	1414	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	583	884	1414	-
HCM Lane V/C Ratio	-	-	0.019	0.002	0.001	-
HCM Control Delay (s)	-	-	11.3	9.1	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	60	55	71	211	105
Future Vol, veh/h	26	60	55	71	211	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	235	235	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	65	60	77	229	114

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	137	0	-	0	181	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	121	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1447	-	-	-	808	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1447	-	-	-	793	1005
Mov Cap-2 Maneuver	-	-	-	-	793	-
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	904	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1447	-	-	-	793	1005
HCM Lane V/C Ratio	0.02	-	-	-	0.289	0.114
HCM Control Delay (s)	7.5	-	-	-	11.4	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2	0.4

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	42	23	1	142	0	70	0	3	1	0	19
Future Vol, veh/h	6	42	23	1	142	0	70	0	3	1	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	46	25	1	154	0	76	0	3	1	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	154	0	0	71	0	0	227	216	46	230	241	154
Stage 1	-	-	-	-	-	-	60	60	-	156	156	-
Stage 2	-	-	-	-	-	-	167	156	-	74	85	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1426	-	-	1529	-	-	728	682	1023	725	660	892
Stage 1	-	-	-	-	-	-	951	845	-	846	769	-
Stage 2	-	-	-	-	-	-	835	769	-	935	824	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1426	-	-	1529	-	-	708	678	1023	720	656	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	708	678	-	720	656	-
Stage 1	-	-	-	-	-	-	946	841	-	842	768	-
Stage 2	-	-	-	-	-	-	815	768	-	927	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	10.6	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	717	1426	-	-	1529	-	-	881
HCM Lane V/C Ratio	0.111	0.005	-	-	0.001	-	-	0.025
HCM Control Delay (s)	10.6	7.5	-	-	7.4	-	-	9.2
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	0	5	0	0	0	15	2	0	0	1	128
Future Vol, veh/h	41	0	5	0	0	0	15	2	0	0	1	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	0	5	0	0	0	16	2	0	0	1	139

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	5	0	0	164	94	-	-	96	1
Stage 1	-	-	-	-	-	-	93	93	-	-	1	-
Stage 2	-	-	-	-	-	-	71	1	-	-	95	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	-	-	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	-	-	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1616	-	-	801	796	0	0	794	1084
Stage 1	-	-	-	-	-	-	914	818	0	0	895	-
Stage 2	-	-	-	-	-	-	939	895	0	0	816	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1616	-	-	682	774	-	-	772	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	682	774	-	-	772	-
Stage 1	-	-	-	-	-	-	888	795	-	-	895	-
Stage 2	-	-	-	-	-	-	817	895	-	-	793	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.5	0	10.3	8.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	692	1622	-	-	1616	-	-	772	1084
HCM Lane V/C Ratio	0.027	0.027	-	-	-	-	-	0.001	0.128
HCM Control Delay (s)	10.3	7.3	-	-	0	-	-	9.7	8.8
HCM Lane LOS	B	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0	0.4

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	96	335	87	60	182
Future Vol, veh/h	69	96	335	87	60	182
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	0	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	104	360	94	63	190

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	676	360	0	0	454	0
Stage 1	360	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	419	684	-	-	1107	-
Stage 1	706	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	395	684	-	-	1107	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	395	684	1107	-
HCM Lane V/C Ratio	-	-	0.19	0.153	0.056	-
HCM Control Delay (s)	-	-	16.2	11.2	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.5	0.2	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	3	400	32	7	229
Future Vol, veh/h	13	3	400	32	7	229
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	235	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	3	430	34	7	239

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	683	430	0	0	464	0
Stage 1	430	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	415	625	-	-	1097	-
Stage 1	656	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	413	625	-	-	1097	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	441	1097	-
HCM Lane V/C Ratio	-	-	0.039	0.007	-
HCM Control Delay (s)	-	-	13.5	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	8	285	43	12	198
Future Vol, veh/h	12	8	285	43	12	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	9	306	46	13	206

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	538	306	0	0	352	0
Stage 1	306	-	-	-	-	-
Stage 2	232	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	504	734	-	-	1207	-
Stage 1	747	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	498	734	-	-	1207	-
Mov Cap-2 Maneuver	498	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	498	734	1207	-
HCM Lane V/C Ratio	-	-	0.026	0.012	0.01	-
HCM Control Delay (s)	-	-	12.4	10	8	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	1	282	12	3	203
Future Vol, veh/h	7	1	282	12	3	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1	303	13	3	211

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	520	303	0	0	316	0
Stage 1	303	-	-	-	-	-
Stage 2	217	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	516	737	-	-	1244	-
Stage 1	749	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	515	737	-	-	1244	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	819	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	515	737	1244	-
HCM Lane V/C Ratio	-	-	0.015	0.001	0.003	-
HCM Control Delay (s)	-	-	12.1	9.9	7.9	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	87	60	96	241	138	69
Future Vol, veh/h	87	60	96	241	138	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	235	-	-	235	235	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	65	104	262	150	75

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	366	0	-	0	359	104
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1193	-	-	-	640	951
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	788	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1193	-	-	-	589	951
Mov Cap-2 Maneuver	-	-	-	-	589	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	788	-

Approach	EB	WB	SB
HCM Control Delay, s	4.9	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1193	-	-	-	589	951
HCM Lane V/C Ratio	0.079	-	-	-	0.255	0.079
HCM Control Delay (s)	8.3	-	-	-	13.2	9.1
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	1	0.3

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	142	79	3	93	1	46	0	2	1	0	13
Future Vol, veh/h	22	142	79	3	93	1	46	0	2	1	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	154	86	3	101	1	50	0	2	1	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	102	0	0	240	0	0	317	310	154	354	396	102
Stage 1	-	-	-	-	-	-	202	202	-	108	108	-
Stage 2	-	-	-	-	-	-	115	108	-	246	288	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1490	-	-	1327	-	-	636	605	892	601	541	953
Stage 1	-	-	-	-	-	-	800	734	-	897	806	-
Stage 2	-	-	-	-	-	-	890	806	-	758	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1327	-	-	618	594	892	591	531	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	618	594	-	591	531	-
Stage 1	-	-	-	-	-	-	787	722	-	883	804	-
Stage 2	-	-	-	-	-	-	875	804	-	744	663	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.2	11.3	9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	626	1490	-	-	1327	-	-	913
HCM Lane V/C Ratio	0.083	0.016	-	-	0.002	-	-	0.017
HCM Control Delay (s)	11.3	7.5	-	-	7.7	-	-	9
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

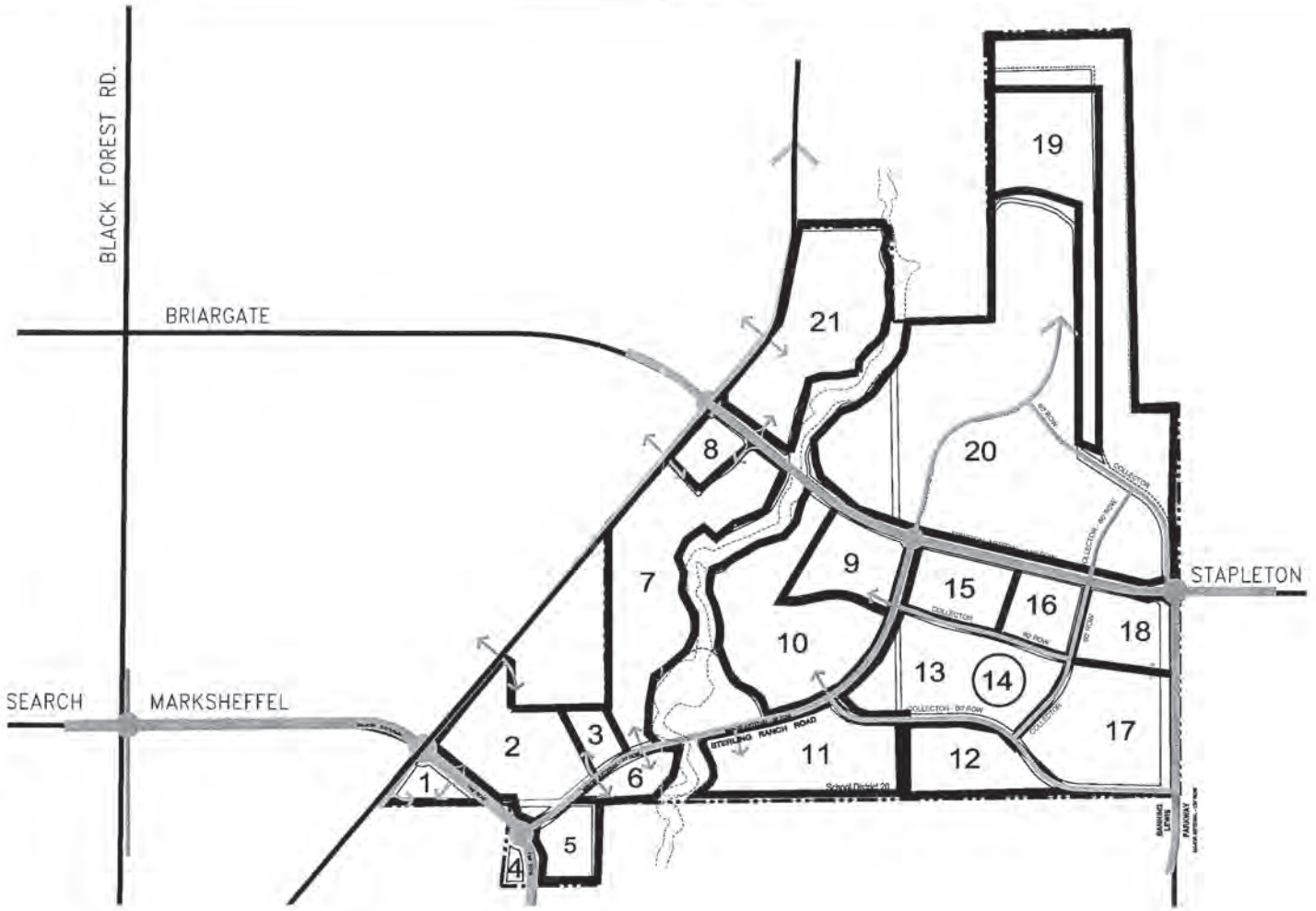
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	128	0	17	0	0	0	10	1	0	0	2	87
Future Vol, veh/h	128	0	17	0	0	0	10	1	0	0	2	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	-	-	-	-	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	139	0	18	0	0	0	11	1	0	0	2	95

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	18	0	0	337	288	-	-	297	1
Stage 1	-	-	-	-	-	-	287	287	-	-	1	-
Stage 2	-	-	-	-	-	-	50	1	-	-	296	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	-	-	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	-	-	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1599	-	-	617	622	0	0	615	1084
Stage 1	-	-	-	-	-	-	720	674	0	0	895	-
Stage 2	-	-	-	-	-	-	963	895	0	0	668	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1599	-	-	524	569	-	-	562	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	524	569	-	-	562	-
Stage 1	-	-	-	-	-	-	658	616	-	-	895	-
Stage 2	-	-	-	-	-	-	877	895	-	-	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	6.6	0	12	8.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	528	1622	-	-	1599	-	-	562	1084
HCM Lane V/C Ratio	0.023	0.086	-	-	-	-	-	0.004	0.087
HCM Control Delay (s)	12	7.4	-	-	0	-	-	11.4	8.6
HCM Lane LOS	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0	-	-	0	0.3



Label which report this is from.

Traffic Analysis Zones
Sterling Ranch

Figure 3
LSC # 074230

TRANSPORTATION CONSULTANTS, INC.

RECEIVED VERSION
JAN 04 2018

STERLING RANCH - VOLLMER ROAD (NORTH)

STA 4+79.21 - STA 38+35.40

COUNTY OF EL PASO, STATE OF COLORADO

STREET IMPROVEMENT PLANS

INCLUDING SIGNAGE AND STRIPING PLAN

JANUARY 2018

AGENCIES

OWNER/DEVELOPER:	SR LAND, LLC 20 BOULDER CRESCENT, SUITE 201 COLORADO SPRINGS, CO 80903 JIM MORLEY (719) 471-1742
CIVIL ENGINEER:	M & S CIVIL CONSULTANTS, INC. 20 BOULDER CRESCENT, SUITE 110 COLORADO SPRINGS, CO 80903 VIRGIL A. SANCHEZ P.E. (719) 955-5485
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 JEFF RICE, P.E. (719) 520-6300
TRAFFIC ENGINEERING:	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 JENNIFER IRVINE, P.E. (719) 520-6460
WATER RESOURCES:	STERLING RANCH METRO DISTRICT ENGINEERS JDS-HYDRO CONSULTANTS 545 E. PIKES PEAK AVE., SUITE 300 COLORADO SPRINGS, CO 80903 JOHN MCGINN (719) 668-8769
FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK (719) 495-4300
GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 7710 DURANT DR. COLORADO SPRINGS, CO 80947 TIM WENDT (719) 668-3556
ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, CO 80831 (719) 495-2283
COMMUNICATIONS:	CENTURYLINK/COMCAST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987 AT&T (LOCATORS) (719) 635-3674

VICINITY MAP
N.T.S.

SITE MAP
N.T.S.

APPROVALS:

ENGINEER'S STATEMENT:

DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS ENGINEER'S STATEMENT:
THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS.

COLORADO REGISTERED 37160 PROFESSIONAL ENGINEER

VIRGIL A SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

DATE 1-4-18

OWNER/DEVELOPER STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

SR LAND, LLC

DATE 1.4.18

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 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, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

DATE 30 JAN 18

STERLING RANCH METROPOLITAN DISTRICT:

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO. DISTRICT

DATE 1-4-18

BENCHMARKS:

1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
   NORTHING = 411416.273
   EASTING = 235167.071
   ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
   NORTHING = 410095.404
   EASTING = 235052.131
   ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDISION
   NORTHING = 411399.962
   EASTING = 233849.817
   ELEVATION = 7030.82

BASIS OF BEARINGS:

THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW1/4) OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N 89°14'14" E, A DISTANCE OF 2,722.56 FEET.

SHEET INDEX

ABBREVIATIONS

ACT	ACTUAL
BCR	BACK OF CURB RETURN
BOV	BLOWOFF VALVE ASSEMBLY
BRK	BREAK
BT	BEGINNING OF TRANSITION
CATV	CABLE TV
CL	CLASS, CENTERLINE
CLR	CLEARANCE
CONST	CONSTRUCT
CSU	COLORADO SPRINGS UTILITIES
ECR	END CURB RETURN
EL	ELEVATION
EOA	EDGE OF ASPHALT
EOP	END OF PAVEMENT
EPC	EL PASO COUNTY
ESMT	EASEMENT
ET	END TRANSITION
EX, EXIST	EXISTING
G	GAS
GB	GRADE BREAK
FL	FLOW LINE
FT	FEET, FOOT
FUT	FUTURE
GRD	GRADE
HORZ	HORIZONTAL
HP	HIGH POINT, ELEVATION
INT	INTERSECTION
LP	LOW POINT ELEVATION
LT	LEFT
LOC	LOCATION
MIN	MINIMUM
N,S,E,W	NORTH,SOUTH,EAST,WEST
NTS	NOT TO SCALE
PC	POINT OF VERTICAL CURVATURE
PCC	POINT OF COMPOUND CURVE
PCR	POINT OF CURB RETURN
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVE
PUB	PUBLIC
PVI	POINT OF VERTICAL INTERSECTION
PVC	POINT OF VERTICAL CURVE
PVT	POINT OF VERTICAL TANGENT
PT	POINT OF TANGENCY
PROP	PROPOSED
REM	REMOVE
ROW	RIGHTS OF WAY
RSNTS	RESTRAINTS
RT	RIGHT
SAN	SANITARY SEWER
SD	STANDARD DETAIL
STA	STATION
STM	STORM
COR	TOP CORNER OF BOX
TELE	TELEPHONE
TYP	TYPICAL
UNK	UNKNOWN
@	UNDERGROUND POWER
UTL	UTILITY
VERT	VERTICAL
WTR	WATER LINE
XING	CROSSING
YD	YARD (CUBIC)

LEGEND

AIR & VACUUM VALVE STA	PROPOSED GAS
ANCHOR, CONC. REVERSE	PROPOSED SANITARY SEWER
ANODE	PROPOSED WATER
CENTERLINE	RIGHT-OF-WAY
FENCE	PROPERTY LINE
EXISTING SANITARY SEWER	FIRE HYDRANT (EXISTING)
EXISTING GAS	FIRE HYDRANT (PROPOSED)
EXISTING ELECTRIC (OH OR UG)	STORM DRAIN
EXISTING TELEPHONE	VALVE (PROPOSED)
EXISTING TELEVISION	VALVE (EXISTING)
EXISTING FIBER OPTIC	BLOWOFF ASSY. (PROPOSED)
EXISTING WATER	BLOWOFF ASSY. (EXISTING)
	PLUG (PROPOSED)
	PLUG (EXISTING)

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH - VOLLMER ROAD (NORTH)
TITLE SHEET
PROJECT NO. 09-002 | SCALE: HORIZONTAL N/A VERTICAL N/A | DATE: 01/03/2018 | SHEET 1 OF 7 | SI01
DESIGNED BY: VAS
DRAWN BY: ELY
CHECKED BY: GW

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
COLORADO REGISTERED 37160 PROFESSIONAL ENGINEER

REVISIONS: NO	DATE	BY	DESCRIPTION

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

GENERAL CONSTRUCTION NOTES:

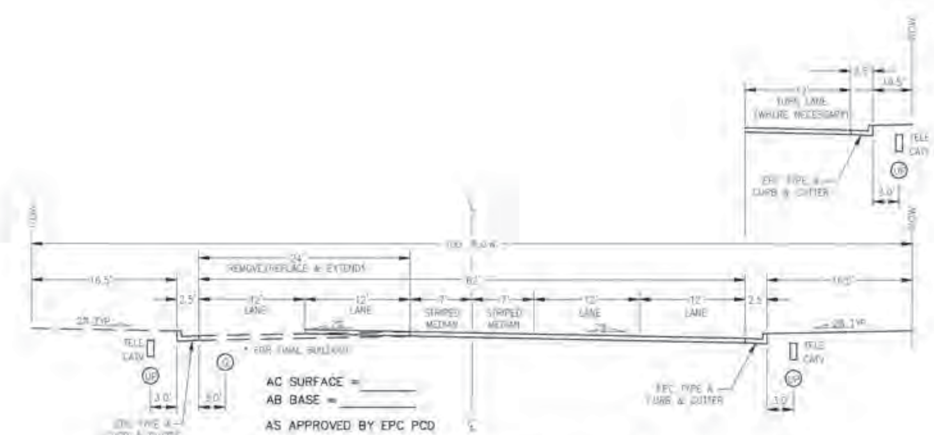
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. 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.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED PER THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
5. ALL STATIONING IS CENTERLINE OF IMPROVEMENTS UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED AS TOP BACK OF CURB (TBC), ASPHALT (ASP), OR TOP OF INLET OR BOX (TOB).
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO EPC ECM APPENDIX K – 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT BRAIRGATE PARKWAY AND VOLLMER ROAD WHICH ARE ARTERIALS AND A 50 FOOT SIGHT VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" VERTICAL IN THIS AREA.
8. ALL CULVERTS AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 – CULVERTS.
9. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT THE TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION PRIOR TO CONSTRUCTION.

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 PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
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 A 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 DEPARTMENT OF PUBLIC WORKS (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 WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY, INCLUDING SIGNAGE OR STRIPING.

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

1. 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 NOTIFICATION 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 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. 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 – 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 DEPARTMENT OF PUBLIC WORKS. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY DEPARTMENT OF PUBLIC WORKS.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 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 VERTICAL ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT PUBLIC WORKS, 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.

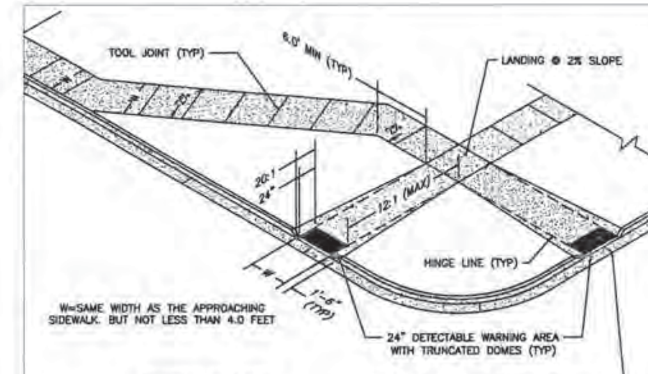


ULTIMATE VOLLMER ROAD

(MODIFIED) URBAN MINOR ARTERIAL CROSS SECTION

SCALE: NTS

DESIGN SPEED = 50 MPH
POSTED SPEED = 45 MPH



PEDESTRIAN RAMP NOTES

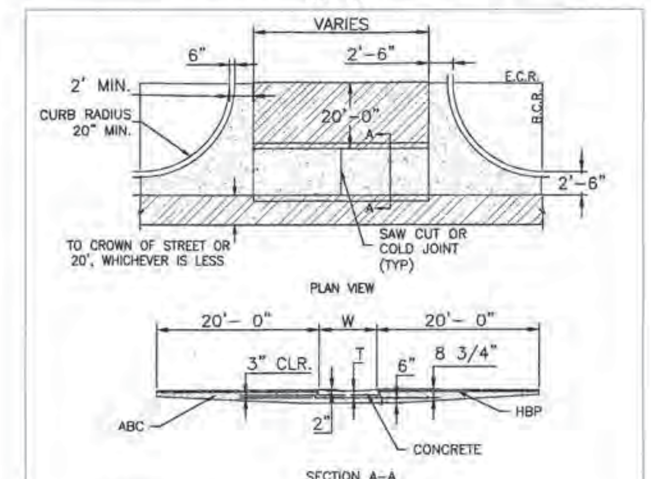
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED, REDDISH INTEGRALLY COLORED, TRUNCATED-DOME, PAVERS. THERMOPLASTIC TRUNCATED DOMES WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

GENERAL NOTES

1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

PEDESTRIAN INTERSECTION RAMP (SD 2-41)

SCALE: NTS



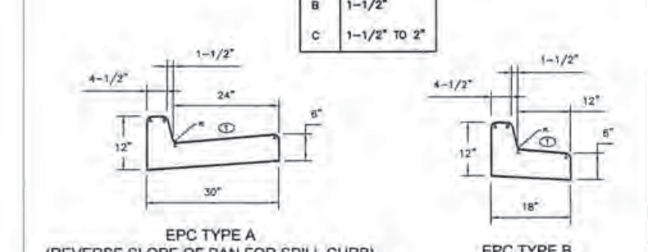
NOTES

1. W – WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, AND 10' FOR ARTERIAL ROADS.
2. T – SQUARED-OFF RETURN TO BE POURED MONOLITHICALLY, 8" PCC FOR LOCAL ROADS, 9" FOR COLLECTORS WITH 6x6 – 4.4 W.W.F. OR #4 REINFORCING BAR @ 18" EACH WAY.
3. [hatch] = 3" MINIMUM ASPHALT DEPTH (2 LIFTS).
4. DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.

TYPICAL CROSS PAN LAYOUT DETAIL (SD 2-26)

SCALE: NTS

LEGEND FOR RADII	
A	1/8" TO 1/4"
B	1-1/2"
C	1-1/2" TO 2"



TYPICAL CURB & GUTTER DETAILS DETAIL (SD 2-20)

SCALE: NTS

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

STERLING RANCH – VOLLMER ROAD (NORTH)

NOTES & DETAILS SHEET

PROJECT NO. 09-002 | DESIGNED BY VAS | DRAWN BY ELY | CHECKED BY GW

SCALE: HORIZONTAL N/A, VERTICAL N/A

DATE: 01/03/2018

SHEET 2 OF 7

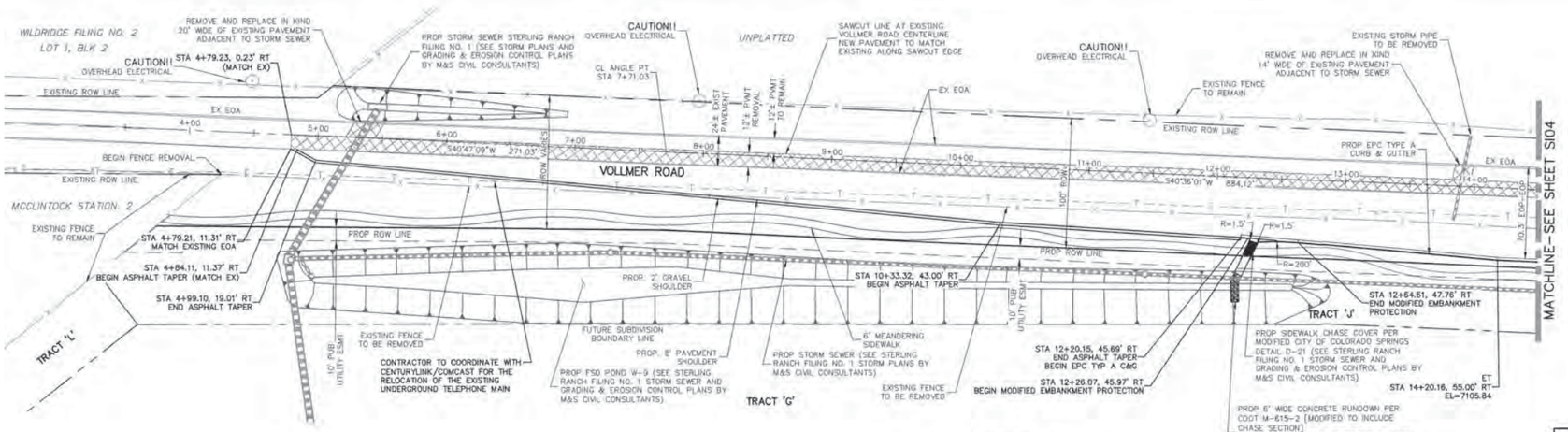
SI02

CIVIL CONSULTANTS, INC.
20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:

CAUTION



VOLLMER ROAD

1" = 50'

0 25 50 100

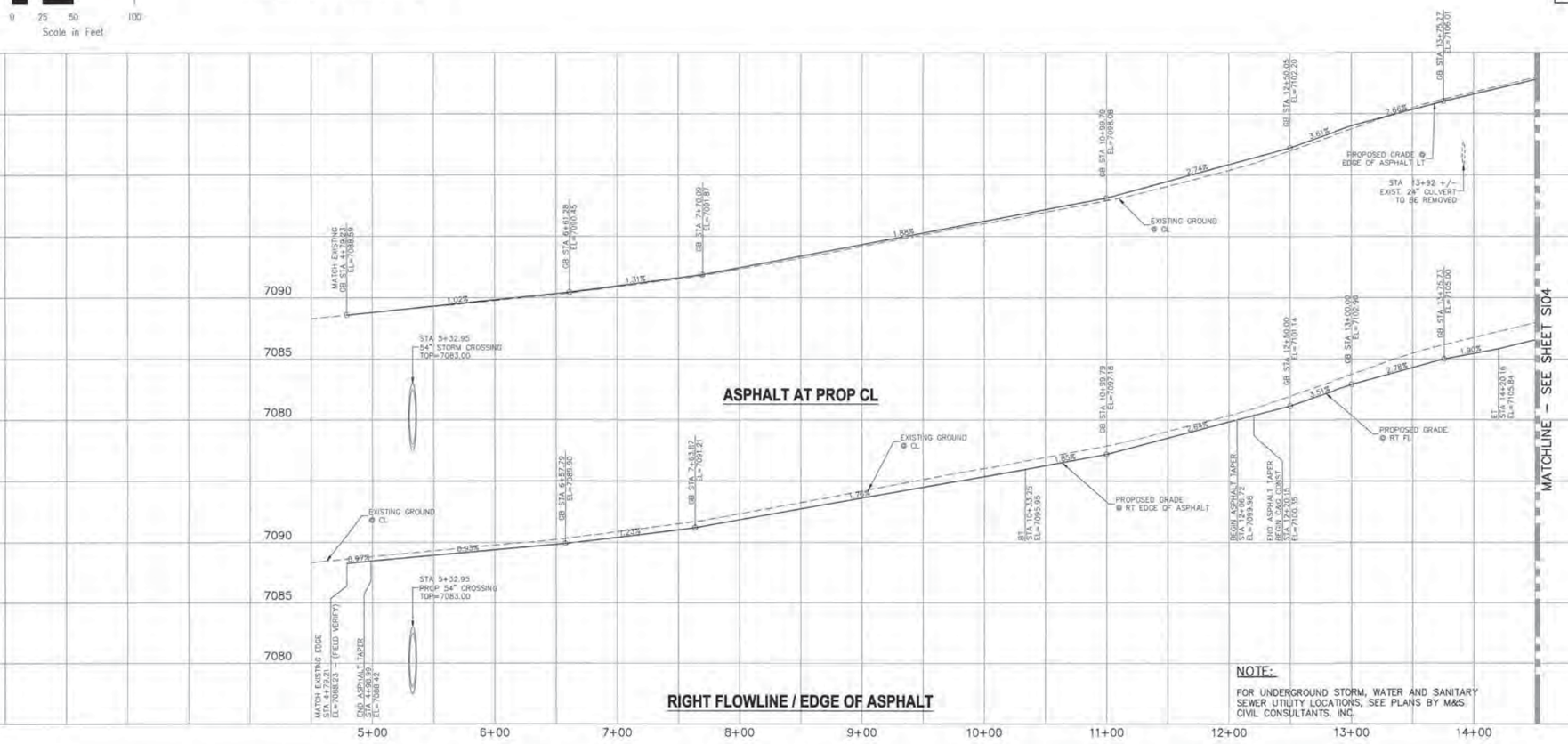
Scale in Feet

EX ASPHALT TO BE REMOVED

NOTE:

CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES LOCATION AND ELEVATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

KEY MAP
N.T.S.



ASPHALT AT PROP CL

RIGHT FLOWLINE / EDGE OF ASPHALT

NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH – VOLLMER ROAD (NORTH)

P&P – STA 4+79.21 TO STA 14+50.00

PROJECT NO. 09-002 | SCALE: HORIZONTAL 1"=50' VERTICAL 1"=5' | DATE: 01/03/2018 | SHEET 3 OF 7 | SI03

DESIGNED BY: VAS
DRAWN BY: ELY
CHECKED BY: GW

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

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

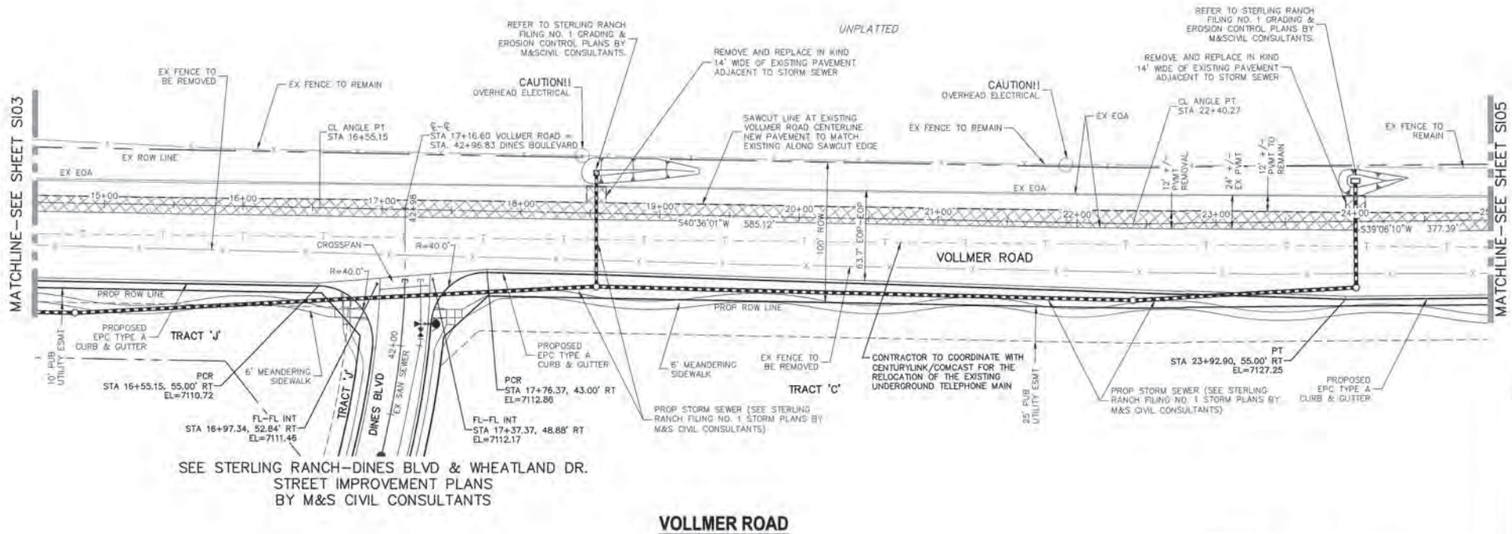
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37180

REVISIONS:

NO.	DATE	BY:	DESCRIPTION:	APP'D: BY:	DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THOSE PLANS.

CAUTION



SEE STERLING RANCH–DINES BLVD & WHEATLAND DR. STREET IMPROVEMENT PLANS BY M&S CIVIL CONSULTANTS

VOLLMER ROAD

EX ASPHALT TO BE REMOVED

NOTE:

CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES LOCATION AND ELEVATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

KEY MAP
N.T.S.

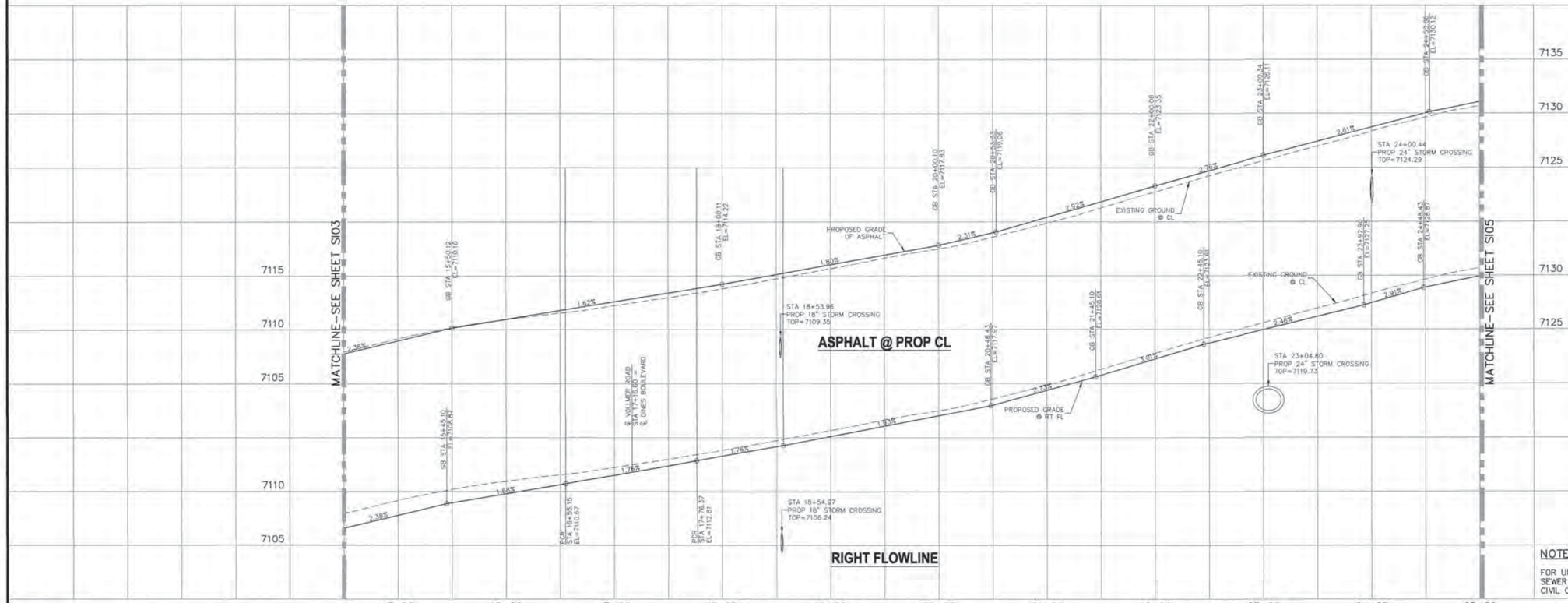
STERLING RANCH – VOLLMER ROAD (NORTH)
P&P – STA 14+50 TO STA 25+00

PROJECT NO. 09-002 | DESIGNED BY: VAS | DRAWN BY: ELY | CHECKED BY: GW | SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5' | DATE: 01/03/2018 | SHEET 4 OF 7 | SI04

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160



NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS. INC.

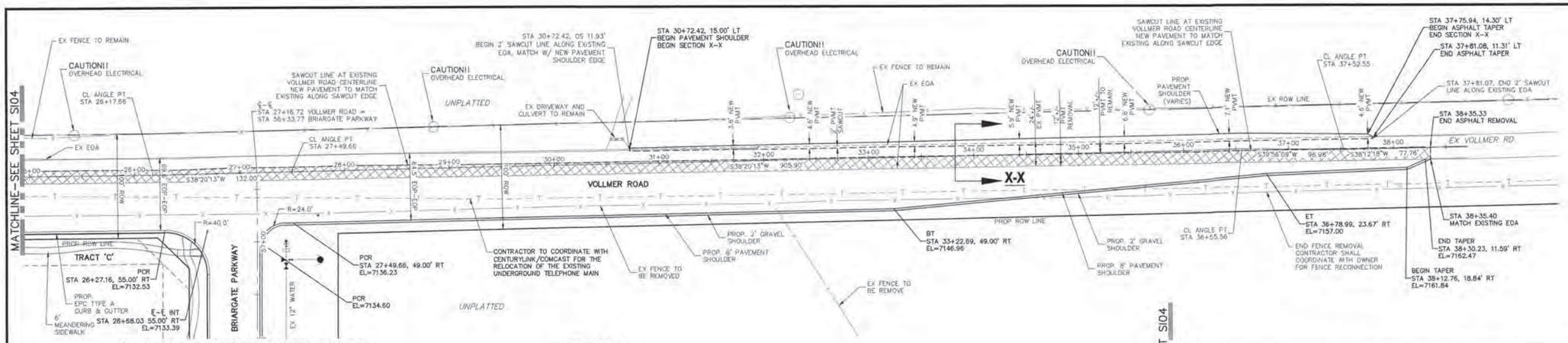
REVISIONS:			
NO.	DATE	BY	DESCRIPTION

APPVD. BY: DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

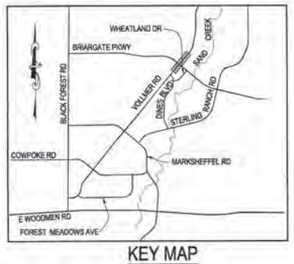
CAUTION

File: D:\0\002A\Sterling Ranch District\dwg\Const Dwg\Street\Vollmer Rd\SI04.dwg Photostamp: 1/3/2018 1:06 PM

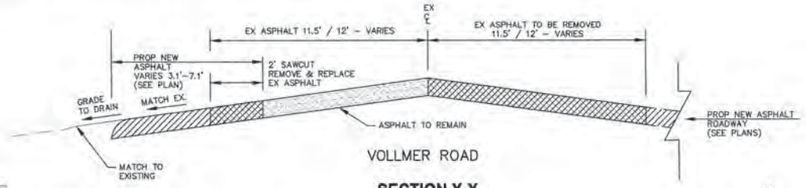


SEE STERLING RANCH–BRIARGATE PARKWAY STREET IMPROVEMENT PLANS BY M&S CIVIL CONSULTANTS

"INTERIM"
VOLLMER ROAD-BRIARGATE PARKWAY INTERSECTION



KEY MAP
N.T.S.



VOLLMER ROAD

SECTION X-X

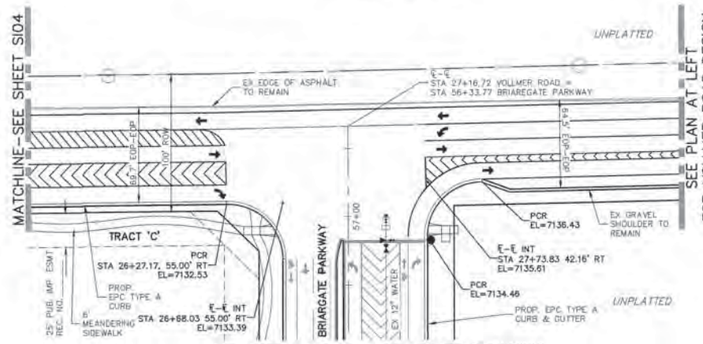
EX ASPHALT TO BE REMOVED

NOTE:

CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES LOCATION AND ELEVATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

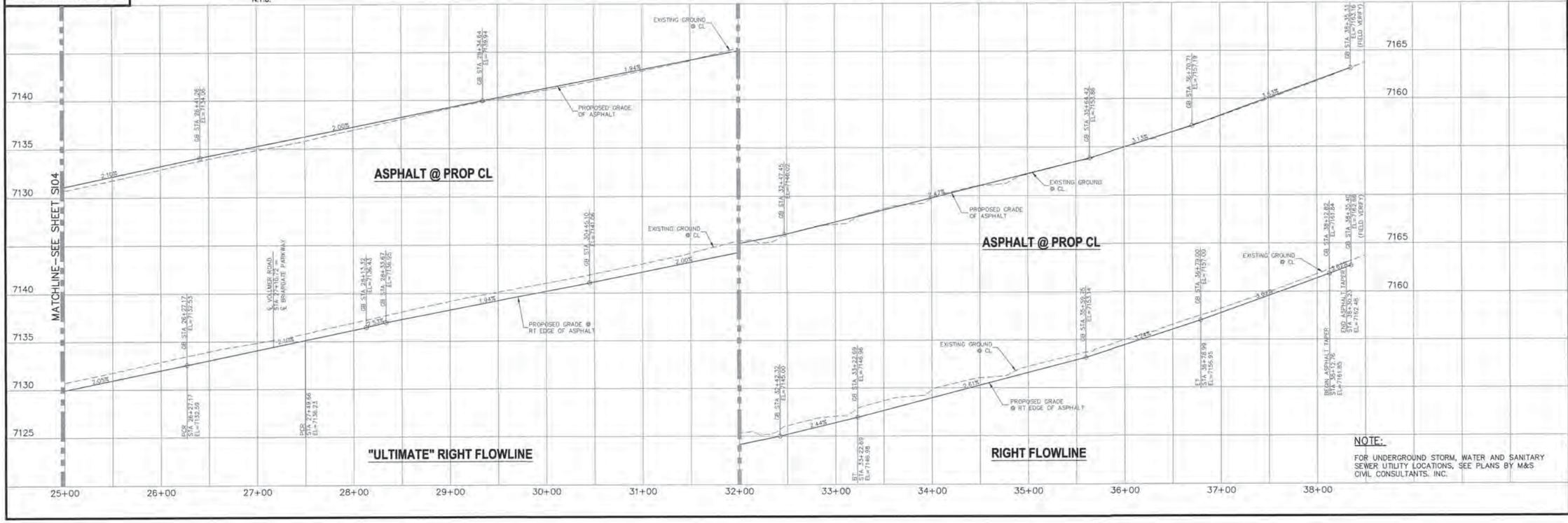
1" = 50'

0 25 50 100
Scale in Feet



SEE STERLING RANCH–BRIARGATE PARKWAY STREET IMPROVEMENT PLANS BY M&S CIVIL CONSULTANTS

"ULTIMATE"
VOLLMER ROAD-BRIARGATE PARKWAY INTERSECTION



NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

STERLING RANCH – VOLLMER ROAD (NORTH)
STREET IMPROVEMENT PLANS

DATE: 01/03/2018
SHEET 5 OF 7
SI05

PROJECT NO: 09-002
SCALE: HORIZONTAL 1"=50' VERTICAL 1"=5'
DESIGNED BY: VAS
DRAWN BY: ELY
CHECKED BY: GW

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:

NO.	DATE	BY	DESCRIPTION

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: G:\JOB02A\Sterling Ranch District\Dwg\Const Dwg\Sheet\Vollmer Rd\SI05.dwg Plotstamp: 1/22/2018 3:41 PM

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LINES (EPOXY)	BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE
⑧	CROSS HATCHING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑨	CROSS HATCHING LINES (EPOXY)	SOLID YELLOW, 8" WIDE

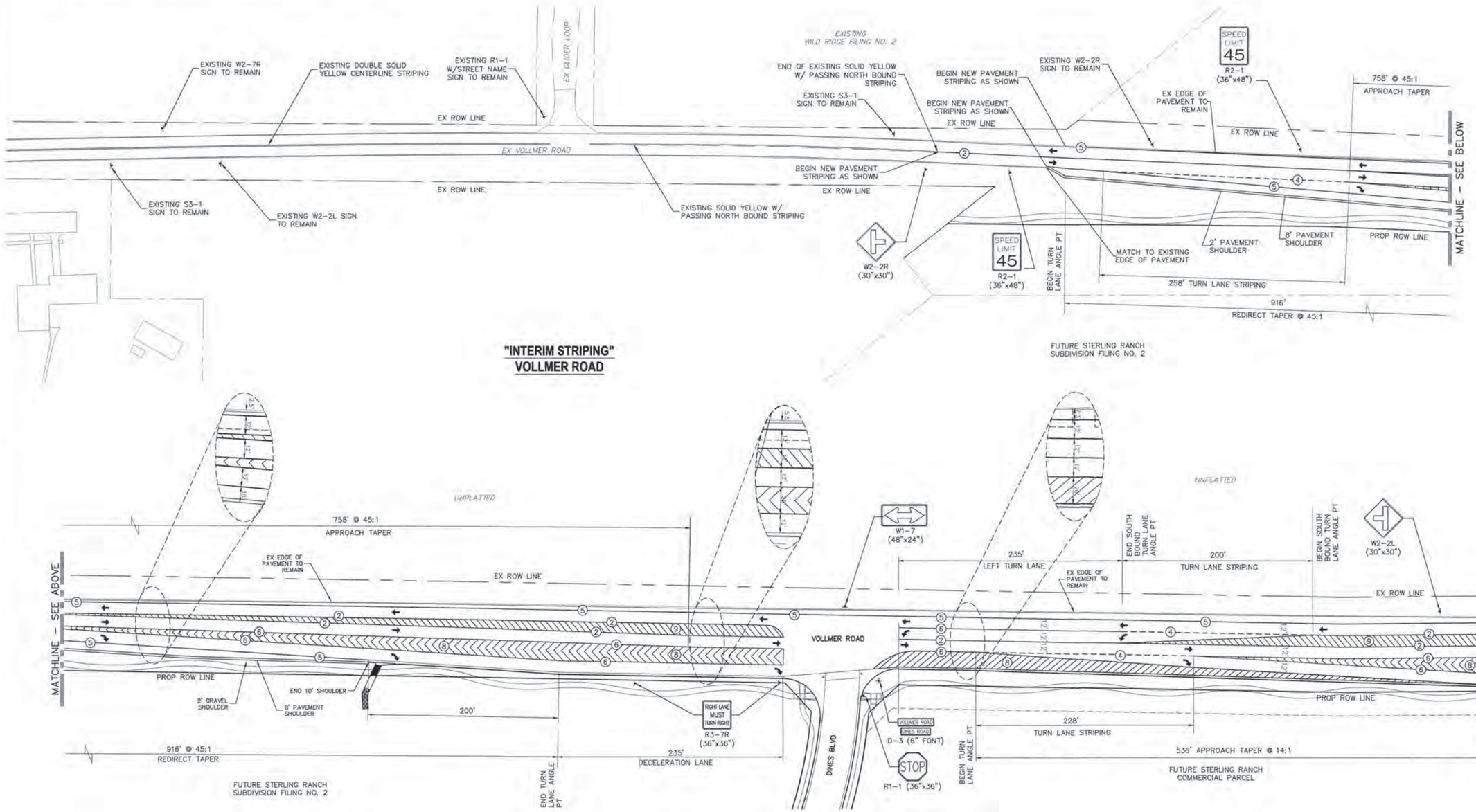
NOTE TO CONTRACTOR:

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

1" = 50'

0 25 50 100
Scale in Feet

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.



FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

STERLING RANCH - VOLLMER ROAD (NORTH)
SIGNAGE AND STRIPING PLAN

PROJECT NO. 09-002 | DATE: 01/03/2018 | SHEET 6 OF 7 | SI06
DESIGNED BY: VAS | SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A
DRAWN BY: ELY
CHECKED BY: GW

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF MAS CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

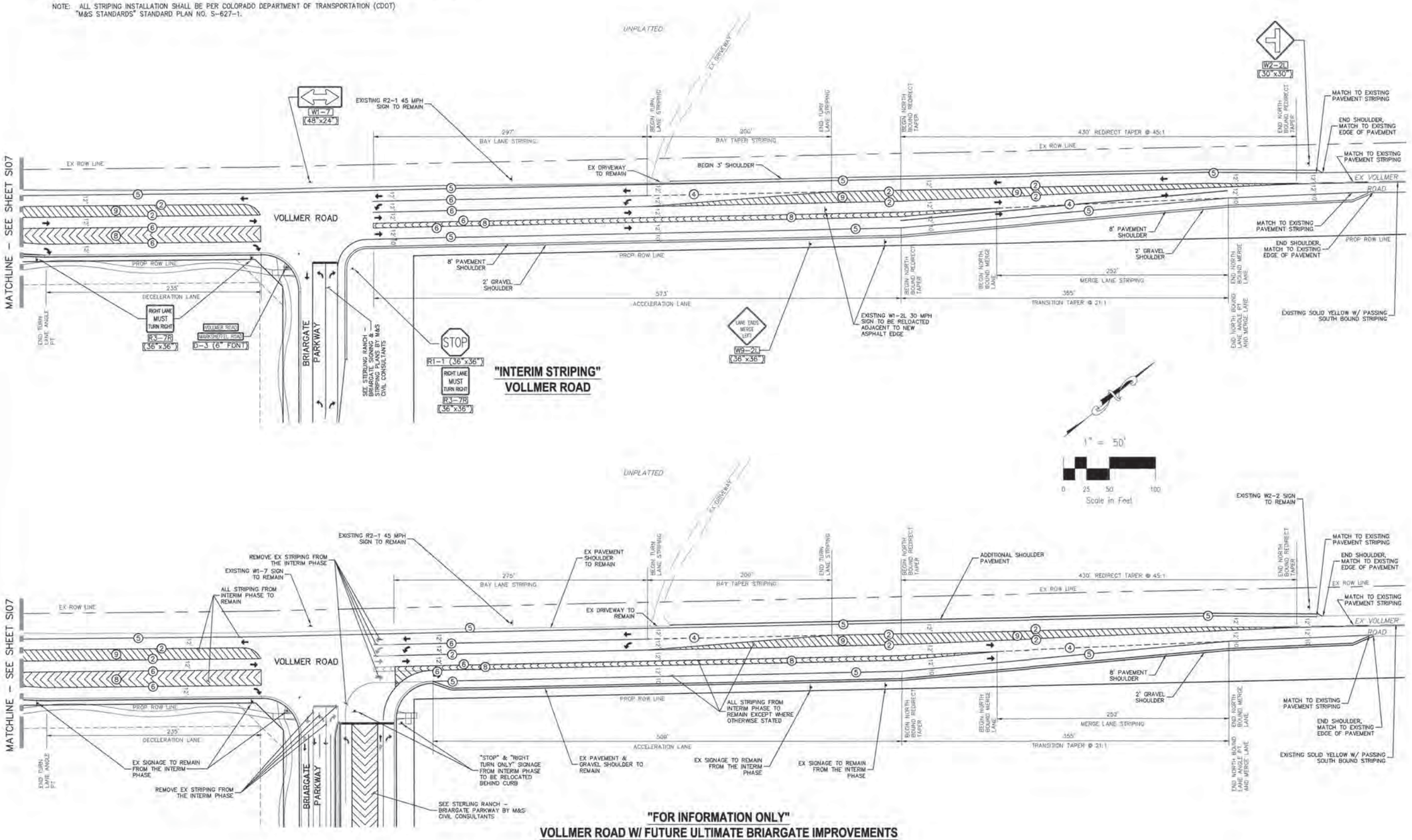
NO.	DATE	BY	DESCRIPTION	APPVD. BY	DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE
⑧	CROSS HATCHING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑨	CROSS HATCHING LINES (EPOXY)	SOLID YELLOW, 8" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.



FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

STERLING RANCH - VOLLMER ROAD (NORTH)
SIGNAGE AND STRIPING PLAN
PROJECT NO. 09-002 | DESIGNED BY: WAS | DRAWN BY: ELY | CHECKED BY: GW
SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A
DATE: 01/03/2018
SHEET 7 OF 7
SI07

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS: NO. | DATE | BY | DESCRIPTION | APPVD. BY | DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

STERLING RANCH - BRIARGATE PARKWAY

FROM VOLLMER ROAD - WHEATLAND DRIVE

COUNTY OF EL PASO, STATE OF COLORADO

STREET IMPROVEMENT PLANS

INCLUDING SIGNAGE AND STRIPING PLAN

JANUARY 2018

AGENCIES

OWNER/DEVELOPER:	SR LAND, LLC 20 BOULDER CRESCENT, SUITE 201 COLORADO SPRINGS, CO 80903 JIM MORLEY (719) 471-1742
CIVIL ENGINEER:	M & S CIVIL CONSULTANTS, INC. 20 BOULDER CRESCENT, SUITE 110 COLORADO SPRINGS, CO 80903 VIRGIL A. SANCHEZ P.E. (719) 955-5485
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 JEFF RICE, P.E. (719) 520-6300
TRAFFIC ENGINEERING:	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 JENNIFER IRVINE, P.E. (719) 520-6460
WATER RESOURCES:	STERLING RANCH METRO DISTRICT ENGINEERS JDS-HYDRO CONSULTANTS 545 E. PIKES PEAK AVE., SUITE 300 COLORADO SPRINGS, CO 80903 JOHN MCGINN (719) 668-8769
FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK (719) 495-4300
GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 7710 DURANT DR. COLORADO SPRINGS, CO 80947 TIM WENDT (719) 668-3556
ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, CO 80831 (719) 495-2283
COMMUNICATIONS:	CENTURYLINK / COMCAST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987 AT&T (LOCATORS) (719) 635-3674

BENCHMARKS:

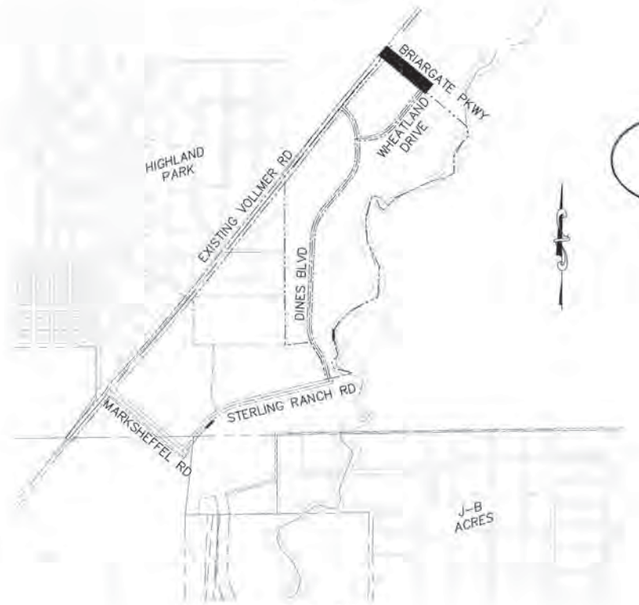
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", AT THE SOUTHEAST BOUNDARY CORNER OF BARBARICK SUBDIVISION
   NORTHING = 411416.273
   EASTING = 235167.071
   ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, AT THE NORTHWEST BOUNDARY CORNER OF PAWNEE RANCHEROS SUBDIVISION
   NORTHING = 410095.404
   EASTING = 235052.131
   ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", AT THE SOUTHWEST BOUNDARY CORNER OF BARBARICK SUBDISION
   NORTHING = 411399.982
   EASTING = 233849.817
   ELEVATION = 7030.82

BASIS OF BEARINGS:

THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW1/4) OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2-1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N 89°14'14" E, A DISTANCE OF 2,722.56 FEET.

RECEIVED VERSION
JAN 04 2018

VICINITY MAP
N.T.S.



SITE MAP
N.T.S.

APPROVALS:

ENGINEER'S STATEMENT:

DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS ENGINEER'S STATEMENT:
THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS.

COLORADO REGISTERED VIRGIL A. SANCHEZ 37160 PROFESSIONAL ENGINEER

VIRGIL A SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

1-4-18
DATE

OWNER/DEVELOPER STATEMENT:

I, THE OWNER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

SR LAND, LLC

1.4.18
DATE

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 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, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

30 JAN 18
DATE

STERLING RANCH METROPOLITAN DISTRICT:

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO. DISTRICT

1-4-18
DATE

SHEET INDEX

ABBREVIATIONS

ACT	ACTUAL	FL	FLOW LINE	PT	POINT OF TANGENCY
BCR	BACK OF CURB RETURN	FT	FEET, FOOT	PROP	PROPOSED
BOV	BLOWOFF VALVE ASSEMBLY	FUT	FUTURE	REM	REMOVE
BRK	BREAK	GRD	GRADE	ROW	RIGHTS OF WAY
BT	BEGINNING OF TRANSITION	HORZ	HORIZONTAL	RSNTS	RESTRAINTS
CATV	CABLE TV	HP	HIGH POINT ELEVATION	RT	RIGHT
CL	CLASS, CENTERLINE	INT	INTERSECTION	SAN	SANITARY SEWER
CLR	CLEARANCE	LP	LOW POINT ELEVATION	SD	STANDARD DETAIL
CONST	CONSTRUCT	LT	LEFT	STA	STATION
CSU	COLORADO SPRINGS UTILITIES	LOC	LOCATION	STM	STORM
ECR	END CURB RETURN	MIN	MINIMUM	COB	TOP CORNER OF BOX
EL	ELEVATION	N,S,E,W	NORTH,SOUTH,EAST,WEST	TELE	TELEPHONE
EOA	EDGE OF ASPHALT	NTS	NOT TO SCALE	TYP	TYPICAL
EOP	END OF PAVEMENT	PC	POINT OF VERTICAL CURVATURE	UNK	UNKNOWN
EPC	EL PASO COUNTY	PCC	POINT OF COMPOUND CURVE	Ⓤ	UNDERGROUND POWER
ESMT	EASEMENT	PCR	POINT OF CURB RETURN	UTL	UTILITY
ET	END TRANSITION	PL	PROPERTY LINE	VERT	VERTICAL
EX, EXIST	EXISTING	PRC	POINT OF REVERSE CURVE	WTR	WATER LINE
Ⓖ	GAS	PUB	PUBLIC	XING	CROSSING
GB	GRADE BREAK	PVI	POINT OF VERTICAL INTERSECTION	YD	YARD (CUBIC)
		PVC	POINT OF VERTICAL CURVE		
		PVT	POINT OF VERTICAL TANGENT		

LEGEND

AIR & VACUUM VALVE STA	PROPOSED GAS
ANCHOR, CONC. REVERSE	PROPOSED SANITARY SEWER
ANODE	PROPOSED WATER
CENTERLINE	RIGHT-OF-WAY
FENCE	PROPERTY LINE
EXISTING SANITARY SEWER	FIRE HYDRANT (EXISTING)
EXISTING GAS	FIRE HYDRANT (PROPOSED)
EXISTING ELECTRIC (OH OR UG)	STORM DRAIN
EXISTING TELEPHONE	VALVE (PROPOSED)
EXISTING TELEVISION	VALVE (EXISTING)
EXISTING FIBER OPTIC	BLOWOFF ASSY. (PROPOSED)
EXISTING WATER	BLOWOFF ASSY. (EXISTING)
	PLUG (PROPOSED)
	PLUG (EXISTING)

STERLING RANCH – BRIARGATE PARKWAY
STREET IMPROVEMENT PLAN
PROJECT NO. 09-002 | SCALE: HORIZONTAL: N/A VERTICAL: N/A | DATE: 1/3/2018 | SHEET 1 OF 5 | SI01
DESIGNED BY: DLM
DRAWN BY: ELY
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS: NO.	DATE:	BY:	DESCRIPTION:	APPD. BY:	DATE:

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES.
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF RECORD PLANS.

CAUTION

File: Q:\2002A\Sterling Ranch District\dwg\Const Dwg\Street\Briargate Pkwy\SI01.dwg Plotstamp: 1/4/2018 8:01 AM

SF 16-013

GENERAL CONSTRUCTION NOTES:

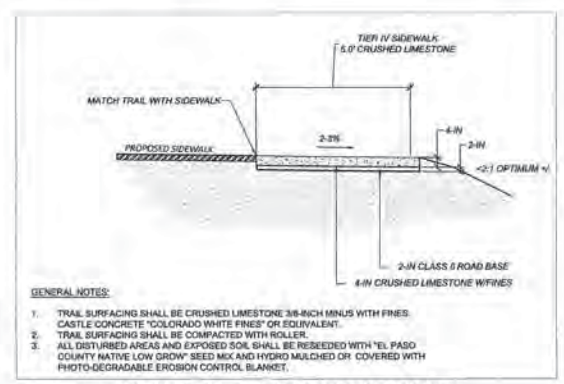
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. 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.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED PER THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
5. ALL STATIONING IS CENTERLINE OF IMPROVEMENTS UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED AS TOP BACK OF CURB (TBC), ASPHALT (ASP), OR TOP OF INLET OR BOX (TOB).
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO EPC ECM APPENDIX K – 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT BRAIRGATE PARKWAY AND VOLLMER ROAD WHICH ARE ARTERIALS AND A 50 FOOT SIGHT VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" VERTICAL IN THIS AREA.
8. ALL CULVERTS AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 – CULVERTS.
9. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT THE TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION PRIOR TO CONSTRUCTION.

SIGNING AND STRIPING NOTES:

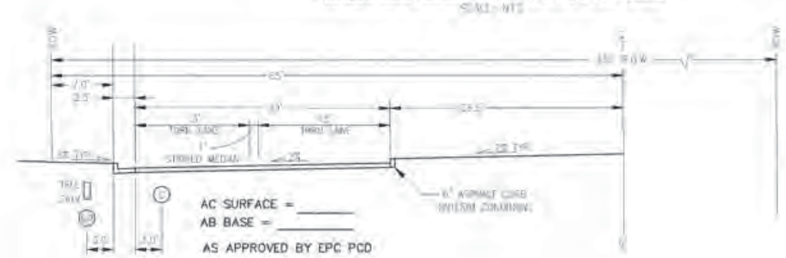
1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT 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 PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
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 A 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 DEPARTMENT OF PUBLIC WORKS (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 WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY, INCLUDING SIGNAGE OR STRIPING.

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

1. 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 NOTIFICATION 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 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. 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 – 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 DEPARTMENT OF PUBLIC WORKS. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY DEPARTMENT OF PUBLIC WORKS.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 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 VERTICAL ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT PUBLIC WORKS, 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.

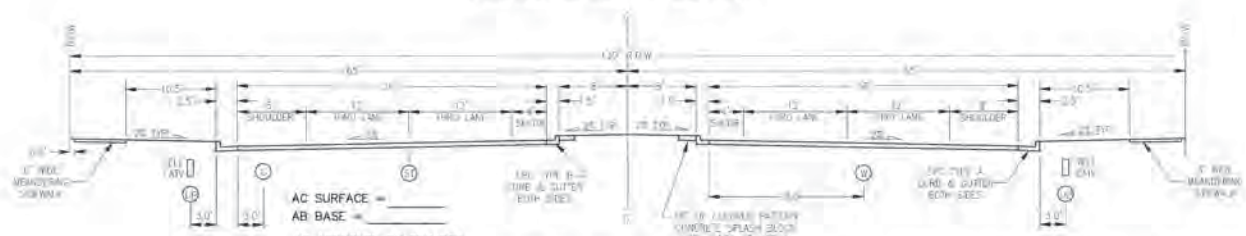


TIER IV 5-FT SIDEWALK DETAIL



"INTERIM" BRIARGATE PARKWAY

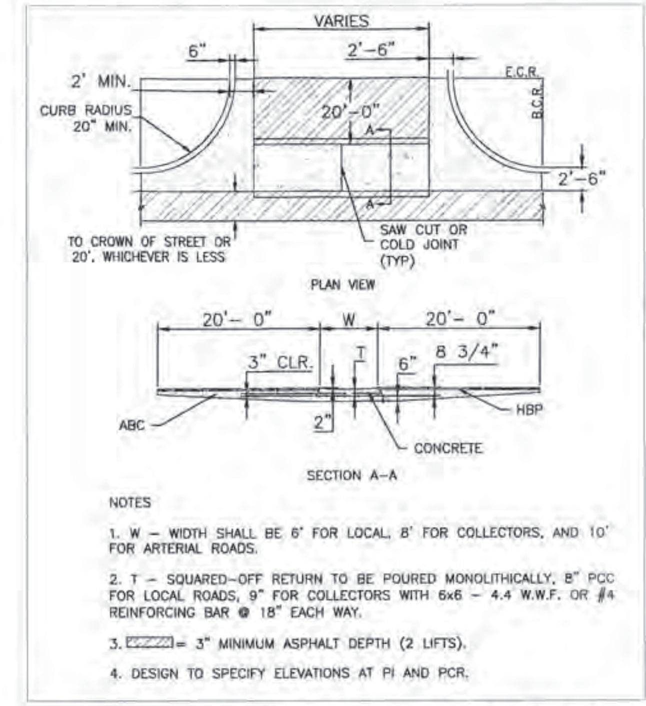
DESIGN SPEED = 50 MPH
POSTED SPEED = 25 MPH



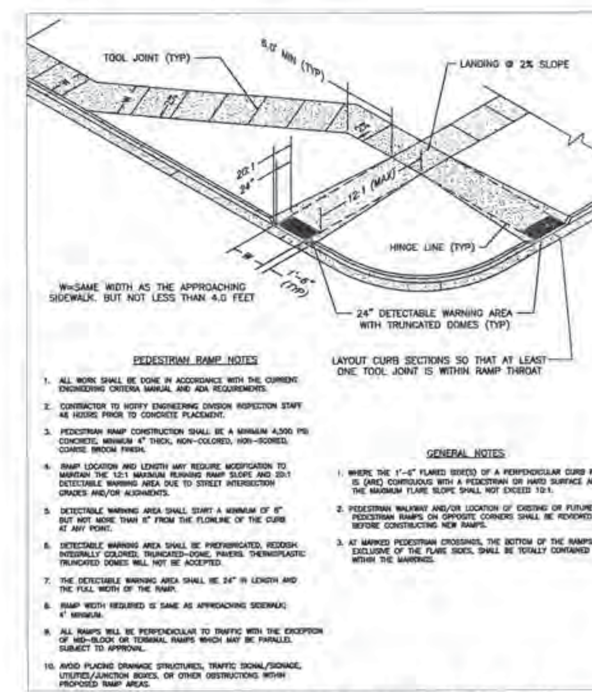
"ULTIMATE" BRIARGATE PARKWAY

(MODIFIED) 4 LANE URBAN PRINCIPAL ARTERIAL CROSS SECTION

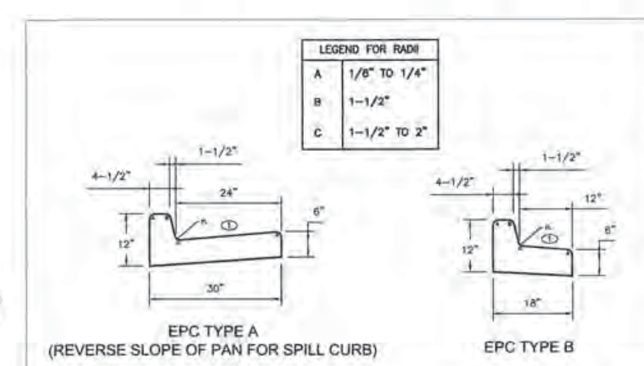
DESIGN SPEED = 50 MPH
POSTED SPEED = 45 MPH



TYPICAL CROSS PAN LAYOUT DETAIL (SD 2-26)



PEDESTRIAN INTERSECTION RAMP (SD 2-41)



TYPICAL CURB & GUTTER DETAILS DETAIL (SD 2-20)

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

REVISIONS:

CAUTION

CIVIL CONSULTANTS, INC.

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

STERLING RANCH – BRIARGATE PARKWAY

NOTES & DETAILS SHEET

PROJECT NO. 09-002 | DESIGNED BY: DLM | DRAWN BY: ELY | CHECKED BY: VAS

SCALE: HORIZONTAL N/A VERTICAL N/A

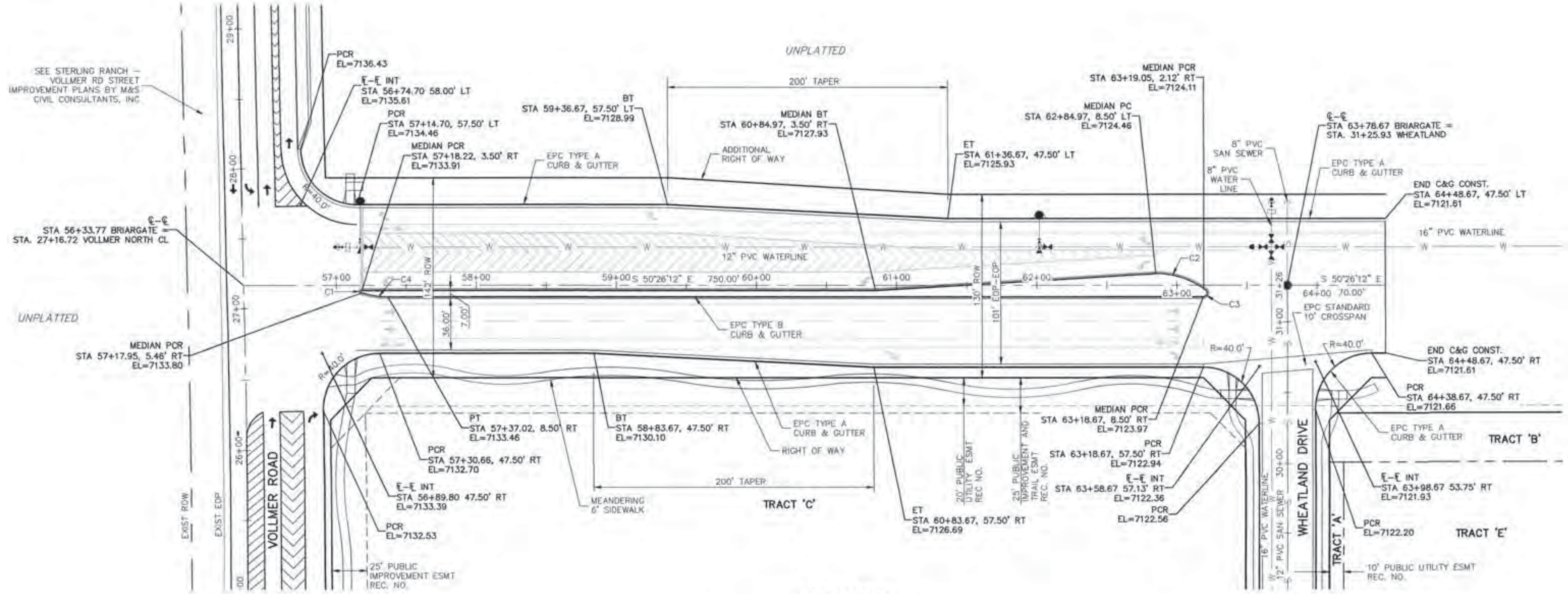
DATE: 1/3/2018

SHEET 2 OF 5

SI02

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987



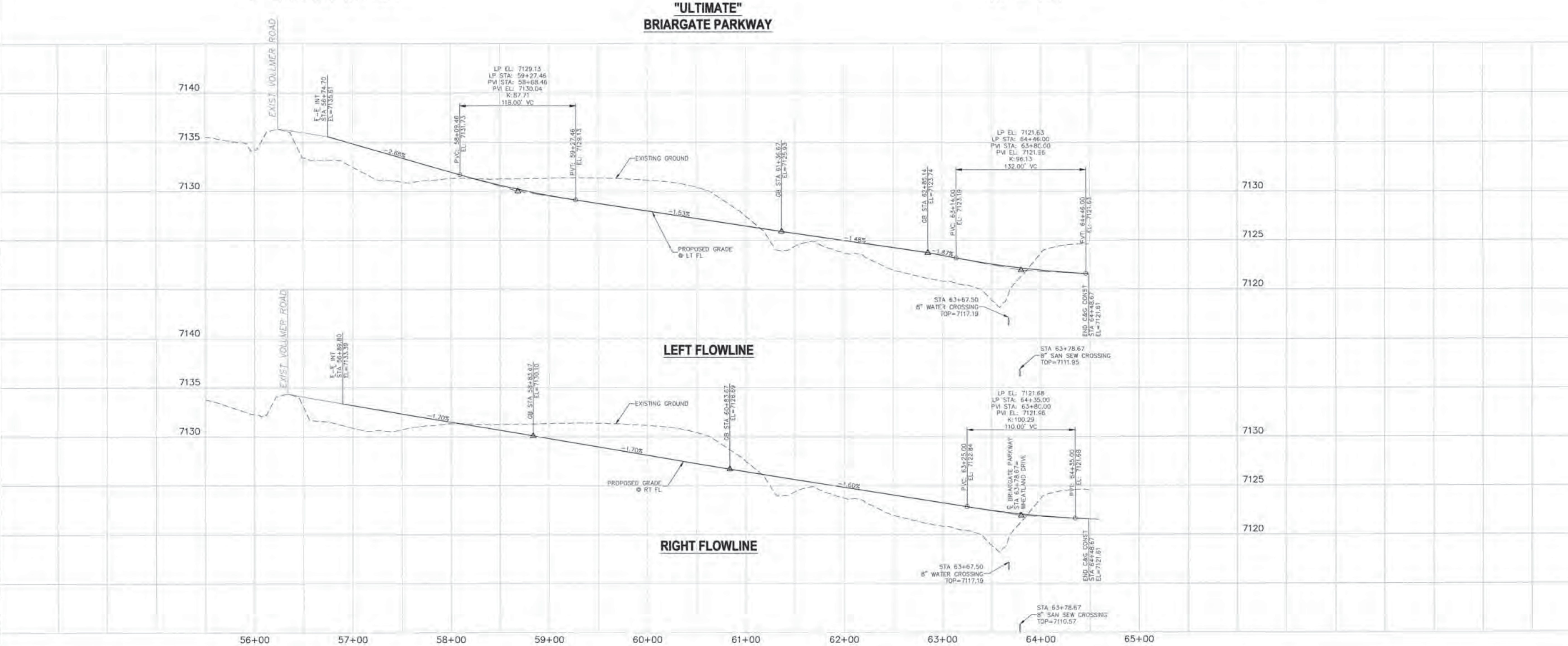
"ULTIMATE" BRIARGATE PARKWAY

STREET ABBREVIATIONS

(DB) DINES BOULEVARD
(SRR) STERLING RANCH ROAD
(BD) BYNUM DRIVE
(MR) MARKSHEFFEL ROAD

MEDIAN CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C1	164°15'06"	1.00'	2.87'
C2	34°37'04"	60.00'	36.25'
C3	145°22'56"	3.00'	7.61'
C4	17°47'40"	62.43'	19.39'



STERLING RANCH – BRIARGATE PARKWAY
"ULTIMATE" STREET IMPROVEMENT PLANS

PROJECT NO. 09-002 | DATE: 1/3/2018 | SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5' | SHEET 3 OF 5 | SI03

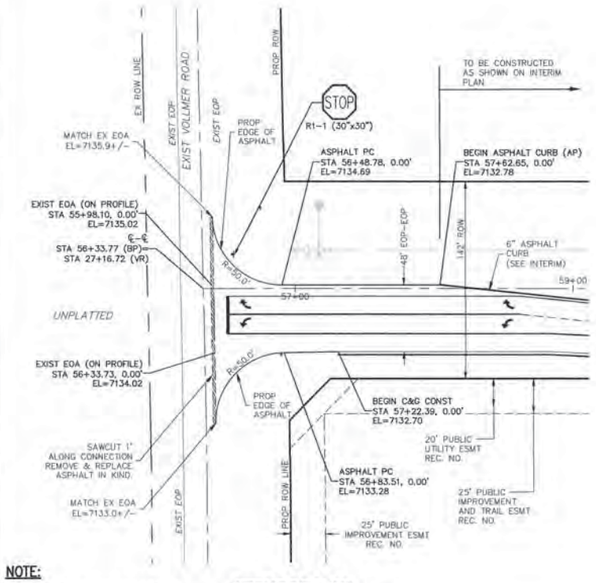
DESIGNED BY: DLM
DRAWN BY: ELY
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS: NO. | DATE | BY | DESCRIPTION | APPR'VD BY | DATE

File: G:\09002A\Sterling Ranch District\dwg\Const Dwg\Street\Briargate Pkwy\SI03.dwg Plotstamp: 1/4/2018 9:42 AM

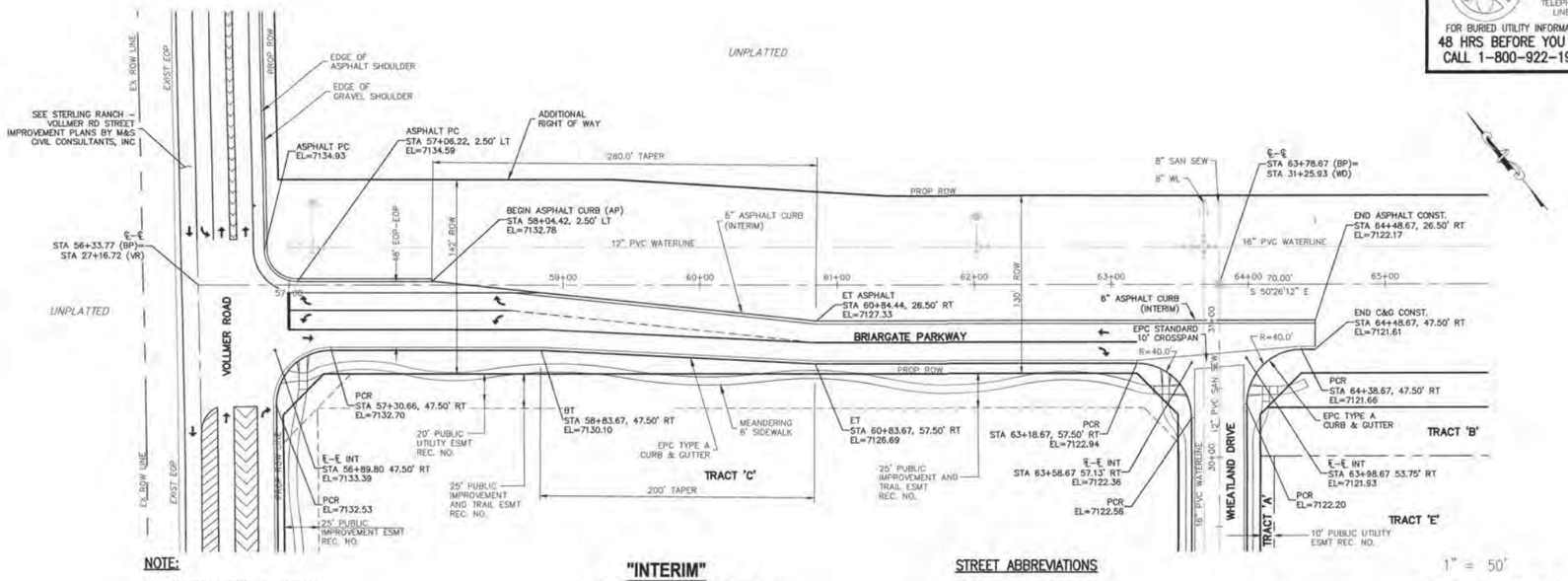


NOTE:

ALL STATION/ELEVATION LABELS REFERENCE TEMPORARY EOA STATIONING.

"TEMPORARY" BRIARGATE PARKWAY W/SIGNAGE & STRIPING *

* REMAINDER OF ROAD (TO EAST) TO BE SIGNED AND STRIPED AS SHOWN ON INTERIM PLAN ON PAGE SI05.



NOTE:

ALL STATION/ELEVATION LABELS REFERENCE ULTIMATE CENTERLINE STATIONING.

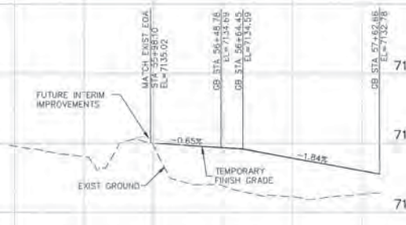
"INTERIM" BRIARGATE PARKWAY

STREET ABBREVIATIONS

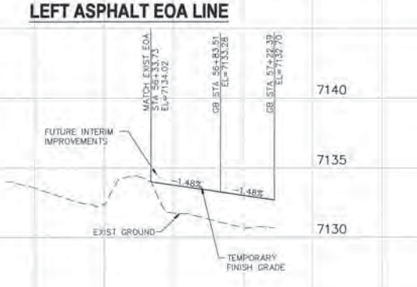
(VR) VOLLMER ROAD
(BP) BRIARGATE PARKWAY
(WD) WHEATLAND DRIVE

1" = 50'

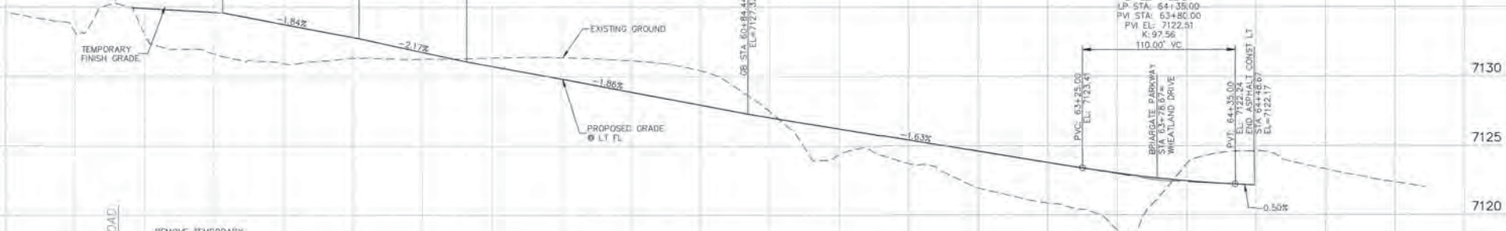
0 25 50 100
Scale in Feet



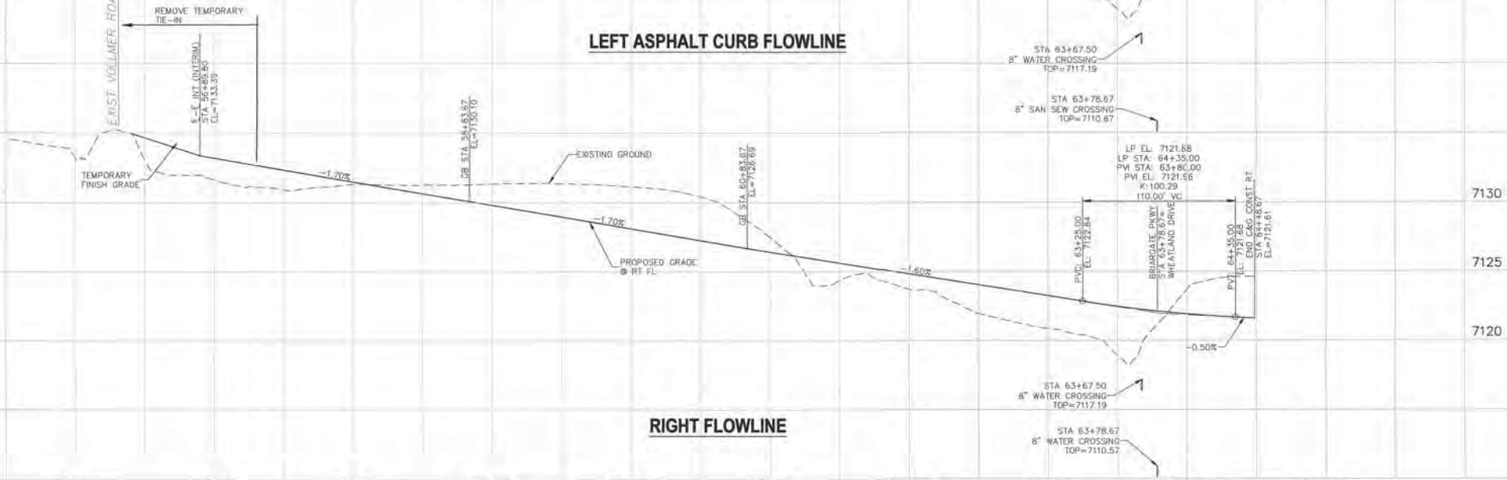
LEFT ASPHALT EOA LINE



RIGHT ASPHALT EOA LINE



LEFT ASPHALT CURB FLOWLINE



STA 63+67.50
8" WATER CROSSING
TOP=7117.19

STA 63+78.67
8" SAN SEW CROSSING
TOP=7110.67

STA 63+67.50
8" WATER CROSSING
TOP=7117.19

STA 63+78.67
8" WATER CROSSING
TOP=7110.57

RIGHT FLOWLINE

55+00 56+00 57+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH – BRIARGATE PARKWAY
"INTERIM" STREET IMPROVEMENT PLANS

PROJECT NO. 09-002 | DESIGNED BY: DLM | DRAWN BY: ELY | CHECKED BY: VAS
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
DATE: 1/3/2018
SHEET 4 OF 5
SI04

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:
NO. | DATE: | BY: | DESCRIPTION: | APPR'D: BY: | DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

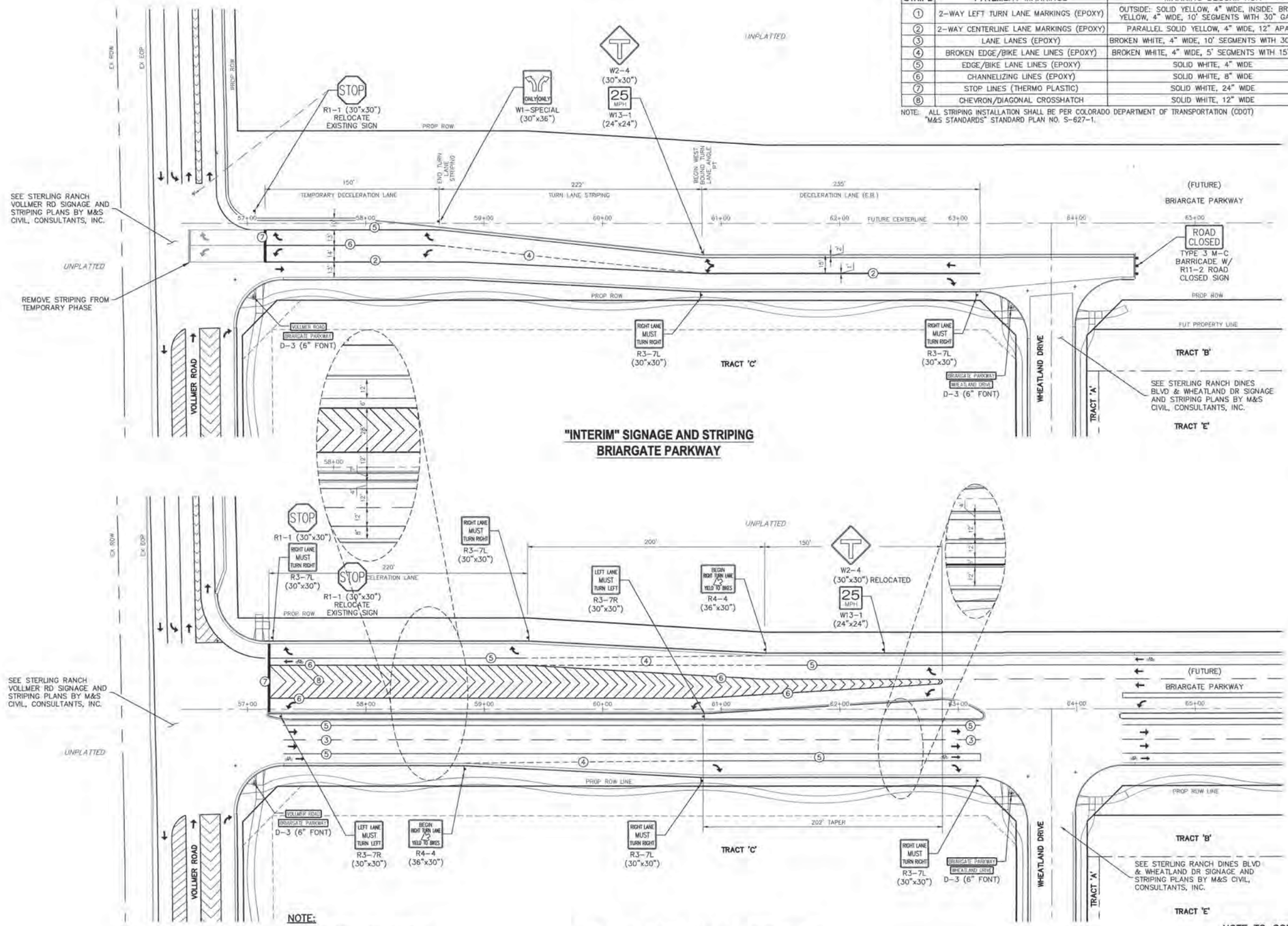
CAUTION

File: Q:\09002A\Sterling Ranch District\dwg\Const. Dwg\Street\Briargate Pkwy\SI04.dwg Plotstamp: 1/4/2018 9:54 AM

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30' GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30' GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE
⑧	CHEVRON/DIAGONAL CROSSHATCH	SOLID WHITE, 12" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987



"INTERIM" SIGNAGE AND STRIPING
BRIARGATE PARKWAY

1" = 40'
0 20 40 80
Scale In Feet

FUTURE "ULTIMATE" SIGNAGE AND STRIPING
BRIARGATE PARKWAY

"FOR INFORMATION ONLY"

NOTE:
ULTIMATE CONDITION SHOWN ASSUMES ALL INTERIM STRIPING AND SIGNAGE REMOVED AS REQUIRED.

NOTE TO CONTRACTOR:

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

STERLING RANCH - BRIARGATE PARKWAY
SIGNAGE & STRIPING PLAN

PROJECT NO. 09-002	SCALE: HORIZONTAL: 1"=40' VERTICAL: N/A	DATE: 1/3/2018	SHEET 5 OF 5	SI05
DESIGNED BY: DLM				
DRAWN BY: ELY				
CHECKED BY: VAS				

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS: NO.	DATE:	BY:	DESCRIPTION:	APPVD BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: D:\108092A\Sterling Ranch District\dwg\Const Dwg\Street\Briargate Pkwy\SI05.dwg Plotstamp: 1/4/2018 9:53 AM

STERLING RANCH-DINES BLVD & WHEATLAND DR.

COUNTY OF EL PASO, STATE OF COLORADO

STREET IMPROVEMENT PLAN

APRIL 2017

AGENCIES

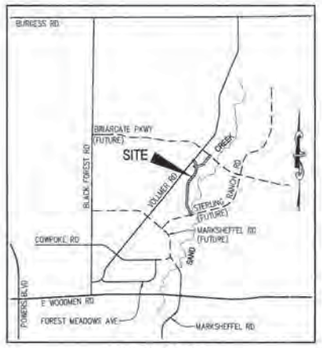
OWNER/DEVELOPER:	SR LAND, LLC 20 BOULDER CRESCENT, SUITE 201 COLORADO SPRINGS, CO 80903 JIM MORLEY (719) 471-1742
CIVIL ENGINEER:	M & S CIVIL CONSULTANTS, INC. 20 BOULDER CRESCENT, SUITE 110 COLORADO SPRINGS, CO 80903 VIRGIL A. SANCHEZ P.E. (719) 955-5485
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 JEFF RICE, P.E. (719) 520-6300
TRAFFIC ENGINEERING:	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 JENNIFER IRVINE, P.E. (719) 520-6460
WATER RESOURCES:	STERLING RANCH METRO DISTRICT ENGINEERS JDS-HYDRO CONSULTANTS 545 E. PIKES PEAK AVE., SUITE 300 COLORADO SPRINGS, CO 80903 JOHN MCGINN (719) 668-8769
FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK (719) 495-4300
GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 7710 DURANT DR. COLORADO SPRINGS, CO 80947 TIM WENDT (719) 668-3556
ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, CO 80831 (719) 495-2283
COMMUNICATIONS:	CENTURYLINK / COMCAST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987 AT&T (LOCATORS) (719) 635-3674

BENCHMARKS

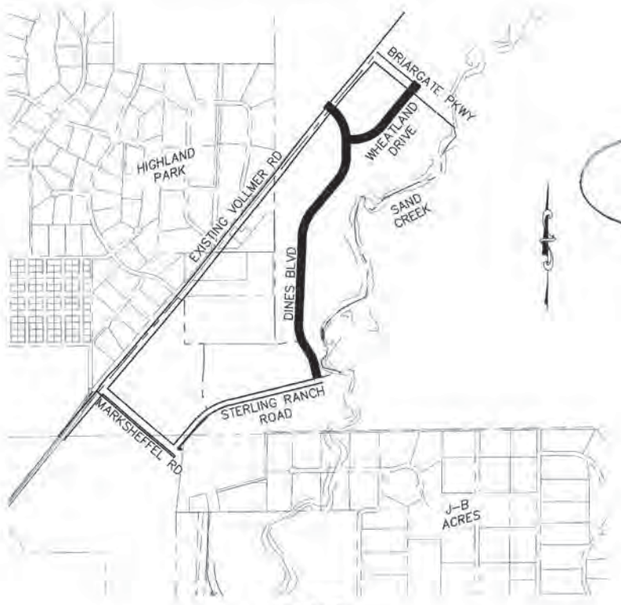
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853"
   NORTHING = 411416.273
   EASTING = 235167.071
   ELEVATION = 7023.42
2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE
   NORTHING = 410095.404
   EASTING = 235052.131
   ELEVATION = 7000.40
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141"
   NORTHING = 411399.962
   EASTING = 233849.817
   ELEVATION = 7030.82

BASIS OF BEARINGS:

THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW1/4) OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M. AS MONUMENTED AT THE SOUTHWEST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2- 1/2" ALUMINUM CAP STAMPED "LS 11624" AND AT THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER (SW1/4) BY A 2- 1/2" ALUMINUM CAP STAMPED "LS 11624", SAID LINE BEARS N 89°14'14" E, A DISTANCE OF 2,722.56 FEET.



VICINITY MAP
N.T.S.



SITE MAP
N.T.S.

RECEIVED VERSION
MAY 01 2017 4

APPROVALS:

ENGINEER'S STATEMENT:

DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS ENGINEER'S STATEMENT:
THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS.

COLORADO REGISTERED VIRGIL A. SANCHEZ 37160 PROFESSIONAL ENGINEER

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

4-17-17
DATE

OWNER/DEVELOPER STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS SPECIFICATIONS.

SR LAND, LLC

4/17/2017
DATE

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 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, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

30 JAN 18
DATE

STERLING RANCH METROPOLITAN DISTRICT:

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO. DISTRICT

4-17-17
DATE

SHEET INDEX

ABBREVIATIONS

ACT	ACTUAL	FL	FLOW LINE	PT	POINT OF TANGENCY
BCR	BACK OF CURB RETURN	FT	FEET, FOOT	PROP	PROPOSED
BOV	BLOWOFF VALVE ASSEMBLY	FUT	FUTURE	REM	REMOVE
BRK	BREAK	GRD	GRADE	ROW	RIGHT OF WAY
BT	BEGINNING OF TRANSITION	HORZ	HORIZONTAL	RSNTS	RESTRAINTS
CATV	CABLE TV	HP	HIGH POINT ELEVATION	RT	RIGHT
CL	CLASS, CENTERLINE	INT	INTERSECTION	SAN	SANITARY SEWER
CLR	CLEARANCE	LP	LOW POINT ELEVATION	SD	STANDARD DETAIL
CONST	CONSTRUCT	LT	LEFT	STA	STATION
CSU	COLORADO SPRINGS UTILITIES	LOC	LOCATION	STM	STORM
ECR	END CURB RETURN	MIN	MINIMUM	TOB	TOP CORNER OF BOX
EL	ELEVATION	N,S,E,W	NORTH,SOUTH,EAST,WEST	TELE	TELEPHONE
EOA	EDGE OF ASPHALT	NTS	NOT TO SCALE	TYP	TYPICAL
EOP	END OF PAVEMENT	PC	POINT OF VERTICAL CURVATURE	UNK	UNKNOWN
EPC	EL PASO COUNTY	PCC	POINT OF COMPOUND CURVE	UG	UNDERGROUND POWER
ESMT	EASEMENT	PCR	POINT OF CURB RETURN	UTL	UTILITY
ET	END TRANSITION	PL	PROPERTY LINE	VERT	VERTICAL
EX	EXISTING	PRC	POINT OF REVERSE CURVE	WTR	WATER LINE
G	GAS	PUB	PUBLIC	X@G	CROSSING
GB	GRADE BREAK	PVI	POINT OF VERTICAL INTERSECTION	YD	YARD (CUBIC)
		PVC	POINT OF VERTICAL CURVE		
		PVT	POINT OF VERTICAL TANGENT		

LEGEND

AIR & VACUUM VALVE STA
ANCHOR, CONC. REVERSE
ANODE
CENTERLINE
FENCE
EXISTING SANITARY SEWER
EXISTING GAS
EXISTING ELECTRIC (OH OR UG)
EXISTING TELEPHONE
EXISTING TELEVISION
EXISTING FIBER OPTIC
EXISTING WATER

PROPOSED GAS
PROPOSED SANITARY SEWER
PROPOSED WATER
RIGHT-OF-WAY
PROPERTY LINE
FIRE HYDRANT (EXISTING)
FIRE HYDRANT (PROPOSED)
STORM DRAIN
VALVE (PROPOSED)
VALVE (EXISTING)
BLOWOFF ASSY. (PROPOSED)
BLOWOFF ASSY. (EXISTING)
PLUG (PROPOSED)
PLUG (EXISTING)

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER.

CAUTION

REVISIONS:

NO	DATE	BY	DESCRIPTION	APPVD	BY	DATE

STERLING RANCH-DINES BLVD & WHEATLAND DR.
STREET IMPROVEMENT PLAN

PROJECT NO. 09-006	FILE: g:\09006\Working Files to Send\Cover Sheet\Sheet Plans\Dines Blvd\SI01.dwg	SCALE:	DATE: 04/17/2017
DESIGNED BY: DM		HORIZ: N/A	SHEET 1 OF 10
DRAWN BY: BB		VERT: N/A	SI01
CHECKED BY: VAS			

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

File: G:\09006\A\Sterling Ranch No 3\dwg\Const Dwg\Sheet Plans\Dines Blvd\SI01.dwg Plotstamp: 2/9/2017 10:48 AM

SF-16-013

GENERAL CONSTRUCTION NOTES:

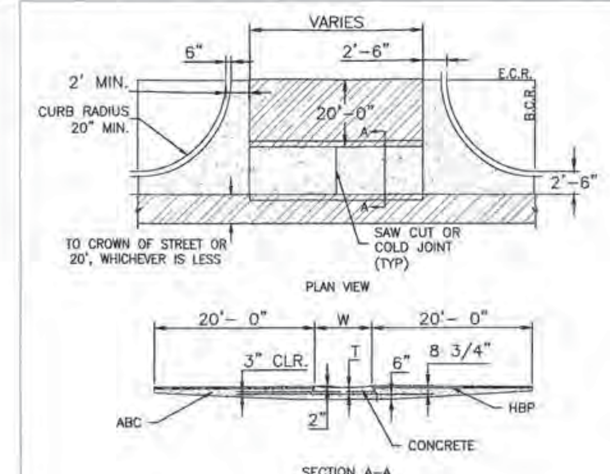
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. 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.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED PER THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
5. ALL STATIONING IS CENTERLINE OF IMPROVEMENTS UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED AS TOP BACK OF CURB (TBC), ASPHALT (ASP), OR TOP OF INLET OR BOX (TOB).
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO EPC ECM APPENDIX K – 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT BRAIRGATE PARKWAY AND VOLLMER ROAD WHICH ARE ARTERIALS AND A 50 FOOT SIGHT VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" VERTICAL IN THIS AREA.
8. ALL CULVERTS AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 – CULVERTS.
9. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT THE TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIVISION PRIOR TO CONSTRUCTION.

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 PLANNING AND COMMUNITY DEVELOPMENT DIVISION.
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 A 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 DEPARTMENT OF PUBLIC WORKS (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 WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY, INCLUDING SIGNAGE OR STRIPING.

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

1. 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 NOTIFICATION 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 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. 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 – 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 DEPARTMENT OF PUBLIC WORKS. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY DEPARTMENT OF PUBLIC WORKS.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 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 VERTICAL ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT PUBLIC WORKS, 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.

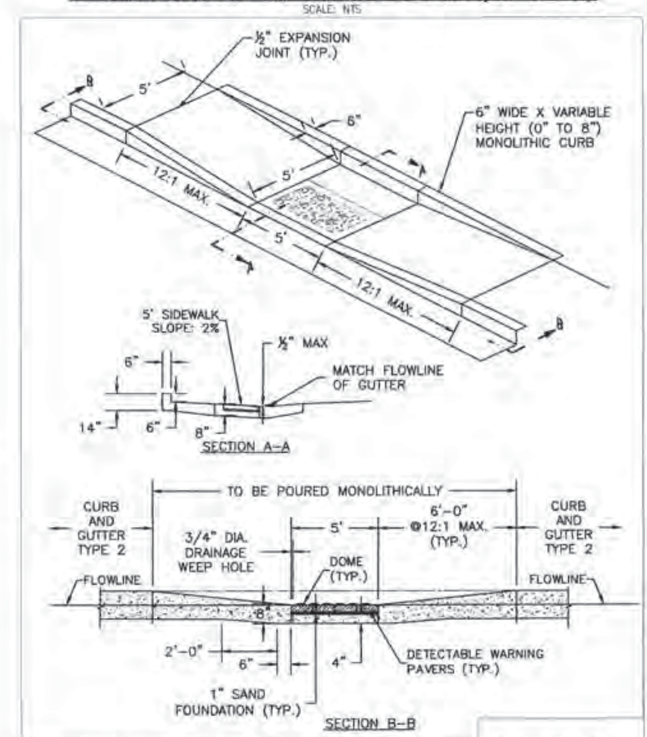


NOTES

1. W – WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, AND 10' FOR ARTERIAL ROADS.
2. T – SQUARED-OFF RETURN TO BE POURED MONOLITHICALLY, 8" PCC FOR LOCAL ROADS, 9" FOR COLLECTORS WITH 6x6 – 4.4 W.W.F. OR #4 REINFORCING BAR @ 18" EACH WAY.
3. [hatch symbol] = 3" MINIMUM ASPHALT DEPTH (2 LIFTS).
4. DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.

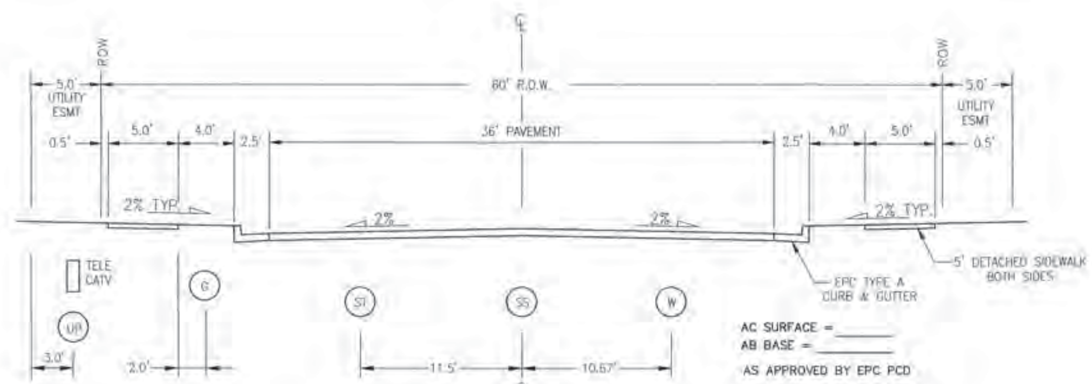
TYPICAL CROSS PAN LAYOUT DETAIL (SD 2-26)

SCALE: NTS



PARALLEL PEDESTRIAN RAMP DETAIL (SD 2-50)

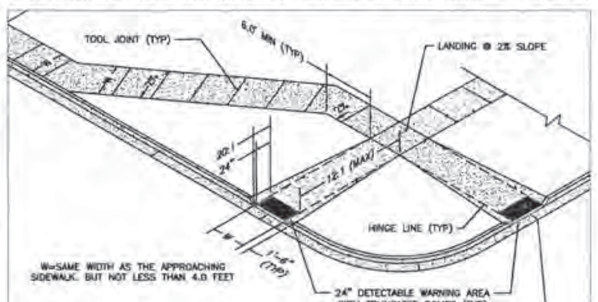
SCALE: NTS



URBAN RESIDENTIAL COLLECTOR "DINES BOULEVARD" & "WHEATLAND DRIVE"

SCALE: NTS

DESIGN SPEED = 40 MPH
POSTED SPEED = 35 MPH



PEDESTRIAN RAMP NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED, REDDISH INTEGRALLY COLORED, TRUNCATED-DOME, PAVERS. THERMOPLASTIC TRUNCATED DOMES WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

GENERAL NOTES

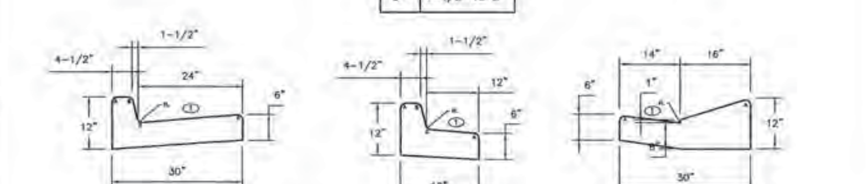
1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

PEDESTRIAN INTERSECTION RAMP (SD 2-41)

SCALE: NTS

LEGEND FOR RADII

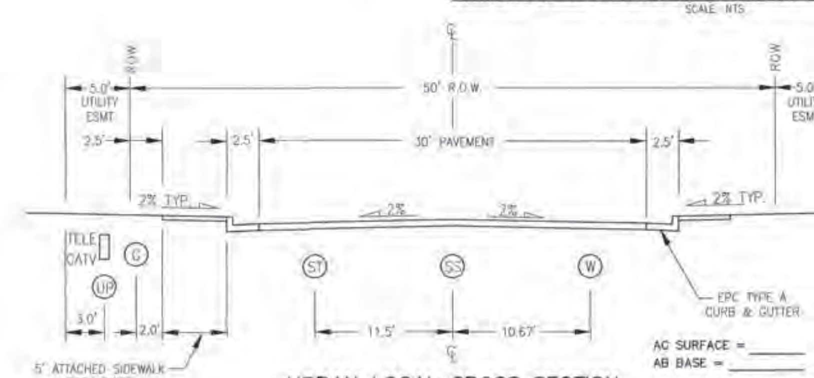
A	1/8" TO 1/4"
B	1-1/2"
C	1-1/2" TO 2"



EPC TYPE A (REVERSE SLOPE OF PAN FOR SPILL CURB) EPC TYPE B EPC TYPE C (REVERSE SLOPE OF PAN FOR SPILL CURB)

TYPICAL CURB & GUTTER DETAILS DETAIL (SD 2-20)

SCALE: NTS



URBAN LOCAL CROSS SECTION

SCALE: NTS

DESIGN SPEED = 25 MPH
POSTED SPEED = 25 MPH

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

REVISIONS: NO. | DATE | BY | DESCRIPTION | APPR'D. BY | DATE

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

M&S CIVIL CONSULTANTS, INC.
20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485

STERLING RANCH-DINES BLVD & WHEATLAND DR.

NOTES & DETAIL SHEET

PROJECT NO. 09-006	FILE:		
DESIGNED BY: DM	SCALE	DATE: 04/17/2017	SI02
DRAWN BY: BB	HORIZ: N/A	SHEET 2 OF 10	
CHECKED BY: VAS	VERT: N/A		

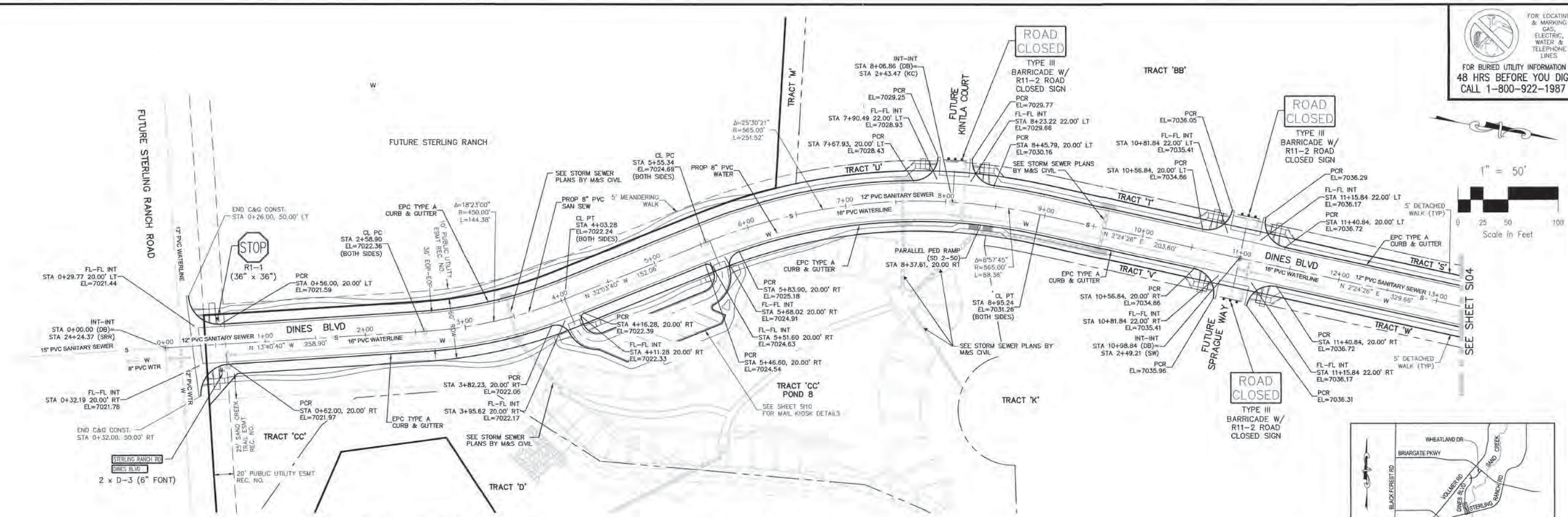
FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH-DINES BLVD & WHEATLAND DR.

STREET IMPROVEMENT PLANS

PROJECT NO: 09-006 | DESIGNED BY: DM | DRAWN BY: BB | CHECKED BY: WAS
FILE: G:\09006A\Sterling Ranch No. 3\Dwg\Cover Page\Cover Page (Dines Blvd)SI03.dwg | SCALE: HORIZ: 1"=50' VERT: 1"=5' | DATE: 04/17/2017 | SHEET 3 OF 10 | SI03

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.



KEY MAP
N.T.S.

NOTES:

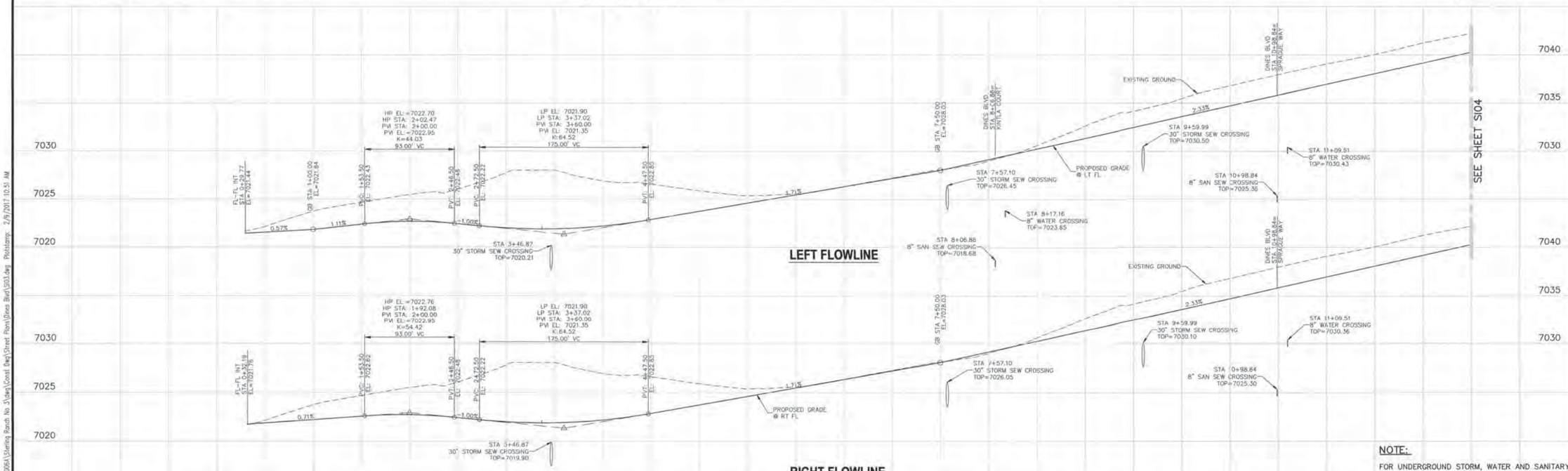
1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.

STREET ABBREVIATIONS

(DB)	DINES BOULEVARD
(SRR)	STERLING RANCH ROAD
(KC)	KINTLA COURT
(SW)	SPRAGUE WAY

NOTE:
1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

DINES BOULEVARD



NOTE:
FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS. INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

NO.	DATE	BY:	DESCRIPTION:	APPV'D BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

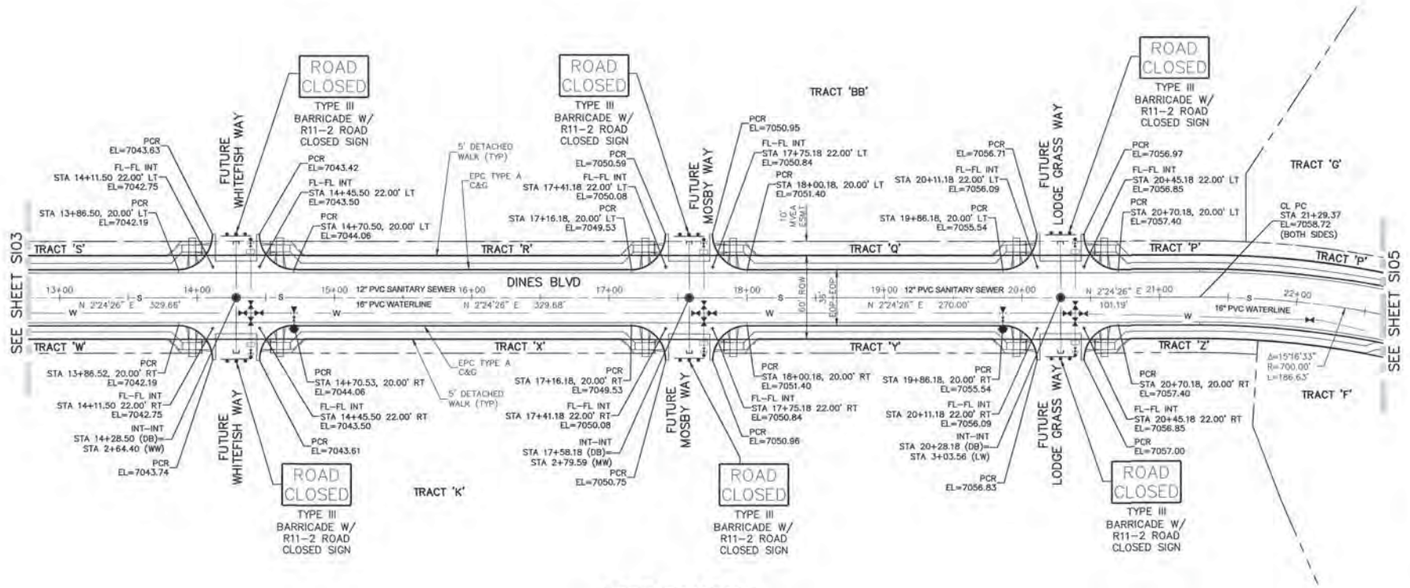
File: G:\09006A\Sterling Ranch No. 3\Civil\Const Dwg\Street Plans\Dines Blvd\SI03.dwg Plotstamp: 2/9/2017 10:51 AM

NOTE:
1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

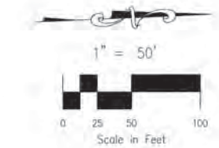
STREET ABBREVIATIONS

(DB)	DINES BOULEVARD
(WW)	WHITEFISH WAY (FUTURE)
(MW)	MOSBY WAY (FUTURE)
(LW)	LODGE GRASS WAY (FUTURE)

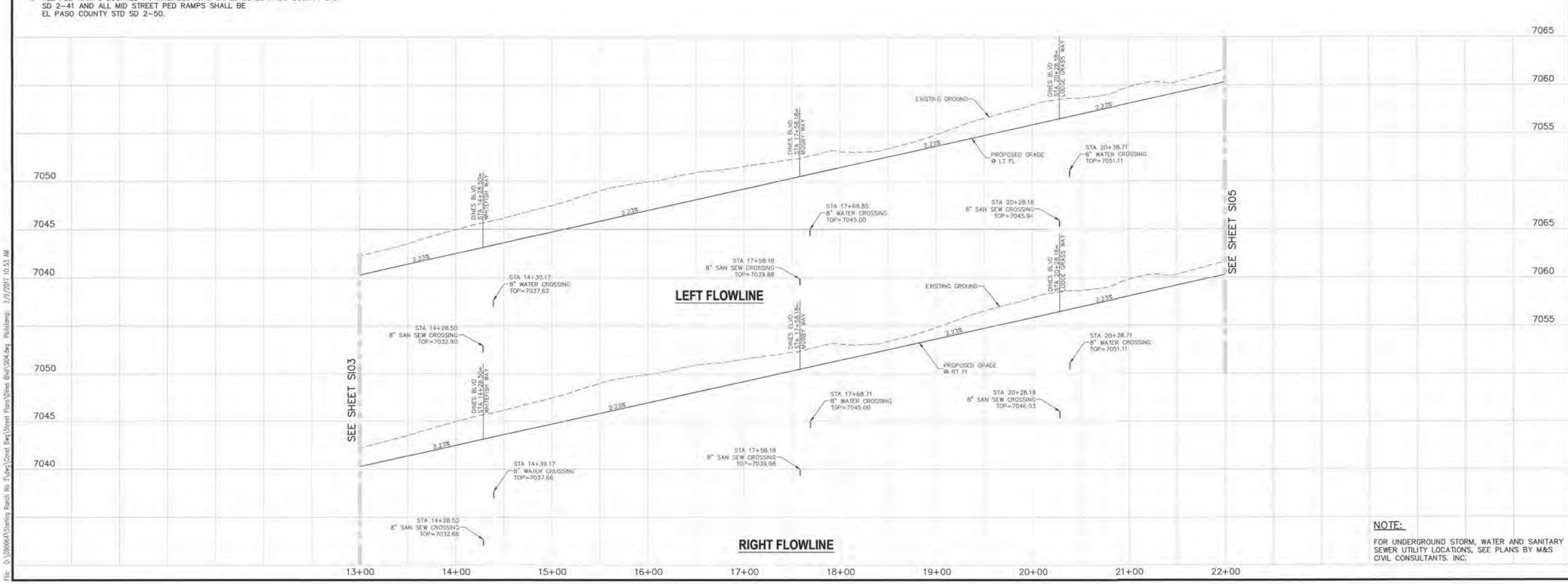
NOTES:
1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.



DINES BOULEVARD



KEY MAP
N.T.S.



NOTE:
FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH–DINES BLVD & WHEATLAND DR.
STREET IMPROVEMENT PLANS

PROJECT NO. 09-006 | DESIGNED BY: DM | DRAWN BY: BB | CHECKED BY: VAS
FILE: G:\09006A\Drafting Files\In Use\Cover Sheet\Cover Sheet SI04.dwg
SCALE: HORIZ. 1"=50' VERT. 1"=5'
DATE: 04/17/2017
SHEET 4 OF 10
SI04

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37150

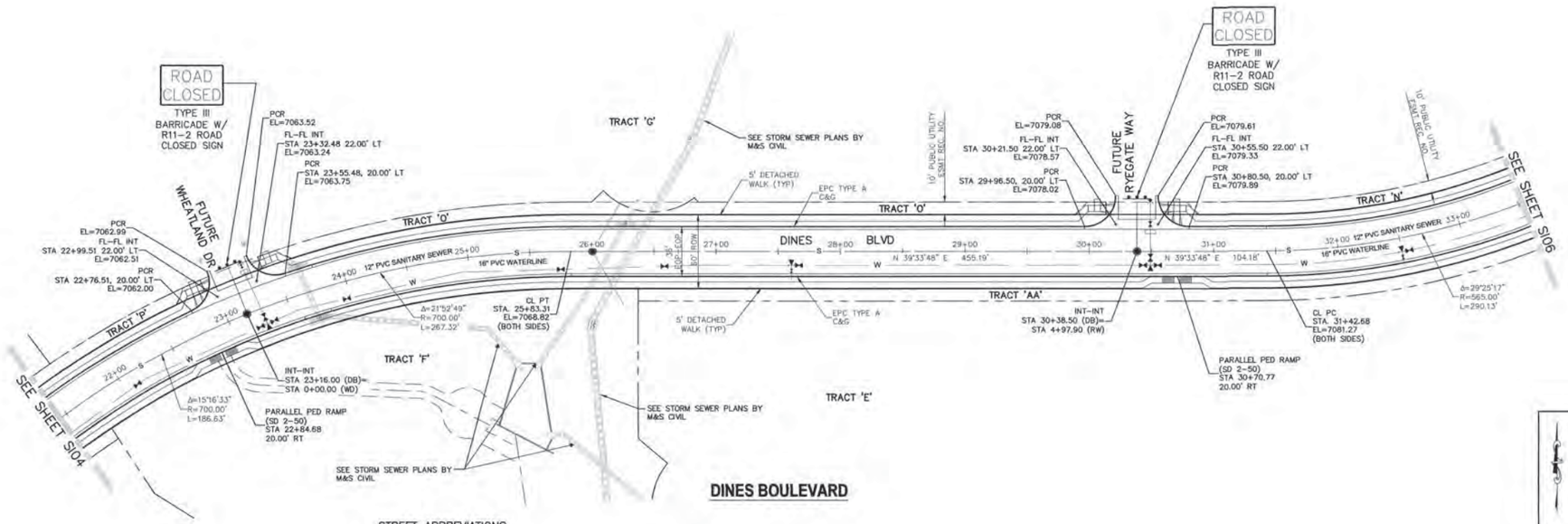
REVISIONS:
NO.	DATE	BY	DESCRIPTION

APPD. BY: DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: G:\09006A\Sterling Ranch No 3\dwg\Const Dwg\Street Plans\Dines Blvd SI04.dwg Plotstamp: 2/9/2017 10:53 AM



DINES BOULEVARD

STREET ABBREVIATIONS

(DB)	DINES BOULEVARD
(RW)	RYEGATE WAY
(WO)	WHEATLAND DRIVE

NOTES:

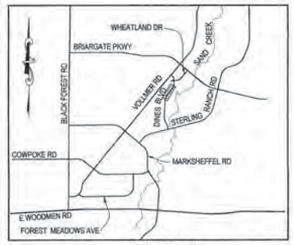
1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.

NOTE:

1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS. INC.



KEY MAP
N.T.S.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

1" = 50'
0 25 50 100
Scale in Feet

STERLING RANCH-DINES BLVD & WHEATLAND DR.
STREET IMPROVEMENT PLANS

PROJECT NO. 09-006
DESIGNED BY: DM
DRAWN BY: BB
CHECKED BY: VAS
FILE: d:\projects\sterling ranch no. 2\land\street plans\dines blvd-wheatland dr\si105.dwg
DATE: 04/17/2017
SCALE: HORIZ: 1"=50' VERT: 1"=5'
SHEET 5 OF 10
SI05

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

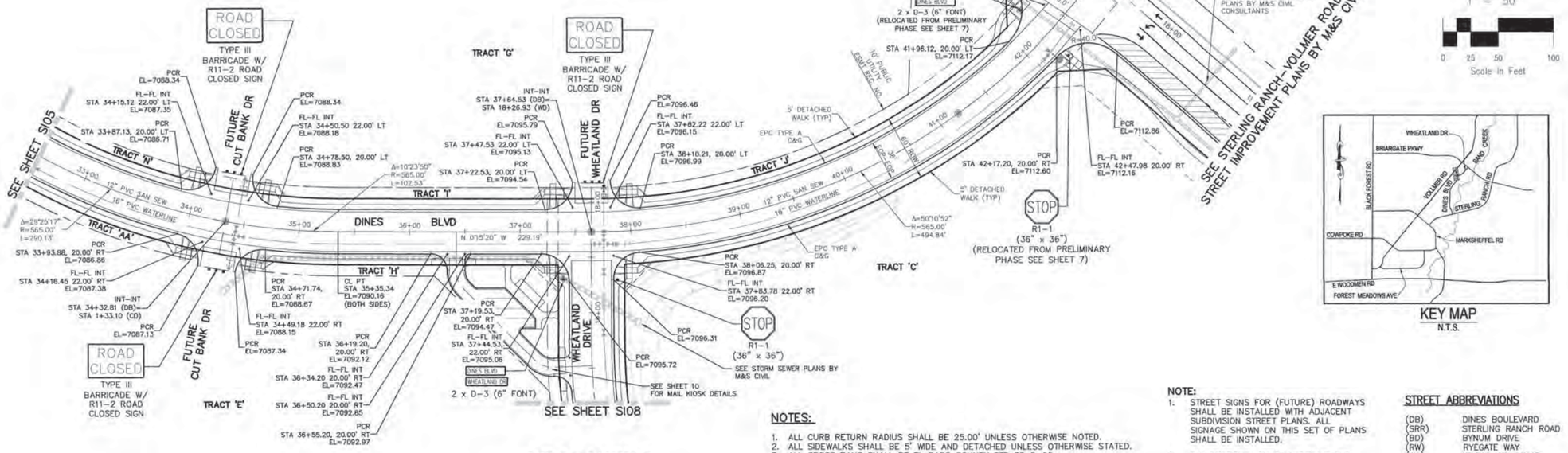
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

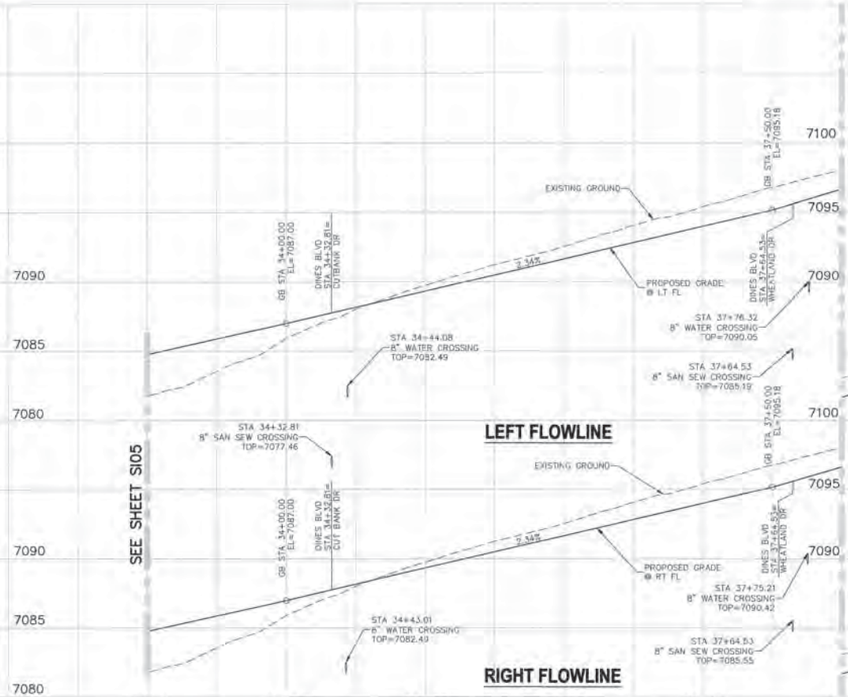
NO.	DATE	BY:	DESCRIPTION	APPVD. BY:	DATE

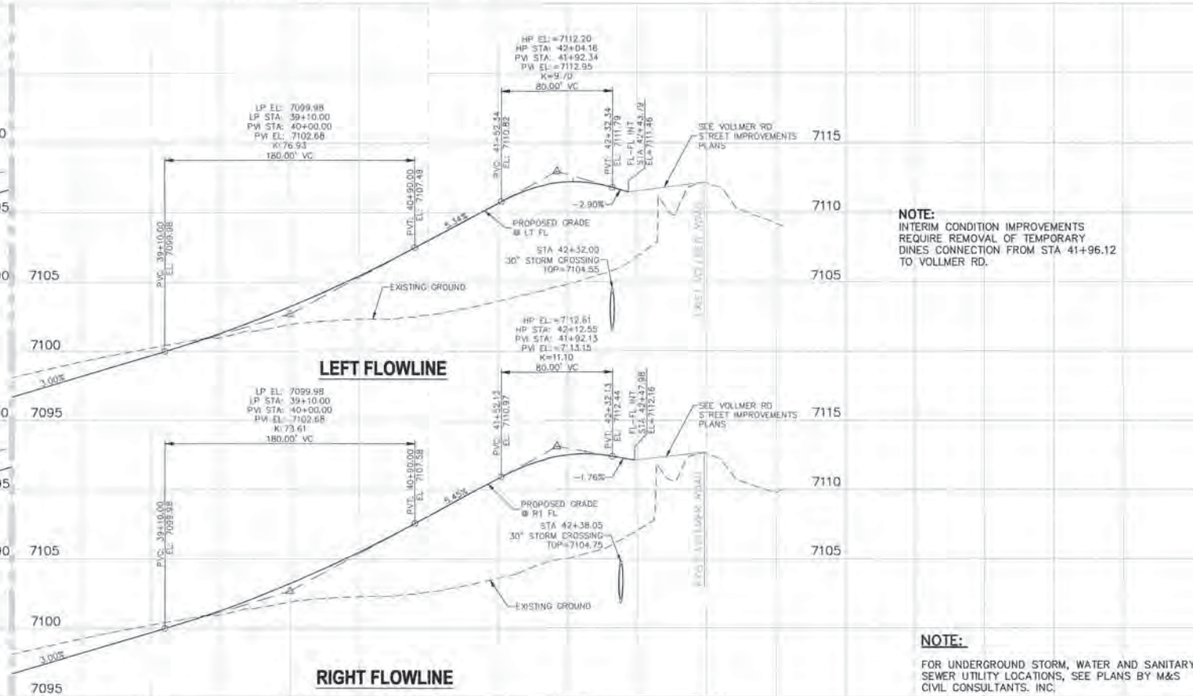
THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION



DINES BOULEVARD





NOTE:
INTERIM CONDITION IMPROVEMENTS REQUIRE REMOVAL OF TEMPORARY DINES CONNECTION FROM STA 41+96.12 TO VOLLMER RD.

NOTE:
FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

NOTES:

1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.

NOTE:

1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

STREET ABBREVIATIONS

(DB)	DINES BOULEVARD
(SRR)	STERLING RANCH ROAD
(BD)	BYNUM DRIVE
(RW)	RYEGATE WAY
(WD)	WHEATLAND DRIVE
(CD)	CUT BANK DR
(VR)	VOLLMER ROAD

KEY MAP
N.T.S.

1" = 50'
0 25 50 100
Scale in Feet

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH-DINES BLVD & WHEATLAND DR
STREET IMPROVEMENT PLANS
PROJECT NO. 09-006 | DESIGNED BY: DLM | DRAWN BY: ELY | CHECKED BY: VAS
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
DATE: 4/14/2017
SHEET 6 OF 10
SI06

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

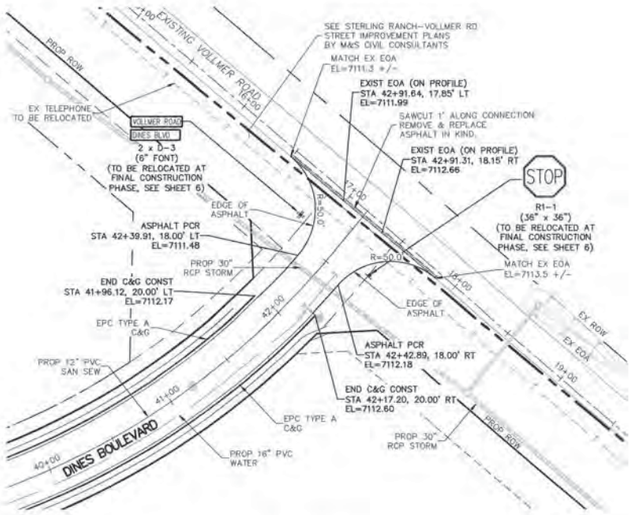
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

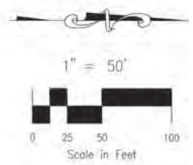
NO.	DATE	BY	DESCRIPTION	APPVD BY	DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER OF THESE PLANS.

CAUTION



"TEMPORARY"
DINES BOULEVARD

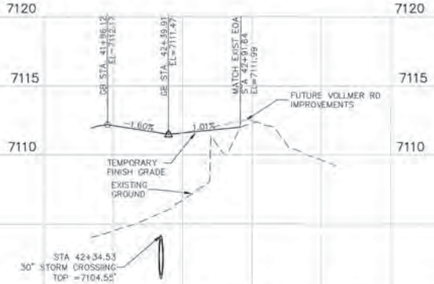


NOTES:

1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.

NOTE:

1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.



LEFT EDGE OF ASPHALT

RIGHT EDGE OF ASPHALT

NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS. INC.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES.
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH-DINES BLVD & WHEATLAND DR
STREET IMPROVEMENT PLANS

PROJECT NO. 09-006
DESIGNED BY: DLM
DRAWN BY: ELY
CHECKED BY: VAS
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
DATE: 4/14/2017
SHEET 7 OF 10
SI07

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

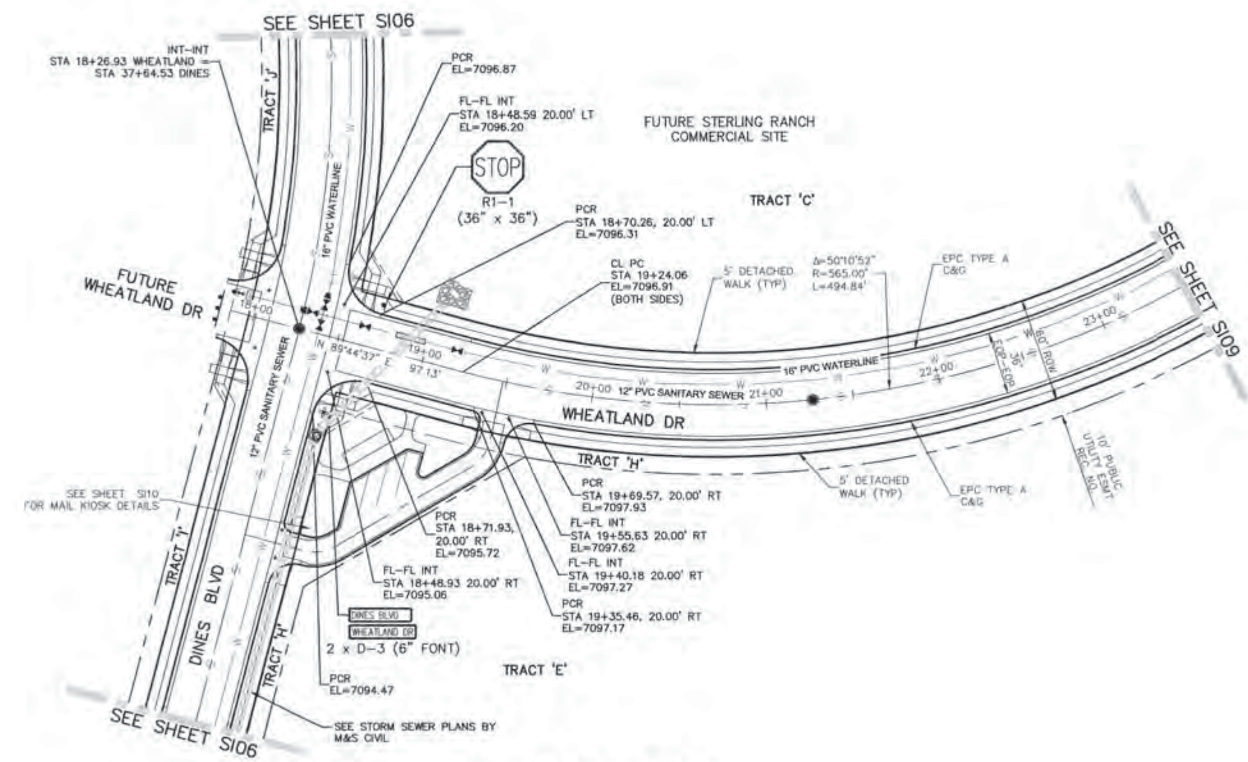
REVISIONS:

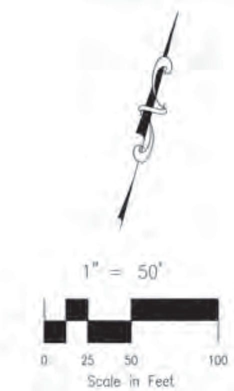
NO.	DATE	BY	DESCRIPTION	APPVD. BY	DATE

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: O:\09006A\Sterling Ranch No 2\dwg\Const Dwg\Street Plans\Vines Blvd-Wheatland Dr\SI07.dwg Plotstamp: 1/4/2018 10:35 AM





WHEATLAND DRIVE

STREET ABBREVIATIONS

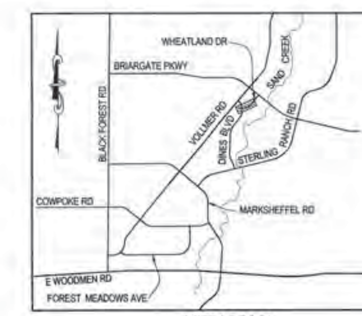
(DB) DINES BOULEVARD
(WD) WHEATLAND DRIVE

NOTE:

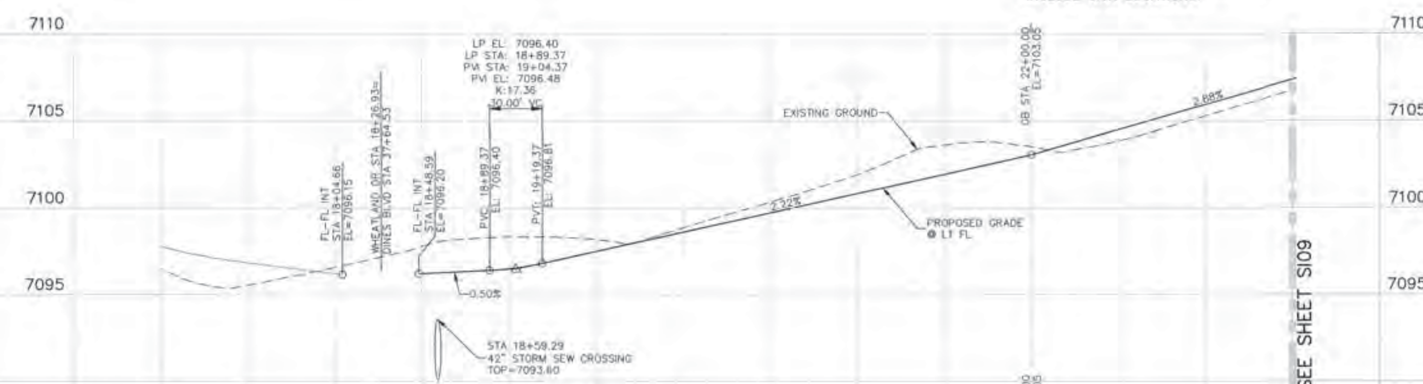
1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

NOTES:

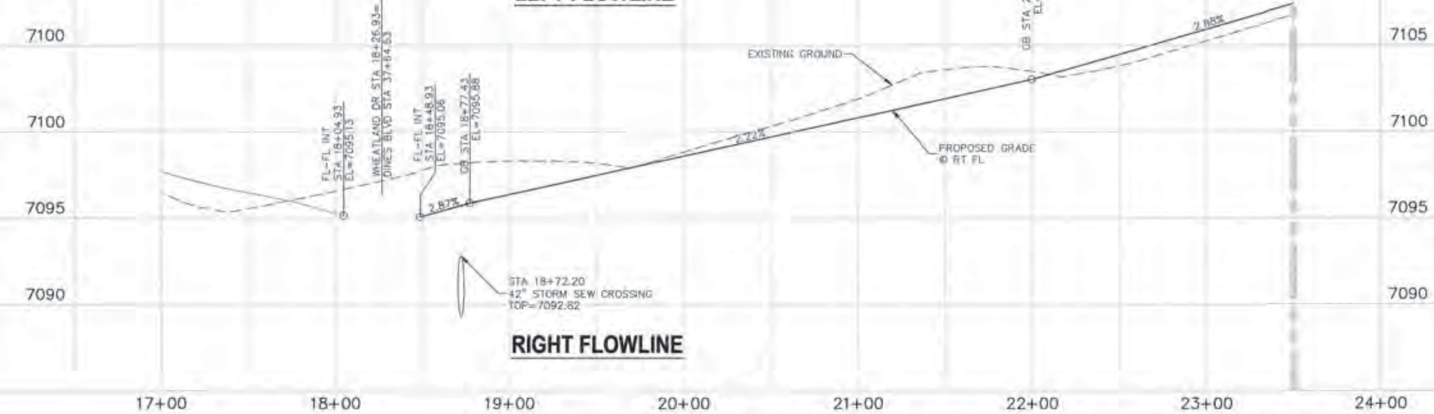
1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.



KEY MAP
N.T.S.



LEFT FLOWLINE



RIGHT FLOWLINE

NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987
FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

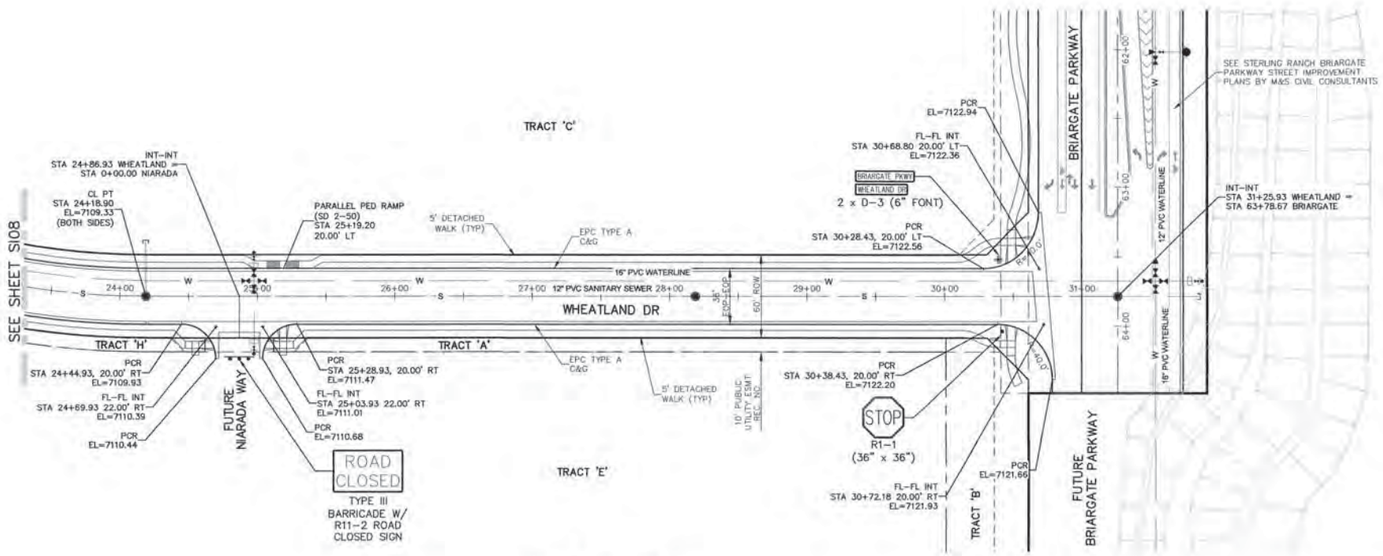
STERLING RANCH-DINES BLVD & WHEATLAND DR.
STREET IMPROVEMENT PLANS

PROJECT NO. 09-006
DESIGNED BY: DM
DRAWN BY: BB
CHECKED BY: VAS
SCALE HORIZ: 1"=50' VERT: 1"=5'
DATE: 04/17/2017
SHEET 8 OF 10
SI08

M&S CIVIL CONSULTANTS, INC.
20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS: NO. | DATE | BY | DESCRIPTION | APRV'D BY | DATE

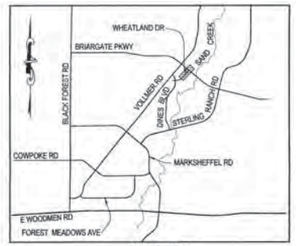


WHEATLAND DRIVE

1" = 50'

0 25 50 100

Scale in Feet



KEY MAP
N.T.S.

STREET ABBREVIATIONS

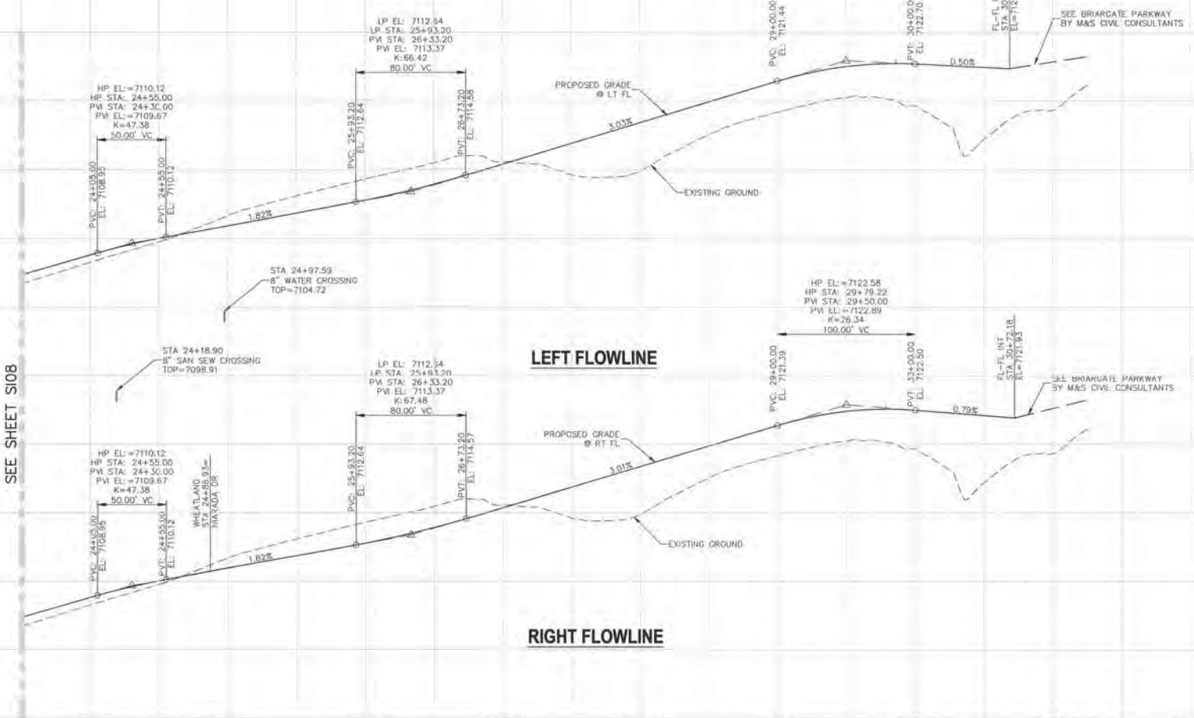
(BP) BRIARGATE PARKWAY
(WD) WHEATLAND DRIVE
(NW) NIARADIA WAY

NOTES:

1. ALL CURB RETURN RADIUS SHALL BE 25.00' UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS SHALL BE 5' WIDE AND DETACHED UNLESS OTHERWISE STATED.
3. ALL CROSS PANS SHALL BE EL PASO COUNTY STD SD 2-26.
4. ALL PED RAMPS LOCATED AT INTERSECTIONS SHALL BE EL PASO COUNTY STD SD 2-41 AND ALL MID STREET PED RAMPS SHALL BE EL PASO COUNTY STD SD 2-50.

NOTE:

1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.



NOTE:

FOR UNDERGROUND STORM, WATER AND SANITARY SEWER UTILITY LOCATIONS, SEE PLANS BY M&S CIVIL CONSULTANTS, INC.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH-DINES BLVD & WHEATLAND DR.

STREET IMPROVEMENT PLANS

PROJECT NO: 09-006
FILE: G:\09000\Planning Basis for JT\dwg\Cover Sheet\Cover Sheet (Dines Blvd - Wheatland Dr).dwg
DATE: 04/17/2017
SHEET 9 OF 10
SI09
SCALE: HORIZ: 1"=50' VERT: 1"=5'
DESIGNED BY: DM
DRAWN BY: BB
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

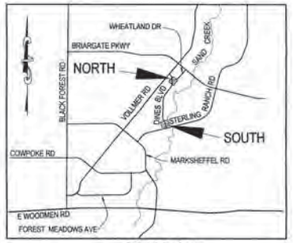
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

NO.	DATE	BY	DESCRIPTION	APPVD. BY	DATE

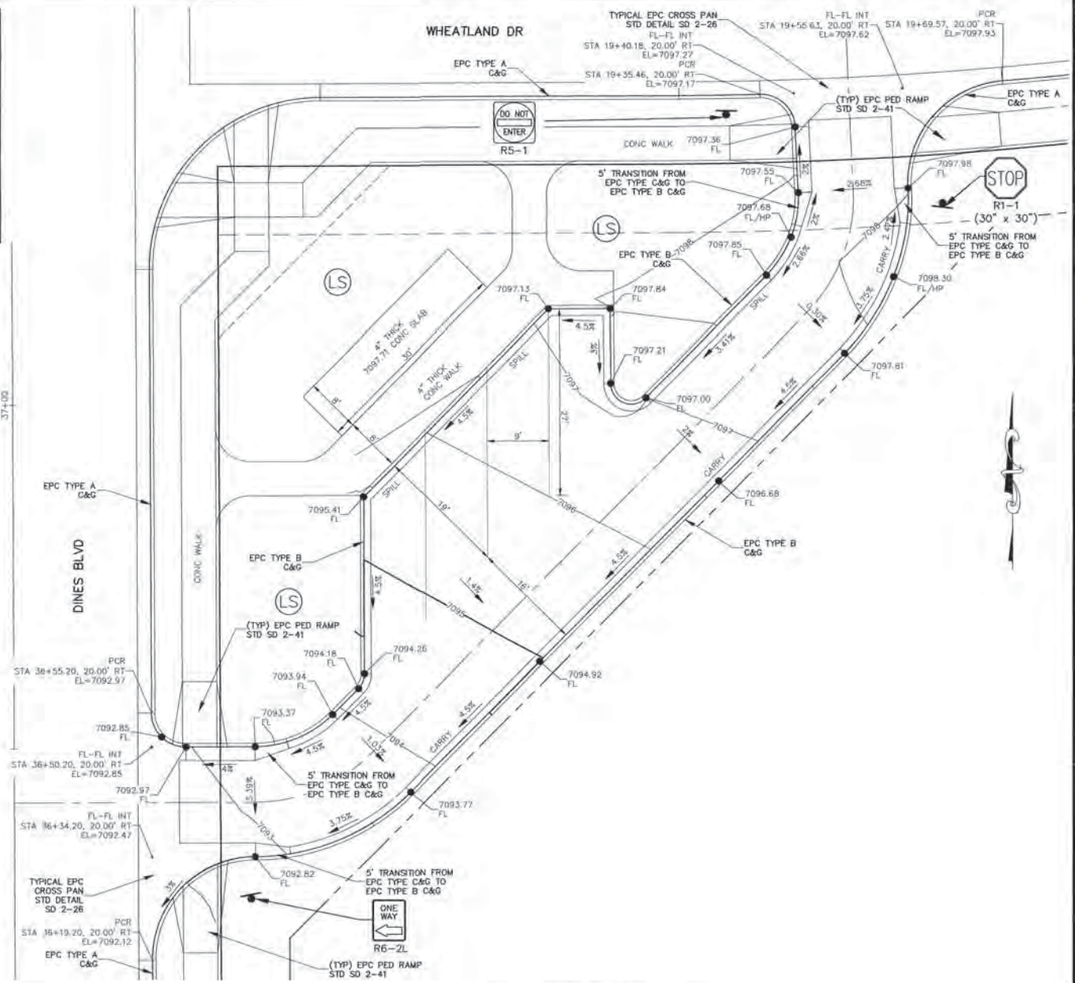
THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF RECORD PLANS.

CAUTION

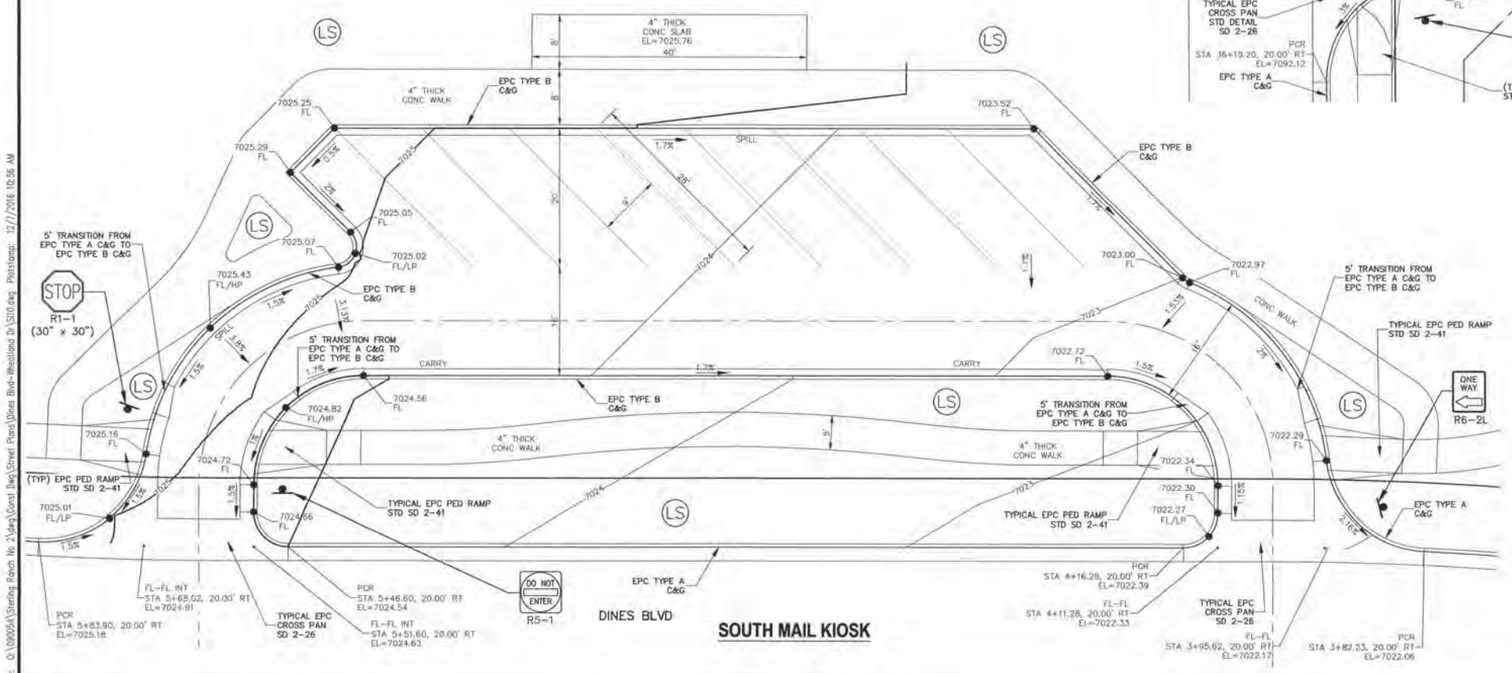


KEY MAP
N.T.S.

1" = 10
0 5 10 20
Scale in Feet



NORTH MAIL KIOSK



SOUTH MAIL KIOSK

LS LANDSCAPE AREA
6920 PROPOSED MAJOR CONTOUR
6918 PROPOSED MINOR CONTOUR
1.5% DRAINAGE FLOW DIRECTION

NOTE:
1. STREET SIGNS FOR (FUTURE) ROADWAYS SHALL BE INSTALLED WITH ADJACENT SUBDIVISION STREET PLANS. ALL SIGNAGE SHOWN ON THIS SET OF PLANS SHALL BE INSTALLED.
2. ALL PROPOSED SIGN LOCATIONS ARE CONCEPTUAL. APPROVAL OF THE CONSTRUCTION DRAWINGS DOES NOT INCLUDE SIGN LOCATIONS.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH-DINES BLVD & WHEATLAND DR.
MAIL KIOSK DETAIL SHEET
PROJECT NO. 09-006 | FILE: R:\09006\Sterling Ranch No 2\dwg\Const Dwg\Street Plans\Dines Blvd-Wheatland Dr\SI10.dwg
DESIGNED BY: DM | DRAWN BY: BB | CHECKED BY: WAS
DATE: 04/17/2017 | SCALE: HORIZ. 1"=10' VERT: N/A
SHEET 10 OF 10 | SI10

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF MAS CIVIL CONSULTANTS, INC.

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

REVISIONS: NO. | DATE | BY | DESCRIPTION | APPVD | BY | DATE

File: R:\09006\Sterling Ranch No 2\dwg\Const Dwg\Street Plans\Dines Blvd-Wheatland Dr\SI10.dwg - Plotstamp: 12/7/2016 10:56 AM

STERLING RANCH - VOLLMER ROAD

STA 10+00.00 - STA 45+34.37

COUNTY OF EL PASO, STATE OF COLORADO

STREET IMPROVEMENT PLANS

INCLUDING SIGNAGE & STRIPING

FEBRUARY 2018

AGENCIES

OWNER/DEVELOPER:	SR LAND, LLC 20 BOULDER CRESCENT, SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
CIVIL ENGINEER:	M & S CIVIL CONSULTANTS, INC. 20 BOULDER CRESCENT, SUITE 110 COLORADO SPRINGS, CO 80903 VIRGIL A. SANCHEZ P.E. (719) 955-5485
COUNTY ENGINEERING:	EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUITE 110 COLORADO SPRINGS, CO 80910 JEFF RICE, P.E. (719) 520-6300
TRAFFIC ENGINEERING:	EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 JENNIFER IRVINE, P.E. (719) 520-6460
WATER RESOURCES:	STERLING RANCH METRO DISTRICT ENGINEERS JDS-HYDRO CONSULTANTS 545 E. PIKES PEAK AVE., SUITE 300 COLORADO SPRINGS, CO 80903 JOHN MCGINN (719) 668-8769
FIRE DISTRICT:	BLACK FOREST FIRE PROTECTION DISTRICT 11445 TEACHOUT ROAD COLORADO SPRINGS, CO 80908 CHIEF BRYAN JACK (719) 495-4300
GAS DEPARTMENT:	COLORADO SPRINGS UTILITIES 7710 DURANT DR. COLORADO SPRINGS, CO 80947 TIM WENDT (719) 668-3556
ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC 11140 E. WOODMEN ROAD FALCON, CO 80831 (719) 495-2283
COMMUNICATIONS:	QWEST COMMUNICATIONS (U.N.C.C. LOCATORS) (800) 922-1987 AT&T (LOCATORS) (719) 635-3674

BENCHMARKS

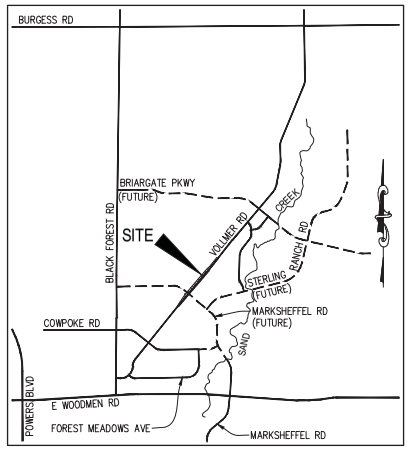
1. THE TOP OF AN ALUMINUM SURVEYORS CAP, STAMPED "9853", LOCATED AT THE SOUTHEAST CORNER OF LOT 4, BARBARICK SUBDIVISION
   NORTHING = 411416.273
   EASTING = 235167.071
   ELEVATION = 7023.42

2. THE TOP OF A RED PLASTIC SURVEYORS CAP, ILLEGIBLE, LOCATED AT THE NORTHWEST CORNER OF LOT 13, PAWNEE RANCHEROS SUBDIVISION FILING NO. 2
   NORTHING = 410095.404
   EASTING = 235052.131
   ELEVATION = 7000.40

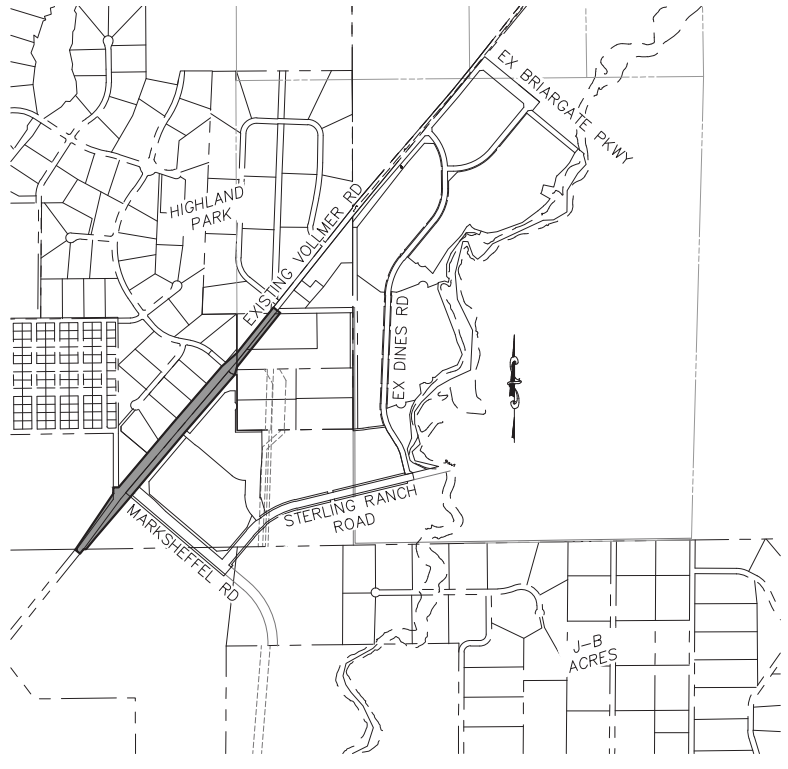
3. THE TOP OF A RED PLASTIC SURVEYORS CAP, STAMPED "38141", LOCATED AT THE SOUTHWEST CORNER OF LOT 2, BARBARICK SUBDIVISION
   NORTHING = 411399.962
   EASTING = 233849.817
   ELEVATION = 7030.82

ABBREVIATIONS

ACT	ACTUAL	FL	FLOW LINE	PT	POINT OF TANGENCY
BCR	BACK OF CURB RETURN	FT	FEET, FOOT	PROP	PROPOSED
BOV	BLOWOFF VALVE ASSEMBLY	FUT	FUTURE	REM	REMOVE
BRK	BREAK	GRD	GRADE	ROW	RIGHT OF WAY
BT	BEGINNING OF TRANSITION	HORZ	HORIZONTAL	RSNTS	RESTRAINTS
CATV	CABLE TV	HP	HIGH POINT ELEVATION	RT	RIGHT
CL	CLASS, CENTERLINE	INT	INTERSECTION	SAN	SANITARY SEWER
CLR	CLEARANCE	LP	LOW POINT ELEVATION	SD	STANDARD DETAIL
CONST	CONSTRUCT	LT	LEFT	STA	STATION
CSU	COLORADO SPRINGS UTILITIES	LOC	LOCATION	STM	STORM
ECR	END CURB RETURN	MIN	MINIMUM	COB	TOP CORNER OF BOX
EL	ELEVATION	N,S,E,W	NORTH,SOUTH,EAST,WEST	TELE	TELEPHONE
EOA	EDGE OF ASPHALT	NTS	NOT TO SCALE	TYP	TYPICAL
EOP	END OF PAVEMENT	PC	POINT OF VERTICAL CURVATURE	UNK	UNKNOWN
EPC	EL PASO COUNTY	PCC	POINT OF COMPOUND CURVE	@	UNDERGROUND POWER
ESMT	EASMENT	PCR	POINT OF CURB RETURN	UTL	UTILITY
ET	END TRANSITION	PL	PROPERTY LINE	VERT	VERTICAL
EX	EXISTING	PRC	POINT OF REVERSE CURVE	WTR	WATER LINE
G	GAS	PUB	PUBLIC	XING	CROSSING
GB	GRADE BREAK	PVI	POINT OF VERTICAL INTERSECTION	YD	YARD (CUBIC)
		PVC	POINT OF VERTICAL CURVE		
		PVT	POINT OF VERTICAL TANGENT		



VICINITY MAP
N.T.S.



SITE MAP
SCALE: NTS

APPROVALS:

ENGINEER'S STATEMENT:

DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED DRAINAGE PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY(S) IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS, OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED IMPROVEMENT PLANS AND SPECIFICATIONS.

VIRGIL A SANCHEZ, COLORADO P.E. NO. 37160 — DATE
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

OWNER/DEVELOPER STATEMENT:

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE DRAINAGE REPORT AND PLAN AND THIS SET OF CONSTRUCTION DOCUMENTS. THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

JAMES F. MORLEY — DATE
SR LAND, LLC
20 BOULDER CRESCENT, SUITE 201
COLORADO SPRINGS, CO 80903
(719) 471-1742

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 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, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

JENNIFER IRVINE, P.E. — DATE
COUNTY ENGINEER / ECM ADMINISTRATOR

STERLING RANCH METROPOLITAN DISTRICT:

THESE DOCUMENTS HAVE BEEN REVIEWED AND APPROVED FOR STORM DRAIN AND ASSOCIATED UTILITY SERVICE CONSTRUCTION.

FOR AND ON BEHALF OF THE STERLING RANCH METRO. DISTRICT — DATE

BLACK FOREST FIRE PROTECTION DISTRICT:

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO THE BLACK FOREST FIRE PROTECTION DISTRICT SPECIFICATIONS. THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THE WATER INSTALLATION PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS AS SPECIFIED BY THE BLACK FOREST FIRE PROTECTION DISTRICT.

FOR AND ON BEHALF OF THE BLACK FOREST FIRE PROTECTION DISTRICT — DATE

SHEET INDEX

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH – VOLLMER ROAD
STREET IMPROVEMENT PLANS
PROJECT NO. 09-002 | SCALE: HORIZONTAL: N/A VERTICAL: N/A | DATE: 2/26/2018 | SHEET 1 OF 10 | SI01
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:

NO.	DATE:	BY:	DESCRIPTION:	APP'D. BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

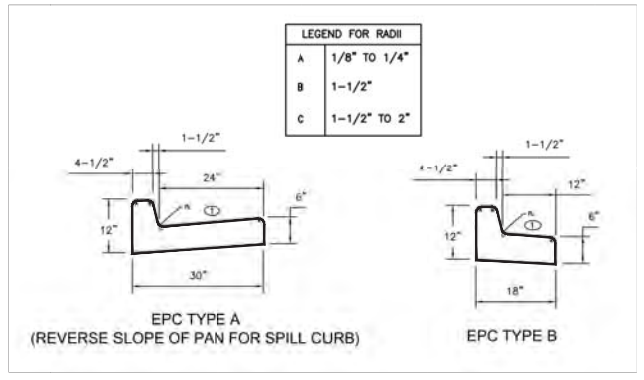
CAUTION

GENERAL CONSTRUCTION NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. 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.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED PER THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION.
5. ALL STATIONING IS CENTERLINE OF IMPROVEMENTS UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED AS TOP BACK OF CURB (TBC), ASPHALT (ASP), OR TOP OF INLET OR BOX (TOB).
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO EPC ECM APPENDIX K – 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES EXCEPT [VOLLMER ROAD, MARKSHEFFEL ROAD, BRAIRGATE PARKWAY] WHICH IS AN ARTERIAL AND A 50 FOOT SIGHT VISIBILITY TRIANGLE IS REQUIRED AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" IN THIS AREA.
8. ALL CULVERTS AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECM SECTION 3.32 – CULVERTS.
9. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER TO BE ON SITE AT THE TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION PRIOR TO CONSTRUCTION.

SIGNING AND STRIPING NOTES:

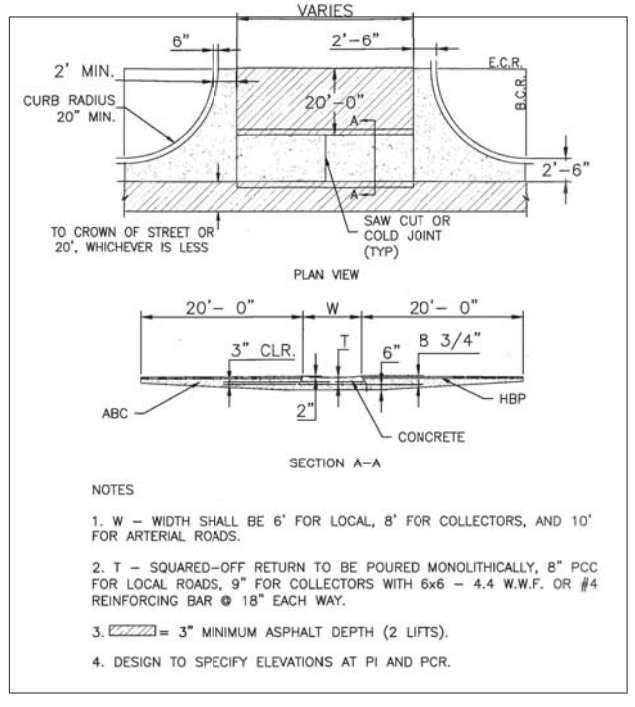
1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT 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 DEVELOPMENT SERVICES.
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 A 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 DEVELOPMENT SERVICES (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 PUBLIC SERVICE DEPARTMENT (PSD) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.



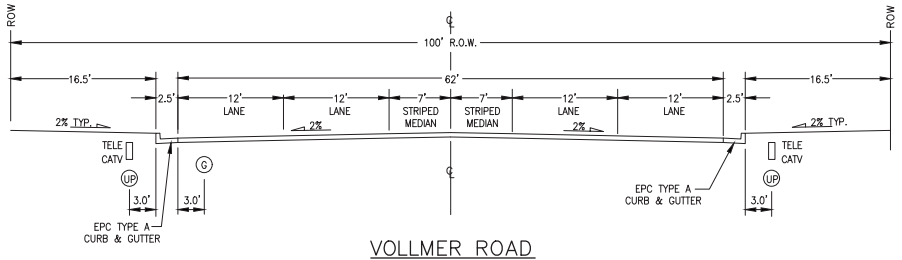
TYPICAL CURB & GUTTER DETAILS DETAIL (SD 2-20)
SCALE: NTS

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS:

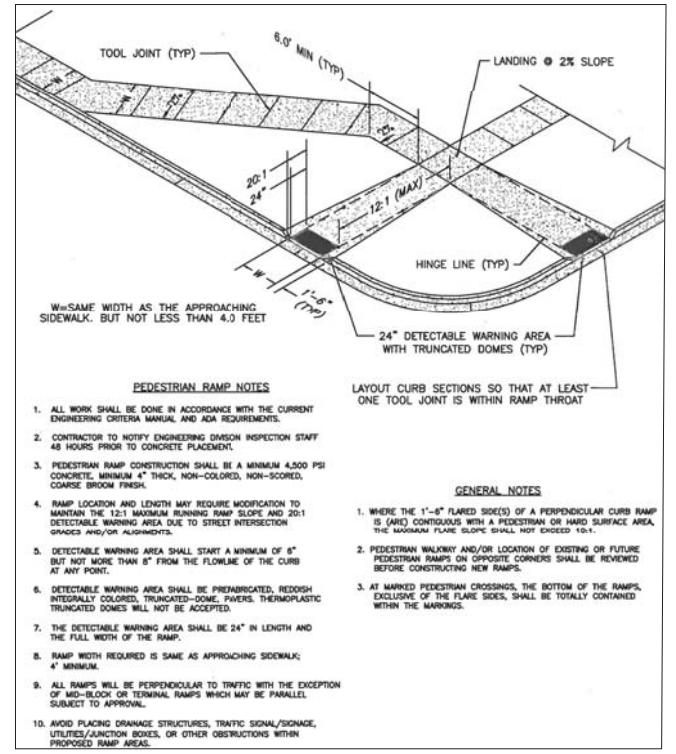
1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION 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 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. 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 DEVELOPMENT SERVICES DEPARTMENT (DSD) – 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 DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY DSD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DSD 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 DOT AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, 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.



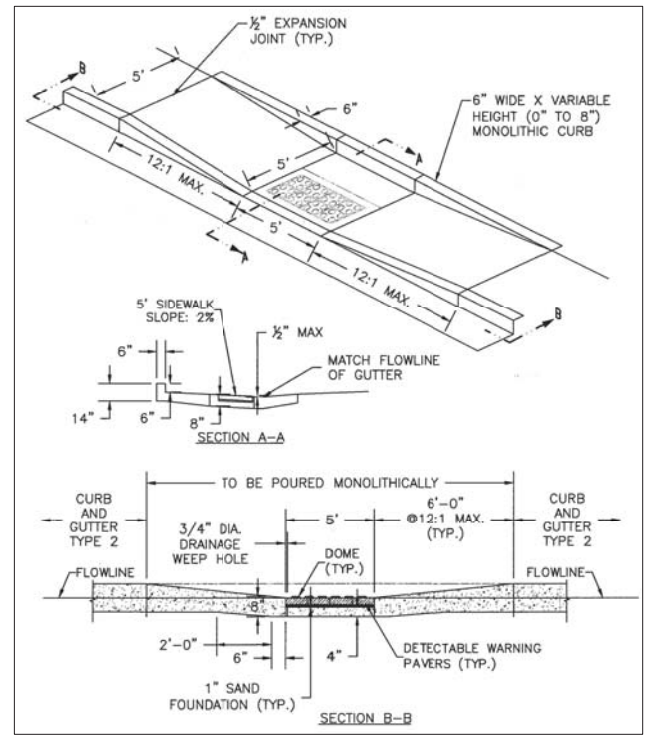
TYPICAL CROSS PAN LAYOUT DETAIL (SD 2-26)
SCALE: NTS



VOLLMER ROAD
(MODIFIED) URBAN MINOR ARTERIAL CROSS SECTION
SCALE: NTS



PEDESTRIAN INTERSECTION RAMP (SD 2-41)
SCALE: NTS



PARALLEL PEDESTRIAN RAMP DETAIL (SD 2-50)
SCALE: NTS

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

STERLING RANCH – VOLLMER ROAD
NOTES AND DETAILS SHEET
PROJECT NO. 09-002 | SCALE: HORIZONTAL: N/A VERTICAL: N/A | DATE: 2/26/2018 | SHEET 2 OF 10 | SI02
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

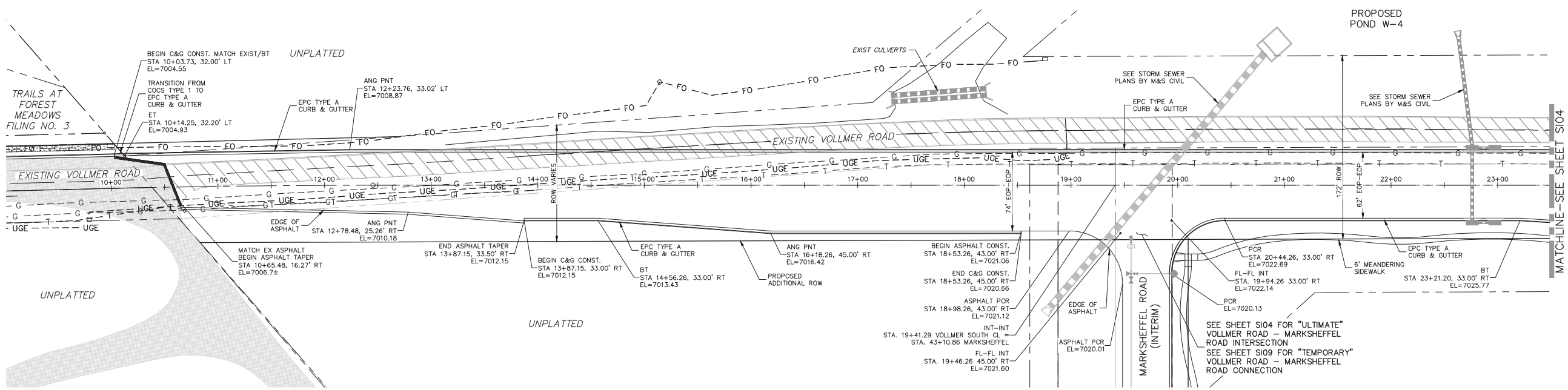
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:
NO. | DATE: | BY: | DESCRIPTION: | APPR'D. BY: | DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

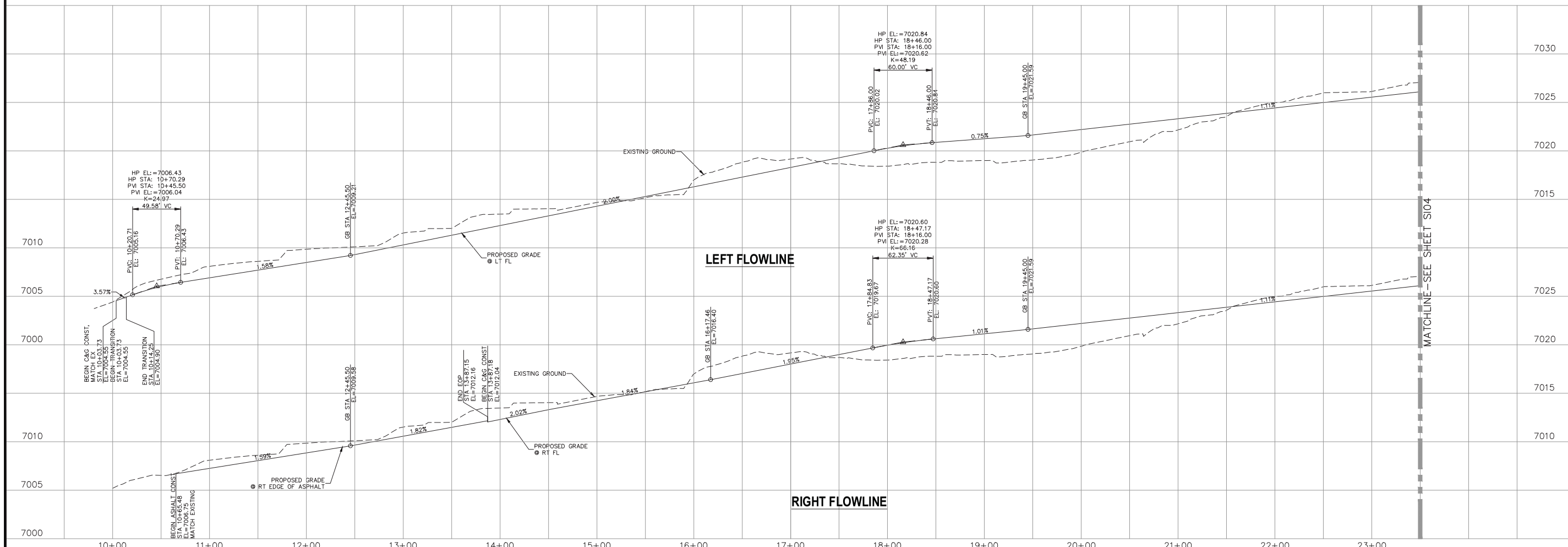
CAUTION

File: O:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\S002.dwg Plotstamp: 2/28/2018 1:46 PM



SEE STERLING RANCH–MARKSHEFFEL ROAD STREET IMPROVEMENT PLANS BY M&S CIVIL CONSULTANTS

VOLLMER ROAD
STA 10+00.00 TO STA 23+50.00



FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

1" = 50'
0 25 50 100
Scale in Feet

STERLING RANCH – VOLLMER ROAD
STREET IMPROVEMENT PLANS

PROJECT NO. 09-002
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
DATE: 2/26/2018
SHEET 3 OF 10
SI03

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:
NO. | DATE: | BY: | DESCRIPTION: | APPR'D. BY: | DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: O:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI03.dwg Plotstamp: 2/28/2018 1:48 PM

— ASPHALT TO BE REMOVED

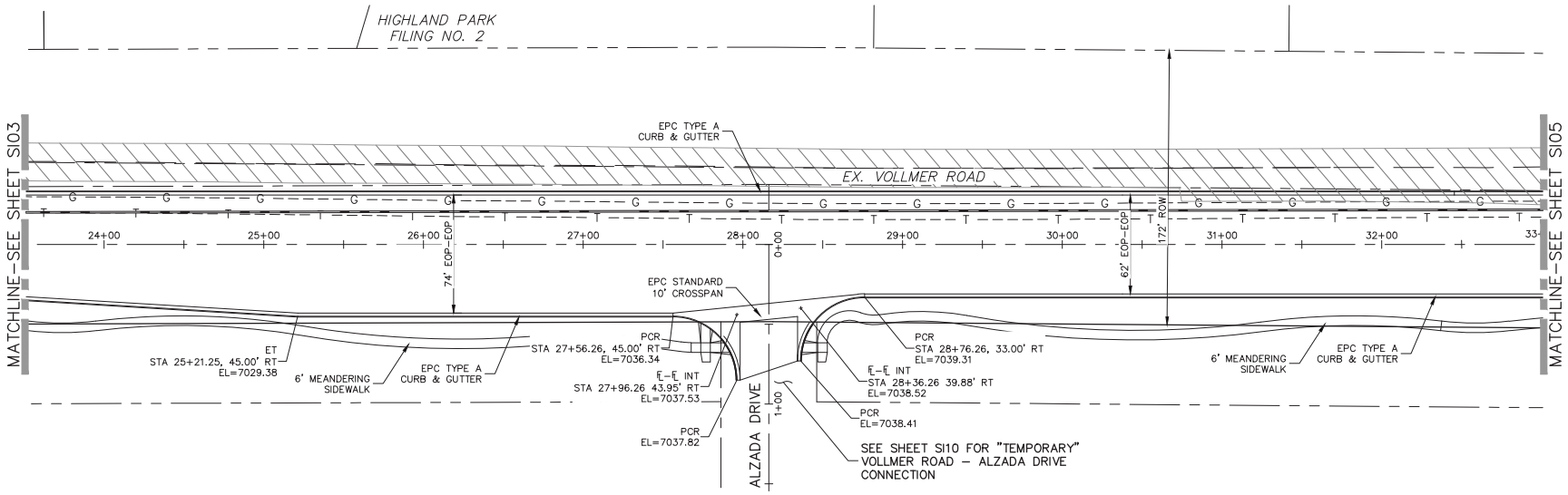
1" = 50'

0 25 50 100

Scale in Feet

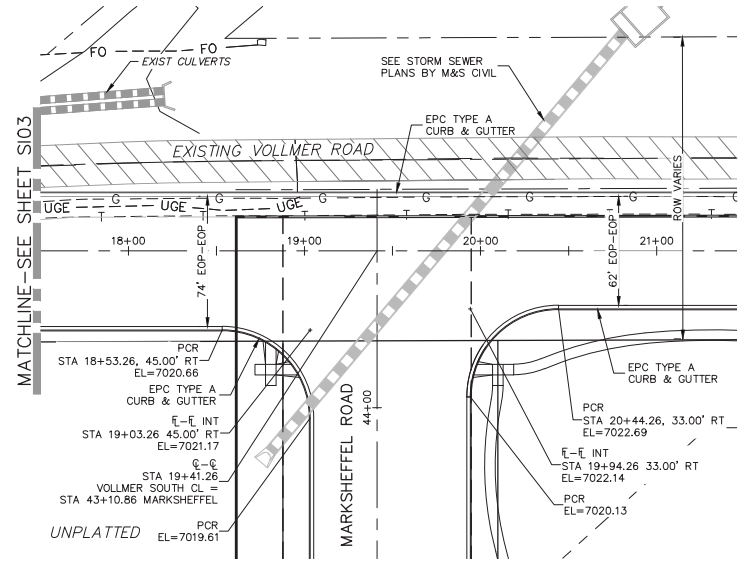
FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987



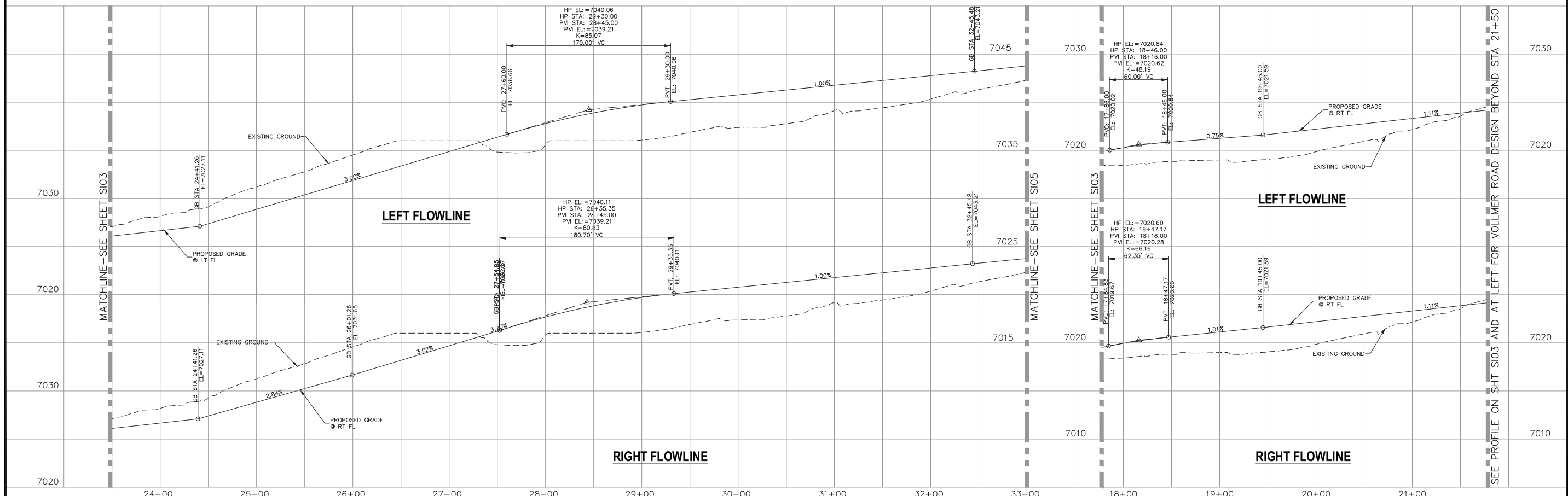
SEE STERLING RANCH-ALZADA DRIVE
STREET IMPROVEMENT PLANS
BY M&S CIVIL CONSULTANTS

VOLLMER ROAD
STA 23+50.00 TO STA 33+00.00



SEE STERLING RANCH-MARKSHEFFEL ROAD
STREET IMPROVEMENT PLANS
BY M&S CIVIL CONSULTANTS

"ULTIMATE"
VOLLMER ROAD - MARKSHEFFEL ROAD
INTERSECTION



STERLING RANCH - VOLLMER ROAD
STREET IMPROVEMENT PLANS

DATE: 2/26/2018
SHEET 4 OF 10
SI04

PROJECT NO. 09-002
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

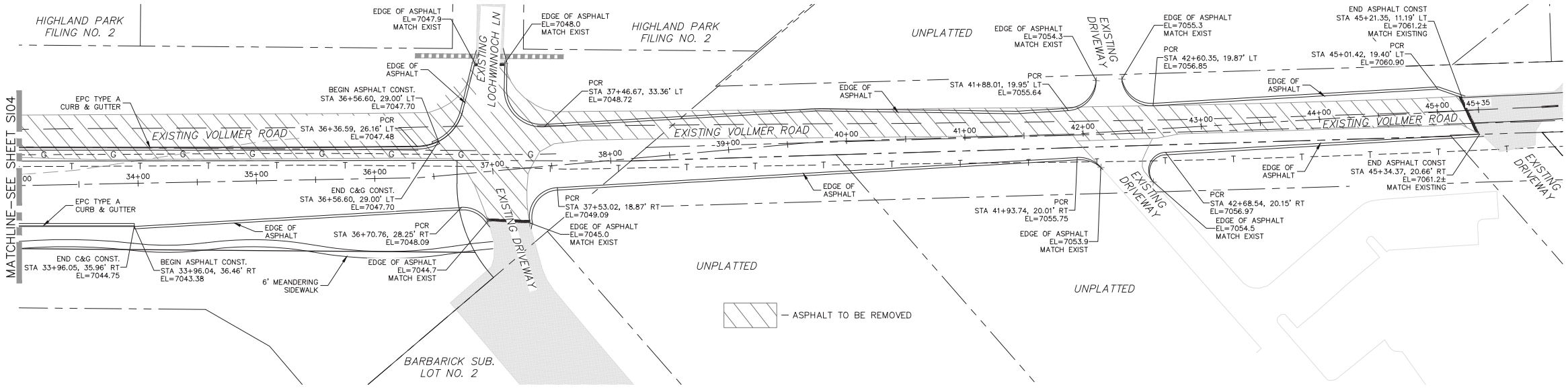
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

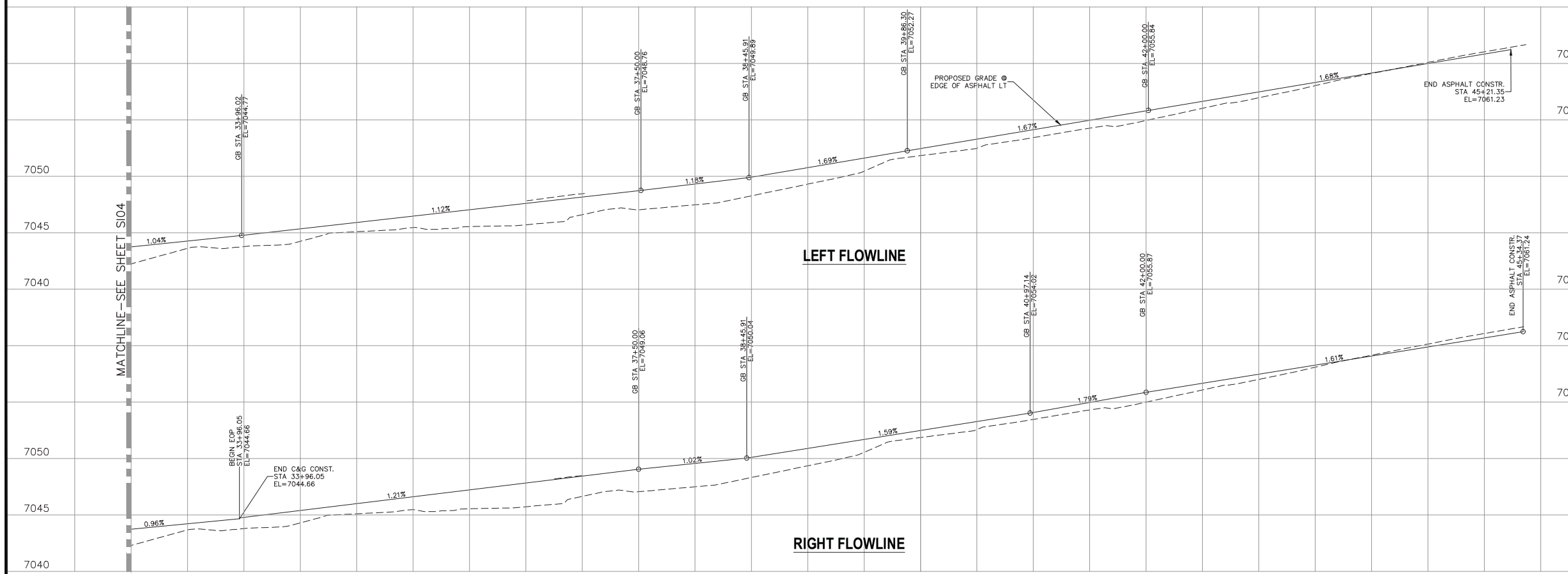
NO.	DATE:	BY:	DESCRIPTION:	APP'D. BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION



VOLLMER ROAD
STA 33+00.00 TO STA 45+34.37



FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

1" = 50'
0 25 50 100
Scale in Feet

STERLING RANCH – VOLLMER ROAD
STREET IMPROVEMENT PLANS

DATE: 2/26/2018
SHEET 5 OF 10
SI05

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'
PROJECT NO. 09-002
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:
NO. | BY: | DESCRIPTION: | APP'D. BY: | DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: C:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI05.dwg Plotstamp: 2/28/2018 2:52 PM

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

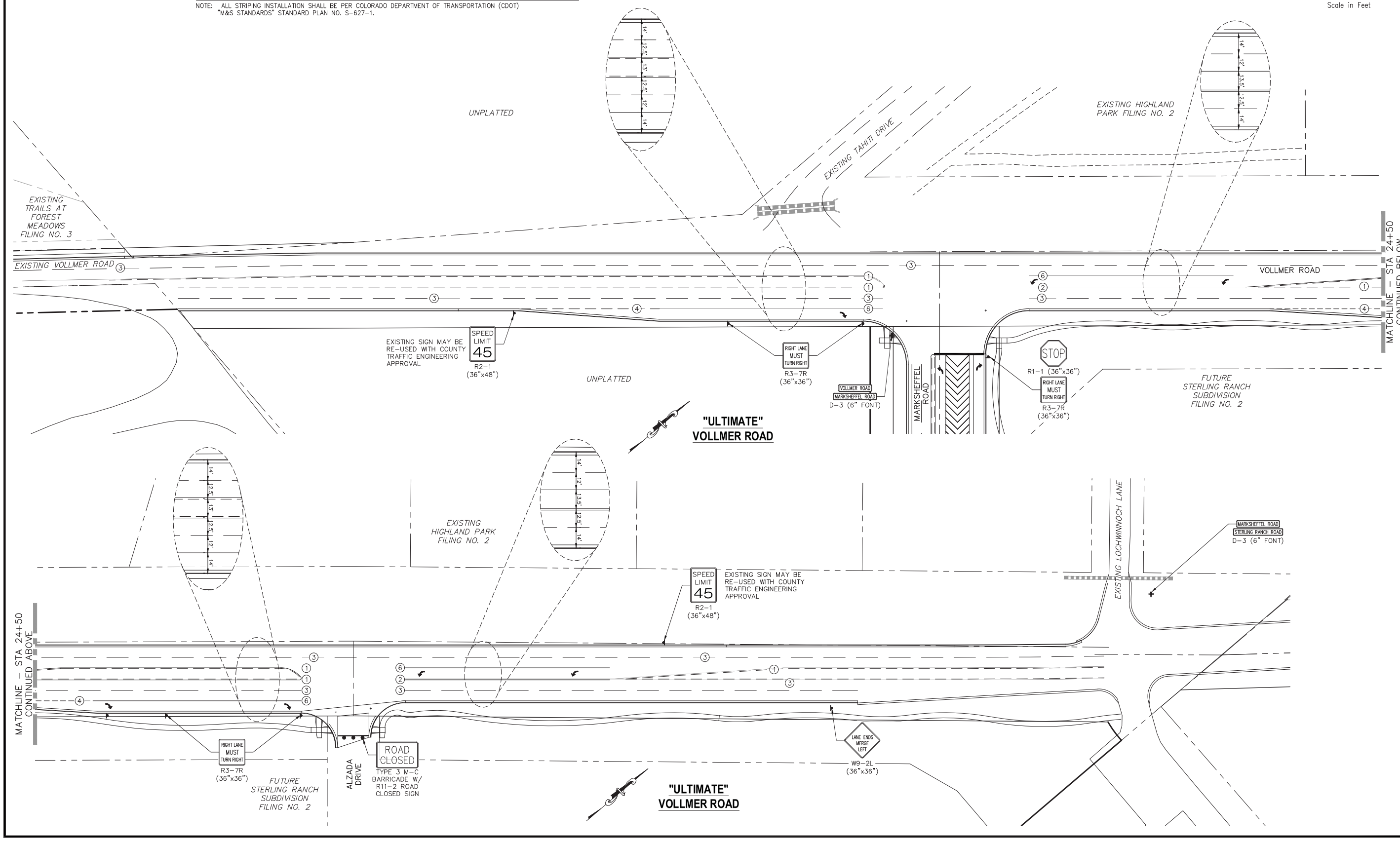
STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

NOTE TO CONTRACTOR:

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

1" = 50'
0 25 50 100
Scale in Feet



STERLING RANCH – VOLLMER ROAD
SIGNAGE & STRIPING PLANS

PROJECT NO. 09-002	SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A	DATE: 2/26/2018	SHEET 6 OF 10
DESIGNED BY: DLM DRAWN BY: JWP CHECKED BY: VAS			SI06

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

NO.	DATE:	BY:	DESCRIPTION:	APPR'D. BY:	DATE:

File: Q:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI06.dwg Plotstamp: 2/28/2018 2:37 PM

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

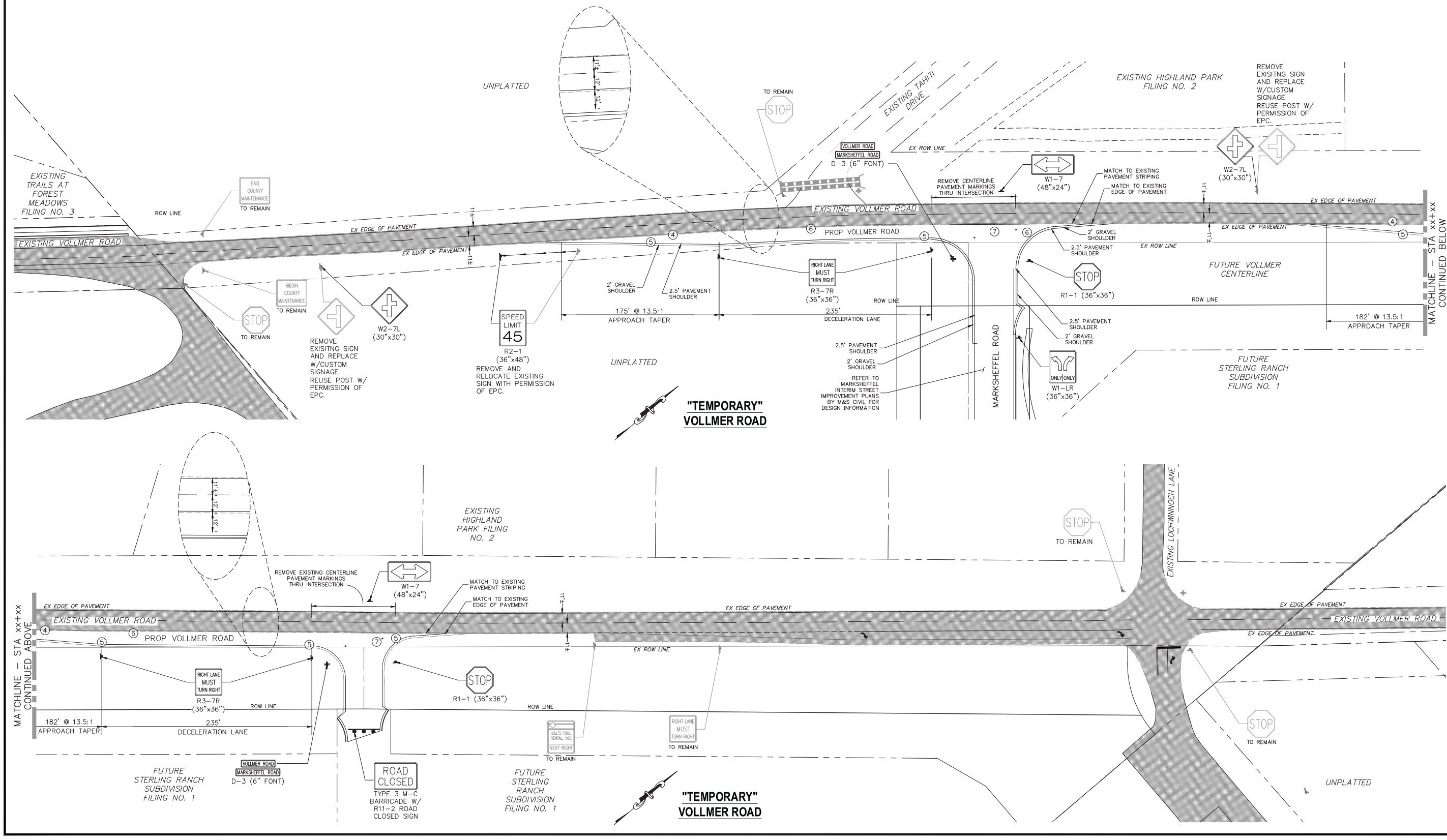
STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

NOTE TO CONTRACTOR:

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

1" = 50'
0 25 50 100
Scale in Feet



STERLING RANCH - VOLLMER ROAD
SIGNAGE & STRIPING PLANS

PROJECT NO. 09-002	DESIGNED BY: DLM	DRAWN BY: JWP	CHECKED BY: VAS
SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A	DATE: 2/26/2018	SHEET 7 OF 10	SI07

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

JIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:	NO.	DATE:	BY:	DESCRIPTION:	APPV'D. BY:	DATE:

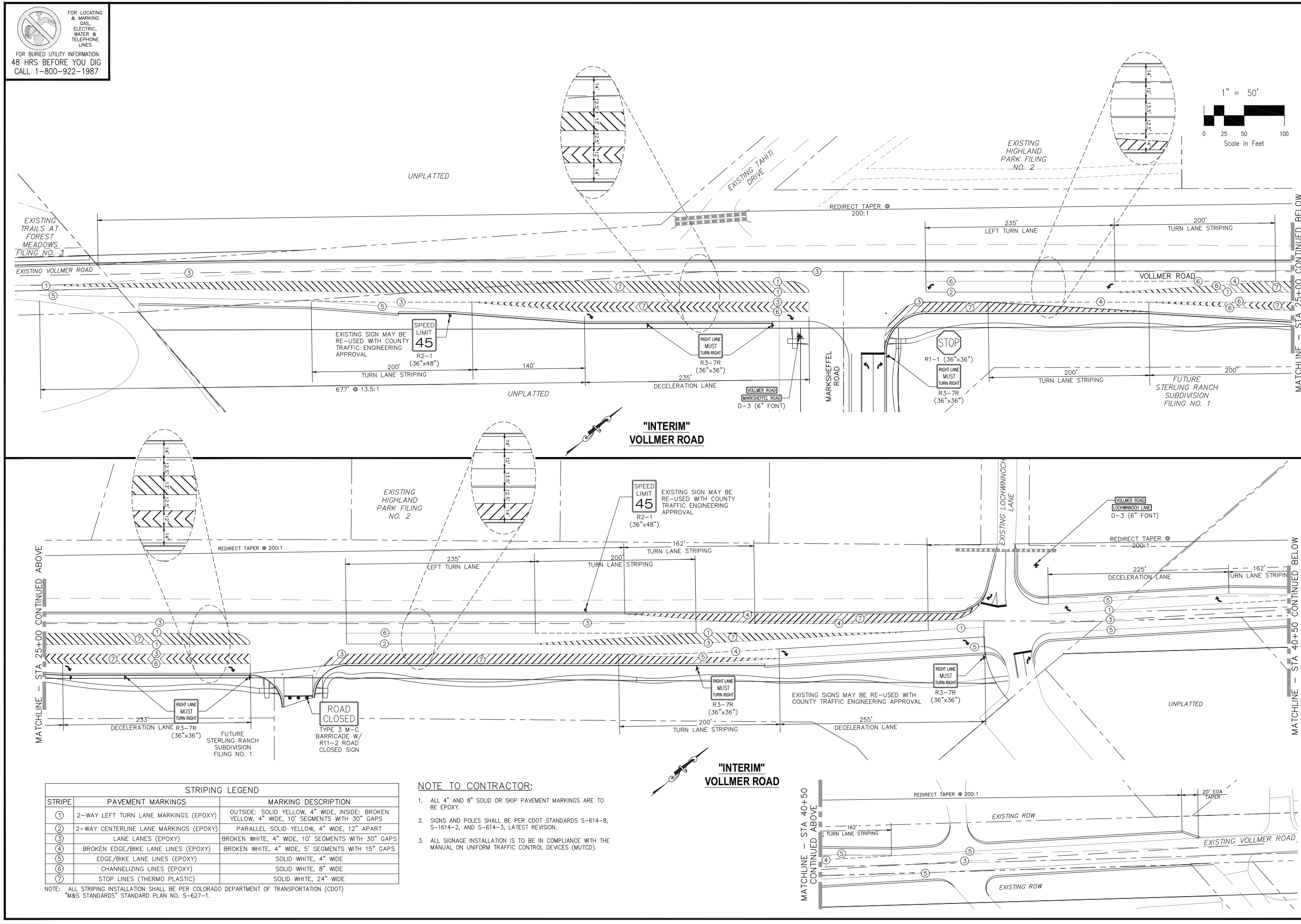
THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

File: O:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI07.dwg Plotstamp: 2/28/2018 2:39 PM

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987



"INTERIM" VOLLMER ROAD

"INTERIM" VOLLMER ROAD

STRIPING LEGEND		
STRIPE	PAVEMENT MARKINGS	MARKING DESCRIPTION
①	2-WAY LEFT TURN LANE MARKINGS (EPOXY)	OUTSIDE: SOLID YELLOW, 4" WIDE, INSIDE: BROKEN YELLOW, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
②	2-WAY CENTERLINE LANE MARKINGS (EPOXY)	PARALLEL SOLID YELLOW, 4" WIDE, 12" APART
③	LANE LANES (EPOXY)	BROKEN WHITE, 4" WIDE, 10' SEGMENTS WITH 30" GAPS
④	BROKEN EDGE/BIKE LANE LINES (EPOXY)	BROKEN WHITE, 4" WIDE, 5' SEGMENTS WITH 15" GAPS
⑤	EDGE/BIKE LANE LINES (EPOXY)	SOLID WHITE, 4" WIDE
⑥	CHANNELIZING LINES (EPOXY)	SOLID WHITE, 8" WIDE
⑦	STOP LINES (THERMO PLASTIC)	SOLID WHITE, 24" WIDE

NOTE: ALL STRIPING INSTALLATION SHALL BE PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "M&S STANDARDS" STANDARD PLAN NO. S-627-1.

NOTE TO CONTRACTOR:

1. ALL 4" AND 8" SOLID OR SKIP PAVEMENT MARKINGS ARE TO BE EPOXY.
2. SIGNS AND POLES SHALL BE PER CDOT STANDARDS S-614-8, S-1614-2, AND S-614-3, LATEST REVISION.
3. ALL SIGNAGE INSTALLATION IS TO BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

STERLING RANCH - VOLLMER ROAD
SIGNAGE & STRIPING PLANS

PROJECT NO. 09-002	SCALE: HORIZONTAL: 1"=50' VERTICAL: N/A	DATE: 2/26/2018	SHEET 8 OF 10
DESIGNED BY: DLM DRAWN BY: JWP CHECKED BY: VAS			SI08

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

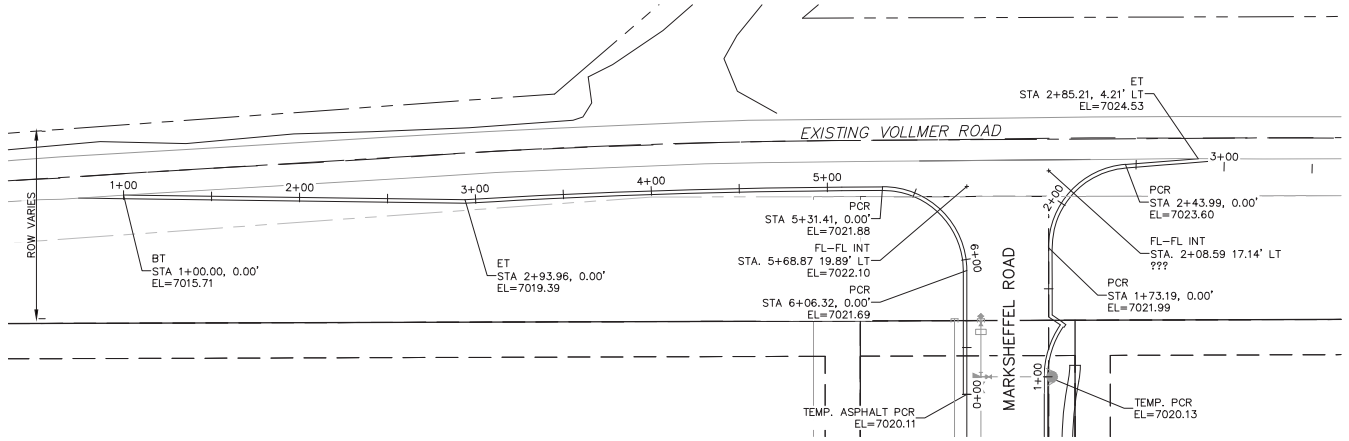
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

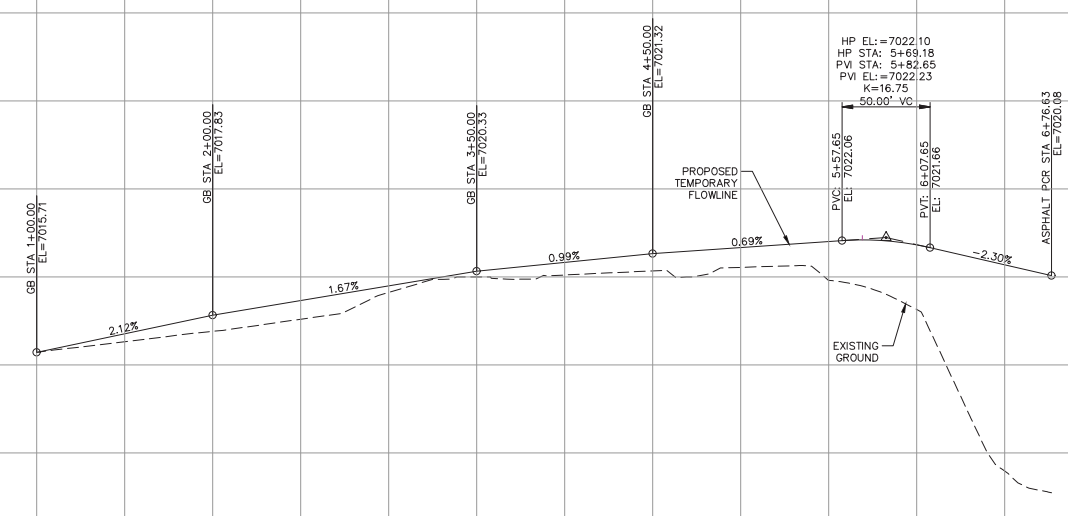
NO.	DATE:	BY:	DESCRIPTION:	APPR'D. BY:	DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

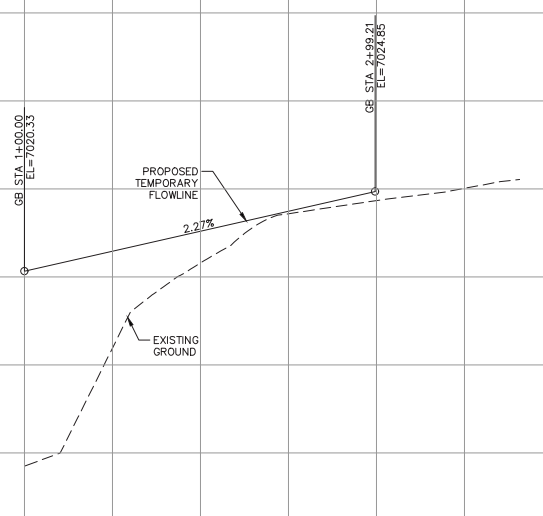
CAUTION



VOLLMER ROAD - TEMPORARY CONNECTION AT MARKSHEFFEL ROAD



VOLLMER TEMP FLOWLINE 1



VOLLMER TEMP FLOWLINE 2

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

1" = 50'
0 25 50 100
Scale in Feet

STERLING RANCH – VOLLMER ROAD
STREET IMPROVEMENT PLANS

PROJECT NO. 09-002	DESIGNED BY: DLM	SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'	DATE: 2/26/2018
	DRAWN BY: JWP		SHEET 9 OF 10
	CHECKED BY: VAS		SI09

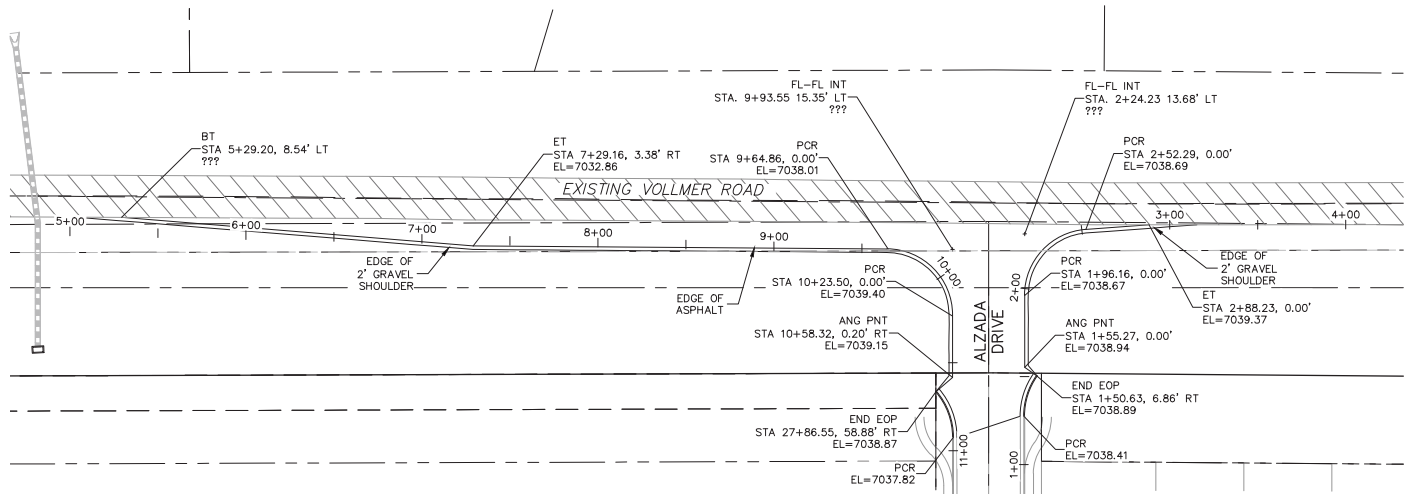
20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

REVISIONS:

NO.	DATE:	BY:	DESCRIPTION:	APPR'D. BY:	DATE:

File: O:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI09.dwg Plotstamp: 2/28/2018 2:46 PM



VOLLMER ROAD - TEMPORARY CONNECTION AT ALZADA DRIVE

VOLLMER TEMP FLOWLINE 3

VOLLMER TEMP FLOWLINE 4

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION
48 HRS BEFORE YOU DIG
CALL 1-800-922-1987

1" = 50'
0 25 50 100
Scale in Feet

STERLING RANCH – VOLLMER ROAD
STREET IMPROVEMENT PLANS

DATE: 2/26/2018
SHEET 10 OF 10
SI10

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'

PROJECT NO. 09-002
DESIGNED BY: DLM
DRAWN BY: JWP
CHECKED BY: VAS

20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485
CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:

NO.	DATE:	BY:	DESCRIPTION:	APPR'D. BY:	DATE:

File: O:\09002A\Sterling Ranch District - Filing 2\dwg\Const Dwg\Street\Vollmer Rd\SI10.dwg Plotstamp: 2/28/2018 2:47 PM

LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

October 2, 2017

Mr. Jim Morley
Morley-Bentley Investments, LLC
20 Boulder Crescent, 1st Floor
Colorado Springs, CO 80903

RE: Sterling Ranch Phases 1-3
El Paso County, CO
Traffic Technical Memorandum
LSC #144010

Dear Mr. Morley:

LSC Transportation Consultants, Inc. has prepared this traffic technical memorandum for Phases 1-3 of the Sterling Ranch development. As shown on Figure 1, the site is located east of Vollmer Road near Lochwinnoch Lane between the future extensions of Marksheffel Road and Stapleton Drive in El Paso County, Colorado.

This memorandum has been prepared to address the proposed interim cross section of Vollmer Road (please refer to attached exhibits). Due to current constraints on the west side of Vollmer Road, the applicant is proposing an interim cross section along the frontage of Sterling Ranch Phase 1. This interim cross section and proposed laneage is attached. The proposed interim road improvement would widen the roadway to the east side. There would continue to be one through lane in each direction but the interim road improvements would allow for southbound left-turn and northbound right-turn lanes at the Briargate Parkway/Vollmer and Dines/Vollmer intersections (both access points to Sterling Ranch Phase 1).

REPORT CONTENTS

This report presents:

- Current traffic volume data
- Estimates of projected "intermediate-term" (2025) traffic volumes
- Roadway capacity of this interim cross section
- An evaluation of the ability of the short-term roadway improvements to accommodate the projected short-term traffic volumes.

LAND USE AND ACCESS

The site plan figure from the July 2, 2014 traffic report for Sterling Ranch is attached for reference. That traffic report assumed 672 lots in the area shown but no commercial development in the short term at the southeast corner of Vollmer/Briargate Parkway. The analysis in this memo assumes buildout of 719 lots, reflecting a minor increase over the previously anticipated 672-lot count.

EXISTING TRAFFIC VOLUMES

Figure 2 shows the existing daily and peak-hour traffic volumes on Vollmer Road adjacent to the site. The traffic volumes are from the attached traffic counts conducted adjacent to the site in September 2017. Figure 2 also shows the average weekday traffic volumes on Vollmer Road based on 24-hour machine (tube) counts conducted in September 2017.

2025 BACKGROUND TRAFFIC

Volumes in Figure 3 represent eight years of growth in current Vollmer Road traffic volumes (out to 2025) at 5.4 percent per year. This is the growth rate of volumes projected in the 2016 *Major Transportation Corridors Plan (MTCP) Update*. Note: It is our understanding that the Marksheffel extension southeast across Sand Creek will occur in the short term, however no timing is available from the City of Colorado Springs.

TRIP GENERATION

The site-generated vehicle-trips were estimated using the nationally published trip generation rates from *Trip Generation, 9th Edition, 2012* by the Institute of Transportation Engineers (ITE). Table 1 shows the current trip generation estimate.

SHORT-TERM DIRECTIONAL DISTRIBUTION

Figure 4 shows the short-term directional distribution estimates. This figure has been taken from the July 2, 2014 Sterling Ranch traffic report. Note: It is our understanding that the Marksheffel extension northwest across Sand Creek to Vollmer Road is anticipated to occur in the short term, however no timing of this connection is available from the City of Colorado Springs.

INTERMEDIATE-TERM (2025) SITE-GENERATED TRAFFIC

Figure 5 shows the projected site-generated traffic volume for 719 lots. The site-generated traffic volumes were calculated by applying the directional distribution percentages (from Figure 4) to the trip generation estimates (from Table 1).

INTERMEDIATE-TERM (2025) TOTAL TRAFFIC

Figure 6 shows the projected total traffic volumes for the intermediate term. Total traffic volumes include 2025 background through traffic on Vollmer Road (from Figure 3) plus Phase 1 site-generated traffic volumes (from Figure 5).

ESTIMATED VOLLMER ROAD CAPACITY

Currently the MTCP indicates a capacity of existing Vollmer Road to be about 6,000 vehicles per day. The ECM indicates the ADT capacity of an ECM-standard rural minor arterial (two lanes) to be 10,000 vehicles per day. However, the proposed interim cross section is a hybrid between urban and rural cross sections and would include auxiliary turn lanes. With the addition of ECM-standard auxiliary right- and left-turn deceleration lanes, LSC estimates the capacity to be about 14,000 vehicles per day through the area of the improved cross section. This is comparable to the fee study estimate of the capacity of Fontaine Boulevard west of Marksheffel, which has a two-lane cross section and auxiliary turn lanes.

The projected intermediate-term total traffic volume as shown in Figure 6 would be 5,300 vehicles per day—well below the estimated capacity of 14,000 vehicles per day for a roadway of this cross section. The projected volume would also be below the estimated existing capacity of 6,000 vehicles per day.

PROJECTED INTERSECTION LEVELS OF SERVICE

The intersections of Marksheffel Road/Vollmer Road and Stapleton Drive/Vollmer Road, and the two full-movement site access intersections to Vollmer Road were analyzed to determine the projected levels of service for the intermediate-term total traffic volumes based on the unsignalized intersection analysis procedures from the *Highway Capacity Manual*. Figure 6 shows the level of service analysis results. The level of service reports are attached.

As shown on the figures, all the intersections analyzed are projected to operate at a level of service B as stop-sign-controlled intersections.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By_____
Jeffrey C. Hodsdon, P.E., PTOE
Principal

COLORADO LICENSED
JEFFREY C. HODSDON
31684
10-2-17
PROFESSIONAL ENGINEER

JCH:bjwb

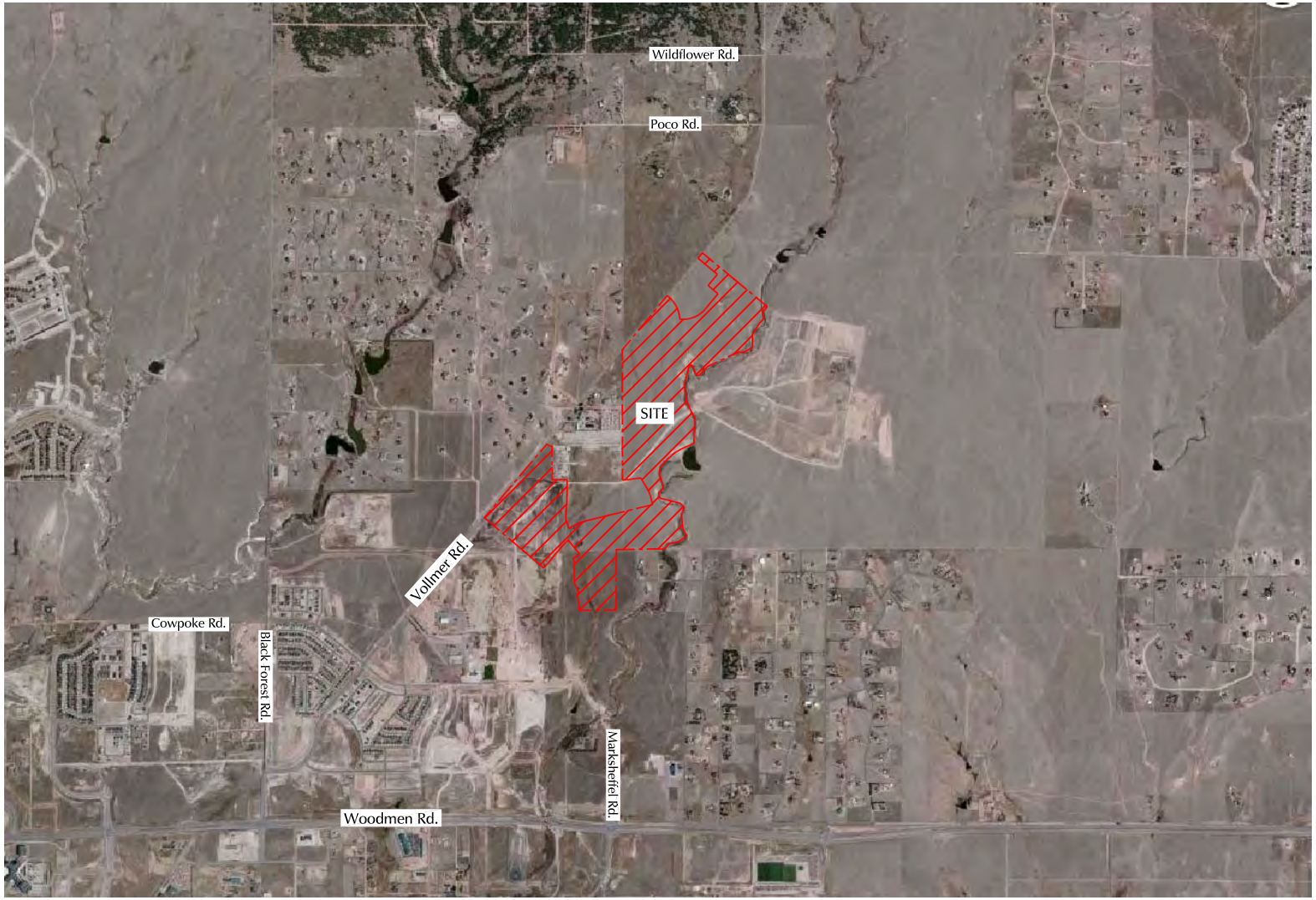
Enclosures: Table 1
Figures 1-6
Cross Section and Laneage Exhibits
Site Plan Exhibit from July 2, 2014 Report
Traffic Count Reports
Level of Service Reports

Table 1
Trip Generation Estimate
Sterling Ranch Phases 1-3

TAZ[2]	Parcel	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates [1] Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Evening Peak Hour In	Evening Peak Hour Out	Total External Trips Generated Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Evening Peak Hour In	Evening Peak Hour Out
October 2017 Currently Anticipated Sterling Ranch Phases 1-3 (Residential Trip Generation Only)														
2, 4, 5, 6, & 7	A1-A4; B1-B3	210	Single-Family Detached Housing	719 DU[3]	9.52	0.19	0.56	0.63	0.37	6,845	135	404	453	266
Sterling Ranch Phases 1-3 Traffic Impact Analysis July 2, 2014														
Phase 1														
7	A1	210	Single-Family Detached Housing	100 DU	9.52	0.19	0.56	0.63	0.37	952	19	56	63	37
2	A2	210	Single-Family Detached Housing	100 DU	9.52	0.19	0.56	0.63	0.37	952	19	56	63	37
4	A3	- - -	Sanitary Lift Station	- - - - - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
			Total Phase 2	200 DU						1,904	38	112	126	74
Phase 2														
7	A1	210	Single-Family Detached Housing	60 DU	9.52	0.19	0.56	0.63	0.37	571	11	34	38	22
2	A2	210	Single-Family Detached Housing	92 DU	9.52	0.19	0.56	0.63	0.37	876	17	52	58	34
6	A4	210	Single-Family Detached Housing	7 DU	9.52	0.19	0.56	0.63	0.37	67	1	4	4	3
			Total Phase 2	159 DU						1,514	29	90	100	59
2, 4, 5, 6, & 7			**Total Phases 1 & 2**	359 DU						3,418	67	202	226	133
Phase 3														
7	B1	210	Single-Family Detached Housing	34 DU	9.52	0.19	0.56	0.63	0.37	324	6	19	21	13
	B2	210	Single-Family Detached Housing	133 DU	9.52	0.19	0.56	0.63	0.37	1,266	25	75	84	49
5 & 6	B3	210	Single-Family Detached Housing	146 DU	9.52	0.19	0.56	0.63	0.37	1,390	27	82	92	54
			Total Phase 3	313 DU						2,980	58	176	197	116
2, 4, 5, 6, & 7			**Total Phases 1, 2, & 3**	672 DU						6,398	125	378	423	249
Sterling Ranch Updated Traffic Impact Analysis June 5, 2008														
4	- - -	220	Apartment	89 DU	6.72	0.10	0.41	0.40	0.22	598	9	36	36	19
2	- - -	210	Single-Family Detached Housing	234 DU	9.57	0.19	0.56	0.64	0.37	2,239	44	132	149	87
5	- - -	210	Single-Family Detached Housing	82 DU	9.52	0.19	0.56	0.63	0.37	781	15	46	52	30
6	- - -	210	Single-Family Detached Housing	103 DU	9.52	0.19	0.56	0.63	0.37	981	19	58	65	38
7	- - -	210	Single-Family Detached Housing	611 DU	9.52	0.19	0.56	0.63	0.37	5,817	115	344	385	226
			Total TAZs 2, 5, 6, & 7	1,030 DU						9,818	193	580	651	381
			Difference in Estimated Trip Generation TAZs 2, 5, 6 & 7	-311 DU						-2,973	-58	-176	-198	-115

Notes:
(1) Source: "*Trip Generation, 9th Edition, 2012*" by the Institute of Transportation Engineers (ITE)
(2) TAZ = Traffic Analysis Zone from *Sterling Ranch Updated Traffic Impact Analysis* by LSC June 5, 2008
(3) DU = dwelling unit

Source: LSC Transportation Consultants, Inc.



N

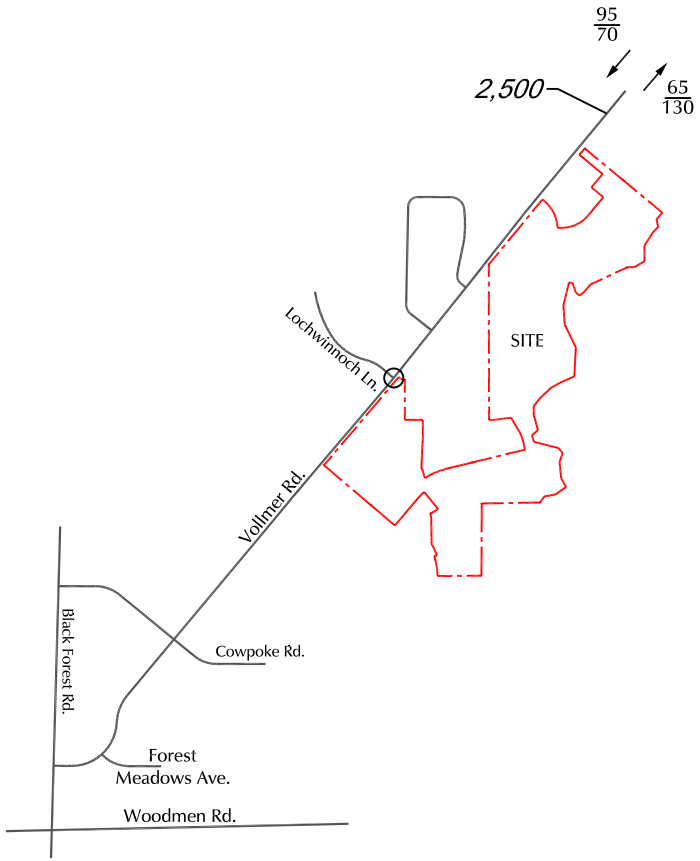
Approximate Scale
Scale: 1"= 3,000'

Figure 1

Vicinity Map

Sterling Ranch (LSC #144010)

LSC TRANSPORTATION CONSULTANTS, INC.



Approximate Scale
Scale: 1"= 3,000'

LEGEND:

= Stop Sign

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

X,XXX = Average Weekday Traffic (vehicles per day) September 2017

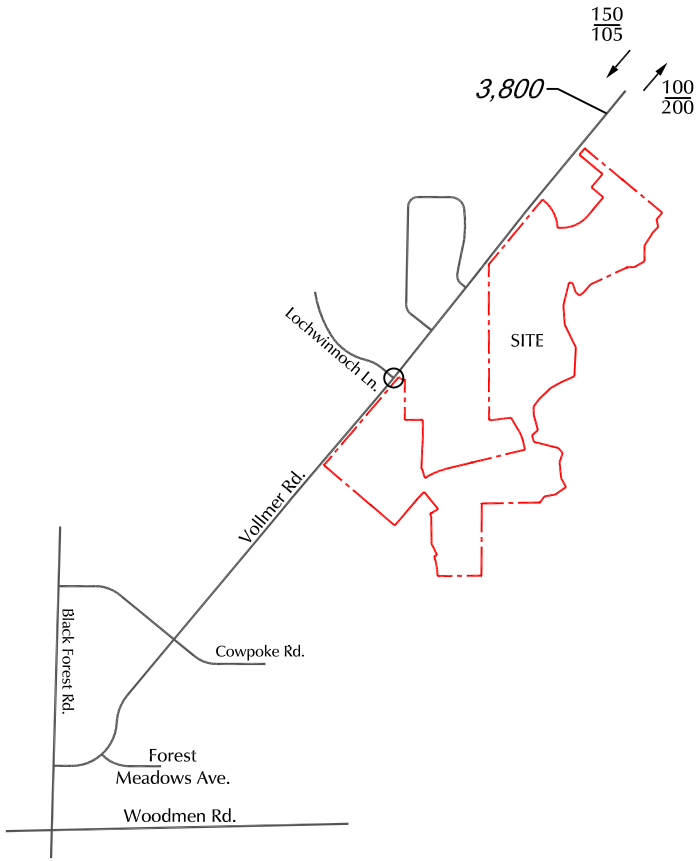
*Based on counts conducted September 2017

TRANSPORTATION CONSULTANTS, INC.

Figure 2

Existing Traffic Volumes

Sterling Ranch (LSC #144010)



Approximate Scale
Scale: 1"= 3,000'

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak–Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak–Hour Traffic (vehicles per hour)}}$

X,XXX = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 3

2025 Background Traffic

Sterling Ranch (LSC #144010)

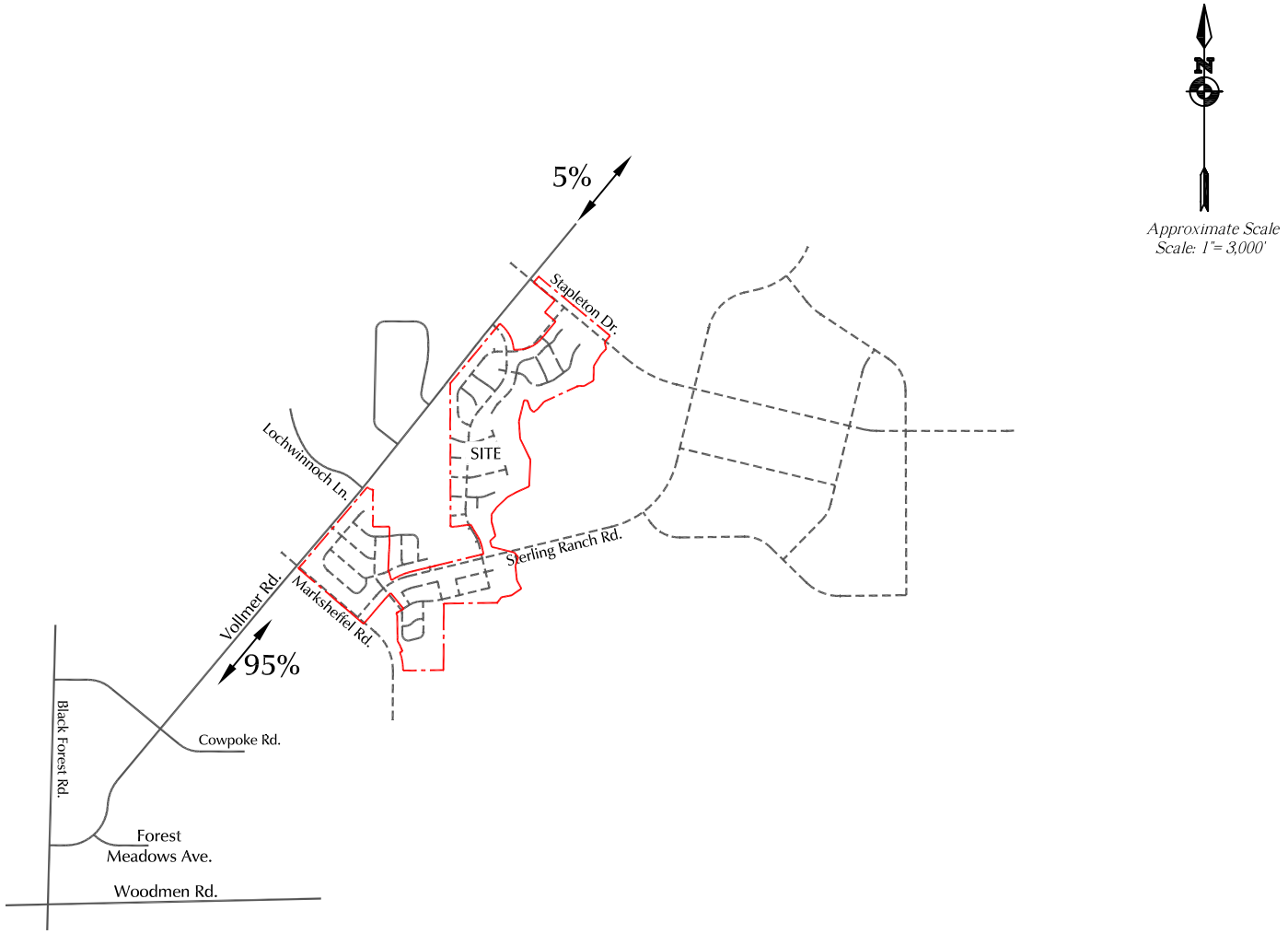


Figure 4

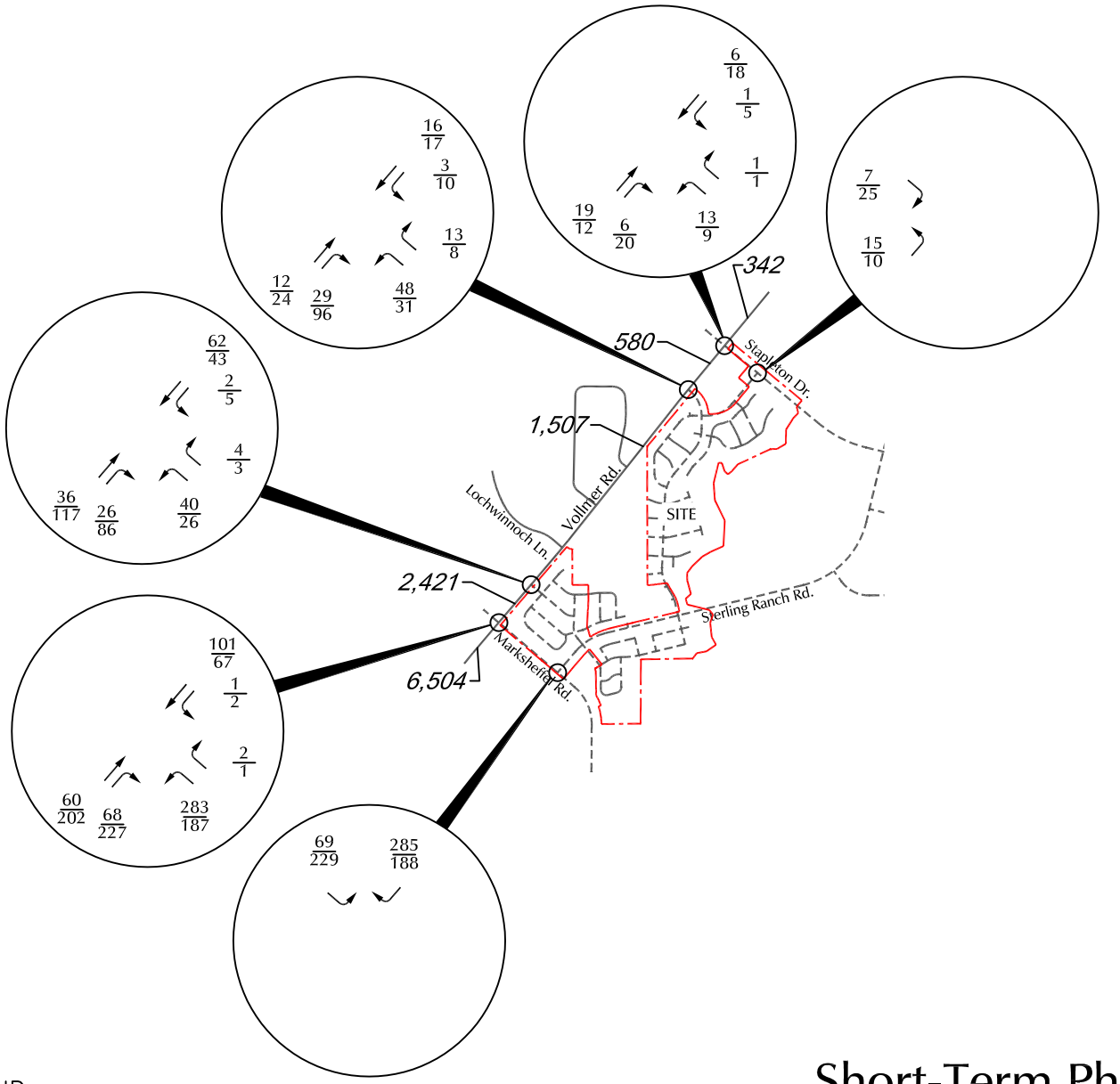
Short-Term Directional Distribution of Site-Generated Traffic

Sterling Ranch (LSC #144010)

LEGEND:

35% = Percent Directional Distribution

LSC TRANSPORTATION CONSULTANTS, INC.



N

Approximate Scale
Scale: 1"= 3,000'

LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

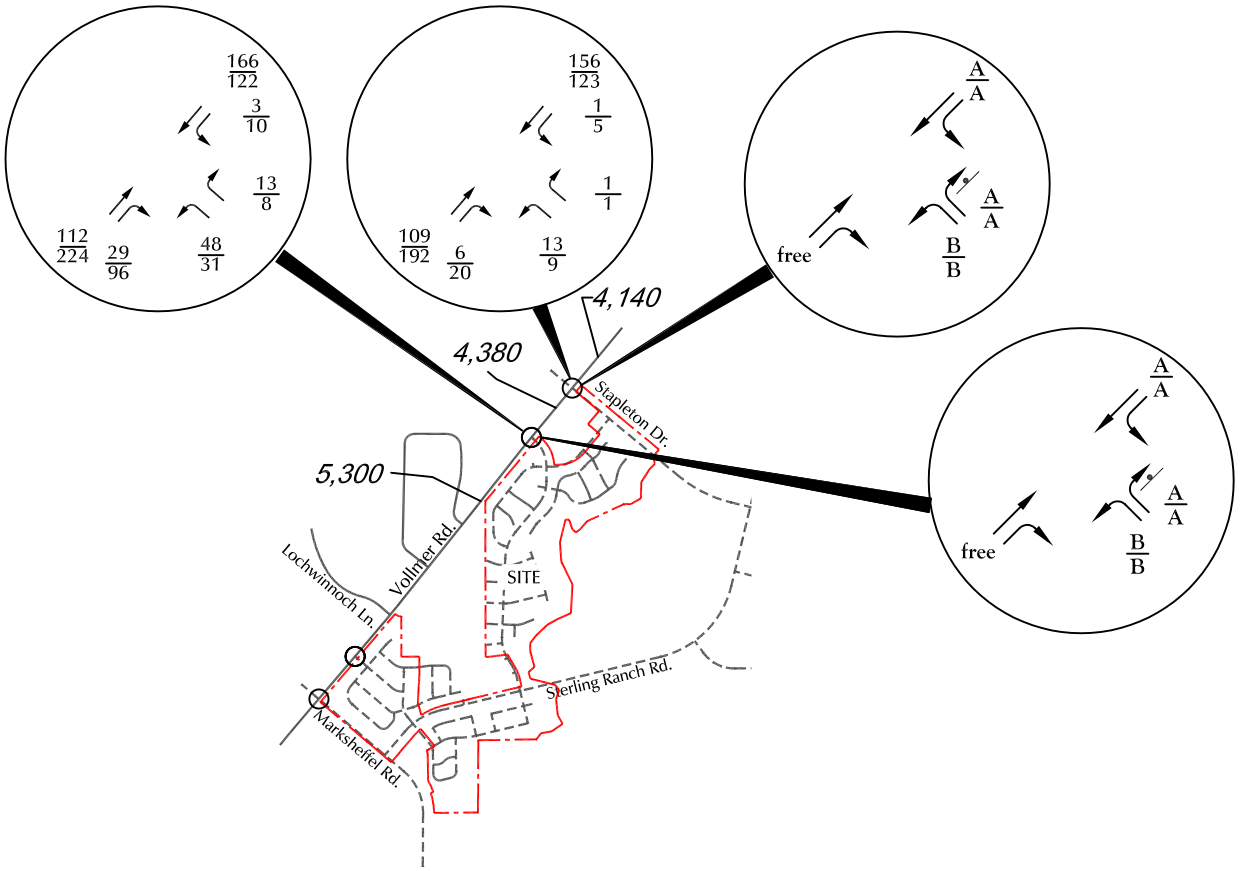
X,XXX = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 5

Short-Term Phase 1-3 Buildout Site-Generated Traffic

Sterling Ranch (LSC #144010)



LEGEND:

= Stop Sign

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

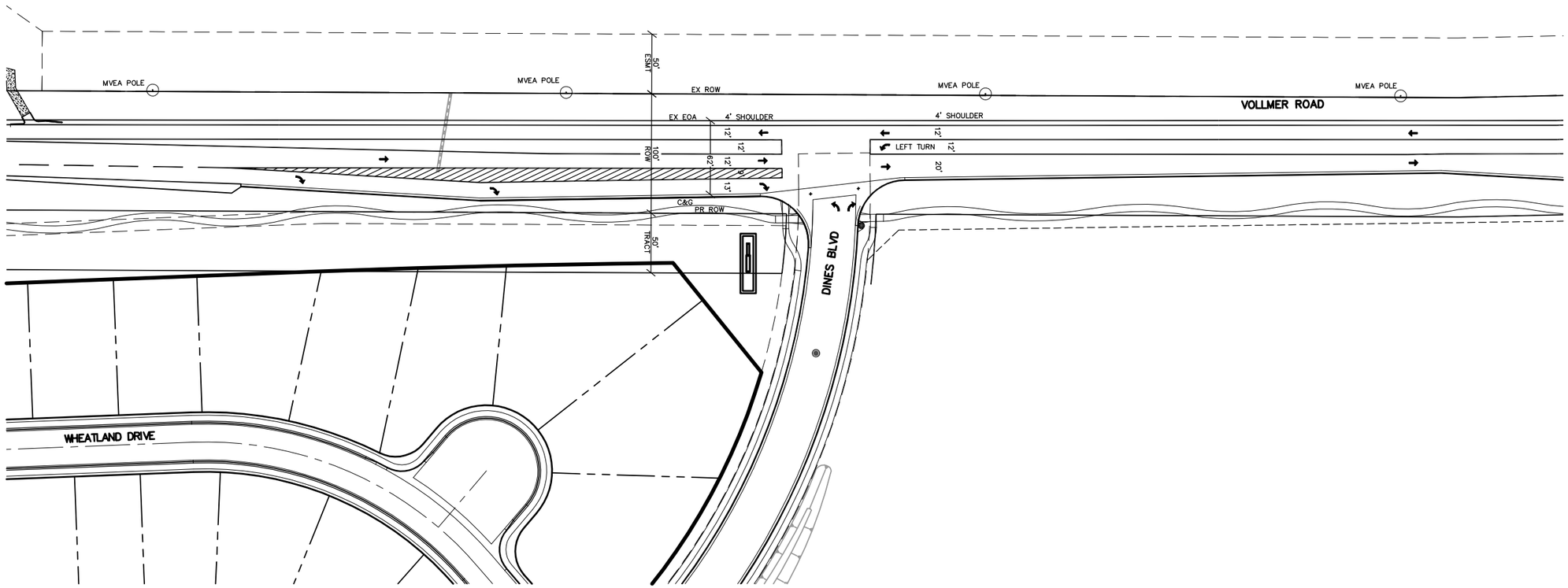
500 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

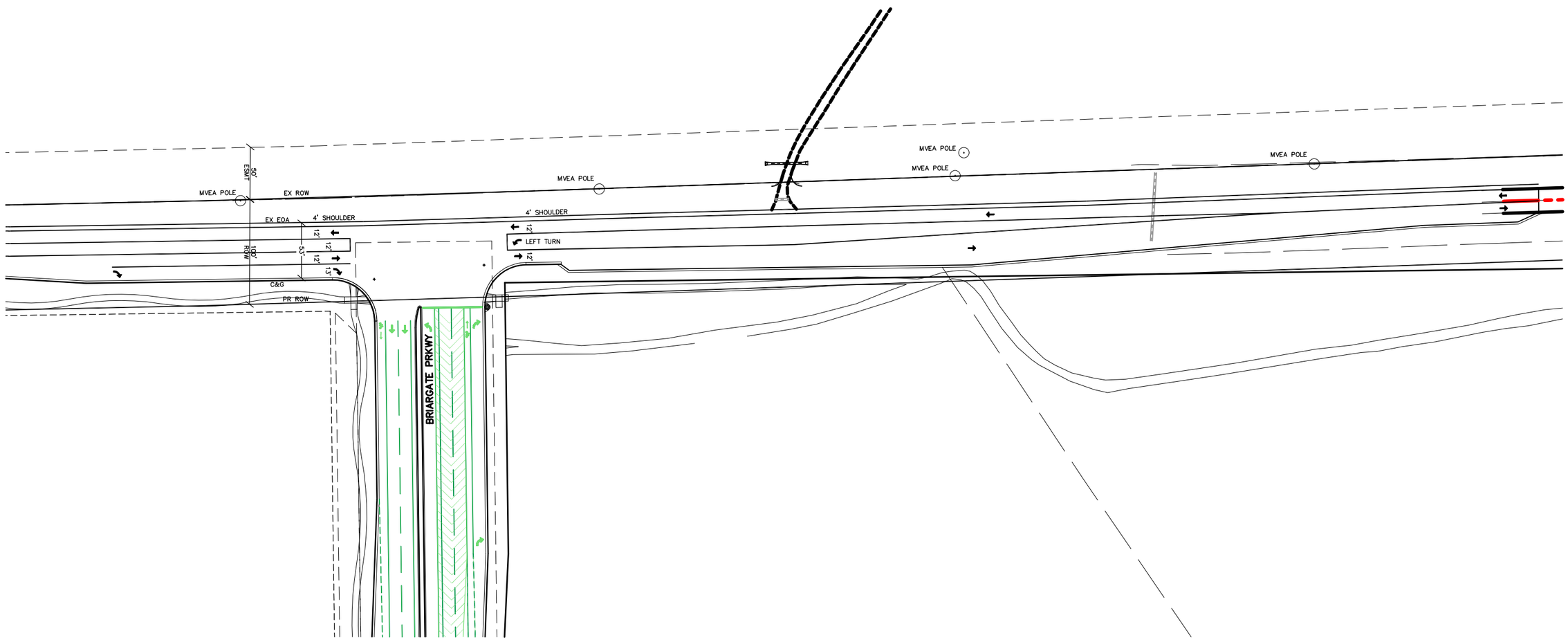
Figure 6

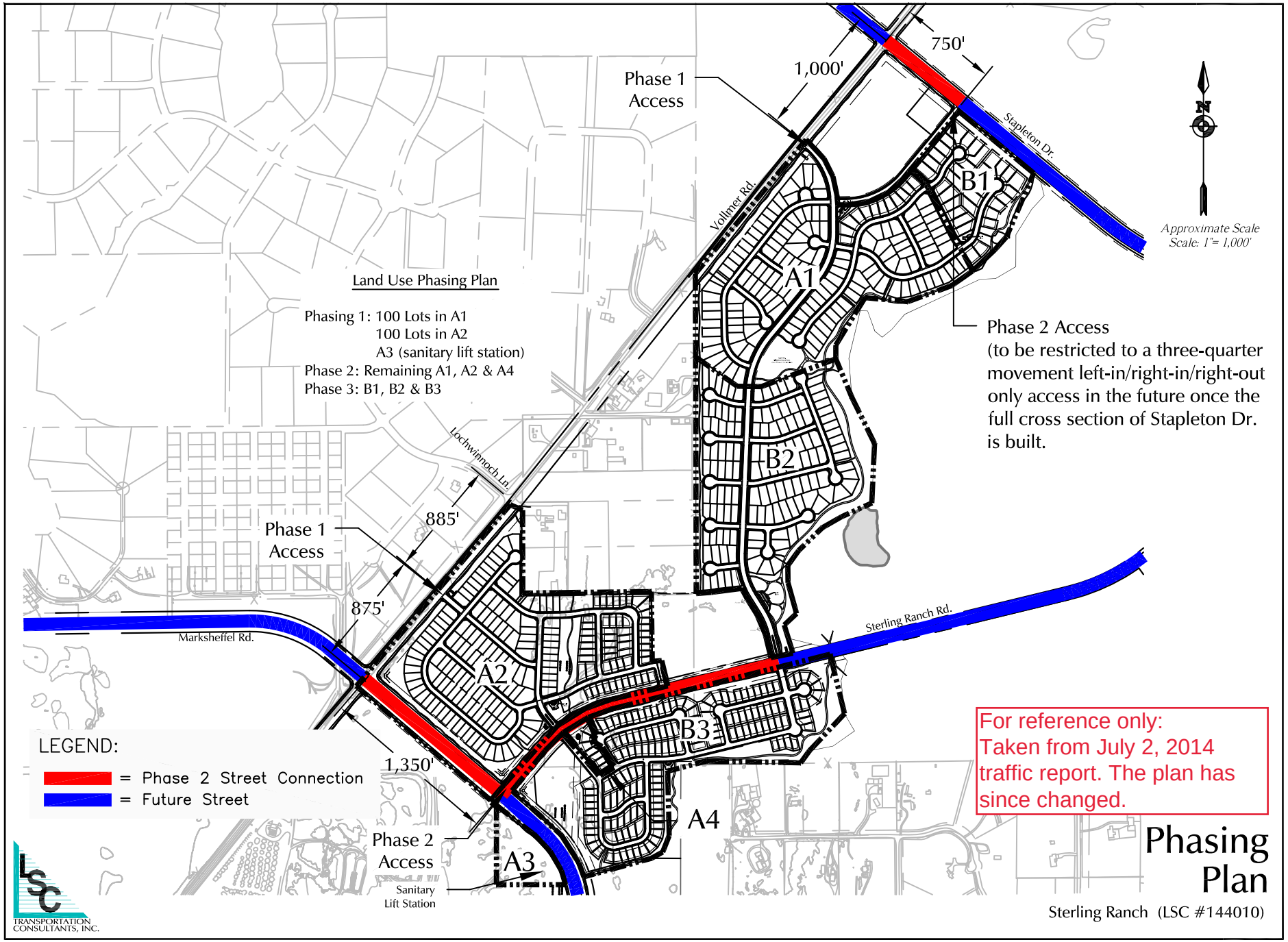
Year 2025 Total Traffic & Intersection Analysis

Sterling Ranch (LSC #144010)



O:\09002A\Sterling Ranch District\dwg\Eng Exhibits\Vollmer Iterim-VAS.dwg, 9/7/2017 11:48:57 AM


MVEA POLE
50' ESMT
EX ROW
MVEA POLE
MVEA POLE
MVEA POLE
MVEA POLE
EX EOA
4' SHOULDER
4' SHOULDER
12'
12'
LEFT TURN
12'
100' ROW
53'
12'
12'
13'
C&G
PR ROW
BRIARGATE PRKWY


Phase 1
Access
1,000'
750'
Stapleton Dr.
Vollmer Rd.
B1
A1
Approximate Scale
Scale: 1"= 1,000'
Land Use Phasing Plan
Phasing 1: 100 Lots in A1
100 Lots in A2
A3 (sanitary lift station)
Phase 2: Remaining A1, A2 & A4
Phase 3: B1, B2 & B3
Phase 2 Access
(to be restricted to a three-quarter movement left-in/right-in/right-out only access in the future once the full cross section of Stapleton Dr. is built.
Lochwinnoch Ln.
B2
885'
Phase 1
Access
875'
Marksheffel Rd.
Sterling Ranch Rd.
A2
B3
LEGEND:
= Phase 2 Street Connection
= Future Street
1,350'
A4
Phase 2
Access
A3
Sanitary
Lift Station
For reference only:
Taken from July 2, 2014
traffic report. The plan has
since changed.
Phasing
Plan
Sterling Ranch (LSC #144010)
TRANSPORTATION
CONSULTANTS, INC.

COUNTER MEASURES INC.

1889 YORK STREET
DENVER,COLORADO 80206
303-333-7409

Location: VOLLMER RD S/O POCO RD
City:
County: EL PASO
Direction: SOUTHBOUND-NORTHBOUND

Site Code: 092712
Station ID: 092712

Start	28-Sep-17	SB		NB		Combined		29-Sep	SB		NB		Combined	
Time	Thu	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	25	1	16	1	41		*	*	*	*	*	*
12:15		0	12	0	25	0	37		*	*	*	*	*	*
12:30		1	12	1	26	2	38		*	*	*	*	*	*
12:45		0	18	0	18	0	36		*	*	*	*	*	*
01:00		0	24	0	16	0	40		*	*	*	*	*	*
01:15		0	16	0	23	0	39		*	*	*	*	*	*
01:30		0	25	2	29	2	54		*	*	*	*	*	*
01:45		0	17	0	20	0	37		*	*	*	*	*	*
02:00		1	21	0	34	1	55		*	*	*	*	*	*
02:15		0	22	2	23	2	45		*	*	*	*	*	*
02:30		0	21	1	28	1	49		*	*	*	*	*	*
02:45		0	14	0	37	0	51		*	*	*	*	*	*
03:00		0	40	0	28	0	68		*	*	*	*	*	*
03:15		0	15	1	27	1	42		*	*	*	*	*	*
03:30		0	24	2	30	2	54		*	*	*	*	*	*
03:45		3	18	0	31	3	49		*	*	*	*	*	*
04:00		1	19	1	25	2	44		*	*	*	*	*	*
04:15		3	18	1	30	4	48		*	*	*	*	*	*
04:30		0	30	0	25	0	55		*	*	*	*	*	*
04:45		6	18	0	30	6	48		*	*	*	*	*	*
05:00		7	19	4	32	11	51		*	*	*	*	*	*
05:15		4	13	0	28	4	41		*	*	*	*	*	*
05:30		19	15	3	30	22	45		*	*	*	*	*	*
05:45		5	16	2	30	7	46		*	*	*	*	*	*
06:00		20	12	6	37	26	49		*	*	*	*	*	*
06:15		16	14	6	18	22	32		*	*	*	*	*	*
06:30		27	16	9	33	36	49		*	*	*	*	*	*
06:45		18	20	4	12	22	32		*	*	*	*	*	*
07:00		14	4	16	15	30	19		*	*	*	*	*	*
07:15		27	2	14	16	41	18		*	*	*	*	*	*
07:30		22	6	12	19	34	25		*	*	*	*	*	*
07:45		16	4	21	16	37	20		*	*	*	*	*	*
08:00		20	4	12	21	32	25		*	*	*	*	*	*
08:15		26	3	16	14	42	17		*	*	*	*	*	*
08:30		23	5	14	15	37	20		*	*	*	*	*	*
08:45		16	5	18	14	34	19		*	*	*	*	*	*
09:00		34	4	27	17	61	21		*	*	*	*	*	*
09:15		19	7	11	4	30	11		*	*	*	*	*	*
09:30		16	6	12	13	28	19		*	*	*	*	*	*
09:45		18	4	12	6	30	10		*	*	*	*	*	*
10:00		21	3	10	7	31	10		*	*	*	*	*	*
10:15		18	4	28	1	46	5		*	*	*	*	*	*
10:30		28	0	15	2	43	2		*	*	*	*	*	*
10:45		28	1	16	1	44	2		*	*	*	*	*	*
11:00		21	1	13	1	34	2		*	*	*	*	*	*
11:15		13	0	18	1	31	1		*	*	*	*	*	*
11:30		15	1	14	3	29	4		*	*	*	*	*	*
11:45		14	0	20	3	34	3		*	*	*	*	*	*
Total		540	598	365	930	905	1528		0	0	0	0	0	0
Day Total		1138		1295		2433			0		0		0	
% Total		22.2%	24.6%	15.0%	38.2%				0.0%	0.0%	0.0%	0.0%		
Peak	-	08:15	02:15	08:15	05:15	08:15	02:45	-	-	-	-	-	-	-
Vol.	-	99	97	75	125	174	215	-	-	-	-	-	-	-
P.H.F.		0.728	0.606	0.694	0.845	0.713	0.790							

ADT	ADT 2,433	AADT 2,433

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	13	112	29	3	166
Future Vol, veh/h	48	13	112	29	3	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	14	122	32	4	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	335	122	0	0	154	0
Stage 1	122	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	660	929	-	-	1426	-
Stage 1	903	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	658	929	-	-	1426	-
Mov Cap-2 Maneuver	658	-	-	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	658	929	1426	-
HCM Lane V/C Ratio	-	-	0.079	0.015	0.003	-
HCM Control Delay (s)	-	-	10.9	8.9	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	1	119	6	1	156
Future Vol, veh/h	13	1	119	6	1	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	1	129	7	1	193

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	324	129	0	0	136	0
Stage 1	129	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	670	921	-	-	1448	-
Stage 1	897	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	669	921	-	-	1448	-
Mov Cap-2 Maneuver	669	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	669	921	1448	-
HCM Lane V/C Ratio	-	-	0.021	0.001	0.001	-
HCM Control Delay (s)	-	-	10.5	8.9	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	8	224	96	10	122
Future Vol, veh/h	31	8	224	96	10	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	9	241	103	10	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	388	241	0	0	344	0
Stage 1	241	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	616	798	-	-	1215	-
Stage 1	799	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	611	798	-	-	1215	-
Mov Cap-2 Maneuver	611	-	-	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	611	798	1215	-
HCM Lane V/C Ratio	-	-	0.055	0.011	0.009	-
HCM Control Delay (s)	-	-	11.2	9.6	8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	1	212	20	5	123
Future Vol, veh/h	9	1	212	20	5	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	235	285	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	93	93	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	1	228	22	5	128

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	366	228	0	0	250	0
Stage 1	228	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	634	811	-	-	1316	-
Stage 1	810	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	631	811	-	-	1316	-
Mov Cap-2 Maneuver	631	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	889	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	631	811	1316	-
HCM Lane V/C Ratio	-	-	0.016	0.001	0.004	-
HCM Control Delay (s)	-	-	10.8	9.4	7.7	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

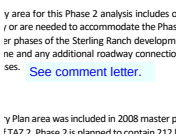
Markup Summary

3/6/2019 1:32:33 PM (1)

Subject: Text Box
Page Label: 1
Author: dsdrice
Date: 3/6/2019 1:32:33 PM
Color:

SP-19-001

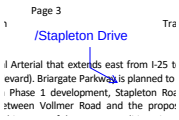
3/6/2019 1:42:51 PM (1)



Subject: Text Box
Page Label: 3
Author: dsdrice
Date: 3/6/2019 1:42:51 PM
Color:

See comment letter.

3/6/2019 10:15:12 PM (1)



Subject: Callout
Page Label: 4
Author: dsdrice
Date: 3/6/2019 10:15:12 PM
Color:

/Stapleton Drive

3/6/2019 10:17:00 PM (1)

Subject: Callout
Page Label: 4
Author: dsdrice
Date: 3/6/2019 10:17:00 PM
Color:

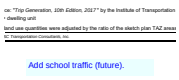
Briargate/

3/6/2019 10:18:26 PM (1)

Subject: Callout
Page Label: 4
Author: dsdrice
Date: 3/6/2019 10:18:26 PM
Color:

This doesn't make sense.

3/7/2019 12:52:31 PM (1)



Subject: Text Box
Page Label: 9
Author: dsdrice
Date: 3/7/2019 12:52:31 PM
Color:

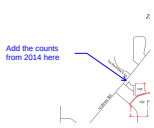
Add school traffic (future).

3/7/2019 12:54:38 PM (1)

Subject: Callout
Page Label: 11
Author: dsdrice
Date: 3/7/2019 12:54:38 PM
Color:

Include school site.

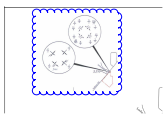
3/7/2019 2:42:50 PM (1)



Subject: Callout
Page Label: 12
Author: dsdrice
Date: 3/7/2019 2:42:50 PM
Color:

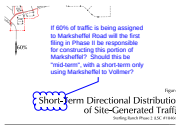
Add the counts from 2014 here

3/7/2019 2:44:31 PM (1)



Subject: Image
Page Label: 12
Author: dsdrice
Date: 3/7/2019 2:44:31 PM
Color:

3/7/2019 2:50:09 PM (1)



Subject: Cloud+
Page Label: 15
Author: dsdrice
Date: 3/7/2019 2:50:09 PM
Color:

If 60% of traffic is being assigned to Marksheffel Road will the first filing in Phase II be responsible for constructing this portion of Marksheffel? Should this be "mid-term", with a short-term only using Marksheffel to Vollmer?

3/7/2019 2:54:53 PM (1)

Subject: Text Box
Page Label: 45
Author: dsdrice
Date: 3/7/2019 2:54:53 PM
Color:

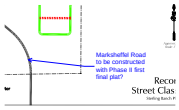
Label which report this is from.

3/7/2019 3:01:16 PM (1)

Subject: Text Box
Page Label: 7
Author: dsdrice
Date: 3/7/2019 3:01:16 PM
Color:

Provide an improvements summary table including the improvements needed in S.R. Filing 2 to serve Phase II and Marksheffel Road adjacent to and south of the site.

3/7/2019 3:04:37 PM (1)



Subject: Callout
Page Label: 19
Author: dsdrice
Date: 3/7/2019 3:04:37 PM
Color:

Marksheffel Road to be constructed with Phase II first final plat?

3/7/2019 3:13:03 PM (1)

Subject: Callout
Page Label: 19
Author: dsdrice
Date: 3/7/2019 3:13:03 PM
Color:

Marksheffel Road to be constructed with Phase I first final plat.

3/7/2019 3:21:24 PM (1)

Subject: Callout
Page Label: 3
Author: dsdrice
Date: 3/7/2019 3:21:24 PM
Color:

as a 4-lane road to be owned and maintained by the City of Colorado Springs

3/7/2019 3:30:59 PM (1)

Subject: Callout
Page Label: 7
Author: dsdrice
Date: 3/7/2019 3:30:59 PM
Color:

, Sterling Ranch Filing No. 2,

3/7/2019 3:32:11 PM (1)

Subject: Text Box
Page Label: 7
Author: dsdrice
Date: 3/7/2019 3:32:11 PM
Color:

Address Marksheffel Road from Vollmer to property boundary (see comment letter).