AGENDA
CITY COUNCIL REGULAR MEETING
THURSDAY, JUNE 11, 2020
SPRING HILL CIVIC CENTER
401 N. MADISON, COUNCIL CHAMBERS
7:00 P.M.

CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

ROLL CALL

APPROVAL OF AGENDA

CONSENT AGENDA:

The items on the Consent Agenda are considered by staff to be routine business items. Approval of the items may be made by a single motion, seconded, and a majority vote with no separate discussion of any item listed. Should a member of the Governing Body desire to discuss any item, it will be removed from the Consent Agenda and considered separately.

1. Appropriation Order No. 2020-06-11

2. Consider Approval of Commercial Fireworks Retail Sales Permit: FS-000249-2020, Tim Durkin, 20559 S. Lone Elm Rd (The Bowery/Bull Creek Distillery)

FORMAL ACTION

3. Consider Charter Ordinance Exempting the City from the Provisions of K.S.A. 79-41a04(d) Pertaining to the Local Alcoholic Liquor Funds, Distribution of Moneys

4. Consider Ordinance: Annexation No. A-000022-2020, 20110 Webster Street, Spring Hill, KS

5. Consider Approval of Site Plan: SP-000011-2020 Spring Hill Middle School #3

ANNOUNCEMENTS and REPORTS

ADJOURN

CITY OF SPRING HILL, KANSAS

APPROPRIATION ORDER
NUMBER 2020-06-11
PRESENTED: June 11, 2020

Be it ordered by the Governing Body of the City of Spring Hill that the above dated order is and shall be approved and all claims honored and paid by the City Clerk.

Section 1:
Claims paid prior to approval of the City Council as authorized by Ordinance 2001-08:

Accounts Payable:	$64,096.87
Payroll:	$76,083.34
	$140,180.21

Section 2:
Claims presented for approval of payment:

Accounts Payable:	$253,018.40
	$253,018.40

Total amount of the Appropriation Order:	**$393,198.61**

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
Vendor: 01822 - ANDERSON AUTOMOTIVE INC					
0038057	OIL, BRAKE, ROTOR & TRANS PAN GASKET CHANGE UNIT #853	100-800-6720			$1,552.24
				Vendor 01822 - ANDERSON AUTOMOTIVE INC Total:	**$1,552.24**
Vendor: 00089 - ARLAN CO INC					
12323	SHAC CHEMICALS - MURIATIC ACID AND SODIUM BICARB	100-730-6500			$2,891.00
				Vendor 00089 - ARLAN CO INC Total:	**$2,891.00**
Vendor: 01866 - ASHLEY OLDENBURG-GOFF					
1180242.003	SHAC MEMBERSHIP REFUND - COVID19	100-000-4641			$135.00
				Vendor 01866 - ASHLEY OLDENBURG-GOFF Total:	**$135.00**
Vendor: 00096 - ASPHALT SALES COMPANY INC					
143516	ASPHALT FOR NORTH STREET	205-640-6630			$875.43
				Vendor 00096 - ASPHALT SALES COMPANY INC Total:	**$875.43**
Vendor: 00105 - ATMOS ENERGY					
INV0001861	GAS SERVICE - 705 W LAWRENCE - 04/21-05/18/2020	520-670-7624	DFT0001660	06/01/2020	$44.63
				Vendor 00105 - ATMOS ENERGY Total:	**$44.63**
Vendor: 00106 - ATMOS ENERGY					
INV0001860	GAS SERVICE - 502 E NICHOLS - 04/21-05/18/2020	100-640-7624	DFT0001661	06/01/2020	$61.82
				Vendor 00106 - ATMOS ENERGY Total:	**$61.82**
Vendor: 00107 - ATMOS ENERGY					
INV0001857	GAS SERVICE-606 N JACKSON,UNIT A -04/21-05/18/2020	520-670-7624	DFT0001662	06/01/2020	$21.84
				Vendor 00107 - ATMOS ENERGY Total:	**$21.84**
Vendor: 00110 - ATMOS ENERGY					
INV0001858	GAS SERVICE - 418 E NICHOLS - 04/21-05/18/2020	100-800-7624	DFT0001663	06/01/2020	$46.99
				Vendor 00110 - ATMOS ENERGY Total:	**$46.99**
Vendor: 00111 - ATMOS ENERGY					
INV0001856	GAS SERVICE - 20129 CRESTONE - 04/21-05/18/2020	520-670-7624	DFT0001664	06/01/2020	$44.63
				Vendor 00111 - ATMOS ENERGY Total:	**$44.63**
Vendor: 00112 - ATMOS ENERGY					
INV0001859	GAS SERVICE - 401 N MADISON - 04/21-05/18/2020	100-720-7624	DFT0001665	06/01/2020	$192.31
				Vendor 00112 - ATMOS ENERGY Total:	**$192.31**
Vendor: 00113 - ATRONIC ALARMS, INC					
407859	FIRE ALARM MONITORING - 6/1 to 8/31/2020 - PD	100-720-7190			$84.00
				Vendor 00113 - ATRONIC ALARMS, INC Total:	**$84.00**
Vendor: 00173 - BURNETT AUTOMOTIVE					
10-95144	TIRE ROTATION & FLUID MAINTENANCE - UNIT #856	100-800-6720			$44.96
				Vendor 00173 - BURNETT AUTOMOTIVE Total:	**$44.96**
Vendor: 01871 - CAITLIN DOWNEY					
1007823.001	SHAC INTERNET SWIM LESSON REFUND - COVID19	100-000-4646			$110.00
				Vendor 01871 - CAITLIN DOWNEY Total:	**$110.00**
Vendor: 00201 - CENTURYLINK					
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	100-110-7622	DFT0001666	06/01/2020	$123.96
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	100-610-7622	DFT0001666	06/01/2020	$72.77
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	100-710-7622	DFT0001666	06/01/2020	$64.40
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	100-730-7622	DFT0001666	06/01/2020	$50.75
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	100-800-7622	DFT0001666	06/01/2020	$143.26
INV0001849	COMMUNICATION - GROUP BILL - 05/18-06/17/2020	520-670-7622	DFT0001666	06/01/2020	$368.58
				Vendor 00201 - CENTURYLINK Total:	**$823.72**
Vendor: 00222 - CINTAS CORPORATION					
5017022359	FIRST AID SUPPLIES - PW OFFICE	100-620-6110			$70.46
5017022359	FIRST AID SUPPLIES - PW OFFICE	100-640-6110			$70.45
5017022359	FIRST AID SUPPLIES - SEWER PLANT	510-660-6110			$59.86
5017022359	FIRST AID SUPPLIES - SEWER PLANT	520-670-6110			$59.85
				Vendor 00222 - CINTAS CORPORATION Total:	**$260.62**
Vendor: 00223 - CITY ATTORNEYS ASSOC OF KS					
2600	CAAK 2020 VIRTUAL SPRING MEETING	100-100-5310			$30.00
				Vendor 00223 - CITY ATTORNEYS ASSOC OF KS Total:	**$30.00**

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
Vendor: 00230 - CITY OF SPRING HILL					
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - PARKS BLDG	100-620-7628			$62.01
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - PW	100-640-7628			$113.01
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - COMM BLDG	100-710-7628			$100.25
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - CH	100-720-7628			$200.50
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - SHAC	100-730-7628			$87.51
INV0001869	TRASH COLLECTION - 04/18-05/18/2020 - PD	100-800-7628			$87.51
				Vendor 00230 - CITY OF SPRING HILL Total:	**$650.79**
Vendor: 01647 - COBAN TECHNOLOGIES INC					
27797	TEST BODY CAMERA, COMMAND SOLUTION LIC & REMOTE SETUP	100-800-8110			$2,030.00
				Vendor 01647 - COBAN TECHNOLOGIES INC Total:	**$2,030.00**
Vendor: 00239 - CONSTRUCTION MATERIALS, INC					
3847	MATERIALS FOR FRIENDSHIP PARK SIGN REPAIR	100-620-6640			$33.17
3849	MATERIALS FOR FRIENDSHIP PARK SIGN REPAIR	100-620-6640			$9.58
3914	MATERIALS FOR FRIENDSHIP PARK SIGN REPAIR	100-620-6640			$8.28
4165	SUPPLIES FOR SNEEZE GUARDS DUE TO COVID19 - CH	100-110-6165			$174.17
CM 4166	ITEM RETURNED, RELATED TO SNEEZE GUARDS - COVID19	100-110-6165			-$3.99
4207	SUPPLIES FOR SNEEZE GUARDS DUE TO COVID19 - CH	100-110-6165			$12.48
				Vendor 00239 - CONSTRUCTION MATERIALS, INC Total:	**$233.69**
Vendor: 01605 - CONVERGEONE, INC					
IE9054381	VNXE MAINTENANCE/SUPPORT RENEWAL	100-220-6130			$2,294.97
				Vendor 01605 - CONVERGEONE, INC Total:	**$2,294.97**
Vendor: 00753 - D K LEASING LLC					
200715	MATERIALS FOR DRAINAGE PROJECT 199TH ST	100-640-6630			$830.00
200816	MATERIALS FOR DRAINAGE PROJECT 199TH ST	100-640-6630			$795.00
				Vendor 00753 - D K LEASING LLC Total:	**$1,625.00**
Vendor: 01861 - DEBORAH A SWEENEY					
7441	VERBATIM COUNCIL MINUTES 03.12.2020	100-120-7110			$403.75
				Vendor 01861 - DEBORAH A SWEENEY Total:	**$403.75**
Vendor: 00676 - EVERGY METRO INC (formerly Kansas City Power & Light)					
INV0001851	ELECTRIC - 18095 W 199TH, SIREN - 04/22-05/20/2020	100-640-7626	DFT0001667	06/01/2020	$33.00
				Vendor 00676 - EVERGY METRO INC (formerly Kansas City Power & Light) Total:	**$33.00**
Vendor: 00683 - EVERGY METRO INC (formerly Kansas City Power & Light)					
INV0001853	ELECTRIC - 18539 WOODLAND RD - 04/22-05/20/2020	520-670-7626	DFT0001668	06/01/2020	$88.17
				Vendor 00683 - EVERGY METRO INC (formerly Kansas City Power & Light) Total:	**$88.17**
Vendor: 00685 - EVERGY METRO INC (formerly Kansas City Power & Light)					
INV0001855	ELECTRIC - 18899 S LONE ELM RD - 04/23-05/21/2020	520-670-7626	DFT0001669	06/01/2020	$221.43
				Vendor 00685 - EVERGY METRO INC (formerly Kansas City Power & Light) Total:	**$221.43**
Vendor: 00686 - EVERGY METRO INC (formerly Kansas City Power & Light)					
INV0001852	ELECTRIC - 18700 W 191ST ST - 04/22-05/20/2020	520-670-7626	DFT0001670	06/01/2020	$109.86
				Vendor 00686 - EVERGY METRO INC (formerly Kansas City Power & Light) Total:	**$109.86**
Vendor: 00688 - EVERGY METRO INC (formerly Kansas City Power & Light)					
INV0001854	ELECTRIC - 20281 LONE ELM RD - 04/23-05/21/2020	100-640-7626	DFT0001671	06/01/2020	$31.51
				Vendor 00688 - EVERGY METRO INC (formerly Kansas City Power & Light) Total:	**$31.51**
Vendor: 00393 - EVOQUA WATER TECHNOLOGIES LLC					
904429179	BIOXIDE CHEMICALS FOR 4.1 & STRONG LIFT STATIONS	520-670-6500			$11,479.10
				Vendor 00393 - EVOQUA WATER TECHNOLOGIES LLC Total:	**$11,479.10**
Vendor: 01765 - G T DISTRIBUTORS, INC					
INV0766701	GLOVE & MAG POUCHES, DUTY BELT, KEEPERS, CUFF CASE	100-800-5400			$133.20
				Vendor 01765 - G T DISTRIBUTORS, INC Total:	**$133.20**
Vendor: 00466 - GERKEN RENTAL					
19577AT-1	PORTABLE RESTROOM RENTAL - CITY PARK	100-620-7220			$110.00
19578AT-1	PORTABLE RESTROOM RENTAL - SHAC PARK	100-620-7220			$110.00
				Vendor 00466 - GERKEN RENTAL Total:	**$220.00**
Vendor: 00487 - GRAINGER					
9494122121	AIR FILTERS FOR COMMUNITY CENTER	100-710-6730			$22.08
				Vendor 00487 - GRAINGER Total:	**$22.08**
Vendor: 00490 - GRASS PAD, INC.					
619489	MEMORIAL TREE REPLACEMENT @ SHAC	100-620-6640			$220.88
				Vendor 00490 - GRASS PAD, INC. Total:	**$220.88**

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
Vendor: 00508 - H.E.R.S. INC					
56051	BLOWER REPAIR - PULL ROPE	100-640-6750			$4.00
56063	PULL ROPE REPLACEMENT & INSTALL ON RECOIL ASSEMBLY	100-620-6750			$29.75
				Vendor 00508 - H.E.R.S. INC Total:	**$33.75**
Vendor: 00516 - HAWKINS, INC					
4712031	CHEMICALS FOR BELT FILTER PRESS	520-670-6500			$2,133.09
				Vendor 00516 - HAWKINS, INC Total:	**$2,133.09**
Vendor: 00571 - INLAND TRUCK PARTS COMPANY					
CM-048733	UNIT #233 REPAIR PARTS ON TAIL PIPE - RETURN PART	100-640-6720			-$27.86
CM-048733	UNIT #233 REPAIR PARTS ON TAIL PIPE - CORRECT PART	100-640-6720			$25.26
IN-612732	UNIT #233 PARTS FOR TAIL PIPE	100-640-6720			$89.14
				Vendor 00571 - INLAND TRUCK PARTS COMPANY Total:	**$86.54**
Vendor: 01777 - INSIGHT PUBLIC SAFETY & FORENSIC CONSULTING, LLC					
398	PRE-EMPLOYMENT TESTING/CERTIFICATION	100-800-5510			$450.00
				Vendor 01777 - INSIGHT PUBLIC SAFETY & FORENSIC CONSULTING, LLC Total:	**$450.00**
Vendor: 00573 - INTEGRITY LOCATING SERVICES, LLC					
4167	UTILITY LOCATING SERVICES - 4/25-5/24/2020	100-640-7190			$1,400.00
4167	UTILITY LOCATING SERVICES - 4/25-5/24/2020	510-660-7190			$1,400.00
4167	UTILITY LOCATING SERVICES - 4/25-5/24/2020	520-670-7190			$1,400.00
				Vendor 00573 - INTEGRITY LOCATING SERVICES, LLC Total:	**$4,200.00**
Vendor: 00575 - INTERNAL REVENUE SERVICE					
INV0001846	MEDICARE TAXES	100-2100	DFT0001651	05/22/2020	$2,791.04
INV0001846	MEDICARE TAXES	510-2100	DFT0001651	05/22/2020	$163.48
INV0001846	MEDICARE TAXES	520-2100	DFT0001651	05/22/2020	$147.62
INV0001847	SOCIAL SECURITY TAXES	100-2100	DFT0001652	05/22/2020	$11,934.62
INV0001847	SOCIAL SECURITY TAXES	510-2100	DFT0001652	05/22/2020	$698.94
INV0001847	SOCIAL SECURITY TAXES	520-2100	DFT0001652	05/22/2020	$631.26
INV0001848	FEDERAL WITHHOLDING TAX	100-2100	DFT0001653	05/22/2020	$7,861.10
INV0001848	FEDERAL WITHHOLDING TAX	510-2100	DFT0001653	05/22/2020	$315.41
INV0001848	FEDERAL WITHHOLDING TAX	520-2100	DFT0001653	05/22/2020	$329.14
				Vendor 00575 - INTERNAL REVENUE SERVICE Total:	**$24,872.61**
Vendor: 01863 - JEFFREY KEARNS					
1180236.003	SHAC MEMBERSHIP REFUND - COVID19	100-000-4641			$103.50
				Vendor 01863 - JEFFREY KEARNS Total:	**$103.50**
Vendor: 01870 - JENNA GOLDSBY					
1180234.003	SHAC SWIM LESSON REFUND - COVID19	100-000-4646			$120.00
				Vendor 01870 - JENNA GOLDSBY Total:	**$120.00**
Vendor: 01868 - JESSICA GOLLWITZER					
1180240.003	SHAC SWIM LESSON REFUND - COVID19	100-000-4646			$100.00
				Vendor 01868 - JESSICA GOLLWITZER Total:	**$100.00**
Vendor: 01517 - K & K CHEMICAL SUPPLY LLC					
68119	HAND SANITIZER - WW - COVID19	520-670-6165			$195.75
68168	HAND SANITIZER - W - COVID19	510-660-6165			$186.75
				Vendor 01517 - K & K CHEMICAL SUPPLY LLC Total:	**$382.50**
Vendor: 00706 - KANSAS PAYMENT CENTER					
INV0001844	INCOME WITHHOLDING ORDER	100-2130	82782	05/22/2020	$158.31
				Vendor 00706 - KANSAS PAYMENT CENTER Total:	**$158.31**
Vendor: 01869 - KATHLEEN PEARCE					
1180239.003	SHAC SWIM LESSON REFUND - COVID19	100-000-4646			$100.00
				Vendor 01869 - KATHLEEN PEARCE Total:	**$100.00**
Vendor: 00764 - KPERS					
INV0001837	KP & F PENSION	100-2110	DFT0001643	05/22/2020	$9,661.70
INV0001838	KPERS TIER 1 PAYROLL	100-2110	DFT0001644	05/22/2020	$3,984.97
INV0001838	KPERS TIER 1 PAYROLL	510-2110	DFT0001644	05/22/2020	$417.38
INV0001838	KPERS TIER 1 PAYROLL	520-2110	DFT0001644	05/22/2020	$130.37
INV0001839	KPERS TIER 2 PAYROLL	100-2110	DFT0001645	05/22/2020	$2,042.51
INV0001839	KPERS TIER 2 PAYROLL	510-2110	DFT0001645	05/22/2020	$394.49
INV0001839	KPERS TIER 2 PAYROLL	520-2110	DFT0001645	05/22/2020	$184.43
INV0001840	KPERS TIER 3 PAYROLL	100-2110	DFT0001646	05/22/2020	$3,762.07
INV0001840	KPERS TIER 3 PAYROLL	510-2110	DFT0001646	05/22/2020	$86.56
INV0001840	KPERS TIER 3 PAYROLL	520-2110	DFT0001646	05/22/2020	$473.30

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
INV0001841	KPERS 457 PLAN	100-2115	DFT0001647	05/22/2020	$460.63
INV0001842	KPERS 457 PLAN	100-2115	DFT0001648	05/22/2020	$1,795.00
INV0001842	KPERS 457 PLAN	510-2115	DFT0001648	05/22/2020	$60.00
INV0001842	KPERS 457 PLAN	520-2115	DFT0001648	05/22/2020	$30.00
INV0001843	KPERS D & D	100-2110	DFT0001649	05/22/2020	$670.05
INV0001843	KPERS D & D	510-2110	DFT0001649	05/22/2020	$61.51
INV0001843	KPERS D & D	520-2110	DFT0001649	05/22/2020	$53.93
				Vendor 00764 - KPERS Total:	**$24,268.90**
Vendor: 01862 - LIFE SPRING CHURCH					
3857	SHAC AFTER HOURS POOL PARTY REFUND - COVID19	100-000-4645			$400.00
				Vendor 01862 - LIFE SPRING CHURCH Total:	**$400.00**
Vendor: 00841 - LOGAN CONTRACTORS SUPPLY, INC.					
P33350	HAND HELD BLOWER	100-640-6660			$249.95
P33350	MISC EQUIPMENT PARTS	100-640-6750			$134.52
				Vendor 00841 - LOGAN CONTRACTORS SUPPLY, INC. Total:	**$384.47**
Vendor: 01867 - MADALYN WALDEN					
1180241.003	SHAC SWIM LESSON REFUND - COVID19	100-000-4646			$200.00
				Vendor 01867 - MADALYN WALDEN Total:	**$200.00**
Vendor: 01865 - MARK BREMERMAN					
1180237.003	SHAC MEMBERSHIP REFUND - COVID19	100-000-4641			$103.50
				Vendor 01865 - MARK BREMERMAN Total:	**$103.50**
Vendor: 01335 - MAXIMUM SECURITY, INC					
RF 453220	FIRE EXTINGUISHER INSPECTION - SHAC	100-730-6730			$136.95
RF 453520	FIRE EXTINGUISHER INSPECTION - PUBLIC WORKS	100-610-6730			$516.65
RF 453620	FIRE EXTINGUISHER INSPECTION - WASTEWATER PLANT	510-660-6730			$239.58
RF 453620	FIRE EXTINGUISHER INSPECTION - WASTEWATER PLANT	520-670-6730			$239.57
				Vendor 01335 - MAXIMUM SECURITY, INC Total:	**$1,132.75**
Vendor: 00882 - MCANANY, VAN CLEAVE & PHILLIPS					
835612	FORD vs CITY OF SPRING HILL	100-110-7170			$472.50
				Vendor 00882 - MCANANY, VAN CLEAVE & PHILLIPS Total:	**$472.50**
Vendor: 01729 - MEGA INDUSTRIES CORPORATION					
677 SHKS-20200430	VETERANS PARK CONSTRUCTION PAY APP #6	300-000-8000			$115,537.91
				Vendor 01729 - MEGA INDUSTRIES CORPORATION Total:	**$115,537.91**
Vendor: 01872 - MEGAN SIMMONS					
1007822.001	SHAC INTERNET SWIM LESSON REFUND - COVID19	100-000-4646			$55.00
				Vendor 01872 - MEGAN SIMMONS Total:	**$55.00**
Vendor: 00916 - MICHAEL W BAUM					
201513	UNIFORM BOOTS & JEANS FOR NEW HIRE	100-640-5400			$241.96
201512	WORK GLOVES	100-640-6670			$9.99
				Vendor 00916 - MICHAEL W BAUM Total:	**$251.95**
Vendor: 00920 - MICRO CENTER					
7895130	EXTERNAL HARD DRIVE	100-730-8300			$150.99
7924586	USB-C TO 3.5 MM CABLE - COVID19	100-110-6165			$9.99
7955406	3.5 MM EXTENSION CABLES - COVID19	100-110-6165			$30.97
				Vendor 00920 - MICRO CENTER Total:	**$191.95**
Vendor: 00921 - MICROCOMM					
13951	SCADA SERV CONTRACT RENEWAL- 12/20/2019-12/19/2021	510-660-7190			$5,150.00
13951	SCADA SERV CONTRACT RENEWAL- 12/20/2019-12/19/2021	520-670-7190			$5,150.00
				Vendor 00921 - MICROCOMM Total:	**$10,300.00**
Vendor: 00930 - MID-STATES MATERIALS, LLC					
92150	GRAVEL FOR LINCOLN STREET PROJECT	300-000-8000			$250.72
92599	GRAVEL FOR LINCOLN STREET PROJECT	300-000-8000			$624.89
				Vendor 00930 - MID-STATES MATERIALS, LLC Total:	**$875.61**
Vendor: 00974 - MUTUAL OF OMAHA INSURANCE CO					
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-100-5120	DFT0001654	05/22/2020	$16.20
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-140-5120	DFT0001654	05/22/2020	$5.40
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-200-5120	DFT0001654	05/22/2020	$16.20
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-220-5120	DFT0001654	05/22/2020	$5.40
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-300-5120	DFT0001654	05/22/2020	$5.40
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-310-5120	DFT0001654	05/22/2020	$5.40
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-500-5120	DFT0001654	05/22/2020	$27.00

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-610-5120	DFT0001654	05/22/2020	$10.80
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-620-5120	DFT0001654	05/22/2020	$21.60
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-640-5120	DFT0001654	05/22/2020	$21.60
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-710-5120	DFT0001654	05/22/2020	$1.76
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-720-5120	DFT0001654	05/22/2020	$4.45
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-730-5120	DFT0001654	05/22/2020	$2.70
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-800-5120	DFT0001654	05/22/2020	$70.20
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	100-810-5120	DFT0001654	05/22/2020	$5.40
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	510-660-5120	DFT0001654	05/22/2020	$18.90
001081882646	GROUP LIFE/AD&D PREMIUMS - MAY 2020	520-670-5120	DFT0001654	05/22/2020	$24.30
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-100-5120	DFT0001655	05/22/2020	$16.20
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-140-5120	DFT0001655	05/22/2020	$5.40
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-200-5120	DFT0001655	05/22/2020	$16.20
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-220-5120	DFT0001655	05/22/2020	$5.40
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-300-5120	DFT0001655	05/22/2020	$5.40
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-310-5120	DFT0001655	05/22/2020	$5.40
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-500-5120	DFT0001655	05/22/2020	$27.00
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-610-5120	DFT0001655	05/22/2020	$10.80
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-620-5120	DFT0001655	05/22/2020	$21.60
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-640-5120	DFT0001655	05/22/2020	$21.60
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-710-5120	DFT0001655	05/22/2020	$1.76
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-720-5120	DFT0001655	05/22/2020	$4.45
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-730-5120	DFT0001655	05/22/2020	$2.70
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-800-5120	DFT0001655	05/22/2020	$70.20
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	100-810-5120	DFT0001655	05/22/2020	$5.40
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	510-660-5120	DFT0001655	05/22/2020	$16.20
001089666785	GROUP LIFE/AD&D PREMIUMS - JUN 2020	520-670-5120	DFT0001655	05/22/2020	$21.60
		Vendor 00974 - MUTUAL OF OMAHA INSURANCE CO Total:			**$520.02**
Vendor: 00988 - NATIONAL SIGN COMPANY INC.					
IN-193451	SIGN BASE	100-640-6600			$49.95
IN-193511	REGULATION SIGNS AT VETERANS PARK	100-620-6600			$439.50
		Vendor 00988 - NATIONAL SIGN COMPANY INC. Total:			**$489.45**
Vendor: 01864 - NIKKI WILLIAMS					
1180235.003	SHAC MEMBERSHIP REFUND - COVID19	100-000-4641			$103.50
		Vendor 01864 - NIKKI WILLIAMS Total:			**$103.50**
Vendor: 01008 - NPG NEWSPAPERS, INC					
6642434	PUBLICATIONS - 2020-01 ADOPT SMALL CELL STANDARDS	100-110-7130			$46.40
6643722	PUBLICATIONS-CH ORD 38 PAWNBROKER & PREC METAL DEALER	100-110-7130			$299.90
6645279	PUBLICATIONS - 2020-02 ANNEXATION - ABBOTT	100-110-7130			$53.76
		Vendor 01008 - NPG NEWSPAPERS, INC Total:			**$400.06**
Vendor: 01012 - OCCUPATIONAL HEALTH CENTERS OF KANSAS, P.A.					
1012378708	PRE-EMPLOYMENT PHYSICAL - NEW HIRE	100-800-7190			$781.00
		Vendor 01012 - OCCUPATIONAL HEALTH CENTERS OF KANSAS, P.A. Total:			**$781.00**
Vendor: 01013 - OFFICE DEPOT, INC					
449551850001	ADMIN/OPERATING SUPPLIES - CH	100-110-6110			$169.13
449551850001	DISINFECTANT WIPES & HAND SANITIZER FOR COVID19	100-110-6165			$76.18
449554947001	ADMIN/OPERATING SUPPLIES - CH	100-110-6110			$6.89
449733216001	ADMIN/OPERATING SUPPLIES - CH	100-110-6110			$6.39
497714444001	ADMIN/OPERATING SUPPLIES - CH	100-110-6110			$60.75
497714444001	PTA SLIPS FOR RESCHEDULED COURT - COVID19	100-110-6165			$37.61
497714682001	ADMIN/OPERATING SUPPLIES - CH	100-110-6110			$11.83
		Vendor 01013 - OFFICE DEPOT, INC Total:			**$368.78**
Vendor: 01035 - OLATHE WINWATER COMPANY					
149263 00	DRAINAGE PROJECT ON 199TH ST	520-670-6610			$1,140.00
		Vendor 01035 - OLATHE WINWATER COMPANY Total:			**$1,140.00**
Vendor: 01051 - PACE ANALYTICAL SERVICES, LLC					
2060104185	LAB ANALYSIS - ROUTINE INFLUENT TESTING	520-670-7560			$275.00
		Vendor 01051 - PACE ANALYTICAL SERVICES, LLC Total:			**$275.00**
Vendor: 01403 - PATTI BANKS ASSOCIATES					
P17059.03-14	ENGINEERING SERVICES - VETERAN'S PARK - APRIL 2020	300-000-7150			$1,824.00
P19013-13	ENGINEERING SERVICES - PARKS MATER PLAN - 04/2020	210-2270			$800.00
		Vendor 01403 - PATTI BANKS ASSOCIATES Total:			**$2,624.00**

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
Vendor: 01082 - POMP'S TIRE SERVICE, INC.					
1180039146	ALIGNMENT FOR UNIT #208	100-640-6720			$89.95
				Vendor 01082 - POMP'S TIRE SERVICE, INC. Total:	**$89.95**
Vendor: 01132 - REINDERS, INC					
5053403-00	PESTICIDE	100-620-6645			$507.58
				Vendor 01132 - REINDERS, INC Total:	**$507.58**
Vendor: 01133 - REJIS COMMISSION					
438650	LEWEB SUBSCRIPTION RENEWAL - MAY 2020	100-800-6130			$44.83
				Vendor 01133 - REJIS COMMISSION Total:	**$44.83**
Vendor: 00119 - RODNEY BREEZE					
3055	VALVE MAINTENANCE - GROUND STORAGE & MASTER METER	510-660-6750			$2,703.14
				Vendor 00119 - RODNEY BREEZE Total:	**$2,703.14**
Vendor: 01163 - RURAL WATER DISTRICT #2 MI CO					
INV0001868	WATER UTILITY- 22711 S WOODLAND - 04/09-05/06/2020	520-670-7620			$22.03
06012020-2	WATER PURCHASE CHARGE - MAY 2020	510-660-7580			$31,014.01
				Vendor 01163 - RURAL WATER DISTRICT #2 MI CO Total:	**$31,036.04**
Vendor: 01185 - SCOTWOOD INDUSTRIES, INC					
0512120-IN	TREATED BULK ROAD SALT	205-640-6635			$2,930.55
0512121-IN	TREATED BULK ROAD SALT	205-640-6635			$2,924.25
0512122-IN	TREATED BULK ROAD SALT	205-640-6635			$2,387.70
0512123-IN	TREATED BULK ROAD SALT	205-640-6635			$2,573.55
0514993-IN	TREATED BULK ROAD SALT	205-640-6635			$3,105.90
0514995-IN	TREATED BULK ROAD SALT	205-640-6635			$2,559.90
0514996-IN	TREATED BULK ROAD SALT	205-640-6635			$2,809.80
0514997-IN	TREATED BULK ROAD SALT	205-640-6635			$2,707.95
				Vendor 01185 - SCOTWOOD INDUSTRIES, INC Total:	**$21,999.60**
Vendor: 01748 - SPRAYER SPECIALTIES, INC					
1091804-IN	MAINTENANCE FOR BOOM SPRAYER	100-620-6750			$58.77
				Vendor 01748 - SPRAYER SPECIALTIES, INC Total:	**$58.77**
Vendor: 00785 - STATE OF KANSAS TREASURER					
53251	COURT FEES - MAY 2020	100-2251			$112.50
53251	COURT FEES - MAY 2020	100-2252			$8.00
53251	COURT FEES - MAY 2020	100-2255			$88.00
53251	COURT FEES - MAY 2020	100-2255			$45.00
53251	COURT FEES - MAY 2020	100-2255			$314.00
53251	COURT FEES - MAY 2020	100-2257			$100.00
				Vendor 00785 - STATE OF KANSAS TREASURER Total:	**$667.50**
Vendor: 01705 - SUDDENLINK					
INV0001850	COMMUNICATION - PD LOBBY - 05/26-06/25/2020	100-800-7622	DFT0001672	06/01/2020	$43.06
				Vendor 01705 - SUDDENLINK Total:	**$43.06**
Vendor: 01635 - T2 HOLDINGS, LLC					
100260118	SHRED BIN RENTAL AND DISPOSAL	100-110-7190			$20.00
100260118	SHRED BIN RENTAL AND DISPOSAL	100-800-7190			$40.00
100260118	SHRED BIN RENTAL AND DISPOSAL	510-660-7190			$10.00
100260118	SHRED BIN RENTAL AND DISPOSAL	520-670-7190			$10.00
				Vendor 01635 - T2 HOLDINGS, LLC Total:	**$80.00**
Vendor: 01788 - TRANSYSTEMS CORPORATION					
INV-0003578420	199TH & RIDGEVIEW ROUNDABOUT - APR 2020	206-000-7150			$27,537.70
				Vendor 01788 - TRANSYSTEMS CORPORATION Total:	**$27,537.70**
Vendor: 01398 - VANCE BROTHERS, INC					
IC00066207	HAND TOOLS	100-640-6660			$157.50
IC00066207	SEALER FOR NICHOLS ST	205-640-6630			$300.00
				Vendor 01398 - VANCE BROTHERS, INC Total:	**$457.50**
Vendor: 01399 - VERIZON WIRELESS					
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-100-7622	DFT0001673	05/04/2020	$168.10
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-110-6165	DFT0001673	05/04/2020	$546.60
9853180881	EQUIPMENT BILL INCENTIVE CREDIT	100-110-6165	DFT0001673	05/04/2020	-$150.00
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-200-7622	DFT0001673	05/04/2020	$84.05
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-220-7622	DFT0001673	05/04/2020	$44.04
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-300-7622	DFT0001673	05/04/2020	$44.04
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-500-7622	DFT0001673	05/04/2020	$260.51
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-610-7622	DFT0001673	05/04/2020	$84.05

Payable Number	Description (Item)	Account Number	Payment Number	Payment Date	Amount
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-620-7622	DFT0001673	05/04/2020	$70.24
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-640-7622	DFT0001673	05/04/2020	$70.24
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-720-7622	DFT0001673	05/04/2020	$52.40
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-730-7622	DFT0001673	05/04/2020	$70.24
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	100-800-7622	DFT0001673	05/04/2020	$656.68
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	510-660-7622	DFT0001673	05/04/2020	$64.04
9853180881	EQUIPMENT BILL INCENTIVE CREDIT	520-670-7622	DFT0001673	05/04/2020	-$150.00
9853180881	COMMUNICATION - GROUP CELL - 04/24-05/23/2020	520-670-7622	DFT0001673	05/04/2020	$371.48
			Vendor 01399 - VERIZON WIRELESS Total:		**$2,286.71**
Vendor: 01429 - VISA					
INV0001863	GOTOMEETING BUS - A/V CONFERENCING -BROADBAND -COVID19	100-110-6165	DFT0001657	05/11/2020	$20.81
INV0001863	AMAZON - USB C TO DISPLAYPORT CABLES - COVID19	100-110-6165	DFT0001657	05/11/2020	$29.98
INV0001863	AMAZON - USB C TO DISPLAYPORT CABLES - COVID19	100-110-6165	DFT0001657	05/11/2020	$50.97
INV0001863	AMAZON - USB C TO DISPLAYPORT CABLES - COVID19	100-110-6165	DFT0001657	05/11/2020	$68.29
INV0001863	AMAZON - 3 UNIVERSAL DOCKING STATIONS - COVID19	100-110-6165	DFT0001657	05/11/2020	$569.97
INV0001863	AMAZON - USB C TO DISPLAYPORT CABLE-REFUND-COVID19	100-110-6165	DFT0001657	05/11/2020	-$50.97
INV0001863	EXCLAIMER - EMAIL SIGNATURE SOFTWARE RENEWAL	100-220-6130	DFT0001657	05/11/2020	$648.00
INV0001863	TREND MICRO - ANTIVIRUS RENEWAL - ENDPOINT DEVICES	100-220-6130	DFT0001657	05/11/2020	$2,258.75
INV0001863	GUMROAD - SECURITY CONFIGURATION TOOL KIT	100-220-7160	DFT0001657	05/11/2020	$149.00
INV0001863	BARCODES - WAX RIBBON FOR EVIDENCE PRINTER - PD	100-800-6110	DFT0001657	05/11/2020	$25.80
INV0001863	BARCODES - PRINTING LABELS FOR EVIDENCE PRINTER - PD	100-800-6110	DFT0001657	05/11/2020	$45.00
			Vendor 01429 - VISA Total:		**$3,815.60**
Vendor: 01444 - VISA					
INV0001865	PRICE CHOPPER - DISINFECTANT - COVID19	100-110-6165	DFT0001659	05/11/2020	$6.98
INV0001865	DOLLAR GENERAL - BLEACH & SPRAY BOTTLES - COVID19	100-110-6165	DFT0001659	05/11/2020	$12.40
INV0001865	KANSAS CITY STAR - DIGITAL SUBSCRIPTION - APR 2020	100-110-7700	DFT0001659	05/11/2020	$3.99
			Vendor 01444 - VISA Total:		**$23.37**
Vendor: 01688 - VISA					
INV0001864	AMAZON -SPRAY BTLS FOR LIQD HAND SANITIZER - COVID19	100-110-6165	DFT0001658	05/11/2020	$18.99
INV0001864	AMAZON - FACE MASKS FOR EMPLOYEES - COVID19	100-110-6165	DFT0001658	05/11/2020	$478.00
			Vendor 01688 - VISA Total:		**$496.99**
Vendor: 01738 - VISA					
INV0001862	GET WELL FLOWERS FROM COUNCIL	100-120-6040	DFT0001656	05/11/2020	$35.00
			Vendor 01738 - VISA Total:		**$35.00**
Vendor: 01465 - WATER DISTRICT #7					
INV0001867	WATER UTILITY SERV -22785 W 220TH- 04/17-05/21/2020	520-670-7620			$22.77
			Vendor 01465 - WATER DISTRICT #7 Total:		**$22.77**
Vendor: 01490 - WILLIAM L WHITESELL					
111675373	VISION BENEFIT	100-620-5120			$250.00
			Vendor 01490 - WILLIAM L WHITESELL Total:		**$250.00**
Vendor: 01505 - WITHHOLDING TAX					
INV0001845	KANSAS WITHHOLDING TAX	100-2100	DFT0001650	05/22/2020	$3,981.38
INV0001845	KANSAS WITHHOLDING TAX	510-2100	DFT0001650	05/22/2020	$164.15
INV0001845	KANSAS WITHHOLDING TAX	520-2100	DFT0001650	05/22/2020	$180.36
			Vendor 01505 - WITHHOLDING TAX Total:		**$4,325.89**
				Grand Total:	**$317,115.27**

AGENDA ITEM REVIEW SHEET

TO: GOVERNING BODY
SUBMITTED BY: PATRICK BURTON, DIRECTOR OF COMMUNITY DEVELOPMENT
MEETING DATE: JUNE 11, 2020
DATE: MAY 28, 2020

Consent Action: Approval of Commercial Fireworks Retail Sales permit FS-000249-2020 for Tim Durkin.

Issue: Tim Durkin has submitted a CFRS application for the sale of fireworks at 20559 S. Lone Elm Road at The Bowery Event Center. This application was received after the May 8th deadline, however, after consideration of the matter, it has been placed on the agenda for consideration by the Governing Body.

Background: This is second year for Mr. Durkin to operate at this site. Staff has reviewed the application as well as supporting documents, and everything is in compliance with the city ordinance.

Analysis: All required documents have been received by the Community Development Department along with the required permit fee. Review of the application shows the site to be in compliance with the provisions of the amended ordinance authorizing the sale of fireworks.

Alternatives: Denial, approval or remand back to staff

Legal Review: N/A

Funding Review or Budgetary Impact: N/A

Recommendation: Staff recommends approval of the CFRS permit FS-000249-2020 for, Tim Durkin, located at 20559 S. Lone Elm Road at The Bowery Event Center.

Attachments: Application & documents

THE CITY OF
SpringHill
KANSAS

Application for Consumer Fireworks Retail Sales

Community Development/Planning Dept.
401 N. Madison St., Spring Hill, KS 66083
(913) 592-3657 • (913) 592-5040 FAX
planning@springhillks.gov • www.springhillks.gov

RECEIVED
MAY 27 2020
CITY OF SPRING HILL, KS
TIME_____ INITIALS_____

APPLICATION MUST BE RECEIVED BY MAY 8, 2020

PERMIT NO. FS-000249-2020

CONSUMER FIREWORKS RETAIL SALES FACILITY (CFRS) - LOCATION/ADDRESS/NAME:
Bull Creek distillery
20559 S lone elm rd Spring Hill ks 66083

APPLICANT:
NAME Tim Durkin
ADDRESS 722 Ash St.
CITY Eudora STATE KS ZIP 66025
MAILING ADDRESS (if different from above) same
CITY _____ STATE _____ ZIP _____
PHONE 785-218-6827 E-MAIL Td542@aol.com

PROPERTY OWNER:
NAME Mike Denny
ADDRESS 20559 S lone elm rd
CITY Spring Hill STATE ks ZIP 66083
MAILING ADDRESS (if different from above) _____
CITY _____ STATE _____ ZIP _____
PHONE 913-231-7111 E-MAIL mike@thebowerhc.com

The following documentation must be submitted with this application:

- Certified Check for $1,000.00 for each CFRS Facility
- Proof of insurance reflecting a minimum of $1,000,000 commercial and general liability coverage.
- A copy of "Retailers Sales Tax Registration Certificate" from the State of Kansas Department of Revenue.
- A detailed site plan for each facility. (See page 2 for details.)

I have read, understand and agree to comply with the regulations of the City of Spring Hill, KS relating to a Consumer Fireworks Retail Sales Facility (CFRS) as approved by the Governing Body in *Chapter 6, Article 1* of the Spring Hill Municipal Code.

APPLICANT'S SIGNATURE _____ DATE 5/27/2020

PROPERTY OWNER'S SIGNATURE _____ DATE 5/27/20

OFFICE USE ONLY

Fee: $1,000 Received by Amy Long Date 5/27/20 Receipt # REC-000431-2020
City Council Action: ☐ *Approved* ☐ *Denied* Date 6/11/20
Community Development Director: _____ Date _____
Public Works Director _____ Date _____
Fire Department _____ Date _____

X Initial

Untitled Map
Write a description for your map.
Legend
Path Measure
Polygon Measure
S Lone Elm Rd
Parking 7389.4 SQ FT
Tent to Building 118.2 FT
Tent to Building 161.6 FT
Trash Can 5.0 EA
Fire Extinguisher 21.0 EA
Drive Entrance 767.5 SQ FT
100 ft
Google Earth

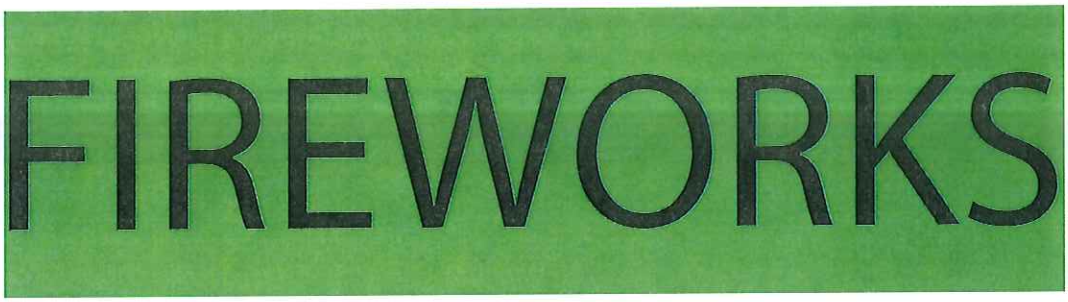
Untitled Map
Write a description for your map.
Legend
Path Measure
Polygon Measure
7
20559 S Lone Elm Rd
S Lone Elm Rd
Signage
32.0 SQ FT
Google Earth
© 2018 Google
200 ft
N

X Initial

Additional information for Item 6. Fireworks Permit

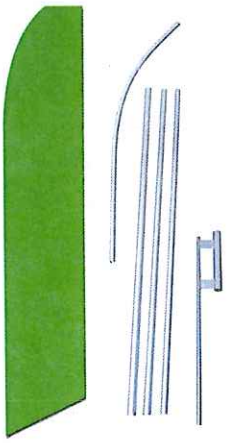
Durkin - Bull Creek Distillery - Fireworks Stand Signage

X Initial



On top of tent 16' tall X 60' wide.

X5 - 12' feather flags located at driveway entrance



X4 - 15' feather flags located at driveway entrance

X1 - 4' X 8' Banner located at Lone Elm entrance

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/4/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Britton Gallagher
One Cleveland Center, Floor 30
1375 East 9th Street
Cleveland OH 44114

CONTACT NAME:
PHONE (A/C, No, Ext): 216-658-7100 **FAX (A/C, No):** 216-658-7101
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Everest Indemnity Insurance Co.	10851
INSURER B : Arch Speciality Ins Co	21199
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED 2567

Jake's Fireworks Inc.
1500 E 27th Terr.
Pittsburg KS 66762

COVERAGES **CERTIFICATE NUMBER:** 969561216 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY**			SI8ML01699-201	2/15/2020	2/15/2021	EACH OCCURRENCE	$1,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$500,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$1,000,000
							GENERAL AGGREGATE	$2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$2,000,000
	POLICY PRO-JECT X LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS / NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
B	**UMBRELLA LIAB** X OCCUR			UXP1037038-00	2/15/2020	2/15/2021	EACH OCCURRENCE	$4,000,000
	X **EXCESS LIAB** CLAIMS-MADE						AGGREGATE	$4,000,000
	DED RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						WC STATU-TORY LIMITS / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					E.L. EACH ACCIDENT	$
							E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Additional Insured extension of coverage is provided by above referenced General Liability policy where required by written agreement.
Sales Location: 20559 S Lone Elm Road, Spring Hill, KS 66083;
Land Owner: Mike Denny, 20559 S Lone Elm Road, Spring Hill, KS 66083;
Term: February 15, 2020 through February 14, 2021
The Certificate Holder and above listed are Additional Insureds with respects to General Liability policy as required by written contract.

CERTIFICATE HOLDER

Timothy Durkin
722 Ash Street
Eudora KS 66025

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Division of Taxation
120 SE 10th AVE
PO BOX 3506
Topeka KS 66601-3506

STATE OF KANSAS

Governor Jeff Colyer, M.D.
Samuel M. Williams, Secretary

DEPARTMENT OF REVENUE
PHONE: 785-368-8222
FAX: 785-296-2073
www.ksrevenue.org

August 27, 2018

DURKIN TACTICAL LLC
722 ASH ST
EUDORA, KS 66025-9556

Attached is your Kansas Retailers' Sales tax registration certificate. Refer to the next page to see how to use your certificate. If you close or sell your business, please return this certificate along with a Discontinuation of Business form, which can be found on our web site.

You are required by Kansas law to file returns electronically. To do so or make payments electronically, visit our web site at http://www.ksrevenue.org/eservices.html or www.webtax.org. See the next page for more details.

KANSAS DEPARTMENT OF REVENUE **www.ksrevenue.org**
Division of Taxation

RETAILERS' SALES TAX REGISTRATION CERTIFICATE

Durkin Tactical Llc
722 Ash St
Eudora, KS 66025

Tax Account Number: 004-XXXXX0288F-01
Inception Date: 01/01/2018
Filing Frequency: Monthly

This Registration Certificate is valid until canceled and is not transferable.

Agenda Item Review Sheet

To: Mayor and City Council
From: Frank Jenkins Jr., City Attorney
Date: June 3, 2020
Meeting: June 11, 2020

Formal Item: Consider adoption of Charter Ordinance No._____ exempting the City from K.S.A. 79-41a04(d) relating to the Local Alcoholic Liquor Fund. The purpose of the exemption is to enable the City to subsequently adopt a regular ordinance on the same subject matter including substitute provisions to apply specifically to Spring Hill.

Issue: Expanding the authorized uses of the tax revenues from the Local Alcoholic Liquor Fund.

Background:

1. In 1979, the Legislature imposed a 10% tax on gross receipts from the sale of alcoholic liquor. Drinking establishments, caterers and temporary permit holders collect the tax and remit it to the Department of Revenue. The State returns 70% of the money to the localities where the money was collected.

2. The City is to deposit the full amount of its share of the taxes into the following funds:

   A. 1/3 – General Fund
   B. 1/3 – Special parks and recreation fund
   C. 1/3 – Special alcohol and drug programs fund

3. With respect to the Special alcohol and drug programs fund (Item 2(C)), K.S.A. 79-41a04(d) limits the use of the funds as follows:

   > "Moneys in the special alcohol and drug programs fund shall be expended only for the purchase, establishment, maintenance or expansion of service or programs whose principal purpose is alcohol and drug abuse or treatment of persons who are alcoholics or drug abuser or are in danger becoming alcoholic or drug abuser."

Analysis:

The City Staff has determine that in order to provide greater flexibility regarding the use of the special alcohol and drug programs fund, City Staff recommends that the Governing Body consider adopting an ordinance that would include additional programs and services.

To accomplish this objective, the following is the two-step process:

1. Charter Ordinance. The City would adopt a Charter Ordinance that exempts the City from K.S.A. 79-41a04(d). A Charter Ordinance is different from a regular ordinance in the following ways:

    A. Ordinance is to be approved by a 2/3 vote of the Governing Body, which includes the Mayor.
    B. Ordinance is published twice.
    C. Ordinance does not become effective until 61 days after the last publication date.
    D. Ordinance is subject to the filing of a referendum protest petition. If the petition is sufficient, the ordinance will only become effective upon approval by a majority of the electors.

    Attached is a copy of the proposed Charter Ordinance (Exhibit A).

2. Regular Ordinance. During the 61-day waiting period, City Staff would prepare and present a regular ordinance for consideration to the Governing Body that would contain substitute or additional provisions to the Local Alcohol Liquor Fund statute.

Recommendation: Adoption of Charter Ordinance No. _____.

Funding and Budgeting Impact: Not applicable

Attachment: Charter Ordinance (Exhibit A)

EXHIBIT A

CHARTER ORDINANCE NO.2020-_____

A CHARTER ORDINANCE EXEMPTING THE CITY OF SPRING HILL KANSAS FROM THE PROVISIONS OF K.S.A. 79-41a04(d) PERTAINING TO THE LOCAL ALCOHOLIC LIQUOR FUNDS; DISTRIBUTION OF MONEYS

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SPRING HILL, KANSAS:

SECTION ONE: The City of Spring Hill, Kansas by the power vested in it by Article 12, Section 5 of the Constitution of the State of Kansas hereby elects to and does exempt itself from and make inapplicable to it the provisions of K.S.A. 79-41a04(d) which applies to the City but not uniformly to all cities.

SECTION TWO: The City of Spring Hill, Kansas may enact by regular ordinance substitute and provide additional provisions in lieu of those which it hereby exempts itself.

SECTION THREE: This Charter Ordinance shall be published once each week for two consecutive weeks in the official city newspaper.

SECTION FOUR: This Charter Ordinance shall take effect sixty-one (61) days after the final publication unless a sufficient petition for a referendum is filed, requiring a referendum to be held on the ordinance as provided by Article 12, Section 5, Subsection (c)(3) of the Constitution of the State of Kansas, in which case this charter Ordinance shall become effective upon approval by the majority of the electors voting thereon.

Passed by the Governing Body, not less than two-thirds of the members elect voting in favor thereof, this _____ day of _____, 2020.

Approved by the Mayor this ____day of _____2020

_____
Steven M. Ellis, Mayor

Attest:

_____

Glenda Gerrity, City Clerk

(SEAL)

Approved as to form:

_____

Frank H. Jenkins, Jr. City Attorney

AGENDA ITEM REVIEW SHEET

TO: GOVERNING BODY
SUBMITTED BY: PATRICK BURTON, COMMUNITY DEVELOPMENT DIRECTOR
MEETING DATE: JUNE 11, 2020
DATE: JUNE 2, 2020

Formal Action: Annexation Ordinance No. 2020-____ authorizing the annexation of land located at the southwest corner of 201st Street and Webster Street.

Issue: Greg Prieb, II, owner, has petitioned for annexation of the property located at the southwest corner 201st Street and Webster Street, known as 20110 Webster Street.

Background: The tract of land being requested for annexation is adjoining to the city limits and is eligible for annexation under Kansas State Law. The owner has signed the "Petition and Consent for Annexation".

Analysis: Annexation of this property is desirable to both the owner and city. From the owner's point of view, it will allow for future development on the property. The City will gain tax value, and partially fill in an area that is currently surrounded by the city limits. According to state statute, property annexed into a city is zoned in a district that is similar to existing county zoning. This property will be zoned R-R which is compatible with the surrounding area.

Alternatives: Denial of the annexation

Legal Review: City Attorney Frank Jenkins has reviewed the documents submitted for annexation.

Funding Review or Budgetary Impact:

Recommendation: Staff recommends adoption of annexation ordinance #

Attachments: Draft ordinance
Exhibit A, Legal Description

ORDINANCE NO. _____

AN ORDINANCE ANNEXING LAND TO THE CITY OF SPRING HILL, KANSAS.

WHEREAS, the following described land is located in Johnson County, Kansas, adjoins the City; and

WHEREAS, the following described land meets one or more of the conditions prescribed by K.S.A 12-520; and

WHEREAS, the governing body of the City of Spring Hill, Kansas finds it advisable to annex such land.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SPRING HILL, KANSAS:

SECTION 1. That the following described land meeting the conditions for annexation prescribed in K.S.A 12-520 is hereby annexed and made a part of the City of Spring Hill, Kansas:

All that part of the Northwest Quarter of Section 11, Township 15 South, Range 23 East, in the City of Spring Hill, Johnson County, Kansas, being more particularly described as follows:

Commencing at the Southeast corner of the Northwest Quarter of said Section 11; thence N 2°11'16" W, along the East line of the Northwest Quarter of said Section 11, a distance of 1137.44 feet; thence S 87°48'44" W, a distance of 37.61 feet to a point on the Westerly right-of-way line of Old U.S. 169 Highway, as now established, said point also being the point of beginning; thence S 87°59'00" W, a distance of 371.02 feet; thence N 1°12'51" W, a distance of 612.95 feet to a point on the North line of the South 1750.00 feet of the Northwest Quarter of said Section 11; thence N 88°00'49" E, along the North line of the South 1750.00 feet of the Northwest Quarter of said Section 11, a distance of 337.62 feet to a point on the Westerly right-of-way line of said Old U.S. 169 Highway; thence Southerly along the Westerly right-of-way line of said Old U.S. 169 Highway, for the following four (4) courses; thence Southerly on a curve to the right, said curve having an initial tangent bearing of S 13°25'14" E and a radius of 680.00 feet, an arc distance of 146.00 feet; thence S 1°01'46" E, a distance of 60.08 feet; thence S 23°58'11" E, a distance of 49.07 feet; thence S 1°05'16" E, a distance of 362.07 feet to the point of beginning, containing 5.1116 acres, more or less, of unplatted land.

INCLUDING:

Any and all adjacent right of way, and said land is hereby annexed and made a part of the City of Spring Hill, Kansas

SECTION 2. This ordinance shall take effect and be in force from and after its publication in the official city newspaper.

SECTION 3. Upon passage and publication of the ordinance, the city clerk shall, pursuant to K.S.A 12-522, file a certified copy of such ordinance with the County Clerk, the Register of Deeds, and the County Election Commissioner of Johnson County, Kansas. A certified copy of such ordinance shall also be filed with the Johnson County Election Commissioner. No fee

shall be charged for such filing, and the register of deeds shall file, but not record, a certified copy of this ordinance with him or her.

PASSED BY THE CITY COUNCIL this _____ day of _____, 2020.

APPROVED BY THE MAYOR this _____ day of _____, 2020.

_____
Steven M. Ellis, Mayor

ATTEST:

_____
Glenda Gerrity, City Clerk

APPROVED AS TO FORM:

_____
Frank H. Jenkins, Jr., City Attorney

Note to publisher: Please publish one (1) time in the official newspaper. After publication, please send one (1) proof of publication to the city clerk, Glenda Gerrity, P.O. Box 424, Spring Hill, Kansas 66083, and one (1) proof of publication to the city attorney, Frank H. Jenkins, Jr., LOWE LAW FIRM, LLP, 105 S. Kansas Avenue, Olathe, Kansas 66051-0580.

EXHIBIT A

All that part of the Northwest Quarter of Section 11, Township 15 South, Range 23 East, in the City of Spring Hill, Johnson County, Kansas, being more particularly described as follows:

Commencing at the Southeast corner of the Northwest Quarter of said Section 11; thence N 2°11’16” W, along the East line of the Northwest Quarter of said Section 11, a distance of 1137.44 feet; thence S 87°48’44” W, a distance of 37.61 feet to a point on the Westerly right-of-way line of Old U.S. 169 Highway, as now established, said point also being the point of beginning; thence S 87°59'00" W, a distance of 371.02 feet; thence N 1°12'51" W, a distance of 612.95 feet to a point on the North line of the South 1750.00 feet of the Northwest Quarter of said Section 11; thence N 88°00'49" E, along the North line of the South 1750.00 feet of the Northwest Quarter of said Section 11, a distance of 337.62 feet to a point on the Westerly right-of-way line of said Old U.S. 169 Highway; thence Southerly along the Westerly right-of-way line of said Old U.S. 169 Highway, for the following four (4) courses; thence Southerly on a curve to the right, said curve having an initial tangent bearing of S 13°25’14” E and a radius of 680.00 feet, an arc distance of 146.00 feet; thence S 1°01'46" E, a distance of 60.08 feet; thence S 23°58'11" E, a distance of 49.07 feet; thence S 1°05'16" E, a distance of 362.07 feet to the point of beginning, containing 5.1116 acres, more or less, of unplatted land.

This description was prepared by Scott D. Confer, LS-1249 dated May 28, 2020 for project number 190380.

AGENDA ITEM REVIEW SHEET

TO: GOVERNING BODY
SUBMITTED BY: PATRICK BURTON, DIRECTOR OF COMMUNITY DEVELOPMENT
MEETING DATE: JUNE 11, 2020
DATE: JUNE 4, 2020

Formal Agenda: Site Plan, Spring Hill Middle School #3, SP-000011-2020

Issue: School District USD 230 has submitted a final site plan application for Spring Hill Middle School #3.

BACKGROUND: The applicant USD230 working with the design team lead by the DLR Group, has submitted an application for site plan approval for a middle school to be located at 18685 W. 191st St., at approximately 191st Street and Ridgeview Rd. The project consists of a middle school building, bus drop-off, parking, sports activity area and storm water detention. The complete site plan is included with this staff report.

Analysis: (See attached staff report, PC minutes, site plan drawing) The Spring Hill Planning Commission reviewed the site plan application at their May 7, 2020 meeting. Following the presentation of the staff report, the PC discussed the volume of traffic that would be turning off Ridgeview onto 192nd and 193rd Streets going to the proposed Middle School. The traffic study summary states, "it is expected that the three intersections analyzed as part of this study will operate acceptably without additional lanes in the Full Build scenario". After deliberation about the traffic study and the need to improve 199th St., 191st St. and Ridgeview Rd., the Planning Commission voted unanimously to recommend approval of the site plan with an amendment / addition of a turn lane be constructed on Ridgeview. This additional lane would be utilized by the traffic traveling north on Ridgeview that will be turning west on 192nd and 193rd Streets. A turn lane exhibit and a cost analysis are attached.

With the construction of the round about at 199th and Ridgeview, City Staff is composing a proposed capital improvement project to improve 191st Street from Woodland to Ridgeview Rd., Ridgeview Rd. from 191st to 199th and 199th from Skyview Lane to South Renner Road. Community Development Department anticipates these improvements would start with-in 5 years. The school district has expressed willingness to participate in improving the road system. Staff believes the district has proposed a very realistic site plan, that will have a positive impact on the area and complement the other 2 school sites that are in proximity of the proposed Middle School site.

Alternatives: Approval, denial, table, or remand to the PC for further study

Legal Review: N/A

Funding Review or Budgetary Impact: N/A

AGENDA ITEM REVIEW SHEET

Recommendation: The Spring Hill Planning Commission recommends approval of Spring Hill Middle School #3, SP-000011-2020, site plan, including the addition of a turn lane be constructed on Ridgeview from just south of 193rd St. to just north of 192nd Street.

Attachments: Planning Commission minutes, May 7, 2020
Staff Report, Site Plan, SP-000011-2020
Site Plan
Turn lane exhibit
Turn lane cost analysis

THE FOLLOWING MINUTES ARE SUBJECT TO MODIFICATION
AND ARE NOT OFFICIAL MINUTES
UNTIL APPROVED BY THE SPRING HILL PLANNING COMMISSION

Temporary changes due to COVID-19. — Attendance at meetings was limited to 10 individuals including Commissioners and staff. Public comments, for agenda items only, must be submitted in writing by noon on the day of the meeting to planning@springhillks.gov. There were no comments received. Public access to the meeting was available via phone or by a link that was provided at the City of Spring Hill website www.springhillks.gov.

City of Spring Hill, Kansas
Minutes of Planning Commission Regular Session
May 7, 2020

A Regular Session of the Planning Commission was held at the Civic Center, 401 N. Madison St., Spring Hill, Kansas on May 7, 2020. The meeting convened at 7:03 p.m. with Chairman Stephen Sly presiding, and Amy Long, Planning Secretary recording.

Commissioners in attendance: Stephen Sly
Cindy Squire
Mary Dobson
Troy Mitchell
Janell Pollom
Roger Welsh, II

Commissioners absent: Mike Denny
Josh Erhart

Staff in attendance: Patrick Burton, Director of Community Development
Amy Long, Planning Secretary
Antwone Smoot, I.T.

PLEDGE OF ALLEGIANCE

ROLL CALL

The Secretary called the roll of the Planning Commissioners. With a quorum present, the meeting commenced.

APPROVAL OF THE AGENDA

Motion by Ms. Squire seconded by Mr. Mitchell to approve the agenda as presented.
Roll Call Vote: Dobson- Aye, Welsh- Aye, Sly-Aye, Mitchell- Aye, Pollom-Aye, Squire-Aye
Motion carried 6-0-0

CITIZEN PARTICIPATION

Members of the public are welcome to use this time to make comments about City matters that do not appear on the agenda.

THE FOLLOWING MINUTES ARE SUBJECT TO MODIFICATION
AND ARE NOT OFFICIAL MINUTES
UNTIL APPROVED BY THE SPRING HILL PLANNING COMMISSION

FORMAL COMMISSION ACTION

2. Site Plan (SP-000011-2020) – Spring Hill Middle School #3

Beginning of Staff Report
End of Staff Report

Mr. Patrick Burton presented the staff report as outlined above.

Motion by Mr. Mitchell seconded by Ms. Pollom to approve the Site Plan (SP-000011-2020 with recommendation to add turn lane at 192nd St. and 193rd St. on Ridgeview Rd. north turning west bound.
Roll Call Vote: Dobson- Aye, Welsh- Aye, Sly-Aye, Mitchell- Aye, Pollom-Aye, Squire-Aye
Motion carried 6-0-0

Agenda item 2

SPRING HILL PLANNING COMMISSION
SITE PLAN STAFF REPORT

Case #: SP-000011-2020 **Meeting Date:** May 7, 2020

Description: Spring Hill Middle School #3

Location: 18685 W. 191st Street

Applicant: DLR Group – Josh Erhart

Engineer: RIC Consultant – Chip Corcoran, PE

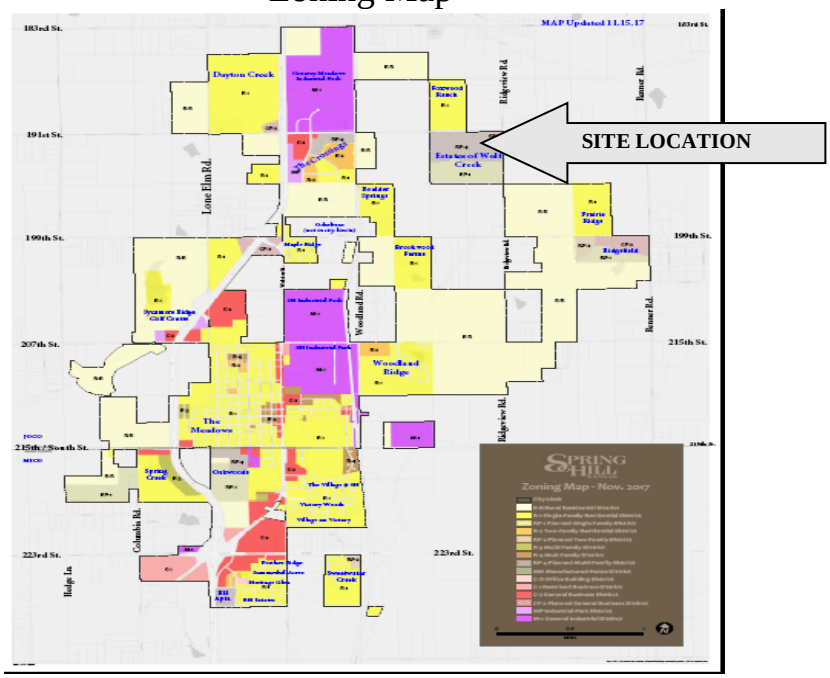
Site Area: 30.56 Acres project site size.

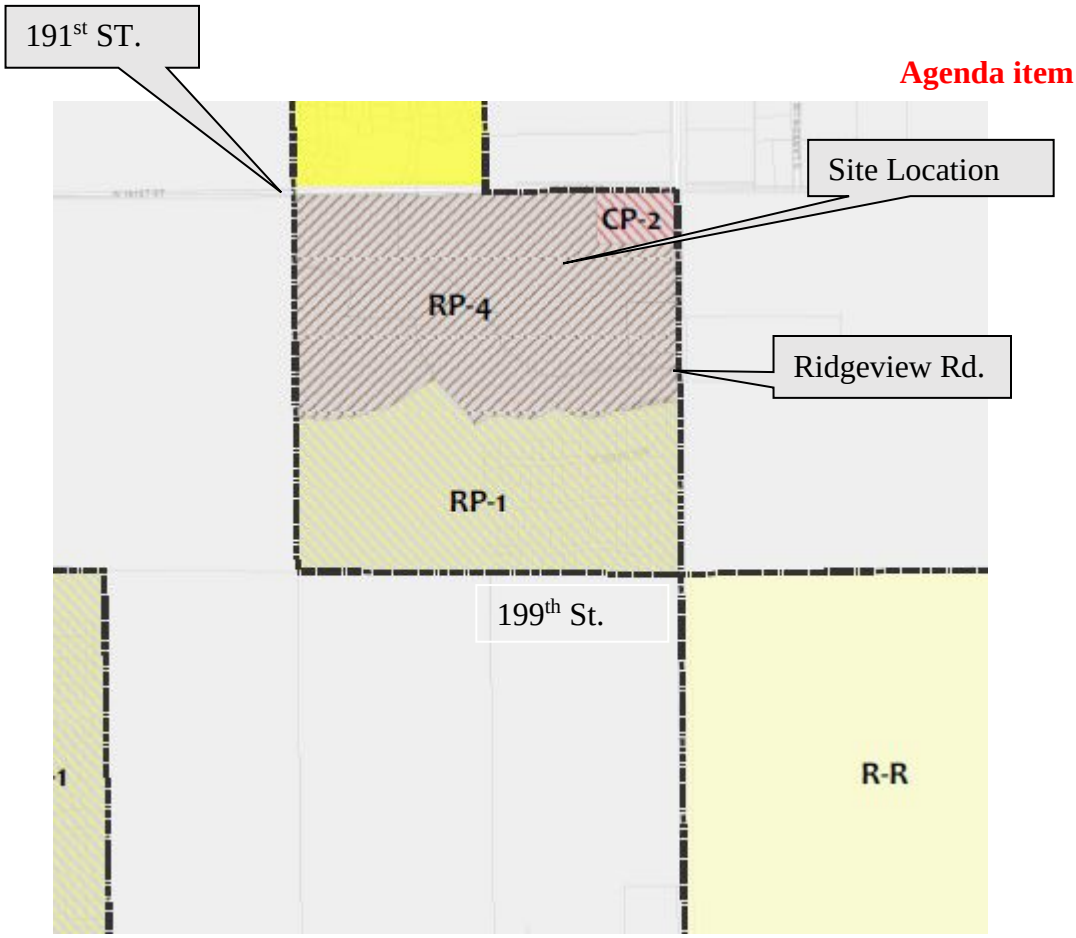
Minimum Lot Area: N/A **Related Case:**

Current Zoning: RP-4 **Proposed Use:** Middle School

	Current Zoning	Existing Land Use	Future Land Use Map
Site:	RP-4	Agricultural	Planned Multi-Family
North:	R-R	Agricultural	Institutional
South:	RP-1	Residential	Mixed-Use Residential
East:	CP-2	Planned General Business	Planned General Business
West:	RP-4	Agricultural	Planned Multi-Family

Zoning Map



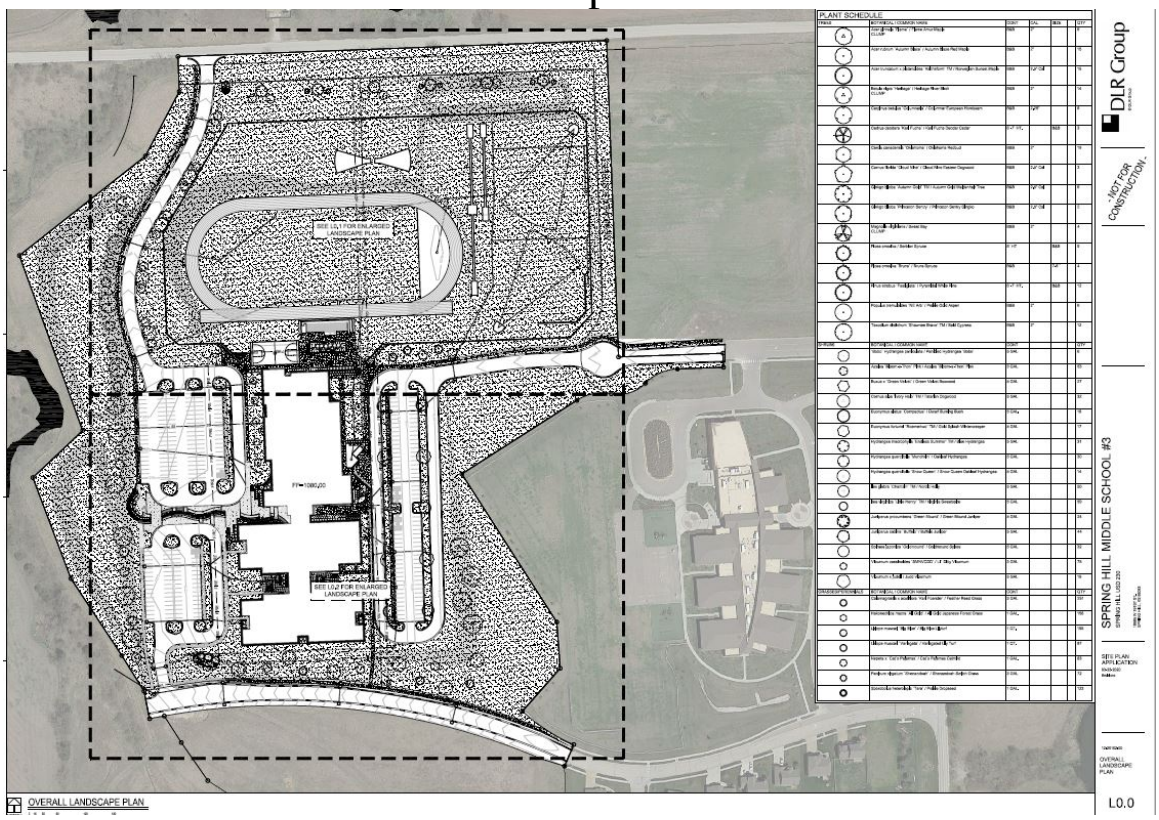


Future Land Use Map

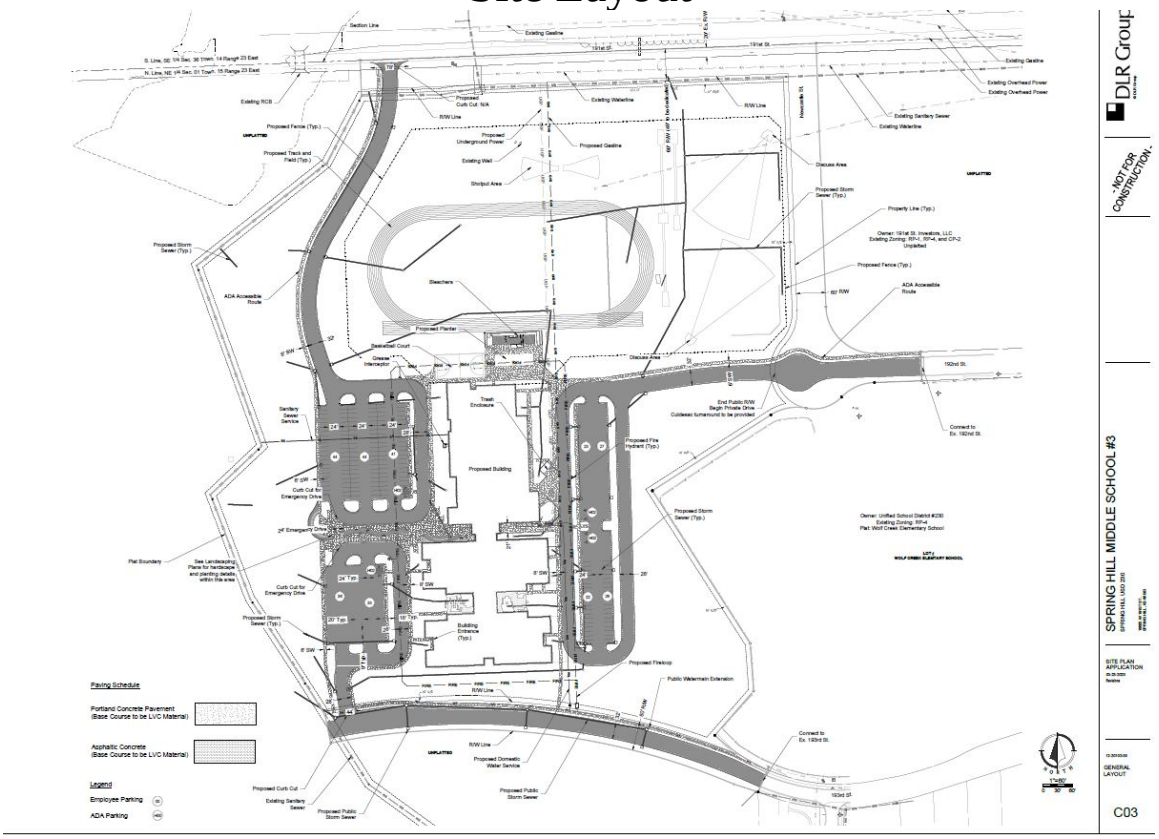
Aerial

191st St
191st St
191
S Ridgeview Rd
Site Location
Wolf Creek Elementary
S Ridgeview Rd
Wolf Creek
Elementary School
Temporarily closed
193rd St
S Ridgeview Rd
W 193rd Terrace
New Castle
W 194th St
W 194th St
W 194th St
age X Y: 237, 97

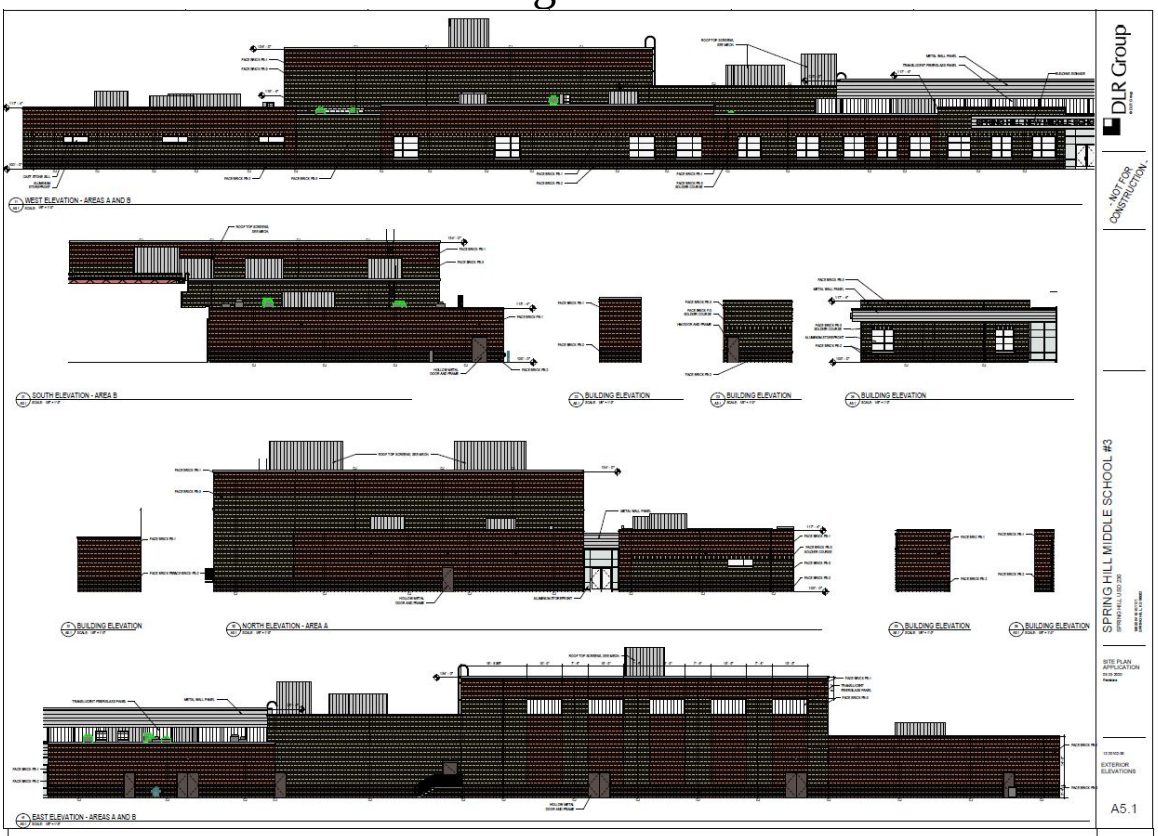
Landscape Plan



Site Layout



Building Elevations



BACKGROUND: The applicant, USD 230 thru their design team, the DLR Group, has submitted an application for site plan approval for a proposed building identified as the Spring Hill Middle School. The project consists of a middle school building, bus drop-off, parking, sports activity area and storm water detention.

As per Section 17.308.C.3, schools are allowed in an RP-4 (Planned Multi-Family) district with an approved Conditional Use Permit. This site is regulated under a Conditional Use Permit that will be presented at the June Planning Commission meeting.

STAFF REVIEW:
Staff has reviewed the site plan under the requirements of Section 17.340 of the Spring Hill Zoning Ordinance as follows:

1. All existing structures with applicable data are identified.

2. The pavement plan adequately identifies all paved areas including drive entrance, parking and traffic flow lanes.

3. The traffic impact study recommends minimal improvements to 191st Street by adding turn lanes and turn lanes to 193rd Street at Ridgeview.

4. Parking spaces provided are compliant with regulations including accessible spaces.

5. The plan identifies appropriate sidewalks connecting to 193rd, 192nd, and up to 191st Street.

6. There is exterior lighting shown for parking and drive areas. Staff has reviewed the photometric plans and study. The offsite light disbursement shows a minimal impact on the surrounding areas and is within acceptable limits. Shielding on the light fixtures will be utilized to reduce the glare where applicable. Photometric is also provided for the sports area to show minimal impact surrounding areas.

7. City Staff will work with the District to ensure minimal noise pollution will occur with the use of the sports broadcast system.

8. Landscaping, existing and proposed is identified on the overall landscape plan and complies with regulations. Existing trees and green space on the west property boundary will remain as identified on the plans. To enhance the visual buffer from residential properties, additional landscaping will be installed on the south side of the property as identified.

9. Utilities are identified and in compliance with regulations.

10. Adequate erosion and pollution control systems are identified.

11. The site plan was sent out to City Staff and consultants for review. The review comments from the government agencies, consultants and utility providers will be implemented as applicable on revised plan if necessary. The applicant and their engineer have agreed to address provided comments.

12. The storm water study for the improvements resulted in proposed construction of

two detention basins to be provided to the west side of the property.

13. The site layout and the building are designed to help protect the views from the adjacent residential housing district.

In addition to the above noted items the site plan has been reviewed for compliance with the following standards:

1. *The extent to which the proposal conforms to the provisions of the Code.*
   The proposed improvements to the property are in compliance with the Code.

2. *The extent to which the proposal conforms to the provisions of the Spring Hill Subdivision Regulations.*
   Schools are allowed in residential districts with an approved Conditional Use Permit (CUP) that will be reviewed for renewal as previously determined.

3. *The extent to which the development would be compatible with the surrounding area.*
   Thee has been an elementary school in the surrounding area for several years. The school is compatible with the future land use map. It is staff's opinion the applicant has been very cognizant and considerate of the adjoining residential development and has designed the project to protect the property values, lines of sight and overall appearance of the project from the adjoining development.

4. *The extent to which the proposal conforms to the recommendations of the Spring Hill Comprehensive Plan including but not limited to the Vision Plan, the Community Development Recommendations, and the Planning and Principles and Design Guidelines.*
   Appendix E of the Spring Hill Comprehensive Plan addresses the school district's growth potential and scenarios to adequately provide facilities to accommodate this growth. As the population grows, the facility's needs and uses are vital in the quest to provide proper education and services for the residents.

5. *The extent to which the proposal conforms to customary engineering standards used in the City.*
   The proposed improvements have been designed by recognized and licensed architects and engineers.

6. *The extent to which the location of streets, paths, walkways, and driveways are located so as to enhance safety and minimize any adverse impact on parking and entering the building.*
   Provisions and recommendations of the traffic impact study will be implemented into the design of the project to minimize any adverse impact on the property and adjoining properties.

PLANNING COMMISSION REVIEW AND ACTION: Upon review of the site plan application, the Planning Commission may by a majority vote of those members present:

- *Approval of application* with final action by the Governing Body on May 28, 2020, or
- *Denial of application* (application would be forwarded to Governing Body) on May 28, 2020, or

- *Continuance* of item to future meeting identifying specific issues to be reviewed by staff and/or the applicant.

RECOMMENDATION:

Staff recommends approval of site plan application SP-000011-2020, Spring Hill Middle School #3, as presented by Staff.

Suggested Motion: Move to recommend approval to the Spring Hill Governing Body for site plan SP-000011-2020 as presented by staff.

Attachments: Exterior Elevations
Utility Plan
Site Perspective Images
Landscape Plan

Renaissance Infrastructure Consulting

100% EMPLOYEE OWNED

TRAFFIC IMPACT STUDY

Spring Hill Middle School

Spring Hill, KS

GRANT NIEHUS
LICENSED
26830
3/23/2020
KANSAS
PROFESSIONAL ENGINEER

Prepared For:

City of Spring Hill, KS

Prepared By:

Renaissance Infrastructure Consulting
March 2020

March 11, 2020

Mr. Patrick Burton
City of Spring Hill
401 N. Madison St
P.O. Box 424
Spring Hill, KS 66083

RE: Spring Hill Middle School Traffic Impact Study
Spring Hill, KS

Dear Patrick Burton,

In response to your request, RIC has completed a traffic impact study for the proposed development to be located west of Ridgeview Rd & south of 191st St in Spring Hill, KS. The purpose of this study was to assess the impact of the proposed development on the surrounding transportation system. The following report documents our analysis and recommendations.

Please do not hesitate to contact us should you have any questions.

Sincerely,

Renaissance Infrastructure Consulting

Grant Niehus, PE, PTOE
Traffic Engineer

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3.3 Intersection Capacity Analysis 8
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4.1 Trip Generation 10
4.2 Trip Distribution 11
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5 Intersection Sight Distance 15
6 Summary 16

1 Introduction

1.1 Project Description

Renaissance Infrastructure Consulting (RIC) has completed the following Traffic Impact Study (TIS) and documents the assumptions, methodology, and analysis results for traffic conditions associated with the proposed development west of Ridgeview Road and south of 191st Street in Spring Hill, Kansas. The purpose of this analysis is to assess the impact of a proposed middle school development on the surrounding transportation system. To evaluate the increase of traffic on adjacent streets, the number of trips were estimated for the morning and afternoon peak time periods.

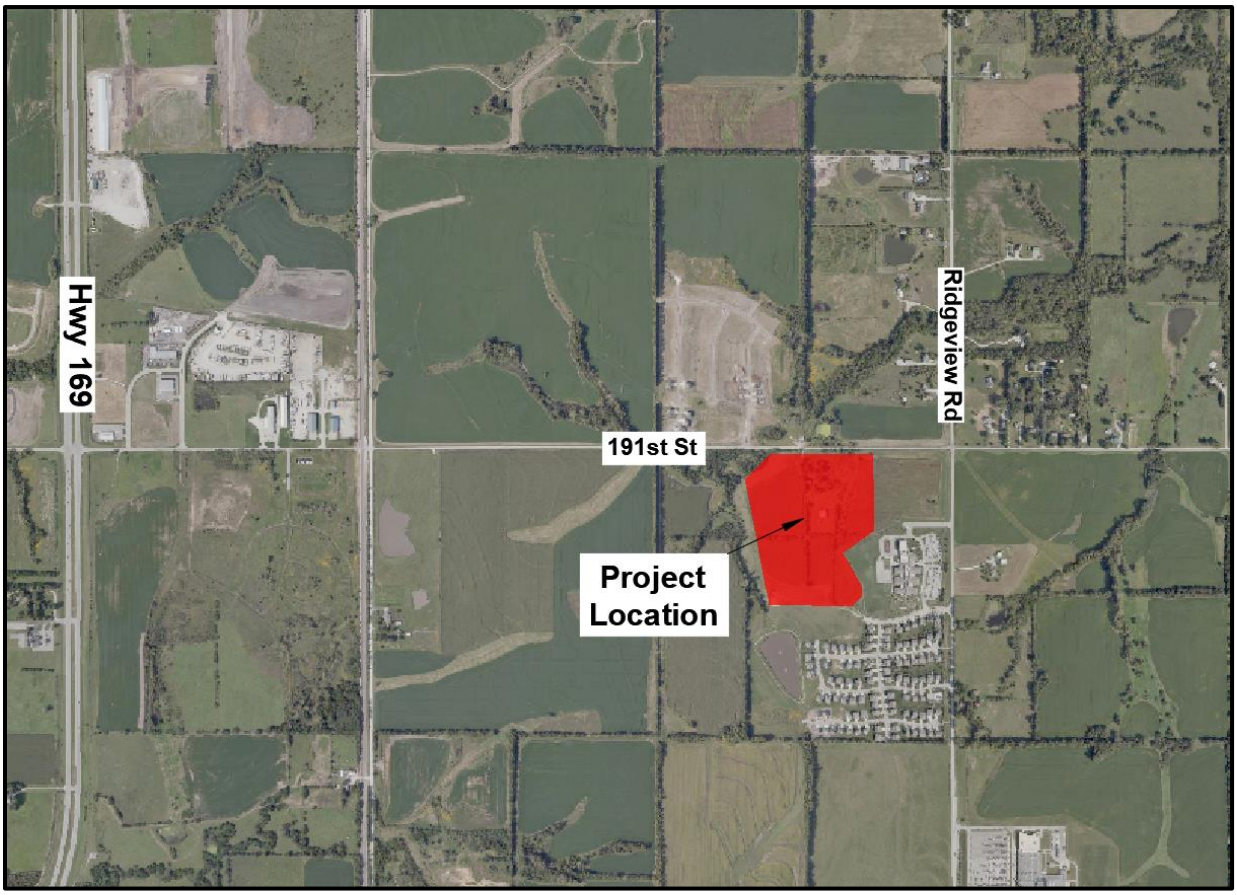


Figure 1 - Proposed project location

1.2 Study Scope

Guidance provided by the city of Spring Hill staff were used in the development of this TIS and its associated scope.

Study Area

Based on discussions with City of Spring Hill staff, the study area for this TIS includes the following intersections:

1. Ridgeview Rd & 191st St
2. Ridgeview Rd & 192nd St
3. Ridgeview Rd & 193rd St
4. 191st St & School Entrance

Figure 2- Study Area

Analysis Scenarios

For this TIS, analysis was completed for the following scenarios during both the AM and PM peak hours:

- Existing Conditions
- Full Build

Analysis Methodology

For all study intersections, delay, level of service (LOS), and 95th percentile queue length analyses were performed in accordance with the Highway Capacity Manual (HCM) 6th Edition using Synchro 10 software. The traffic signal warrant evaluation process used for this study is based on the criteria presented in the *Manual on Uniform Traffic Control Devices* (MUTCD) *2009 Edition*, which is published by the Federal Highway Administration.

2 Proposed Development

The proposed development is located to the west of Ridgeview Rd and south of 191st St in Spring Hill, KS. The development is proposed to be a Spring Hill School District Middle School that would be located west of the existing Wolf Creek Elementary School. Access to the school would be provided via 193rd St, 192nd St, and a new dedicated school entrance off 191st St. The extension of 192nd St is proposed to include a roundabout east of Wolf Creek Elementary where a future north/south connection to 191st may be constructed as part of a separate project. In the near term, the roundabout may be used as additional queueing storage for morning school traffic entering Wolf Creek Elementary. The school will be approximately 105,000 square feet with 528 students and is expected to include a 400-meter track and athletic fields. A proposed site plan for the development is included in **Appendix A**.

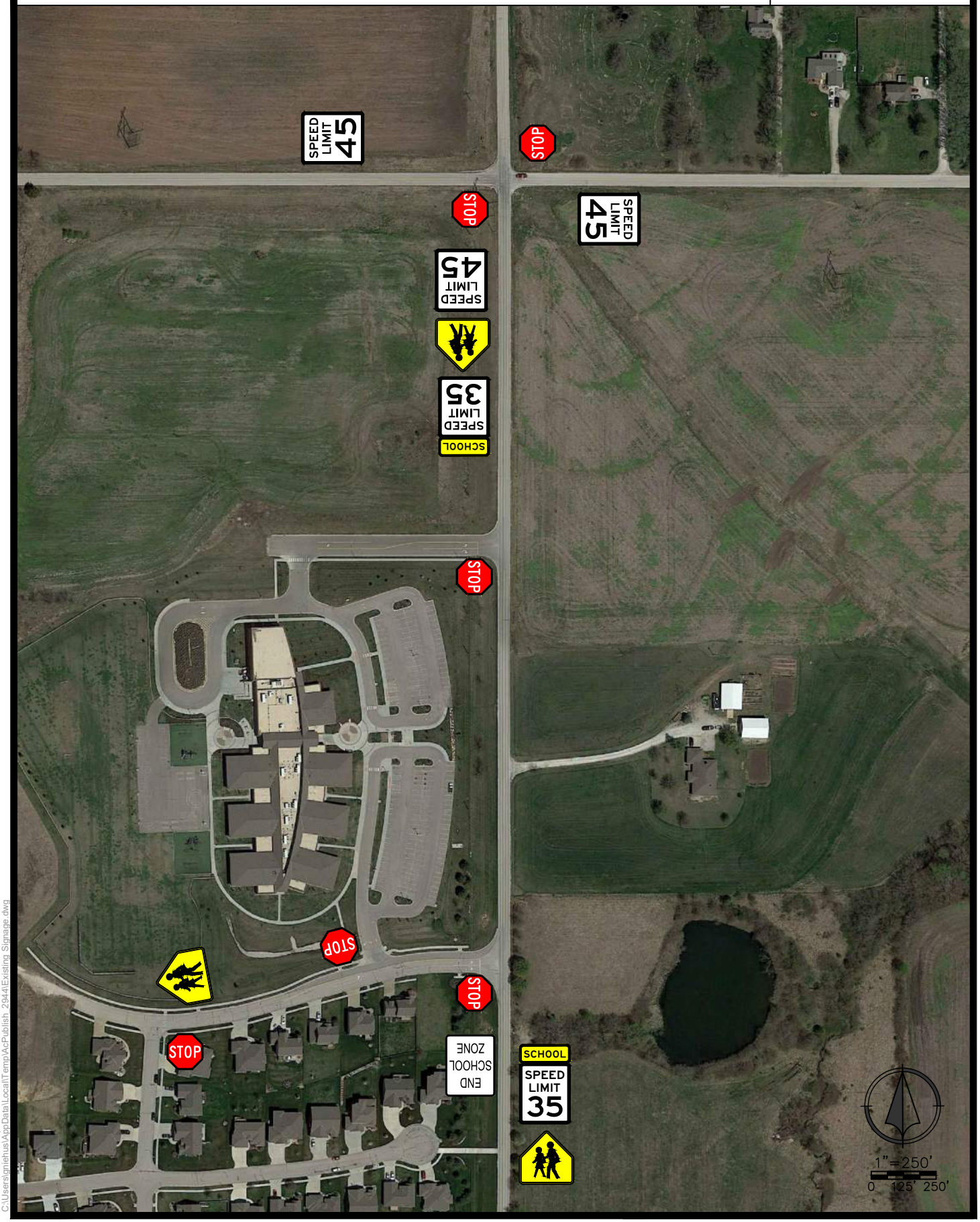
3 Existing Conditions

3.1 Existing Street Network and Land Uses

Ridgeview Road is adjacent to the proposed development to the east and is a 2-lane roadway with a posted speed limit of 45 mph. It is classified as a major collector in KDOT's Functional Classification Map of Johnson County. 192nd and 193rd Streets currently act as access points for Wolf Creek Elementary School with the exiting traffic off those streets stop-controlled and Ridgeview Rd uncontrolled. In addition to the school traffic, 193rd also carries residential traffic that is south of the school.

Existing Conditions

Figure 3



Feb 18 , 2020-3:33pm
C:\Users\grieh\AppData\Local\Temp\AcPublish_2944\Existing Signage.dwg

191st Street is adjacent to the proposed development to the north and is a 2-lane roadway with a posted speed limit of 45 mph. The intersection of 191st St and Ridgeview Rd is two-way stop-controlled with 191st St acting as the stop-controlled movement and Ridgeview Rd as the uncontrolled movement.

The two roadways analyzed as part of this study are summarized in **Table 1** and the existing conditions with signage is included in **Figure 3.**

Table 1 – Roadway Characteristics

Roadway	Functional Classification	Posted Speed	Travel Lanes	Bike Lanes	On-Street Parking	Sidewalks
Ridgeview Rd	Major Collector	45	2	No	No	No
191st St	Local Road	45	2	No	No	No

3.2 Existing Traffic Volumes

To assess the impacts of the proposed development, turning-movement counts were collected at the following intersections on February 6th, 2020:

1. Ridgeview Rd & 191st St
2. Ridgeview Rd & 192nd St
3. Ridgeview Rd & 193rd St

This data revealed that the weekday peak hours of the intersection were as follows:

- AM Peak Hour: 7:15AM – 8:15AM
- PM Peak Hour: 3:00PM – 4:00PM

Within each of these peak hours, a peak hour factor (PHF) was calculated, which compares the traffic volume during the busiest 15-minutes of the peak hour with the total volume during the peak hour. It indicates how consistent traffic volume is during the peak hour. The existing peak hour traffic volumes are summarized in **Appendix B.**

3.3 Intersection Capacity Analysis

In order to analyze the traffic impacts, operating conditions were analyzed using SYNCHRO 10, a macroscopic analysis and optimization software. Synchro is based on study procedures outlined

in the Highway Capacity Manual, 6th edition. The analysis determines the "Level of Service" of the intersections and is based on factors such as the number and types of lanes, signal timing, traffic volumes, pedestrian activity, etc. This manual, which is used universally by traffic engineers to measure roadway capacity, establishes six levels of traffic service: Level A ("Free Flow") to Level F ("Fully Saturated").

Table 2 – Level of Service Criteria

Level of Service	Unsignalized Intersection (sec/veh)
A	< 10 seconds
B	< 15 seconds
C	< 25 seconds
D	< 35 seconds
E	< 50 seconds
F	≥ 50 seconds

Level of Service "D" is considered the minimum acceptable LOS in most areas. However, LOS E is sometimes accepted during peak periods. The above table shows the thresholds for Levels of Service A through F for unsignalized intersections.

Intersection capacity analysis was performed for existing weekday AM peak hour and PM peak hour traffic conditions at the intersections listed in **Table 3.** Analysis was not performed at the intersection of 191st and School Entrance as it does not exist yet. Detailed capacity analysis can be found in **Appendix C**.

Table 3 – Existing Conditions Intersection Capacity Analysis

Intersection	Traffic Control	Time Period	Level of Service/ Delay (seconds)				
			Overall	EB	WB	NB	SB
Ridgeview Rd & 191st St	EB/WB Stop Controlled	AM Peak	A	B	C	A	A
			4.5	11.6	23	1.8	0.1
		PM Peak	A	B	C	A	A
			3.7	12.4	17.1	2.3	0.4
Ridgeview Rd & 192nd St	EB Stop Controlled	AM Peak	A	C	*	A	A
			3.4	19.2	*	1.8	0
		PM Peak	A	B	*	A	A
			2.4	11.9	*	0.5	0
Ridgeview Rd & 193rd St	EB Stop Controlled	AM Peak	A	D	*	A	A
			5.1	25	*	2.9	0
		PM Peak	A	B	*	A	A
			2.8	12.2	*	0.9	0

Ridgeview Rd & 191st St

The intersection currently operates at LOS “A” during the AM and PM peak hours. The stop controlled eastbound approach operates as a LOS “B” in both AM and PM peaks and the stop controlled westbound approach operates as a LOS “C” in both AM and PM peaks.

Ridgeview Rd & 192nd St

The intersection operates at LOS “A” during the AM and PM peak hours. The stop controlled eastbound approach operates as a LOS “C” in the AM peak and LOS “B” in the PM peak.

Ridgeview Rd & 193rd St

The intersection operates at LOS “A” during the AM and PM peak hours. The stop controlled eastbound approach operates as a LOS “D” in the AM peak and LOS “B” in the PM peak.

Overall, all three intersections operate adequately in the AM and PM peak hours.

4 Full Build Conditions

4.1 Trip Generation

Trip generation estimates developed for this study are based on the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). The Manual is the most widely used industry resource for this type of data. The trip generation data are organized by land use types, with more than 170 different categories of land uses. For each category, the manual provides a data set for use in estimating the number of vehicle and person trips generated by a site based on its characteristics such as physical size or intensity. Trips may be estimated by direction (entering or exiting the site) and for time periods typically pertaining to a full day (weekday or weekend), peak hours of the adjacent roadway, and peak hours of the particular land use. Used properly, the Trip Generation Manual provides an objective basis for estimating trips generated by a proposed development.

The ITE categories listed in below were used to project traffic volumes for the proposed developments using the listed intensities. The AM trips were estimated based on data that was collected in the peak hour of the adjacent street traffic (7-9am) whereas the PM trips were estimated based on the peak hour of the generator (school) as the school PM peak does not correlate with the 4-6pm peak of adjacent traffic used for trip generation estimates.

Table 4 – Trip Generation								
			AM Peak Hour			PM Peak Hour		
Land Use	Intensity	ITE Code	Total	In	Out	Total	In	Out
Middle School/Junior High School	528 students	522	306	165	141	174	80	94

4.2 Trip Distribution

The traffic generated by the proposed development was assigned to the adjacent roadway system based on existing traffic patterns and engineering judgement. It is anticipated that traffic will be distributed amongst the three access points for the middle school. The trip distribution is expected to be similar to the existing elementary school boundaries with the majority of middle school traffic coming from the south and the east.

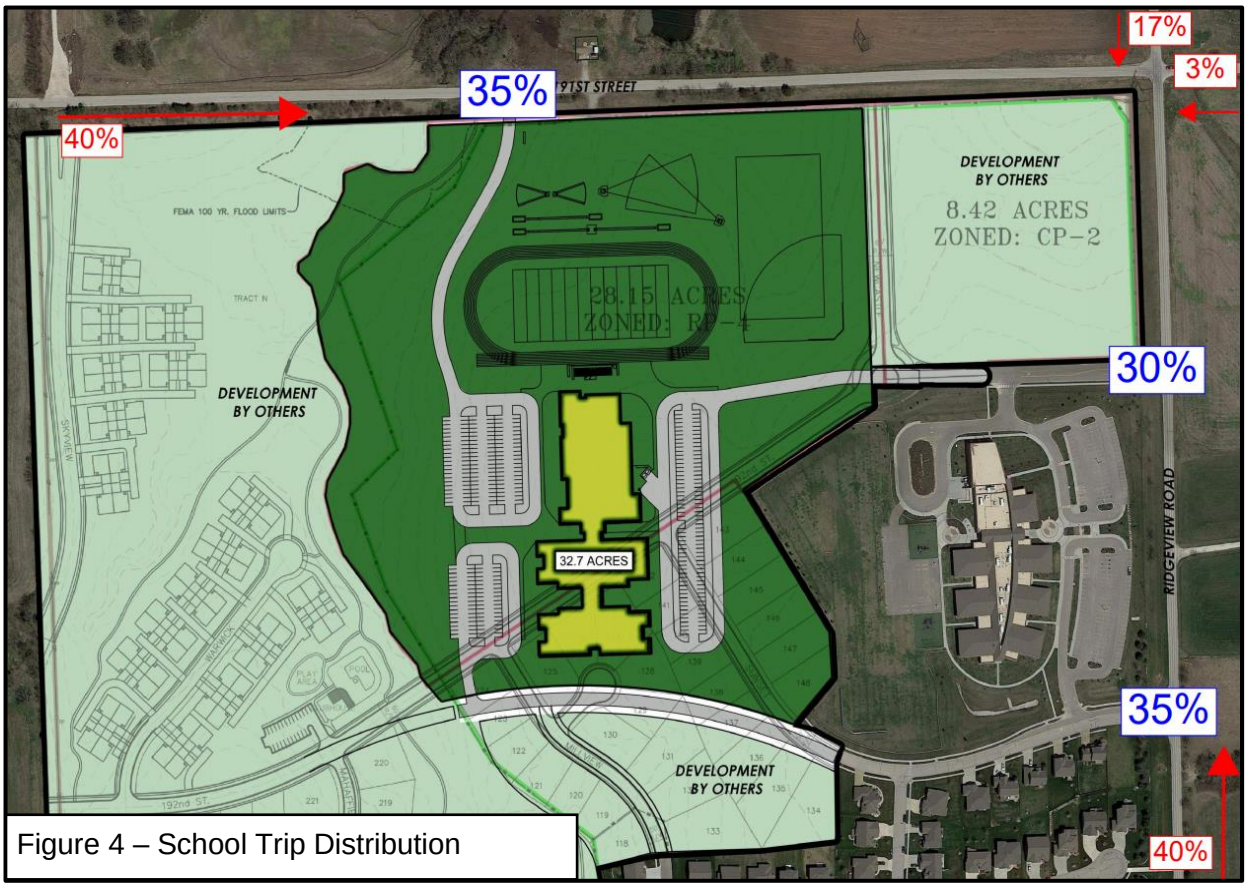


Figure 4 – School Trip Distribution

4.3 Signal Warrant Analysis

Traffic signal warrants were evaluated for Existing and Full Build conditions at the intersection of Ridgeview Rd & 191st St. To warrant traffic signalization, an intersection must satisfy one or more of the nine warrants presented in the MUTCD. However, the satisfaction of a signal warrant shall not in itself require the installation of a traffic signal. For the purpose of this study process, the traffic signal warrant evaluation was limited to Signal Warrants 1-4 for the existing conditions and Warrant 3 for the Full Build scenario. A brief description of the warrant, based on traffic volumes, as presented in the MUTCD is provided as follows:

Signal Warrant 1 - Eight-hour vehicular volume

The Minimum Vehicular Volume, Condition A, is intended for situations where a large volume of intersecting traffic is the primary reason to consider installing a traffic signal. The Interruption of Continuous Traffic, Condition B, is intended for situations where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. If neither Condition A nor B is met, Warrant 1 allows for re-evaluation of the warrant using a reduction of the traffic volumes, assuming an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems. To meet Warrant 1, either condition A or B must be met.

Signal Warrant 2 - Four-hour vehicular volume

The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Signal Warrant 3 - Peak-hour volume

The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. This warrant is intended to apply for unusual cases where a facility generates or attracts an unusual amount of traffic over a short time.

Signal Warrant 4 - Pedestrian volume

The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.

Table 5 Ridgeview Rd & 191st St Signal Warrants		
	Existing Conditions	**Full Build**
Ridgeview Rd & 191st St	No	No

The intersection of Ridgeview Rd & 191st St did not meet signal warrants for existing conditions or the Full Build condition.

4.4 Intersection Capacity Analysis

Intersection capacity analysis was performed for the AM and PM peak hours with traffic volumes anticipated from the new development. Assumed baseline intersection configurations for future intersections do not consider the addition of turn lanes on any approach. The proposed new school entrance off 191st St, Ridgeview & 192nd, and Ridgeview & 193rd used a peak hour factor of .75 for both peak periods to account for the short peaks expected for school traffic. For Ridgeview & 191st, a peak hour factor of .92 was used.

Results from intersection capacity analyses under existing lane configurations and traffic control can be seen in **Table 6**. Results from analyses which consider potential intersection improvements can be seen in **Table 7**. Turn lane warrant analysis followed guidelines described in Kansas Department of Transportation's Access Management Policy.

Ridgeview Rd & 191st St

The addition of site generated traffic is expected to result in an overall LOS "A", with the eastbound approach a LOS "B" in the AM peak and LOS "B" in the PM peak. The westbound approach is expected to have a LOS "C" in the AM peak and LOS "B" in the PM peak.

Potential Improvements:

The northbound left-turn movement meets left-turn lane warrants. However, the turn-lane did not improve the overall intersection delay.

Ridgeview Rd & 192nd St

The addition of site generated traffic is expected to result in an overall LOS "A", with the eastbound approach a LOS "C" in the AM peak and LOS "B" in the PM peak.

Potential Improvements:

The northbound left-turn movement meets left-turn lane warrants. However, the turn-lane did not improve the overall intersection delay and improved the eastbound delay in the AM peak by less than 2%.

Ridgeview Rd & 193rd St

The addition of site generated traffic is expected to result in an overall LOS "A", with the eastbound approach a LOS "C" in the AM peak and LOS "B" in the PM peak.

Potential Improvements:

The northbound left-turn movement meets left-turn lane warrants. However, the turn-lane did not improve the overall intersection delay and improved the eastbound delay in the AM peak by less than 2.5%.

191st St & School Entrance

The proposed intersection is expected to operate at LOS "A" with no approach deficiencies during either peak hour.

Overall, all four study intersections operate adequately in the AM and PM peak hours without any auxiliary turn lanes.

Table 6 – Full Build Conditions Intersection Capacity Analysis – No Improvements

Intersection	Traffic Control	Time Period	Level of Service/ Delay (seconds)				
			Overall	EB	WB	NB	SB
Ridgeview & 191st	EB/WB Stop Controlled	AM Peak	A	B	C	A	A
			4.4	11.6	16.2	1.9	0.1
		PM Peak	A	B	B	A	A
			3.4	10.7	12.8	2.3	0.4
Ridgeview & 192nd	EB Stop Controlled	AM Peak	A	C	*	A	A
			3.8	16.9	*	2.1	0
		PM Peak	A	B	*	A	A
			2.8	11.5	*	0.7	0
Ridgeview & 193rd	EB Stop Controlled	AM Peak	A	C	*	A	A
			4.9	17.4	*	3.5	0
		PM Peak	A	B	*	A	A
			3.3	11.5	*	1.6	0
191st & School Entrance	NB Stop Controlled	AM Peak	A	A	A	B	*
			1.9	0	0.7	10.8	*
		PM Peak	A	A	A	A	*
			2.0	0	0.6	9.6	*

Table 7 – Full Build Conditions
Intersection Capacity Analysis – Potential Improvements

Intersection	Potential Improvements	Traffic Control	Time Period	Level of Service/ Delay (seconds)				
				Overall	EB	WB	NB	SB
Ridgeview & 191st	Northbound Left-Turn Lane	EB/WB Stop Controlled	AM Peak	A	B	C	A	A
				4.4	11.6	16.2	1.9	0.1
			PM Peak	A	B	B	A	A
				3.4	10.7	12.8	2.3	0.4
Ridgeview & 192nd	Northbound Left-Turn Lane	EB Stop Controlled	AM Peak	A	C	*	A	A
				3.8	16.6	*	2.1	0
			PM Peak	A	B	*	A	A
				2.8	11.5	*	0.7	0
Ridgeview & 193rd	Northbound Left-Turn Lane	EB Stop Controlled	AM Peak	A	C	*	A	A
				4.8	17	*	3.5	0
			PM Peak	A	B	*	A	A
				3.3	11.5	*	1.6	0
191st & School Entrance		NB Stop Controlled	AM Peak	A	A	A	B	*
				1.9	0	0.7	10.8	*
			PM Peak	A	A	A	A	*
				2.0	0	0.6	9.6	*

5 Intersection Sight Distance

Using AASHTO's guidelines and a posted speed of 45 mph, the minimum recommended sight distance of 500 feet was used to determine if there were any intersection sight distance issues at the three study intersections. While there were no observed intersection sight distance issues, there is a tree on the west of Ridgeview Rd, south of 192nd St that will need it's lower branches occasionally trimmed in order to keep adequate sight distance for traffic turning from 192nd to northbound Ridgeview Rd.

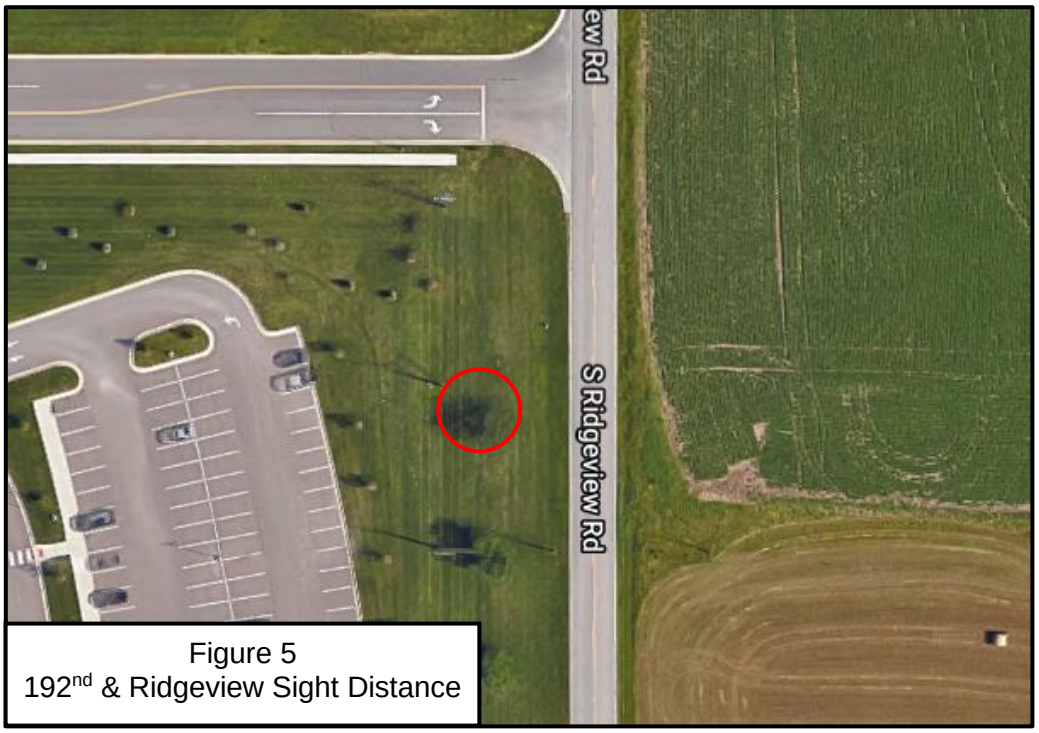


Figure 5
192nd & Ridgeview Sight Distance

6 Summary

RIC completed the preceding study to analyze the traffic impacts associated with a proposed middle school development west of Ridgeview Rd and south of 191st St in Spring Hill, KS. Based on traffic analysis completed, the following summary is provided:

- Access to the development is provided via three unsignalized access points, with two on Ridgeview Rd and one on 191st St. The intersection on 191st will be built as part of this development.
- The proposed middle school was estimated to generate a total of 306 new trips in the AM peak hour and 174 new trips in the PM peak hour.
- Existing intersection's sight distances meet AASHTO requirements
- The intersection of Ridgeview Rd & 191st St does not meet signal warrants.
- It is expected that the three intersections analyzed as part of this study will operate acceptably without any additional lanes in the Full Build scenario.

Please do not hesitate to contact us should you have any questions.

Appendix A - Site Plan

191st and Ridgeview - 4D

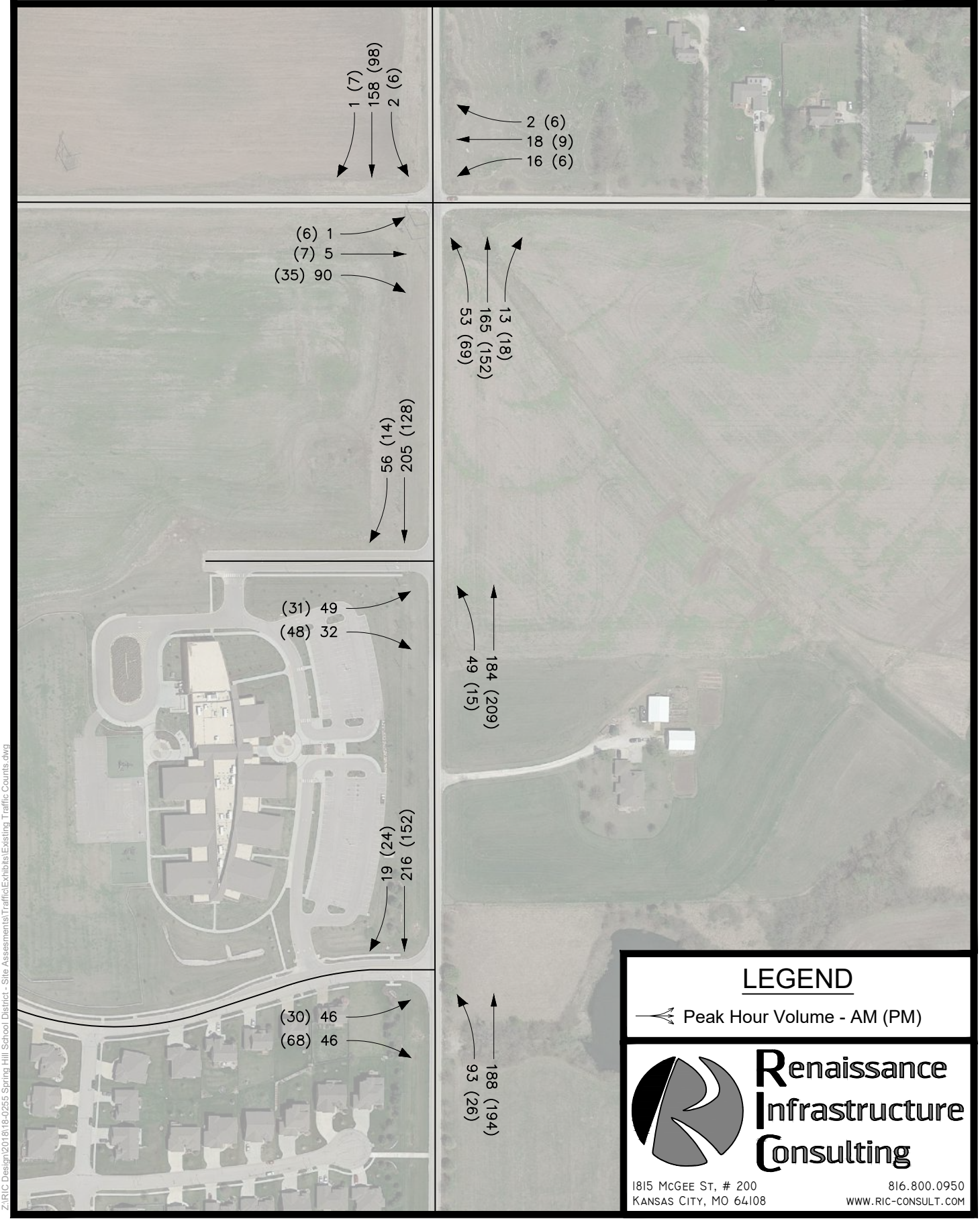
0 100 200 400

SCALE: 1" = 200'-0"

Appendix B - Traffic Volumes

Existing Traffic Counts

Figure B-1



Renaissance Infrastructure Consulting

1815 McGee St, # 200
Kansas City, MO 64108

816.800.0950
www.ric-consult.com

Feb 17, 2020-11:22am
Z:\RIC Design\2018\18-0255 Spring Hill School District - Site Assessments\Traffic\Exhibits\Existing Traffic Counts.dwg

191st St & Ridgeview Rd - TMC
Thu Feb 6, 2020
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745889, Location: 38.781899, -94.79721

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	191st						191st						Ridgeview						Ridgeview						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2020-02-06 12:00AM	0	0	1	0	1	0	1	0	0	0	1	0	0	2	0	0	2	0	0	7	0	0	7	0	11
1:00AM	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
2:00AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	0	0	1	0	3
4:00AM	0	0	1	0	1	0	1	1	0	0	2	0	0	4	0	0	4	0	1	2	0	0	3	0	10
5:00AM	0	1	1	0	2	0	0	1	0	0	1	0	2	14	0	0	16	0	1	8	0	0	9	0	28
6:00AM	0	2	5	0	7	0	1	7	2	0	10	0	7	62	2	0	71	0	0	27	0	0	27	0	115
7:00AM	1	5	90	0	96	0	16	18	2	0	36	0	53	165	13	0	231	0	2	158	1	0	161	0	524
8:00AM	3	7	6	0	16	0	4	9	0	0	13	0	17	76	5	0	98	0	5	36	4	0	45	0	172
9:00AM	2	5	6	0	13	0	1	5	2	0	8	0	9	44	2	0	55	0	0	40	7	0	47	0	123
10:00AM	1	6	7	0	14	0	1	3	4	0	8	0	7	42	2	0	51	0	3	38	1	0	42	0	115
11:00AM	1	9	11	0	21	0	2	7	1	0	10	0	3	47	1	0	51	0	1	45	2	0	48	0	130
12:00PM	2	11	8	0	21	0	6	3	1	0	10	0	7	44	2	0	53	0	5	45	3	0	53	0	137
1:00PM	0	7	6	0	13	0	5	3	7	0	15	0	9	40	4	0	53	0	1	38	6	0	45	0	126
2:00PM	4	9	28	0	41	0	6	2	4	0	12	0	9	34	4	0	47	0	2	70	5	0	77	0	177
3:00PM	6	7	35	0	48	0	6	9	6	0	21	0	69	152	18	0	239	0	6	98	7	0	111	0	419
4:00PM	5	13	16	0	34	0	7	11	1	0	19	0	18	88	6	0	112	0	5	113	4	0	122	0	287
5:00PM	4	17	30	0	51	0	7	12	4	0	23	0	18	76	4	0	98	0	7	129	2	0	138	0	310
6:00PM	3	5	16	0	24	0	1	4	0	0	5	0	4	44	3	0	51	0	3	79	2	0	84	0	164
7:00PM	0	1	5	0	6	0	1	2	1	0	4	0	1	27	2	0	30	0	1	47	1	0	49	0	89
8:00PM	0	1	4	0	5	0	0	0	3	0	3	0	5	34	2	0	41	0	1	48	1	0	50	0	99
9:00PM	2	3	5	0	10	0	0	1	0	0	1	0	1	4	0	0	5	0	1	19	1	0	21	0	37
10:00PM	1	1	3	0	5	1	0	0	0	0	0	0	1	3	0	0	4	0	0	11	1	0	12	0	21
11:00PM	0	0	1	0	1	0	0	0	1	0	1	0	0	4	0	0	4	0	0	11	0	0	11	0	17
Total	35	111	285	0	431	1	66	99	39	0	204	0	240	1009	70	0	1319	0	45	1070	48	0	1163	0	3117
% Approach	8.1%	25.8%	66.1%	0%	-	-	32.4%	48.5%	19.1%	0%	-	-	18.2%	76.5%	5.3%	0%	-	-	3.9%	92.0%	4.1%	0%	-	-	-
% Total	1.1%	3.6%	9.1%	0%	13.8%	-	2.1%	3.2%	1.3%	0%	6.5%	-	7.7%	32.4%	2.2%	0%	42.3%	-	1.4%	34.3%	1.5%	0%	37.3%	-	-
Lights	33	105	281	0	419	-	59	93	37	0	189	-	232	997	66	0	1295	-	42	1060	44	0	1146	-	3049
% Lights	94.3%	94.6%	98.6%	0%	97.2%	-	89.4%	93.9%	94.9%	0%	92.6%	-	96.7%	98.8%	94.3%	0%	98.2%	-	93.3%	99.1%	91.7%	0%	98.5%	-	97.8%
Articulated Trucks	0	1	1	0	2	-	1	2	0	0	3	-	1	2	1	0	4	-	2	1	1	0	4	-	13
% Articulated Trucks	0%	0.9%	0.4%	0%	0.5%	-	1.5%	2.0%	0%	0%	1.5%	-	0.4%	0.2%	1.4%	0%	0.3%	-	4.4%	0.1%	2.1%	0%	0.3%	-	0.4%
Buses and Single-Unit Trucks	2	5	3	0	10	-	6	4	2	0	12	-	7	10	3	0	20	-	1	9	3	0	13	-	55
% Buses and Single-Unit Trucks	5.7%	4.5%	1.1%	0%	2.3%	-	9.1%	4.0%	5.1%	0%	5.9%	-	2.9%	1.0%	4.3%	0%	1.5%	-	2.2%	0.8%	6.3%	0%	1.1%	-	1.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

191st St & Ridgeview Rd - TMC
Thu Feb 6, 2020
AM Peak (Feb 06 2020 7AM - 8 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745889, Location: 38.781899, -94.79721

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	191st Eastbound						191st Westbound						Ridgeview Northbound						Ridgeview Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2020-02-06 7:00AM	0	0	7	0	**7**	0	1	5	1	0	**7**	0	4	34	1	0	**39**	0	0	17	1	0	**18**	0	**71**
7:15AM	0	3	13	0	**16**	0	5	2	0	0	**7**	0	11	34	1	0	**46**	0	0	20	0	0	**20**	0	**89**
7:30AM	1	1	25	0	**27**	0	7	1	0	0	**8**	0	8	34	4	0	**46**	0	1	60	0	0	**61**	0	**142**
7:45AM	0	1	45	0	**46**	0	3	10	1	0	**14**	0	30	63	7	0	**100**	0	1	61	0	0	**62**	0	**222**
Total	1	5	90	0	**96**	0	16	18	2	0	**36**	0	53	165	13	0	**231**	0	2	158	1	0	**161**	0	**524**
% Approach	1.0%	5.2%	93.8%	0%	**-**	-	44.4%	50.0%	5.6%	0%	**-**	-	22.9%	71.4%	5.6%	0%	**-**	-	1.2%	98.1%	0.6%	0%	**-**	-	-
% Total	0.2%	1.0%	17.2%	0%	**18.3%**	-	3.1%	3.4%	0.4%	0%	**6.9%**	-	10.1%	31.5%	2.5%	0%	**44.1%**	-	0.4%	30.2%	0.2%	0%	**30.7%**	-	-
PHF	0.250	0.417	0.500	-	**0.522**	-	0.571	0.450	0.500	-	**0.643**	-	0.442	0.655	0.464	-	**0.578**	-	0.500	0.648	0.250	-	**0.649**	-	0.590
Lights	1	5	90	0	**96**	-	14	18	2	0	**34**	-	53	163	13	0	**229**	-	2	154	1	0	**157**	-	516
% Lights	100%	100%	100%	0%	**100%**	-	87.5%	100%	100%	0%	**94.4%**	-	100%	98.8%	100%	0%	**99.1%**	-	100%	97.5%	100%	0%	**97.5%**	-	98.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	2	0	0	0	**2**	-	0	2	0	0	**2**	-	0	4	0	0	**4**	-	8
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	12.5%	0%	0%	0%	**5.6%**	-	0%	1.2%	0%	0%	**0.9%**	-	0%	2.5%	0%	0%	**2.5%**	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

191st St & Ridgeview Rd - TMC
Thu Feb 6, 2020
PM Peak (Feb 06 2020 3PM - 4 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745889, Location: 38.781899, -94.79721

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	191st						191st						Ridgeview						Ridgeview						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2020-02-06 3:00PM	2	0	12	0	**14**	0	0	0	0	0	**0**	0	6	29	4	0	**39**	0	2	20	5	0	**27**	0	**80**
3:15PM	2	4	7	0	**13**	0	4	2	5	0	**11**	0	52	69	9	0	**130**	0	1	27	0	0	**28**	0	**182**
3:30PM	1	2	11	0	**14**	0	1	3	0	0	**4**	0	3	29	3	0	**35**	0	2	26	0	0	**28**	0	**81**
3:45PM	1	1	5	0	**7**	0	1	4	1	0	**6**	0	8	25	2	0	**35**	0	1	25	2	0	**28**	0	**76**
Total	6	7	35	0	**48**	0	6	9	6	0	**21**	0	69	152	18	0	**239**	0	6	98	7	0	**111**	0	**419**
% Approach	12.5%	14.6%	72.9%	0%	**-**	-	28.6%	42.9%	28.6%	0%	**-**	-	28.9%	63.6%	7.5%	0%	**-**	-	5.4%	88.3%	6.3%	0%	**-**	-	**-**
% Total	1.4%	1.7%	8.4%	0%	**11.5%**	-	1.4%	2.1%	1.4%	0%	**5.0%**	-	16.5%	36.3%	4.3%	0%	**57.0%**	-	1.4%	23.4%	1.7%	0%	**26.5%**	-	**-**
PHF	0.750	0.438	0.729	-	**0.857**	-	0.375	0.563	0.300	-	**0.477**	-	0.332	0.551	0.500	-	**0.460**	-	0.750	0.907	0.350	-	**0.991**	-	0.576
Lights	5	7	34	0	**46**	-	4	7	6	0	**17**	-	66	150	15	0	**231**	-	5	97	6	0	**108**	-	402
% Lights	83.3%	100%	97.1%	0%	**95.8%**	-	66.7%	77.8%	100%	0%	**81.0%**	-	95.7%	98.7%	83.3%	0%	**96.7%**	-	83.3%	99.0%	85.7%	0%	**97.3%**	-	95.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	16.7%	0%	0%	0%	**0.9%**	-	0.2%
Buses and Single-Unit Trucks	1	0	1	0	**2**	-	2	2	0	0	**4**	-	3	2	3	0	**8**	-	0	1	1	0	**2**	-	16
% Buses and Single-Unit Trucks	16.7%	0%	2.9%	0%	**4.2%**	-	33.3%	22.2%	0%	0%	**19.0%**	-	4.3%	1.3%	16.7%	0%	**3.3%**	-	0%	1.0%	14.3%	0%	**1.8%**	-	3.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ridgeview Rd & N School Entrance - TMC
Thu Feb 6, 2020
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745888, Location: 38.780083, -94.797221

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	School Eastbound					Ridgeview Northbound					Ridgeview Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2020-02-06 7:15AM	4	2	0	**6**	0	9	42	0	**51**	0	32	7	0	**39**	0	**96**
7:30AM	6	1	0	**7**	0	16	40	0	**56**	0	76	17	0	**93**	0	**156**
7:45AM	32	22	0	**54**	0	21	68	0	**89**	0	82	30	0	**112**	0	**255**
8:00AM	7	7	0	**14**	0	3	34	0	**37**	0	15	2	0	**17**	0	**68**
Total	49	32	0	**81**	0	49	184	0	**233**	0	205	56	0	**261**	0	**575**
% Approach	60.5%	39.5%	0%	**-**	-	21.0%	79.0%	0%	**-**	-	78.5%	21.5%	0%	**-**	-	-
% Total	8.5%	5.6%	0%	**14.1%**	-	8.5%	32.0%	0%	**40.5%**	-	35.7%	9.7%	0%	**45.4%**	-	-
PHF	0.383	0.364	-	**0.375**	-	0.583	0.676	-	**0.654**	-	0.625	0.467	-	**0.583**	-	0.564
Lights	49	27	0	**76**	-	45	184	0	**229**	-	202	55	0	**257**	-	562
% Lights	100%	84.4%	0%	**93.8%**	-	91.8%	100%	0%	**98.3%**	-	98.5%	98.2%	0%	**98.5%**	-	97.7%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	5	0	**5**	-	4	0	0	**4**	-	3	1	0	**4**	-	13
% Buses and Single-Unit Trucks	0%	15.6%	0%	**6.2%**	-	8.2%	0%	0%	**1.7%**	-	1.5%	1.8%	0%	**1.5%**	-	2.3%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ridgeview Rd & N School Entrance - TMC
Thu Feb 6, 2020
PM Peak (3 PM - 4 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745888, Location: 38.780083, -94.797221

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	School Eastbound					Ridgeview Northbound					Ridgeview Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2020-02-06 3:00PM	4	20	0	**24**	0	11	38	0	**49**	0	24	8	0	**32**	0	**105**
3:15PM	18	23	0	**41**	0	1	109	0	**110**	0	36	2	0	**38**	0	**189**
3:30PM	5	0	0	**5**	0	2	30	0	**32**	0	36	2	0	**38**	0	**75**
3:45PM	4	5	0	**9**	0	1	32	0	**33**	0	32	2	0	**34**	0	**76**
Total	31	48	0	**79**	0	15	209	0	**224**	0	128	14	0	**142**	0	**445**
% Approach	39.2%	60.8%	0%	**-**	-	6.7%	93.3%	0%	**-**	-	90.1%	9.9%	0%	**-**	-	-
% Total	7.0%	10.8%	0%	**17.8%**	-	3.4%	47.0%	0%	**50.3%**	-	28.8%	3.1%	0%	**31.9%**	-	-
PHF	0.431	0.522	-	**0.482**	-	0.341	0.479	-	**0.509**	-	0.889	0.438	-	**0.934**	-	0.589
Lights	28	46	0	**74**	-	15	203	0	**218**	-	124	14	0	**138**	-	430
% Lights	90.3%	95.8%	0%	**93.7%**	-	100%	97.1%	0%	**97.3%**	-	96.9%	100%	0%	**97.2%**	-	96.6%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	3	2	0	**5**	-	0	6	0	**6**	-	4	0	0	**4**	-	15
% Buses and Single-Unit Trucks	9.7%	4.2%	0%	**6.3%**	-	0%	2.9%	0%	**2.7%**	-	3.1%	0%	0%	**2.8%**	-	3.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

S Ridgeview Rd & 193rd St - TMC
Thu Feb 6, 2020
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745887, Location: 38.777942, -94.797242

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	193rd Eastbound					Ridgeview Northbound					Ridgeview Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2020-02-06 7:15AM	6	1	0	**7**	0	10	45	0	**55**	0	29	5	0	**34**	0	**96**
7:30AM	8	8	0	**16**	0	27	47	0	**74**	0	67	6	0	**73**	0	**163**
7:45AM	24	34	0	**58**	0	48	68	0	**116**	0	101	7	0	**108**	0	**282**
8:00AM	8	3	0	**11**	0	8	28	0	**36**	0	19	1	0	**20**	0	**67**
Total	46	46	0	**92**	0	93	188	0	**281**	0	216	19	0	**235**	0	**608**
% Approach	50.0%	50.0%	0%	**-**	-	33.1%	66.9%	0%	**-**	-	91.9%	8.1%	0%	**-**	-	-
% Total	7.6%	7.6%	0%	**15.1%**	-	15.3%	30.9%	0%	**46.2%**	-	35.5%	3.1%	0%	**38.7%**	-	-
PHF	0.479	0.338	-	**0.397**	-	0.484	0.691	-	**0.606**	-	0.535	0.679	-	**0.544**	-	0.539
Lights	46	46	0	**92**	-	93	184	0	**277**	-	209	18	0	**227**	-	596
% Lights	100%	100%	0%	**100%**	-	100%	97.9%	0%	**98.6%**	-	96.8%	94.7%	0%	**96.6%**	-	98.0%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	**0**	-	0	4	0	**4**	-	7	1	0	**8**	-	12
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	2.1%	0%	**1.4%**	-	3.2%	5.3%	0%	**3.4%**	-	2.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

S Ridgeview Rd & 193rd St - TMC
Thu Feb 6, 2020
PM Peak (3 PM - 4 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 745887, Location: 38.777942, -94.797242

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	193rd Eastbound					Ridgeview Northbound					Ridgeview Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2020-02-06 3:00PM	4	21	0	**25**	0	18	49	0	**67**	0	36	7	0	**43**	0	**135**
3:15PM	13	36	0	**49**	0	4	94	0	**98**	0	58	4	0	**62**	0	**209**
3:30PM	6	6	0	**12**	0	3	26	0	**29**	0	30	5	0	**35**	0	**76**
3:45PM	7	5	0	**12**	0	1	25	0	**26**	0	28	8	0	**36**	0	**74**
Total	30	68	0	**98**	0	26	194	0	**220**	0	152	24	0	**176**	0	**494**
% Approach	30.6%	69.4%	0%	**-**	-	11.8%	88.2%	0%	**-**	-	86.4%	13.6%	0%	**-**	-	**-**
% Total	6.1%	13.8%	0%	**19.8%**	-	5.3%	39.3%	0%	**44.5%**	-	30.8%	4.9%	0%	**35.6%**	-	**-**
PHF	0.577	0.472	-	**0.500**	-	0.361	0.516	-	**0.561**	-	0.655	0.750	-	**0.710**	-	0.591
Lights	27	68	0	**95**	-	26	191	0	**217**	-	147	23	0	**170**	-	482
% Lights	90.0%	100%	0%	**96.9%**	-	100%	98.5%	0%	**98.6%**	-	96.7%	95.8%	0%	**96.6%**	-	97.6%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	3	0	0	**3**	-	0	3	0	**3**	-	5	1	0	**6**	-	12
% Buses and Single-Unit Trucks	10.0%	0%	0%	**3.1%**	-	0%	1.5%	0%	**1.4%**	-	3.3%	4.2%	0%	**3.4%**	-	2.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Mar 11 , 2020-3:25pm
C:\Users\apatel\AppData\Local\Temp\AcPublish_8100\School Trip Distribution.dwg

Renaissance Infrastructure Consulting
1815 McGee Street, Suite 200
Kansas City, Missouri 64108
816.800.0950
www.ric-consult.com

NO.	BY	QD	DATE	REVISION
0	GDN		2/19/20	----

School Trip Distribution

191st & Ridgeview Traffic Study

18-0255
Spring Hill
Johnson County, Kansas

Sheet of

MO Certificate of Authority: E-2010033630

Mar 11 , 2020-3:24pm
C:\Users\apatel\AppData\Local\Temp\AcPublish_8100\School Trip Distribution Volumes.dwg

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1815 McGee Street, Suite 200
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NO.	BY	QD	DATE	REVISION
0	GDN		2/19/20	----

MO Certificate of Authority: E-2010033630

School Trip Distribution Volumes

191st & Ridgeview Traffic Study

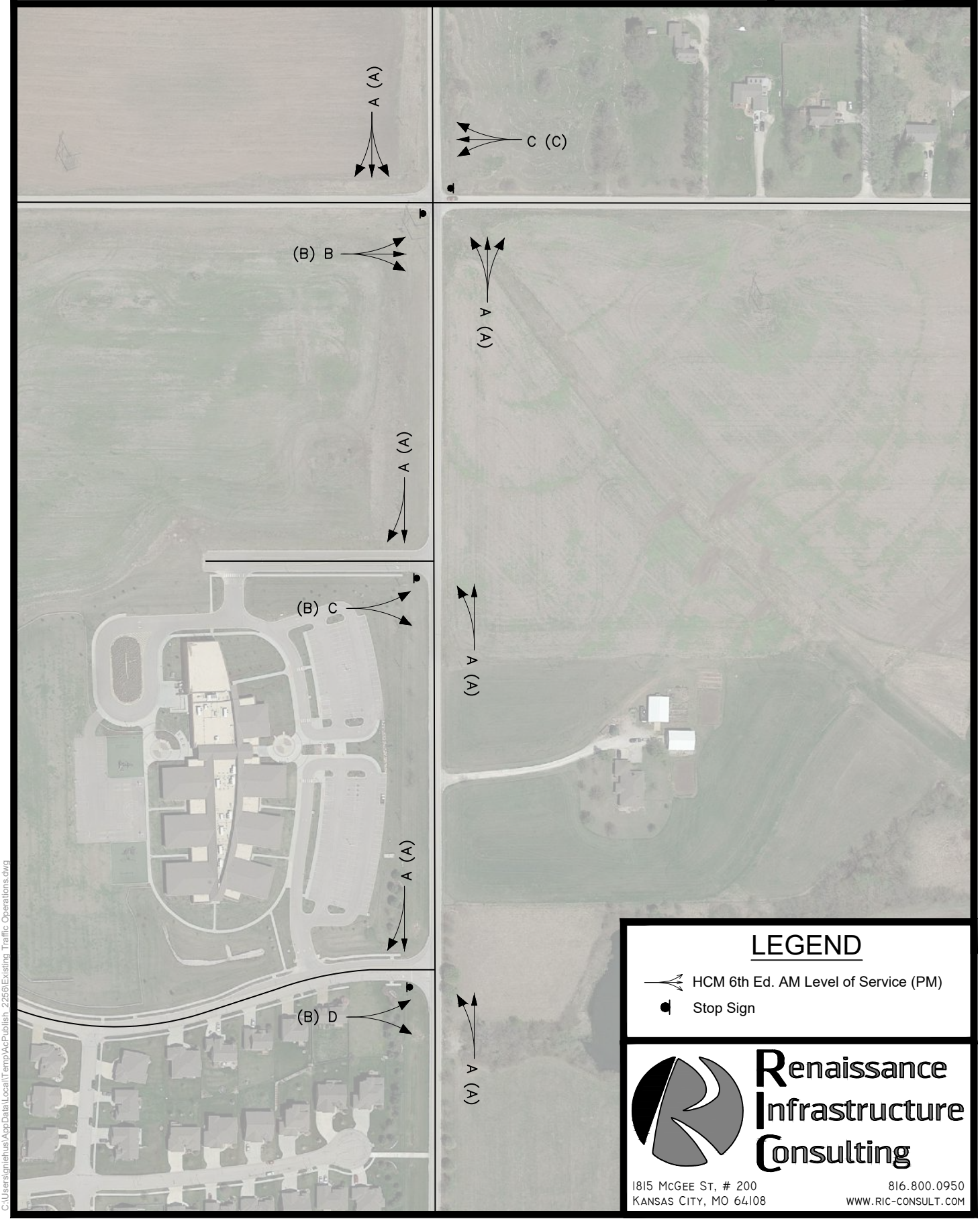
18-0255
Spring Hill
Johnson County, Kansas

Sheet of

Appendix C - Intersection Capacity Analysis

Existing Traffic Operations

Figure C-1



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Kansas City, MO 64108
816.800.0950
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Feb 28 , 2020-9:39am
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Mar 11 , 2020-3:25pm
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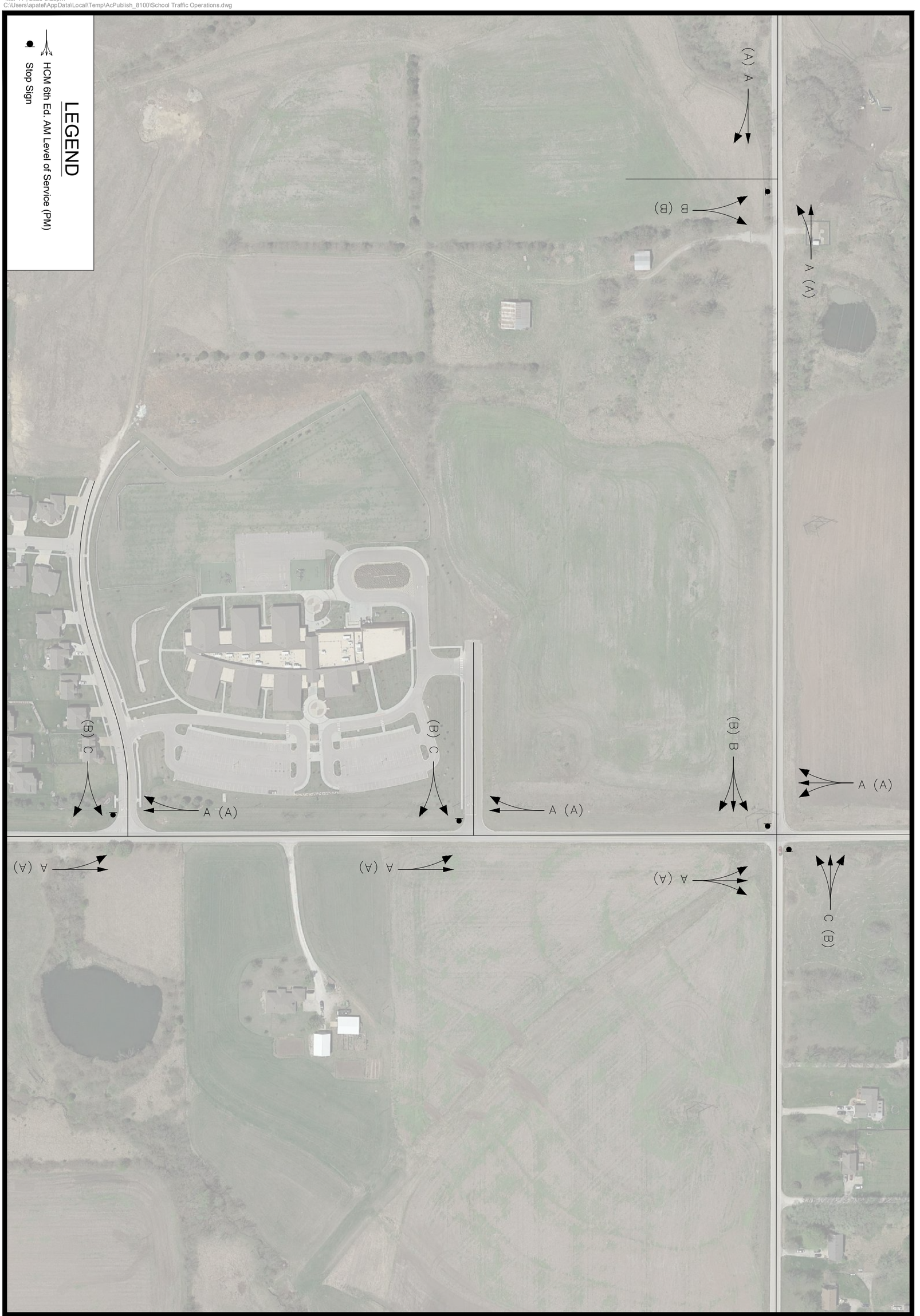

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MO Certificate of Authority: E-2010033630

School Traffic Operations

191st & Ridgeview Traffic Study

18-0255
Spring Hill
Johnson County, Kansas

Sheet of

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	5	90	16	18	2	53	165	13	2	158	1
Future Vol, veh/h	1	5	90	16	18	2	53	165	13	2	158	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	59	59	59	59	59	59	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	12	0	0	0	1	0	0	2	0
Mvmt Flow	2	8	153	27	31	3	90	280	22	3	268	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	763	757	269	827	747	291	270	0	0	302	0	0
Stage 1	275	275	-	471	471	-	-	-	-	-	-	-
Stage 2	488	482	-	356	276	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.22	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.22	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.22	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.608	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	324	339	775	279	344	753	1305	-	-	1270	-	-
Stage 1	736	686	-	555	563	-	-	-	-	-	-	-
Stage 2	565	557	-	641	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	279	310	775	205	314	753	1305	-	-	1270	-	-
Mov Cap-2 Maneuver	279	310	-	205	314	-	-	-	-	-	-	-
Stage 1	675	684	-	509	516	-	-	-	-	-	-	-
Stage 2	485	511	-	507	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	23	1.8	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1305	-	-	707	261	1270	-	-
HCM Lane V/C Ratio	0.069	-	-	0.23	0.234	0.003	-	-
HCM Control Delay (s)	8	0	-	11.6	23	7.8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9	0.9	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	49	32	49	184	205	56
Future Vol, veh/h	49	32	49	184	205	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	56	56	56	56
Heavy Vehicles, %	0	16	8	0	2	2
Mvmt Flow	88	57	88	329	366	100

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	919	416	466	0	-	0
Stage 1	416	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.4	6.36	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.444	2.272	-	-	-
Pot Cap-1 Maneuver	304	608	1065	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	274	608	1065	-	-	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.2	1.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1065	-	274	608	-	-
HCM Lane V/C Ratio	0.082	-	0.319	0.094	-	-
HCM Control Delay (s)	8.7	0	24.2	11.5	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	0.3	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	46	93	188	216	19
Future Vol, veh/h	46	46	93	188	216	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	54	54	54	54
Heavy Vehicles, %	0	0	0	2	3	5
Mvmt Flow	85	85	172	348	400	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1110	418	435	0	-	0
Stage 1	418	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	234	639	1135	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	190	639	1135	-	-	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	543	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25	2.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1135	-	190	639	-	-
HCM Lane V/C Ratio	0.152	-	0.448	0.133	-	-
HCM Control Delay (s)	8.7	0	38.5	11.5	-	-
HCM Lane LOS	A	A	E	B	-	-
HCM 95th %tile Q(veh)	0.5	-	2.1	0.5	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	7	35	6	9	6	69	152	18	6	98	7
Future Vol, veh/h	6	7	35	6	9	6	69	152	18	6	98	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	58	58	58	58	58	58	58	58	58
Heavy Vehicles, %	17	0	3	33	22	0	4	1	17	17	1	14
Mvmt Flow	10	12	60	10	16	10	119	262	31	10	169	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	724	726	175	747	717	278	181	0	0	293	0	0
Stage 1	195	195	-	516	516	-	-	-	-	-	-	-
Stage 2	529	531	-	231	201	-	-	-	-	-	-	-
Critical Hdwy	7.27	6.5	6.23	7.43	6.72	6.2	4.14	-	-	4.27	-	-
Critical Hdwy Stg 1	6.27	5.5	-	6.43	5.72	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.27	5.5	-	6.43	5.72	-	-	-	-	-	-	-
Follow-up Hdwy	3.653	4	3.327	3.797	4.198	3.3	2.236	-	-	2.353	-	-
Pot Cap-1 Maneuver	322	354	866	293	332	766	1382	-	-	1188	-	-
Stage 1	773	743	-	489	503	-	-	-	-	-	-	-
Stage 2	507	529	-	707	699	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	279	315	866	242	295	766	1382	-	-	1188	-	-
Mov Cap-2 Maneuver	279	315	-	242	295	-	-	-	-	-	-	-
Stage 1	693	736	-	439	451	-	-	-	-	-	-	-
Stage 2	433	475	-	641	693	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	17.1	2.3	0.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1382	-	-	570	333	1188	-	-
HCM Lane V/C Ratio	0.086	-	-	0.145	0.109	0.009	-	-
HCM Control Delay (s)	7.8	0	-	12.4	17.1	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.5	0.4	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	48	15	209	128	14
Future Vol, veh/h	31	48	15	209	128	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	10	4	0	3	3	0
Mvmt Flow	53	81	25	354	217	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	633	229	241	0	-	0
Stage 1	229	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Critical Hdwy	6.5	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	431	805	1337	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	421	805	1337	-	-	-
Mov Cap-2 Maneuver	421	-	-	-	-	-
Stage 1	773	-	-	-	-	-
Stage 2	657	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1337	-	421	805	-	-
HCM Lane V/C Ratio	0.019	-	0.125	0.101	-	-
HCM Control Delay (s)	7.7	0	14.8	10	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	0.3	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	68	26	194	152	24
Future Vol, veh/h	30	68	26	194	152	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	10	0	0	2	3	4
Mvmt Flow	51	115	44	329	258	41

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	696	279	299	0	-	0
Stage 1	279	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.5	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	396	765	1274	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	379	765	1274	-	-	-
Mov Cap-2 Maneuver	379	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1274	-	379	765	-	-
HCM Lane V/C Ratio	0.035	-	0.134	0.151	-	-
HCM Control Delay (s)	7.9	0	16	10.5	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	0.5	-	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	6	113	19	20	2	67	194	16	2	178	8
Future Vol, veh/h	20	6	113	19	20	2	67	194	16	2	178	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	22	7	123	21	22	2	73	211	17	2	193	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	580	576	198	633	572	220	202	0	0	228	0	0
Stage 1	202	202	-	366	366	-	-	-	-	-	-	-
Stage 2	378	374	-	267	206	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	426	428	843	392	430	820	1370	-	-	1340	-	-
Stage 1	800	734	-	653	623	-	-	-	-	-	-	-
Stage 2	644	618	-	738	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	388	401	843	315	403	820	1370	-	-	1340	-	-
Mov Cap-2 Maneuver	388	401	-	315	403	-	-	-	-	-	-	-
Stage 1	751	733	-	613	585	-	-	-	-	-	-	-
Stage 2	581	580	-	624	730	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	16.2	1.9	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1370	-	-	693	365	1340	-	-
HCM Lane V/C Ratio	0.053	-	-	0.218	0.122	0.002	-	-
HCM Control Delay (s)	7.8	0	-	11.6	16.2	7.7	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.4	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	46	66	191	213	89
Future Vol, veh/h	77	46	66	191	213	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	61	88	255	284	119

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	775	344	403	0	-	0
Stage 1	344	-	-	-	-	-
Stage 2	431	-	-	-	-	-
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	366	699	1156	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	699	1156	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	655	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.9	2.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1156	-	333	699	-	-
HCM Lane V/C Ratio	0.076	-	0.308	0.088	-	-
HCM Control Delay (s)	8.4	0	20.6	10.6	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.3	0.3	-	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	53	88	143	205	230	27
Future Vol, veh/h	53	88	143	205	230	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	117	191	273	307	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	980	325	343	0	-	0
Stage 1	325	-	-	-	-	-
Stage 2	655	-	-	-	-	-
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	277	716	1216	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	226	716	1216	-	-	-
Mov Cap-2 Maneuver	226	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	3.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1216	-	226	716	-	-
HCM Lane V/C Ratio	0.157	-	0.313	0.164	-	-
HCM Control Delay (s)	8.5	0	28	11	-	-
HCM Lane LOS	A	A	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.3	0.6	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	50	8	86	42	7
Future Vol, veh/h	113	50	8	86	42	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	151	67	11	115	56	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	218	0	322	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	137	-
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	-	-	1352	-	672	857
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1352	-	666	857
Mov Cap-2 Maneuver	-	-	-	-	666	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	882	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	688	-	-	1352	-
HCM Lane V/C Ratio	0.095	-	-	0.008	-
HCM Control Delay (s)	10.8	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	8	43	8	10	6	78	164	20	6	108	10
Future Vol, veh/h	10	8	43	8	10	6	78	164	20	6	108	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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	11	9	47	9	11	7	85	178	22	7	117	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	505	507	123	524	501	189	128	0	0	200	0	0
Stage 1	137	137	-	359	359	-	-	-	-	-	-	-
Stage 2	368	370	-	165	142	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	478	468	928	464	472	853	1458	-	-	1372	-	-
Stage 1	866	783	-	659	627	-	-	-	-	-	-	-
Stage 2	652	620	-	837	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	440	434	928	410	438	853	1458	-	-	1372	-	-
Mov Cap-2 Maneuver	440	434	-	410	438	-	-	-	-	-	-	-
Stage 1	809	778	-	616	586	-	-	-	-	-	-	-
Stage 2	593	579	-	781	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	12.8	2.3	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1458	-	-	697	486	1372	-	-
HCM Lane V/C Ratio	0.058	-	-	0.095	0.054	0.005	-	-
HCM Control Delay (s)	7.6	0	-	10.7	12.8	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	57	23	214	132	30
Future Vol, veh/h	50	57	23	214	132	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	76	31	285	176	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	543	196	216	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	347	-	-	-	-	-
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	501	845	1354	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	487	845	1354	-	-	-
Mov Cap-2 Maneuver	487	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	716	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1354	-	487	845	-	-
HCM Lane V/C Ratio	0.023	-	0.137	0.09	-	-
HCM Control Delay (s)	7.7	0	13.6	9.7	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	0.3	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	96	50	202	161	28
Future Vol, veh/h	35	96	50	202	161	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	128	67	269	215	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	637	234	252	0	-	0
Stage 1	234	-	-	-	-	-
Stage 2	403	-	-	-	-	-
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	441	805	1313	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	415	805	1313	-	-	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	757	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1313	-	415	805	-	-
HCM Lane V/C Ratio	0.051	-	0.112	0.159	-	-
HCM Control Delay (s)	7.9	0	14.8	10.3	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	0.6	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	63	24	4	46	28	5
Future Vol, veh/h	63	24	4	46	28	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	32	5	61	37	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	116	0	171	100
Stage 1	-	-	-	-	100	-
Stage 2	-	-	-	-	71	-
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	-	-	1473	-	819	956
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1473	-	816	956
Mov Cap-2 Maneuver	-	-	-	-	816	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	948	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	835	-	-	1473	-
HCM Lane V/C Ratio	0.053	-	-	0.004	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	6	113	19	20	2	67	194	16	2	178	8
Future Vol, veh/h	20	6	113	19	20	2	67	194	16	2	178	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	-	-	-
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	22	7	123	21	22	2	73	211	17	2	193	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	580	576	198	633	572	220	202	0	0	228	0	0
Stage 1	202	202	-	366	366	-	-	-	-	-	-	-
Stage 2	378	374	-	267	206	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	426	428	843	392	430	820	1370	-	-	1340	-	-
Stage 1	800	734	-	653	623	-	-	-	-	-	-	-
Stage 2	644	618	-	738	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	391	404	843	317	406	820	1370	-	-	1340	-	-
Mov Cap-2 Maneuver	391	404	-	317	406	-	-	-	-	-	-	-
Stage 1	758	733	-	618	590	-	-	-	-	-	-	-
Stage 2	586	585	-	624	730	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	16.2	1.9	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1370	-	-	695	367	1340	-	-
HCM Lane V/C Ratio	0.053	-	-	0.217	0.121	0.002	-	-
HCM Control Delay (s)	7.8	-	-	11.6	16.2	7.7	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.4	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	46	66	191	213	89
Future Vol, veh/h	77	46	66	191	213	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	61	88	255	284	119

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	775	344	403	0	-	0
Stage 1	344	-	-	-	-	-
Stage 2	431	-	-	-	-	-
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	366	699	1156	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	338	699	1156	-	-	-
Mov Cap-2 Maneuver	338	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	655	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	2.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1156	-	338	699	-	-
HCM Lane V/C Ratio	0.076	-	0.304	0.088	-	-
HCM Control Delay (s)	8.4	-	20.2	10.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.3	0.3	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	53	88	143	205	230	27
Future Vol, veh/h	53	88	143	205	230	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	117	191	273	307	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	980	325	343	0	-	0
Stage 1	325	-	-	-	-	-
Stage 2	655	-	-	-	-	-
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	277	716	1216	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	234	716	1216	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	3.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1216	-	234	716	-	-
HCM Lane V/C Ratio	0.157	-	0.302	0.164	-	-
HCM Control Delay (s)	8.5	-	26.9	11	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.6	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	113	50	8	86	42	7
Future Vol, veh/h	113	50	8	86	42	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	151	67	11	115	56	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	218	0	322	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	137	-
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	-	-	1352	-	672	857
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1352	-	666	857
Mov Cap-2 Maneuver	-	-	-	-	666	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	882	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	688	-	-	1352	-
HCM Lane V/C Ratio	0.095	-	-	0.008	-
HCM Control Delay (s)	10.8	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	8	43	8	10	6	78	164	20	6	108	10
Future Vol, veh/h	10	8	43	8	10	6	78	164	20	6	108	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	-	-	-
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	11	9	47	9	11	7	85	178	22	7	117	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	505	507	123	524	501	189	128	0	0	200	0	0
Stage 1	137	137	-	359	359	-	-	-	-	-	-	-
Stage 2	368	370	-	165	142	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	478	468	928	464	472	853	1458	-	-	1372	-	-
Stage 1	866	783	-	659	627	-	-	-	-	-	-	-
Stage 2	652	620	-	837	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	443	438	928	413	442	853	1458	-	-	1372	-	-
Mov Cap-2 Maneuver	443	438	-	413	442	-	-	-	-	-	-	-
Stage 1	816	778	-	621	591	-	-	-	-	-	-	-
Stage 2	598	584	-	781	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	12.8	2.3	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1458	-	-	700	490	1372	-	-
HCM Lane V/C Ratio	0.058	-	-	0.095	0.053	0.005	-	-
HCM Control Delay (s)	7.6	-	-	10.7	12.8	7.6	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	57	23	214	132	30
Future Vol, veh/h	50	57	23	214	132	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	76	31	285	176	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	543	196	216	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	347	-	-	-	-	-
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	501	845	1354	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	489	845	1354	-	-	-
Mov Cap-2 Maneuver	489	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	716	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1354	-	489	845	-	-
HCM Lane V/C Ratio	0.023	-	0.136	0.09	-	-
HCM Control Delay (s)	7.7	-	13.5	9.7	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	0.3	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	96	50	202	161	28
Future Vol, veh/h	35	96	50	202	161	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	350	0	250	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	128	67	269	215	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	637	234	252	0	-	0
Stage 1	234	-	-	-	-	-
Stage 2	403	-	-	-	-	-
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	441	805	1313	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	419	805	1313	-	-	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1313	-	419	805	-	-
HCM Lane V/C Ratio	0.051	-	0.111	0.159	-	-
HCM Control Delay (s)	7.9	-	14.7	10.3	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	0.6	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	63	24	4	46	28	5
Future Vol, veh/h	63	24	4	46	28	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	32	5	61	37	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	116	0	171	100
Stage 1	-	-	-	-	100	-
Stage 2	-	-	-	-	71	-
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	-	-	1473	-	819	956
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1473	-	816	956
Mov Cap-2 Maneuver	-	-	-	-	816	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	948	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	835	-	-	1473	-
HCM Lane V/C Ratio	0.053	-	-	0.004	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Appendix D - Signal Warrant Analysis

Traffic Signal Warrant Summary Worksheet 70%

Intersection: Ridgeview Rd & 191st St
County: Johnson County
City: Spring Hill, KS

Major Street: Ridgeview Rd
Critical Approach Speed: 45 mph
Lanes: 1 lane

Minor Street: 191st St
Critical Approach Speed: 45 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 100%

In built-up area of isolated community of < 10,000 population? Yes
Total number of approaches at intersection? 4 or more
If it is a "T" intersection, inflate minor threshold to 150%? No
Manually set volume level? No

Analysis based on EXISTING volume data.

Date	Day of the Week	Time (HH:MM)			
		From	AM / PM	To	AM / PM
2/6/2020	Thursday	6:00	AM	9:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**No**
Warrant 4: Pedestrian Volume	**No**
Criterion A: Four-Hour	No
Criterion B: Peak-Hour	No
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**N/A**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:
Name: Grant Niehus
Agency: RIC
Date: 2/26/2020

Warrant 1: Eight - Hour Vehicular Volume 70%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition A : Min. Veh. Volume		
Volume Level	70%	56%
Major Rd. Req	350	280
Minor Rd. Req	105	84
Number of Hours	1	1

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	70%	56%
Major Rd. Req	525	420
Minor Rd. Req	53	42
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 56%

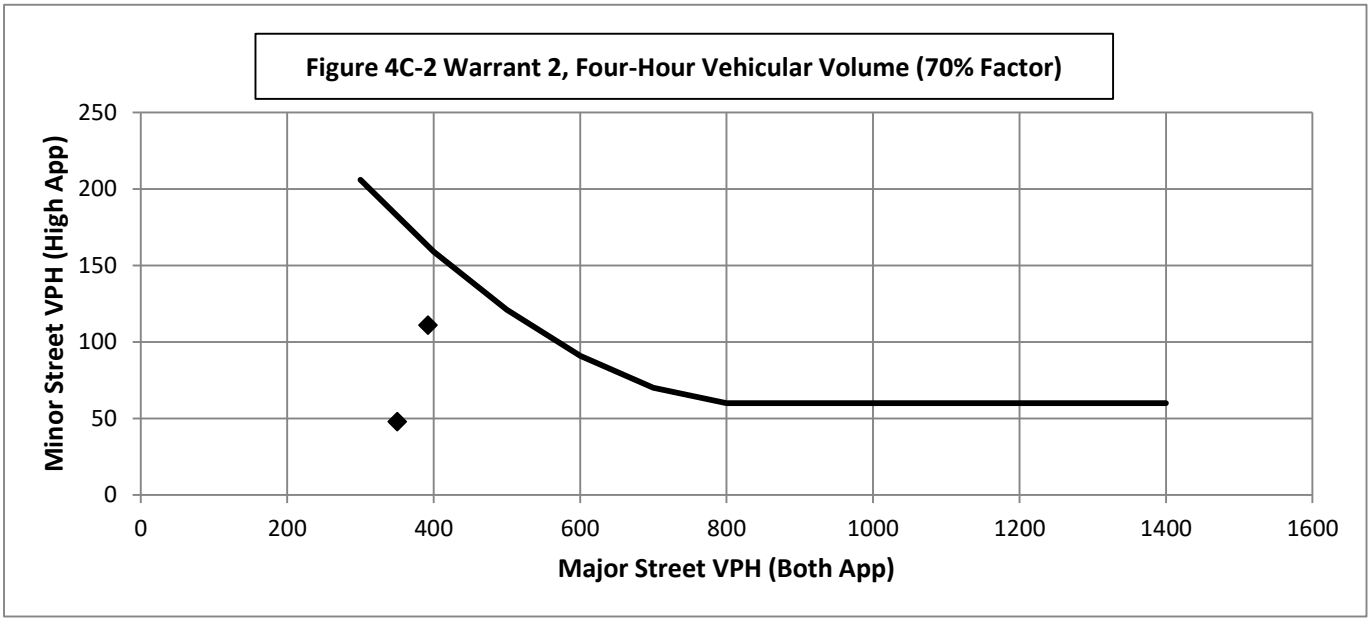
Satisfied? No

6:00 AM		Enter Start Time (Military Time) (HH:MM)			
Time Period	**From**	**To**	**Major Road: Both App. (VPH)**	**Minor Road: High App. (VPH)**	**Total**
1	6:00	7:00	98	10	108
2	7:00	8:00	392	111	503
3	8:00	9:00	143	17	160
4	9:00	10:00	102	12	114
5	10:00	11:00	93	14	107
6	11:00	12:00	99	22	121
7	12:00	13:00	106	25	131
8	13:00	14:00	98	18	116
9	14:00	15:00	124	43	167
10	15:00	16:00	350	48	398
11	16:00	17:00	234	36	270
12	17:00	18:00	236	54	290
13	18:00	19:00	135	22	157
14	19:00	20:00	79	7	86
15	20:00	21:00	91	5	96
16	21:00	22:00	26	8	34

Warrant 2: Four-Hour Volume 70%

Warrant Evaluated? Yes
Warrant Satisfied? No
Manually Set To:

Hour Start	7:00	15:00	#N/A	#N/A
Major Road Vol.	392	350	#N/A	#N/A
Minor Road Vol.	111	48	#N/A	#N/A



Warrant 3: Peak Hour Volume 70%

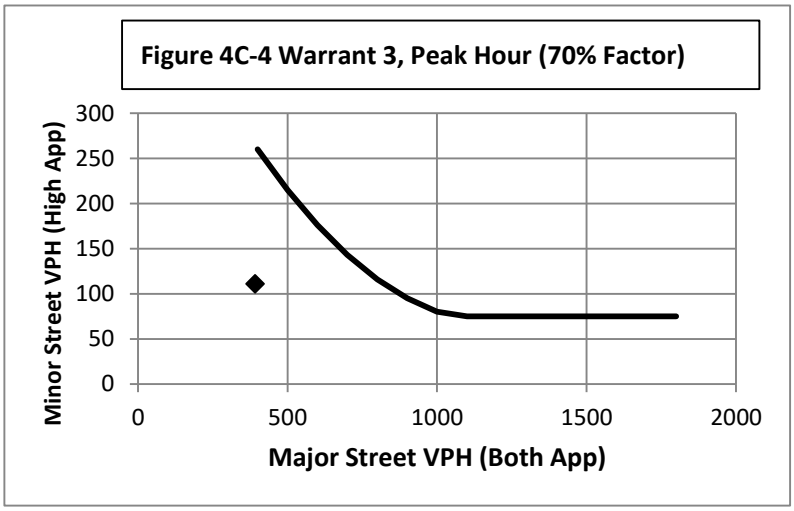
Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	
Volume on Minor Approach	100	No
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour? No

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
7:00	392	111



Warrant 4: Pedestrian Volume 70%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

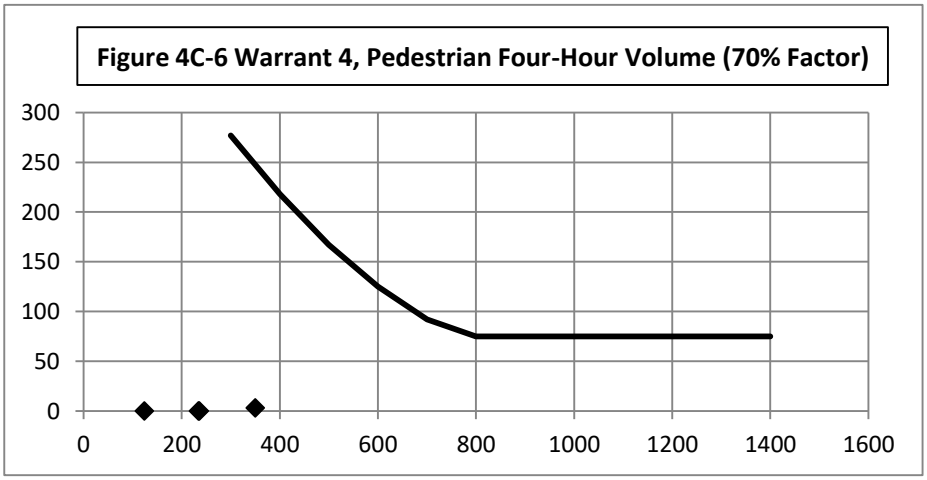
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
14:00	0	124
15:00	3	350
16:00	0	234
17:00	0	236

Manually Set Major Rd Vol? No

Avg. walk speed less than 3.5 ft/s? No

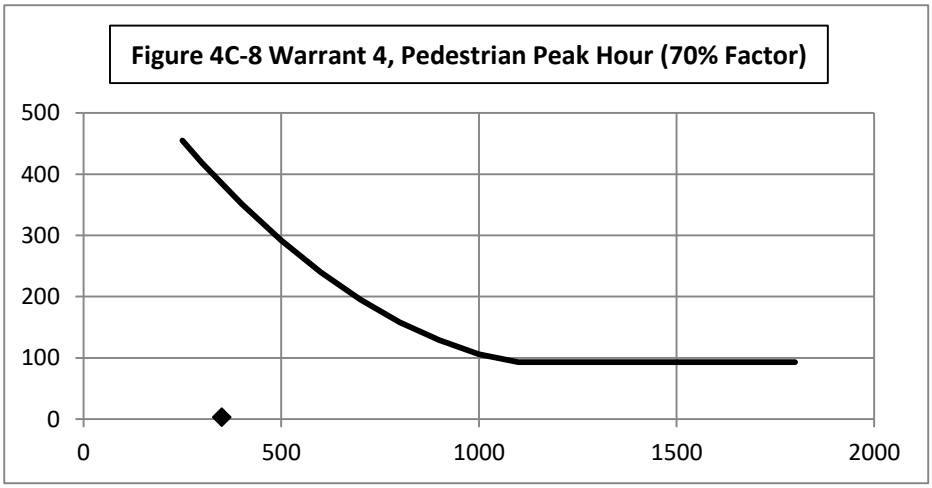
Criterion A Satisfied? No



Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
15:00	3	350

Criterion B Satisfied? No



Traffic Signal Warrant Summary Worksheet 70%

Intersection: Ridgeview Rd & 191st St
County: Johnson County
City: Spring Hill, KS

Major Street: Ridgeview Rd
Critical Approach Speed: 45 mph
Lanes: 1 lane

Minor Street: 191st St
Critical Approach Speed: 45 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 100%

In built-up area of isolated community of < 10,000 population? Yes
Total number of approaches at intersection? 4 or more
If it is a "T" intersection, inflate minor threshold to 150%? No
Manually set volume level? No

Analysis based on PROJECTED volume data.

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
2020	Yes	6:00	AM	9:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**Yes**
Warrant 4: Pedestrian Volume	**No**
Criterion A: Four-Hour	No
Criterion B: Peak-Hour	No
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**N/A**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:
Name: Grant Niehus
Agency: RIC
Date: 2/26/2020

Warrant 3: Peak Hour Volume 70%

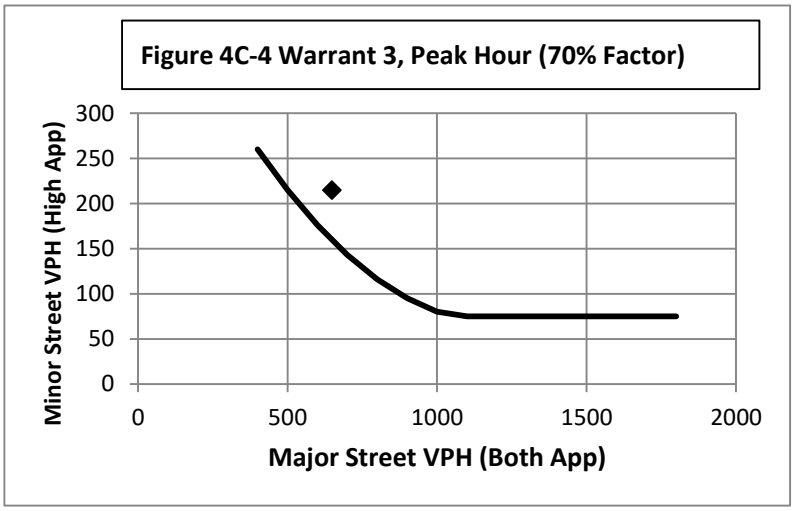
Warrant Evaluated? Yes **Warrant Satisfied? Yes** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	
Volume on Minor Approach	100	Yes
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour? No

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
7:00	648	215



Warrant 4: Pedestrian Volume 70%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

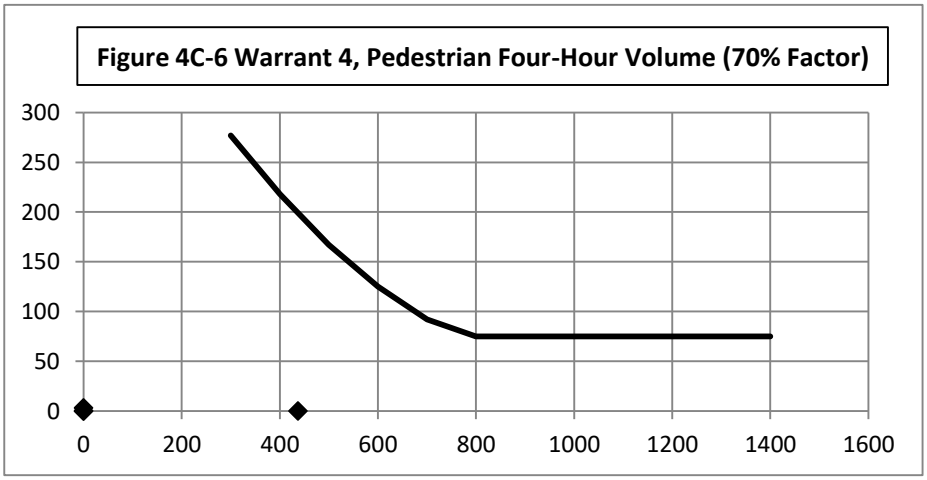
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
14:00	0	0
15:00	3	0
16:00	0	0
17:00	0	437

Manually Set Major Rd Vol? No

Avg. walk speed less than 3.5 ft/s? No

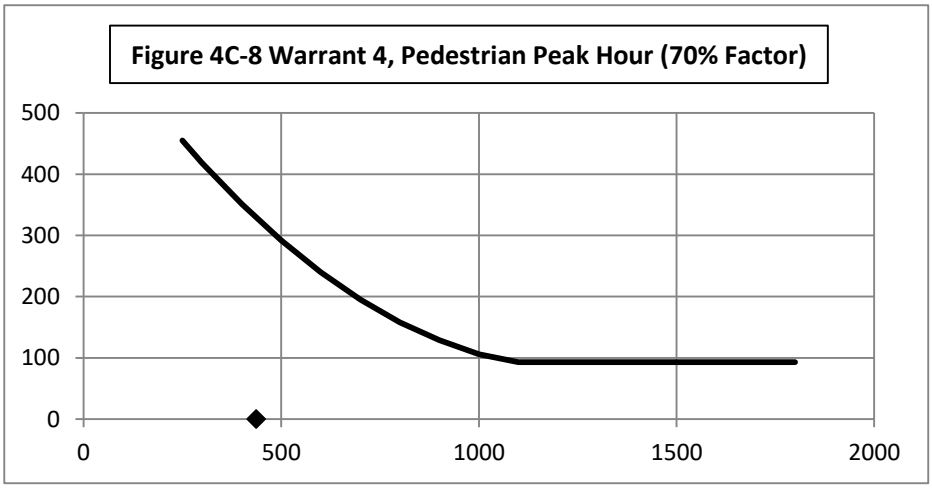
Criterion A Satisfied? No

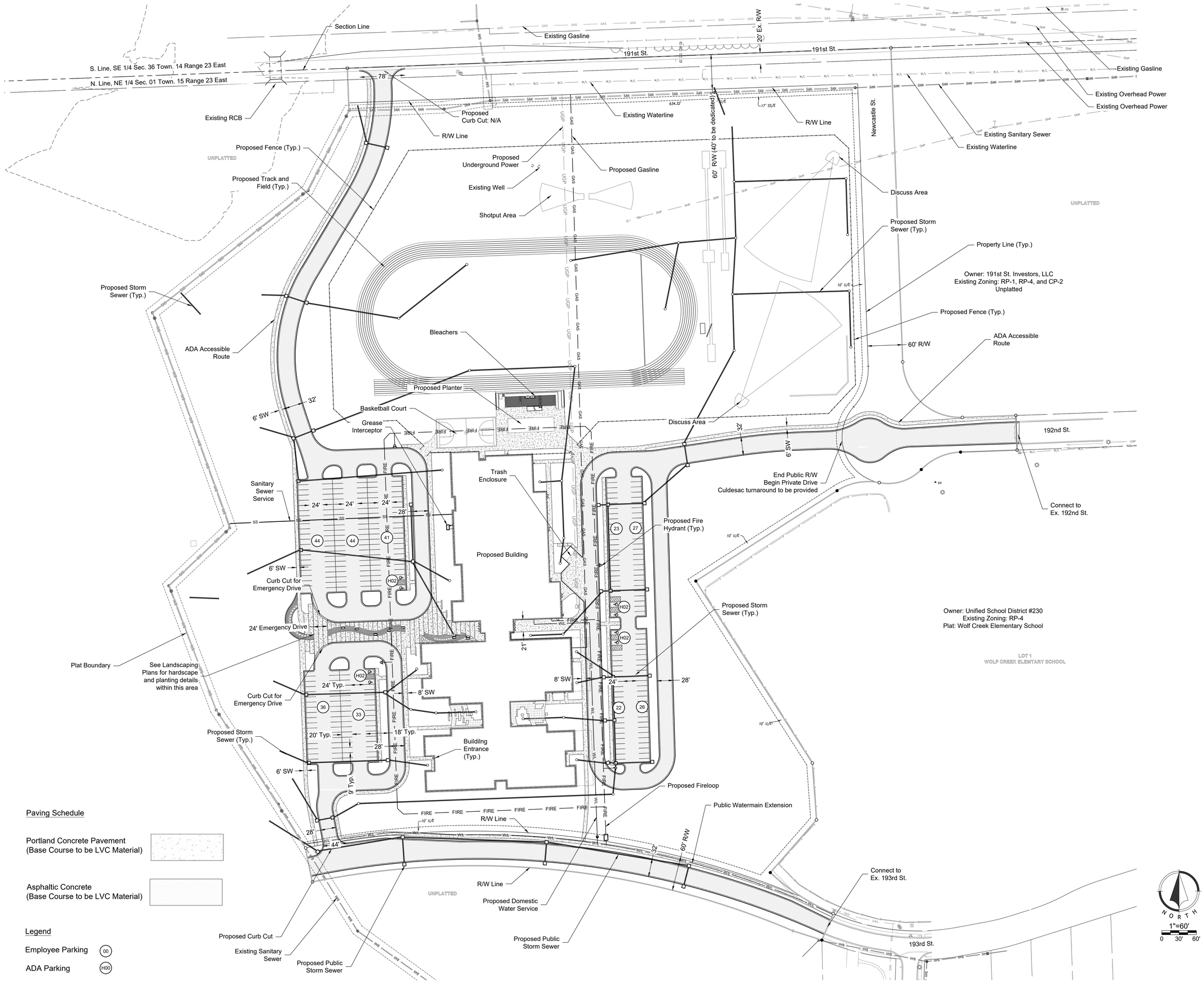


Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
17:00	0	437

Criterion B Satisfied? No





Paving Schedule

Portland Concrete Pavement
(Base Course to be LVC Material)

Asphaltic Concrete
(Base Course to be LVC Material)

Legend

Employee Parking (00)

ADA Parking (H00)

DLR Group
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- NOT FOR CONSTRUCTION -

SPRING HILL MIDDLE SCHOOL #3

SPRING HILL USD 230

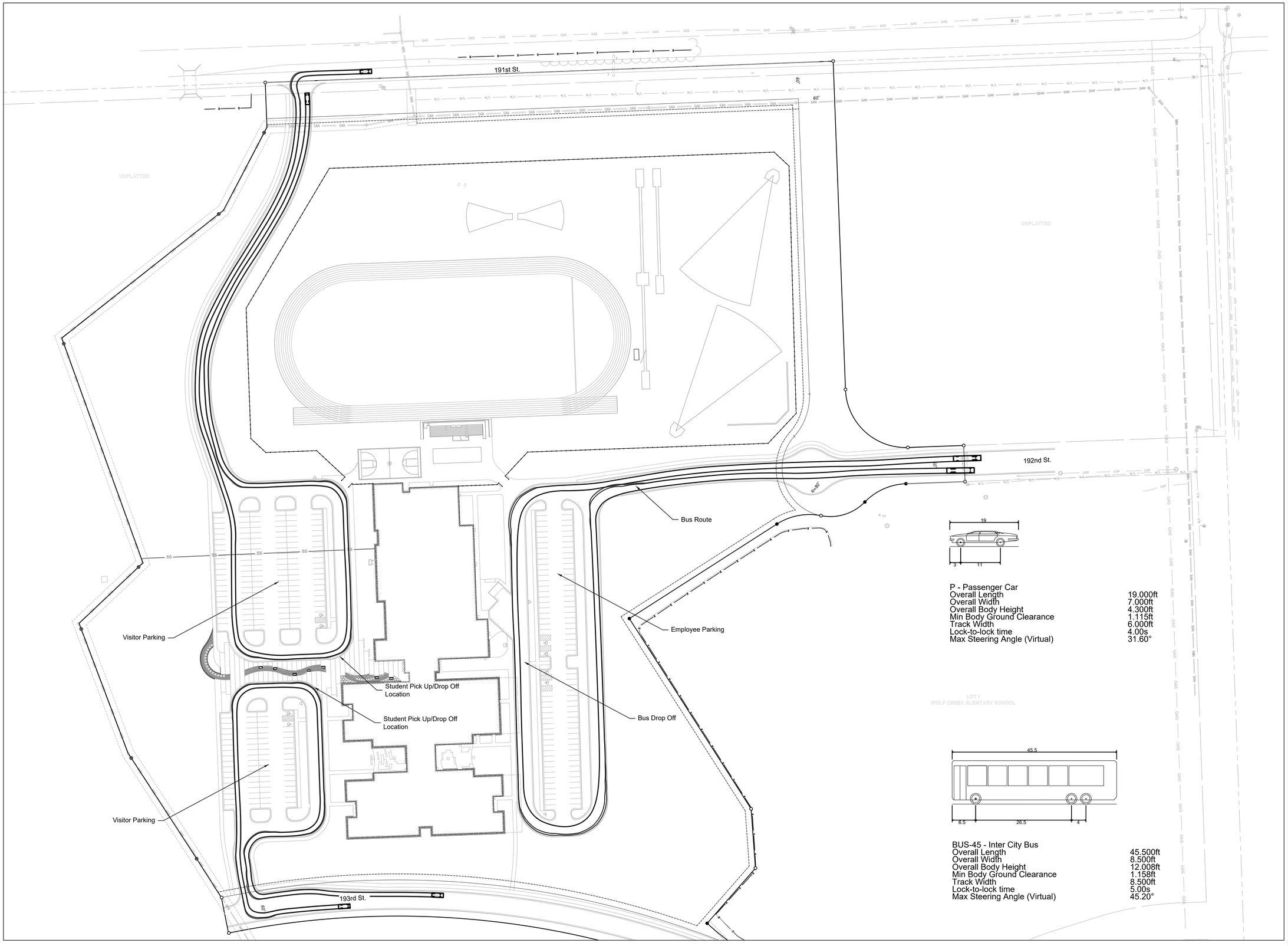
18685 W 191ST ST.
SPRING HILL, KS 66083

SITE PLAN APPLICATION
03-23-2020
Revisions

12-20102-00

GENERAL LAYOUT

C03



P - Passenger Car

Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°

BUS-45 - Inter City Bus

Overall Length	45.500ft
Overall Width	8.500ft
Overall Body Height	12.008ft
Min Body Ground Clearance	1.158ft
Track Width	8.500ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	45.20°

DLR Group
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- NOT FOR CONSTRUCTION -

SPRING HILL MIDDLE SCHOOL #3

SPRING HILL USD 230

18685 W 191ST ST.
SPRING HILL, KS 66083

SITE PLAN APPLICATION
03-23-2020
Revisions

12-20102-00

TRAFFIC CIRCULATION PLAN

C09

May 08 , 2020-12:34pm
C:\Users\gniehus\AppData\Local\Temp\AcPublish_18756\Turn Lanes.dwg

Renaissance Infrastructure Consulting
5015 NW Canal Street, Suite 100
Riverside, Missouri 64150
816.800.0950
www.ric-consult.com

NO.	BY	QD	DATE	REVISION

MO Certificate of Authority: E-2010033630

Ridgeview Rd Turn Lane Exhibit

Turn Lane Exhibit

Spring Hill Middle School
Spring Hill, Kansas

Sheet 1 of 1

Spring Hill MS#3
Spring Hill, Kansas
May 8, 2020
Concept Estimate

Ridgeview Road Turn Lane
1,806 LF Long

Item	Description		Cost	Cost/LF
1	General Conditions	6.20%	30,491	16.88
2	Public Works Permit & Bond		34,425	19.06
3	Traffic Control		1,941	1.07
4	Excavation and Grading		106,496	58.97
5	Asphalt Paving		197,761	109.50
6	Concrete Work		0	0.00
7	Site Structures		0	0.00
8	Specialty Paving		0	0.00
9	Striping and Signage		9,411	5.21
10	Storm Drainage Systems		20,000	11.07
11	Utilities		0	0.00
12	Landscaping		5,597	3.10
13	Electrical		0	0.00
14	Traffic Signals		0	0.00
	Subtotal		406,122	225
	Permits, Bonds and Insurance	4.46%	21,913	12
	Design & Estimate Contingency	4.00%	17,121	9
	Construction Contingency	3.00%	13,355	7
	Escalation to 2nd Qtr 2021	5.00%	22,926	13
	Design Fees & Reimbursables	0.00%	0	0
	Fee	2.15%	10,351	6
	Total		**$491,788**	**$272**

Item	Description	Unit	Quantity	Price	Amount	QuantF	Note
2	**Public Works Permit & Bond**						
01 10 00	Public Works Permit & Bond	LS	1	7.00%	34,425		
					34,425		
3	**Traffic Control**						
31 20 00	Misc Traffic Control	LF	22	86.89	1,941		
					1,941		
4	**Excavation and Grading**						
31 20 00	Site Demolition & Clearing	AC	2.38	1,914	4,559		
31 20 00	Erosion Control	AC	2.38	5,451	12,985		
31 20 00	Site Stripping	CY	1,922	2.13	4,086	6" Thick	
31 20 00	Street Cuts & Fills	CY	11,530	3.19	36,778	3.0' Avg	
31 20 00	Fine Grading	SF	103,774	0.16	16,550		
31 20 00	Respread Topsoil & Grade	CY	1,520	6.64	10,091	6" Thick	
31 20 00	Sawcut Asphalt	LF	1,806	11.88	21,446		12.0" Thick
					106,496		
5	**Asphalt Paving**						
32 12 00	Asphalt Street Paving	SY	2,241	63.00	141,211	12.0 Inches	0"AggBase
32 13 00	Concrete Paving, Unreinforced	SY	172	70.00	12,040	10.0 Inches	0"AggBase
32 12 00	Gravel Shoulders	SY	3,097	3.96	12,264		6"AggBase
32 12 00	Street Layout and Cleanup	LF	1,806	17.85	32,245		
					197,761		
6	**Concrete Work**						
					0		
7	**Site Structures**						
					0		

Item	Description	Unit	Quantity	Price	Amount	QuantF	Note
8	**Specialty Paving**						
	Total				0		
9	**Striping and Signage**						
10 14 00	Misc Signage	EA	14	251.32	3,631		
32 17 23	Pavement Marking	LF	2,709	2.13	5,779		
					9,411		
10	**Storm Drainage Systems**						
33 00 00	Storm Drainage	AL	1.00	20,000	20,000		
					20,000		
11	**Utilities**						
					0		
12	**Landscaping**						
32 90 00	Seeding	AC	1.88	2,971	5,597		
					5,597		
13	**Electrical**						
					0		
14	**Traffic Signals**						
					0		