Meadowlake Industrial Park Filing No. 1 Preliminary Plan Traffic Impact Study

Prepared for: Meadowlake Developments, LLC P.O. Box 1385 Colorado Springs, CO 80901

Contact: Kevin O'Neil

NOVEMBER 15, 2024

LSC Transportation Consultants Prepared by: Jeffrey C. Hodsdon, P.E.

EPC PCD File No.: SP236

LSC #S234040

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LSC Responses to TIS Redline Comments

Page: 1

Number: 1

Author: Daniel Torres

Subject: Text Box Date: 12/4/2024 20:47:33

provide EPC standard signature block

Author: jchodsdon Subject: Sticky Note

Date: 1/10/2025 08:36:07

LSC Response: Provided with this resubmittal.

ROADWAY SEGMENT IMPROVEMENTS

Curtis Road

72' to match the - prelim plan and Saddlehorn project

Please refer to Table 4 for details regarding roadway improvements. Curtis Road should ultimately be improved to a two-lape, Principal Arterial. Dedication of right-of-way for one- half of a two-lane Principal Arterial (78 feet from centerline) with ROW reservation for additional width of 90 feet from centerline for four-lane Principal Arterial corridor preservation would be required. Table 4calls out specific recommended short-term improvements to Curtis Road, between the south property line and the south terminus of the Saddlehorn Filing No. 1 improvements.

Falcon Highway

This report does not recommend any Falcon Highway roadway **segment** improvements associated with this Filing 1 Preliminary Plan application. However, Table 4 includes Falcon Highway **intersection-related** items under Nos. 5.1, 6.1, and 8.1 through 8.5.

DEVIATIONS AND WAIVERS

The following deviation is included with this submittal.

Curtis Road/ Falcon Highway Intersection - Eastbound Left-Turn Lane Lengthening

A deviation to allow continued use of the existing lane and tapers and defer this improvement (based on short-term turning volumes/associated queue length). There is a drainage channel just to the west. The development would contribute a fair-share escrow amount toward a future improvement.

The future improvement would encompass bringing the existing turn lane up to *ECM* standards. The *ECM* criteria for turn lanes require elements of deceleration distance plus stacking distance plus taper length. On a roadway with a 60-mph design speed (55 posted), the required full-width, left-turn lane length is 290 feet plus left-turn stacking/queuing distance. The required transition taper is 240 feet. For this turn lane, the stacking requirement would be 50 feet (100 feet based on long-term projections) and the resulting total prescribed turn-lane length would be 580 feet. Redirect tapers as a ratio of 55:1 would also need to be part of the design.

Please refer to the deviation form included with this submittal for additional detail and justification.

Page: 23

Number: 1 Author: Daniel Torres Subject: Callout Date: 12/6/2024 12:56:56

72' to match the prelim plan and Saddlehorn project

Author: Jack Subject: Sticky Note Dat LSC Response
Report has been updated to say 72' instead of 78' Date: 1/8/2025 13:40:59

Table 4 (page 2 of 3) Meadowlake Industrial Park Filing No. 1 Preliminary Plan Roadway Improvements aso County Off-Site Intersec

El Paso County Off-Site Intersections			
		Falcon Highway/Meridian Road Intersection	
6.1	Short Term Westbound right-turn deceleration lane	Currently warranted by ECM	Escrow portion toward improvement with Filing No. 1 final plat (fee program credit per fee program provisions)
		Judge Orr/Curtis Road Intersection	
tem#		Timing	Responsibility
7.1	Short Term Eastbound right-turn deceleration lane	Currently warranted by the ECM; construct this improvement with this preliminary Plan.	Applicant
7.2	Short Term - Traffic Control	This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filling No. 1 Site Traffic Scenario.	N/A
	This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario.		
7.3	Long Term (or Prior to 2040) - Traffic Control	Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and	The applicant will pay fee program traffic impact fees. This intersection i
	This intersection is likley an eligible intersection for future signalization within the fee program. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term.	associated background traffic growth. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario.	likley an eligible intersection for future signalization within the fee program. Additionally, any required improvements due to future
	intersection would continue to operate at an acceptable 200 with the current 1930 in the 2023/3/3/07 ferm.	ing to 1 are think action.	development of the overall Meadowlake Industrial Park plan.
	Master Study: Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary.		
7.4	Long Term (if signalized in the future, or w/TWSC if Stop-sign orientation switched to eastbound/westbount)	Lane lengthening not currently needed with this Preliminary plan	Applicant - Escrow Pro-rata share for potential future lane lengthening.
	Potential future need to lengthen northbound left-turn deceleration lane - provide pro-rata share escrow toward		
	potential future lengthening of lane.	Master Study: As needed based on future speed limit and turning volume/stacking length criteria.	Master Study: Escrow for improvement or construction if warranted at ti
	Master Study: Lengthen northbound left-turn deceleration lane.		time of development (fee program credit per fee program provisions).
Adjacent & Access Intersections			
		Curtis Road/Falcon Highway	
tem#		Timing	Responsibility
8.1	From Master Study (for Reference)	From Master Study (for Reference)	From Master Study (for Reference)
	Short Term/Long Term Change to AWSC traffic control as necessary. Participate on a pro-rata basis with a fair share contribution toward	Once LOS of AWSC drops below acceptable levels; and/or ance signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.	The applicant will pay fee program traffic impact fees and any required intersection improvements (or participation) may be fee-program eligible
	Change to AWSC traffic control as necessary. Participate on a pro-rata basis with a fair share contribution toward upgrade the intersection, potentially including new traffic control, to mitigate substandard level of service, as necessary.	ussurateu aurrijuana trajni gravan.	intersection improvements (or participation) may be fee-program eligible for credit based on the program guidelines.
	Significant improvements may be needed in the short term if rapid site buildout and area growth occurs. Otherwise,		,
	intermediate term.		This intersection is likley an eligible intersection for future signalization
8.1a	Short Term:	Consider traffic-control change to interim AWSC once warrants for AWSC control are met.	Applicant
	This TIS indicates the intersection would operate at LOS F/E (AM/PM) on the northbound approch with the current TWSC		
	based on the in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. Consideration for interim conversion to AWSC.		
	interim conversion to AWSC.		
8.1b	Long Term (or Prior to 2040)	Once LOS of AWSC control (interim change to AWSC in the short term) drops below acceptable levels and/or once signal warrants are met. Depends on the pace and intensity of development of this	Applicant and/or other developments
	This intersection is likely an eligible intersection for future signalization within the fee program. See above item 8.1a	site and the rate of other area development and associated background traffic growth.	
	relative to the Short Term. A roundabout may also be considered.		
	Master Study (for reference:) Participate on a pro-rata basis with a fair share contribution or upgrade the intersection,		
	potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary.		
8.2	Short Term Unless the interesection control is changed to AWSC in the short term, construct a southbound-right-turn lane on Curtis	Unless the interesection control is changed to AWSC in the short term, install with this preliminary plan.	Applicant - Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared: If lane is constructed, recovery
	Road approaching Falcon Highway with the addition of site-generated traffic from this preliminary plan's development,	Full-length deceleration lane only required upon signalization or reversal of the stop-sign traffic control orientation, or as needed in the future for acceptable operations. See footnote below.	from any escrowed funds may apply.
	as it would result in a better LOS for some movements. Potentially, a southbound right-turn "stacking" lane, rather than		, , , , , , , , , , , , , , , , , , , ,
	the full-length deceleration-plus-stacking lane, could potentially be an interim improvement, provided the approach	If the intersection control is changed to AWSC in the short term, escrow funds with site development plans/plats under this Preliminary plan toward this potential future improvement.	
	remains stop-sign controlled.		
	Long Term: ONLY needed in the case of a future signalized intersection or reverse of the TWSC stop-sign traffic control		
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(.		see comments on	
7	MASTER STUDY:		
		deviation submitted	
~_	Short Term (if planned to be signalized in the future)	deviation submitted	
8.3	Short Term (if planned to be signalized in the future)		Escrow for pro-rata share of future improvement.
8.3,	Short Term (if planned to be signalized in the future) Short Term Secrow-Coverd the Coverd Hurch's edugated hing of the suisigns to lethour Secrow-Coverd the Coverd Hurch's education in the Secrow-Coverd Hurch's education in the Secrow-Coverd Hurch's education in the Secretary in the Secretary Secretary in the Secretary Secr	Previously recommended "trigger" from Sodishorn Ranch: once projected queue (95th percentile) exceed tel: LSC suggests the same trigger for this project. When warrants require improvements, a deviation would be guidnited. A deviation request, if approved, would allow interim use deviating lane and taper (based on short term total turning volumes) Associated	Responsibility will likely be shared between this project and Saddlehorn
8.3	Short Term (if planned to be signalized in the future)	Previously recommended "trigger" from Spdischom Ranch: once projected queue (95th percentile) exceed improvements, a deviation would be plaintled. A deviation request, if approved, would allow interin use deviating lane and taper (based on short term total turning volume, suscitating queue length). Deviation is included with this submittat. Note: EPC comments on Saddehorn Filling No. 4 indicate: "Forstruct with Filling Armarated based on 50"	Escrow for pro-rata share of future improvement. Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared.
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	Short Term (if abonned to be signatured in the future) Short Lerm Short Lerm Short Lerm Short Lerm Short Lerm Short Short Short Short Palcon Highway Approaching Curtis Road. Please fix so that it is Usin Ho	Previously recommended "rigger" from Sudishorn Ranch: once projected queue (93th percentile) exceed improvements, a deviation would be palmitted. A deviation request, if approved, would allow interim use disting large and taper (based on short term total turning volumes /associated queue length). Deviation is included with this submittal. Note: EPC comments on Saddlehorn Filing No. 4 indicate "construct with Filing 4 if warranted based on 50" queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved.	Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared.
	Short Term (I planned to be implaced in the Idulars) And Time And Time (I planned to be implaced in the Idulars) And Time (I planned to be implaced in the Idulars) And Time (I planned to be implaced in the Idulars) Please fix so that it is Short Term Visible	Previously recommended "trigger" from Spdischom Ranch: once projected queue (95th percentile) exceed improvements, a deviation would be plaintled. A deviation request, if approved, would allow interin use deviating lane and taper (based on short term total turning volume, suscitating queue length). Deviation is included with this submittat. Note: EPC comments on Saddehorn Filling No. 4 indicate: "Forstruct with Filling Armarated based on 50"	Responsibility will likely be shared between this project and Saddlehorn
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	Sont Term WB right-turn descleration lane on Fascon Highway approaching Curtis Noad. Short Term WB right-turn descleration lane on Fascon Highway approaching Curtis Noad.	Previously recommended "rigger" from Sudishorn Ranch: once projected queue (93th percentile) exceed improvements, a deviation would be palmitted. A deviation request, if approved, would allow interim use disting large and taper (based on short term total turning volumes /associated queue length). Deviation is included with this submittal. Note: EPC comments on Saddlehorn Filing No. 4 indicate "construct with Filing 4 if warranted based on 50" queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved.	Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared.
8.4	Short Term Short Liter Please fix so that it is visible Wight win decleration lane or action Highway approaching Curris Road. Please fix so that it is visible Wight turn deceleration lane or action Highway approaching Curris Road. From Master Study (for Reference)	Previously recommended "rigger" from Sudishorn Ranch: once projected queue (93th percentile) exceed improvements, a deviation would be palmitted. A deviation request, if approved, would allow interim use disting large and taper (based on short term total turning volumes /associated queue length). Deviation is included with this submittal. Note: EPC comments on Saddlehorn Filing No. 4 indicate "construct with Filing 4 if warranted based on 50" queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved.	Responsibility will likely be shared between this project and Saddlehorm Ranch, with the cost shared.
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8.4	Soon Term If planned to be impossed in the distured Short Term Such such business that the such such such such such such such such	Previously recommended "trigger" from Sudishorn Ranch: once projected quoue (95th percentile) exceed improvements, a deviation would be pointed. A crisialization request, if approved, would allow interin use dusting like and taper (based on short term total turning volume, passociated queue length). Deviation is included with this submittan. Note: PEC comments on Suddenion Filling No. 4 includer Construct with Filling 4 warranted based on 50° queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved. This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. MA with this Preliminary Plan	Responsibility will likely be shared between this project and Saddiehorn Ranch, with the cost shared. Excrow for pro-rata share of improvement NA with this Preliminary Plan
8.4	Short Term (If planned to be signalized in the future) Short Term Short Term Will fight turn described being delated uniforge to be the future to exclusion with each of Falcon Highway approaching Curtis Road. Please fix so that it is Short Term Will right turn described on one on Falcon Highway approaching Curtis Road. This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. Escrow toward the cost of future Will right-turn described in an on Falcon Highway approaching Curtis Road. From Master Tisc Lang Term (Master Tisc)	Previously recommended "trigger" from Spdiehom Ranch: once projected queue (95th percentile) exceed improvements, a deviation would be planited. A deviation request, if approved, would allow interin use desiring lane and taper (lasted on short term total turning volumes / suscitated queue length). Deviation is included with this submittat. Note: PEC comments on Saddehorn Filling No. 4 indicate "construct with Filling A warranted based on 50" queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved. This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume.	Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared. Escrow for pro-rata share of improvement Escrow for pro-rata share of improvement N/A with this Preliminary Plan Escrow for improvement or construction if warranted at the time of
8.4	Soon Term If planned to be impossed in the distured Short Term Such such business that the such such such such such such such such	Previously recommended "trigger" from Sudishorn Ranch: once projected quoue (95th percentile) exceed improvements, a deviation would be pointed. A crisialization request, if approved, would allow interin use dusting like and taper (based on short term total turning volume, passociated queue length). Deviation is included with this submittan. Note: PEC comments on Suddenion Filling No. 4 includer Construct with Filling 4 warranted based on 50° queuing length, per conditions of approval." A similar condition would likely apply to this development, provided the deviation is approved. This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. MA with this Preliminary Plan	Responsibility will likely be shared between this project and Saddiehorn Ranch, with the cost shared. Excrow for pro-rata share of improvement NA with this Preliminary Plan

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Number: 1 **Author: Daniel Torres** Subject: Callout Date: 12/6/2024 12:08:39 see comments on deviation submitted Author: jchodsdon Subject: Sticky Note Date: 1/10/2025 08:36:50 LSC Response Comment noted. See LSC responses to deviation comments. **™**Number: 2 **Author: Daniel Torres** Subject: Cloud+ Date: 12/6/2024 12:07:19 please fix so that it is visible Author: Jack Date: 1/8/2025 13:33:05 Subject: Sticky Note

LSC Response

Row formatting has been updated to show previously-hidden text:

"Construct SB right-turn lane on Curtis Road approaching Falcon Highway."