

Community Planning and Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.gov

BOARD OF COUNTY COMMISSIONERS PUBLIC HEARING

April 1, 2025 at 1:00 p.m.

Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder Virtual and in-person

DATE PUBLISHED: March 25, 2025

STAFF PLANNER: Pete L'Orange, Senior Planner

STAFF RECOMMENDATION

Docket LU-24-0017/SPR-24-0081: Starlings CO LLC Equestrian Center and Ag Worker ADU

Proposal: Limited Impact Special Review for an Equestrian Center with more

> than 25,000 square feet of floor area, an Agricultural Worker Accessory Dwelling Unit, and non-foundational earthwork exceeding 500 cubic yards, and Site Plan Review for a new 5,352square-foot residence where the presumed compatible size is

5,934 square feet.

8130 N. 73rd Street, a 68-acre parcel located approximately .75 Location:

mile north of the intersection of N. 73rd Street and Nimbus Road.

in Section 24, Township 2N, Range 70W.

Zoning: Agricultural (A) Zoning District

Owners/Applicants: Starlings CO, LLC

Johnson & Repucci LLP c/o Stephen Larson and ShelterBelt Design Agents:

c/o Paige Schavey

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STAFF RECOMMENDATION:

Staff recommend that the Board of County Commissioners conditionally approve docket LU-24-0017/SPR-24-0081: Starlings CO LLC Equestrian Center and Ag Worker ADU.

SUMMARY AND RECOMMENDATION:

This application requests Limited Impact Special Review for an Equestrian Center with more than 25,000 square feet of floor area, for an Agricultural Worker Accessory Dwelling Unit (Ag Worker ADU), and for non-foundational earthwork exceeding 500 cubic yards; the application also requests Site Plan Review for construction a new 5,352-square-foot residence where the presumed compatible size is 5,934 square feet.

Limited Impact Special Use Review is required for the Equestrian Center with more than 25,000 square feet of floor area, for the Ag Worker ADU, and for earthwork exceeding 500 cubic yards; these are analyzed pursuant to the Special Use Standards outlined in Article 4-601 of the Boulder County Land Use Code (the Code). Site Plan Review is required for the proposed residence; this is analyzed pursuant to the Site Plan Review standards outlined in Article 4-806 of the Code.

Staff recommend conditional approval of the proposal because, as conditioned, staff find the equestrian center, the Ag Worker ADU, and the earthwork can meet all of the criteria for Limited Impact Special Use Review. Staff also recommend conditional approval of the proposed residence because, as conditioned, staff find it can meet all of the standards for Site Plan Review.

DISCUSSION:

The subject parcel is approximately 68 acres in size, located on the east side of N. 73rd Street, approximately 0.75 mile north of the intersection of N. 73rd Street and Nimbus Road (see Figure 1 below).

The Boulder County Comprehensive Plan indicates that a significant portion of the northern part of the subject parcel is located within identified Agricultural Lands of National Importance; there are additional Agricultural Lands of National and Local Importance on the southern portion of the parcel (see Figure 2 below). There is also an identified Riparian area associated with the Highland Ditch, and a very small Critical Wildlife Habitat in the southeast corner of the subject parcel. Finally, there is a viewshed protection score of 1.85 out of 5 along N. 73rd Street.

The northern two-thirds of the subject parcel is identified as being located within a High Swelling Soil Potential Area; there is also an identified Landslide Susceptibility area south of the Highland Ditch (see Figure 3 below).

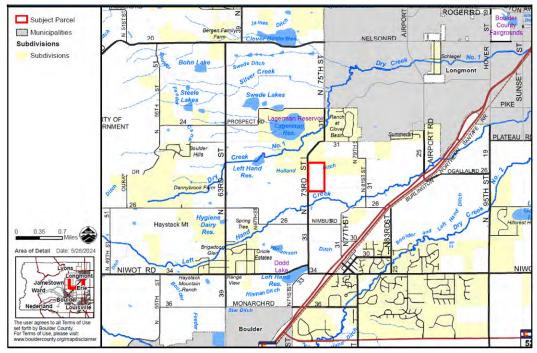


Figure 1: Vicinity Map showing location of the subject parcel.

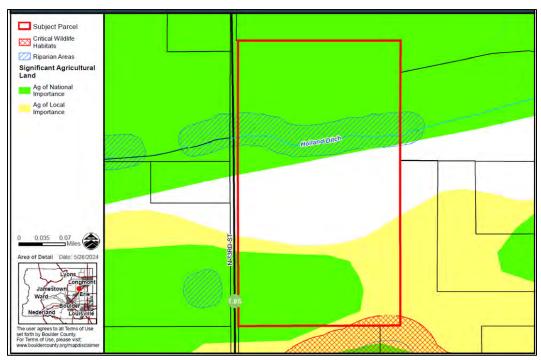


Figure 2: Comprehensive Plan map of subject parcel.

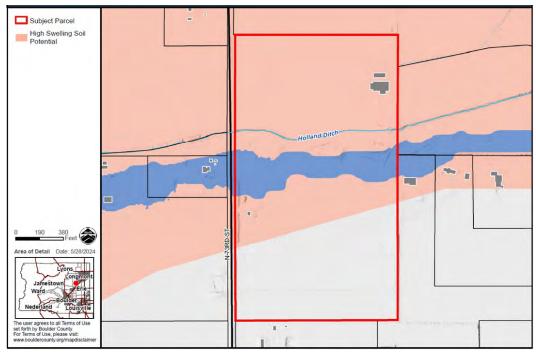


Figure 3: Geological hazards located on the subject parcel.

EQUESTRIAN CENTER CONTEXT:

Equestrian Centers are allowed by right in the Agricultural Zoning District but are subject to specific provisions under Article 4-502.A.5 of the Code. These provisions were added as part of a 1998 Land Use Code amendment. Equestrian centers which were operating prior to the adoption of this amendment were allowed to continue at their existing levels, provided they submitted a site plan and description of the operation, including number and types of competitive events, to the county by December 31, 1999. If they were to increase the number or type of events, or add lighting for nighttime riding activities, they were required to go through the Special Review process. Any equestrian centers established after the code amendments are, of course, subject to the new provisions and any required reviews. Every equestrian center that goes through a planning process is reviewed on a case-by-case basis based on the specifics of the property and the proposal.

Staff reviewed the planning and land use records to develop a general context for equestrian centers in unincorporated Boulder County. Factors that staff reviewed include: the number of reviewed equestrian centers; the distribution of equestrian centers in unincorporated Boulder County; which equestrian centers were grandfathered as existing prior to the code amendments; whether any of the grandfathered equestrian centers required additional reviews; and how much floor area was related to equestrian center activities versus other activities for each site.

Based on the planning and land use records, including the proposed equestrian center on the subject parcel, staff identified a total of 29 equestrian centers as having been reviewed by the county (see Table 1 below). Staff have not inspected each approved or documented equestrian center to determine if they are still in operation; rather, staff

focused their analysis on the characteristics of those reviewed equestrian centers. They are scattered throughout the county, but there is some slight clustering west of Longmont and around the Louisville/Lafayette/Erie area (see Figure 4 below). Of those 29 existing equestrian centers, only one of those (Magpie Meadows Farm at 7754 Ute Road) was not in operation prior to the 1998 code amendment.¹

Name	Location	Acreage	Residential	Agricultural	Total	Review	Pre-1999
		_	Floor Area	Floor Area	Floor	Process	Grandfathered
					Area		
Starlings CO	8130 N. 73rd Street	68	5,352	51,194	56,726	LU (2024,	N
						under review)	
Nighthawk	5555 Nelson Road	35	2,844	43,743	46,587	SU (2019,	Υ
Equestrian						Approved)	
Canino	10024 Lookout	134	7,705	38,164	45,869		Υ
Boulder Equestrian	8778 Arapahoe	10	3,197	32,236	35,433	SU (1990,	Υ
Center						Approved)	
Carlisle	11050 Jasper	55	10,002	25,369	35,371		Υ
Windswept Farms	10985 Lookout Road	44	1,500	34,734	36,234	LU (2023,	Υ
						approved)	
Treadwell	8002 Arapahoe	31.5	5,345	27,402	32,747	SU (1983,	Υ
						Approved)	
Wasson	10594 N 65th	40	9,471	22,443	31,914		Υ
Full Moon Farm	9143 Valmont	25	0	26,344	26,344		Υ
Miles	11051 Jasper	43	4,176	21,135	25,311		Υ
Anderson	7132 Baseline	37	13,724	9,316	23,040		Υ
Hansen	7659 East County Line	40	2,167	18,616	20,783		Y
Rossing	13781 N 115th	55	4,794	12,626	17,420		Υ
Tanksalvala	10505 N 65th	20	3,306	12,696	16,002		У
Magpie Meadows	7754 Ute Road	4.5	4,706	10,961	15,667	SU (2022, On Hold)	N
Schultz	6650 Nelson	29	2,676	11,514	14,190	,	Υ
Nemmers	14128 N 115th	5		12,374	14,038		Υ
Middlecreek	7484 N 49th	45	3,388	7,380	10,768		Υ
Winters	7160 Nimbus	12	5,843	3,636	9,479		Υ
Taylor	9647 N 63rd	29	5,545	2,376	7,921		Υ
Brinkman	10145 N 65th	10	3,485	4,092	7,577		Υ
Kinne	3575 Nimbus	10	2,855	4,702	7,557		Υ
Cameron	10282 Arapahoe	15	2,596	4,656	7,252		Y
Hunnes	4650 Pleasant Ridge	8.5	4,797	1,917	6,714		Υ
Moore	5150 St Vrain	10	2,535	3,920	6,455		Y
Marten	2401 N 119th	10	4,216	2,018	6,234		Y
Roark	11623 Wasatch	40	4,089	1,542	5,631		Υ
Masters	12257 Baseline	16	3,016	2,480	5,496		Y
Avery	11026 Maple	4.8	2,031	2,072	4,103		Υ

Table 1: Approved Equestrian Centers in unincorporated Boulder County.

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¹ The Magpie Meadows proposal was submitted in 2022 (docket SU-22-0009) but is currently on hold at the request of the Access & Engineering team for additional information.

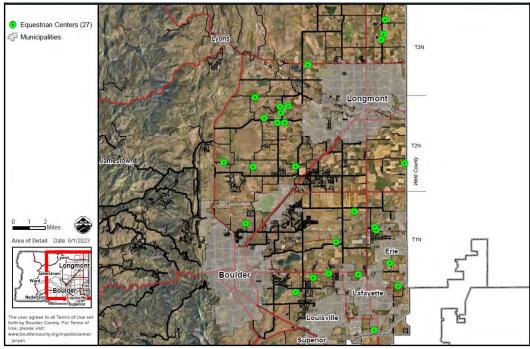


Figure 4: Approved Equestrian Centers in Boulder County.

Based on the planning records, four of the equestrian centers in operation prior to the code amendments have been subject to another review process, not including the application for the subject property. The Boulder Equestrian Center at 8778 Arapahoe Road and the Treadwell Equestrian Center at 8002 Arapahoe Road both went through the Special Review process prior to 1998. In reviewing their status after the adoption of the code amendment, staff determined they were operating legally but were still subject to the conditions of those Special Review approvals, including floor area and number and types of events. The Boulder Equestrian Center (docket SU-90-0009, then known as the Randolf Equestrian Center and originally called the Paclamar Equestrian Center) was approved for a total of 35,433 square feet for floor area (3,197 square feet for the residence and 32,236 square feet related to agricultural activities). The Treadwell Equestrian Center (docket SU-83-0024, originally the Cunningham Horse Training Center) was originally approved with 28,065 square feet of floor area (5345 square feet the residence and 22,720 square feet of agricultural floor area); an additional 4,682 square feet of agricultural floor area have been added since for an existing total of 32,747 square feet of floor area (27,402 square feet of agricultural floor area).

The third grandfathered equestrian center which has gone through a subsequent review is the Nighthawk Equestrian Center at 5555 Nelson Road. Originally the Foothills Equestrian Center, the Nighthawk Equestrian Center went through Special Review in 2019 (docket SU-19-0011) in order to expand the approved use of the site to include onsite camping for those attending events at the equestrian center and to allow for members of the public outside of those who board or train at the facility to attend events. Per Article 4-502.A.5.c, equestrian centers require Special Review in order to have competitive events open to participants outside of those who board or train there. The Nighthawk Equestrian Center was approved for a total floor area of 47,555 square

feet (2,844 square feet for the residence and 44,711 square feet of agricultural floor area, including an Ag Worker ADU); to date, they have built 46,587 square feet, with the remaining 968 square feet specifically allocated to the Ag Worker ADU (the square footage for Nighthawk Equestrian Center listed in Table 1 reflects what has been built).

Finally, Windswept Farms at 10985 Lookout Road went through the Limited Impact Special Review in 2023 for 34,734 square feet of agricultural floor area and approximately 1,500 square feet of residential floor for a detached, single unit dwelling to be used for staff housing (docket LU-23-0007). The total resulting floor area proposed was 36,234 square feet. No concerns were expressed regarding the proposed floor area, and the floor area was approved at a total of 36,234 square feet.

The remainder of the reviewed equestrian centers all fall under the pre-1998 code amendment provision.

PROPOSAL:

The applicants have proposed the develop the subject parcel as an equestrian training and breeding center ("Equestrian Center"), with multiple structures supporting that use, including an Agricultural Worker Accessory Dwelling Unit (Ag Worker ADU). See Figure 5 below for the proposed site plan. The total proposed floor area for the Equestrian Center is approximately 49,925 square feet; the proposed Ag Worker ADU is 1,010 square feet, plus 278-square-foot covered porch. The applicants have also prosed a new 5,352-square-foot residence as customary and incidental to the Equestrian Center use.

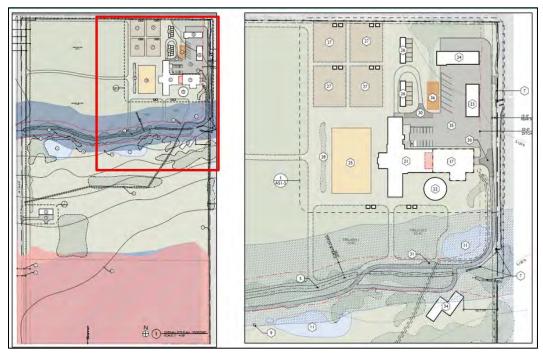


Figure 5: Proposed site plan, with detail of the northeastern portion of the subject parcel.

According to the Boulder County Assessor's records, there is a 12,144-square-foot "Special Purpose Barn" and a 4,000-square-foot equipment shed on the subject parcel. Staff also observed an approximately 900-square-foot accessory structure the use of which is not known. Per the application materials, approximately 1,472 square feet of the existing special purpose barn and all of the 900-square-foot accessory structure are proposed to be deconstructed.

The applicants then propose to build a total of 20 structures, 17 of which would be new, one of which would be the existing barn with new additional floor area, one being an existing structure which will be relocated on the subject parcel, and the final structure being a residence as customary and incidental to the equestrian center. The total resulting floor area proposed is 56,565 square feet (see Table 2 below). Per the Code, covered porches attached to a principal structure, Agricultural Worker ADUs, agricultural accessory structures (such as barns) are not included in residential floor area (RFA) calculations. As such, the total resulting RFA as proposed is 5,352 square feet and the total non-residential floor area is 51,213 square feet.

Structure	Total	RFA or Non-RFA
Residence	5,082 sq. ft.	RFA
Residence (Screened Porch)	270 sq. ft.	RFA
Residence (Covered Porch)	116 sq. ft.	Exempt from RFA
Stable and Arena	30,077 sq. ft.	Non-RFA
Heavy Equipment Storage	4,000 sq. ft.	Non-RFA
Hay/Bedding Storage	4,000 sq. ft.	Non-RFA
Daily Equipment Storage	4,000 sq. ft.	Non-RFA
Ag Worker ADU	1,010 sq. ft.	Non-RFA
Ag Worker ADU covered porch	278 sq. ft.	Non-RFA
Dry Lot Sheds (120 sq. ft. x 12)	1,440 sq. ft.	Non-RFA
Horse Run Sheds (1,280 sq. ft. x 2)	2,506 sq. ft.	Non-RFA
Round Pen (covered)	3,848 sq. ft.	Non-RFA

Table 2: Existing and proposed square footage, include RFA status.

REFERRALS:

This application was referred to the typical agencies, departments, and nearby property owners within 1,500 feet of the property. All responses received are attached and summarized below.

<u>Boulder County Building Safety and Inspection Services Team:</u> Boulder County Building Safety and Inspection Services reviewed the proposal and responded that the proposed structures will be required to meet the county's BuildSmart requirements and must

have an automated fire sprinkler system installed, be constructed with ignition-resistant materials and defensible space for wildfire mitigation and include an electrical vehicle charging outlet in the garage. They also noted that, as the property will exceed 25,000 square feet of total floor area, the 2015 International Green Construction Code will apply to new construction on the parcel. The Building team also noted that soils report will be required at building permit and that grading observation reports will be required. A more detailed plan review will be performed at the time of permit application, when full details are available, to assure that the proposal will meet all applicable minimum requirements.

Boulder County Development Review Team – Access & Engineering: Boulder County Development Review Team – Access & Engineering (A&E) reviewed the proposal and determined the property has legal access via N. 73rd Street. They noted that the proposed driveway must meet the Boulder County Multimodal Transportation Standard, including emergency pullouts and turnarounds. The Access & Engineering team also provided comment on the grading plans as submitted and noted that a stormwater quality permit and a drainage letter will be required. Finally, they reviewed the Transportation System Impact Analysis (TSIR); while they requested some additional information from the applicants regarding staffing and operations, they accepted the conclusions.

<u>Boulder County Public Health Department:</u> The Public Health Department reviewed the proposal and noted that a new onsite wastewater treatment system (OWTS) permit will be necessary for the proposed OWTS. They provided recommendations on avoiding damage to the OWTS during construction. They also provided on the requirements for decommissioning of the existing OWTS.

<u>Boulder County Floodplain Management Team:</u> The Floodplain Management team reviewed the application materials and stated that, due to recent updates to the floodplain maps, the subject parcel is no longer within the Floodplain Overlay (FO) district; however, the southern portion of the subject parcel is still located within the 500-year floodplain and a known fluvial hazard zone. They also provided recommendations to the applicants regarding flood insurance.

<u>Colorado Division of Water Resources:</u> This agency reviewed the application and noted that the existing well can only be used for livestock owned by the property owners and may not be used for any horses being boarded on-site. They also noted that the well cannot be used for the residence or the Ag Worker ADU. Finally, they noted that it is not clear whether the existing ponds on-site were constructed in accordance with Colorado State law and that the applicants must coordinate with the Water Commissioner to ensure the pond are in compliance.

<u>Xcel Energy:</u> This agency's referral response noted that Xcel owns and operates existing natural gas service facilities to the main house. For new natural gas service or modification to any of the existing facilities, the applicants must complete Xcel's application process.

<u>Adjacent Property Owners:</u> Notices were mailed to 33 nearby property owners. Staff have received three public comments. The first stated concern about traffic along N. 73rd Street in general, but noted that they did not oppose the proposal; the second and third comments also expressed concerns about traffic, and also expressed a desire that lighting be limited to prevent light pollution. One comment also requested a restriction on when outdoor work could occur.

<u>Agencies that sent a response indicating no conflicts include:</u> Boulder County Conservation Easement Team.

<u>Agencies that did not respond include:</u> Boulder County Long Range Planning; Boulder County Stormwater team; Boulder County Parks & Open Space – Natural Resource Planner; Left Hand Water District; Poudre Valley REA; Holland Ditch Company; and Mountain View Fire Protection District.

LIMITED IMPACT SPECIAL REVIEW SUMMARY:

The Community Planning & Permitting staff reviewed the conditions and standards for approval of a Limited Impact Special Review. Staff has reviewed these standards as they apply to the proposed Equestrian Center, the Ag Worker ADU, and the earthwork. Staff also reviewed the Equestrian Center requirements per Article 4-502.A and the Ag Worker ADU per Article 4-516.H of the Code.

(1) Complies with the minimum zoning requirements of the zoning district in which the use is to be established, and will also comply with all other applicable requirements;

The subject parcel is zoned Agricultural and is a legal building lot. Equestrian Centers, Ag Worker ADUs, and earthwork exceeding 500 cubic yards can be approved through the Limited Impact Special Review process.

All of the existing and proposed structures meet the required setbacks for the Agricultural zoning district. There is a supplemental setback of 90 feet along N. 73rd Street; there is also a supplemental setback along the Holland Ditch. The applicants are not proposing any structures within either of the supplemental setbacks.

Equestrian Center

As discussed above, the project as proposed would result in over 25,000 square feet of floor area, all of which is related to the equestrian center, a defined agricultural use. Properties with over 25,000 square feet of floor area, all of which is related to an agricultural use, must be reviewed the Limited Impact Special Review process.

Additional Provisions for an Equestrian Center under Article 4-502.A.5 include the following:

a. Setback Requirements: Unlighted outdoor equestrian arenas shall be set back 300 feet from existing schools, churches and dwelling on other lots, unless reduced through Special Review or Site Plan Review.

There are no existing or proposed outdoor equestrian arenas located within 300 feet of any existing school, church, or dwelling on other lots. The propose round pen, which is unlighted, is located approximately 600 feet from the nearest residence located on another parcel; the proposed outdoor arena area is located approximately 825 feet from the nearest residence located on another parcel. Therefore, staff find this provision is met.

b. Limited Impact Special Review is required for any equestrian center with amplified sound and/or lighted outdoor riding, driving, or showing of horses.

Staff have confirmed with the applicants that there will be no amplified sound or lighting for outdoor riding, driving, or showing of horses. Therefore, staff find this provision is not applicable to this application.

c. Special Review is required for competitive events open to participants outside of those who board or train at the facility.

Per the application materials submitted, and as confirmed by the applicants, the proposed equestrian center use will not include any competitive events open to any persons outside of those who board or train at the facility. Therefore, staff find the proposal does not require Special Review.

d. Existing establishments will be considered conforming at their present levels of use provided a site plan and description of the operation, including number and types of competitive events, is submitted to the Community Planning & Permitting Department by December 31, 1999. Increasing the number of competitive events or lighting for night time riding activities will require Special Review or Limited Impact Special Review as required in (b) above (Section 4-600).

There is no existing equestrian center on the subject parcel. Therefore, staff find this provision is not applicable to this application.

e. One Single Unit Dwelling, occupied by the owner or manager of the equestrian center, will be considered customary and incidental as a part of this use.

As discussed above, the applicants have proposed a single unit dwelling on the subject parcel. The applicants have confirmed that the single unit dwelling will be occupied by the property owners. Therefore, staff find this provision is met.

The proposed residence is reviewed under the Site Plan Review Standards below.

f. This use requires a building lot. Activities related to the use may occur on agricultural outlots which do not prohibit the activity, however no structures related to the use are allowed on the outlot.

The subject parcel is over 35 acres in size. Per Article 9-100.A.2, this constitutes a legal building lot. Therefore, staff find this provision is met.

g. Boarding of horses is permitted.

Per the applicants, the majority of the horses on-site will be owned by the property owners, and all of the horses on the property will be part of the equestrian center's training program. They stated that there will be times when a trainee's horse is stabled on site for a period of time. A small number of horses (6-8) will be stabled for the duration of a weekend clinic; up to two horses will be stabled for training for up to 6-12 months. The applicants have stated that the facility will for training, not for boarding. However, while staff find stabling for a weekend does not necessarily constitute "boarding," staff find that stabling horses for a period up to a year, even if it is no more than two at any time, would be considered boarding. Per this provision, however, boarding is allowed as part of an equestrian center use. Therefore, staff find that this provision is met.

In addition to the provisions discussed above, Article 4-502.A.3 and 4, provide that the parking and loading requirements for an equestrian center must be sufficient for the use as proposed. The application materials plans show 11 parking spaces, one of which must be ADA van accessible, and 6 spaces for vehicles with trailers. Per the referral response from the Access & Engineering Team, the proposed parking and loading spaces are sufficient for the use as proposed.

Therefore, staff find that the proposed equestrian center meets all of the additional provisions under Article 4-502.A.5.

<u>Agricultural Worker Accessory Dwelling Unit</u>

The applicants have proposed a 1,010-square-foot, two-bed and one-bath Agricultural Worker Accessory Dwelling Unit, with a 278-square-foot covered porch. The Ag Worker ADU is proposed to be attached to the Daily Equipment Storage Building; no internal communication is proposed between the Ag Worker ADU and the rest of the storage building. Ag Worker ADUs are allowed in

the Agricultural Zoning District, if approved through the Limited Impact Special Review process.

Additional Provisions for Agricultural Worker Units under Article 4-516.H.6 include the following:

a. The applicant shall adequately demonstrate that the property size and nature of the agricultural work on the property requires a second household for labor on-site.

The subject parcel is approximately 68 acres in size. Per the application materials, the equestrian center would include stabling and breeding of horses, training of both horses and riders, and hay production. The equestrian center would stable up to 15 horses; the haying operations would occur on the southern portion of the parcel (approximately 30 acres). Per the application materials, the agricultural worker "needs to be on hand early in the morning for proper daily feeding times, the frequent moving of horses from the stable out to pasture or the paddocks, and especially during foaling season when constant 24 hour monitoring is required leading up to the birth and the time after." Staff find that the level and nature of the agricultural activities on the subject parcel supports the request for a second household for on-site labor. Therefore, staff find this provision is met.

b. The applicant shall adequately demonstrate that the worker is substantially employed in farming the property.

As discussed above, the agricultural worker on the subject parcel carries out a wide range of agricultural activities and responsibilities related to equestrian center activities and the haying operations on the property. To ensure that this provision continues to be met, staff recommend as a condition of approval that the applicants provide evidence that the agricultural worker is substantially employed in farming the property as part of the annual reports required under provision 4-415.H.6.g below. Therefore, as conditioned, staff find this provision can be met.

c. The applicant shall adequately demonstrate that the unit is necessary for operating the farm.

As reflected in the application materials and discussed above, a significant amount of time and manpower, which exceed that which can be provided the property owners on their own, is necessary for the day-to-day operations of the proposed equestrian center. As such, the Agricultural Worker ADU is necessary for operating the equestrian center. Therefore, staff find this provision is met.

d. The accessory dwelling may be detached from the principal dwelling, provided it is either closely clustered with the principal structure or located where appropriate for the agricultural operation with which it is associated.

The applicants have proposed to locate the Ag Worker ADU as part of the daily equipment storage building. This would place the Ag Worker ADU approximately 700 feet from the principal residence (see Figure 6 below). However, staff find that the proposed location for the Ag Worker ADU is appropriate, as it places it near the equestrian center operations.

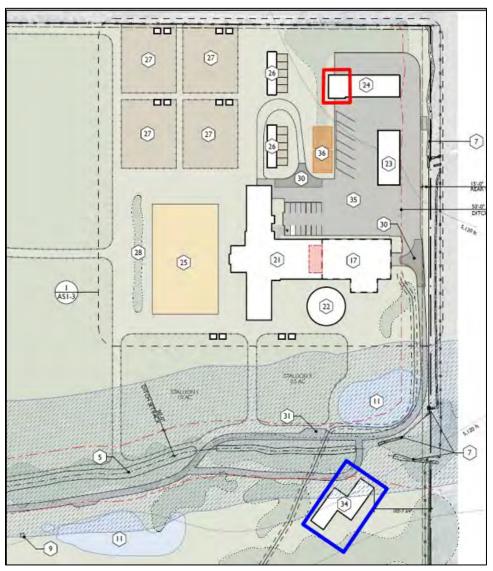


Figure 6: Proposed site plan, with proposed Ag Worker ADU indicated in red and the proposed residence indicated in blue.

Therefore, staff find this criterion is met.

e. The accessory dwelling is limited to 1,800 square feet. The Board may approve covered porches to proposed accessory dwellings which exceed these specified square footage limitations, provided that no other portion of the floor area of the proposed dwelling exceeds the specified limitation, and provided that the Board approves the additional covered porch area in accordance with the special use criteria. In no event shall any such approved covered porch area ever be enclosed.

The Ag Worker ADU is proposed to be 1,010 square feet, with a 278-square-foot covered porch area; the total size of the Ag Worker ADU is proposed at 1,288 square feet. Staff find the size proposed Ag Worker ADU is in compliance with this provision. Therefore, staff find this provision is met.

f. The property owner or a member of the owner's immediate family must work and live on the property.

Per the applicants, the property owners will reside in the proposal principal residence and will be actively involved in the daily training sessions and other required operations. Therefore, staff find this provision is met.

g. The owner must submit an annual report to the Community Planning & Permitting Department indicating that the purpose for which the accessory unit was approved has not changed, and that the unit continues to be occupied in accordance with the approval. Any impermissible change in use of the unit can result in termination of the right to occupy or use the unit.

Staff recommend a condition of approval requiring the property owners to submit an annual report to the Community Planning & Permitting Department indicating that the accessory dwelling continues to be used as an Agricultural Worker Unit that is occupied in accordance with the approval of this docket. As conditioned, staff find this provision can be met.

h. A notice of these provisions will be recorded in the real property records of the Clerk and Recorder's Office.

Staff recommend a condition of approval requiring, prior to the issuance of any building permits for the Agricultural Worker Unit, a signed affidavit be recorded that recognizes the conditions of approval for this docket. As conditioned, staff find this provision can be met.

i. Agricultural accessory dwellings approved by Boulder County or legally nonconforming prior to October 19, 1994 shall be permitted to be repaired, remodeled or replaced, provided the new structure is in the same general location and does not exceed 1,800 square feet.

There is no existing agricultural worker accessory dwelling on the subject parcel. Therefore, staff find this provision is not applicable.

Therefore, as conditioned, staff find the Agricultural Worker ADU can meet all of the required provisions.

Non-Foundational Earthwork

Per Article 4-102.F.3.c of the Code, Limited Impact Special Review is required for grading exceeding 500 cubic yards in the Agricultural zoning district. The applicants have proposed approximately 2,496 cubic yards of non-foundational earthwork. Per the referral response from the Boulder County Building Safety & Inspection Services Team, the proposed earthwork will require a grading permit. A qualified Colorado-licensed design professional must observe the grading and submit an observation report to ensure that the work is completed in substantial conformance with the approved engineered plans. Staff recommend as conditions of approval that grading permits are obtained and that the grading observation and associated report be carried out per the referral response. Additional impacts and requirements for the proposed earthwork are discussed in other criteria below. As conditioned, staff the proposed earthwork can meet this criterion.

Therefore, as conditioned, staff find this criterion can be met.

(2) Will be compatible with the surrounding area. In determining compatibility, the Board should consider the location of structures and other improvements on the site; the size, height and massing of the structures; the number and arrangement of structures; the design of structures and other site features; the proposed removal or addition of vegetation; the extent of site disturbance, including, but not limited to, any grading and changes to natural topography; and the nature and intensity of the activities that will take place on the site. In determining the surrounding area, the Board should consider the unique location and environment of the proposed use; assess the relevant area that the use is expected to impact; and take note of important features in the area including, but not limited to, scenic vistas, historic townsites and rural communities, mountainous terrain, agricultural lands and activities, sensitive environmental areas, and the characteristics of nearby development and neighborhoods;

For purposes of this review, staff consider the properties within 1,500 feet of the subject parcel as the applicable surrounding area, which is consistent with the defined neighborhood for the Site Plan Review. Existing development within this area consists primarily of single unit residences, many with agricultural activities and structures.

Equestrian Center

The proposed equestrian center use is a defined agricultural use, which is generally appropriate for the Agricultural zoning district. Most of the proposed equestrian center structures are located in the northeast portion of the parcel. Staff find this portion of the parcel is an appropriate location for the proposed equestrian center structures as it clusters them in one portion of the subject parcel, which is where the existing development is generally located. The exception to this clustering of structures is the proposed 4,000-square-foot heavy equipment storage building, which is proposed to be located on the southern portion of the parcel (see Figure 7 below). While this structure would not be clustered with the rest of the development, staff find this location is appropriate as it would provide access and storage for equipment that will be used for the haying operations which take place on the southern portion of the parcel. The southern portion of the lot is down-slope from the rest of the parcel. Locating this structure closer to the hay fields will allow for that equipment to access the fields without having the drive down N. 73rd Street.

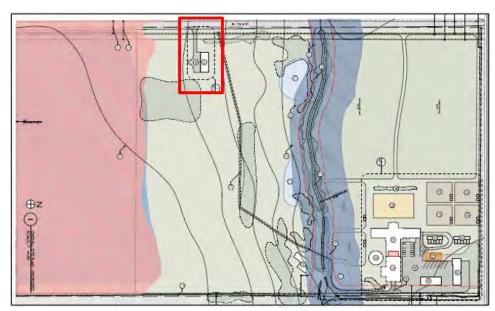


Figure 7: Proposed site plan, with heavy equipment storage building indicated in red. NOTE: North is to the right on the image.

The proposed equestrian center structures range from approximately 12 feet in height (sheds) to approximately 32 feet 7.5 inches (stable and arena). Staff find the range of heights for the proposed structures are compatible with the surrounding area as there are a number of other parcels with agricultural structures which, based on pictometry measurements, are in the range of 25 to 30 feet in height. Additionally, the existing special use barn is approximately 32.5 feet in height; staff find the very minimal increase in height to the structure will not result in any adverse impacts on the character of the area. As such, while the proposed stable and arena is slightly higher than other agricultural structures in the area, staff find that the heights for the proposed structures are in character with the rest the neighborhood.

Staff evaluated the total floor area proposed in relation to other parcels in the area. The applicants have proposed a total of 56,565 square feet of floor area, including the proposed residence (the compatibility of the residential floor area is discussed under the Site Plan Review standards below). The total floor area on other parcels in neighborhood range from 1,150 square feet to 48,105 square feet. The proposed floor area for the subject parcel would make it the largest in the neighborhood. However, the proposed floor area is all located well back from the public right-of-way, which helps to reduce the impact of the proposed development. As discussed in more detail under Criterion 9 below, staff recommend several conditions of approval which will serve to reduce and mitigate the visible impacts of the proposed development.

Staff also evaluated the resulting size of the equestrian center in relation to other equestrian centers in unincorporated Boulder County. The proposal would result in the largest floor area for equestrian centers in unincorporated Boulder County; the next largest equestrian center, Nighthawk Equestrian, was approved in 2019 for a total of 47,655 square feet. Considering specifically the equestrian centers which have gone through a land use review process, the approved total floor areas range between 32,747 square feet and 47,655 square feet, with an average of approximately 37,617 square feet. The proposal would exceed that median by 19,109 square feet, and the largest existing equestrian center by 9,914 square feet. However, staff also considered the size of the subject parcel in relation to the proposed development. The applicants have proposed a total of 56,565 square feet of floor area on a 68-acre parcel; this approximately 832 square feet per acre. The other four equestrian centers which have been reviewed and approved through a land use review process have the following square footage and acreage:

Name	Location	Parcel Acreage	Total Floor Area	Square Footage per Acre	Review Process
Starlings CO	8130 N. 73rd Street	68	56,565	832	LU (2024, under review)
Nighthawk Equestrian	5555 Nelson Road	35	46,587	1,331	SU (2019, Approved)
Boulder Equestrian Center	8778 Arapahoe Road	10	35,433	3,543	SU (1990, Approved)
Windswept Farms	10985 Lookout Road	44	36,234	824	LU (2023, Approved)
Treadwell	8002 Arapahoe Road	31.5	32,747	1,040	SU (1983, Approved)

Table 3: Approved Equestrian Centers, with parcel acreage, total floor area, and square footage per acre.

Based on the floor area to parcel size analysis, the floor area proposed by the applicants is generally consistent with the floor area approved for Windswept Farms in 2023, and well below the other three previous approvals. While the Code does not specifically consider the ratio of floor area to parcel size in the Agricultural zoning district, staff find it to be a useful method to help evaluate the overall impact of the proposed floor area. As such, while the equestrian center as proposed would have significantly more floor area than other equestrian centers, staff find that the significantly larger size of the parcel adequately serves to mitigate the proposed square footage.

As such, based on the application materials submitted, staff find that level and nature of the agricultural activities on the subject parcel, the total proposed floor area can be found to support the floor areas for each of the proposed structures.

Finally, as discussed in more detail in Criterion 4 below, staff evaluated the anticipated number of people coming and going from the subject parcel for the proposed equestrian center and found that there will be a relatively low number of people coming to the subject parcel at any given time. As such, staff do not anticipate the level of activities proposed for the equestrian center will be out of character with the rest of the surrounding area.

As such, staff find the proposed equestrian center use would not be out of character with the surrounding area and recommend approval of the floor areas proposed for the equestrian center structures, including the Ag Worker ADU, not to exceed a total of 51,213 square feet.

Ag Worker ADU

Staff have not identified any conflicts with the uses of the Ag Worker ADU in relation to the character of the surrounding area; no referral agencies have responded with any such concerns.

Earthwork

In regard to the proposed non-foundational earthwork, while the applicants propose a significant amount of earthwork, per the application materials, much of it is intended to provide "safe footing for the horses and reduces any inclines where a horse may feel the need to run." Based on the grading plan submitted with the application, and as observed by staff during a site visit, the existing contours of the proposed development area are uneven (see Figure 8 below). The proposed earthwork is intended to smooth out these contours.

Additionally, the extent of the area where earthwork is proposed is generally limited to the development area, and it does not extend to areas where it is not necessary; the exception to this is a proposed berm west of the uncovered riding area west of the stable. Per the calculations submitted by the applicants,

construction of this berm would require approximately 839 cubic yards of fill – approximately 61% of the non-foundational fill and approximately one-third of the total non-foundational earthwork. Unless necessary for drainage control, berms are typically considered unnecessary earthwork. Staff find the proposed berm does not provide any necessary drainage control. As such, staff find the berm is excessive and unnecessary, and staff recommend that the proposed berm be removed.

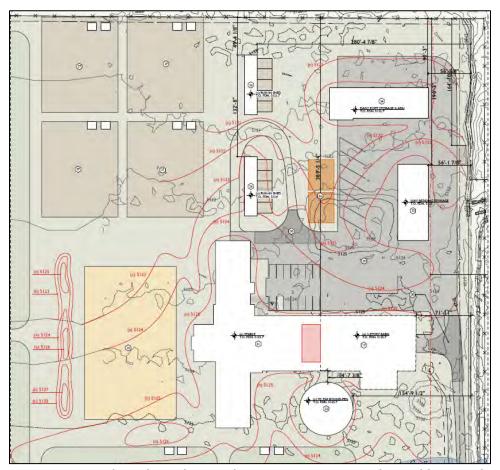


Figure 8: Proposed grading plan, with existing contours indicated by gray lines and proposed contours indicated in red lines.

Another signification portion of the non-foundational earthwork is related to the removal of part of the existing septic system north of the existing barn. The applicant has proposed to remove this system and install a new one. In doing so, they propose to flatten a currently raised portion of ground (see Figures 9 and 10 below). The raised area is approximately two feet above the surrounding area. While the application materials do not include the number of cubic yards of earthwork specifically related to the flattening of these area, staff estimate that it is approximately 8,800 square feet by two feet tall, resulting in a total of approximately 652 cubic yards of cut. Given that this is a previously disturbed area and given the applicants' desire to smooth the site contours, effectively

returning it a natural grade, staff find this section of earthwork is justified and appropriate.



Figure 9: Photo of existing barn with raised septic system area indicated in red.

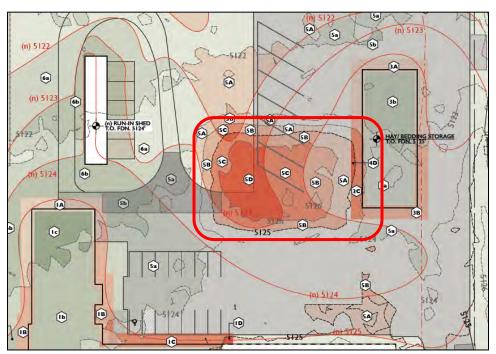


Figure 10: Detail from proposed cut and fill plan, with volume shading; proposed area of cut related to the existing septic system outlined in red.

Finally, as noted in the referral response from the Access & Engineering Team, the grading plans submitted with the application do not show the full extent of the proposed grading and where the proposed contours tie into the existing contours. Given staff's concerns about the berm and necessity of addressing the Access & Engineering Team's referral response, staff recommend as a condition of approval that revised grading plans be submitted at permit which show the

full extent of the grading and with the berm removed. This will significantly reduce the amount of non-foundational earthwork required.

Therefore, as conditioned, staff find that this criterion can be met.

(3) The use will be in accordance with the Comprehensive Plan;

The Comprehensive Plan indicates that a significant portion of the subject parcel is located in areas identified as Agricultural Lands of National and Local Importance (see Figure 11 below). There is also an identified riparian area associated with the Holland Ditch, and a very small Critical Wildlife Habitat area in the southeast corner of the subject parcel (impacts to the riparian area and the critical wildlife habitat are discussed in Criterion 4 below). Finally, the Comprehensive Plan indicates that there is a Viewshed Protection Score of 1.85 out of 5 along N. 73rd Street; visual impacts, including potential impacts related to this viewshed protection score, are discussed under Criterion 9 below for the equestrian center and Site Plan Review Standard 10 for the residence.

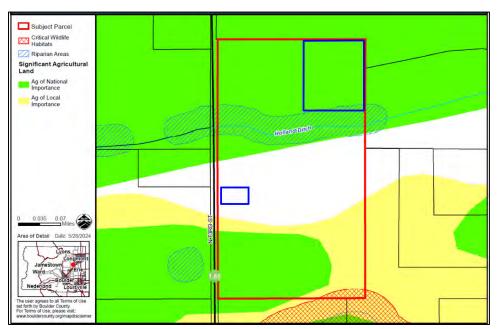


Figure 11: Comprehensive Plan map of the subject parcel. The proposed areas of development associated with the Equestrian Center are indicated in blue.

Staff evaluated the proposal in relation to the goals and policies set forth in the Boulder Valley Comprehensive Plan and identified one guiding principle and two specific policies which are particularly relevant to this application.

 Guiding Principle 5, states "Maintain the rural character and function of the unincorporated area of Boulder County by protecting environmental resources, agricultural uses, open spaces, vistas, and the distinction between urban and rural areas of the county." Staff find that, while the proposed development includes a significant amount of floor area, the

- proposed use of equestrian center is one that is typically located in, and associated with, rural and agricultural portions of the county. As such, staff find the proposal does not conflict with this guiding principle.
- Agricultural Element Policy AG 1.03: Agricultural Lands of Importance states, "It is the policy of Boulder County to encourage the preservation and utilization of those lands identified in the Agricultural Element as Agricultural Lands of National, Statewide, or Local Importance and other agricultural lands for agricultural or rural uses." Staff find that the proposed equestrian center use is consistent with this policy, as equestrian centers are a defined agricultural use.
- Agricultural Element Policy AG 1.12: Land Unification states, "The county shall continue to discourage the fragmentation of large parcels of agricultural land and to encourage the assemblage of smaller parcels into larger, more manageable and productive tracts." In this case, the proposed development is generally clustered in the northeast corner of the subject parcel (except for the equipment storage barn on the southern portion of the parcel, discussed above). To access the proposed development, the existing driveway transverses the whole width of the subject parcel. However, in this specific instance, staff find this does not result in any fragmentation of agricultural lands of importance, as the driveway generally follows the Holland ditch, before cutting north and running adjacent to the eastern property line. Additionally, the area south of the driveway is largely steeply sloped and outside of the designated agricultural lands of importance.

Staff have not identified any significant conflicts with any other goals or policies of the comprehensive plan related to the equestrian center, the Ag Worker ADU, or the earthwork.

Therefore, staff find that this criterion is met.

(4) Will not result in an over-intensive use of land or excessive depletion of natural resources. In evaluating the intensity of the use, the Board should consider the extent of the proposed development in relation to parcel size and the natural landscape/topography; the area of impermeable surface; the amount of blasting, grading or other alteration of the natural topography; the elimination or disruption of agricultural lands; the effect on significant natural areas and environmental resources; the disturbance of plant and animal habitat, and wildlife migration corridors; the relationship of the proposed development to natural hazards; and available mitigation measures such as the preservation of open lands, the addition or restoration of natural features and screening, the reduction or arrangement of structures and land disturbance, and the use of

sustainable construction techniques, resource use, and transportation management.

Equestrian Center

As discussed above, while the proposed equestrian center includes a significant amount for floor area, the level and nature of the activities support the proposed floor area. Additionally, the estimated "footprint" of the proposed development area, not including the open fields and grazing pastures, is approximately six acres in size; this is approximately only 8.8% of the total parcel size. Therefore, staff find that the overall size of the subject parcel and clustering of the proposed development in generally one area helps to mitigate the impact of the use.

Staff also considered the potential impact of the proposal in regard to the number people coming and go from the subject parcel, and whether that would constitute an over-intensive use of the property. The routine, day-to-day activities on the subject parcel involve a relatively low number of people at any given time, with approximately 15 people traveling to the equestrian center per day, Monday through Friday, and 10 people Saturday and Sunday. Per information provided by the applicants, the trainings are done on an individual basis (except on special occasions for clinics). For each session, an individual arrives at the beginning of their session and stays for the duration of the session, approximately 90 minutes total (half hour to prepare their horse, 30-45 minute session, and half hour to untack and load up); there are approximately four to five training sessions per day. The rest of the 10-11 people traveling to the site are not training but are caring and tending to the horses. Given the size of the subject parcel, and that much of the activity will occur inside the stable and arena building, staff find the anticipated number of people would not result in an over-intensive use of the subject parcel.

Additionally, the application materials do state that the equestrian center would occasion host training clinics, which would bring in a higher number of people to the subject parcel. Per the applicants, these clinics would last for the duration of a weekend, starting either Friday or Saturday and ending Sunday. These clinics would happen only three or four times a year and would include approximately 50 people. Additionally, six to eight times per year, clinics for approximately 25 people will travel to the site. For the proposed clinics, there will typically be only six to eight individuals who will bring horses. Typically, these horses stay for the duration of the clinic. Staff find that these clinics are consistent with the activities allowed as part of an Equestrian Center Use.

As discussed above, there is an identified riparian area which runs along the Holland Ditch (see Figure 10 above). However, the development associated with the equestrian center use avoids the riparian, with the exception of the driveway and staff do not have any concerns related to the driveway's impact on the riparian area. As also discussed above, there is a very small critical wildlife

habitat area on the subject parcel, located in the far southeast corner. Staff do not anticipate any impacts to this critical wildlife habitat as there is no development proposed or existing anywhere near the southeast corner of the subject parcel.

Ag Worker ADU

Staff do not anticipate that the proposed ADU will result in an over-intensive use of land or an excessive depletion of natural resources.

Earthwork

Finally, as discussed above, with the exception of the proposed berm, staff find the proposed earthwork and grading is generally supported by the proposed nature of the activities on site. Therefore, with the recommended condition to remove the proposed berm, staff find the proposed earthwork is not considered an over-intensive use of land.

Therefore, as conditioned in Criterion 2 above, staff find that this criterion can be met.

(5) The use will not have a material adverse effect on community capital improvement programs

Staff have not identified any capital improvement programs which might be impacted by the proposed equestrian center, ADU, or earthwork; additionally, no referral agency has responded with any such concern.

Therefore, staff find that this criterion is met.

(6) The use will not require a level of community facilities and services greater than that which is available;

Per the application materials submitted, the applicants propose to decommission and remove the existing onsite wastewater treatment system (OWTS), and to install a new OWTS to support the proposed development on the subject parcel. This new OWTS will require a permit from Boulder County Public Health and will have to comply with all Boulder County OWTS regulations.

Staff did not receive any response from the Mountain View Fire Protection District. However, the Access & Engineering Team noted in their referral response that emergency pullouts and turnarounds shown on the submitted site plans do not comply with the Boulder County Multimodal Transportation Standards (MMTS). Specifically, the proposed pullouts are more than the allowed 400 feet apart and the proposed emergency turnarounds are within 50 feet of the front of the horse barn and the proposed residence, which is not in accordance with the MMTS requirements. To ensure that the emergency pullouts and turnaround meet the MMTS requirements, staff recommend as a

condition of approval that revised plans be submitted for permitting which meet the requirements for emergency pullout and turnaround locations.

Per the application materials, water to the subject parcel is provided via both an existing well and a tap from the Left Hand Water District. Per the referral response from the Colorado Division of Water Resources, the existing well can only be used for watering livestock on a farm or ranch and that the applicants may only use it for their own horses and cannot be used for any stabled trainees' horses. The applicants have stated that the water from the well is not currently potable, so they would only use the well if they can design an adequate filtration system; if that is not feasible, the applicants will just use the Left Hand Water District tap. The water district did not respond to the referral request.

Therefore, as conditioned, staff find that this criterion can be met.

(7) Will support a multimodal transportation system and not result in significant negative impacts to the transportation system or traffic hazards;

The subject property is accessed via N 73rd Street, an asphalt Boulder County owned and maintained right-of-way (ROW) with a Functional Classification of Collector. Legal access has been demonstrated via adjacency to this public ROW.

Per the referral response from the Access & Engineering Team, the minimum ROW width requirement for a Collector is 70 feet. However, N. 73rd Street is 60 feet at the subject property. As such, the Access & Engineering Team have requested that the applicants provide a five-foot ROW dedication to the County at the subject property. Staff find that this dedication would not result in any conflicts with the proposed activities on the subject parcel, as there is already a 90-foot supplemental setback along N. 73rd Street, which prevents any development within that supplemental set back; the requested dedication would fall within this supplemental setback. As such, staff recommend that a five-foot ROW dedication be included as a condition of approval to allow for potential future widening of N. 73rd Street to meet required width requirements for a Collector road.

The Access & Engineering Team also reviewed the transportation system impact analysis (TSIR) submitted by the applicants and agreed with its conclusions. As such, staff find the proposed equestrian center use will not result in adverse impacts to the transportation system once the proposed project is developed. In order to prevent any adverse impacts to traffic along N. 73rd Street during construction, staff recommend as a condition of approval that during construction, all vehicles, machinery, dumpsters, and other items must be staged on the subject property.

Per the applicants, the existing driveway is to be paved to prevent rutting over time, which would be very challenging with trailers. The parking areas, both at the stable and at the residence would also be paved for similar reasons. The drive court and additional areas would be constructed with an 100% permeable TRUEGRID commercial paver combined with pea gravel. Per the applicants, this will maintain permeability and will reduce road maintenance by keeping the pea gravel in place. To ensure that the driveway meets the MMTS requirements, staff recommend as a condition of approval that plans submitted for permitting show a driveway which meets the standards for a one-lane plains access.

Therefore, as conditioned, staff find this criterion can be met.

(8) Will not cause significant air, odor, water, or noise pollution;

Staff have not identified any potential air pollution which might result from the proposed equestrian center, Ag Worker ADU, or proposed earthwork, and no referral agencies have responded with any such concerns.

Staff find the proposed equestrian center does have the potential to result in odor and/or water pollution, largely as a result of manure from the horses kept on-site. Water pollution is of particular concern, given the proposed flattening of the subject parcel and the proximity to both the Holland Ditch and an irrigation lateral along the eastern property line. To help mitigate and prevent any significant odor or water pollution impacts which may result from manure on site, staff recommend as a condition of approval that the applicants submit a manure management plan and then implement the plan. Additionally, as discussed in more detail and as conditioned in Criterion 13 below, erosion control and revegetation will also help to prevent potential water pollution during construction.

Per the application materials and as confirmed by the applicants, there is no outdoor amplified sound proposed for the equestrian center. As such, staff do not have any particular concerns about significant or undue noise pollution resulting from the proposed equestrian center once it is constructed. Given the rural character of the area and the wide open nature of the subject parcel, however, staff find that construction of the proposed development will result in temporary noise impacts. To limit the noise impacts of construction, staff recommend as a condition of approval that any outdoor construction or grading activities during the construction of the equestrian center use be limited to between 8:00 am and 5:00 pm, Monday through Friday; indoor construction activities may occur outside these hours provided the noise levels do not exceed those permitted under the Boulder County Noise Ordinance.

There is no indication that the proposed Ag Worker ADU will cause significant air, odor, or noise pollution in addition to the impacts discussed above, and no referral agency responded with such a concern.

Therefore, as conditioned here and in Criterion 13 below, staff find this criterion can be met.

(9) Will be adequately buffered or screened to mitigate any undue visual impacts of the use;

As discussed above, staff find that the location of the proposed equestrian center structures and Ag Worker ADU are generally appropriate, given the size of the subject parcel, the level of activities on the subject parcel, and the location of development on adjacent parcels. However, per the application materials, the applicants propose to remove a line of existing trees along the northern property line. Staff recommend as a condition of approval that these trees be retained, as they would help to screen the development visually from the property to the north and from a significant portion of N. 73rd Street north of the subject parcel. Additionally, as discussed in Criterion 2 above, staff have recommended the removal of the proposed berm; however, staff find that the location of the proposed berm would an appropriate location for additional trees to help screen the stable and arena structure from the properties to the west and from N. 73rd Street adjacent to the subject parcel. As such, staff recommend as a condition of approval that a minimum of ten trees be planted west of the outdoor arena, where the berm was proposed. Staff recommend that all required deciduous trees must have at least a two-and-a-half inch caliper and coniferous trees must be at least six feet in height.

Due the rural natural of the area surrounding the subject parcel, staff find the area is particularly susceptible to light pollution. As such, staff find that limiting the number and location of exterior lighting fixtures is an appropriate measure to reduce and mitigate the potential for light pollution. The elevations as submitted by the applicants indicate dark-sky compliant exterior lighting fixtures on the proposed structures; however, no information on the specific fixtures was provided. Staff recommend as a condition of approval that locations and fixture information for all exterior lighting be provided at permitting. Additionally, given the very rural nature of the area surrounding the subject parcel, staff find that lighting has the potential to cause negative visual impacts. In order to minimize adverse visual impacts, staff recommend as a condition of approval that exterior lighting fixtures must be limited as follows: one ceiling or wall mounted fixture is permitted for each exterior entrance; no landscape lighting is permitted; and no driveway lighting is permitted.

Therefore, due to the mitigating factors outlined above and as, staff find this criterion can be met.

(10) The use will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County

Staff have not identified any impacts of the proposed equestrian center, the Ag Worker ADU, or earthwork which would be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County; additionally, no referral agencies have responded with any such concerns.

Therefore, staff find this criterion is met.

(11) The use will establish an appropriate balance between current and future economic, environmental, and societal needs by minimizing the consumption and inefficient use of energy, materials, minerals, water, land, and other finite resources.

Per the applicants, roof-top solar panels will be installed on the indoor riding arena, as well as other equestrian center structures as suitable. Staff have not identified any other concerns or conflicts with this criterion; additionally, no agencies have responded with any such concerns.

Therefore, staff find this criterion is met.

(12) The use will not result in unreasonable risk of harm to people or property – both onsite and in the surrounding area – from natural hazards. Development or activity associated with the use must avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors; all as identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Special Review or Limited Impact Special Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies.

As discussed above, the subject parcel is located within a High Swelling Potential Area; additionally, there is an identified Landslide Susceptibility area associated with hillside south of the Holland Ditch. Per the referral response from the Building division, due to the High Swelling Soil Potential Area designation, a soils report which address the soil and bedrock swell potential on the parcel will be required at building permit; as such, staff recommend the soils report be included as a condition of approval. The applicants have not proposed any development in the Landslide Susceptibility Area; as such, staff find the proposed development will not result in any unreasonable risk of harm related to the Landslide Susceptibility Area.

Therefore, as conditioned, staff find that this criterion can be met.

(13) The proposed use shall not alter historic drainage patterns and/or flow rates unless the associated development includes acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.

As discussed above, the applicants have proposed a significant amount of earthwork and grading associated with the development of the equestrian center. While staff have found that the amount of earthwork is generally supported by the proposal, staff find the amount of earthwork has the potential to result in alterations to drainage and run-off on site and may require additional water detention or water quality treatment may be necessary. In order to help determine this, staff recommend that a drainage letter, as described in the Access & Engineering referral response, be submitted for review and approval at building permit application. Additionally, as the proposed development will result in over one acre of ground disturbance, and as part of Boulder County's water quality protection and Municipal Separate Storm Sewer System (MS4) Construction Program, a Stormwater Quality Permit (SWQP) is required for this project. Staff recommend as a condition of approval that applicants provide a complete SWQP submittal at building permit.

Additionally, to help ensure that the proposed development does not result in any runoff or excessive erosion, staff find that both erosion control measures and revegetation of any disturbed area is necessary. As such, staff recommend as a condition of approval that the applicants include revegetation information and erosion controls measures on plans submitted for permitting for review and approval and that erosion control measures be installed and remain in place until revegetation is complete.

Therefore, as conditioned, staff find that this criterion is met.

Staff find, as conditioned, the proposed Equestrian Center, the Ag Worker ADU, and the proposed earthwork can meet all of the standards for Limited Impact Special Review and recommend approval.

SITE PLAN REVIEW SUMMARY:

Per Article 4-802.A.3 of the Boulder County Land Use Code (the Code), Site Plan Review is required for any cumulative increase in floor area of more than 1,000 square feet on a parcel over that existing as of September 8, 1998. In this case, the applicant has proposed to construct a new residence resulting in a total of 5,352 square feet of

residential floor area, where 125% of the median residential floor area for the defined neighborhood is 5,934 square feet.

Article 4-806 of the Boulder County Land Use Code states that no Site Plan Review can be approved without compliance with the following standards. All site plan review applications must be reviewed in accordance with the following standards which the Director has determined to be applicable based on the nature and extent of the proposed development. Only those standards applicable to this project are included in this list. Staff has reviewed these standards as they apply to the proposed residence and find the following:

- (1) To provide a greater measure of certainty as to the applicable neighborhood relevant for comparison, the following definition of neighborhood shall be used to review proposed Site Plan Review applications:
 - c. For applications outside of platted subdivisions with seven or more developed lots or the townsites of Allenspark, Eldora, Eldorado Springs, Raymond, and Riverside, the defined neighborhood is the area within 1,500 feet from the applicable parcel. The neighborhood shall not include any parcels inside municipal boundaries, platted subdivisions with seven or more developed lots or the townsites of Allenspark, Eldora, Eldorado Springs, Gold Hill Historic District, Raymond, and Riverside.

The applicable neighborhood for the subject parcel is area within 1,500 feet of the subject parcel, not including any parcels inside municipal boundaries, platted subdivisions with seven or more developed lots or the townsites of Allenspark, Eldora, Eldorado Springs, Gold Hill Historic District, Raymond, and Riverside.

- (2) The size of the resulting development (residential or nonresidential) must be compatible with the general character of the defined neighborhood.
 - a. In determining size compatibility of residential structures within the defined neighborhood, it is presumed that structures of a size within the <u>larger</u> of a total residential floor area of either (1) 125% of the median residential floor area for that defined neighborhood or (2) of a total residential floor area of 1,500 square feet in the mapped townsites of Allenspark, Eldora, Eldorado Springs, Raymond, and Riverside, or 2,500 square feet for all other areas of the County, are compatible with that neighborhood, subject also to a determination that the resulting size complies with the other Site Plan Review standards in this section 4-806.A.

A. SIZE PRESUMPTION

The presumed compatible size of residential structures within the defined neighborhood (see Standard 1 above for the applicable neighborhood) is 5,934 square feet.

Median (total residential floor area) in the defined neighborhood*	4,747 square feet
125% of the median residential floor	5,934 square feet
area in the defined neighborhood	3,934 square reet
Total proposed residential floor area	5,352 square feet

^{*}Source: Boulder County Assessor's records, as verified by CPP staff for the subject parcel.

B. PROPOSED SIZE

RESIDENTIAL FLOOR AREA*	
Total existing residential floor area on the subject parcel	0 square feet
Proposed NEW residential floor area	Approximately 5,352 square feet
TOTAL resulting residential floor area	Approximately 5,352 square feet

^{*}Residential Floor Area includes all attached and detached floor area on a parcel including principal and accessory structures used or customarily used for residential purposes, such as garages, studios, pool houses, home offices, and workshops, excluding covered deck. Floor area does not include the area of any covered porch. Gazebos, carports, detached greenhouses and hoophouses up to a total combined size of 400 square feet are also exempt.

Information submitted with the application materials indicate the size of the proposed new residence is as follows: 2,638-square-foot first story; 1,401-square-foot second story; a 270-square-foot screened porch; and a 1,043-square-foot attached garage. The proposed carport and the ADU are exempted from RFA. Per Article 18-131A of the Code, covered porches attached to a principal structure are not included in residential floor area; however, to be considered a "covered porch," per the Code, it cannot be enclosed with solid walls, glass, or screens. The plans submitted for the proposed residence indicate the 270-foot-porch is to be screened. As such, it is not exempted under Article 18-131A and is included in the residential floor area calculations. Staff support the size of the residence as proposed since it is under the presumptive size limitation and since the resulting size of 5,352 square feet (all above grade and visible) is found to be compatible with the general character of the defined neighborhood.

Additionally, the above grade and visible residential floor areas in the defined neighborhood range between 1,778 square feet and 8,813 square feet; staff find

the proposed above grade floor area to be compatible with the general character of the defined neighborhood.

Therefore, staff recommend approval of the approximately 5,352 square feet of residential floor area as proposed.

(3) The location of existing or proposed buildings, structures, equipment, grading, or uses shall not impose an undue burden on public services and infrastructure.

ACCESS TO PROPERTY

As discussed in LU Criterion 7 above, the subject parcel is accessed via N. 73rd Street and has demonstrated legal access. As also discussed in LU Criteria 6 and 7 above, the driveway must meet the Boulder County Multimodal Transportation Standards (MMTS), including adequate access for emergency vehicles. However, as the proposed equestrian center and the residence share the same driveway, staff find that, with the recommended condition of approval in LU Criteria 6 and 7, that the proposed residence drive will meet the MMTS and, as such, will not impose an undue burden on public services or infrastructure.

Therefore, as conditioned in LU Criteria 6 and 7 above, staff find this standard can be met.

(4) The proposed development shall avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors. Natural hazards may be identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Site Plan Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies. Development within or affecting such natural hazards may be approved, subject to acceptable measures that will satisfactorily mitigate all significant hazard risk posed by the proposed development to the subject property and surrounding area, only if there is no way to avoid one or more hazards, no other sites on the subject property can be reasonably developed, or if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

GEOLOGICAL HAZARDS

As discussed in LU Criterion 12 above, the subject parcel is located within a Major Geologic Hazard Area as identified by the Boulder County Comprehensive Plan (see Figure 4 above). Specifically, the subject parcel is located within a High Swelling Soil Potential Area. As part of the building permit process, the Building Safety & Inspection Services Team will require the applicants to submit a soils report; this is included as recommended condition of approval under LU Criterion 12. As also discussed above, there is an identified Landslide Susceptibility Area on the subject parcel, south of the proposed residence; however, the proposed residence avoids this area.

Therefore, as conditioned in LU Criterion 12 above, staff find this standard is met.

(5) The site plan shall satisfactorily mitigate the risk of wildfire both to the subject property and those posed to neighboring properties in the surrounding area by the proposed development. In assessing the applicable wildfire risk and appropriate mitigation measures, the Director shall consider the referral comments of the County Wildfire Mitigation Coordinator and the applicable fire district, and may also consult accepted national standards as amended, such as the Urban-Wildland Interface Code; National Fire Protection Association (NFPA); International Fire Code; and the International Building Code.

The proposed project is in Wildfire Zone 2 (eastern area of unincorporated Boulder County). In response to catastrophic wildfire events of the recent past and continued hazards of a changing climate, on May 12, 2022, the Board of County Commissioners adopted revisions to the Boulder County Building Code to ensure a minimum level of ignition resistance for all structures in Wildfire Zone 2. The approved updates to the Building Code took effect on June 6, 2022, and require the use of ignition-resistant materials for construction and a minimum three-foot non-combustible perimeter around the residence.

Therefore, with this building permit requirement, staff find this standard is met.

(6) The proposed development shall not alter historic drainage patterns and/or flow rates or shall include acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.

DRAINAGE LETTER

As discussed in LU Criterion 13 above, staff find that the significant amount of proposed earthwork and grading on the subject parcel requires both a drainage letter and a Stormwater Quality Permit (SWQP). Staff find that, with the submission of these at building permit, the potential drainage impacts of the proposed residence can be adequately addressed.

Therefore, as conditioned in Criterion 13 above, staff find this standard can be met.

(7) The development shall avoid significant natural ecosystems or environmental features, including but not necessarily limited to riparian corridors and wetland areas, plant communities, and wildlife habitat and migration corridors, as identified in the Comprehensive Plan or through the Site Plan Review process. Development within or affecting such areas may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

As discussed above, there is an identified riparian area which runs along the Holland Ditch (see Figure 11 above). The proposed residence encroaches into this riparian area (see Figure 12 below).

However, based on staff observation during a site visit to the subject parcel, the proposed residence is located in a previously disturbed area, and is on the south side of the existing driveway spur for the residence. As such, staff find the proposed residence is not likely to have any significant impacts on the riparian area.

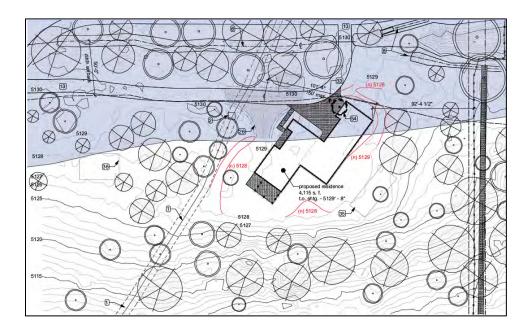


Figure 12: Site plan for proposed residence, with the mapped riparian area indicated in blue.

Therefore, staff find this standard is met.

(8) The development shall avoid agricultural lands of local, state or national significance as identified in the Comprehensive Plan or through the site plan review process. Development within or affecting such lands may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

As discussed above, much of the subject parcel is located within Agricultural Lands of National and Local Importance. The proposed residence is located the very edge of the Agricultural Lands of National Importance on the northern portion of the parcel. However, based on staff observations on-site, the area south of the main driveway and the Holland Ditch and is effectively cut off from the rest of the agricultural land and is not practical for actual agricultural activities. As such staff find the proposed residence will not have any adverse impact on agricultural lands of significance.

Therefore, staff find this standard is met.

(9) The development shall avoid significant historic or archaeological resources as identified in the Comprehensive Plan or the Historic Sites Survey of Boulder County, or through the site plan review process. Development within or affecting such resources may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

There are no known historic or archaeological resources on the subject parcel.

Therefore, staff find this standard is met.

(10) The development shall not have a significant negative visual impact on the natural features or neighborhood character of surrounding area. Development shall avoid prominent, steeply sloped, or visually exposed portions of the property. Particular consideration shall be given to protecting views from public lands and rights-of-way, although impacts on views of or from private properties shall also be considered. Development within or affecting features or areas of visual significance may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably

necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

a. For development anywhere in the unincorporated areas of the county, mitigation of visual impact may include changing structure location, reducing or relocating windows and glazing to minimize visibility, reducing structure height, changing structure orientation, requiring exterior color and materials that blend into the natural environment, and/or lighting requirements to reduce visibility at night.

Location:	As shown on the site plan dated November 18, 2024 and staked in the field
Elevations:	As shown in the application materials dated
	November 18, 2024
Height:	Approximately 29' from existing grade
Exterior Materials:	Brick and Board and Batten siding and Asphalt
	shingle roof
Exterior Colors:	Red and white siding and Gray roof

A. ELEVATIONS

The applicants submitted elevations for the proposed residence. Based on these elevations, staff have not identified any significant or undue visual impacts from the proposed residence. Staff recommend approval of the elevations for the residence as submitted.

B. HEIGHT VERIFICATION

Because the proposed height of the structure is within two feet of the maximum allowed 30 feet above existing grade, a licensed Surveyor must complete a Height Survey Verification Form. Please note that the height verification is a two-part process that requires a licensed Surveyor to establish existing grade (the grade before any site work) prior to construction, in addition to a follow-up survey once all roof framing is in place. The two-part form must sufficiently establish existing grade in accordance with standard surveying practice. Staff recommend as a condition of approval that the Height Survey Verification form be completed. Staff recommend the height survey be included as a condition of approval.

C. EXTERIOR COLORS AND MATERIALS

The application materials indicate that the proposed residence will have brick and board and batten siding in red and white, and a gray asphalt shingle roof; however, no samples were provided with the application materials. Staff do not have any concerns with the colors or materials as proposed. Staff find they are compatible with the policies and goals established by the Comprehensive Plan

and provisions of the Code and will not result in an adverse impact on surrounding properties. To ensure compatibility with the surrounding area, staff recommend as a condition of approval that the applicants submit exterior color and material details as part of the building permit application.

D. EXTERIOR LIGHTING

As discussed in LU Criterion 9 above, staff find the rural natural of the area surrounding the subject parcel is particularly susceptible to light pollution and, as such, limiting the location and number of lighting fixtures is an appropriate measure to mitigation light pollution resulting from the proposed residence. The elevations submitted for the residence do not include any location or fixture information for exterior lighting. However, as conditioned in LU Criterion 9 above, staff find the exterior lighting for residence can be adequately addressed at building permit.

Therefore, as conditioned here and in LU Criterion 9 above, staff find this standard can be met.

(11) The location of the development shall be compatible with the natural topography and existing vegetation and the development shall not cause unnecessary or excessive site disturbance. Such disturbance may include but is not limited to long driveways, over-sized parking areas, or severe alteration of a site's topography. Driveways or grading shall have a demonstrated associated principal use.

A. LOCATION

The proposed location of the residence is generally clustered with the rest of the development, in the context of the entire parcel. Additionally, as discussed above, the location is in a previously disturbed area, which is not useful for any agricultural activities. As such, staff recommend approval of the location of the proposed residence as shown on the site plan dated November 18, 2024.

B. EARTHWORK AND GRADING

The following foundational earthwork and grading requirements are associated with the proposed residence:

Foundational Earthwork (exempt from 500 cubic yards threshold)	317 cubic yards cut; 79 cubic yards fill
Other Earthwork (Swale)	26 cubic yards cut; 3 cubic yards fill

Staff find that the grading and earthwork specifically related to the residence is reasonable and recommend approval of it. However, given the total amount of earthwork proposed on the property as a whole, staff recommend that the conditions of approval in LU Criterion 1 related to grading permitting requirements, LU Criterion 2 related to revised grading plans, and LU Criterion 13 related to submission of a drainage letter and SWQP, all be applied to the earthwork and grading associated with the proposed residence. As conditioned, staff find this standard can be met.

C. UTILITIES

To minimize disturbances to the site, all utility service lines should be routed underground (see <u>Article 7-1200</u> of the Code) and located in areas already disturbed or proposed to be disturbed (e.g., along driveway).

Therefore, as conditioned, staff find this standard can be met.

(12) Runoff, erosion, and/or sedimentation from the development shall not have a significant adverse impact on the surrounding area

A. REVEGETATION REQUIREMENT

As discussed in LU Criterion 13, in order to limit the potential for runoff, erosion, or sedimentation to cause adverse impacts to the surrounding area, staff recommend as a condition of approval that the applicants revegetate all areas of exposed soil. If weather is not conducive to seeding or if adequate revegetation efforts have not occurred and vegetation is not adequately established at the time of final inspection request, an irrevocable letter of credit or monies deposited into a County Treasurer account must be provided to assure completion of revegetation.

B. EROSION CONTROL MEASURES

As also discussed in LU Criterion 13, staff recommend as a condition of approval that the applicants install erosion control measures (e.g., silt fencing) down slope of all disturbed areas prior to construction and maintain them throughout the construction process until revegetation has been established. These erosion control measures must be shown on plans submitted for permitting.

Therefore, as conditioned in LU Criterion 13 above, staff find this standard can be met.

(13) The development shall avoid Natural Landmarks and Natural Areas as designated in the Goals, Policies & Maps Element of the Comprehensive Plan and shown on the Zoning District Maps of Boulder County. The protection of Natural Landmarks and Natural Areas shall also be extended to their

associated buffer zones. Development within or affecting such Landmarks or Areas may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

There are no identified Natural Landmarks, Natural Areas, or associated buffer zones that fall within the boundaries of the subject parcel. Therefore, staff find no conflicts with this standard.

(14) Where an existing principal structure is proposed to be replaced by a new principal structure, construction or subsequent enlargement of the new structure shall not cause significantly greater impact (with regard to the standards set forth in this Section 4-806) than the original structure.

The applicants do not propose to replace any existing residence. Therefore, staff find this standard is not applicable.

(15) The proposal shall be consistent with the Comprehensive Plan, any applicable intergovernmental agreement affecting land use or development, and this Code.

As conditioned, staff find the proposed residence can be found to be consistent with the Comprehensive Plan.

Staff find, as conditioned, the proposed residence can meet all of the standards for Site Plan Review and recommend approval.

RECOMMENDATION:

Staff have determined that, as conditioned, the proposal can meet all the applicable criteria of the Boulder County Land Use Code for Site Plan Review and Limited Impact Special Review. Therefore, staff recommend that the Board of County Commissioners CONDITIONALLY APPROVE <u>Docket LU-24-0017/SPR-24-0081: Starlings CO LLC</u> <u>Equestrian Center and Ag Worker ADU</u>, subject to the following conditions:

- The development is subject to the requirements of the Boulder County Building Safety and Inspection Services Team and adopted County Building Codes, as outlined in the referral comments, including, but not limited to required sprinklering, ignition resistant materials and defensible space, and the BuildSmart energy efficiency and sustainability requirements.
- 2. **Prior to the issuance of any building permits for the Agricultural Worker Unit,** a signed affidavit from the property owners must be recorded that recognizes the conditions of approval for this docket.

- 3. The property owner must submit an annual report to the Community Planning & Permitting Department indicating that the Agricultural Worker accessory dwelling continues to be used as an Agricultural Worker Unit that is occupied in accordance with the approval of this docket and that the agricultural worker is substantially employed in farming the property.
- 4. **At building permit,** the applicant must submit revised grading plans that show the complete proposed grading, including all proposed contours tying back into existing.
- 5. A qualified Colorado-licensed design professional must observe the grading and submit an observation report to ensure that the work is completed in substantial conformance with the approved engineered plans.
- 6. **Prior to issuance of building permits,** an Onsite Wastewater Treatment System (OWTS) permit must be applied for and issued by Boulder County Public Health.
- 7. The total floor area of all structures associated with the equestrian center, including the Ag Worker ADU, is approved at a maximum floor area of 51,213 square feet.
- 8. The berm as proposed and shown in the submitted plans is denied. Plans submitted for permitting must have the berm removed.
- 9. **Prior to issuance of any Certificate of Occupancy,** the applicants must provide Boulder County a five-foot ROW dedication to allow for potential future widening of N. 73rd Street to meet required width requirements for a Collector road.
- 10. **During construction,** all vehicles, materials, machinery, dumpsters, and other items must be staged on the subject property; no items are permitted to be stored or staged on N. 73rd Street.
- 11. The driveway design must comply with the Multimodal Transportation Standards (the Standards) for residential development, including without limitation:
 - a. Table 5.5.1 Parcel Access Design Standards (1-Lane Plains Access)
 - b. Standard Drawing 11 Private Access
 - c. Standard Drawing 14 Access with Roadside Ditch
 - d. Standard Drawing 15 Access Profiles Detail
 - e. Standard Drawing 16 Access Grade & Clearance
 - f. Standard Drawing 17 Access Pull-Outs
 - g. Standard Drawing 18 Access Turnaround
 - h. Standard Drawing 19 Typical Turnaround & Pullout Locations

The proposed emergency pullouts are more than 400 feet apart. Emergency pullouts have to be within 400 feet of each other per Standard Drawing 17 – Access Pull-Outs of the Standards.

The proposed emergency turnarounds are within 50 feet of the front of the house barn and the proposed residence. The emergency turnarounds must be no closer than 50 feet to the front of the structures per Standard Drawing 18 – Access Turnaround of the Standards.

At building permit, submit revised plans that show the proposed emergency pullouts within 400 feet of each other and the emergency turnarounds further than 50 feet from the front of structures.

At final inspection, the Community Planning & Permitting Department must verify that the access and driveway has been constructed to comply with the Standards.

- 12. At the time of building permit application, the applicants must submit a manure management plan for review and approval by Community Planning & Permitting staff. The approved manure management plan must be implemented as part of standard operations for the equestrian center.
- 13. To limit the noise impacts of construction, any outdoor construction or grading activities during the construction of the equestrian center be limited to between 8:00 am and 5:00 pm, Monday through Friday; indoor construction activities may occur outside these hours provided the noise levels do not exceed those permitted under the Boulder County Noise Ordinance.
- 14. The existing trees along the northern property line must be retained so as to screen the development from the adjacent property and N. 73rd Street to the north.
- 15. The placement of no less than ten trees is required to the west side of the outdoor riding arena, in place of the proposed berm, to mitigate the visual impacts of the equestrian center. Deciduous trees must have at least a two-and-a-half inch caliper and coniferous trees must be at least six feet in height. The intent is not to completely hide the development, but to break up the mass of the facade and soften the structures' hard lines. Native tree species must be used.

At building permit, indicate the location and species for the required trees on plans submitted for permitting for review and approval by Community Planning & Permitting staff.

16. **Prior to issuance of building permits,** one copy of a proposed lighting plan must be submitted to the Community Planning & Permitting Department for review

and approval. In accordance with Article 7-1600 of the Code, down lighting is required, meaning that all bulbs must be fully shielded to prevent light emissions above a horizontal plane drawn from the bottom of the fixture. The lighting plan must indicate the location of all exterior fixtures on the site and structure and must include cut sheets (manufacturer's specifications with picture or diagram) of all proposed fixtures. Exterior lighting fixtures must be limited as follows: one ceiling or wall mounted fixture is permitted for each exterior entrance; no landscape lighting is permitted; and no driveway lighting is permitted. The lighting plan must be included as part of the building plan set required at the time of permit application.

At the final inspection, the full installation of the approved lighting plan must be inspected and approved by the Community Planning & Permitting Department.

- 17. **At building permit application,** the applicants must submit a soils report which addresses the soil and bedrock swell potential on the parcel.
- 18. **At building permit,** submit a drainage letter conforming with the requirements set out in the November 9, 2021, memorandum titled "Allowance of the use of Drainage Letters on Private Development and Public Capital Projects" (attached to the Access & Engineering referral response).
- 19. **At building permit,** the applicants must provide a complete Stormwater Quality Permit (SWQP) submittal to stormwater@bouldercounty.gov.

Prior to any site disturbance, the applicants must obtain the SWQP.

20. **Prior to issuance of building or grading permits,** submit to the Community Planning & Permitting Department for review and approval one copy of the proposed Revegetation Plan that conforms to the requirements as described on the materials located on our <u>Revegetation Page</u>.

The plan must show the location of all erosion control devices such as silt fence, straw bales, riprap and retaining walls. Cut and fill slopes are not to exceed a slope of 2:1. The grade of all cut and fill slopes must be included on the revegetation plan. The plan must include details regarding the reclamation of existing and proposed cut and fill slopes.

Prior to issuance of a Certificate of Occupancy, the full installation of the approved revegetation plan must be inspected and approved by the Community Planning & Permitting Department. If weather is not conducive to seeding or if adequate revegetation efforts have not occurred and vegetation is not adequately established at the time of final inspection request, an irrevocable letter of credit or monies deposited into a County Treasurer account will be required to assure the success of revegetation. You should consider the following well in advance of your revegetation inspection:

- a. Whether you are applying for a Certificate of Occupancy, final inspection, or the return of funds held in escrow for completion of revegetation, some level of germination and growth of grass seed is required.
- b. Keep in mind that the steeper the slopes and dryer the soil, the greater the attention needed to establish a level of germination adequate to obtain revegetation approval.
- c. Areas of disturbance found at inspection not included on the revegetation plan are still subject to reseeding and matting.

Incomplete revegetation is the leading cause for delays in obtaining a Certificate of Occupancy.

21. **Prior to issuance of building permits,** details regarding the placement and construction of the silt fence must be submitted to and approved by the Community Planning & Permitting Department. The placement and profile of the silt fence may be shown on the Revegetation Plan. The silt fence must be installed before construction commences and remain in place until vegetation is sufficiently established on the disturbed soil.

Prior to any grading or site disturbance, the silt barrier location and materials must be installed as required per the approved plans.

At the time of the footing foundation inspection and all subsequent inspections, the Community Planning & Permitting Department must confirm the silt barrier location and materials have been installed as required per the approved plans. Any other areas on site are subject to installation of silt fences, if needed.

- 22. The residence is approved at approximately 5,352 square feet as proposed.
- 23. The elevations of the residence, dated November 18, 2024, are approved as proposed.
- 24. **Prior to issuance of building or grading permits**, the <u>first part of the Height</u>

 <u>Survey Verification form</u> must be completed and submitted to the Community Planning & Permitting Department.

Prior to rough frame inspection, the <u>second part of the form</u> will be provided upon building permit application and must be submitted to the Community Planning & Permitting Department.

25. **Prior to issuance of building permits,** submit to the Community Planning & Permitting Department for review and approval, one digital set of exterior color samples (color chips, brochure, or catalog page) and material samples to be used including roof, siding and trim. All exterior materials must have a matte finish.

- Samples must be included as part of the building plan set required at the time of permit application.
- 26. **Prior to issuance of a Certificate of Occupancy**, the Community Planning & Permitting Department must inspect and verify that the approved color samples are used on the new structure.
- 27. The location of the residence is approved as shown on the site plan dated November 18, 2024.
- 28. To minimize disturbances to the site, all utility service lines should be routed underground (see Article 7-1200 of the Land Use Code) and located in areas already disturbed or proposed to be disturbed (e.g., along driveway).
- 29. The Applicants shall be subject to the terms, conditions, and commitments of record and in the file for <u>Docket LU-24-0017/SPR-24-0081</u>: <u>Starlings CO LLC Equestrian Center and Ag Worker ADU</u>.



Project Number

☐ Appeal

Correction Plat

Boulder County Land Use Department

Courthouse Annex Building 2045 13th Street • PO Box 471 • Boulder, Colorado 80302 Phone 303-441-3930 Email: planner@bouldercounty.org

Web: www.bouldercounty.org/lu Office Hours: Mon., Wed., Thurs., Frl. 8 a.m. to 4:30 p.m. Tuesday 10 a.m. to 4:30 p.m.

Modification of Site Plan

Review

Shaded Areas for Staff Use Only					
Intake Stamp					

☐ Special Use (Oil & Gas

development)

Planning Application Form

The Land Use Department maintains a submittal schedule for accepting applications. Planning applications are accepted on Mondays, by appointment only. Please call 303-441-3930 to schedule a submittal appointment.

Project Name

Road Name Change

☐ Road/Easement Vacation

☐ Exemption Plat ☐ Final Plat ☐ Umited Impact Spec ☐ Umited Impact Spec ☐ Location and Extent	ial Use Waiver	Use Prelimina	ision (Replat)	Site Plan Review Walver		tate Interest Review (1041) ubdivision Exemption ariance ther:		
Locationisi/Street Addressics	8130 N. 73	3rd St. Lor	ngmont, CO	80 50 3				
Subdivision Name FOO	thills East							
Lotic	Block(s)	•	Section(s)	24	Township(s)	2N	Rangelsi 70W	
Area in Acres 68.3	Existing Zanin	A - Ag	Existing Use of P	operty Agri	icultural		Number of Proposed Lots	
Proposed Water Supply (e)	Well & Left		Proposed Seway	e Disposal Metho	owts	S, existing a	nd new	
Applicants:								
Applicant/Property Owner	Starlings (CO, LLC		Email	sclarson@	@j-rlaw.com		
Mailing Address 8	50 W. Sout	h Boulder	Rd, Ste 100)				
CayLouisville	State	Zip Code	30027	Phone				
Applicant/Property Owner As Stephen	C. Larson, J			p tmat so	clarson@	-rlaw.com		
	South Boul							
City Louisville	ඊර්	Zip Code 800	27	Phone (3	303)546-5	606		
Agent/Consultant Paige	Schavey,	ShelterBel	t Design	Email	paige@	shelterbeltd	esign.com	
Mailing Address 614	5 Broadway	,		-,				
Cay Denver	State C	O Zip Code	80216	Phone (Phone (720)313-0205			
Certification (Please	refer to the Reg	julations and	Application Su	bmittal Pack	age for com	plete application	on requirements.)	

I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees, and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school, and park dedications may be required as a condition of approval. I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.

All landowners are required to sign application. If additional space is needed, attach additional sheet signed and dated.

Signature of Property Owner	Printed Name	Date / S/27
Signature of Property Owner DU DUSSAL	Printed Name Starlings CO, LLC a Colorado limited hability comp By: Starlings Holding, LLC, a Dehaare corporation, Manager, by: Stephen C, Lanon, Attorney in F.	to 1.1-1-1

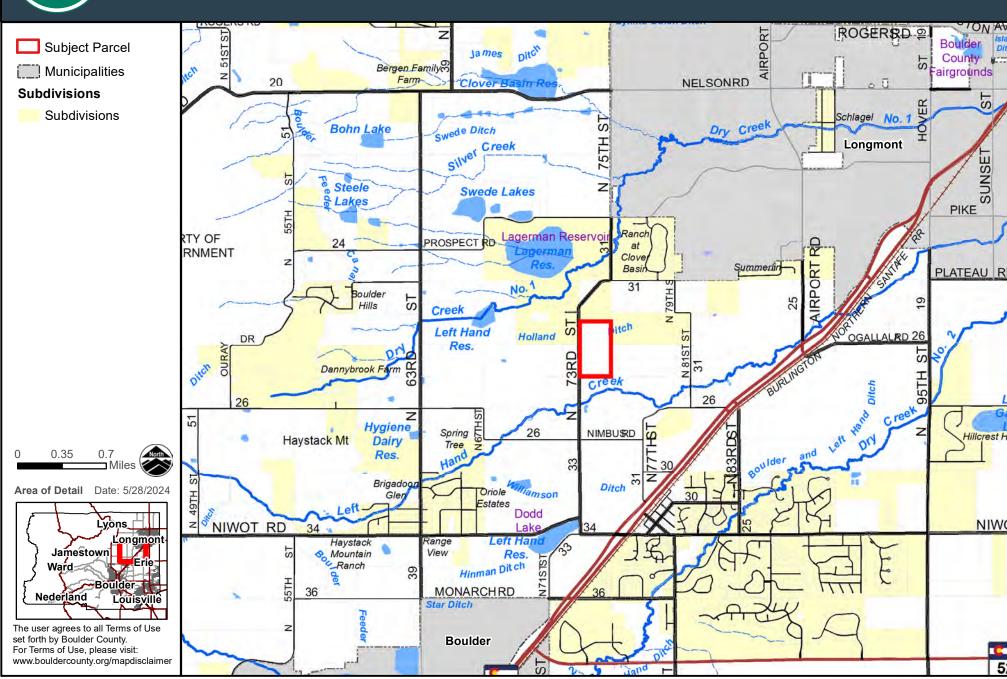
The Land Use Director may waive the landowner signature requirement for good cause, under the applicable provisions of the Land Use Code.

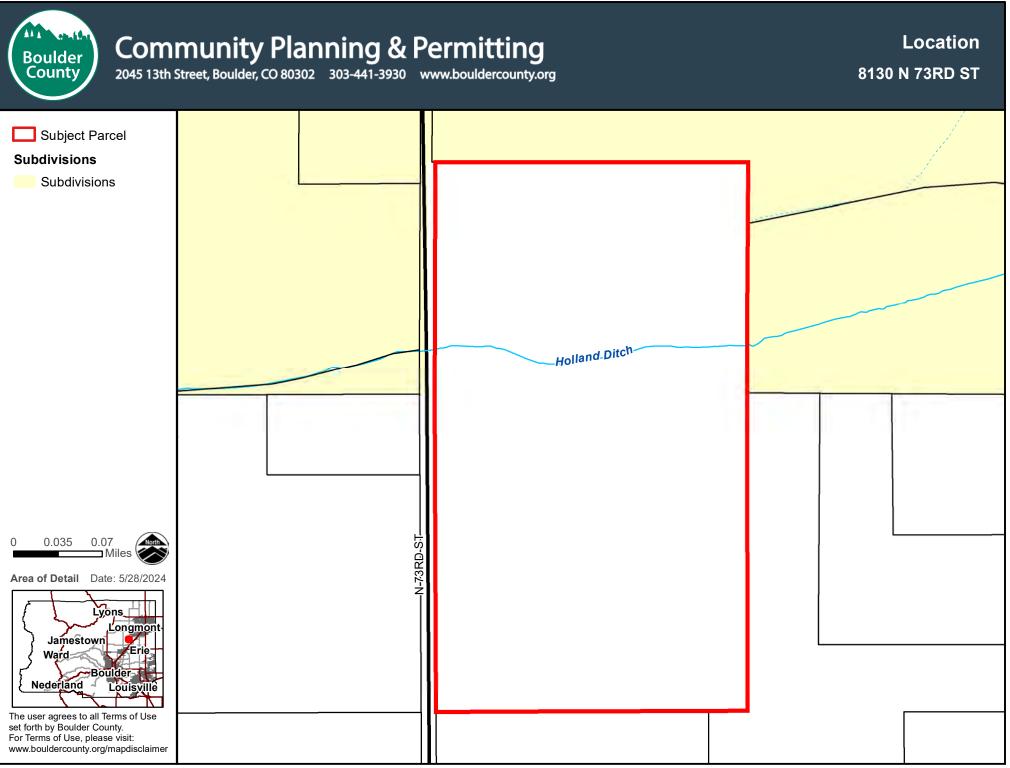
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Vicinity

8130 N 73RD ST

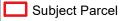






Community Planning & Permitting 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Aerial 8130 N 73RD ST





Jamestown

Nederland 4

set forth by Boulder County.



Community Planning & Permitting 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Aerial 8130 N 73RD ST

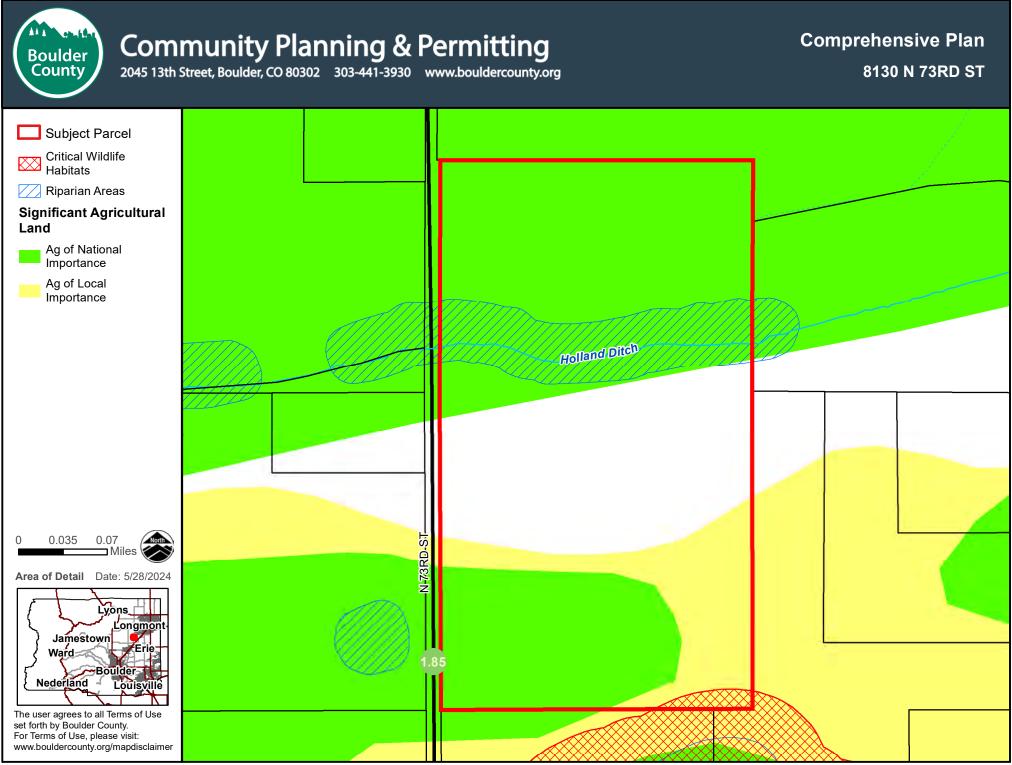




set forth by Boulder County.

Jamestown

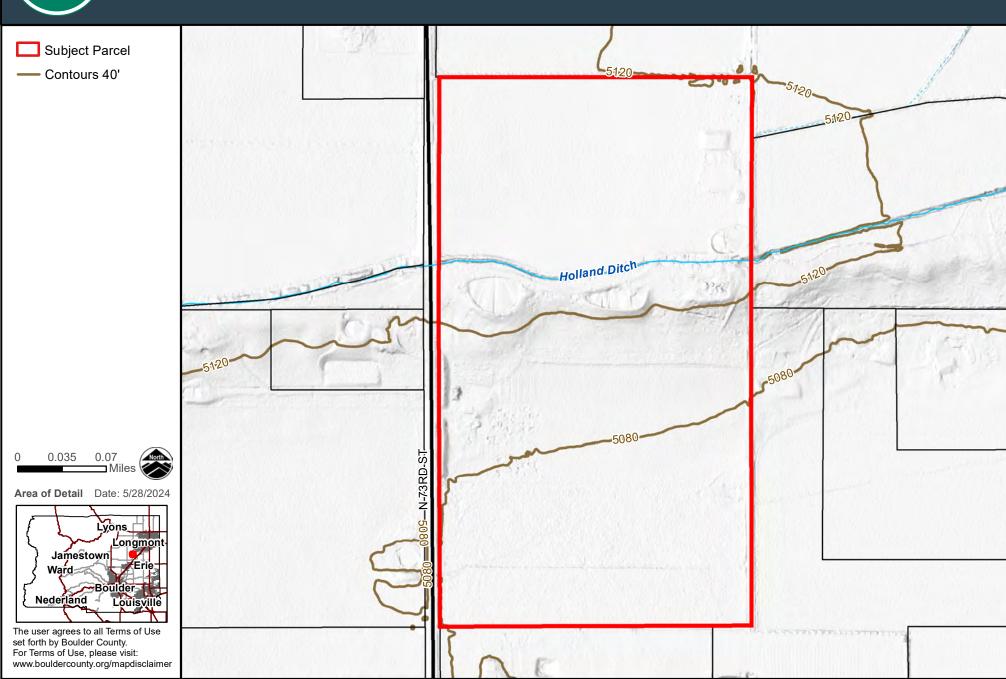
Nederland 4



Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Elevation Contours 8130 N 73RD ST





Community Planning & Permitting 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Floodplain 8130 N 73RD ST

Subject Parcel

Floodplain

100-Year Floodplain

500-Year Floodplain



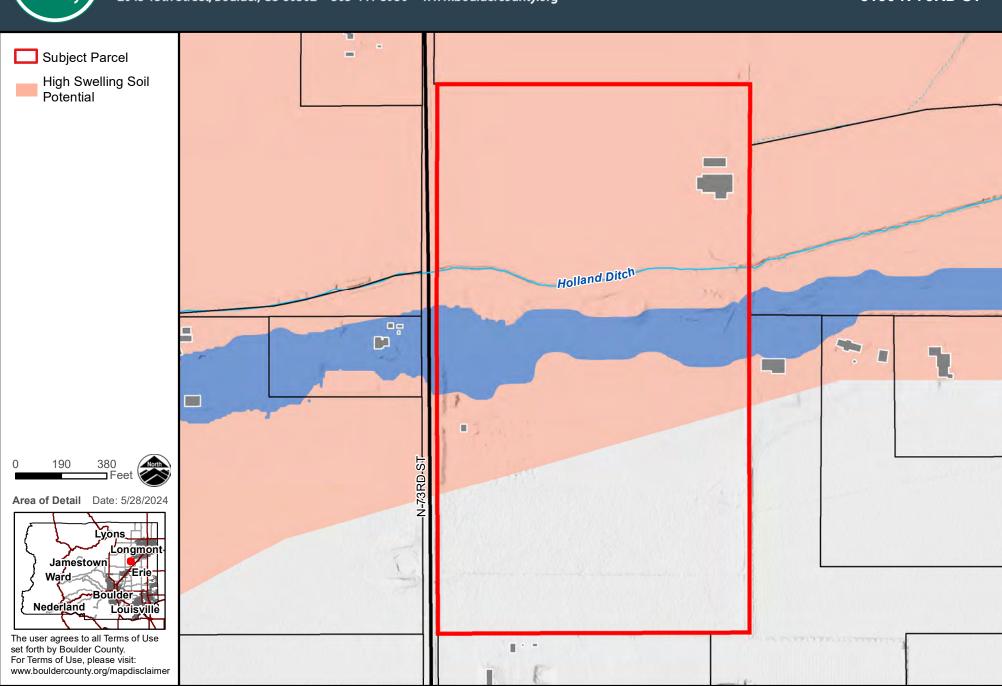
Area of Detail Date: 6/10/2024 Jamestown Louisville The user agrees to all Terms of Use

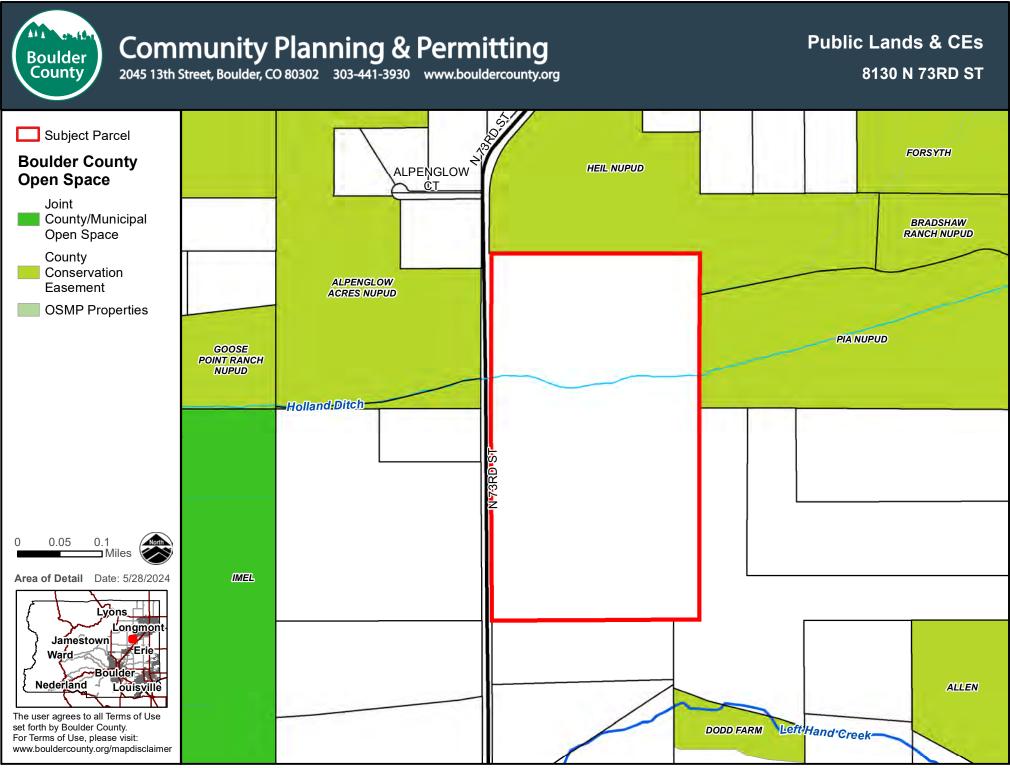
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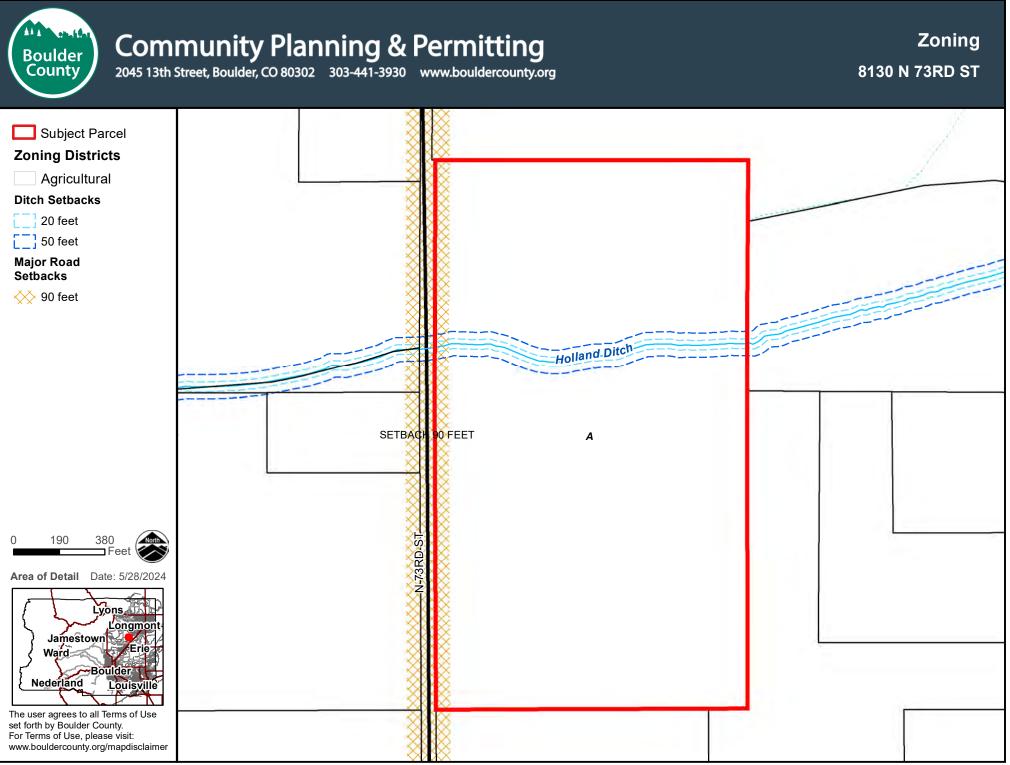
Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Geologic Hazards 8130 N 73RD ST







Narrative / Development Report

November 13, 2024

Client / Owner: Starlings CO LLC

8050 W. South Boulder Rd, STE 100

Louisville, CO 80027

Project: 73CO | 73rd St. Farm

Project Address: 8130 N 73rd St. Longmont, CO 80503

Site Description:

8130 N 73d St., Parcel Number 131724000011, is located in the Foothills East Subdivision of Unincorporated Boulder County. The area of the property is 68.3 acres and it is zoned Agricultural. The site is a developed lot with multiple large, irrigated hay fields. The site is bifurcated by Holland Ditch, running West to East, splitting the property roughly 1/3 to 2/3 with a number of moderate existing ponds adjacent to the ditch. The site is generally flat north of the existing ponds with a moderate slope to the south, south of the existing ponds. Vegetation on the property consists of a moderate growth of grasses, trees, and shrubs.

The South half of the property is characterized by flooding and is in the flood plain, is topographically quite flat and is mostly devoid of trees. There is an existing 1-story, wood frame building, 768 sq. ft. The North half of the property is "high ground" with a drop in grade just South of Holland Ditch, is again topographically quite flat and is mostly devoid of trees except for an existing copse of coniferous trees planted by the previous owner in the Northeast most corner of the lot. There is an existing 2-story barn with a garage, 12,093 sq. ft. and an existing 1-story metal frame building, 4,000 sq ft. The land around Holland Ditch is riparian and is where most of the trees and tall vegetation on the property are located. The entire property was measured to have high ground water, with groundwater noted in all borings at depths ranging from 5-9 ft below existing grade when measured just past the seasonal groundwater high. Soils on the site were found to be ranging for low to moderate expansion potential to moderate to very high expansion potential.

Site Proposal:

The proposal for this site is in support of the business CH Equine, an equestrian training and breeding center and includes agricultural uses inclusive of a 15-stall stable with integral office, storage, and supporting programming (12,792 sq. ft.) an attached riding arena (17,285 sq. ft.), horse runs and dry lots as well as heavy

farm equipment storage for hay production, hay/bedding storage, daily farm equipment storage with an ADU for live-on-site staff (5,288 sq. ft.) In addition to the agricultural use, the proposal includes residential use, which is customary and incidental. The proposed residence will be ~5,000 sq. ft.

CH Equine equestrian facility is not open to the public. The equestrian complex will be located North of Holland Ditch, with the facility buildings clustered near the existing 2-story barn, which is to be partially demolished and added onto. The residence will be located just South of Holland Ditch. The South 2/3rd of the property will remain the same, to continue hay production. The proposal includes the demolition of the existing 1-story wood frame structure and the relocation of the existing 1-story metal building to the approximate location of the existing 1-story wood frame structure.

PROPOSED SQUARE FOOTAGE TABLE

Residential Building Areas:	
Residence First Floor (conditioned):	2,638 s.f.
Residence Second Floor (conditioned):	1,401 s.f.
Total Conditioned Area:	4,039 s.f.
Attached Garage (unconditioned):	1,043 s.f.
Attached Screened Porch (unconditioned):	270 s.f.
Total Unconditioned Area:	1,313 s.f.
Detached Residential Floor Area	
(n) ADU covered patio:	278 s.f.
(n) Barn covered patio:	180 s.f.
Total Detached Residential Floor Area:	458 s.f.
Total Combined Residential Building Area:	5,810 s.f.
Presumptive Size Maximum:	5,934 s.f.
Agricultural Building Areas:	
(n) Stable (conditioned):	3,189 s.f.
(n) Stable (unconditioned):	9,603 s.f.
Total Stable Area:	12,792 s.f.
(e) Indoor Arena:	12,093 s.f.
(e) Indoor Arena to be Demolitioned:	1,472 s.f.
Total (e) Indoor Arena Area:	10,621 s.f.

(n) Indoor Arena (unconditioned):	6,664 s.f.
Total Indoor Arena Area:	17,285 s.f.
(n) Covered Round Pen (unconditioned):	3,848 s.f.
(n) Hay/Bedding Storage (unconditioned):	4,000 s.f.
(n) Daily Farm Equipment Storage (unconditioned):	4,000 s.f.
(n) ADU (conditioned+ 278 covered patio):	1,288 s.f.
(n) Heavy Equipment Storage (unconditioned):	4,000 s.f.
Total Combined Agr. Conditioned Floor Area:	4,199 s.f.
Total Combined Agr. Building Area:	47,213 s.f.

Residential Floor Area Compatibility

The total proposed residential square footage is 5,810 sq. ft.

The current residential Presumptive Size Maximum is 5,934 sq. ft. As such, the proposed residential floor area is below the PSM and is therefore in keeping with the neighborhood. The residence is to be sited just South of Holland Ditch, within an existing copse of trees. This location will provide proximity and privacy to the occupants, as well as screening to reduce visual impact to the neighborhood.

Non-Residential Floor Area Compatibility

The total proposed agricultural square footage is 47, 213 sq. ft. The proposed facility is for the year-round breeding and training of horses. Additional use includes occasional clinics, about 3 or 4 times a year. The equestrian facility programming includes the necessary paddocks, fenced pastures, 15-stall stable, outdoor riding arena and a covered round pen for the successful operation of the business. The existing wood framed barn (12,093 sq ft) will be partially demolished and expanded by about 6,664 sq. ft. to house a regulation size dressage arena (198' x 66') and an attached 15-stall stable (12,792 sq ft). The existing metal storage building (4,000 sq ft) will be relocated to the southern half of the property, near the existing wood framed building to be demolished, to store the heavy equipment necessary for hay production. A new storage building (4,000 sq. ft.) is to be located near the stable and arena for hay/bedding storage. An additional storage building (4,000 sq. ft.) for storage of everyday farm equipment with an attached ADU (1,288 sq. ft.) for live-on-site and seasonal staff. Lastly, the proposal includes a covered 70 ft. diameter round pen (3,848 sq ft) to be used for warm-ups and cool-downs of the houses.

Indoor Arena & Stable (30,077 sq ft)

The addition to the existing barn will allow for dressage training and clinics to take place and be protected during inclement weather, while the attached 15-stall stable will permanently house several horses and allow them to be tacked and taken to and from the stalls or arena under the protection of a roof. The stable will also provide space necessary for the functions and programs of the facility, including grooming stalls, a laundry room, storage for tack and saddles for the owners and the students, a classroom for instruction, bathrooms, office, feed storage, a vet and farrier stall, a foaling stall. Leading from the stable to the arena, there is a mounting area where the trainers can help riders mount and dismount before entering the arena, as well as additional room for a second rider to approach and wait while a trainer exits the arena. Nearby is an open observation platform for the trainers and students to observe those riding. The existing bump out will be preserved and slightly modified for the storage of the regularly used tractor and drag, to smooth out the arena between riders, and other equipment used for the maintenance of the arena, as well as an additional restroom for staff use only. The existing upstairs will be used as secured, additional storage for the stable.

Hay / Bedding Storage Building (4,000 sq. ft)

To reduce fire risk in the stable, a separate storage building will be used to house the hay and bedding used by the facility. The 4,000 sq. ft. building is sized to accommodate 6 months of hay for 15 horses. A typical horse consumes ~60 lbs of hay per day, or ~5.05 cubic ft of hay per day. A 4,000 sq. ft. building with a wall height of 16 ft (allowing some clearance for a forklift or bale handler) can fit about 11,089 square bales of hay, equaling about 184 days of hay supply.

Heavy Equipment Storage Building (4,000 sq. ft)

The existing 1-story metal building will be relocated to the lower part of the property where the existing 1-story building is located. This is to keep the heavy machinery to be used for hay production closer to the hay fields as well as to not interfere with the functions of the equestrian facility.

Daily Equipment Storage Building with ADU (5,288 sq. ft)

A 4-bay metal storage building (4,000 sq. ft) will be used to house the equipment used in the daily operation of the facility, to reduce exposure to dust and dirt and prolong the life of the equipment. This will accommodate a vehicle for the on-site staff, seasonal staff, a farm truck, tractor, gators, lawn mower, tractor attachments such as front bucket, tillers, hitch trailers, pallet fork, bush hog, etc,

as well as wheelbarrows, hand buckets, and other hand tools. Along the back wall, vertical storage as well as work benches will be placed.

A 2 bed, 1 bath, ADU (1,010 sq ft plus a 278 sq ft covered patio) will be attached to the Daily Equipment Storage building to house on-site and seasonal staff. This location allows proximity to necessary equipment used daily and visibility to the charges of the staff, being the horses in the stable and at pasture. This location also reduces fire risk in the stable by separating occupancy types. Staff needs to be on hand early in the morning for proper daily feeding times, the frequent moving of horses from the stable out to pasture or the paddocks, and especially during foaling season when constant 24 hour monitoring is required leading up to the birth and the time after. Seasonal staff ranges from summer interns to guest trainers.

Outdoor Riding Arena:

The outdoor riding arena will be used when weather permits and will allow for additional training while the indoor arena is used by another rider or trainer. The 100' x 200' footprint allows for the placement of a regulation size dressage arena within, with clearance around the perimeter for coaching. The footprint also provides the flexibility for other types of training and coaching. This arena will not have lighting or a sound system.

Covered Round Pen (3,848 sq ft):

The covered 70' diameter round pen will be located south of the indoor arena/ stable. This placement provides protection from the strong Western and Northern winds allowing the structure to remain open on the sides. The location also allows proximity to the indoor arena and quick access to the stalls. The structure will allow for the warming-up and cooling-down of the horses while the arenas are in use. This structure will also be used when

Horse Runs with Sheds:

These two (2) structures will each house five (5) horses during the day when they are 'turned out' but need to have their movement restricted and therefore placed in a controlled environment. Each structure will have five (5) fenced-in areas, each measuring 32' x14' allowing for some movement but not enough for the horses to fully gallop. The structures will have power and water.

Dry Lots with Sheds:

Four (4) lots, each with two (2) sheds measuring 120' x 100'. These will be used for daily turnouts for training horses that need more room than that allowed in the horse runs. These sheds will not have power but will have water supply.

Gelding and Mare Pastures:

These will each be enclosed using open wire fencing to allow for maximum visibility and will each have water supply. By using wire fencing, unobstructed views across the northern property are achieved and maintained as they currently exist.

Stallion Pastures:

These will each be enclosed using open wire fencing to allow for visibility, and will each have water supply at one (1) of the two (2) loafing sheds measuring 12' x10', within each pasture. The smaller pastures reduce the stallion's risk of aggression and injury, and their location closer to the stable reduces the distance and the time with the handlers when moving the stallions during 'turnouts.' The loafing sheds provide protection to the animals during inclement weather.

Muck Pad:

This open air 15' x 25' concrete pad for muck collection along the East side of the property, is placed for easy access by the collection trucks, down-wind from any human frequented spaces and out of the way from any structures that are up-wind in neighboring properties, and out of the 50' wetland ditch setback.

Parking Area/ Drive Court/ Driveway:

A new parking area and drive court of a combination of permeable and impermeable materials will extend from the existing gravel driveway at the eastern end of the existing 2-story building to reach the proposed stable entry, hay/bedding storage, and daily equipment storage buildings. This new drive court will accommodate the required Emergency Access Turnaround (hammerhead) by Boulder County Multimodal Transportation Standards. Additionally, the existing gravel driveway will be modified to accommodate pullouts every 400 feet starting from N 73rd St. New paving will be added to access the proposed private residence.



SEPTIC & WELL/WATER

There are two septic systems on the property - a 7 bedroom system located on the North side of the property, servicing the existing barn, and a 3 bedroom system on the South side of property that used to service the residence that was demolished. The previous residence was damaged by a vehicular accident and as such, the building was demolished and the septic was never used. The existing 7 bedroom system has been inspected and requires some repairs - it is to be replaced and relocated further North, to be sized in support of the proposed stable. A new OWTS system will be designed and installed to service the proposed residence.

Current water supply comes from an ag. well and an existing 3/4" tap through Left Hand Water. The well is 26' deep and documented to have a flow rate of 30 gpm at the time of drilling April 20, 1960. The original well has since been abandoned and a new one drilled around 2000.

CH Equine equestrian facility is not open to the public and the septic and water supply can be sized as such.

CHARACTER OF THE NEIGHBORHOOD

The proposed development plan for this property is in keeping with the character of the neighborhood. There are several private equestrian facilities and private residences along 73rd St. The existing houses, equestrian facilities and agricultural buildings are all independently built, resulting in varying sizes and styles ranging from single-story brick ranch homes, to 2-story contemporary structures with varying siding materials. The proposed materials for the facilities will be in keeping with the existing material palette found in the neighborhood, consisting of white board and batten, white lap siding, and red brick. The roofing on the equestrian buildings will be dark gray, standing seam metal and the roofing on the residence will be gray asphalt.

GRADING AND EARTH WORK

The strategy taken regarding grading at the equine core was to prioritize horse & handler safety rather than minimizing cut and full. A pastoral quality to the grade is not only in keeping with the character of the development but it ensures safe footing for the horses and reduces any inclines where a horse may feel the need to run, potentially causing harm to itself or the handler. Additionally, the existing site is very flat and a broad approach to grading will ensure there are no areas for water to pool and stagnate.

END.

Site Plan Review Fact Sheet

The applicant(s) is/are required to complete each section of this Site Plan Review (SPR) Fact Sheet even if the information is duplicated elsewhere in the SPR application. Completed Fact Sheets reduce the application review time which helps expedite the Director's Determination. Please make duplicates of this SPR Fact Sheet if the project involves more than two structures.

Structure #1 Information

Type of Structure: (e.g. residence, studio, barn, etc.)				Residend	се	
(Finished + Unf	Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.)				Deconstruction: N/A	sq. ft.
	s being propos	sed where	e den ea squ	are footage in	the table below)	
Floposeu i	Finished	Unfinis		Total	Residential Non-Resident	ial
Basement:	n/a sq. ft.	n/a	sq. ft.	n/a sq. ft.	Height (above existing grade)	29'-6 5/8"
First Floor:	2638 sq. ft.	n/a	sq. ft.	2638 sq. ft.	Exterior	Brick/ board n batten
Second Floor:	1401 sq. ft.	n/a	sq. ft.	1401 sq. ft.	Exterior Wall Color	Red & White
Garage: Detached Attached	1043 sq. ft.	n/a	sq. ft.	1043 sq. ft.	Roofing Material	Asphalt
*Covered Porch:	386 sq. ft.	n/a	sq. ft.	386 sq. ft.	Roofing Color	Gray
Total:	5468 sq. ft.	n/a	sq. ft.	5468 sq. ft.	Total Bedrooms	4

Structure #2 Information

(e.g. (Finished + Unfi	residence, studence, stude	ng Floor Area:	sq. ft.	Deconstruction:	sq. ft.
Are new floor area No Yes (i				cur? the table below)	
		Construction		Residential	
	Finished	Unfinished	Total	☐ Non-Resident	ial
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)	_
First Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Material	
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	
Garage: ☐ Detached ☐ Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material	
*Covered Porch:	sq. ft.	sq. ft.	sq. ft.	Roofing Color	
Total:	sq. ft.	sq. ft.	sq. ft.	Total Bedrooms	

^{*}See Article 18-131A for definition of covered porch.

Project Identification:

Project Name:

73CO - 73rd Farmhouse

Property Address/Location:

8130 N. 73rd St. Longmont, CO 80503

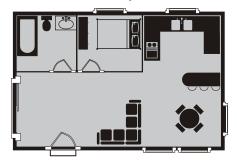
Owner: Starlings CO LLC

Size of Property in Acres:

68.3

Determining Floor Area

Floor Area is measured in terms of square feet. The total square footage is as everything within the exterior face of the exterior walls including garages and basements. Covered porch area that is attached to the principal structure is not included (see Article 18-131A). The shaded area on the diagram indicates the area counted as square feet.



Residential vs. Non-Residential Floor Area

Residential Floor Area includes all attached and detached floor area (as defined in Article 18-162) on a parcel, including principal and accessory structures used or customarily used for residential purposes, such as garages, studies, pool houses, home offices and workshops. Gazebos and carports up to a total combined size of 400 square feet are exempt. Barns used for agricultural purposed are not considered residential floor area.

Note: If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Site Plan Review and shown on this Fact Sheet.

If a Limited Impact Special Review is required, then call 303-441-3930 and ask for a new Pre-Application conference for the Limited Impact Special Review.

1

Limited Impact Special Use Review Fact Sheet

Project Identification

Project Name:
73rd St. Farm
Property Address/Location:
8130 N. 73rd St., Niwat, CO
Current Owner:
Starlings CO, LLC
Size of Property in Acres:
68.3 ACRES

The applicant(s) is/are required to complete each section of this Limited Impact Special Use Review Fact Sheet even if the information is duplicated elsewhere in the application.

Completed Fact Sheets reduce the application review time which helps expediate the Director's Determination. Please make duplicates of this Limited Impact Special Use Review Fact Sheet if the project involves more than two structures.

Determining Floor Area

If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Limited Impact Special Use Review and shown on this Fact Sheet.

Structure #1 Information

(e.g	Type . residence, stu	e of Structure: dio, barn, etc.)	STABLE & AR	ENA			
(Finished + Unfi	Total Existir inished square garag	Deconstruction:	1,472 sq. ft.				
	Are new floor areas being proposed where demolition will occur? Yes (include the new floor area square footage in the table below)						
Proposed F	loor Area (Nev	v Construction	Only)				
	Finished	Unfinished	Total				
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)	32'-7 1/2"		
First Floor:	19,276 sq. ft.	sq. ft.	19,276 sq. ft.	Exterior Wall Material	MASONRY & COMPOSITE SIDING		
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	WHITE & RED BRICK		
Garage: Detached Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material	METAL ROOF		
Covered Deck:	180 sq. ft.	sq. ft.	180 sq. ft.	Roofing Color	GREY		
Total:	19,456 sq. ft.	sq. ft.	19,456 sq. ft.	Total Bedrooms	0		

Structure #2 Information

(e.g	Type residence, stu	e of Structure: dio, barn, etc.)	HEAVY EQUI	PMENT STORAGE			
(Finished + Unfi	sq.ft.						
	Are new floor areas being proposed where demolition will occur? Yes (include the new floor area square footage in the table below)						
Proposed F	loor Area (Nev		·				
	Finished	Unfinished	Total				
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)	21'-8"		
First Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Material	COMPOSITE SIDING		
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	WHITE		
Garage: Detached Attached	sq. ft.	sq. ft.	sq.ft.	Roofing Material	METAL ROOF		
Covered Deck:	sq. ft.	sq. ft.	sq.ft.	Roofing Color	GREY		
Total:	sq. ft.	sq. ft.	N/A sq. ft.	Total Bedrooms	0		

Limited Impact Special Use Review Fact Sheet

Project Identification

Project Name:	
73rd St. Farm	
Property Address/Location:	
8130 N. 73rd St., Niwat, CO	
Current Owner:	
Starlings CO, LLC	
Size of Property in Acres:	
68.3 ACRES	

The applicant(s) is/are required to complete each section of this Limited Impact Special Use Review Fact Sheet even if the information is duplicated elsewhere in the application. Completed Fact Sheets reduce the application review time which helps expediate the Director's Determination. Please make duplicates of this Limited Impact Special Use Review Fact Sheet if the project involves more than two structures.

Determining Floor Area

If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Limited Impact Special Use Review and shown on this Fact Sheet.

Structure #3 Information

Type of Structure: (e.g. residence, studio, barn, etc.)			HAY/ BEDDIN	G STORAGE	
(Finished + Unfi	Total Existing Floor Area: - Unfinished square feet including garage if attached.) sq. ft. D			Deconstruction:	sq. ft.
Are new floor area		<u> </u>			34.11.
Yes (include th	e new floor are	a square foota	ge in the table l	pelow)	
☐ No Proposed F	loor Area (Nev	v Construction	n Only)		
Порозеці	Finished	Unfinished	Total		
Basement:	sq. ft.	sq.ft.	sq. ft.	Height (above existing grade)	23'-2"
First Floor:	sq. ft.	4,000 sq.ft.	4,000 sq. ft.	Exterior Wall Material	COMPOSITE SIDING
Second Floor:	sq. ft.	sq.ft.	sq.ft.	Exterior Wall Color	WHITE
Garage: Detached Attached	sq. ft.	sq.ft.	sq. ft.	Roofing Material	METAL ROOF
Covered Deck:	sq. ft.	sq.ft.	sq.ft.	Roofing Color	GREY
Total:	sq. ft.	4,000 sq.ft.	4,000 sq. ft.	Total Bedrooms	0

Structure #4 Information

(e.g.	Type residence, stu	e of Structure: dio, barn, etc.)	I DAILY FOUIDMENT STORAGE & ADD		
(Finished + Unfi	Total Existing Floor Area: shed + Unfinished square feet including garage if attached.) sq. ft.			Deconstruction:	sq. ft.
	Are new floor areas being proposed where demolition will occur? Yes (include the new floor area square footage in the table below)				
Proposed F	loor Area (Nev	v Construction	Only)		
	Finished	Unfinished	Total		
Basement:	sq. ft.	sq. ft.	sq.ft.	Height (above existing grade)	25'-3"
First Floor:	1,010 sq. ft.	sq. ft.	1,010 sq.ft.	Exterior Wall Material	COMPOSITE SIDING
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	WHITE
Garage: ☐ Detached ☑ Attached	sq. ft.	4,000 sq. ft.	4,000 sq. ft.	Roofing Material	METAL ROOF
Covered Deck:	sq. ft.	278 sq. ft.	278 sq. ft.	Roofing Color	GREY
Total:	1,010 sq.ft.	4,278 sq.ft.	5,288 sq. ft.	Total Bedrooms	2

Limited Impact Special Use Review Fact Sheet

Project Identification

Project Name: 73rd St. Farm	
Property Address/Location: 8130 N. 73rd St., Niwat, CO	
Current Owner: Starlings CO, LLC	
Size of Property in Acres: 68.3 ACRES	

The applicant(s) is/are required to complete each section of this Limited Impact Special Use Review Fact Sheet even if the information is duplicated elsewhere in the application.

Completed Fact Sheets reduce the application review time which helps expediate the Director's Determination. Please make duplicates of this Limited Impact Special Use Review Fact Sheet if the project involves more than two structures.

Determining Floor Area

If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Limited Impact Special Use Review and shown on this Fact Sheet.

Structure #5 Information

Type of Structure: (e.g. residence, studio, barn, etc.)			- GII	EDS @ DR	Y LOTS (x12)	
	Total Existing Floor Area:					
(Finished + Unf		feet includin e if attached		sq. ft.	Deconstruction:	sq. ft.
Are new floor area		<u>′</u>				34.16.
☐ Yes (include th	•					
☐ No						
Proposed F	loor Area (Nev	v Constructi	on Only	()		
	Finished	Unfinished	1 1	Γotal		
Basement:	sq. ft.	sq.:	t.	sq. ft.	Height (above existing grade)	12'-3"
First Floor:	sq. ft.	120 sq.	t. 12	0 sq. ft.	Exterior Wall Material	METAL PANEL
Second Floor:	sq. ft.	sq.	t.	sq. ft.	Exterior Wall Color	WHITE
Garage: ☐ Detached ☐ Attached	sq.ft.	sq.	t.	sq. ft.	Roofing Material	METAL ROOF
Covered Deck:	sq. ft.	sq.	t.	sq.ft.	Roofing Color	GREY
Total:	sq. ft.	120 sq.:	t. 120	sq. ft.	Total Bedrooms	0

Structure #6 Information

(e.g.	Type residence, stu	e of Structure: dio, barn, etc.)	SHEDS @ HO	DRSE RUNS (x2)	
(Finished + Unfi	Total Existing Floor Area: (Finished + Unfinished square feet including garage if attached.) sq. ft.			Deconstruction:	sq. ft.
	Are new floor areas being proposed where demolition will occur? Yes (include the new floor area square footage in the table below)				
Proposed F	loor Area (Nev	v Construction	Only)		
	Finished	Unfinished	Total		
Basement:	sq. ft.	sq. ft.	sq. ft.	Height (above existing grade)	16'-1"
First Floor:	sq. ft.	1,248 sq. ft.	1,248 sq. ft.	Exterior Wall Material	METAL PANEL
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	WHITE
Garage: Detached Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material	METAL ROOF
Covered Deck:	sq. ft.	sq. ft.	sq. ft.	Roofing Color	GREY
Total:	sq. ft.	1,248 sq. ft.	1,248 sq. ft.	Total Bedrooms	0

Grading Calculation

Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify whether or not a Limited Impact Special Review is required. Limited Impact Special Review is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint).

If grading totals are close to the 500 yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

Earth Work and Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the Boulder County Land Use Code. Please fill in all applicable boxes.

Note: Applicant(s) must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review. Also, all areas of earthwork must be represented on the site plan.

Earth Work and Grading Worksheet:

	_		
	Cut	Fill	Subtotal
Driveway and Parking Areas	841.07 y3	96.2 y3	937.28 y3
Berm(s)	n/a	839.24 y3	839.24 y3
Other Grading			
_Swales, etc.	252.57 y3	466.98 y3	719.56 y3
Subtotal			2,496.08 y3
* If the total in Box 1 is go is required.	greater than 500 cubic ya	rds, then a Limited Impa	ct Special Review
	Cut	Fill	Total
Foundation	2,930.45 y3	1,992.46 y3	4,922.91 y3
	0 y3		

Excess Material will be Transported to the Following Location:

Excess Materials Transport Location:
Excess material to be redistributed evenly around the property

Narrative

Use this space to describe any special circumstances that you feel the Land Use Office should be aware of when reviewing your application, including discussion regarding any factors (listed in Article 4-806.2.b.i) used to demonstrate that the presumptive size limitation does not adequately address the size compatibility of the proposed development with the defined neighborhood. If more room is needed, feel free to attach a separate sheet.

See attached		

Is Your Property Gated and Locked?

Note: If county personnel cannot access the property, then it could cause delays in reviewing your application.

Certification

I certify that the information submitted is complete and correct. I agree to clearly identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

Signature Paige Schavey	Print Name Paige Schavey	Date 11/12/2024

	Residence Fdn Cut						
	area (sq ft)	depth (ft)	volume (ft3)	top 12" / 2	total		
а	3075	3	9224	1537	7687		
b	429	1	429	215	215		
С	1134	1	1134	567	567		
d	75	1	75	38	38		
е	114	1	114	57	57		

total (ft3)	8563
conversion	27
Total (y3)	317

Swale Cut					
	area (sq ft)	depth (ft)	volume (ft3)	top 12" / 2	total
1	710	1	710	355	355
2	3	1	3	1	1
3	60	2	120	30	90
4	3	2	6	2	5
5	331	1	331	165	165
6	172	1	172	86	86
7	19	1	19	9	9
8	41	1	41	20	20
9	0	1	0	0	0
10	17	1	17	9	9

total (ft3)	703	
conversion	27	
Total (y3)	26	

	Residence Fdn Fill				
	area (sq ft)	depth (ft)	volume (ft3)	top 12" / 2	total
Α	735	3	2204	367	1836
В	97	1	97	48	48
С	72	2	143	36	108
D	112	1	112	56	56
Ε	190	1	190	95	95
F		1	0	0	0
				total (ft3)	2143
				conversion	27

Swale Fill					
	area (sq ft)	depth (ft)	volume (ft3)	top 12" / 2	total
1	98	1	98	49	49
2	60	1	60	30	30

total (ft3)	79	
conversion	27	
Total (y3)	3	29
		425

79

Total (y3)

397

A26

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his or her contractor, and the architect. Design and construction are complex. Although the architect and his/her consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for all consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect from all consequences arising out of such changes.

LUDate: 18 November, 2024
Revisions:

75rd. St. FarmStarlings CO LLC
8130 N. 73rd St.
Longmont, CO 80503

ShelterBelt Design

DR CONSTRUCTION

Residence Existing Site Plan

Sheet Number:

A1.0

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A27

Attachment A - Application Materials

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his or her contractor, and the architect. Design and construction are complex. Although the architect and his/her consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect

LU
Date: 18 November, 2024

Date: 18 November, 20 Revisions:

cooperate by a simple notice to the architect shall relieve the architect from responsibility for all consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect from all consequences arising out of such changes.

73rd. St. Far Starlings CO LL 8130 N. 73rd St

DR CONSTRUCTION

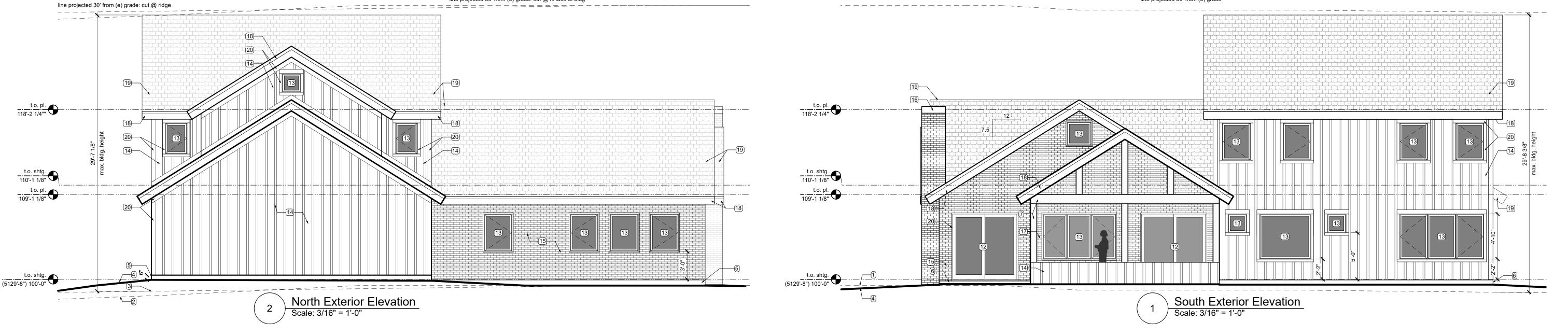
ShelterBelt Design

Residence Proposed Site Plan

Sheet Number:

A1.1

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Elevation Notes

- (e) grade: cut at North face of
 - (e) grade: cut at ridge

- 6 concrete slab: 2" below t.o. shtg., slope 1/4" over 12"
- sawn wood w/ clear sealant
- 8 door: overhead; vinyl/fiberglass, white exterior
- 9 door: pedestrian; viny/fiberglass, half lite, white
- door: pedestrian; viny/fiberglass, white exterior 11 door: pedestrian, screened
- door: vinyl/fiberglass sliding door, white exterior
- window: vinyl/fiberglass exterior, white
- siding B: brick, red

 chimney: red brick w/ white stone chimney cap
- screen enclosure: paint screen black
- fascia & trim: hardie board or eq., white & pre-frinished brake trim, white
- roofing: Class A asphalt shingles, gray

20 exterior trim: window/corner; hardie board or eq., white

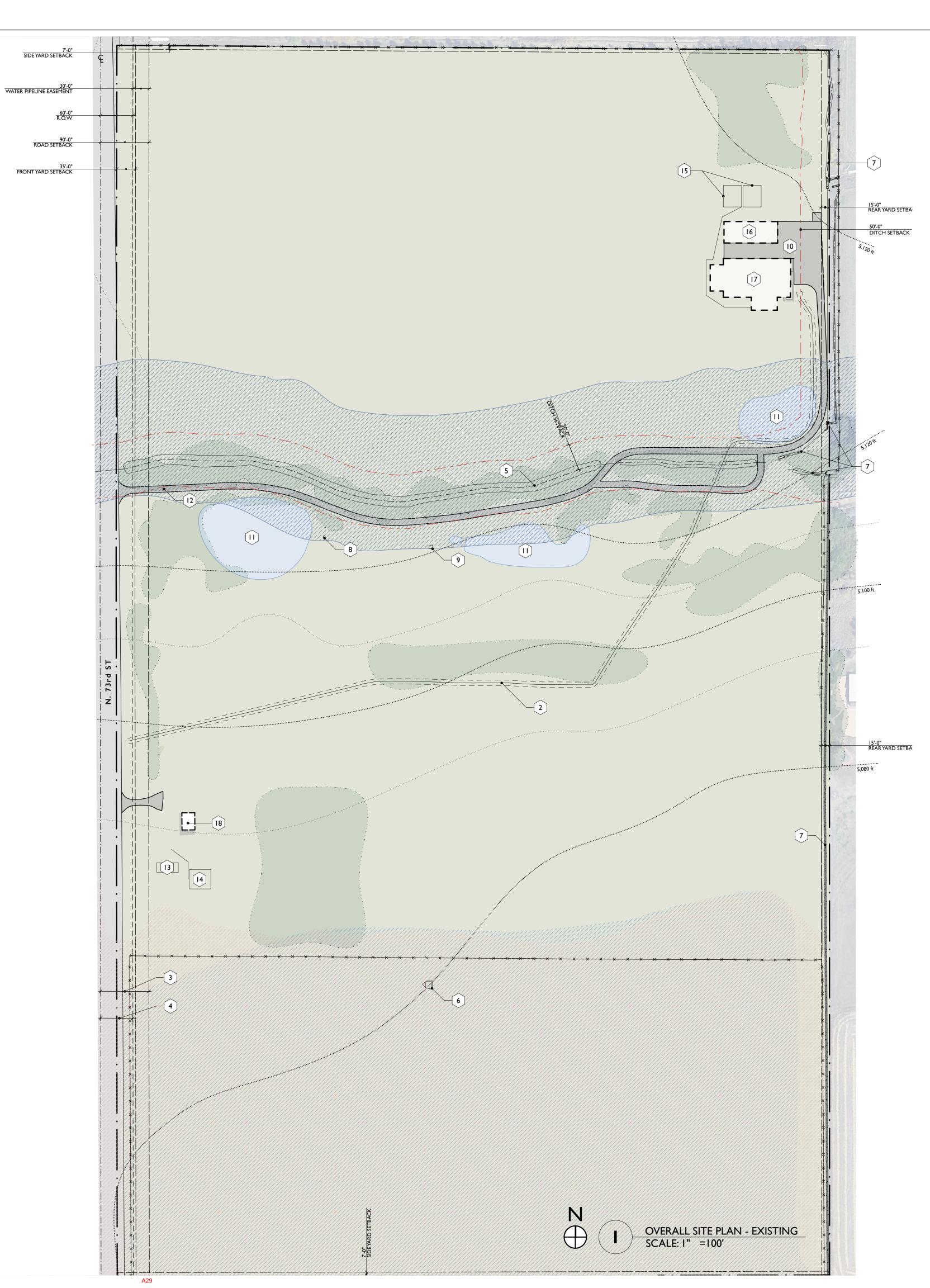
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Date: 18 November, 2024 Revisions:

Residence Elevations

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SITE PLAN LEGEND

Property Extents

Pond

Tree Line

Riparian Area

Flood Zone AE (100 yr floodplain)

Flood Zone X (500 yr floodplain)

SITE PLAN NOTES

- I. 30' water pipeline easement
- 2. 10' wide PVREA electric easement
- 3. 90' road setback
- **4.** N 73rd st. 60' r.o.w.
- 5. Holland Ditch
- **6.** (e) center pivot irrigation on concrete pad
- 7. (e) concrete ditch
- **8.** (e) bronze statue
- **9.** (e) concrete pump structure
- IO. (e) asphalt
- II. (e) pond
- 12. (e) dirt/gravel drive
- (e) abandoned absorption bed: approximate location (no record)
- **14.** (e) septic tank and leech field (3 bed): approximate location
- **15.** (e) septic tank and leech field (7 bed): approximate location
- **16.** (e) I-story metal frame bldg, 4,000 s.f.
- 17. (e) 2-story residence w/ garage, 11,385 s.f.
- 18. (e) I-story wood frame bldg, 768 s.f.

BLACKBURN

WASHINGTON, DC www.blackburnarch 1820 N STREET NW WASHINGTON, DC 20036 (202) 337-1755 PHONE (202)337-5271 FAX

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73rd. St. Farm

8130 N. 73rd St. Longmont, CO 80503

CHECKED BY:

PROJECT No: 224010.01

DATE: November 12, 2024

DRAWN BY: FZ

SCHEMATIC DESIGN:

PROGRESS SET

DESIGNER'S STAMP

NOT FOR CONSTRUCTION

CLIENT
Starlings CO LI

Starlings CO LLC 73rd. St. Farm 8130 N. 73rd St. Longmont,CO 80503

DESIGNER

JOHN A. BLACKBURN ARCHITECT 1820 N STREET NW WASHINGTON, DC 20036 Tel: 202-337-1755 Fax: 202-337-5271

CONSULTANTS

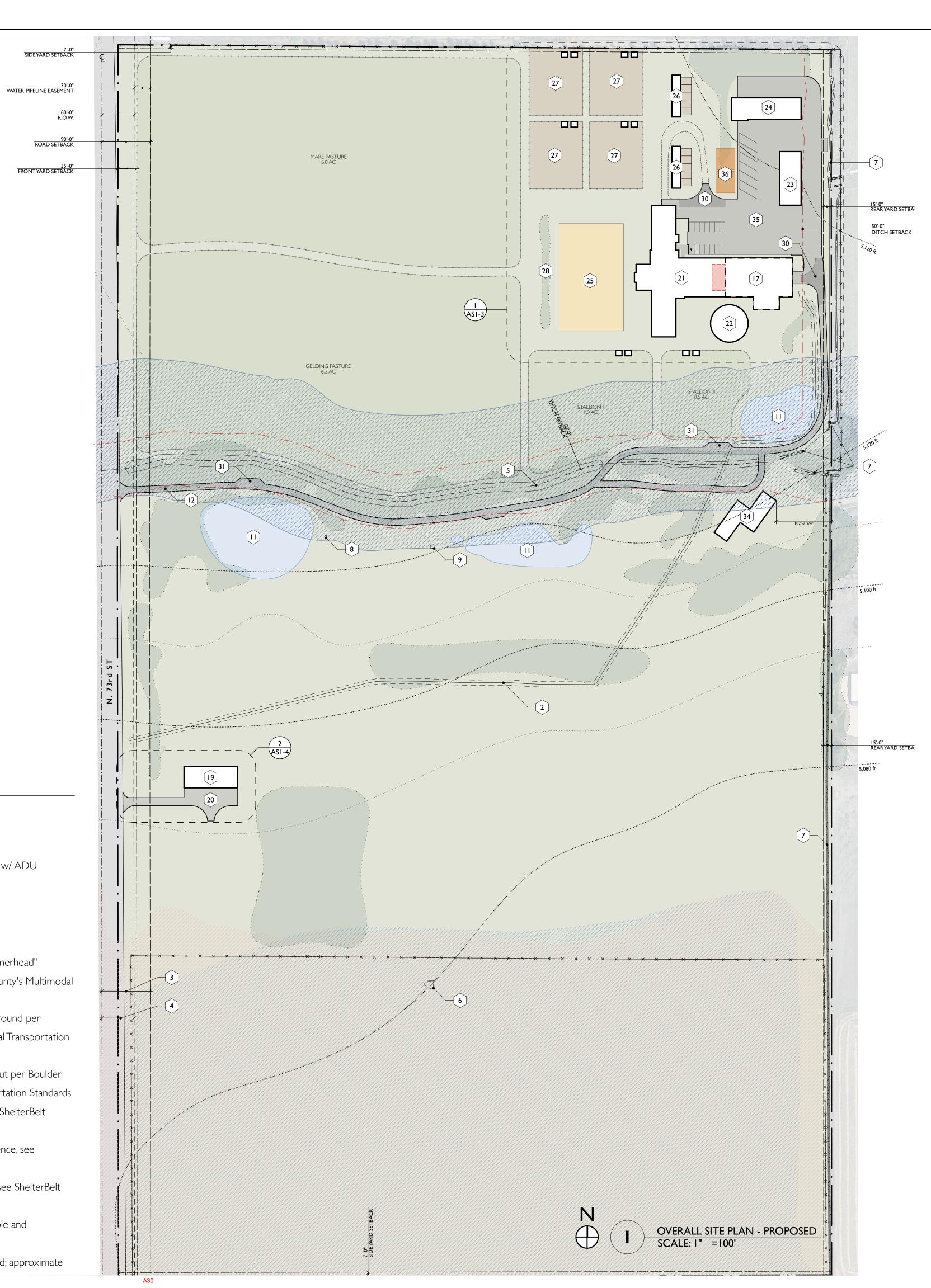
RevDateDescription11/12/24PROGRESS SET

TITLE

EQUESTRIAN CENTER -EXISTING SITE PLAN

SHEET NUMBER

AS1-1



1820 N STREET NW WASHINGTON, DC 20036 (202) 337-1755 PHONE (202) 337-5271 FAX

73rd. St. Farm

8130 N. 73rd St. Longmont, CO 80503

PROJECT No: 224010.01 DATE: November 12, 2024 DRAWN BY: FZ **CHECKED BY:**

SCHEMATIC DESIGN: PROGRESS SET

DESIGNER'S STAMP

NOT FOR CONSTRUCTION

CLIENT **Starlings CO LLC** 73rd. St. Farm

8130 N. 73rd St. Longmont,CO 80503

DESIGNER

JOHN A. BLACKBURN ARCHITECT 1820 N STREET NW WASHINGTON, DC 20036 Tel: 202-337-1755 Fax: 202-337-5271

CONSULTANTS

Date Description 11/12/24 PROGRESS SET

EQUESTRIAN CENTER -PROPOSED SITE PLAN

SHEET NUMBER

AS1-2

SITE PLAN LEGEND

Property Extents

Pond Tree Line

Riparian Area

Flood Zone AE (100 yr floodplain)

Flood Zone X (500 yr floodplain)

Existing Structure to be demolished

SITE PLAN NOTES

1. 30' water pipeline easement

2. 10' wide PVREA electric easement

3. 90' road setback

4. N 73rd st. 60' r.o.w.

5. Holland Ditch

6. (e) center pivot irrigation on concrete pad

7. (e) concrete ditch

8. (e) bronze statue

9. (e) concrete pump structure

10. (e) asphalt

II. (e) pond

12. (e) dirt/gravel drive

13. (e) abandoned absorption bed: approximate location (no record)

14. (e) septic tank and leech field (3 bed): approximate location

15. (e) septic tank and leech field (7 bed): approximate location

16. (e) I-story metal frame bldg, 4,000 s.f.

17. (e) 2-story residence w/ garage, 11,388 s.f.

18. (e) 1-story wood frame bldg, 768 s.f.

19. (e) building: relocated, for heavy equipment storage

20. (n) drive

21. (n) 15 stall barn

22. (n) 70' round pen

23. (n) hay/bedding storage

24. (n) farm equipment storage w/ ADU

7'-0" SIDE YARD SETBACK

25. (n) 120' × 200' arena

26. (n) $32' \times 14'$ horse runs

Transportation Standards

27. (n) $100' \times 125'$ dry lots 28. (n) bern w/ plantings

29. (n) emergency access "hammerhead" turnaround per Boulder County's Multimodal

30. (n) emergency access turnaround per Boulder County's Multimodal Transportation Standards

31. (n) emergency access pull-out per Boulder County Multimodal Transportation Standards

32. (n) driveway: residence, see ShelterBelt

33. (e) tree: demo for (n) residence, see

ShelterBelt Design **34.** (n) 4,115 s.f. (conditioned), see ShelterBelt

35. (n) combination of permeable and impermeable driving surface

36. (n) septic tank and leach field; approximate

ENLARGED PROPOSED SITE PLAN | HEAVY EQUIP. CORE

SITE PLAN LEGEND

Property Extents

Pond

Tree Line

Riparian Area

Flood Zone AE (100 yr floodplain)

Flood Zone X (500 yr floodplain) Existing structure to be demolished

SITE PLAN NOTES

1. 30' water pipeline easement

2. 10' wide PVREA electric easement

3. 90' road setback

4. N 73rd st. 60' r.o.w.

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6. (e) center pivot irrigation on concrete pad

7. (e) concrete ditch

8. (e) bronze statue

9. (e) concrete pump structure

10. (e) asphalt

II. (e) pond

12. (e) dirt/gravel drive

13. (e) abandoned absorption bed: approximate 30. (n) emergency access turnaround per location (no record)

14. (e) septic tank and leech field (3 bed): approximate location

15. (e) septic tank and leech field (7 bed): approximate location

16. (e) I-story metal frame bldg, 4,000 s.f.

17. (e) 2-story residence w/ garage, 11,385 s.f.

18. (e) I-story wood frame bldg, 768 s.f.

20. (n) drive

21. (n) 15 stall barn

22. (n) 70' round pen

23. (n) hay/bedding storage

24. (n) farm equipment storage w/ ADU

25. (n) 120' × 200' arena

26. (n) 32' × 14' horse runs

27. (n) $100' \times 125'$ dry lots

28. (n) bern w/ plantings

29. (n) emergency access "hammerhead"

turnaround per Boulder County's Multimodal

Transportation Standards

Boulder County's Multimodal Transportation Standards

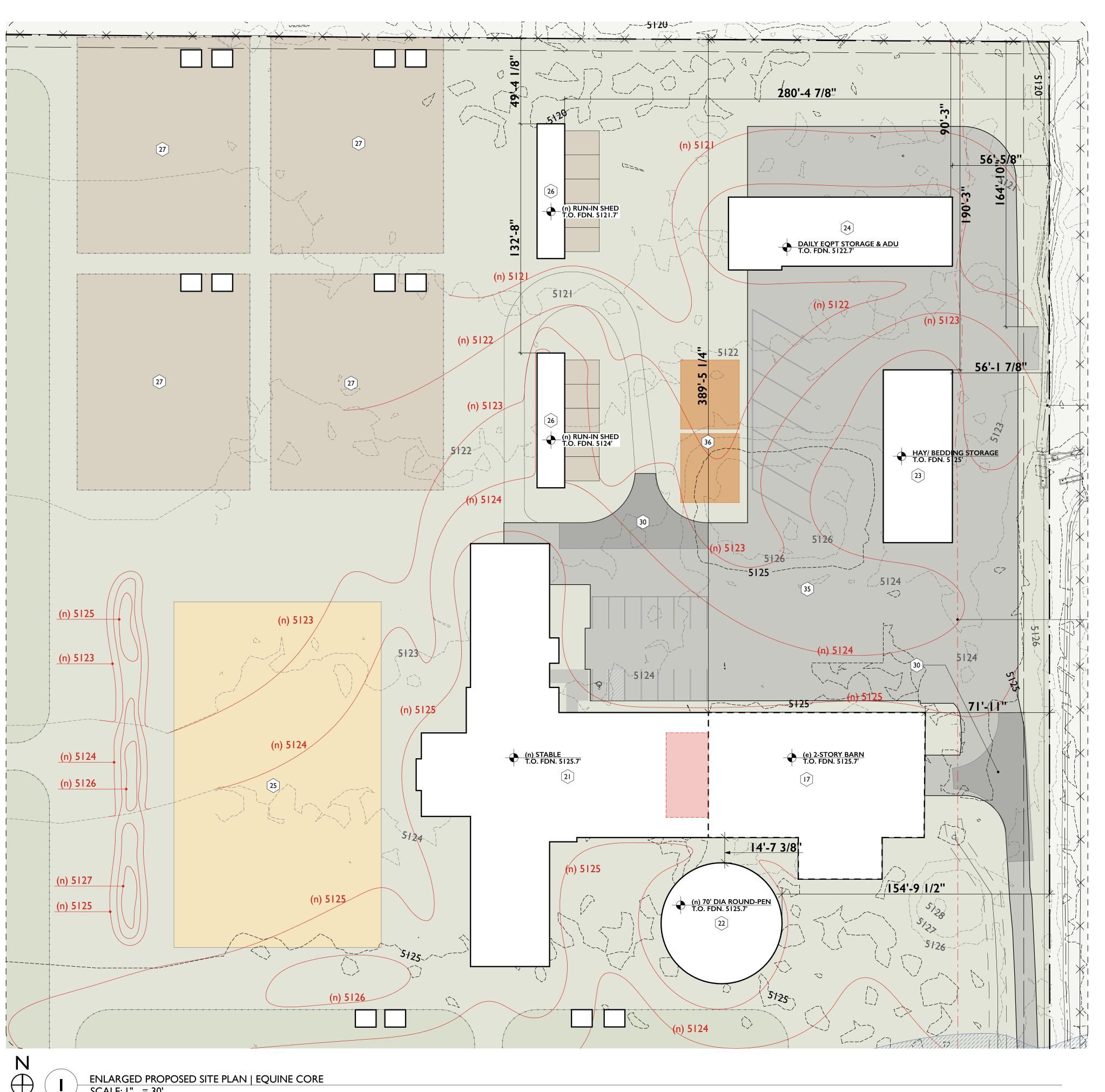
31. (n) emergency access pull-out per Boulder County Multimodal Transportation Standards

32. (n) driveway: residence, see ShelterBelt Design

33. (e) tree: demo for (n) residence, see ShelterBelt Design

19. (e) building: relocated, for equipment storage 34. (n) 4,115 s.f. (conditioned), see ShelterBelt

35. (n) combination of permeable and impermeable driving surface



BLACKBURN

73rd. St. Farm

8130 N. 73rd St. Longmont, CO 80503

CHECKED BY:

1820 N STREET NW WASHINGTON, DC 20036 (202) 337-1755 PHONE (202) 337-5271 FAX

PROJECT No: 224010.01 DATE: November 12, 2024 DRAWN BY: FZ

SCHEMATIC DESIGN: PROGRESS SET

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Starlings CO LLC 73rd. St. Farm 8130 N. 73rd St. Longmont,CO 80503

DESIGNER

JOHN A. BLACKBURN ARCHITECT 1820 N STREET NW WASHINGTON, DC 20036 Tel: 202-337-1755 Fax: 202-337-5271

CONSULTANTS

Date Description 11/12/24 PROGRESS SET

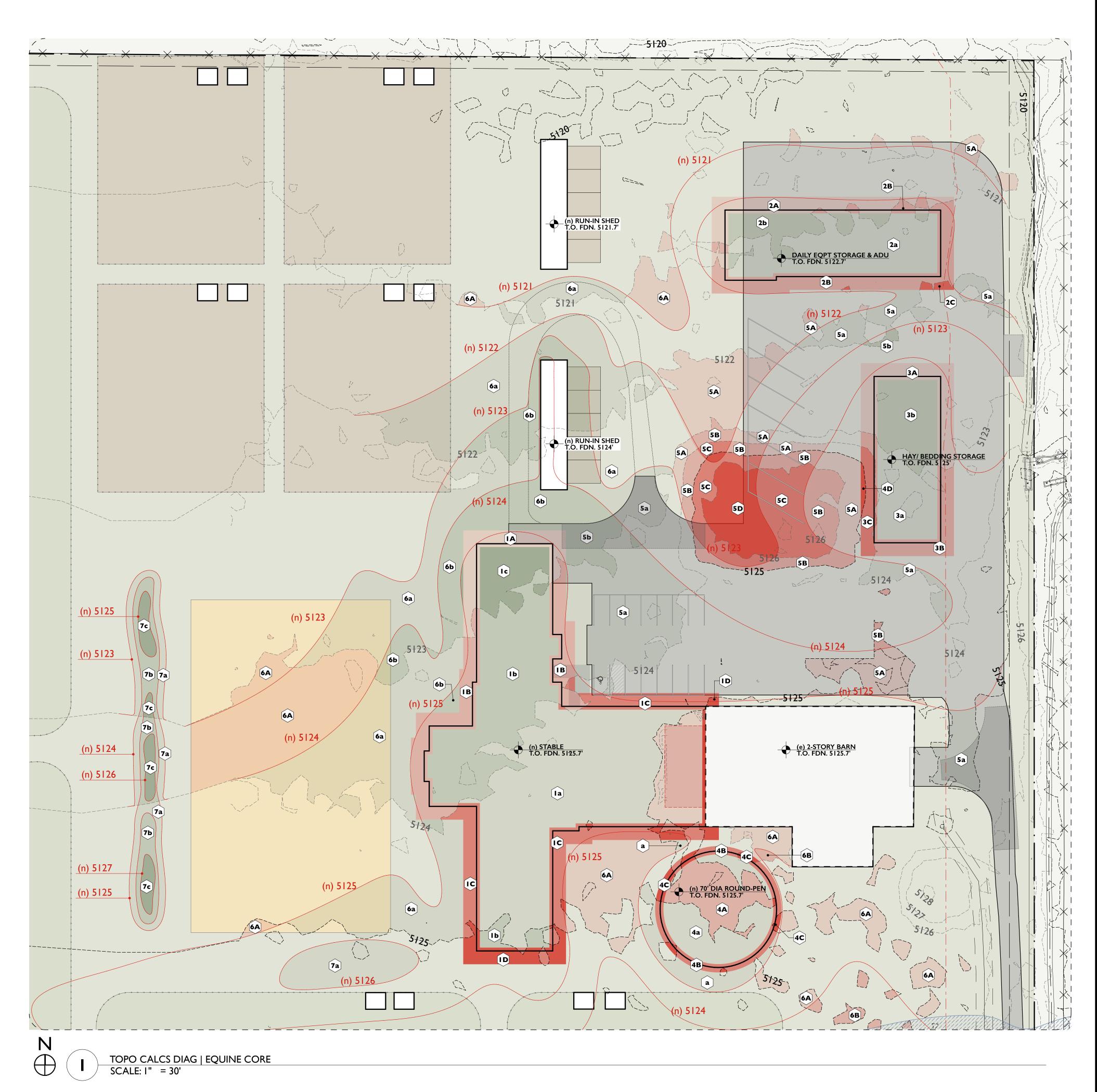
EQUESTRIAN CENTER PROPOSED SITE PLAN - ENLARGED

SHEET NUMBER

AS1-3

TOPO CALCS | HEAVY EQUIP. CORE SCALE: I" = 30'

	S	table & I	Indoor .	Arena - (CUT				Stable &	Indoor A	rena - FILI	L	
zone	area (sq ft)	depth (ft)	volumn	top 12"/2			zone	area (sq ft)	depth (ft)	volumn	top 12"/2		
IA	1,885	ı	1,885	942.5	2,827.5		la	9,348	I	9,348	4,674.0	14,022	
IB	1,437	2	2,874	718.5	3,592.5		lb	5,501	2	11,002	2,750.5	13,752.5	
IC	3,019	3	9,057	1,509.5	10,566.5		Ic	1,285	3	3,855	642.5	4,497.5	
ID	1,152	4	4,608	576.0	5,184								
					22,170.5	cubic feet						32,272	cubic feet
					27	convert						27	convert
					821.13	cubic yards						1,195.26	cubic yard
	D. H. I	••_	4 64	0 AF		_		D-:	L. F		rds Total:		
zone	area (sq ft)	depth (ft)	volumn	top 12"/2	0 - 00	•	zone	area (sq ft)	depth (ft)	volumn	ge & ADU	- FILL	
2A	1,437	I	1,437	718.5	2,155.5		2a	3,353	I	3,353	1,676.5	5,029.5	
2B	2,238	2	4,476	1,119.0	5,595		2b	1,226	2	2,452	613.0	3,065	
2C	90	3	271	45.2	316.19								
					8,066.69	cubic feet						8,094.5	cubic feet
					27	convert						27	convert
					298.77	cubic yards						299.80	cubic yards
			•							Cubic ya	ırds Total:	598.56	
	н	lay/ Bed	ding St	orage - C	UT				Hay/ Be	dding Sto	rage - FILL	-	
zone	area (sq ft)	depth (ft)	volumn	top 12"/2			zone	area (sq ft)	depth (ft)	volumn	top I2"/2		
3A	1,411	ı	1,411	705.5	2,116.5		3a	3,353	ı	3,353	1,676.5	5,029.5	
3B 3C	1,069	3	2,138 1,470	534.5 245.0	2,672.5 1,715		3b	1,226	2	2,452	613.0	3,065	
3D	68	4	272	34.0	306								
					6,810	cubic feet						8,094.5	cubic feet
					27 252.22	convert cubic yards						27 299.80	convert
					202.22	cable yar as				Cubic ya	ırds Total:	552.02	cubic yar di
		70' Ro	ound Pe	en - CUT					70' F	Round Per	n - FILL		
zone	area (sq ft)	depth (ft)	volumn	top 12"/2			zone	area (sq ft)	depth (ft)	volumn	top 12"/2		
4A	1,571	2	3,142	785.5	3,927.5		4a	1,848	I	1,848	924.0	2,772	
4B	843	3	2,529	421.5	2,950.5								
4C	227	4	908	113.5	1,021.5								
					7,899.5	cubic feet						2,772	cubic feet
					27	convert						27	convert
					292.57	cubic yards						102.67	cubic yards
									_		rds Total:	395.24	
	(6)		veway					((-)		riveway -			
zone 5A	area (sq ft) 25,440	depth (ft)	volumn 25,440	top 12"/2	38,160		zone 5a	area (sq ft) 12,143	depth (ft)	12,143	top 12"/2 6,071.5	18,214.5	
5B	2,447	2	4,894	1,223.5	6,117.5		5b	1,039	2	2,078	519.5	2,597.5	
5C			7,695	1,282.5	8,977.5								
	2,565	3											
5C 5D	2,565 1,692	4	6,768	846.0	7,614								
			6,768	846.0	7,614	cubic feet						2,597.5	cubic feet
			6,768	846.0		cubic feet						2,597.5 27	cubic feet
			6,768	846.0	22,709								
		4			22,709 27 841.07	convert					ards Total:	27	convert
5D	1,692	4 Other	Gradin	ng - CUT	22,709 27 841.07	convert				er Gradin	g - FILL	27 96.20	convert
5D zone	I,692	Other depth (ft)	Gradin	ng - CUT	22,709 27 841.07	convert	zone	area (sq ft)	depth (ft)	er Grading	g - FILL top I2"/2	96.20 937.28	convert
5D	1,692	4 Other	Gradin	ng - CUT	22,709 27 841.07	convert	zone 6a 6b	area (sq ft) 72,590 5,011		er Gradin	g - FILL	27 96.20	convert
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn	top 12"/2	22,709 27 841.07	convert	6a	72,590	depth (ft)	volumn 72,590	g - FILL top 12"/2 36,295.0	27 96.20 937.28	convert
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn	top 12"/2	22,709 27 841.07 18,414 6,117.5	convert cubic yards	6a	72,590	depth (ft)	volumn 72,590	g - FILL top 12"/2 36,295.0	27 96.20 937.28 108.885 12,527.5	convert cubic yard:
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn	top 12"/2	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	6a	72,590	depth (ft)	volumn 72,590	g - FILL top 12"/2 36,295.0	27 96.20 937.28 108.885 12,527.5 12,527.5	convert cubic yard:
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn	top 12"/2	22,709 27 841.07 18,414 6,117.5	convert cubic yards	6a	72,590	depth (ft)	volumn 72,590 10,022	g - FILL top 12"/2 36,295.0 2,505.5	27 96.20 937.28 108.885 12,527.5	convert cubic yard:
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	6a	72,590	depth (ft)	volumn 72,590 10,022	g - FILL top 12"/2 36,295.0 2,505.5	27 96.20 937.28 108.885 12.527.5 27 463.98	convert cubic yard:
zone 6A	1,692 area (sq ft)	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	6a	72,590	depth (ft)	volumn 72,590 10,022 Cubic ya	g - FILL top 12"/2 36,295.0 2,505.5	27 96.20 937.28 108.885 12.527.5 27 463.98	convert cubic yard:
zone 6A 6B	area (sq ft) 12,276 2,447	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	6a 6b	72,590	depth (ft)	volumn 72,590 10,022 Cubic ya Berm - F	g - FILL top 12"/2 36,295.0 2,505.5	27 96.20 937.28 108.885 12.527.5 27 463.98	convert cubic yard:
zone 6A 6B	area (sq ft) 12,276 2,447	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	zone 7a 7b	72,590 5,011 area (sq ft) 1,772 1,384	depth (ft) I 2 depth (ft) I 1 2	volumn 72,590 10,022 Cubic ya Berm - F volumn 1,772 2,768	g - FILL top 12"/2 36,295.0 2,505.5 ards Total: ILL top 12"/2 886.0 692.0	27 96.20 937.28 108.885 12,527.5 27 463.98 690.56	cubic yards
zone 6A 6B	area (sq ft) 12,276 2,447	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	6a 6b zone	72,590 5,011 area (sq ft)	depth (ft) I 2 depth (ft) I I I	volumn 72,590 10,022 Cubic ya Berm - F volumn 1,772	g - FILL top 12"/2 36,295.0 2,505.5 ards Total: ILL top 12"/2 886.0	27 96.20 937.28 108,885 12,527.5 27 463.98 690.56	cubic yards
zone 6A 6B	area (sq ft) 12,276 2,447	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27	convert cubic yards cubic feet convert	zone 7a 7b	72,590 5,011 area (sq ft) 1,772 1,384	depth (ft) I 2 depth (ft) I 1 2	volumn 72,590 10,022 Cubic ya Berm - F volumn 1,772 2,768	g - FILL top 12"/2 36,295.0 2,505.5 ards Total: ILL top 12"/2 886.0 692.0	27 96.20 937.28 108.885 12,527.5 27 463.98 690.56	cubic yards
zone 6A 6B	area (sq ft) 12,276 2,447	Other depth (ft)	volumn 12,276 4,894	top 12"/2 6,138.0 1,223.5	22,709 27 841.07 18,414 6,117.5 27 226.57	convert cubic yards cubic feet convert cubic yards	zone 7a 7b	72,590 5,011 area (sq ft) 1,772 1,384	depth (ft) I 2 depth (ft) I 1 2	volumn 72,590 10,022 Cubic ya Berm - F volumn 1,772 2,768	g - FILL top 12"/2 36,295.0 2,505.5 ards Total: ILL top 12"/2 886.0 692.0	27 96.20 937.28 108.885 12,527.5 27 463.98 690.56	cubic yards cubic feet convert cubic yards
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73rd. St. Farm

8130 N. 73rd St. Longmont, CO 80503

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PROJECT No: 224010.01 DATE: November 12, 2024 DRAWN BY: FZ

SCHEMATIC DESIGN:

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DESIGNER

JOHN A. BLACKBURN ARCHITECT 1820 N STREET NW WASHINGTON, DC 20036 Tel: 202-337-1755 Fax: 202-337-5271

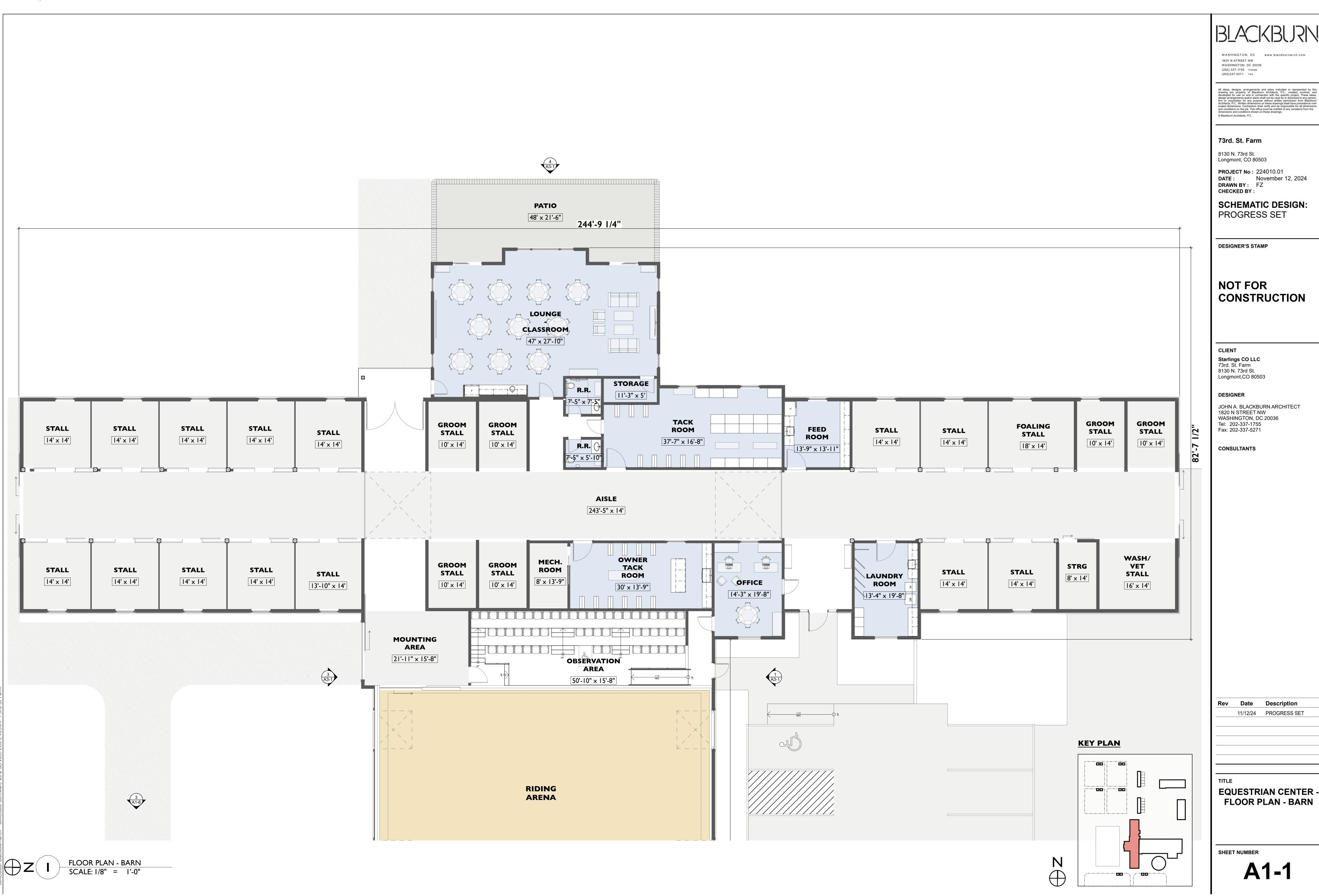
CONSULTANTS

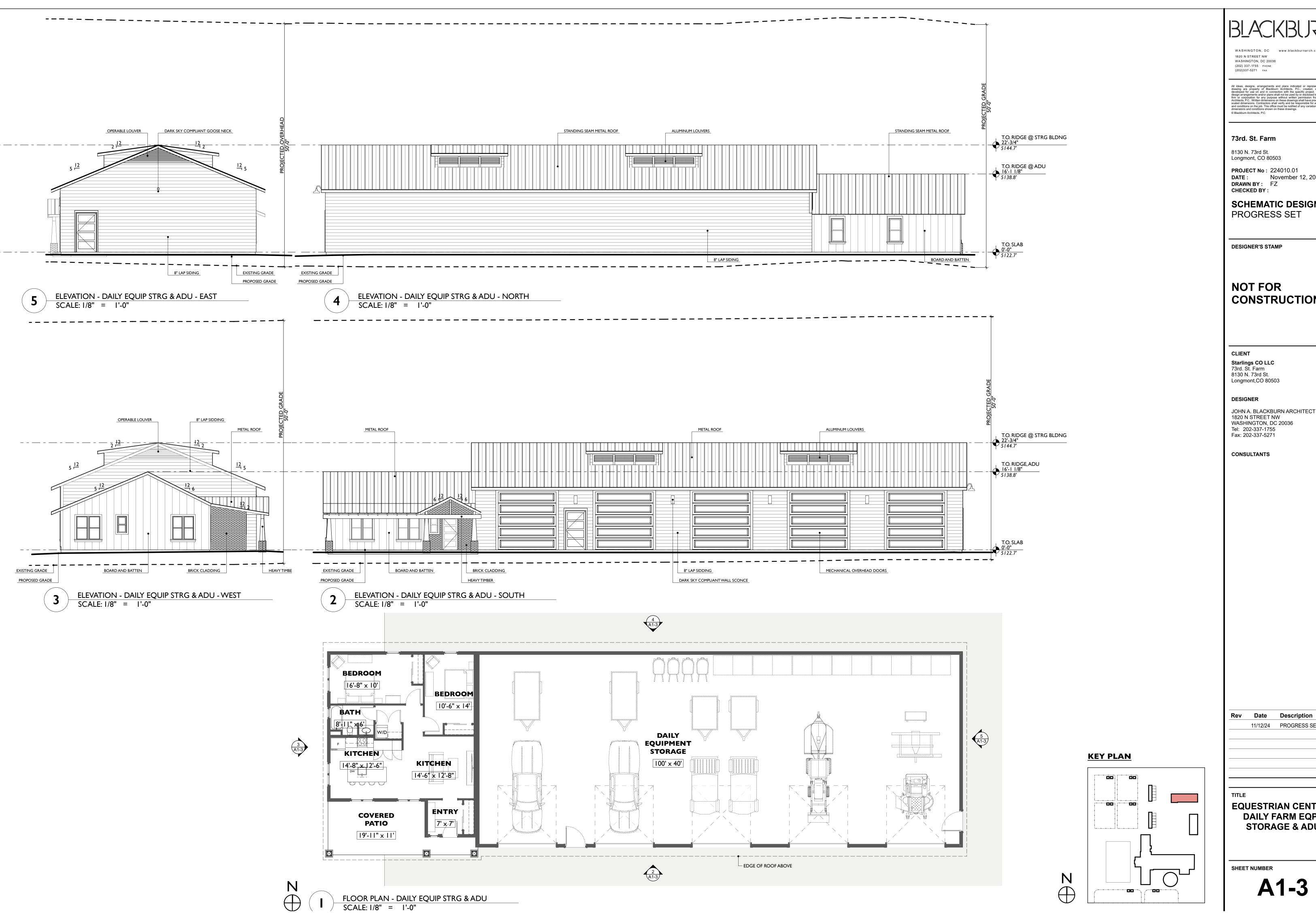
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EQUESTRIAN CENTER -PROPOSED SITE PLAN - CUT & FILL CALCS

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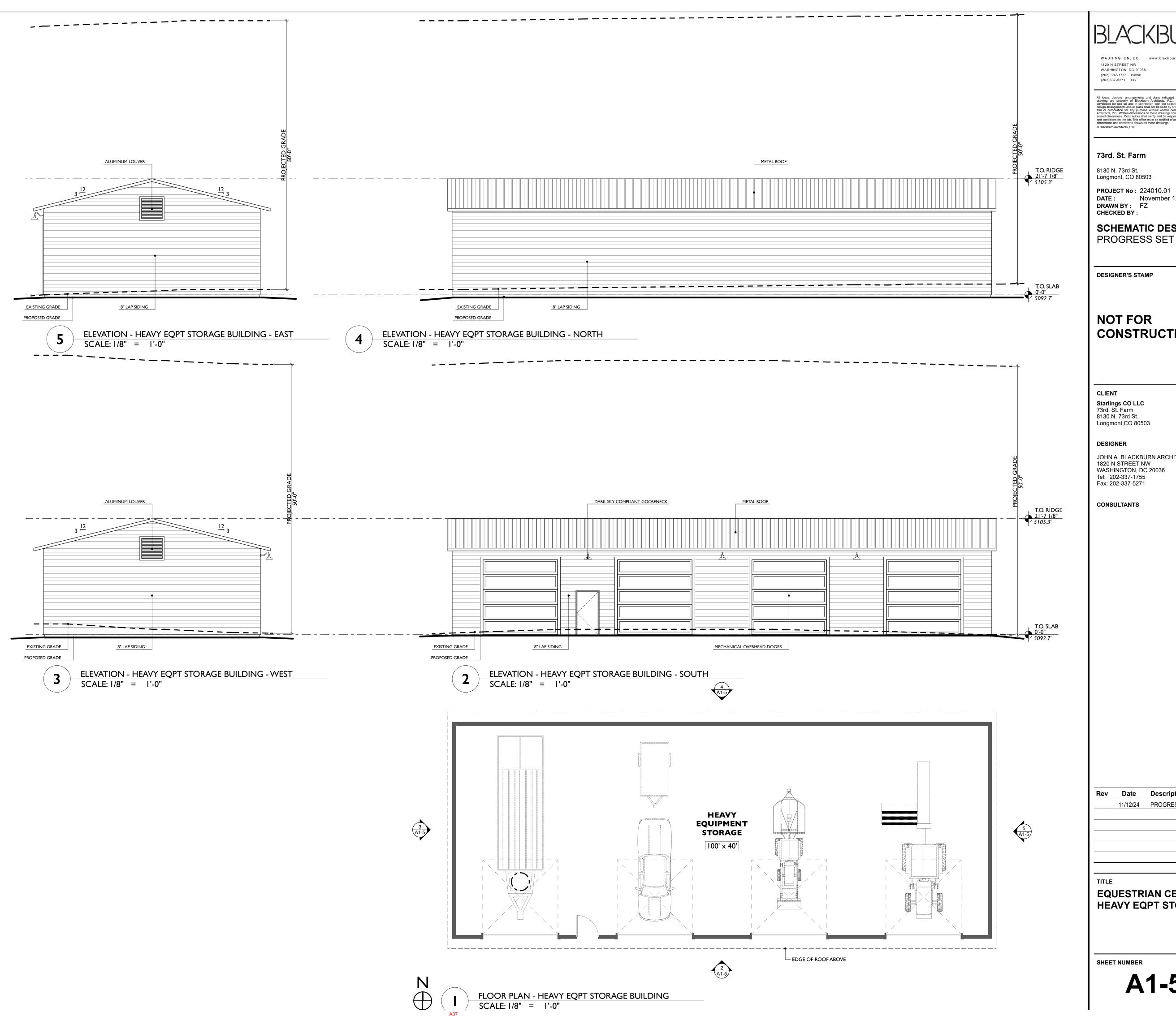
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DESIGNER

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TITLE

EQUESTRIAN CENTER -ROUND PEN

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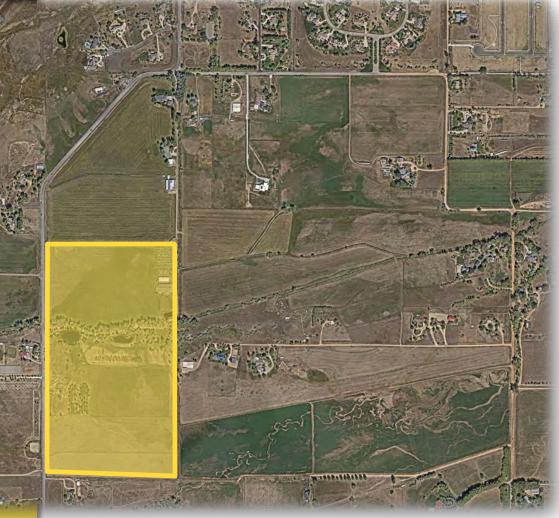
Rev Date Description 11/12/24 PROGRESS SET

EQUESTRIAN CENTER EXTERIOR ELEVATIONS - STABLE & ARENA

SHEET NUMBER

CH Equine

Transportation System Impact Analysis at the Review Level



Submittal Date: November 5, 2024

Submitted To:

Shelterbelt Design 6145 Broadway Denver, CO 80216

Submitted By:

Fox Tuttle Transportation Group, LLC 1580 Logan Street, 6th Floor Denver, CO 80203

CH Equine Transportation System Impact Analysis at the Review Level [FT#24077]

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CH Equine Transportation System Impact Analysis at the Review Level [FT#24077]

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Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

CH EQUINE

TRANSPORTATION SYSTEM IMPACT ANALYSIS AT THE REVIEW LEVEL

1.0 Introduction

The Fox Tuttle Transportation Group has prepared this Transportation System Impact Analysis at the Review Level (TSIR) for the development of the CH Equine project. The property is located in Boulder County east of 73rd Street, approximately 1.3 miles north of Niwot Road. It is understood that the project will develop an equestrian training and breeding center. Access to the site is planned to be located on 73rd Street at one (1) location. Adjacent land uses are comprised of agricultural and rural residential areas, with the Town of Niwot to the southeast and the City of Longmont to the northeast. **Figure 1** provides a vicinity map for the proposed project.

The purpose of this study is to assist in identifying potential traffic impacts within the study area as a result of this project. The traffic study addresses existing and short-term peak hour intersection conditions in the study area with and without the project-generated traffic. The information contained in this study is anticipated to be used by Boulder County staff in identifying any intersection or roadway deficiencies and potential improvements for the build-out condition. This study focused on the weekday AM, weekday mid-day, and Saturday peak hours which represent the periods of highest trip generation for the proposed use and adjacent street traffic. The study is consistent with the requirements of the <u>Boulder County Multimodal Transportation Standards</u> (July 1, 2012).

2.0 Project Description

The CH Equine project plans to develop the site with an equestrian training and breeding center including agricultural uses, a horse barn, a riding arena, horse runs, and residential uses typical for projects of this type. The project proposes to construct one (1) access on 73rd Street. The access is proposed to be full-movement and side-street stop-controlled. For the purpose of this traffic study, it was assumed that the project will be built out and operational by Year 2025. **Figure 1** shows the project location.

3.0 Study Considerations

3.1 Data Collection

Intersection turning movement volumes were collected in October 2024 at two (2) existing intersections during the weekday AM, weekday mid-day, and Saturday peak hours, including pedestrians and bicyclists. Daily traffic volumes were also collected on 75th Street south of Nelson Road, on 73rd Street north of the project site, and on Niwot Road east of 73rd Street.

The existing traffic volumes, including pedestrian and bicycle volumes, are illustrated on **Figure 2**. The existing intersection geometry and traffic control are also shown on this figure. Count data sheets are provided in the **Appendix**.

3.2 Evaluation Methodology

The traffic operations analysis addressed the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the <u>Highway Capacity Manual</u> (HCM)¹. Existing peak hour factors (PHF) by approach and peak hour were applied to the study intersections for all scenarios. Study intersections were evaluated using Synchro software (v12).

3.3 Level of Service Capacity Analysis

A Level of Service analysis was conducted to determine the existing and future performance of the study area intersections and accesses to determine the most appropriate intersection traffic controls and auxiliary lanes for future conditions.

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a system referred to as "Level of Service" (LOS) that is defined by the *HCM*. LOS characterizes the operational conditions of an intersection's traffic flow, ranging from LOS A (indicating free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience

Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 7th Edition (2022).

associated with traveling through the intersections. The intersection LOS is based on delay in seconds per vehicle for the intersection as a whole and for each movement.

Typically, LOS D overall during peak hours is acceptable. Individual movements may be allowed to fall to LOS E or F at signalized intersections. Minor movements at unsignalized intersections, such as left turns onto a major arterial, may be allowed to fall below LOS D. Criteria contained in the <u>HCM</u> was applied for these analyses in order to determine peak hour LOS for each scenario. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference.

4.0 Existing Conditions

4.1 Roadways

The study area boundaries are based on the amount of traffic to be generated by the project and potential impact to the existing roadway network. The primary public roadways that serve the project site are discussed in the following text and illustrated on **Figure 1**.

73rd Street is a two-lane, north-south, collector roadway that provides access to rural residential and agricultural sites near the project location. The roadway extends from the 71st Street/Niwot Road intersection (south) to an easterly bend where the roadway becomes 75th Street (north). 73rd Street has a posted speed limit of 50 miles per hour (mph) and serves approximately 5,050 vehicles per day (vpd) near the project site (Year 2024).

75th **Street** is a two-lane, north-south, collector roadway that provides access to local residential neighborhoods and agricultural sites. The roadway extends from 73rd Street (south) to Woodland Road (north). 75th Street has a posted speed limit of 45 mph within the study area and serves approximately 3920 vpd south of Nelson Road (Year 2024).

Niwot Road is a two-lane, east-west, collector roadway that provides access to local residential neighborhoods, agricultural sites, and the Town of Niwot. The roadway extends from 45th Street (west) to 107th Street (east). At 73rd Street, the west approach of Niwot Road is north of Dodd Lake, while the east approach of Niwot Road is south of Dodd Lake and in line with 71st Street at the T-intersection. Niwot Road has a posted speed limit of 35 mph within the study area and serves approximately 4,730 vpd east of 73rd Street (Year 2024).

71st **Street** is a two-lane local roadway that provides access to local residential and agricultural sites The roadway extends from the T-intersection with 73rd Street and Niwot Road (north) to State Highway 119 (south). 71st Street has a posted speed limit of 35 mph and serves approximately 720 vpd (Boulder County, Year 2022).

Nelson Road is an east-west roadway. West of 75th Street, Nelson Road is a two-lane minor arterial roadway. East of 75th Street, Nelson Road is a City of Longmont three-lane municipal primary roadway. The roadway provides access to residential neighborhoods, agricultural areas, and the City of Longmont. Nelson Road extends from Foothills Highway (west) to Ken Pratt Boulevard (east). The posted speed is 35 mph west of the 75th Street intersection and 45 mph east of the intersection, within the study area. Nelson Road serves approximately 4,100 vpd west of 75th Street (Boulder County, Year 2022).

4.2 Intersections

The study area includes two (2) existing intersections that are listed below with the current traffic control and were analyzed for existing and future background year traffic operations:

- 1. Nelson Road at 75th Street [signalized]
- 2. 73rd Street at Niwot Road / 71st Street [all-way stop-controlled]

The existing lane configuration at each of the study locations is illustrated on Figure 2.

4.3 Pedestrian and Bicycle

Currently, there are no sidewalks on any of the study roadways, with the exception of Nelson Road. East of 75th Street, Nelson Road has sidewalks on the south side of the roadway with no sidewalks on the north side of the roadway. West of 75th Street, Nelson Road does not have sidewalks.

There are no on-street bike lanes within the project study area with the exception of Nelson Road east of 75th Street which has a bike lane on the south side only. However, 73rd Street and 75th Street both have wide paved shoulders which bicyclists use frequently. Bicycle counts were taken at the study intersections during peak hours, and range from 0 to 10 for any given direction and peak hour. Daily bicycle volumes were obtained from the Boulder County Geographic Information Systems (GIS) website and are shown on **Figure 2**. 73rd Street serves approximately 165 bicycles per day (bpd) (Boulder County, Year 2020), while 75th Street serves approximately 275 bpd (Boulder County, Year 2020).

4.4 Transit

Boulder County is serviced by multiple municipal and regional transit services from Boulder, Longmont, Boulder County, and RTD. However, there are no transit routes or facilities near the project or within the study area.

4.5 Year 2024 Existing Intersection Capacity Analysis

The existing volumes, lane configuration, and traffic control are illustrated on **Figure 2**. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**. **Currently, the study intersections overall and all individual movements operate at LOS B or better in the weekday AM, weekday mid-day, and Saturday peak hours. All 95th percentile queues were estimated to be contained within existing storage.**

5.0 Future Conditions with the Development

The CH Equine project will develop an equestrian training and breeding center to include agricultural uses, a horse barn, a riding arena, horse runs, and residential uses typical for projects of this type. For the purpose of this study it was assumed that the entire project will be built out and operational in Year 2025. Due to the short timeframe before the project is operational and relatively low existing traffic volumes, a background growth rate was not applied to existing traffic volumes for the project buildout year.

5.1 Trip Generation

A trip generation estimate was performed to determine the traffic characteristics of the proposed development. Because the Institute of Transportation Engineers (ITE) <u>Trip Generation Handbook and Manual</u>² does not contain any land uses similar to the project, the project team used data from a similar site to estimate the project-generated traffic for the equestrian center.

The CH Equine project was estimated to generate approximately 32 weekday daily trips, 10 trips in the weekday AM peak hour, 15 trips in the weekday PM peak hour, and 23 trips in the Saturday peak hour.

² Trip Generation Handbook and Manual, 11th Edition, Institute of Transportation Engineers, 2021.

It should be noted that these trip volumes are not expected to occur most days and instead represent the highest daily and peak hour volumes the site can be expected to generate. Additionally, it is likely that the peak hour trips for each individual period will not occur on the same day. Trip generation is described on **Table 3**.

5.2 Trip Distribution and Assignment

The estimated trip volumes were distributed onto the study area street network based on existing traffic characteristics, land uses, and traffic patterns in the area. A desktop analysis was performed to determine where vehicles are coming from and going to within the study area, plus the route to get to major highways and anticipated destinations.

The following distributions were assumed for this project and are shown on Figure 3:

North via 75th Street: 20%

West via Nelson Road: 20%

• East via Nelson Road: 10%

South via 71st Street: 30%

East via Niwot Road: 20%

The above distribution assumes that all project trips will start and end outside the study area, and pass through one of the study intersections to both enter and exit the project site. This approach results in conservatively high trip assignments at the study intersections, as it is likely that some project trips will start and end before they reach the study intersections.

Using the distribution assumptions, the projected site traffic was assigned to the study area roadway network for the weekday AM, weekday PM, and Saturday peak hour periods. Project-generated trips are shown on **Figure 4**.

5.3 Year 2025 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the project trips in the project buildout scenario. The site-generated volumes were added to the Year 2025 background volumes and are illustrated on **Figure 5**. This figure also illustrates the necessary traffic control and lane configurations for the proposed access. Note that for the purposes of this study, Year 2025 background volumes are equal

to Year 2024 existing volumes as a growth rate was not applied given the short timeframe. See **Section 5.0** for further discussion.

The study intersections are anticipated to operate similarly to the existing conditions with the addition of project trips since all of the intersection and movement levels of service remain the same letter grade. The proposed access is anticipated to operate at LOS A in the weekday AM, weekday PM, and Saturday peak hours with all movements operating at LOS B or better. The details of LOS for each movement are provided in Table 1 and the 95th percentile queues are provided in Table 2 (refer to Appendix). The intersection Level of Service worksheets are attached in the Appendix.

6.0 Queuing Analysis

A queuing analysis was performed to determine if the 95th percentile queues would be accommodated by the existing storage length, to determine the storage lengths for future auxiliary lanes, and if any of the queues would impact an upstream intersection/access. **Table 2** provides the existing storage lengths, as well as the 95th percentile queues for each scenario as calculated by Synchro (assuming each vehicle utilizes 25 feet of space). It should be noted that the 95th percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95th percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

As shown in **Table 2**, all of the queues are shorter than the provided storage length in all scenarios. The project trips have minimal impact on queues at the existing study intersections.

7.0 Safety Analysis

A safety analysis was performed to determine if there is a documented crash history within the study area and, if so, if there are any correctable patterns with the crashes. Crash data was gathered from the Colorado Department of Transportation (CDOT) (Years 2021-2023) as well as Boulder County GIS (Years 2021-2022). CDOT crash data was used to confirm Boulder County GIS data as well as supplement the data for Year 2023.

The following is a summary of the crash history analyzed for this study:

- **73**rd **Street at Niwot Road (north intersection)**: four (4) total crashes including three (3) property damage only and one (1) with possible injury:
 - o At two (2) of the crashes, the vehicles ran off the road at the T-intersection.
 - o At one (1) of the crashes, a vehicle rear ended another vehicle.
 - At one (1) of the crashes, a vehicle made an eastbound right turn, failed to yield right-ofway to a southbound vehicle, and was struck. This crash resulted in a possible injury.
- **73**rd **Street south of Nimbus Road**: a motorcycle was involved in a single-vehicle rollover crash resulting in possible injury.
- **73**rd **Street north of Alpenglow Court**: two (2) total crashes including one (1) with evident injury:
 - At one (1) of the crashes, a suspected alcohol-impaired driver ran off the side of the road resulting in evident, non-incapacitating injury.
 - o At one (1) of the crashes, a non-impaired driver ran off the side of the road.
- **75**th **Street at 73**rd **Street**: a vehicle was involved in a single-vehicle rollover crash.
- **75**th **Street north of 73**rd **Street**: a vehicle was involved in a crash where it ran off the road attempting to pass another vehicle, resulting in evident, non-incapacitating injury.
- **75**th **Street at Nelson Road**: five (5) total crashes including four (4) property damage only and one (1) with possible injuries:
 - o At two (2) of the crashes, the vehicle ran off the side of the road.
 - o At one (1) of the crashes, a vehicle sideswiped another vehicle while changing lanes.
 - One (1) of the crashes was an approach turn crash.

One (1) of the crashes was a broadside, or T-bone, crash which resulted in possible injuries.

In the provided data, there were no crashes involving bicycles or pedestrians. It should be noted that near misses, or unsafe situations which nearly resulted in a crash, are frequently unreported and therefore are not available for analysis. Safety concerns which can result in near misses but do not have a discernable crash history can sometimes be addressed through systemic safety improvements.

From the available data, it does not appear that the crashes follow a discernable pattern. There were no crash trends which would suggest changes in traffic control or traffic operations. The relatively low amount of additional trips generated by the project should not create or exacerbate a safety issue. Boulder County should consider systemic improvements to identify and address safety concerns with horizontal roadway alignments, or curves in the roadway, especially given the high bicycle volumes on 73rd Street and 75th Street.

8.0 Conclusions

The CH Equine project plans to develop the site with an equestrian training and breeding center including agricultural uses, a horse barn, a riding arena, horse runs, and residential uses typical for projects of this type. The project proposes to construct one (1) access on 73rd Street. The access is proposed to full-movement and side-street stop-controlled. For the purpose of this traffic study, it was assumed that the project will be built out and operational by Year 2025.

The project is estimated to generate approximately 32 weekday daily trips, 10 trips in the weekday AM peak hour, 15 trips in the weekday PM peak hour, and 23 trips in the Saturday peak hour. It was determined that the proposed roadway system can adequately accommodate the projected traffic volumes. The relatively low increase in traffic volumes from the project should not create or exacerbate any safety issues. There are no existing, background, or project-related recommendations for roadway improvements

Tables and Figures:

Table 1 – Peak Hour Intersection Level of Service Summary

Table 2 – Peak Hour Estimated Queues

Table 3 – Trip Generation Summary

Figure 1 – Vicinity Map

Figure 2 – Year 2024 Existing Traffic Volumes

Figure 3 – Site Trip Distribution

Figure 4 – Site-Generated Trips

Figure 5 – Year 2025 Total Traffic Volumes

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CH Equine Transportation System Impact Analysis at the Review Level Table 1 - Peak Hour Intersection Level of Service Summary

		Year 2024 Existing							Year 2025 with Project							
Intersections and Lane Groups	AM	Peak	Mid-Day		Saturday Peak		AM Peak		Mid-Day		Saturday Peak					
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
SIGNAL CONTROL																
1. 75th Street at Nelson Road	13	В	12	В	10	В	13	В	12	В	10	В				
Eastbound Left	11	В	11	В	7	Α	11	В	11	В	7	Α				
Eastbound Through + Right	8	Α	9	Α	7	Α	8	Α	9	Α	7	Α				
Westbound Left	9	Α	11	В	7	Α	9	Α	11	В	7	Α				
Westbound Through	10	Α	7	Α	7	Α	10	Α	7	Α	7	Α				
Westbound Right	7	Α	7	Α	7	Α	7	Α	7	Α	7	Α				
Northbound Left	17	В	15	В	14	В	17	В	15	В	14	В				
Northbound Through	14	В	16	В	13	В	14	В	16	В	13	В				
Northbound Right	14	В	14	В	13	В	14	В	14	В	13	В				
Southbound Left	17	В	19	В	14	В	17	В	19	В	14	В				
Southbound Through	17	В	15	В	14	В	17	В	15	В	14	В				
Southbound Right	19	В	13	В	13	В	19	В	13	В	13	В				
STOP SIGN CONTROL					_		L									
2. 71st Street at Niwot Road / 73rd Street	10	Α	10	В	8	Α	10	Α	10	В	8	Α				
Eastbound Left + Through	9	Α	10	Α	8	А	9	Α	10	Α	8	Α				
Westbound Through + Right	9	Α	9	Α	7	Α	9	Α	9	Α	7	Α				
Southbound Left + Right	10	В	12	В	8	Α	10	В	12	В	8	Α				
101. 73rd Street at Access							0	Α	0	Α	0	Α				
Westbound Left + Right			Project	Access			0	Α	13	В	0	Α				
Northbound Through + Right							0	Α	0	Α	0	Α				
Southbound Left + Through							9	Α	9	Α	8	Α				



CH Equine Transportation System Impact Analysis at the Review Level Table 2 - Peak Hour Estimated Queues

Intersections and Lane Groups	AM	2024 Existing 95th% Queue AM Mid-Day Saturday			25 with Proj 95th% Queu Mid-Day	Max. Queue	Existing Storage	
1. 75th Street at Nelson Road		Signal			Signal			
Eastbound Left	8'	71'	6'	8'	71'	6'	71'	210'
Eastbound Through + Right	40'	100'	24'	40'	101'	24'	101'	-
Westbound Left	26'	18'	9'	27'	18'	10'	27'	240'
Westbound Through	100'	41'	27'	100'	41'	27'	100'	-
Westbound Right	12'	15'	4'	12'	15'	4'	15'	240'
Northbound Left	14'	12'	9'	14'	13'	9'	14'	300'
Northbound Through	43'	81'	24'	43'	81'	24'	81'	-
Northbound Right	16'	15'	0'	16'	16'	0'	16'	300'
Southbound Left	48'	39'	15'	48'	39'	15'	48'	190'
Southbound Through	77'	50'	25'	77'	50'	27'	77'	-
Southbound Right	19'	5'	2'	19'	5'	2'	19'	190'
2. 71st Street at Niwot Road / 73rd Street		Stop-Controlle	ed	Si	top-Controlle			
Eastbound Left + Through	3'	20'	0'	3'	20'	3'	20'	-
Westbound Through + Right	23'	20'	13'	23'	20'	13'	23'	-
Southbound Left + Right	48'	55'	10'	48'	58'	10'	58'	-
101. 73rd Street at Access		Project Acces	ss	Si	top-Controlle			
Westbound Left + Right				0'	3'	0'	3'	-
Northbound Through + Right				0'	0'	0'	0'	-
Southbound Left + Through				0'	0'	0'	0'	-



CH Equine Transportation System Impact Analysis at the Review Level



Table 3 - Trip Generation

			Weekday									Saturday Event		
			Higl	AM F	AM Peak Hour			Mid-Day			Peak Hour			
Land Use	Size	Unit	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Visitors with Trailers			10	5	5	8	8	0	8	5	3	8	8	0
Visitors No Trailers			10	5	5	0	0	0	3	2	1	15	15	0
Employees			12	6	6	2	2	0	4	1	3	0	0	0
		Total	32	16	16	10	10	0	15	8	7	23	23	0

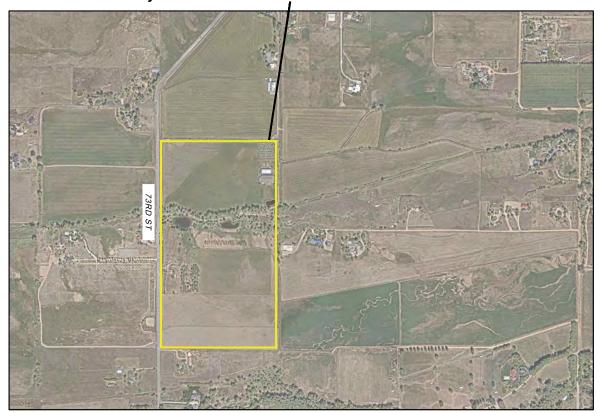
Sources: Project team.

Area Map



Location within Boulder County

PROJECT SITE



FOX TUTTLE

RANSPORTATION GROU

Project #

24077

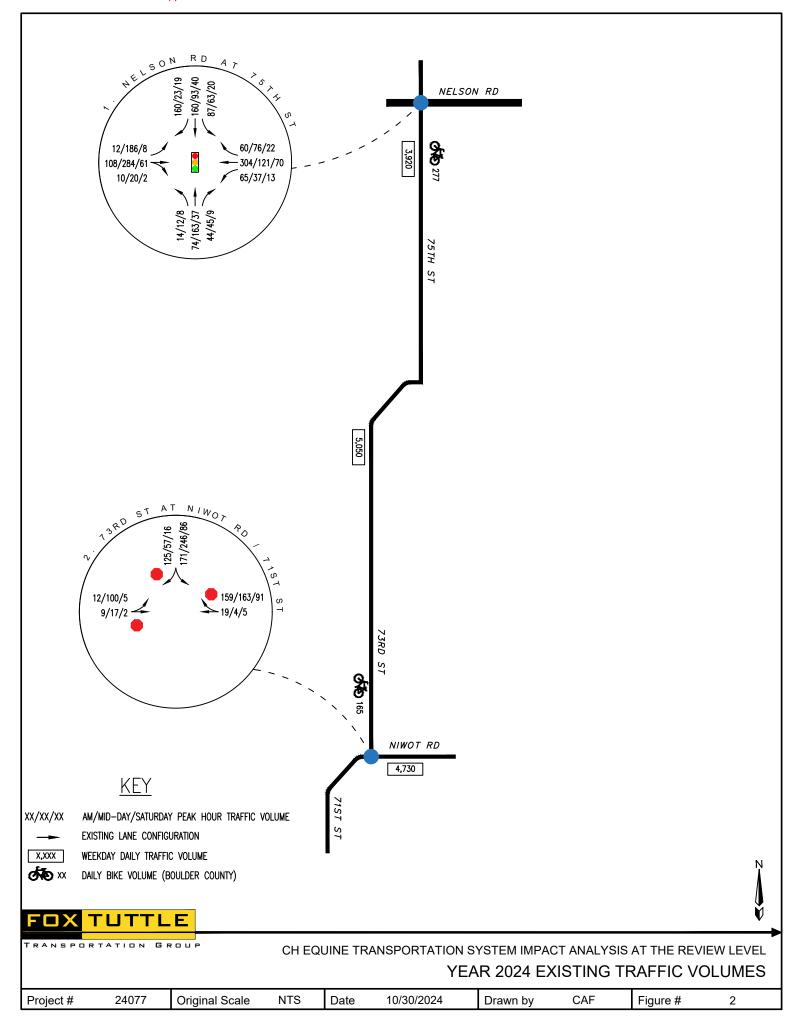
CH EQUINE TRANSPORTATION SYSTEM IMPACT ANALYSIS AT THE REVIEW LEVEL VICINITY MAP

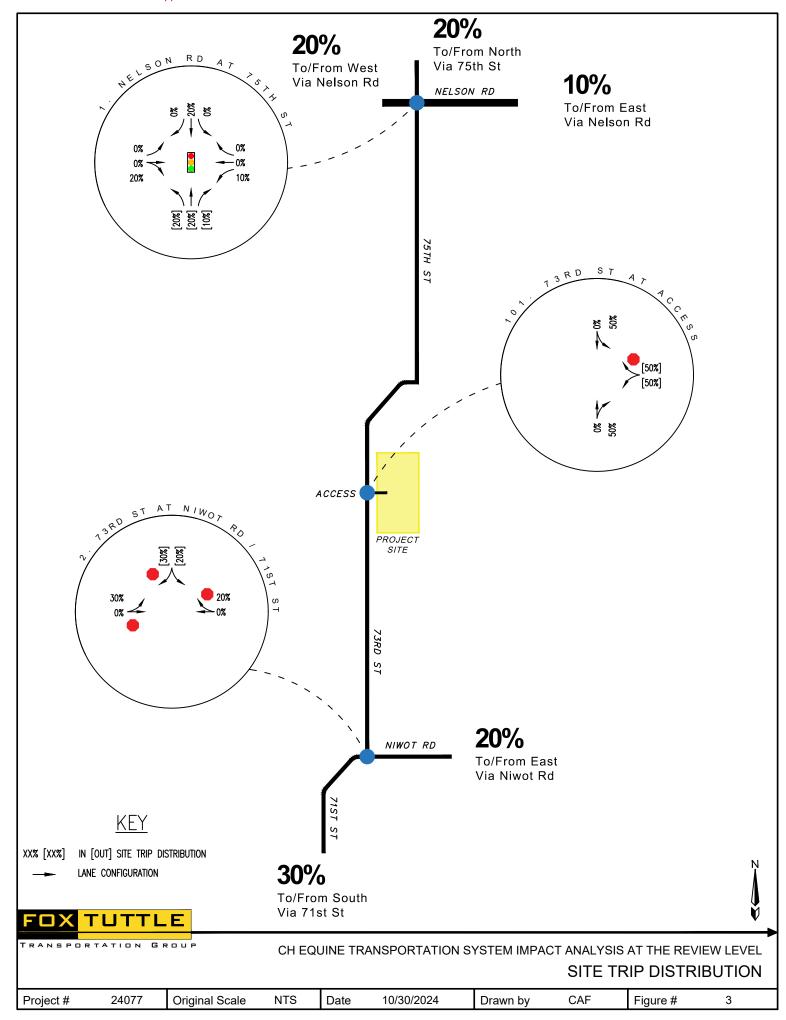
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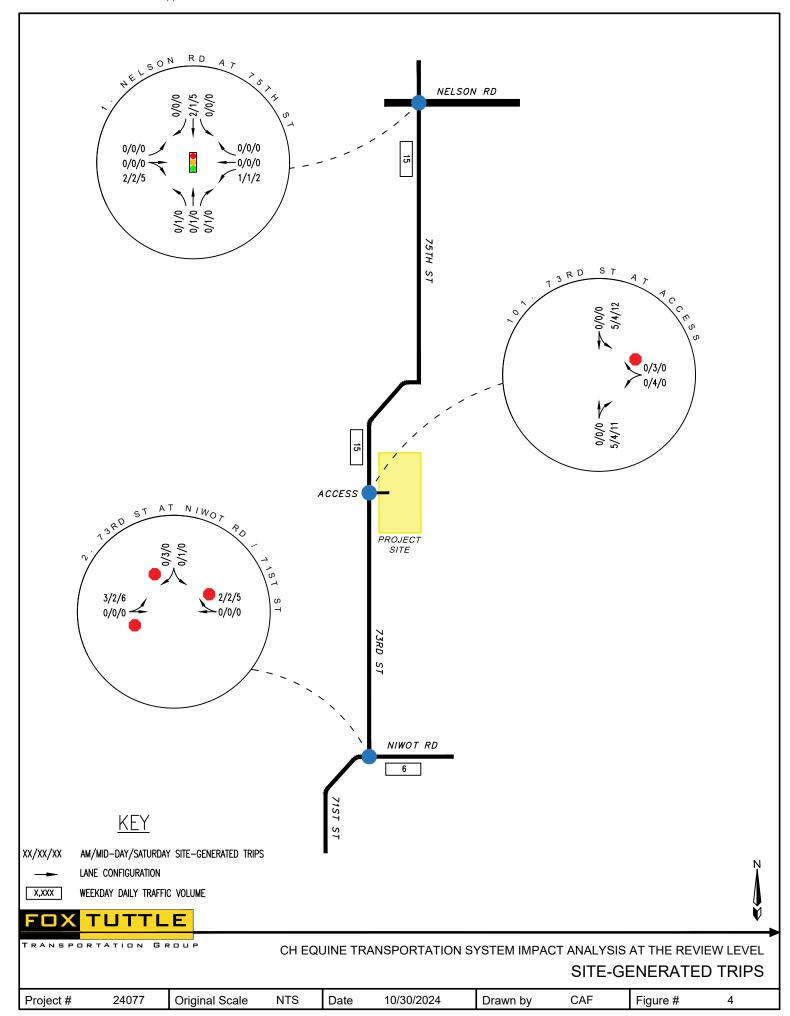
CAF

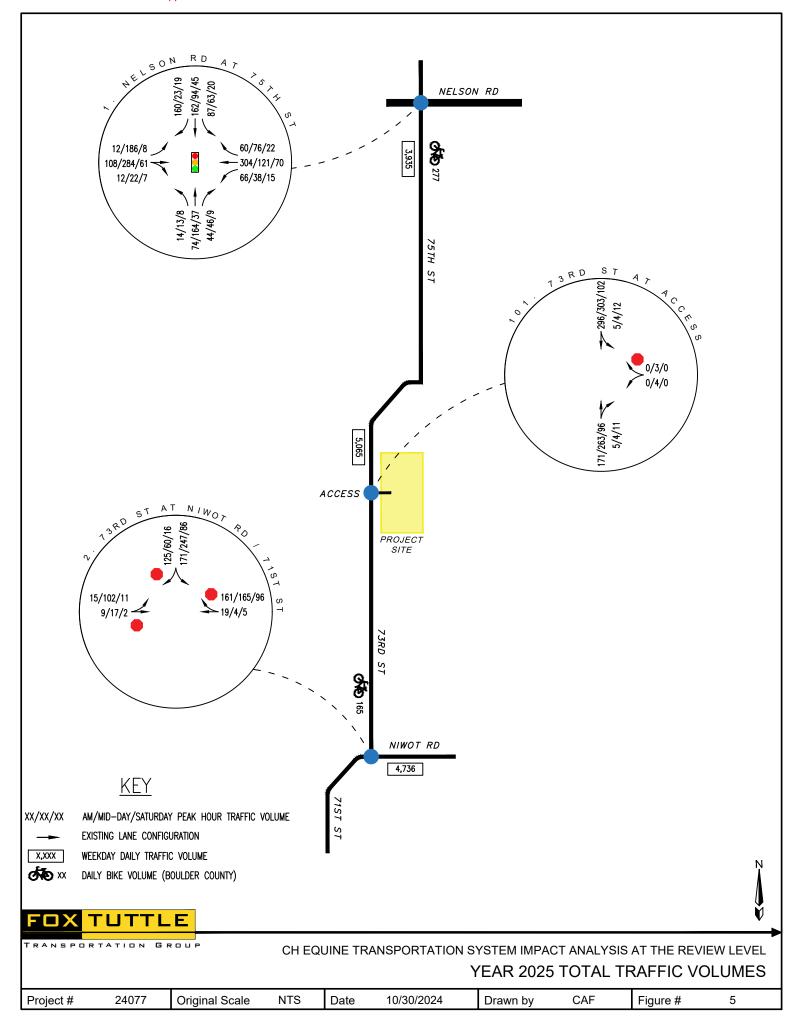
A57

Date









November 5, 2024

Appendix:

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

November 5, 2024

Level of Service Definitions



LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, "Levels of Service" (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

Level	Delay in seco	onds per vehicle (a)	
of Service Rating	Signalized	Unsignalized	Definition
А	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
В	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
С	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

⁽a) Delay ranges based on Highway Capacity Manual (6th Edition, 2016) criteria.

November 5, 2024

Existing Traffic Data

Vehicle Classification Report Summary



Location: 75th St S/O Nelson Rd

Count Direction: Northbound / Southbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 01

Direction						FHWA Ve	ehicle Clas	sification						Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Northbound	235	3,400	942	32	217	4	0	0	4	0	0	0	3	4,837
Northbound	4.9%	70.3%	19.5%	0.7%	4.5%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	4,037
Southbound	109	3,822	965	24	185	4	0	1	5	0	0	0	0	5,115
Southbound	2.1%	74.7%	18.9%	0.5%	3.6%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	5,115
Total	344	7,222	1,907	56	402	8	0	1	9	0	0	0	3	9,952
iotai	3.5%	72.6%	19.2%	0.6%	4.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	9,952

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Site Code: 01



Thursday, October 10, 2024 Northbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	0	20	8	0	3	0	0	0	0	0	0	0	0	31
7:00 AM	1	77	19	1	9	0	0	0	1	0	0	0	0	108
8:00 AM	2	89	18	3	9	0	0	0	0	0	0	0	0	121
9:00 AM	3	86	22	3	9	0	0	0	0	0	0	0	0	123
10:00 AM	18	62	14	2	5	0	0	0	0	0	0	0	0	101
11:00 AM	5	78	26	2	3	0	0	0	0	0	0	0	0	114
12:00 PM	5	70	19	2	7	0	0	0	0	0	0	0	0	103
1:00 PM	8	77	30	0	4	0	0	0	2	0	0	0	0	121
2:00 PM	6	107	26	1	4	2	0	0	0	0	0	0	0	146
3:00 PM	2	146	45	3	9	0	0	0	0	0	0	0	0	205
4:00 PM	5	156	44	0	14	0	0	0	0	0	0	0	0	219
5:00 PM	3	113	37	1	9	0	0	0	0	0	0	0	1	164
6:00 PM	3	85	18	0	2	0	0	0	0	0	0	0	0	108
7:00 PM	0	53	18	0	4	0	0	0	0	0	0	0	0	75
8:00 PM	0	55	8	0	3	0	0	0	0	0	0	0	0	66
9:00 PM	0	44	11	0	1	0	0	0	0	0	0	0	0	56
10:00 PM	0	21	3	0	0	0	0	0	0	0	0	0	0	24
11:00 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	12
Total	61	1,364	371	18	95	2	0	0	3	0	0	0	1	1,915
- I Otal	3.2%	71.2%	19.4%	0.9%	5.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	1,010

Site Code: 01



Thursday, October 10, 2024 Southbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	3
4:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	7
5:00 AM	1	27	10	0	4	0	0	0	0	0	0	0	0	42
6:00 AM	1	54	27	2	4	0	0	0	0	0	0	0	0	88
7:00 AM	2	167	39	1	10	0	0	0	0	0	0	0	0	219
8:00 AM	2	179	53	5	11	0	0	0	2	0	0	0	0	252
9:00 AM	1	80	33	0	8	0	0	0	0	0	0	0	0	122
10:00 AM	1	69	22	2	5	0	0	0	0	0	0	0	0	99
11:00 AM	2	81	11	1	1	1	0	0	0	0	0	0	0	97
12:00 PM	4	58	21	0	5	0	0	0	1	0	0	0	0	89
1:00 PM	4	78	18	0	6	1	0	0	0	0	0	0	0	107
2:00 PM	5	91	29	2	3	0	0	0	0	0	0	0	0	130
3:00 PM	3	114	24	3	2	0	0	0	0	0	0	0	0	146
4:00 PM	3	121	27	0	1	0	0	0	0	0	0	0	0	152
5:00 PM	2	84	23	0	5	0	0	0	0	0	0	0	0	114
6:00 PM	2	75	19	0	0	0	0	0	0	0	0	0	0	96
7:00 PM	0	49	10	0	2	0	0	0	0	0	0	0	0	61
8:00 PM	0	43	6	0	1	0	0	0	0	0	0	0	0	50
9:00 PM	0	56	7	0	1	0	0	0	0	0	0	0	0	64
10:00 PM	0	35	3	0	0	0	0	0	0	0	0	0	0	38
11:00 PM	0	22	2	0	0	0	0	0	0	0	0	0	0	24
Total	33	1,493	386	16	70	2	0	0	3	0	0	0	0	2,003
Total	1.6%	74.5%	19.3%	0.8%	3.5%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	2,000

Site Code: 01



Friday, October 11, 2024 Northbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	6
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	3
5:00 AM	0	4	3	0	0	0	0	0	0	0	0	0	0	7
6:00 AM	0	19	7	0	3	0	0	0	1	0	0	0	0	30
7:00 AM	1	44	17	0	5	0	0	0	0	0	0	0	0	67
8:00 AM	4	48	20	0	6	0	0	0	0	0	0	0	0	78
9:00 AM	6	68	19	1	2	0	0	0	0	0	0	0	0	96
10:00 AM	10	67	20	3	9	0	0	0	0	0	0	0	0	109
11:00 AM	4	70	17	1	1	1	0	0	0	0	0	0	0	94
12:00 PM	6	67	18	2	4	0	0	0	0	0	0	0	0	97
1:00 PM	4	93	23	0	7	0	0	0	0	0	0	0	0	127
2:00 PM	5	100	35	2	0	0	0	0	0	0	0	0	0	142
3:00 PM	4	113	29	0	9	0	0	0	0	0	0	0	0	155
4:00 PM	9	115	35	0	6	0	0	0	0	0	0	0	0	165
5:00 PM	7	94	30	0	6	0	0	0	0	0	0	0	0	137
6:00 PM	2	54	28	0	2	0	0	0	0	0	0	0	0	86
7:00 PM	0	32	21	0	4	0	0	0	0	0	0	0	0	57
8:00 PM	0	19	4	0	2	0	0	0	0	0	0	0	0	25
9:00 PM	0	26	6	0	0	0	0	0	0	0	0	0	0	32
10:00 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	14
11:00 PM	0	7	3	0	0	0	0	0	0	0	0	0	0	10
Total	62	1,060	342	9	68	1	0	0	1	0	0	0	0	1,543
Total	4.0%	68.7%	22.2%	0.6%	4.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1,040

Site Code: 01



Friday, October 11, 2024 Southbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	8	2	0	0	0	0	0	0	0	0	0	0	10
1:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	4
4:00 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	4
5:00 AM	0	17	6	0	6	0	0	0	0	0	0	0	0	29
6:00 AM	0	51	16	0	1	0	0	0	0	0	0	0	0	68
7:00 AM	0	98	47	1	14	0	0	0	1	0	0	0	0	161
8:00 AM	2	92	43	3	7	0	0	0	0	0	0	0	0	147
9:00 AM	1	91	26	1	4	0	0	0	0	0	0	0	0	123
10:00 AM	0	83	24	1	6	0	0	0	0	0	0	0	0	114
11:00 AM	5	77	23	0	1	0	0	0	0	0	0	0	0	106
12:00 PM	7	79	21	0	2	1	0	0	0	0	0	0	0	110
1:00 PM	1	79	14	0	5	0	0	0	0	0	0	0	0	99
2:00 PM	1	86	18	0	7	0	0	0	0	0	0	0	0	112
3:00 PM	3	98	26	0	4	0	0	0	0	0	0	0	0	131
4:00 PM	6	98	24	0	7	0	0	0	0	0	0	0	0	135
5:00 PM	2	98	15	0	2	0	0	0	0	0	0	0	0	117
6:00 PM	2	72	16	0	4	0	0	0	0	0	0	0	0	94
7:00 PM	0	36	7	0	0	0	0	0	0	0	0	0	0	43
8:00 PM	0	29	6	0	0	0	0	0	0	0	0	0	0	35
9:00 PM	0	19	3	0	0	0	0	0	0	0	0	0	0	22
10:00 PM	0	17	4	0	1	0	0	0	0	0	0	0	0	22
11:00 PM	0	4	1	0	0	0	0	0	1	0	0	0	0	6
Total	30	1,239	347	6	72	1	0	0	2	0	0	0	0	1,697
Total	1.8%	73.0%	20.4%	0.4%	4.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1,001

Site Code: 01



Saturday, October 12, 2024 Northbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	3	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
5:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	0	10	2	0	0	0	0	0	0	0	0	0	0	12
7:00 AM	1	20	7	0	1	0	0	0	0	0	0	0	0	29
8:00 AM	6	45	11	0	3	0	0	0	0	0	0	0	0	65
9:00 AM	26	61	13	1	3	0	0	0	0	0	0	0	2	106
10:00 AM	15	78	17	2	5	0	0	0	0	0	0	0	0	117
11:00 AM	12	95	23	0	2	0	0	0	0	0	0	0	0	132
12:00 PM	11	120	19	0	6	1	0	0	0	0	0	0	0	157
1:00 PM	14	97	30	0	8	0	0	0	0	0	0	0	0	149
2:00 PM	11	78	16	1	6	0	0	0	0	0	0	0	0	112
3:00 PM	7	84	14	0	6	0	0	0	0	0	0	0	0	111
4:00 PM	6	81	21	0	5	0	0	0	0	0	0	0	0	113
5:00 PM	1	59	15	1	1	0	0	0	0	0	0	0	0	77
6:00 PM	0	54	9	0	3	0	0	0	0	0	0	0	0	66
7:00 PM	0	29	11	0	0	0	0	0	0	0	0	0	0	40
8:00 PM	0	18	4	0	2	0	0	0	0	0	0	0	0	24
9:00 PM	2	13	3	0	2	0	0	0	0	0	0	0	0	20
10:00 PM	0	14	3	0	1	0	0	0	0	0	0	0	0	18
11:00 PM	0	7	4	0	0	0	0	0	0	0	0	0	0	11
Total	112	976	229	5	54	1	0	0	0	0	0	0	2	1,379
Total	8.1%	70.8%	16.6%	0.4%	3.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1,379

Site Code: 01



Saturday, October 12, 2024 Southbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
6:00 AM	0	8	6	0	4	0	0	0	0	0	0	0	0	18
7:00 AM	0	16	8	0	2	0	0	0	0	0	0	0	0	26
8:00 AM	1	37	14	0	1	1	0	0	0	0	0	0	0	54
9:00 AM	2	59	15	1	1	0	0	0	0	0	0	0	0	78
10:00 AM	2	74	10	0	2	0	0	0	0	0	0	0	0	88
11:00 AM	5	104	13	0	1	0	0	0	0	0	0	0	0	123
12:00 PM	11	73	21	0	3	0	0	0	0	0	0	0	0	108
1:00 PM	10	105	18	0	6	0	0	0	0	0	0	0	0	139
2:00 PM	5	102	14	0	4	0	0	0	0	0	0	0	0	125
3:00 PM	3	120	20	0	5	0	0	0	0	0	0	0	0	148
4:00 PM	5	93	26	0	3	0	0	0	0	0	0	0	0	127
5:00 PM	1	92	22	1	5	0	0	0	0	0	0	0	0	121
6:00 PM	1	57	14	0	3	0	0	0	0	0	0	0	0	75
7:00 PM	0	40	8	0	1	0	0	0	0	0	0	0	0	49
8:00 PM	0	30	4	0	0	0	0	1	0	0	0	0	0	35
9:00 PM	0	26	6	0	1	0	0	0	0	0	0	0	0	33
10:00 PM	0	25	7	0	0	0	0	0	0	0	0	0	0	32
11:00 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	12
Total	46	1,090	232	2	43	1	0	1	0	0	0	0	0	1,415
Total	3.3%	77.0%	16.4%	0.1%	3.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1,410

Site Code: 01



Total Study Average Northbound

Times						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	0	16	6	0	2	0	0	0	0	0	0	0	0	24
7:00 AM	1	47	14	0	5	0	0	0	0	0	0	0	0	67
8:00 AM	4	61	16	1	6	0	0	0	0	0	0	0	0	88
9:00 AM	12	72	18	2	5	0	0	0	0	0	0	0	1	110
10:00 AM	14	69	17	2	6	0	0	0	0	0	0	0	0	108
11:00 AM	7	81	22	1	2	0	0	0	0	0	0	0	0	113
12:00 PM	7	86	19	1	6	0	0	0	0	0	0	0	0	119
1:00 PM	9	89	28	0	6	0	0	0	1	0	0	0	0	133
2:00 PM	7	95	26	1	3	1	0	0	0	0	0	0	0	133
3:00 PM	4	114	29	1	8	0	0	0	0	0	0	0	0	156
4:00 PM	7	117	33	0	8	0	0	0	0	0	0	0	0	165
5:00 PM	4	89	27	1	5	0	0	0	0	0	0	0	0	126
6:00 PM	2	64	18	0	2	0	0	0	0	0	0	0	0	86
7:00 PM	0	38	17	0	3	0	0	0	0	0	0	0	0	58
8:00 PM	0	31	5	0	2	0	0	0	0	0	0	0	0	38
9:00 PM	1	28	7	0	1	0	0	0	0	0	0	0	0	37
10:00 PM	0	16	3	0	0	0	0	0	0	0	0	0	0	19
11:00 PM	0	8	3	0	0	0	0	0	0	0	0	0	0	11
Total	79	1,133	314	10	70	1	0	0	1	0	0	0	1	1,609
Total	4.9%	70.4%	19.5%	0.6%	4.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	1,009

Note: Average only condsidered on days with 24-hours of data.

Site Code: 01



Total Study Average Southbound

Times						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	4
4:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	4
5:00 AM	0	17	6	0	4	0	0	0	0	0	0	0	0	27
6:00 AM	0	38	16	1	3	0	0	0	0	0	0	0	0	58
7:00 AM	1	94	31	1	9	0	0	0	0	0	0	0	0	136
8:00 AM	2	103	37	3	6	0	0	0	1	0	0	0	0	152
9:00 AM	1	77	25	1	4	0	0	0	0	0	0	0	0	108
10:00 AM	1	75	19	1	4	0	0	0	0	0	0	0	0	100
11:00 AM	4	87	16	0	1	0	0	0	0	0	0	0	0	108
12:00 PM	7	70	21	0	3	0	0	0	0	0	0	0	0	101
1:00 PM	5	87	17	0	6	0	0	0	0	0	0	0	0	115
2:00 PM	4	93	20	1	5	0	0	0	0	0	0	0	0	123
3:00 PM	3	111	23	1	4	0	0	0	0	0	0	0	0	142
4:00 PM	5	104	26	0	4	0	0	0	0	0	0	0	0	139
5:00 PM	2	91	20	0	4	0	0	0	0	0	0	0	0	117
6:00 PM	2	68	16	0	2	0	0	0	0	0	0	0	0	88
7:00 PM	0	42	8	0	1	0	0	0	0	0	0	0	0	51
8:00 PM	0	34	5	0	0	0	0	0	0	0	0	0	0	39
9:00 PM	0	34	5	0	1	0	0	0	0	0	0	0	0	40
10:00 PM	0	26	5	0	0	0	0	0	0	0	0	0	0	31
11:00 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	14
Total	37	1,274	322	9	62	0	0	0	1	0	0	0	0	1,705
Total	2.2%	74.7%	18.9%	0.5%	3.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1,705

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary



Location: 75th St S/O Nelson Rd

Direction: Northbound / Southbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 01

Direction								Speed	d Range	(mph)								Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volumo
Northbound	28	129	51	51	97	330	1,261	1,685	912	244	38	11	0	0	0	0	0	4,837
Northbound	0.6%	2.7%	1.1%	1.1%	2.0%	6.8%	26.1%	34.8%	18.9%	5.0%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4,037
Southbound	3	3	36	38	35	266	1,336	1,994	1,007	312	69	16	0	0	0	0	0	5,115
Southbound	0.1%	0.1%	0.7%	0.7%	0.7%	5.2%	26.1%	39.0%	19.7%	6.1%	1.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	5,115
Total	31	132	87	89	132	596	2,597	3,679	1,919	556	107	27	0	0	0	0	0	9,952
i Otai	0.3%	1.3%	0.9%	0.9%	1.3%	6.0%	26.1%	37.0%	19.3%	5.6%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	9,952

Total Study Percentile Speed	Summ	ary	Total Study Spee	d Statistics	
Northbound			Northbou	ınd	
50th Percentile (Median)	41.3	mph	Mean (Average) Speed	40.3	mph
85th Percentile	47.1	mph	10 mph Pace	36.5 - 46.5	mph
95th Percentile	50.4	mph	Percent in Pace	62.6	%
Southbound			Southbou	ınd	
50th Percentile (Median)	41.9	mph	Mean (Average) Speed	42.1	mph
85th Percentile	47.5	mph	10 mph Pace	37.1 - 47.1	mph
95th Percentile	51.2	mph	Percent in Pace	69.3	%

Site Code: 01



Thursday, October 10, 2024 Northbound

Time								Spee	d Range ((mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
1:00 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	6
6:00 AM	0	0	0	0	0	4	9	8	6	3	1	0	0	0	0	0	0	31
7:00 AM	0	1	0	4	1	5	29	40	19	8	1	0	0	0	0	0	0	108
8:00 AM	0	2	0	0	0	4	36	56	21	2	0	0	0	0	0	0	0	121
9:00 AM	0	1	1	2	3	6	35	45	22	8	0	0	0	0	0	0	0	123
10:00 AM	2	10	3	2	1	8	30	28	13	3	0	1	0	0	0	0	0	101
11:00 AM	0	1	1	1	4	7	31	42	20	7	0	0	0	0	0	0	0	114
12:00 PM	4	2	1	1	1	5	15	44	20	7	3	0	0	0	0	0	0	103
1:00 PM	0	6	2	2	2	4	19	44	28	11	3	0	0	0	0	0	0	121
2:00 PM	0	1	1	2	2	5	36	49	30	16	3	1	0	0	0	0	0	146
3:00 PM	0	1	0	0	2	21	65	60	40	12	2	2	0	0	0	0	0	205
4:00 PM	0	0	1	2	3	13	59	91	44	5	1	0	0	0	0	0	0	219
5:00 PM	1	0	3	0	3	6	48	60	33	9	1	0	0	0	0	0	0	164
6:00 PM	0	0	1	0	2	6	39	32	21	6	0	1	0	0	0	0	0	108
7:00 PM	0	0	0	0	3	15	20	29	8	0	0	0	0	0	0	0	0	75
8:00 PM	0	0	0	1	0	14	26	18	5	2	0	0	0	0	0	0	0	66
9:00 PM	0	0	0	1	5	8	15	17	10	0	0	0	0	0	0	0	0	56
10:00 PM	0	0	0	0	0	4	13	4	3	0	0	0	0	0	0	0	0	24
11:00 PM	0	0	0	0	0	0	2	6	4	0	0	0	0	0	0	0	0	12
Total	7	25	14	18	33	137	533	679	349	99	16	5	0	0	0	0	0	1,915
	0.4%	1.3%	0.7%	0.9%	1.7%	7.2%	27.8%	35.5%	18.2%	5.2%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed S	Summary		Speed Stat	istics	
50th Percentile (Median)	41.2	mph	Mean (Average) Speed	40.8	mph
85th Percentile	47.2	mph	10 mph Pace	36.5 - 46.5	mph
95th Percentile	50.5	mph	Percent in Pace	64.9	%

Site Code: 01



Thursday, October 10, 2024 Southbound

Time								Speed	d Range	(mph)								Total
Tille	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
4:00 AM	0	0	0	0	0	1	1	0	2	3	0	0	0	0	0	0	0	7
5:00 AM	0	0	0	0	0	0	9	11	12	6	4	0	0	0	0	0	0	42
6:00 AM	0	0	0	0	0	2	15	36	19	12	4	0	0	0	0	0	0	88
7:00 AM	0	0	0	0	1	6	51	80	53	26	1	1	0	0	0	0	0	219
8:00 AM	0	0	0	0	0	4	60	118	49	18	2	1	0	0	0	0	0	252
9:00 AM	0	1	0	0	0	3	34	41	32	10	1	0	0	0	0	0	0	122
10:00 AM	0	0	0	1	2	8	37	32	15	3	0	1	0	0	0	0	0	99
11:00 AM	0	0	1	0	1	1	29	50	11	3	1	0	0	0	0	0	0	97
12:00 PM	0	0	0	0	1	4	25	42	13	2	1	1	0	0	0	0	0	89
1:00 PM	0	0	1	1	0	8	27	43	21	5	0	1	0	0	0	0	0	107
2:00 PM	0	0	2	0	3	8	30	51	26	9	1	0	0	0	0	0	0	130
3:00 PM	0	0	0	0	2	6	41	70	23	3	1	0	0	0	0	0	0	146
4:00 PM	0	0	1	2	1	2	50	64	27	4	1	0	0	0	0	0	0	152
5:00 PM	0	0	0	1	0	12	31	34	32	3	1	0	0	0	0	0	0	114
6:00 PM	0	0	0	0	1	4	24	43	14	8	2	0	0	0	0	0	0	96
7:00 PM	0	0	0	0	0	6	18	24	9	3	1	0	0	0	0	0	0	61
8:00 PM	0	0	0	0	1	5	12	22	10	0	0	0	0	0	0	0	0	50
9:00 PM	0	0	0	1	1	7	25	16	11	3	0	0	0	0	0	0	0	64
10:00 PM	0	0	0	0	1	3	11	14	6	2	1	0	0	0	0	0	0	38
11:00 PM	0	0	0	0	0	6	8	6	4	0	0	0	0	0	0	0	0	24
Total	0	1	5	6	15	97	538	799	392	123	22	5	0	0	0	0	0	2,003
- I Otal	0.0%	0.0%	0.2%	0.3%	0.7%	4.8%	26.9%	39.9%	19.6%	6.1%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2,000

Daily Percentile Speed	Summary		Speed Stati	istics	
50th Percentile (Median)	41.9	mph	Mean (Average) Speed	42.3	mph
85th Percentile	47.4	mph	10 mph Pace	37.1 - 47.1	mph
95th Percentile	51.0	mph	Percent in Pace	71.49	%

Site Code: 01



Friday, October 11, 2024 Northbound

Time								Speed	d Range	(mph)								Total
rime	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	6
1:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	7
6:00 AM	0	0	0	0	0	1	10	6	9	4	0	0	0	0	0	0	0	30
7:00 AM	0	0	0	0	2	3	16	21	19	6	0	0	0	0	0	0	0	67
8:00 AM	1	3	0	2	2	5	22	25	15	1	1	1	0	0	0	0	0	78
9:00 AM	0	5	1	3	3	4	23	33	18	5	0	1	0	0	0	0	0	96
10:00 AM	4	3	0	1	2	11	39	28	17	4	0	0	0	0	0	0	0	109
11:00 AM	3	1	0	1	1	8	27	36	15	2	0	0	0	0	0	0	0	94
12:00 PM	0	2	0	3	1	11	15	35	22	6	2	0	0	0	0	0	0	97
1:00 PM	1	3	0	2	2	4	38	52	13	9	3	0	0	0	0	0	0	127
2:00 PM	1	3	1	1	4	14	28	52	28	10	0	0	0	0	0	0	0	142
3:00 PM	1	2	0	1	6	6	35	61	32	9	2	0	0	0	0	0	0	155
4:00 PM	0	5	0	1	5	12	36	63	31	9	2	1	0	0	0	0	0	165
5:00 PM	0	4	3	1	0	2	22	64	36	4	1	0	0	0	0	0	0	137
6:00 PM	0	1	1	1	0	8	14	32	24	4	0	1	0	0	0	0	0	86
7:00 PM	0	0	0	0	2	8	18	21	6	2	0	0	0	0	0	0	0	57
8:00 PM	0	0	0	1	0	3	8	5	5	3	0	0	0	0	0	0	0	25
9:00 PM	0	0	0	0	2	8	4	8	8	1	0	1	0	0	0	0	0	32
10:00 PM	0	0	0	0	0	3	5	3	3	0	0	0	0	0	0	0	0	14
11:00 PM	0	0	0	0	0	1	3	5	1	0	0	0	0	0	0	0	0	10
Total	11	32	6	18	32	115	371	556	306	80	11	5	0	0	0	0	0	1.543
	0.7%	2.1%	0.4%	1.2%	2.1%	7.5%	24.0%	36.0%	19.8%	5.2%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1.543

Daily Percentile Speed	Summary		Speed Stati	istics	
50th Percentile (Median)	41.7	mph	Mean (Average) Speed	40.7	mph
85th Percentile	47.0	mph	10 mph Pace	37.5 - 47.5	mph
95th Percentile	50.6	mph	Percent in Pace	63.8	%

Site Code: 01



Friday, October 11, 2024 Southbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	3	3	2	1	0	0	0	0	0	0	0	10
1:00 AM	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	4
5:00 AM	0	0	0	0	0	0	3	12	9	3	2	0	0	0	0	0	0	29
6:00 AM	0	0	0	0	0	2	6	23	19	15	3	0	0	0	0	0	0	68
7:00 AM	0	0	0	0	0	4	27	65	43	19	3	0	0	0	0	0	0	161
8:00 AM	0	0	0	0	0	6	33	55	32	16	5	0	0	0	0	0	0	147
9:00 AM	0	0	0	0	0	4	32	52	22	10	3	0	0	0	0	0	0	123
10:00 AM	0	0	0	0	1	9	33	47	21	2	0	1	0	0	0	0	0	114
11:00 AM	0	0	1	2	0	7	28	37	24	4	3	0	0	0	0	0	0	106
12:00 PM	0	0	1	3	2	2	36	34	22	7	3	0	0	0	0	0	0	110
1:00 PM	0	0	0	0	1	13	23	34	21	6	1	0	0	0	0	0	0	99
2:00 PM	0	0	0	0	0	11	34	44	15	5	0	3	0	0	0	0	0	112
3:00 PM	1	0	1	1	2	6	40	55	24	1	0	0	0	0	0	0	0	131
4:00 PM	0	0	2	0	0	7	44	57	21	4	0	0	0	0	0	0	0	135
5:00 PM	1	0	1	0	0	1	40	49	19	4	2	0	0	0	0	0	0	117
6:00 PM	0	0	0	0	1	4	29	31	24	4	1	0	0	0	0	0	0	94
7:00 PM	0	0	0	1	1	4	11	8	12	3	1	2	0	0	0	0	0	43
8:00 PM	0	0	0	0	0	6	10	12	6	0	1	0	0	0	0	0	0	35
9:00 PM	0	0	0	0	0	3	5	7	4	3	0	0	0	0	0	0	0	22
10:00 PM	0	0	0	0	0	1	4	11	5	1	0	0	0	0	0	0	0	22
11:00 PM	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6
Total	2	0	6	7	8	92	446	644	347	110	29	6	0	0	0	0	0	1,697
	0.1%	0.0%	0.4%	0.4%	0.5%	5.4%	26.3%	37.9%	20.4%	6.5%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	42.1	mph	Mean (Average) Speed	42.4	mph
85th Percentile	47.9	mph	10 mph Pace	37.2 - 47.2	mph
95th Percentile	51.9	mph	Percent in Pace	68.36	%

Site Code: 01



Saturday, October 12, 2024 Northbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 AM	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	4
5:00 AM	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	6
6:00 AM	0	0	0	0	0	1	4	3	2	1	1	0	0	0	0	0	0	12
7:00 AM	1	0	1	2	0	3	5	9	4	3	0	1	0	0	0	0	0	29
8:00 AM	0	5	1	1	1	3	19	16	15	2	2	0	0	0	0	0	0	65
9:00 AM	4	18	5	2	0	2	17	32	24	2	0	0	0	0	0	0	0	106
10:00 AM	0	9	7	3	4	6	28	35	20	4	1	0	0	0	0	0	0	117
11:00 AM	2	8	6	0	2	7	35	46	22	3	1	0	0	0	0	0	0	132
12:00 PM	0	9	1	2	2	9	33	58	34	8	1	0	0	0	0	0	0	157
1:00 PM	0	6	3	0	1	13	37	54	28	7	0	0	0	0	0	0	0	149
2:00 PM	0	7	3	1	3	6	33	37	18	4	0	0	0	0	0	0	0	112
3:00 PM	2	6	0	2	4	6	27	37	22	5	0	0	0	0	0	0	0	111
4:00 PM	1	3	1	0	2	1	28	44	24	8	1	0	0	0	0	0	0	113
5:00 PM	0	1	0	2	1	2	23	27	14	7	0	0	0	0	0	0	0	77
6:00 PM	0	0	2	0	3	5	23	15	14	3	1	0	0	0	0	0	0	66
7:00 PM	0	0	1	0	5	5	15	8	6	0	0	0	0	0	0	0	0	40
8:00 PM	0	0	0	0	1	5	6	7	4	1	0	0	0	0	0	0	0	24
9:00 PM	0	0	0	0	1	1	8	4	2	2	2	0	0	0	0	0	0	20
10:00 PM	0	0	0	0	0	2	7	8	1	0	0	0	0	0	0	0	0	18
11:00 PM	0	0	0	0	0	0	3	4	1	2	1	0	0	0	0	0	0	11
Total	10	72	31	15	32	78	357	450	257	65	11	1	0	0	0	0	0	1,379
lotai	0.7%	5.2%	2.2%	1.1%	2.3%	5.7%	25.9%	32.6%	18.6%	4.7%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1,010

Daily Percentile Speed	Summary		Speed Stati	stics	
50th Percentile (Median)	41.0	mph	Mean (Average) Speed	39.2	mph
85th Percentile	47.1	mph	10 mph Pace	36.0 - 46.0	mph
95th Percentile	50.3	mph	Percent in Pace	59.4	%

Site Code: 01



Saturday, October 12, 2024 Southbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
1:00 AM	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3
4:00 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	1	2	4	1	2	1	0	0	0	0	0	0	11
6:00 AM	0	0	0	0	0	1	3	7	6	0	0	1	0	0	0	0	0	18
7:00 AM	0	0	0	0	0	0	4	13	6	3	0	0	0	0	0	0	0	26
8:00 AM	0	0	0	0	0	2	9	20	13	5	5	0	0	0	0	0	0	54
9:00 AM	0	0	0	1	1	1	17	28	21	8	0	1	0	0	0	0	0	78
10:00 AM	0	1	3	1	0	3	23	34	20	3	0	0	0	0	0	0	0	88
11:00 AM	0	0	9	8	3	5	26	48	21	3	0	0	0	0	0	0	0	123
12:00 PM	0	1	4	4	0	3	19	56	13	5	3	0	0	0	0	0	0	108
1:00 PM	0	0	6	5	0	4	42	53	22	5	2	0	0	0	0	0	0	139
2:00 PM	0	0	0	2	1	9	27	52	25	7	1	1	0	0	0	0	0	125
3:00 PM	1	0	0	3	0	13	41	65	18	7	0	0	0	0	0	0	0	148
4:00 PM	0	0	3	1	3	3	32	50	22	10	2	1	0	0	0	0	0	127
5:00 PM	0	0	0	0	0	14	33	40	26	8	0	0	0	0	0	0	0	121
6:00 PM	0	0	0	0	0	9	21	22	17	5	1	0	0	0	0	0	0	75
7:00 PM	0	0	0	0	1	3	14	18	10	2	1	0	0	0	0	0	0	49
8:00 PM	0	0	0	0	1	2	9	10	10	1	2	0	0	0	0	0	0	35
9:00 PM	0	0	0	0	2	1	12	12	5	1	0	0	0	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	11	10	9	1	0	1	0	0	0	0	0	32
11:00 PM	0	0	0	0	0	1	6	4	0	1	0	0	0	0	0	0	0	12
Total	1	2	25	25	12	77	352	551	268	79	18	5	0	0	0	0	0	1,415
	0.1%	0.1%	1.8%	1.8%	0.8%	5.4%	24.9%	38.9%	18.9%	5.6%	1.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed S	Summary		Speed Stati	istics	
50th Percentile (Median)	41.8	mph	Mean (Average) Speed	41.5	mph
85th Percentile	47.2	mph	10 mph Pace	36.2 - 46.2	mph
95th Percentile	51.0	mph	Percent in Pace	67.63	%

Site Code: 01



Total Study Average Northbound

Time								Speed	d Range	(mph)								Total
ııme	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	6
6:00 AM	0	0	0	0	0	2	8	6	6	3	1	0	0	0	0	0	0	26
7:00 AM	0	0	0	2	1	4	17	23	14	6	0	0	0	0	0	0	0	67
8:00 AM	0	3	0	1	1	4	26	32	17	2	1	0	0	0	0	0	0	87
9:00 AM	1	8	2	2	2	4	25	37	21	5	0	0	0	0	0	0	0	107
10:00 AM	2	7	3	2	2	8	32	30	17	4	0	0	0	0	0	0	0	107
11:00 AM	2	3	2	1	2	7	31	41	19	4	0	0	0	0	0	0	0	112
12:00 PM	1	4	1	2	1	8	21	46	25	7	2	0	0	0	0	0	0	118
1:00 PM	0	5	2	1	2	7	31	50	23	9	2	0	0	0	0	0	0	132
2:00 PM	0	4	2	1	3	8	32	46	25	10	1	0	0	0	0	0	0	132
3:00 PM	1	3	0	1	4	11	42	53	31	9	1	1	0	0	0	0	0	157
4:00 PM	0	3	1	1	3	9	41	66	33	7	1	0	0	0	0	0	0	165
5:00 PM	0	2	2	1	1	3	31	50	28	7	1	0	0	0	0	0	0	126
6:00 PM	0	0	1	0	2	6	25	26	20	4	0	1	0	0	0	0	0	85
7:00 PM	0	0	0	0	3	9	18	19	7	1	0	0	0	0	0	0	0	57
8:00 PM	0	0	0	1	0	7	13	10	5	2	0	0	0	0	0	0	0	38
9:00 PM	0	0	0	0	3	6	9	10	7	1	1	0	0	0	0	0	0	37
10:00 PM	0	0	0	0	0	3	8	5	2	0	0	0	0	0	0	0	0	18
11:00 PM	0	0	0	0	0	0	3	5	2	1	0	0	0	0	0	0	0	11
Total	7	42	16	16	31	108	420	561	304	82	11	2	0	0	0	0	0	1,600
lotai	0.4%	2.6%	1.0%	1.0%	1.9%	6.8%	26.3%	35.1%	19.0%	5.1%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1,000

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	41.3	mph	Mean (Average) Speed	40.3	mph
85th Percentile	47.1	mph	10 mph Pace	36.5 - 46.5	mph
95th Percentile	50.4	mph	Percent in Pace	62.6	%

Site Code: 01



Total Study Average Southbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	5
1:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3
4:00 AM	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4
5:00 AM	0	0	0	0	0	0	5	9	7	4	2	0	0	0	0	0	0	27
6:00 AM	0	0	0	0	0	2	8	22	15	9	2	0	0	0	0	0	0	58
7:00 AM	0	0	0	0	0	3	27	53	34	16	1	0	0	0	0	0	0	134
8:00 AM	0	0	0	0	0	4	34	64	31	13	4	0	0	0	0	0	0	150
9:00 AM	0	0	0	0	0	3	28	40	25	9	1	0	0	0	0	0	0	106
10:00 AM	0	0	1	1	1	7	31	38	19	3	0	1	0	0	0	0	0	102
11:00 AM	0	0	4	3	1	4	28	45	19	3	1	0	0	0	0	0	0	108
12:00 PM	0	0	2	2	1	3	27	44	16	5	2	0	0	0	0	0	0	102
1:00 PM	0	0	2	2	0	8	31	43	21	5	1	0	0	0	0	0	0	113
2:00 PM	0	0	1	1	1	9	30	49	22	7	1	1	0	0	0	0	0	122
3:00 PM	1	0	0	1	1	8	41	63	22	4	0	0	0	0	0	0	0	141
4:00 PM	0	0	2	1	1	4	42	57	23	6	1	0	0	0	0	0	0	137
5:00 PM	0	0	0	0	0	9	35	41	26	5	1	0	0	0	0	0	0	117
6:00 PM	0	0	0	0	1	6	25	32	18	6	1	0	0	0	0	0	0	89
7:00 PM	0	0	0	0	1	4	14	17	10	3	1	1	0	0	0	0	0	51
8:00 PM	0	0	0	0	1	4	10	15	9	0	1	0	0	0	0	0	0	40
9:00 PM	0	0	0	0	1	4	14	12	7	2	0	0	0	0	0	0	0	40
10:00 PM	0	0	0	0	0	1	9	12	7	1	0	0	0	0	0	0	0	30
11:00 PM	0	0	0	0	0	3	6	4	1	0	0	0	0	0	0	0	0	14
Total	1	0	12	11	10	87	446	666	336	103	20	3	0	0	0	0	0	1,695
- Total	0.1%	0.0%	0.7%	0.6%	0.6%	5.1%	26.3%	39.3%	19.8%	6.1%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1,000

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	41.9	mph	Mean (Average) Speed	42.1	mph
85th Percentile	47.5	mph	10 mph Pace	37.1 - 47.1	mph
95th Percentile	51.2	mph	Percent in Pace	69.3	%



Site Code: 01

Time		hursda 0/10/202	_	1	Friday 0/11/20			Saturda 0/12/20:	_		Sunda 0/13/20			Monda 0/14/20	_		Tuesda 0/15/20	•		ednesc 0/16/20		Mid-V	Veek A	verage
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	3	2	5	6	10	16	5	3	8	-	-	-	-	-	-	-	-	-	-	-	-	3	2	5
1:00 AM	4	1	5	2	4	6	2	4	6	-	-	-	-	-	-	-	-	-	-	-	-	4	1	5
2:00 AM	2	0	2	2	1	3	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
3:00 AM	0	3	3	2	4	6	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	0	3	3
4:00 AM	3	7	10	3	4	7	4	2	6	-	_	-	-	-	-	-	-	-	-	-	-	3	7	10
5:00 AM	6	42	48	7	29	36	6	11	17	_	_	_	-	-	_	-	_	_	_	_	_	6	42	48
6:00 AM	31	88	119	30	68	98	12	18	30	-	_	_	-	-	-	-	-	-	-	-	_	31	88	119
7:00 AM	108	219	327	67	161	228	29	26	55	_	-	_	_	_	_	_	_	_	_	_	_	108	219	327
8:00 AM	121	252	373	78	147	225	65	54	119	-	_	-	-	_	-	-	-	_	-	-	-	121	252	373
9:00 AM	123	122	245	96	123	219	106	78	184	_	_	-	_	_	_	_	-	_	_	-	_	123	122	245
10:00 AM	101	99	200	109	114	223	117	88	205	-	_	_	-	_	_	_	_	_	_	_	_	101	99	200
11:00 AM	114	97	211	94	106	200	132	123	255	_	_	_	_	_	_	_	-	_	_	_	_	114	97	211
12:00 PM	103	89	192	97	110	207	157	108	265	-	_	-	-	-	-	-	_	-	-	-	-	103	89	192
1:00 PM	121	107	228	127	99	226	149	139	288	_	_	_	_	_	_	_	_	_	_	_	_	121	107	228
2:00 PM	146	130	276	142	112	254	112	125	237	-	_	-	-	_	-	-	-	_	-	-	-	146	130	276
3:00 PM	205	146	351	155	131	286	111	148	259	_	-	_	_	_	_	_	_	_	_	_	_	205	146	351
4:00 PM	219	152	371	165	135	300	113	127	240	-	_	-	-	_	-	-	-	_	-	-	-	219	152	371
5:00 PM	164	114	278	137	117	254	77	121	198	_	_	-	_	_	_	_	-	_	_	-	_	164	114	278
6:00 PM	108	96	204	86	94	180	66	75	141	-	_	-	-	_	-	-	-	_	-	-	-	108	96	204
7:00 PM	75	61	136	57	43	100	40	49	89	_	_	-	_	_	_	_	-	_	_	-	_	75	61	136
8:00 PM	66	50	116	25	35	60	24	35	59	-	_	-	-	_	-	-	-	_	-	-	-	66	50	116
9:00 PM	56	64	120	32	22	54	20	33	53	_	_	_	_	_	_	_	_	_	_	_	_	56	64	120
10:00 PM	24	38	62	14	22	36	18	32	50	_		_	_	_	-	_	_	_	-		_	24	38	62
11:00 PM	12	24	36	10	6	16	11	12	23	-	-	-	-	-	-	-	-	-	-	-	-	12	24	36
Total	1,915	2,003				3,240			2,794	-	-	-	-	-	-	-	-	-	-	-	-	1,915		3,918
Percent	49%	51%		48%	52%		49%	51%		-	-		-	-		-	-		-	-		49%	51%	
AM Peak	09:00	08:00				07:00	11:00			-			-			-		-	-			09:00	08:00	
Vol.	123	252	373	109	161	228	132	123	255	-	-	-	-	-	-	-	-	-	-	-	-	123	252	373
PM Peak Vol.	16:00 219	16:00 152	16:00 371	16:00 165	16:00 135	16:00 300	12:00 157	15:00 148	13:00 288	_			_			_		-	_			16:00 219	16:00 152	16:00 371

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: 73rd St S/O Goose Point Ct

Count Direction: Northbound / Southbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 02

Direction						FHWA Ve	ehicle Clas	sification						Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volumo
Northbound	10	3,842	948	16	168	24	0	3	11	1	0	0	0	5,023
Northbound	0.2%	76.5%	18.9%	0.3%	3.3%	0.5%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	5,023
Southbound	391	5,386	1,107	33	351	269	0	4	7	0	0	0	1	7,549
Southbound	5.2%	71.3%	14.7%	0.4%	4.6%	3.6%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	7,549
Total	401	9,228	2,055	49	519	293	0	7	18	1	0	0	1	12,572
iotai	3.2%	73.4%	16.3%	0.4%	4.1%	2.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	12,572

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Site Code: 02



Thursday, October 10, 2024 Northbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	7
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
6:00 AM	0	17	8	0	2	0	0	0	0	0	0	0	0	27
7:00 AM	0	63	12	0	5	1	0	0	2	0	0	0	0	83
8:00 AM	0	78	20	1	8	0	0	0	0	0	0	0	0	107
9:00 AM	0	67	20	0	6	2	0	0	0	0	0	0	0	95
10:00 AM	1	62	16	2	5	0	0	0	0	0	0	0	0	86
11:00 AM	1	89	25	0	5	0	0	0	1	0	0	0	0	121
12:00 PM	1	91	18	1	7	1	0	0	0	0	0	0	0	119
1:00 PM	1	102	29	1	3	0	0	0	3	0	0	0	0	139
2:00 PM	4	128	31	1	3	2	0	0	0	0	0	0	0	169
3:00 PM	0	196	46	3	13	0	0	0	1	0	0	0	0	259
4:00 PM	2	228	43	0	8	1	0	0	0	0	0	0	0	282
5:00 PM	0	216	43	0	10	0	0	0	0	0	0	0	0	269
6:00 PM	0	130	23	0	2	0	0	0	0	0	0	0	0	155
7:00 PM	0	97	16	0	3	0	0	0	0	0	0	0	0	116
8:00 PM	0	41	8	0	2	0	0	0	0	0	0	0	0	51
9:00 PM	0	54	12	0	0	0	0	0	0	0	0	0	0	66
10:00 PM	0	36	6	0	0	0	0	0	0	0	0	0	0	42
11:00 PM	0	14	3	0	0	0	0	0	0	0	0	0	0	17
Total	10	1,725	384	9	82	7	0	0	7	0	0	0	0	2,224
Total	0.4%	77.6%	17.3%	0.4%	3.7%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	<u> </u>

Site Code: 02



Thursday, October 10, 2024 Southbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:00 AM	0	9	2	0	0	0	0	0	0	0	0	0	0	11
5:00 AM	2	37	12	0	3	4	0	0	0	0	0	0	0	58
6:00 AM	1	144	24	2	8	6	0	0	0	0	0	0	0	185
7:00 AM	5	316	47	0	11	11	0	0	0	0	0	0	0	390
8:00 AM	4	315	57	3	24	16	0	0	2	0	0	0	0	421
9:00 AM	10	147	33	0	13	3	0	0	0	0	0	0	0	206
10:00 AM	7	86	37	2	14	5	0	0	0	0	0	0	0	151
11:00 AM	14	79	28	0	6	1	0	0	0	0	0	0	0	128
12:00 PM	10	62	14	1	9	7	0	0	1	0	0	0	0	104
1:00 PM	14	77	21	0	11	4	0	0	0	0	0	0	0	127
2:00 PM	4	99	39	3	5	3	0	1	0	0	0	0	0	154
3:00 PM	6	135	47	2	14	2	0	0	0	0	0	0	0	206
4:00 PM	3	149	45	0	13	8	0	0	0	0	0	0	0	218
5:00 PM	5	96	27	0	6	3	0	1	0	0	0	0	0	138
6:00 PM	4	86	24	0	4	2	0	0	0	0	0	0	0	120
7:00 PM	0	39	14	0	4	1	0	0	0	0	0	0	0	58
8:00 PM	0	30	6	0	3	1	0	0	0	0	0	0	0	40
9:00 PM	0	40	1	0	0	3	0	0	0	0	0	0	0	44
10:00 PM	0	26	4	0	0	4	0	0	0	0	0	0	0	34
11:00 PM	0	20	2	0	1	2	0	0	0	0	0	0	0	25
Total	89	1,998	484	13	149	86	0	2	3	0	0	0	0	2,824
Total	3.2%	70.8%	17.1%	0.5%	5.3%	3.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	2,024

Site Code: 02



Friday, October 11, 2024 Northbound

Time						FHWA V	ehicle Clas	sification						Total
rime	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	9	3	0	1	0	0	0	0	0	0	0	0	13
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	3
4:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 AM	0	3	3	0	0	2	0	0	0	0	0	0	0	8
6:00 AM	0	15	3	0	1	0	0	0	1	0	0	0	0	20
7:00 AM	0	10	6	2	4	1	0	0	0	0	0	0	0	23
8:00 AM	0	30	15	0	1	0	0	0	0	0	0	0	0	46
9:00 AM	0	47	15	0	3	1	0	0	0	0	0	0	0	66
10:00 AM	0	62	23	1	5	3	0	1	0	0	0	0	0	95
11:00 AM	0	81	22	1	2	0	0	0	0	0	0	0	0	106
12:00 PM	0	79	20	1	3	0	0	0	0	0	0	0	0	103
1:00 PM	0	111	27	0	7	0	0	0	1	0	0	0	0	146
2:00 PM	0	138	37	1	5	1	0	0	1	0	0	0	0	183
3:00 PM	0	146	38	0	6	0	0	1	1	0	0	0	0	192
4:00 PM	0	163	44	0	4	1	0	0	0	0	0	0	0	212
5:00 PM	0	136	33	0	5	0	0	0	0	0	0	0	0	174
6:00 PM	0	73	27	0	3	0	0	0	0	1	0	0	0	104
7:00 PM	0	47	15	0	2	0	0	0	0	0	0	0	0	64
8:00 PM	0	28	4	0	1	0	0	0	0	0	0	0	0	33
9:00 PM	0	11	4	0	0	1	0	0	0	0	0	0	0	16
10:00 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
11:00 PM	0	9	3	0	0	0	0	0	0	0	0	0	0	12
Total	0	1,215	347	6	54	10	0	2	4	1	0	0	0	1,639
Total	0.0%	74.1%	21.2%	0.4%	3.3%	0.6%	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	1,059

Site Code: 02



Friday, October 11, 2024 Southbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	4
4:00 AM	0	4	3	0	0	0	0	0	0	0	0	0	0	7
5:00 AM	1	40	6	3	3	0	0	0	0	0	0	0	0	53
6:00 AM	0	124	12	0	4	9	0	0	0	0	0	0	0	149
7:00 AM	1	286	26	0	15	7	0	0	2	0	0	0	0	337
8:00 AM	7	216	26	3	14	8	0	0	0	0	0	0	0	274
9:00 AM	3	160	25	1	10	9	0	0	0	0	0	0	0	208
10:00 AM	10	136	35	0	9	1	0	0	0	0	0	0	0	191
11:00 AM	18	125	15	2	7	5	0	0	0	0	0	0	0	172
12:00 PM	13	100	32	0	6	6	0	1	0	0	0	0	0	158
1:00 PM	8	80	33	3	11	5	0	0	0	0	0	0	0	140
2:00 PM	12	105	31	2	11	1	0	1	0	0	0	0	0	163
3:00 PM	11	119	27	0	10	5	0	0	0	0	0	0	0	172
4:00 PM	13	117	26	0	16	7	0	0	0	0	0	0	0	179
5:00 PM	3	114	29	0	6	6	0	0	0	0	0	0	0	158
6:00 PM	4	109	15	0	4	8	0	0	0	0	0	0	0	140
7:00 PM	0	61	6	0	0	4	0	0	0	0	0	0	0	71
8:00 PM	1	29	5	0	0	0	0	0	0	0	0	0	0	35
9:00 PM	0	30	2	0	0	1	0	0	0	0	0	0	0	33
10:00 PM	0	23	1	0	0	1	0	0	0	0	0	0	0	25
11:00 PM	0	7	0	0	1	1	0	0	1	0	0	0	0	10
Total	105	1,995	358	14	128	84	0	2	3	0	0	0	0	2,689
Total	3.9%	74.2%	13.3%	0.5%	4.8%	3.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	2,000

Site Code: 02



Saturday, October 12, 2024 Northbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	9
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
2:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	3
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	3
8:00 AM	0	14	7	0	0	0	0	0	0	0	0	0	0	21
9:00 AM	0	23	12	0	0	0	0	0	0	0	0	0	0	35
10:00 AM	0	70	11	0	1	2	0	1	0	0	0	0	0	85
11:00 AM	0	84	20	0	2	0	0	0	0	0	0	0	0	106
12:00 PM	0	121	28	0	4	0	0	0	0	0	0	0	0	153
1:00 PM	0	122	34	0	4	0	0	0	0	0	0	0	0	160
2:00 PM	0	90	24	1	3	1	0	0	0	0	0	0	0	119
3:00 PM	0	91	17	0	5	2	0	0	0	0	0	0	0	115
4:00 PM	0	82	16	0	7	0	0	0	0	0	0	0	0	105
5:00 PM	0	59	12	0	1	0	0	0	0	0	0	0	0	72
6:00 PM	0	41	8	0	4	0	0	0	0	0	0	0	0	53
7:00 PM	0	33	8	0	0	0	0	0	0	0	0	0	0	41
8:00 PM	0	22	3	0	1	0	0	0	0	0	0	0	0	26
9:00 PM	0	14	6	0	0	0	0	0	0	0	0	0	0	20
10:00 PM	0	8	3	0	0	0	0	0	0	0	0	0	0	11
11:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	9
Total	0	902	217	1	32	7	0	1	0	0	0	0	0	1,160
Total	0.0%	77.8%	18.7%	0.1%	2.8%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Site Code: 02



Saturday, October 12, 2024 Southbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	17	0	0	1	0	0	0	0	0	0	0	0	18
6:00 AM	0	26	3	0	1	1	0	0	0	0	0	0	0	31
7:00 AM	3	85	8	0	3	0	0	0	0	0	0	0	0	99
8:00 AM	10	92	6	0	5	4	0	0	0	0	0	0	0	117
9:00 AM	8	95	19	1	5	7	0	0	0	0	0	0	0	135
10:00 AM	19	94	25	1	8	2	0	0	0	0	0	0	0	149
11:00 AM	29	85	14	1	3	6	0	0	0	0	0	0	0	138
12:00 PM	37	99	32	0	8	3	0	0	0	0	0	0	1	180
1:00 PM	29	109	34	1	6	7	0	0	0	0	0	0	0	186
2:00 PM	19	104	24	0	4	7	0	0	0	0	0	0	0	158
3:00 PM	19	125	21	0	12	7	0	0	0	0	0	0	0	184
4:00 PM	8	104	20	1	7	12	0	0	0	0	0	0	0	152
5:00 PM	14	124	29	0	4	17	0	0	0	0	0	0	0	188
6:00 PM	2	85	7	0	3	10	0	0	1	0	0	0	0	108
7:00 PM	0	53	6	1	0	3	0	0	0	0	0	0	0	63
8:00 PM	0	29	6	0	1	7	0	0	0	0	0	0	0	43
9:00 PM	0	22	3	0	0	4	0	0	0	0	0	0	0	29
10:00 PM	0	24	3	0	2	1	0	0	0	0	0	0	0	30
11:00 PM	0	11	1	0	1	1	0	0	0	0	0	0	0	14
Total	197	1,393	265	6	74	99	0	0	1	0	0	0	1	2,036
Iotai	9.7%	68.4%	13.0%	0.3%	3.6%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,030

Site Code: 02



Total Study Average Northbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	9
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	2	2	0	0	1	0	0	0	0	0	0	0	5
6:00 AM	0	12	4	0	1	0	0	0	0	0	0	0	0	17
7:00 AM	0	25	6	1	3	1	0	0	1	0	0	0	0	37
8:00 AM	0	41	14	0	3	0	0	0	0	0	0	0	0	58
9:00 AM	0	46	16	0	3	1	0	0	0	0	0	0	0	66
10:00 AM	0	65	17	1	4	2	0	1	0	0	0	0	0	90
11:00 AM	0	85	22	0	3	0	0	0	0	0	0	0	0	110
12:00 PM	0	97	22	1	5	0	0	0	0	0	0	0	0	125
1:00 PM	0	112	30	0	5	0	0	0	1	0	0	0	0	148
2:00 PM	1	119	31	1	4	1	0	0	0	0	0	0	0	157
3:00 PM	0	144	34	1	8	1	0	0	1	0	0	0	0	189
4:00 PM	1	158	34	0	6	1	0	0	0	0	0	0	0	200
5:00 PM	0	137	29	0	5	0	0	0	0	0	0	0	0	171
6:00 PM	0	81	19	0	3	0	0	0	0	0	0	0	0	103
7:00 PM	0	59	13	0	2	0	0	0	0	0	0	0	0	74
8:00 PM	0	30	5	0	1	0	0	0	0	0	0	0	0	36
9:00 PM	0	26	7	0	0	0	0	0	0	0	0	0	0	33
10:00 PM	0	18	3	0	0	0	0	0	0	0	0	0	0	21
11:00 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	12
Total	2	1,281	315	5	56	8	0	1	3	0	0	0	0	1,671
Total	0.1%	76.7%	18.9%	0.3%	3.4%	0.5%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	1,071

Note: Average only condsidered on days with 24-hours of data.

Site Code: 02



Total Study Average Southbound

Times						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	7
5:00 AM	1	31	6	1	2	1	0	0	0	0	0	0	0	42
6:00 AM	0	98	13	1	4	5	0	0	0	0	0	0	0	121
7:00 AM	3	229	27	0	10	6	0	0	1	0	0	0	0	276
8:00 AM	7	208	30	2	14	9	0	0	1	0	0	0	0	271
9:00 AM	7	134	26	1	9	6	0	0	0	0	0	0	0	183
10:00 AM	12	105	32	1	10	3	0	0	0	0	0	0	0	163
11:00 AM	20	96	19	1	5	4	0	0	0	0	0	0	0	145
12:00 PM	20	87	26	0	8	5	0	0	0	0	0	0	0	146
1:00 PM	17	89	29	1	9	5	0	0	0	0	0	0	0	150
2:00 PM	12	103	31	2	7	4	0	1	0	0	0	0	0	160
3:00 PM	12	126	32	1	12	5	0	0	0	0	0	0	0	188
4:00 PM	8	123	30	0	12	9	0	0	0	0	0	0	0	182
5:00 PM	7	111	28	0	5	9	0	0	0	0	0	0	0	160
6:00 PM	3	93	15	0	4	7	0	0	0	0	0	0	0	122
7:00 PM	0	51	9	0	1	3	0	0	0	0	0	0	0	64
8:00 PM	0	29	6	0	1	3	0	0	0	0	0	0	0	39
9:00 PM	0	31	2	0	0	3	0	0	0	0	0	0	0	36
10:00 PM	0	24	3	0	1	2	0	0	0	0	0	0	0	30
11:00 PM	0	13	1	0	1	1	0	0	0	0	0	0	0	16
Total	129	1,794	368	11	115	90	0	1	2	0	0	0	0	2,510
Total	5.1%	71.5%	14.7%	0.4%	4.6%	3.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	2,510

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary



Location: 73rd St S/O Goose Point Ct

Direction: Northbound / Southbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 02

Direction								Speed	d Range	(mph)								Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volumo
Northbound	0	0	1	1	5	81	651	1,535	1,639	812	244	54	0	0	0	0	0	5,023
Northbound	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	13.0%	30.6%	32.6%	16.2%	4.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3,023
Southbound	13	68	205	95	59	101	298	1,097	2,503	2,246	700	164	0	0	0	0	0	7,549
Southbound	0.2%	0.9%	2.7%	1.3%	0.8%	1.3%	3.9%	14.5%	33.2%	29.8%	9.3%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	7,549
Total	13	68	206	96	64	182	949	2,632	4,142	3,058	944	218	0	0	0	0	0	12,572
i Otai	0.1%	0.5%	1.6%	0.8%	0.5%	1.4%	7.5%	20.9%	32.9%	24.3%	7.5%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	12,572

Total Study Percentile Speed	Summ	ary	Total Study Spee	d Statistics	
Northbound			Northbou	ınd	
50th Percentile (Median)	45.6	mph	Mean (Average) Speed	45.9	mph
85th Percentile	51.6	mph	10 mph Pace	39.8 - 49.8	mph
95th Percentile	55.7	mph	Percent in Pace	63.0	%
Southbound			Southboo	ınd	
50th Percentile (Median)	48.9	mph	Mean (Average) Speed	47.3	mph
85th Percentile	54.0	mph	10 mph Pace	44.1 - 54.1	mph
95th Percentile	57.4	mph	Percent in Pace	63.6	%

Site Code: 02



Thursday, October 10, 2024 Northbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45		50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	3	0	3	0	0	0	0	0	0	0	0	7
1:00 AM	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 AM	0	0	0	0	0	0	0	4	0	2	0	0	0	0	0	0	0	6
6:00 AM	0	0	0	0	0	0	2	9	12	3	1	0	0	0	0	0	0	27
7:00 AM	0	0	0	0	0	0	14	21	26	17	4	1	0	0	0	0	0	83
8:00 AM	0	0	0	0	0	1	13	38	34	17	3	1	0	0	0	0	0	107
9:00 AM	0	0	0	0	1	1	20	27	30	11	5	0	0	0	0	0	0	95
10:00 AM	0	0	0	0	0	1	15	33	26	9	2	0	0	0	0	0	0	86
11:00 AM	0	0	0	0	1	2	32	26	35	19	6	0	0	0	0	0	0	121
12:00 PM	0	0	0	1	0	1	14	42	35	20	5	1	0	0	0	0	0	119
1:00 PM	0	0	0	0	0	4	16	38	45	29	6	1	0	0	0	0	0	139
2:00 PM	0	0	0	0	0	1	20	49	68	22	7	2	0	0	0	0	0	169
3:00 PM	0	0	0	0	0	0	44	75	90	40	10	0	0	0	0	0	0	259
4:00 PM	0	0	0	0	0	2	40	78	109	43	8	2	0	0	0	0	0	282
5:00 PM	0	0	0	0	0	2	27	76	97	46	19	2	0	0	0	0	0	269
6:00 PM	0	0	0	0	0	2	26	62	45	15	2	3	0	0	0	0	0	155
7:00 PM	0	0	0	0	0	4	21	30	47	10	1	3	0	0	0	0	0	116
8:00 PM	0	0	0	0	1	1	6	20	11	8	3	1	0	0	0	0	0	51
9:00 PM	0	0	1	0	0	3	14	23	12	9	3	1	0	0	0	0	0	66
10:00 PM	0	0	0	0	0	0	8	18	10	3	2	1	0	0	0	0	0	42
11:00 PM	0	0	0	0	0	0	0	4	10	2	1	0	0	0	0	0	0	17
Total	0	0	1	1	3	26	338	675	746	327	88	19	0	0	0	0	0	2,224
Total	0.0%	0.0%	0.0%	0.0%	0.1%	1.2%	15.2%	30.4%	33.5%	14.7%	4.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	2,224

Daily Percentile Speed S	Summary		Speed Stat	istics	
50th Percentile (Median)	45.4	mph	Mean (Average) Speed	45.6	mph
85th Percentile	51.0	mph	10 mph Pace	39.5 - 49.5	mph
95th Percentile	54.8	mph	Percent in Pace	64.2	%

Site Code: 02



Thursday, October 10, 2024 Southbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	0	0	0	2	1	4	4	0	0	0	0	0	11
5:00 AM	0	0	1	0	0	0	0	8	17	15	16	1	0	0	0	0	0	58
6:00 AM	0	0	0	0	0	0	5	18	67	82	10	3	0	0	0	0	0	185
7:00 AM	0	1	1	0	0	3	10	58	154	140	19	4	0	0	0	0	0	390
8:00 AM	0	0	2	0	0	2	13	59	150	143	45	7	0	0	0	0	0	421
9:00 AM	0	0	8	2	0	0	4	18	46	89	32	7	0	0	0	0	0	206
10:00 AM	1	1	4	0	2	7	6	26	49	37	13	5	0	0	0	0	0	151
11:00 AM	0	3	10	1	1	0	6	24	46	22	12	3	0	0	0	0	0	128
12:00 PM	1	2	3	5	0	3	2	15	32	21	16	4	0	0	0	0	0	104
1:00 PM	0	4	7	1	0	1	9	20	34	37	9	5	0	0	0	0	0	127
2:00 PM	0	2	0	0	0	4	9	35	44	51	6	3	0	0	0	0	0	154
3:00 PM	0	0	3	0	0	7	12	33	62	57	28	4	0	0	0	0	0	206
4:00 PM	0	0	2	1	0	1	3	24	73	82	28	4	0	0	0	0	0	218
5:00 PM	0	0	2	2	1	0	9	11	43	49	19	2	0	0	0	0	0	138
6:00 PM	0	1	0	1	1	0	5	20	54	27	7	4	0	0	0	0	0	120
7:00 PM	0	0	0	0	0	0	3	12	15	24	3	1	0	0	0	0	0	58
8:00 PM	0	0	0	0	0	0	1	4	24	9	2	0	0	0	0	0	0	40
9:00 PM	0	0	0	0	1	0	5	10	21	5	1	1	0	0	0	0	0	44
10:00 PM	0	0	0	0	0	0	4	15	12	3	0	0	0	0	0	0	0	34
11:00 PM	0	0	0	0	0	0	3	3	4	13	1	1	0	0	0	0	0	25
Total	2	14	43	13	6	28	109	414	951	909	272	63	0	0	0	0	0	2,824
lotai	0.1%	0.5%	1.5%	0.5%	0.2%	1.0%	3.9%	14.7%	33.7%	32.2%	9.6%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2,024

Daily Percentile Speed S	Summary		Speed Stati	istics	
50th Percentile (Median)	49.3	mph	Mean (Average) Speed	48.3	mph
85th Percentile	54.1	mph	10 mph Pace	43.7 - 53.7	mph
95th Percentile	57.6	mph	Percent in Pace	66.54	%

Site Code: 02



Friday, October 11, 2024 Northbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	4	4	2	2	0	1	0	0	0	0	0	13
1:00 AM	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3
4:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	0	0	0	2	3	3	0	0	0	0	0	0	8
6:00 AM	0	0	0	0	0	0	2	6	7	3	2	0	0	0	0	0	0	20
7:00 AM	0	0	0	0	0	1	2	6	10	4	0	0	0	0	0	0	0	23
8:00 AM	0	0	0	0	0	2	3	20	13	4	4	0	0	0	0	0	0	46
9:00 AM	0	0	0	0	0	2	6	18	25	8	6	1	0	0	0	0	0	66
10:00 AM	0	0	0	0	0	3	12	34	28	16	2	0	0	0	0	0	0	95
11:00 AM	0	0	0	0	1	0	13	35	32	19	5	1	0	0	0	0	0	106
12:00 PM	0	0	0	0	0	2	11	34	29	19	6	2	0	0	0	0	0	103
1:00 PM	0	0	0	0	0	2	15	51	44	23	10	1	0	0	0	0	0	146
2:00 PM	0	0	0	0	0	4	21	62	52	37	7	0	0	0	0	0	0	183
3:00 PM	0	0	0	0	0	1	21	55	62	35	15	3	0	0	0	0	0	192
4:00 PM	0	0	0	0	0	5	19	54	67	44	19	4	0	0	0	0	0	212
5:00 PM	0	0	0	0	0	2	18	44	75	25	8	2	0	0	0	0	0	174
6:00 PM	0	0	0	0	1	3	10	31	33	17	7	2	0	0	0	0	0	104
7:00 PM	0	0	0	0	0	0	7	22	18	13	2	2	0	0	0	0	0	64
8:00 PM	0	0	0	0	0	0	4	8	13	6	2	0	0	0	0	0	0	33
9:00 PM	0	0	0	0	0	0	1	4	7	1	2	1	0	0	0	0	0	16
10:00 PM	0	0	0	0	0	0	3	2	2	2	1	1	0	0	0	0	0	11
11:00 PM	0	0	0	0	0	0	2	4	4	1	0	1	0	0	0	0	0	12
Total	0	0	0	0	2	27	176	498	528	284	102	22	0	0	0	0	0	1,639
- I Otal	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	10.7%	30.4%	32.2%	17.3%	6.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	1,005

Daily Percentile Speed S	Summary		Speed Stat	istics	
50th Percentile (Median)	46.1	mph	Mean (Average) Speed	46.3	mph
85th Percentile	51.8	mph	10 mph Pace	41.0 - 51.0	mph
95th Percentile	56.5	mph	Percent in Pace	63.0	%

Site Code: 02



Friday, October 11, 2024 Southbound

Time		Speed Range (mph)														Total		
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	6
1:00 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	0	7
5:00 AM	0	0	0	0	1	1	0	6	12	15	13	5	0	0	0	0	0	53
6:00 AM	0	0	0	0	0	0	2	11	48	54	30	4	0	0	0	0	0	149
7:00 AM	1	0	0	0	0	1	13	36	131	136	14	5	0	0	0	0	0	337
8:00 AM	0	1	2	2	2	8	6	21	115	79	34	4	0	0	0	0	0	274
9:00 AM	0	0	1	1	0	4	3	33	76	56	30	4	0	0	0	0	0	208
10:00 AM	0	0	7	2	6	0	11	26	70	53	12	4	0	0	0	0	0	191
11:00 AM	0	6	11	6	1	3	8	47	47	34	8	1	0	0	0	0	0	172
12:00 PM	2	4	4	1	5	7	9	27	56	26	13	4	0	0	0	0	0	158
1:00 PM	0	3	3	1	2	3	6	18	47	41	13	3	0	0	0	0	0	140
2:00 PM	0	3	4	5	3	7	11	27	42	41	18	2	0	0	0	0	0	163
3:00 PM	0	2	5	2	1	3	6	21	55	59	16	2	0	0	0	0	0	172
4:00 PM	2	2	4	0	1	0	3	27	66	54	14	6	0	0	0	0	0	179
5:00 PM	0	1	2	0	0	0	3	19	49	59	21	4	0	0	0	0	0	158
6:00 PM	0	0	3	0	2	0	12	36	53	25	8	1	0	0	0	0	0	140
7:00 PM	0	0	0	0	0	0	3	9	21	32	3	3	0	0	0	0	0	71
8:00 PM	1	0	0	8	0	0	2	6	8	10	0	0	0	0	0	0	0	35
9:00 PM	0	0	0	0	0	0	0	1	11	20	1	0	0	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	0	0	1	12	11	1	0	0	0	0	0	25
11:00 PM	0	0	0	0	0	0	1	3	2	0	4	0	0	0	0	0	0	10
Total	6	22	46	28	24	37	99	374	920	815	263	55	0	0	0	0	0	2,689
Iotai	0.2%	0.8%	1.7%	1.0%	0.9%	1.4%	3.7%	13.9%	34.2%	30.3%	9.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,000

Daily Percentile Speed S	Summary	Speed Statistics						
50th Percentile (Median)	49.1	mph	Mean (Average) Speed	47.8	mph			
85th Percentile	54.2	mph	10 mph Pace	44.1 - 54.1	mph			
95th Percentile	57.8	mph	Percent in Pace	65.34	%			

Site Code: 02



Saturday, October 12, 2024 Northbound

Time		Speed Range (mph)															Total	
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	0	4	0	1	1	2	0	0	0	0	0	9
1:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
6:00 AM	0	0	0	0	0	0	1	1	2	0	1	0	0	0	0	0	0	5
7:00 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	4	4	7	6	0	0	0	0	0	0	0	21
9:00 AM	0	0	0	0	0	0	1	14	13	7	0	0	0	0	0	0	0	35
10:00 AM	0	0	0	0	0	0	10	31	19	18	5	2	0	0	0	0	0	85
11:00 AM	0	0	0	0	0	3	12	33	37	18	3	0	0	0	0	0	0	106
12:00 PM	0	0	0	0	0	3	16	49	58	24	3	0	0	0	0	0	0	153
1:00 PM	0	0	0	0	0	3	26	52	46	29	4	0	0	0	0	0	0	160
2:00 PM	0	0	0	0	0	4	15	38	32	20	9	1	0	0	0	0	0	119
3:00 PM	0	0	0	0	0	5	13	39	42	11	5	0	0	0	0	0	0	115
4:00 PM	0	0	0	0	0	4	8	28	33	22	8	2	0	0	0	0	0	105
5:00 PM	0	0	0	0	0	1	5	23	25	12	6	0	0	0	0	0	0	72
6:00 PM	0	0	0	0	0	3	8	14	14	11	2	1	0	0	0	0	0	53
7:00 PM	0	0	0	0	0	0	12	15	9	4	0	1	0	0	0	0	0	41
8:00 PM	0	0	0	0	0	0	1	7	12	4	0	2	0	0	0	0	0	26
9:00 PM	0	0	0	0	0	0	3	4	4	5	2	2	0	0	0	0	0	20
10:00 PM	0	0	0	0	0	1	1	1	5	1	2	0	0	0	0	0	0	11
11:00 PM	0	0	0	0	0	0	0	2	4	3	0	0	0	0	0	0	0	9
Total	0	0	0	0	0	28	137	362	365	201	54	13	0	0	0	0	0	1,160
Iotai	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	11.8%	31.2%	31.5%	17.3%	4.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1,100

Daily Percentile Speed	Summary	Speed Statistics					
50th Percentile (Median)	45.6	mph	Mean (Average) Speed	45.9	mph		
85th Percentile	51.9	mph	10 mph Pace	39.7 - 49.7	mph		
95th Percentile	55.8	mph	Percent in Pace	63.4	%		

Location: 73rd St S/O Goose Point Ct
Date Range: 10/10/2024 to 10/12/2024

Site Code: 02



Saturday, October 12, 2024 Southbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	1	1	0	4	0	0	0	0	0	6
1:00 AM	0	0	0	0	0	0	0	1	0	2	0	2	0	0	0	0	0	5
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	0	0	0	1	1	12	4	0	0	0	0	0	18
6:00 AM	0	0	0	0	0	0	0	2	2	18	8	1	0	0	0	0	0	31
7:00 AM	0	0	2	0	0	0	0	18	33	41	3	2	0	0	0	0	0	99
8:00 AM	1	0	6	2	0	8	2	10	29	50	9	0	0	0	0	0	0	117
9:00 AM	2	1	4	1	3	6	4	18	42	35	17	2	0	0	0	0	0	135
10:00 AM	0	2	12	7	5	0	8	23	47	37	7	1	0	0	0	0	0	149
11:00 AM	0	6	17	11	1	5	5	15	43	28	4	3	0	0	0	0	0	138
12:00 PM	0	6	28	11	2	3	10	27	42	37	11	3	0	0	0	0	0	180
1:00 PM	1	3	22	4	7	4	5	42	51	31	13	3	0	0	0	0	0	186
2:00 PM	0	4	8	5	8	2	11	37	44	28	10	1	0	0	0	0	0	158
3:00 PM	0	4	9	9	2	4	9	26	65	40	12	4	0	0	0	0	0	184
4:00 PM	0	1	1	3	1	1	6	18	44	57	17	3	0	0	0	0	0	152
5:00 PM	1	5	6	1	0	3	16	22	71	41	20	2	0	0	0	0	0	188
6:00 PM	0	0	1	0	0	0	6	18	56	21	6	0	0	0	0	0	0	108
7:00 PM	0	0	0	0	0	0	4	6	19	28	5	1	0	0	0	0	0	63
8:00 PM	0	0	0	0	0	0	1	10	18	2	6	6	0	0	0	0	0	43
9:00 PM	0	0	0	0	0	0	2	7	9	8	1	2	0	0	0	0	0	29
10:00 PM	0	0	0	0	0	0	0	6	9	12	2	1	0	0	0	0	0	30
11:00 PM	0	0	0	0	0	0	1	3	5	3	2	0	0	0	0	0	0	14
Total	5	32	116	54	29	36	90	309	632	522	165	46	0	0	0	0	0	2,036
	0.2%	1.6%	5.7%	2.7%	1.4%	1.8%	4.4%	15.2%	31.0%	25.6%	8.1%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed	Summary		Speed Stat	istics	
50th Percentile (Median)	47.8	mph	Mean (Average) Speed	45.1	mph
85th Percentile	53.6	mph	10 mph Pace	44.0 - 54.0	mph
95th Percentile	56.9	mph	Percent in Pace	57.56	%

Location: 73rd St S/O Goose Point Ct
Date Range: 10/10/2024 to 10/12/2024

Site Code: 02



Total Study Average Northbound

Time								Speed	l Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	2	3	2	1	0	1	0	0	0	0	0	10
1:00 AM	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	5
6:00 AM	0	0	0	0	0	0	2	5	7	2	1	0	0	0	0	0	0	17
7:00 AM	0	0	0	0	0	0	5	9	12	8	1	0	0	0	0	0	0	35
8:00 AM	0	0	0	0	0	1	7	21	18	9	2	0	0	0	0	0	0	58
9:00 AM	0	0	0	0	0	1	9	20	23	9	4	0	0	0	0	0	0	66
10:00 AM	0	0	0	0	0	1	12	33	24	14	3	1	0	0	0	0	0	88
11:00 AM	0	0	0	0	1	2	19	31	35	19	5	0	0	0	0	0	0	112
12:00 PM	0	0	0	0	0	2	14	42	41	21	5	1	0	0	0	0	0	126
1:00 PM	0	0	0	0	0	3	19	47	45	27	7	1	0	0	0	0	0	149
2:00 PM	0	0	0	0	0	3	19	50	51	26	8	1	0	0	0	0	0	158
3:00 PM	0	0	0	0	0	2	26	56	65	29	10	1	0	0	0	0	0	189
4:00 PM	0	0	0	0	0	4	22	53	70	36	12	3	0	0	0	0	0	200
5:00 PM	0	0	0	0	0	2	17	48	66	28	11	1	0	0	0	0	0	173
6:00 PM	0	0	0	0	0	3	15	36	31	14	4	2	0	0	0	0	0	105
7:00 PM	0	0	0	0	0	1	13	22	25	9	1	2	0	0	0	0	0	73
8:00 PM	0	0	0	0	0	0	4	12	12	6	2	1	0	0	0	0	0	37
9:00 PM	0	0	0	0	0	1	6	10	8	5	2	1	0	0	0	0	0	33
10:00 PM	0	0	0	0	0	0	4	7	6	2	2	1	0	0	0	0	0	22
11:00 PM	0	0	0	0	0	0	1	3	6	2	0	0	0	0	0	0	0	12
Total	0	0	0	0	1	27	219	511	549	272	82	17	0	0	0	0	0	1,678
lotai	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	13.1%	30.5%	32.7%	16.2%	4.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1,070

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	45.6	mph	Mean (Average) Speed	45.9	mph
85th Percentile	51.6	mph	10 mph Pace	39.8 - 49.8	mph
95th Percentile	55.7	mph	Percent in Pace	63.0	%

Location: 73rd St S/O Goose Point Ct
Date Range: 10/10/2024 to 10/12/2024

Site Code: 02



Total Study Average Southbound

Time								Speed	l Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	4
1:00 AM	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	0	0	1	3	1	2	0	0	0	0	0	7
5:00 AM	0	0	0	0	0	0	0	5	10	10	14	3	0	0	0	0	0	42
6:00 AM	0	0	0	0	0	0	2	10	39	51	16	3	0	0	0	0	0	121
7:00 AM	0	0	1	0	0	1	8	37	106	106	12	4	0	0	0	0	0	275
8:00 AM	0	0	3	1	1	6	7	30	98	91	29	4	0	0	0	0	0	270
9:00 AM	1	0	4	1	1	3	4	23	55	60	26	4	0	0	0	0	0	182
10:00 AM	0	1	8	3	4	2	8	25	55	42	11	3	0	0	0	0	0	162
11:00 AM	0	5	13	6	1	3	6	29	45	28	8	2	0	0	0	0	0	146
12:00 PM	1	4	12	6	2	4	7	23	43	28	13	4	0	0	0	0	0	147
1:00 PM	0	3	11	2	3	3	7	27	44	36	12	4	0	0	0	0	0	152
2:00 PM	0	3	4	3	4	4	10	33	43	40	11	2	0	0	0	0	0	157
3:00 PM	0	2	6	4	1	5	9	27	61	52	19	3	0	0	0	0	0	189
4:00 PM	1	1	2	1	1	1	4	23	61	64	20	4	0	0	0	0	0	183
5:00 PM	0	2	3	1	0	1	9	17	54	50	20	3	0	0	0	0	0	160
6:00 PM	0	0	1	0	1	0	8	25	54	24	7	2	0	0	0	0	0	122
7:00 PM	0	0	0	0	0	0	3	9	18	28	4	2	0	0	0	0	0	64
8:00 PM	0	0	0	3	0	0	1	7	17	7	3	2	0	0	0	0	0	40
9:00 PM	0	0	0	0	0	0	2	6	14	11	1	1	0	0	0	0	0	35
10:00 PM	0	0	0	0	0	0	1	7	7	9	4	1	0	0	0	0	0	29
11:00 PM	0	0	0	0	0	0	2	3	4	5	2	0	0	0	0	0	0	16
Total	3	21	68	31	19	33	98	366	834	748	233	55	0	0	0	0	0	2,509
I Otal	0.1%	0.8%	2.7%	1.2%	0.8%	1.3%	3.9%	14.6%	33.2%	29.8%	9.3%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2,303

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	48.9	mph	Mean (Average) Speed	47.3	mph
85th Percentile	54.0	mph	10 mph Pace	44.1 - 54.1	mph
95th Percentile	57.4	mph	Percent in Pace	63.6	%



Location: 73rd St S/O Goose Point Ct Date Range: 10/10/2024 - 10/16/2024

Site Code: 02

Time		hursda 0/10/202	_	10	Friday 0/11/202			Saturda 0/12/20:	_		Sunday 0/13/20			Monda 0/14/20	_		Tuesda 0/15/20	•		ednesc 0/16/20		Mid-V	Veek Av	verage
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	7	2	9	13	6	19	9	6	15	-	-	-	-	-	-	-	-	-	-	-	-	7	2	9
1:00 AM	4	0	4	4	2	6	3	5	8	-	-	-	-	-	-	-	-	-	-	-	-	4	0	4
2:00 AM	2	0	2	3	2	5	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
3:00 AM	1	4	5	3	4	7	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5
4:00 AM	1	11	12	2	7	9	3	2	5	-	-	-	-	-	-	-	-	-	-	-	-	1	11	12
5:00 AM	6	58	64	8	53	61	1	18	19	-	-	-	-	-	-	-	-	-	-	-	-	6	58	64
6:00 AM	27	185	212	20	149	169	5	31	36	-	-	-	-	-	-	-	-	-	-	-	-	27	185	212
7:00 AM	83	390	473	23	337	360	3	99	102	-	-	-	-	-	-	-	-	-	-	-	-	83	390	473
8:00 AM	107	421	528	46	274	320	21	117	138	-	-	-	-	-	-	-	-	-	-	-	-	107	421	528
9:00 AM	95	206	301	66	208	274	35	135	170	-	-	-	-	-	-	-	-	-	-	-	-	95	206	301
10:00 AM	86	151	237	95	191	286	85	149	234	-	-	-	-	-	-	-	-	-	-	-	-	86	151	237
11:00 AM	121	128	249	106	172	278	106	138	244	-	-	-	-	-	-	-	-	-	-	-	-	121	128	249
12:00 PM	119	104	223	103	158	261	153	180	333	-	_	-	-	-	-	-	-	-	-	-	-	119	104	223
1:00 PM	139	127	266	146	140	286	160	186	346	-	-	-	-	-	-	-	-	-	-	-	-	139	127	266
2:00 PM	169	154	323	183	163	346	119	158	277	-	-	-	-	-	-	-	-	-	-	-	-	169	154	323
3:00 PM	259	206	465	192	172	364	115	184	299	-	-	-	-	-	-	-	-	-	-	-	-	259	206	465
4:00 PM	282	218	500	212	179	391	105	152	257	-	-	-	-	-	-	-	-	-	-	-	-	282	218	500
5:00 PM	269	138	407	174	158	332	72	188	260	-	-	-	-	-	-	-	-	-	-	-	-	269	138	407
6:00 PM	155	120	275	104	140	244	53	108	161	-	-	-	-	-	-	-	-	-	-	-	-	155	120	275
7:00 PM	116	58	174	64	71	135	41	63	104	-	-	-	-	-	-	-	-	-	-	-	-	116	58	174
8:00 PM	51	40	91	33	35	68	26	43	69	-	-	-	-	-	-	-	-	-	-	-	-	51	40	91
9:00 PM	66	44	110	16	33	49	20	29	49	-	-	-	-	-	-	-	-	-	-	-	-	66	44	110
10:00 PM	42	34	76	11	25	36	11	30	41	-	-	_	-	_	-	-	_	-	-	-	-	42	34	76
11:00 PM	17	25	42	12	10	22	9	14	23	-	-	-	-	-	-	-	-	-	-	-	-	17	25	42
Total	2,224	2,824	5,048	1,639	2,689	4,328	1,160	2,036	3,196	-	-	-	-	-	-	-	-	-	-	-	-	2,224	2,824	5,048
Percent	44%	56%		38%	62%		36%	64%		-	-		-	-		-	-		-	-		44%	56%	
AM Peak	11:00	08:00	08:00				11:00			-			-			-		-			-	11:00	08:00	
Vol. PM Peak	121 16:00	421 16:00	528 16:00	106 16:00	337 16:00	360 16:00	106 13:00	149 17:00	244 13:00	_	-	_	_	-	-	_	-	-	-	-	-	121 16:00	421 16:00	528 16:00
Vol.	282	218	500	212	179	391	160	188	346	_			_			_		_				282	218	500

^{1.} Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary



Location: Niwot Rd E/O 73rd St

Count Direction: Eastbound / Westbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 03

Direction						FHWA Ve	ehicle Clas	sification						Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Eastbound	168	5,419	742	11	171	147	0	0	25	2	0	0	2	6,687
Eastboulld	2.5%	81.0%	11.1%	0.2%	2.6%	2.2%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0,007
Westbound	45	4,562	839	16	155	108	0	2	10	1	0	0	1	5,739
vvestbound	0.8%	79.5%	14.6%	0.3%	2.7%	1.9%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	5,739
Total	213	9,981	1,581	27	326	255	0	2	35	3	0	0	3	12,426
Total	1.7%	80.3%	12.7%	0.2%	2.6%	2.1%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	12,420

Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Site Code: 03



Thursday, October 10, 2024 Eastbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	2
4:00 AM	0	10	6	0	0	0	0	0	0	0	0	0	0	16
5:00 AM	0	20	10	0	3	0	0	0	0	0	0	0	0	33
6:00 AM	0	71	7	1	4	0	0	0	0	0	0	0	0	83
7:00 AM	2	163	24	0	8	0	0	0	0	0	0	0	0	197
8:00 AM	2	159	33	3	8	2	0	0	1	0	0	0	0	208
9:00 AM	4	135	20	1	8	4	0	0	1	0	0	0	0	173
10:00 AM	5	119	29	0	6	3	0	0	2	0	0	0	0	164
11:00 AM	6	135	24	0	5	1	0	0	2	0	0	0	0	173
12:00 PM	9	107	21	0	5	3	0	0	2	0	0	0	1	148
1:00 PM	4	134	20	0	3	3	0	0	3	0	0	0	0	167
2:00 PM	3	143	24	0	2	3	0	0	4	1	0	0	0	180
3:00 PM	4	170	27	1	8	6	0	0	0	0	0	0	0	216
4:00 PM	2	213	32	2	7	5	0	0	2	0	0	0	0	263
5:00 PM	2	163	22	0	2	3	0	0	1	0	0	0	0	193
6:00 PM	4	116	10	0	2	3	0	0	0	0	0	0	0	135
7:00 PM	0	53	7	0	1	1	0	0	0	0	0	0	0	62
8:00 PM	0	30	4	0	2	1	0	0	0	0	0	0	0	37
9:00 PM	0	45	5	0	0	2	0	0	0	0	0	0	0	52
10:00 PM	0	40	3	0	0	0	0	0	0	0	0	0	0	43
11:00 PM	0	27	3	0	0	0	0	0	0	0	0	0	0	30
Total	47	2,057	331	8	75	40	0	0	18	1	0	0	1	2,578
Total	1.8%	79.8%	12.8%	0.3%	2.9%	1.6%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	2,370

Site Code: 03



Thursday, October 10, 2024 Westbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
6:00 AM	0	32	13	0	3	1	0	0	0	0	0	0	0	49
7:00 AM	0	83	28	4	8	2	0	0	1	0	0	0	0	126
8:00 AM	0	139	22	1	10	1	0	0	0	0	0	0	1	174
9:00 AM	1	94	30	0	4	1	0	0	0	0	0	0	0	130
10:00 AM	4	88	18	1	6	1	0	0	0	0	0	0	0	118
11:00 AM	1	102	32	1	8	2	0	0	0	0	0	0	0	146
12:00 PM	1	89	31	0	9	1	0	0	0	0	0	0	0	131
1:00 PM	3	103	36	1	7	1	0	0	1	0	0	0	0	152
2:00 PM	3	126	30	1	3	5	0	0	0	0	0	0	0	168
3:00 PM	0	134	30	1	5	2	0	0	2	0	0	0	0	174
4:00 PM	1	135	26	1	6	2	0	0	0	0	0	0	0	171
5:00 PM	1	130	17	0	3	2	0	0	2	0	0	0	0	155
6:00 PM	1	99	13	0	5	1	0	0	0	0	0	0	0	119
7:00 PM	0	101	13	0	2	3	0	0	0	0	0	0	0	119
8:00 PM	0	63	7	0	0	1	0	0	0	0	0	0	0	71
9:00 PM	0	58	10	0	0	0	0	0	0	0	0	0	0	68
10:00 PM	0	39	4	0	0	0	0	0	0	0	0	0	0	43
11:00 PM	0	14	3	0	0	0	0	0	0	0	0	0	0	17
Total	16	1,643	367	11	80	26	0	0	6	0	0	0	1	2,150
Total	0.7%	76.4%	17.1%	0.5%	3.7%	1.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	2,130

Site Code: 03



Friday, October 11, 2024 Eastbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	8
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	5
4:00 AM	0	6	4	0	0	0	0	0	0	0	0	0	0	10
5:00 AM	0	23	3	0	4	2	0	0	0	0	0	0	0	32
6:00 AM	0	64	6	0	5	0	0	0	0	0	0	0	0	75
7:00 AM	1	95	16	0	5	0	0	0	1	0	0	0	0	118
8:00 AM	2	146	17	0	8	3	0	0	0	0	0	0	0	176
9:00 AM	2	131	18	1	4	5	0	0	1	0	0	0	0	162
10:00 AM	0	127	20	1	5	5	0	0	0	0	0	0	0	158
11:00 AM	8	132	14	0	3	7	0	0	0	0	0	0	0	164
12:00 PM	6	145	17	0	4	5	0	0	1	0	0	0	0	178
1:00 PM	4	135	20	0	2	5	0	0	0	0	0	0	0	166
2:00 PM	2	132	13	0	5	10	0	0	1	0	0	0	0	163
3:00 PM	4	160	19	0	7	3	0	0	0	0	0	0	0	193
4:00 PM	4	184	22	0	6	2	0	0	0	1	0	0	0	219
5:00 PM	3	167	18	0	5	0	0	0	1	0	0	0	0	194
6:00 PM	1	113	17	0	4	3	0	0	0	0	0	0	0	138
7:00 PM	0	56	7	0	0	1	0	0	0	0	0	0	0	64
8:00 PM	0	49	4	0	0	3	0	0	0	0	0	0	0	56
9:00 PM	0	20	1	0	0	1	0	0	0	0	0	0	0	22
10:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	18
11:00 PM	0	10	0	0	1	0	0	0	0	0	0	0	0	11
Total	37	1,925	240	2	69	55	0	0	5	1	0	0	0	2,334
Total	1.6%	82.5%	10.3%	0.1%	3.0%	2.4%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	2,334

Site Code: 03



Friday, October 11, 2024 Westbound

Time						FHWA Ve	ehicle Clas	sification						Total
rime	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	8	3	0	0	1	0	0	1	0	0	0	0	13
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	3
4:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
5:00 AM	0	9	1	0	0	1	0	0	0	0	0	0	0	11
6:00 AM	0	27	8	0	1	1	0	0	0	0	0	0	0	37
7:00 AM	1	63	19	1	5	3	0	0	0	0	0	0	0	92
8:00 AM	0	88	17	0	9	2	0	0	1	0	0	0	0	117
9:00 AM	2	86	18	0	3	1	0	0	0	1	0	0	0	111
10:00 AM	3	97	15	1	5	3	0	0	0	0	0	0	0	124
11:00 AM	0	93	16	1	3	4	0	0	0	0	0	0	0	117
12:00 PM	2	99	16	0	2	5	0	0	0	0	0	0	0	124
1:00 PM	1	110	34	0	4	1	0	0	0	0	0	0	0	150
2:00 PM	0	120	24	0	3	4	0	1	1	0	0	0	0	153
3:00 PM	1	110	25	0	1	5	0	0	0	0	0	0	0	142
4:00 PM	0	133	21	0	2	4	0	0	0	0	0	0	0	160
5:00 PM	1	142	15	1	0	5	0	0	0	0	0	0	0	164
6:00 PM	1	104	24	0	4	1	0	0	0	0	0	0	0	134
7:00 PM	0	75	7	0	1	3	0	0	0	0	0	0	0	86
8:00 PM	0	49	8	0	4	1	0	0	0	0	0	0	0	62
9:00 PM	0	40	4	0	0	2	0	0	0	0	0	0	0	46
10:00 PM	0	20	3	0	0	0	0	0	0	0	0	0	0	23
11:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	18
Total	12	1,499	284	4	47	47	0	1	3	1	0	0	0	4 909
lotai	0.6%	79.0%	15.0%	0.2%	2.5%	2.5%	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	1,898

Site Code: 03



Saturday, October 12, 2024 Eastbound

Time						FHWA Ve	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	5
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2
5:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	0	11
6:00 AM	0	10	1	0	4	0	0	0	0	0	0	0	0	15
7:00 AM	0	47	6	0	0	1	0	0	0	0	0	0	0	54
8:00 AM	2	81	11	0	0	5	0	0	1	0	0	0	0	100
9:00 AM	5	111	17	0	3	4	0	0	0	0	0	0	0	140
10:00 AM	6	116	15	0	1	3	0	0	0	0	0	0	0	141
11:00 AM	12	109	12	0	2	4	0	0	0	0	0	0	0	139
12:00 PM	19	112	14	0	2	2	0	0	0	0	0	0	1	150
1:00 PM	15	125	16	0	1	3	0	0	1	0	0	0	0	161
2:00 PM	9	115	12	0	5	6	0	0	0	0	0	0	0	147
3:00 PM	6	117	14	0	4	4	0	0	0	0	0	0	0	145
4:00 PM	3	127	13	0	1	1	0	0	0	0	0	0	0	145
5:00 PM	5	139	11	0	2	6	0	0	0	0	0	0	0	163
6:00 PM	2	81	10	0	0	6	0	0	0	0	0	0	0	99
7:00 PM	0	45	4	1	1	1	0	0	0	0	0	0	0	52
8:00 PM	0	28	5	0	0	2	0	0	0	0	0	0	0	35
9:00 PM	0	32	3	0	0	0	0	0	0	0	0	0	0	35
10:00 PM	0	17	3	0	0	2	0	0	0	0	0	0	0	22
11:00 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Total	84	1,437	171	1	27	52	0	0	2	0	0	0	1	1,775
Total	4.7%	81.0%	9.6%	0.1%	1.5%	2.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	1,773

Site Code: 03



Saturday, October 12, 2024 Westbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	12	1	0	0	0	0	0	0	0	0	0	0	13
1:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	2	1	0	0	1	0	0	0	0	0	0	0	4
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	4
4:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	7
5:00 AM	0	5	1	0	0	1	0	0	0	0	0	0	0	7
6:00 AM	0	12	3	0	0	0	0	0	0	0	0	0	0	15
7:00 AM	0	29	7	0	1	1	0	0	0	0	0	0	0	38
8:00 AM	0	89	14	0	4	3	0	0	0	0	0	0	0	110
9:00 AM	2	69	9	1	0	1	0	0	0	0	0	0	0	82
10:00 AM	1	100	10	0	3	1	0	0	0	0	0	0	0	115
11:00 AM	3	104	20	0	1	5	0	0	0	0	0	0	0	133
12:00 PM	3	138	21	0	4	3	0	1	0	0	0	0	0	170
1:00 PM	2	133	29	0	2	5	0	0	0	0	0	0	0	171
2:00 PM	3	117	13	0	2	2	0	0	0	0	0	0	0	137
3:00 PM	1	129	7	0	5	1	0	0	1	0	0	0	0	144
4:00 PM	2	110	13	0	3	2	0	0	0	0	0	0	0	130
5:00 PM	0	114	9	0	0	0	0	0	0	0	0	0	0	123
6:00 PM	0	76	8	0	1	4	0	0	0	0	0	0	0	89
7:00 PM	0	58	3	0	0	2	0	0	0	0	0	0	0	63
8:00 PM	0	41	5	0	2	1	0	0	0	0	0	0	0	49
9:00 PM	0	31	6	0	0	1	0	0	0	0	0	0	0	38
10:00 PM	0	23	2	0	0	1	0	0	0	0	0	0	0	26
11:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	18
Total	17	1,420	188	1	28	35	0	1	1	0	0	0	0	1,691
Total	1.0%	84.0%	11.1%	0.1%	1.7%	2.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	1,001

Site Code: 03



Total Study Average Eastbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	3
4:00 AM	0	5	4	0	0	0	0	0	0	0	0	0	0	9
5:00 AM	0	17	5	0	3	1	0	0	0	0	0	0	0	26
6:00 AM	0	48	5	0	4	0	0	0	0	0	0	0	0	57
7:00 AM	1	102	15	0	4	0	0	0	0	0	0	0	0	122
8:00 AM	2	129	20	1	5	3	0	0	1	0	0	0	0	161
9:00 AM	4	126	18	1	5	4	0	0	1	0	0	0	0	159
10:00 AM	4	121	21	0	4	4	0	0	1	0	0	0	0	155
11:00 AM	9	125	17	0	3	4	0	0	1	0	0	0	0	159
12:00 PM	11	121	17	0	4	3	0	0	1	0	0	0	1	158
1:00 PM	8	131	19	0	2	4	0	0	1	0	0	0	0	165
2:00 PM	5	130	16	0	4	6	0	0	2	0	0	0	0	163
3:00 PM	5	149	20	0	6	4	0	0	0	0	0	0	0	184
4:00 PM	3	175	22	1	5	3	0	0	1	0	0	0	0	210
5:00 PM	3	156	17	0	3	3	0	0	1	0	0	0	0	183
6:00 PM	2	103	12	0	2	4	0	0	0	0	0	0	0	123
7:00 PM	0	51	6	0	1	1	0	0	0	0	0	0	0	59
8:00 PM	0	36	4	0	1	2	0	0	0	0	0	0	0	43
9:00 PM	0	32	3	0	0	1	0	0	0	0	0	0	0	36
10:00 PM	0	24	3	0	0	1	0	0	0	0	0	0	0	28
11:00 PM	0	15	1	0	0	0	0	0	0	0	0	0	0	16
Total	57	1,805	246	3	57	48	0	0	10	0	0	0	1	2,227
Total	2.6%	81.1%	11.0%	0.1%	2.6%	2.2%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	2,221

Note: Average only condsidered on days with 24-hours of data.

Site Code: 03



Total Study Average Westbound

Time						FHWA V	ehicle Clas	sification						Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	9
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
4:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
5:00 AM	0	7	1	0	0	1	0	0	0	0	0	0	0	9
6:00 AM	0	24	8	0	1	1	0	0	0	0	0	0	0	34
7:00 AM	0	58	18	2	5	2	0	0	0	0	0	0	0	85
8:00 AM	0	105	18	0	8	2	0	0	0	0	0	0	0	133
9:00 AM	2	83	19	0	2	1	0	0	0	0	0	0	0	107
10:00 AM	3	95	14	1	5	2	0	0	0	0	0	0	0	120
11:00 AM	1	100	23	1	4	4	0	0	0	0	0	0	0	133
12:00 PM	2	109	23	0	5	3	0	0	0	0	0	0	0	142
1:00 PM	2	115	33	0	4	2	0	0	0	0	0	0	0	156
2:00 PM	2	121	22	0	3	4	0	0	0	0	0	0	0	152
3:00 PM	1	124	21	0	4	3	0	0	1	0	0	0	0	154
4:00 PM	1	126	20	0	4	3	0	0	0	0	0	0	0	154
5:00 PM	1	129	14	0	1	2	0	0	1	0	0	0	0	148
6:00 PM	1	93	15	0	3	2	0	0	0	0	0	0	0	114
7:00 PM	0	78	8	0	1	3	0	0	0	0	0	0	0	90
8:00 PM	0	51	7	0	2	1	0	0	0	0	0	0	0	61
9:00 PM	0	43	7	0	0	1	0	0	0	0	0	0	0	51
10:00 PM	0	27	3	0	0	0	0	0	0	0	0	0	0	30
11:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	18
Total	16	1,521	281	4	52	37	0	0	2	0	0	0	0	1,913
Total	0.8%	79.5%	14.7%	0.2%	2.7%	1.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1,913

Note: Average only condsidered on days with 24-hours of data.

Vehicle Speed Report Summary



Location: Niwot Rd E/O 73rd St

Direction: Eastbound / Westbound

Date Range: 10/10/2024 to 10/12/2024

Site Code: 03

Direction								Speed	d Range	(mph)								Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volumo
Eastbound	0	23	108	78	113	702	2,677	2,253	601	103	21	8	0	0	0	0	0	6,687
Eastboullu	0.0%	0.3%	1.6%	1.2%	1.7%	10.5%	40.0%	33.7%	9.0%	1.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0,007
Westbound	1	1	3	20	95	685	2,192	1,822	748	134	26	12	0	0	0	0	0	5,739
vvestbound	0.0%	0.0%	0.1%	0.3%	1.7%	11.9%	38.2%	31.7%	13.0%	2.3%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5,759
Total	1	24	111	98	208	1,387	4,869	4,075	1,349	237	47	20	0	0	0	0	0	12,426
i Otai	0.0%	0.2%	0.9%	0.8%	1.7%	11.2%	39.2%	32.8%	10.9%	1.9%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	12,420

Total Study Percentile Speed	d Summ	ary	Total Study Spee	d Statistics	
Eastbound			Eastbou	nd	
50th Percentile (Median)	39.5	mph	Mean (Average) Speed	39.2	mph
85th Percentile	44.1	mph	10 mph Pace	35.1 - 45.1	mph
95th Percentile	47.3	mph	Percent in Pace	73.5	%
Westbound			Westbou	nd	
50th Percentile (Median)	39.8	mph	Mean (Average) Speed	40.1	mph
85th Percentile	45.2	mph	10 mph Pace	34.8 - 44.8	mph
95th Percentile	48.5	mph	Percent in Pace	70.0	%

Site Code: 03



Thursday, October 10, 2024 Eastbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	1	7	4	3	0	1	0	0	0	0	0	0	16
5:00 AM	0	0	0	0	0	2	14	8	7	1	0	1	0	0	0	0	0	33
6:00 AM	0	0	0	1	3	9	24	33	8	4	1	0	0	0	0	0	0	83
7:00 AM	0	0	0	2	5	15	80	71	21	2	1	0	0	0	0	0	0	197
8:00 AM	0	0	0	4	5	41	69	62	23	3	1	0	0	0	0	0	0	208
9:00 AM	0	1	4	3	1	20	67	57	17	3	0	0	0	0	0	0	0	173
10:00 AM	0	3	5	5	2	22	74	43	9	1	0	0	0	0	0	0	0	164
11:00 AM	0	0	8	3	7	19	73	43	13	6	0	1	0	0	0	0	0	173
12:00 PM	0	2	6	3	6	20	52	52	4	3	0	0	0	0	0	0	0	148
1:00 PM	0	0	7	3	6	30	69	40	8	2	2	0	0	0	0	0	0	167
2:00 PM	0	1	3	17	4	29	63	49	9	5	0	0	0	0	0	0	0	180
3:00 PM	0	0	3	1	3	17	80	93	17	1	0	1	0	0	0	0	0	216
4:00 PM	0	0	2	0	1	24	126	84	21	4	1	0	0	0	0	0	0	263
5:00 PM	0	0	2	3	0	13	88	61	20	3	2	1	0	0	0	0	0	193
6:00 PM	0	0	2	4	2	13	57	47	8	2	0	0	0	0	0	0	0	135
7:00 PM	0	0	0	0	0	4	30	25	3	0	0	0	0	0	0	0	0	62
8:00 PM	0	0	0	0	0	3	19	12	3	0	0	0	0	0	0	0	0	37
9:00 PM	0	0	0	0	1	4	28	17	2	0	0	0	0	0	0	0	0	52
10:00 PM	0	0	0	0	0	7	24	8	4	0	0	0	0	0	0	0	0	43
11:00 PM	0	0	0	0	1	0	21	8	0	0	0	0	0	0	0	0	0	30
Total	0	7	43	49	47	293	1,068	818	200	40	9	4	0	0	0	0	0	2,578
Total	0.0%	0.3%	1.7%	1.9%	1.8%	11.4%	41.4%	31.7%	7.8%	1.6%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2,576

Daily Percentile Speed S	Summary		Speed Stati	stics	
50th Percentile (Median)	39.3	mph	Mean (Average) Speed	38.8	mph
85th Percentile	43.7	mph	10 mph Pace	34.0 - 44.0	mph
95th Percentile	47.1	mph	Percent in Pace	73.6	%

Site Code: 03



Thursday, October 10, 2024 Westbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	2	7	1	1	0	0	0	0	0	0	0	11
6:00 AM	0	0	0	0	0	6	24	14	4	0	1	0	0	0	0	0	0	49
7:00 AM	0	0	0	0	6	15	54	38	9	3	0	1	0	0	0	0	0	126
8:00 AM	0	0	0	1	12	30	63	48	15	4	1	0	0	0	0	0	0	174
9:00 AM	0	0	0	0	1	15	38	39	30	6	1	0	0	0	0	0	0	130
10:00 AM	0	0	0	0	0	8	52	36	16	6	0	0	0	0	0	0	0	118
11:00 AM	0	0	0	0	1	17	50	56	18	4	0	0	0	0	0	0	0	146
12:00 PM	0	0	0	2	2	17	41	41	24	4	0	0	0	0	0	0	0	131
1:00 PM	0	0	0	0	2	17	47	62	21	3	0	0	0	0	0	0	0	152
2:00 PM	0	0	0	8	7	24	44	54	26	5	0	0	0	0	0	0	0	168
3:00 PM	0	0	0	0	16	43	65	34	16	0	0	0	0	0	0	0	0	174
4:00 PM	0	0	0	0	1	26	80	46	16	1	1	0	0	0	0	0	0	171
5:00 PM	0	0	0	0	1	23	60	48	19	4	0	0	0	0	0	0	0	155
6:00 PM	0	0	0	0	0	13	58	39	8	1	0	0	0	0	0	0	0	119
7:00 PM	0	0	0	0	0	21	54	34	9	1	0	0	0	0	0	0	0	119
8:00 PM	0	0	0	0	2	10	28	20	8	1	0	2	0	0	0	0	0	71
9:00 PM	0	0	0	0	1	9	32	20	4	1	0	1	0	0	0	0	0	68
10:00 PM	0	0	0	0	2	7	17	12	4	1	0	0	0	0	0	0	0	43
11:00 PM	0	0	0	0	0	3	2	2	6	4	0	0	0	0	0	0	0	17
Total	0	0	1	11	55	306	813	651	255	50	4	4	0	0	0	0	0	2,150
	0.0%	0.0%	0.0%	0.5%	2.6%	14.2%	37.8%	30.3%	11.9%	2.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed S	Summary		Speed Stati	stics	
50th Percentile (Median)	39.4	mph	Mean (Average) Speed	39.6	mph
85th Percentile	44.9	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	48.2	mph	Percent in Pace	68.88	%

Site Code: 03



Friday, October 11, 2024 Eastbound

Time								Speed	d Range	(mph)								Total
rime	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	8
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	5
4:00 AM	0	0	0	0	0	0	3	5	1	0	1	0	0	0	0	0	0	10
5:00 AM	0	0	0	0	0	5	8	13	4	1	0	1	0	0	0	0	0	32
6:00 AM	0	0	0	0	0	3	28	28	15	1	0	0	0	0	0	0	0	75
7:00 AM	0	0	0	0	0	6	48	41	20	3	0	0	0	0	0	0	0	118
8:00 AM	0	1	0	1	0	16	58	71	24	4	0	1	0	0	0	0	0	176
9:00 AM	0	0	0	1	1	14	72	55	15	2	1	1	0	0	0	0	0	162
10:00 AM	0	0	0	1	1	14	63	60	17	0	2	0	0	0	0	0	0	158
11:00 AM	0	2	3	0	4	25	76	37	14	3	0	0	0	0	0	0	0	164
12:00 PM	0	1	5	1	4	17	75	55	16	4	0	0	0	0	0	0	0	178
1:00 PM	0	0	3	1	5	14	70	58	14	1	0	0	0	0	0	0	0	166
2:00 PM	0	0	2	0	2	17	72	50	17	3	0	0	0	0	0	0	0	163
3:00 PM	0	0	3	1	0	17	79	73	18	1	1	0	0	0	0	0	0	193
4:00 PM	0	0	0	2	3	26	77	84	22	5	0	0	0	0	0	0	0	219
5:00 PM	0	1	1	0	3	9	64	83	27	4	1	1	0	0	0	0	0	194
6:00 PM	0	0	2	0	1	20	68	41	6	0	0	0	0	0	0	0	0	138
7:00 PM	0	0	0	0	0	8	28	19	8	0	1	0	0	0	0	0	0	64
8:00 PM	0	0	0	1	1	14	24	15	1	0	0	0	0	0	0	0	0	56
9:00 PM	0	0	0	0	1	2	13	5	1	0	0	0	0	0	0	0	0	22
10:00 PM	0	0	0	0	0	5	5	7	1	0	0	0	0	0	0	0	0	18
11:00 PM	0	0	0	0	0	3	7	1	0	0	0	0	0	0	0	0	0	11
Total	0	5	19	9	27	237	945	808	241	32	7	4	0	0	0	0	0	2,334
	0.0%	0.2%	0.8%	0.4%	1.2%	10.2%	40.5%	34.6%	10.3%	1.4%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed S	Summary		Speed Stati	istics	
50th Percentile (Median)	39.7	mph	Mean (Average) Speed	39.7	mph
85th Percentile	44.5	mph	10 mph Pace	35.1 - 45.1	mph
95th Percentile	47.4	mph	Percent in Pace	74.7	%

Site Code: 03



Friday, October 11, 2024 Westbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	1	0	3	3	4	2	0	0	0	0	0	0	0	0	13
1:00 AM	0	0	0	0	1	0	2	0	0	0	1	0	0	0	0	0	0	4
2:00 AM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	3
4:00 AM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	4
5:00 AM	0	0	0	0	0	0	3	3	4	1	0	0	0	0	0	0	0	11
6:00 AM	0	0	0	0	0	7	17	11	2	0	0	0	0	0	0	0	0	37
7:00 AM	0	0	0	0	1	4	33	25	22	2	4	1	0	0	0	0	0	92
8:00 AM	1	0	0	0	1	10	45	47	13	0	0	0	0	0	0	0	0	117
9:00 AM	0	0	0	0	0	6	45	41	17	2	0	0	0	0	0	0	0	111
10:00 AM	0	0	0	0	1	15	48	49	9	2	0	0	0	0	0	0	0	124
11:00 AM	0	0	0	0	7	16	43	41	9	1	0	0	0	0	0	0	0	117
12:00 PM	0	0	0	0	2	15	54	38	10	4	1	0	0	0	0	0	0	124
1:00 PM	0	0	0	2	1	21	64	43	16	3	0	0	0	0	0	0	0	150
2:00 PM	0	0	0	0	0	19	62	45	22	4	1	0	0	0	0	0	0	153
3:00 PM	0	0	0	0	3	15	75	31	16	1	1	0	0	0	0	0	0	142
4:00 PM	0	0	0	0	0	9	67	57	18	7	1	1	0	0	0	0	0	160
5:00 PM	0	0	0	0	2	19	60	51	30	2	0	0	0	0	0	0	0	164
6:00 PM	0	0	0	0	0	19	52	50	11	2	0	0	0	0	0	0	0	134
7:00 PM	0	0	0	0	1	9	43	24	7	2	0	0	0	0	0	0	0	86
8:00 PM	0	0	0	0	0	10	30	16	4	1	1	0	0	0	0	0	0	62
9:00 PM	0	0	0	0	2	5	14	15	7	3	0	0	0	0	0	0	0	46
10:00 PM	0	0	0	0	0	3	7	1	6	1	3	2	0	0	0	0	0	23
11:00 PM	0	0	0	0	0	2	3	6	6	1	0	0	0	0	0	0	0	18
Total	1	0	0	4	22	210	771	600	233	39	14	4	0	0	0	0	0	1,898
	0.1%	0.0%	0.0%	0.2%	1.2%	11.1%	40.6%	31.6%	12.3%	2.1%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Daily Percentile Speed S	Summary		Speed Stati	stics	
50th Percentile (Median)	39.7	mph	Mean (Average) Speed	40.1	mph
85th Percentile	45.1	mph	10 mph Pace	34.3 - 44.3	mph
95th Percentile	48.2	mph	Percent in Pace	72.92	%

Site Code: 03

DATA SOLUTIONS

Saturday, October 12, 2024 Eastbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	1	0	0	3	1	0	0	0	0	0	0	0	0	5
1:00 AM	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	5
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	1	2	4	3	1	0	0	0	0	0	0	0	11
6:00 AM	0	0	0	0	0	1	7	6	1	0	0	0	0	0	0	0	0	15
7:00 AM	0	0	0	0	2	4	16	22	8	2	0	0	0	0	0	0	0	54
8:00 AM	0	1	2	0	0	3	34	35	21	3	1	0	0	0	0	0	0	100
9:00 AM	0	0	2	2	3	14	47	55	15	2	0	0	0	0	0	0	0	140
10:00 AM	0	1	4	1	7	5	54	45	19	5	0	0	0	0	0	0	0	141
11:00 AM	0	0	8	5	6	16	39	56	8	1	0	0	0	0	0	0	0	139
12:00 PM	0	4	13	5	4	17	52	45	10	0	0	0	0	0	0	0	0	150
1:00 PM	0	1	9	4	5	17	53	59	13	0	0	0	0	0	0	0	0	161
2:00 PM	0	0	2	2	1	14	64	50	11	2	1	0	0	0	0	0	0	147
3:00 PM	0	3	2	1	6	20	46	52	10	2	3	0	0	0	0	0	0	145
4:00 PM	0	1	1	0	1	11	71	43	12	5	0	0	0	0	0	0	0	145
5:00 PM	0	0	2	0	1	19	56	68	13	4	0	0	0	0	0	0	0	163
6:00 PM	0	0	1	0	0	11	48	32	5	2	0	0	0	0	0	0	0	99
7:00 PM	0	0	0	0	1	8	20	17	6	0	0	0	0	0	0	0	0	52
8:00 PM	0	0	0	0	1	0	20	14	0	0	0	0	0	0	0	0	0	35
9:00 PM	0	0	0	0	0	7	12	12	2	2	0	0	0	0	0	0	0	35
10:00 PM	0	0	0	0	0	4	11	6	1	0	0	0	0	0	0	0	0	22
11:00 PM	0	0	0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	8
Total	0	11	46	20	39	172	664	627	160	31	5	0	0	0	0	0	0	1,775
- I Otal	0.0%	0.6%	2.6%	1.1%	2.2%	9.7%	37.4%	35.3%	9.0%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1,113

Daily Percentile Speed	Summary		Speed Stati	istics	
50th Percentile (Median)	39.7	mph	Mean (Average) Speed	38.9	mph
85th Percentile	44.1	mph	10 mph Pace	34.9 - 44.9	mph
95th Percentile	47.2	mph	Percent in Pace	72.6	%

Site Code: 03



Saturday, October 12, 2024 Westbound

Time								Speed	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	1	4	4	4	0	0	0	0	0	0	0	0	13
1:00 AM	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	5
2:00 AM	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4
3:00 AM	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	1	0	4	1	0	0	1	0	0	0	0	0	7
5:00 AM	0	0	0	0	1	0	0	5	1	0	0	0	0	0	0	0	0	7
6:00 AM	0	0	0	0	0	1	5	7	1	1	0	0	0	0	0	0	0	15
7:00 AM	0	0	0	0	0	4	15	11	6	2	0	0	0	0	0	0	0	38
8:00 AM	0	0	1	2	0	13	35	42	17	0	0	0	0	0	0	0	0	110
9:00 AM	0	1	0	0	1	7	24	36	11	2	0	0	0	0	0	0	0	82
10:00 AM	0	0	1	0	2	8	39	37	21	4	2	1	0	0	0	0	0	115
11:00 AM	0	0	0	2	5	21	45	42	15	3	0	0	0	0	0	0	0	133
12:00 PM	0	0	0	1	1	13	60	61	26	5	2	1	0	0	0	0	0	170
1:00 PM	0	0	0	0	1	26	55	53	33	3	0	0	0	0	0	0	0	171
2:00 PM	0	0	0	0	4	18	45	41	24	4	1	0	0	0	0	0	0	137
3:00 PM	0	0	0	0	0	5	62	57	17	3	0	0	0	0	0	0	0	144
4:00 PM	0	0	0	0	0	10	45	47	23	4	1	0	0	0	0	0	0	130
5:00 PM	0	0	0	0	0	10	55	37	15	5	1	0	0	0	0	0	0	123
6:00 PM	0	0	0	0	3	8	35	26	17	0	0	0	0	0	0	0	0	89
7:00 PM	0	0	0	0	0	13	36	10	1	2	0	1	0	0	0	0	0	63
8:00 PM	0	0	0	0	0	6	18	21	3	0	1	0	0	0	0	0	0	49
9:00 PM	0	0	0	0	0	2	19	11	5	1	0	0	0	0	0	0	0	38
10:00 PM	0	0	0	0	0	0	4	5	11	6	0	0	0	0	0	0	0	26
11:00 PM	0	0	0	0	0	0	3	11	4	0	0	0	0	0	0	0	0	18
Total	0	1	2	5	18	169	608	571	260	45	8	4	0	0	0	0	0	4 604
Total	0.0%	0.1%	0.1%	0.3%	1.1%	10.0%	36.0%	33.8%	15.4%	2.7%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1,691

Daily Percentile Speed S	Summary		Speed Stat	istics	
50th Percentile (Median)	40.3	mph	Mean (Average) Speed	40.6	mph
85th Percentile	45.7	mph	10 mph Pace	35.0 - 45.0	mph
95th Percentile	48.9	mph	Percent in Pace	69.43	%

Site Code: 03

DATA SOLUTIONS

Total Study Average Eastbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	4	3	2	0	1	0	0	0	0	0	0	10
5:00 AM	0	0	0	0	0	3	8	8	5	1	0	1	0	0	0	0	0	26
6:00 AM	0	0	0	0	1	4	20	22	8	2	0	0	0	0	0	0	0	57
7:00 AM	0	0	0	1	2	8	48	45	16	2	0	0	0	0	0	0	0	122
8:00 AM	0	1	1	2	2	20	54	56	23	3	1	0	0	0	0	0	0	163
9:00 AM	0	0	2	2	2	16	62	56	16	2	0	0	0	0	0	0	0	158
10:00 AM	0	1	3	2	3	14	64	49	15	2	1	0	0	0	0	0	0	154
11:00 AM	0	1	6	3	6	20	63	45	12	3	0	0	0	0	0	0	0	159
12:00 PM	0	2	8	3	5	18	60	51	10	2	0	0	0	0	0	0	0	159
1:00 PM	0	0	6	3	5	20	64	52	12	1	1	0	0	0	0	0	0	164
2:00 PM	0	0	2	6	2	20	66	50	12	3	0	0	0	0	0	0	0	161
3:00 PM	0	1	3	1	3	18	68	73	15	1	1	0	0	0	0	0	0	184
4:00 PM	0	0	1	1	2	20	91	70	18	5	0	0	0	0	0	0	0	208
5:00 PM	0	0	2	1	1	14	69	71	20	4	1	1	0	0	0	0	0	184
6:00 PM	0	0	2	1	1	15	58	40	6	1	0	0	0	0	0	0	0	124
7:00 PM	0	0	0	0	0	7	26	20	6	0	0	0	0	0	0	0	0	59
8:00 PM	0	0	0	0	1	6	21	14	1	0	0	0	0	0	0	0	0	43
9:00 PM	0	0	0	0	1	4	18	11	2	1	0	0	0	0	0	0	0	37
10:00 PM	0	0	0	0	0	5	13	7	2	0	0	0	0	0	0	0	0	27
11:00 PM	0	0	0	0	0	1	11	4	0	0	0	0	0	0	0	0	0	16
Total	0	6	36	26	37	233	893	751	201	33	6	2	0	0	0	0	0	2,224
- Jotan	0.0%	0.3%	1.6%	1.2%	1.7%	10.5%	40.2%	33.8%	9.0%	1.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	39.5	mph	Mean (Average) Speed	39.2	mph
85th Percentile	44.1	mph	10 mph Pace	35.1 - 45.1	mph
95th Percentile	47.3	mph	Percent in Pace	73.5	%

Site Code: 03

DATA SOLUTIONS

Total Study Average Westbound

Time								Spee	d Range	(mph)								Total
Time	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
12:00 AM	0	0	0	0	0	2	2	3	2	0	0	0	0	0	0	0	0	9
1:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	2	5	2	1	0	0	0	0	0	0	0	10
6:00 AM	0	0	0	0	0	5	15	11	2	0	0	0	0	0	0	0	0	33
7:00 AM	0	0	0	0	2	8	34	25	12	2	1	1	0	0	0	0	0	85
8:00 AM	0	0	0	1	4	18	48	46	15	1	0	0	0	0	0	0	0	133
9:00 AM	0	0	0	0	1	9	36	39	19	3	0	0	0	0	0	0	0	107
10:00 AM	0	0	0	0	1	10	46	41	15	4	1	0	0	0	0	0	0	118
11:00 AM	0	0	0	1	4	18	46	46	14	3	0	0	0	0	0	0	0	132
12:00 PM	0	0	0	1	2	15	52	47	20	4	1	0	0	0	0	0	0	142
1:00 PM	0	0	0	1	1	21	55	53	23	3	0	0	0	0	0	0	0	157
2:00 PM	0	0	0	3	4	20	50	47	24	4	1	0	0	0	0	0	0	153
3:00 PM	0	0	0	0	6	21	67	41	16	1	0	0	0	0	0	0	0	152
4:00 PM	0	0	0	0	0	15	64	50	19	4	1	0	0	0	0	0	0	153
5:00 PM	0	0	0	0	1	17	58	45	21	4	0	0	0	0	0	0	0	146
6:00 PM	0	0	0	0	1	13	48	38	12	1	0	0	0	0	0	0	0	113
7:00 PM	0	0	0	0	0	14	44	23	6	2	0	0	0	0	0	0	0	89
8:00 PM	0	0	0	0	1	9	25	19	5	1	1	1	0	0	0	0	0	62
9:00 PM	0	0	0	0	1	5	22	15	5	2	0	0	0	0	0	0	0	50
10:00 PM	0	0	0	0	1	3	9	6	7	3	1	1	0	0	0	0	0	31
11:00 PM	0	0	0	0	0	2	3	6	5	2	0	0	0	0	0	0	0	18
Total	0	0	0	7	30	227	729	609	246	45	7	3	0	0	0	0	0	1,903
Total	0.0%	0.0%	0.0%	0.4%	1.6%	11.9%	38.3%	32.0%	12.9%	2.4%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1,000

Note: Average only condsidered on days with 24-hours of data.

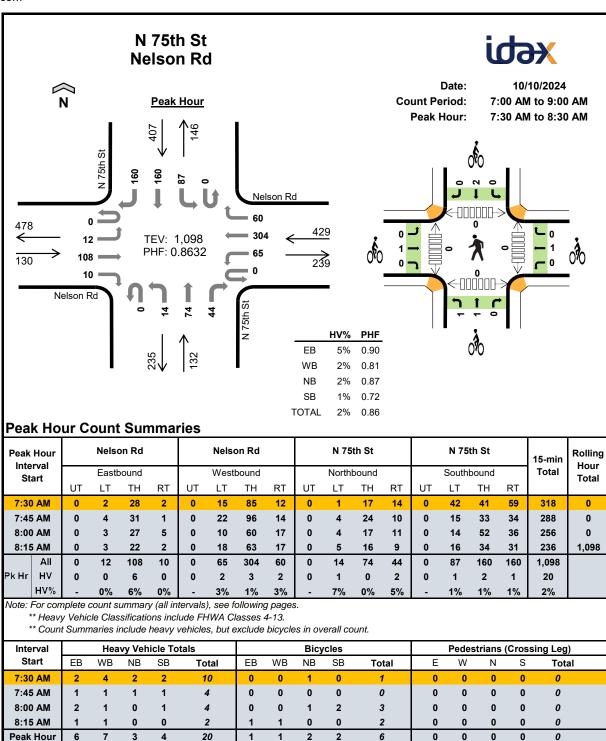
Total Study Percentile Spe	ed Summ	ary	Total Study Spee	d Statistics	
50th Percentile (Median)	39.8	mph	Mean (Average) Speed	40.1	mph
85th Percentile	45.2	mph	10 mph Pace	34.8 - 44.8	mph
95th Percentile	48.5	mph	Percent in Pace	70.0	%



Site Code: 03

Time		hursda 0/10/202	_	1	Friday 0/11/202			Saturda 0/12/202		1	Sunday 0/13/20			Monda 0/14/20			Tuesda 0/15/20	_		ednesd 0/16/20		Mid-V	Veek Av	/erage
	ЕВ	WB	Total	ЕВ	WB	Total	EB	WB	Total	EB	WB	Total	ЕВ	WB	Total	ЕВ	WB	Total	EB	WB	Total	ЕВ	WB	Total
12:00 AM	2	4	6	8	13	21	5	13	18	-	-	-	-	-	-	-	-	-	-	-	-	2	4	6
1:00 AM	1	3	4	1	4	5	5	5	10	-	-	-	-	-	-	-	-	-	-	-	-	1	3	4
2:00 AM	0	1	1	3	3	6	1	4	5	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
3:00 AM	2	0	2	5	3	8	0	4	4	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
4:00 AM	16	0	16	10	4	14	2	7	9	-	-	-	-	-	-	-	-	-	-	-	-	16	0	16
5:00 AM	33	11	44	32	11	43	11	7	18	_	-	-	_	-	_	-	_	_	_	_	_	33	11	44
6:00 AM	83	49	132	75	37	112	15	15	30	-	_	-	-	_	_	-	_	-	-	_	-	83	49	132
7:00 AM	197	126	323	118	92	210	54	38	92	-	_	-	-	_	_	_	_	_	-	_	_	197	126	323
8:00 AM	208	174	382	176	117	293	100	110	210	-	_	_	-	_	_	-	-	-	-	_	-	208	174	382
9:00 AM	173	130	303	162	111	273	140	82	222	-	_	-	-	_	_	_	_	_	-	_	_	173	130	303
10:00 AM	164	118	282	158	124	282	141	115	256	_	_	_	-	_	_	_	_	_	_	_	_	164	118	282
11:00 AM	173	146	319	164	117	281	139	133	272	-	_	-	-	_	_	_	_	_	-	_	_	173	146	319
12:00 PM	148	131	279	178	124	302	150	170	320	-	-	-	-	-	-	-	_	-	-	-	-	148	131	279
1:00 PM	167	152	319	166	150	316	161	171	332	_	_	_	_	_	_	_	_	_	-	_	_	167	152	319
2:00 PM	180	168	348	163	153	316	147	137	284	-	_	-	-	_	-	-	_	_	-	-	-	180	168	348
3:00 PM	216	174	390	193	142	335	145	144	289	-	_	-	-	_	_	_	_	_	-	_	_	216	174	390
4:00 PM	263	171	434	219	160	379	145	130	275	-	_	-	-	_	-	-	_	_	-	-	-	263	171	434
5:00 PM	193	155	348	194	164	358	163	123	286	-	_	-	-	_	-	_	_	_	-	_	_	193	155	348
6:00 PM	135	119	254	138	134	272	99	89	188	-	_	_	-	-	_	-	-	_	-	_	-	135	119	254
7:00 PM	62	119	181	64	86	150	52	63	115	-	_	-	-	_	-	_	_	_	-	_	_	62	119	181
8:00 PM	37	71	108	56	62	118	35	49	84	-	_	_	-	-	_	-	-	_	-	_	-	37	71	108
9:00 PM	52	68	120	22	46	68	35	38	73	_	_	_	_	_	_	_	_	_	_	_	_	52	68	120
10:00 PM	43	43	86	18	23	41	22	26	48	_	_		_			_		_	_		_	43	43	86
11:00 PM	30	17	47	11	18	29	8	18	26	-	-	-	-	-	-	-	-	-	-	-	-	30	17	47
Total			4,728			4,232			3,466	-	-	-	-	-	-	-	-	-	-	-	-	2,578		4,728
Percent	55%	45%		55%	45%		51%	49%		-	-		-	-		-	-		-	-		55%	45%	
AM Peak	08:00	08:00				08:00	10:00			-			-			-		-	-		-	08:00	08:00	
Vol.	208	174	382	176	124	293	141	133	272	-	-	-	-	-	-	-	-	-	-	-	-	208	174	382
PM Peak Vol.	16:00 263	15:00 174	16:00 434	16:00 219	17:00 164	16:00 379	17:00 163	13:00 171	13:00 332	_			_			_		_	_		-	16:00 263	15:00 174	16:00 434

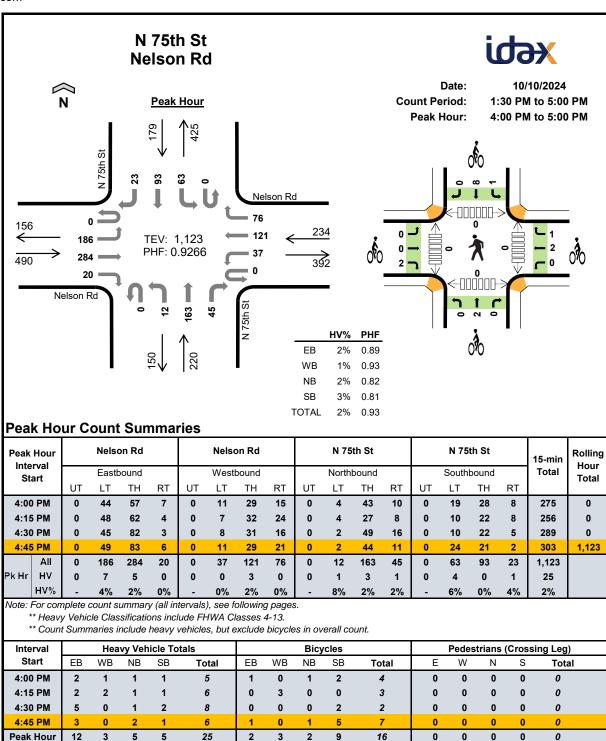
^{1.} Mid-week average includes data between Tuesday and Thursday.



Inte	rval		Nelso	on Rd			Nelso	on Rd			N 75	th St			N 75	th St		15-min	Rolling Hour
Sta	art		Eastb	ound			Westl	oound			North	bound			South	bound		Total	Total
		UT	LT	TH	RT		Total												
7:00) AM	0	2	11	2	0	10	38	6	0	0	13	4	0	6	29	24	145	0
7:15	5 AM	0	5	14	3	0	13	68	5	0	3	8	9	0	11	44	34	217	0
7:30) AM	0	2	28	2	0	15	85	12	0	1	17	14	0	42	41	59	318	0
7:45	5 AM	0	4	31	1	0	22	96	14	0	4	24	10	0	15	33	34	288	968
8:00) AM	0	3	27	5	0	10	60	17	0	4	17	11	0	14	52	36	256	1,079
8:15	5 AM	0	3	22	2	0	18	63	17	0	5	16	9	0	16	34	31	236	1,098
8:30) AM	0	2	26	4	0	11	59	13	0	3	12	6	0	15	53	31	235	1,015
8:45	5 AM	0	2	30	4	0	12	49	7	0	5	18	16	0	16	43	19	221	948
Count	t Total	0	23	189	23	0	111	518	91	0	25	125	79	0	135	329	268	1,916	
	All	0	12	108	10	0	65	304	60	0	14	74	44	0	87	160	160	1,098	
Pk Hr	HV	0	0	6	0	0	2	3	2	0	1	0	2	0	1	2	1	20	
	HV%	-	0%	6%	0%	-	3%	1%	3%	-	7%	0%	5%	-	1%	1%	1%	2%	

Interval		Hea	vy Veh	icle Tota	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	Е	W	N	S	Total
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
7:15 AM	2	1	1	1	5	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	4	2	2	10	0	0	1	0	1	0	0	0	0	0
7:45 AM	1	1	1	1	4	0	0	0	0	0	0	0	0	0	0
8:00 AM	2	1	0	1	4	0	0	1	2	3	0	0	0	0	0
8:15 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0
8:30 AM	1	1	1	2	5	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	4	2	2	8	0	0	2	0	2	0	0	0	0	0
Count Total	9	14	7	9	39	1	1	4	2	8	0	0	0	0	0
Peak Hour	6	7	3	4	20	1	1	2	2	6	0	0	0	0	0

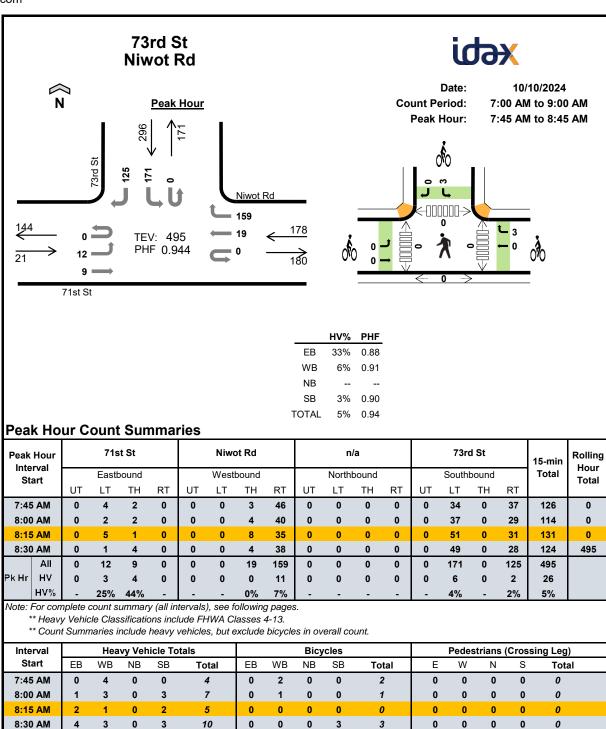
Count S	umn	narie	s - H	leav	/ Vel	nicle	s											
Interval		Nelso				Nelso	on Rd			N 75	th St			N 75	th St		15-min	Rolling Hour
Start		Easth	ound			West	bound			North	bound			South	bound		Total	Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	5	0
7:30 AM	0	0	2	0	0	0	3	1	0	0	0	2	0	1	0	1	10	0
7:45 AM	0	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	4	20
8:00 AM	0	0	2	0	0	1	0	0	0	0	0	0	0	0	1	0	4	23
8:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	20
8:30 AM	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	1	5	15
8:45 AM	0	0	0	0	0	2	2	0	0	0	1	1	0	0	1	1	8	19
Count Total	0	0	9	0	0	4	7	3	0	1	3	3	0	1	5	3	39	
Pk Hr Heavy	0	0	6	0	0	2	3	2	0	1	0	2	0	1	2	1	20	
Count Si		! .		:1														
Count St	umn	narie	s - B	ikes														
Interval	umm	Nelso		ikes		Nelse	on Rd			N 75	th St			N 75	th St		15-min	Rolling
	umn		on Rd	orkes			on Rd bound				th St				th St		15-min Total	Hour
Interval	UT	Nelso	on Rd	RT	UT			RT	UT			RT	UT			RT		
Interval		Nelso Easth	on Rd			West	bound	RT 0	UT 0	North	bound	RT 0	UT 0	South	bound	RT 0		Hour
Interval Start	UT	Nelso Eastb LT	on Rd bound TH	RT	UT	West	bound TH			North LT	bound TH			South LT	bound TH		Total	Hour Total
Interval Start	UT 0	Nelso Eastb LT	on Rd bound TH 0	RT 0	UT 0	West	bound TH 0	0	0	North LT 0	bound TH 0	0	0	South LT 0	bound TH 0	0	Total	Hour Total
Interval Start 7:00 AM 7:15 AM	UT 0 0	Nelso Eastb	on Rd oound TH 0 0	RT 0 0	UT 0 0	West	bound TH 0	0 0	0	North LT 0	bound TH 0	0 0	0	South LT 0	bound TH 0	0 0	Total 0 0	Hour Total 0
Interval Start 7:00 AM 7:15 AM 7:30 AM	UT 0 0 0	Nelso Easth LT 0 0	on Rd oound TH 0 0	RT 0 0 0	UT 0 0	West	bound TH 0 0	0 0 0	0 0 0	North LT 0 0	bound TH 0 0	0 0 0	0 0 0	South LT 0 0	bound TH 0 0	0 0 0	0 0 1	Hour Total 0 0
7:00 AM 7:15 AM 7:30 AM 7:45 AM	UT 0 0 0 0 0	Nelso Eastb LT 0 0 0	on Rd oound TH 0 0 0	RT 0 0 0 0 0 0	UT 0 0 0 0 0 0	West LT 0 0 0 0 0 0	bound TH 0 0 0	0 0 0	0 0 0	North	bound TH 0 0 0 0	0 0 0	0 0 0	South	bound TH 0 0 0	0 0 0	0 0 1 0	Hour Total 0 0 1
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 0	on Rd oound TH 0 0 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0	West	bound TH 0 0 0 0 0	0 0 0 0	0 0 0 0	North LT 0 0 1 0 0	bound TH 0 0 0 1	0 0 0 0	0 0 0 0	South LT 0 0 0 0 0	bound TH 0 0 0 0	0 0 0 0	Total 0 0 1 0 3	Hour Total 0 0 1 4
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM	UT 0 0 0 0 0 0 0 0	Nelso Eastlt LT 0 0 0 0 0	on Rd oound TH 0 0 0 0 1	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	West LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 1	0 0 0 0 0	0 0 0 0 0	North LT 0 0 1 0 0 0	bound TH 0 0 0 1 0	0 0 0 0 0	0 0 0 0 0	South LT 0 0 0 0 0 0	bound TH 0 0 0 2 0	0 0 0 0 0	Total 0 0 1 0 3 2	Hour Total 0 0 1 4 6
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM	UT 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastlt LT 0 0 0 0 0 0 0	on Rd oound TH 0 0 0 1 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Westl LT 0 0 0 0 0 0 0	bound TH 0 0 0 0 1 0	0 0 0 0 0	0 0 0 0 0	North LT 0 0 0 1 0 0 0 0	bound TH 0 0 0 1 0 0	0 0 0 0 0 0	0 0 0 0 0	South LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 2 0 0	0 0 0 0 0 0	Total 0 0 1 0 3 2 0	Hour Total 0 0 1 4 6 5



COU	nt Sı	ullilli	iaile	3 - A	ii ve	HILLI	53			ı								1	1
Inte	rval		Nelso	on Rd			Nelso	on Rd			N 75	th St			N 75	th St		15-min	Rolling Hour
St	art		Eastb	ound			West	bound			North	bound			South	bound		Total	Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
1:30	PM	0	10	27	1	0	5	20	16	0	3	17	11	0	12	16	5	143	0
1:45	5 PM	0	10	34	2	0	4	34	19	0	1	20	10	0	6	17	4	161	0
2:00) PM	0	9	27	2	0	11	22	9	0	1	19	14	0	6	11	7	138	0
2:15	5 PM	0	14	35	2	0	9	24	13	0	2	28	8	0	12	18	5	170	612
2:30	PM	0	20	34	4	0	7	20	14	0	1	22	10	0	20	30	6	188	657
2:45	5 PM	0	19	51	4	0	10	37	23	0	1	28	8	0	19	19	4	223	719
3:00) PM	0	22	47	3	0	13	35	33	0	4	30	6	0	13	16	5	227	808
3:15	5 PM	0	37	57	2	0	6	29	24	0	3	29	10	0	14	26	4	241	879
3:30) PM	0	37	65	5	0	10	29	24	0	6	33	20	0	13	25	7	274	965
3:45	5 PM	0	35	71	5	0	10	29	26	0	6	36	20	0	16	27	3	284	1,026
4:00) PM	0	44	57	7	0	11	29	15	0	4	43	10	0	19	28	8	275	1,074
4:15	5 PM	0	48	62	4	0	7	32	24	0	4	27	8	0	10	22	8	256	1,089
4:30) PM	0	45	82	3	0	8	31	16	0	2	49	16	0	10	22	5	289	1,104
4:45	5 PM	0	49	83	6	0	11	29	21	0	2	44	11	0	24	21	2	303	1,123
Coun	t Total	0	399	732	50	0	122	400	277	0	40	425	162	0	194	298	73	3,172	
	All	0	186	284	20	0	37	121	76	0	12	163	45	0	63	93	23	1,123	
Pk Hr	HV	0	7	5	0	0	0	3	0	0	1	3	1	0	4	0	1	25	
	HV%	-	4%	2%	0%	-	0%	2%	0%	-	8%	2%	2%	-	6%	0%	4%	2%	

Interval		Heav	/y Vehi	cle Tota	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	Е	W	N	S	Total
1:30 PM	1	1	1	0	3	2	2	2	1	7	0	0	0	0	0
1:45 PM	2	1	2	2	7	3	2	1	4	10	0	0	0	0	0
2:00 PM	1	0	1	0	2	3	0	2	2	7	0	0	0	0	0
2:15 PM	1	0	1	4	6	1	0	0	1	2	0	0	0	0	0
2:30 PM	2	1	1	1	5	5	0	1	1	7	0	0	0	0	0
2:45 PM	3	3	1	2	9	2	0	0	2	4	0	0	0	0	0
3:00 PM	2	4	2	0	8	2	0	1	1	4	0	0	0	0	0
3:15 PM	2	3	2	2	9	1	0	0	0	1	0	0	0	0	0
3:30 PM	6	4	2	1	13	0	0	0	1	1	0	0	0	0	0
3:45 PM	3	1	4	0	8	0	0	0	3	3	0	0	0	0	0
4:00 PM	2	1	1	1	5	1	0	1	2	4	0	0	0	0	0
4:15 PM	2	2	1	1	6	0	3	0	0	3	0	0	0	0	0
4:30 PM	5	0	1	2	8	0	0	0	2	2	0	0	0	0	0
4:45 PM	3	0	2	1	6	1	0	1	5	7	0	0	0	0	0
Count Total	35	21	22	17	95	21	7	9	25	62	0	0	0	0	0
Peak Hour	12	3	5	5	25	2	3	2	9	16	0	0	0	0	0

0 10																		
Count S	umn			leavy	/ Vet				I									
Interval		Neise	on Rd			Neiso	on Rd			N /5	th St			N /5	th St		15-min	Rolling Hour
Start			oound				bound				bound			South			Total	Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:30 PM	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	0
1:45 PM	0	1	1	0	0	0	1	0	0	0	2	0	0	1	1	0	7	0
2:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0
2:15 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	2	2	0	6	18
2:30 PM	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	0	5	20
2:45 PM	0	0	3	0	0	0	3	0	0	0	1	0	0	2	0	0	9	22
3:00 PM	0	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	8	28
3:15 PM	0	0	2	0	0	0	3	0	0	0	1	1	0	1	1	0	9	31
3:30 PM	0	1	5	0	0	2	0	2	0	0	2	0	0	1	0	0	13	39
3:45 PM	0	0	3	0	0	0	0	1	0	1	2	1	0	0	0	0	8	38
4:00 PM	0	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0	5	35
4:15 PM	0	2	0	0	0	0	2	0	0	1	0	0	0	0	0	1	6	32
4:30 PM	0	4	1	0	0	0	0	0	0	0	0	1	0	2	0	0	8 6	27
4:45 PM	0	0	3 21	2	0	4		6	0	2	2	3	0		5	0	95	25
Count Total Pk Hr Heavy	0	7	5	0	0	0	11 3				17			11				
r k ili ilcavy										1	- 3			4	0	1	25	
0					_	U	ა	0	0	1	3	1	0	4	0	1	25	
Count S	umn				_	U	ა	U	U	1	3	1	U	4	0	1	25	
	umn	narie			_		on Rd	U			th St	1	U		th St	1		Rolling
Interval	umn	narie Nelse	s - B		_	Nelso		0	0	N 75		1	0		th St	1	15-min Total	Hour
Interval	UT	narie Nelse	S - B		_	Nelso	on Rd	RT	UT	N 75	th St	RT	UT	N 75	th St	RT	15-min	_
Interval		Nelso Eastk	s - B on Rd	ikes		Nelso	on Rd bound			N 75	th St			N 75	th St		15-min	Hour
Interval Start	UT	Nelso Eastb	S - B on Rd oound TH	RT	UT	Nelso Westl LT	on Rd bound TH	RT	UT	N 75	th St bound TH	RT	UT	N 75 South	th St bound TH	RT	15-min Total	Hour Total
Interval Start	UT 0	Nelso Easth LT 0	s - B on Rd oound TH	RT 1	UT 0	Westl LT	on Rd bound TH	RT 1	UT 0	N 75 North	th St bound TH	RT 0	UT 0	N 75 South LT 0	th St bound TH	RT 1	15-min Total	Hour Total
Interval Start 1:30 PM 1:45 PM	UT 0 0	Nelso Eastt LT 0 0	s - B on Rd oound TH 1 2	RT 1	UT 0 0	Westl LT 0	bound TH 1 2	RT 1 0	UT 0 0	N 75 North	th St bound TH 1	RT 0 0	UT 0 0	N 75 South	th St bound TH 0 4	RT 1 0	15-min Total 7 10	Hour Total 0 0
Interval Start 1:30 PM 1:45 PM 2:00 PM	UT 0 0 0	Nelso Eastt LT 0 0	s - B on Rd cound TH 1 2	RT 1 1 2	UT 0 0 0	Westl LT 0 0	bound TH 1 2 0	RT 1 0 0	UT 0 0 0	N 75 North LT 1 0 1	th St bound TH 1 1	RT 0 0 0	UT 0 0 0	N 75 South LT 0 0	th St bound TH 0 4 2	RT 1 0 0	7 10 7	Hour Total 0 0 0
1:30 PM 1:45 PM 2:00 PM 2:15 PM	UT 0 0 0 0 0	Nelso Easth LT 0 0 0	s - Bon Rd bound TH 1 2 1 1	RT 1 1 2 0	UT 0 0 0 0 0	Westl LT 0 0 0	bound TH 1 2 0	RT 1 0 0 0	UT 0 0 0 0 0	N 75 Northl LT 1 0 1	bound TH 1 1 0	RT 0 0 0 0 0	UT 0 0 0 0 0	N 75 South LT 0 0 1	bound TH 0 4 2 0	RT 1 0 0 0 0	7 10 7 2	Hour Total 0 0 0 0 26
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM	UT 0 0 0 0 0 0 0	Nelso Easth LT 0 0 0	s - B cound TH 1 2 1 1 2	RT 1 1 2 0 2	UT 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0	bound TH 1 2 0 0	RT 1 0 0 0 0 0 0	UT 0 0 0 0 0 0 0	N 75 Northl LT 1 0 1 0 0	th St bound TH 1 1 0 1	RT 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0	th St bound TH 0 4 2 0	RT 1 0 0 0 0 0	7 10 7 2 7	0 0 0 0 26 26
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM	UT 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1	s - B on Rd oound TH 1 2 1 1 2 2	RT 1 1 2 0 2 0	UT 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0	bound TH 1 2 0 0 0 0	RT 1 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0	N 75 North LT 1 0 1 0 0	th St bound TH 1 1 0 1	RT 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0 2	th St bound TH 0 4 2 0 1	RT 1 0 0 0 0 0 0 0	7 10 7 2 7 4	Hour Total 0 0 0 26 26 20
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM	UT 0 0 0 0 0 0 0 0 0 0	Nelso Easttl LT 0 0 0 1 1	s - B on Rd oound TH 1 2 1 2 1	RT 1 1 2 0 2 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0	bound TH 1 2 0 0 0 0 0	RT 1 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0	N 75 North LT 1 0 1 0 0 0 0	th St bound TH 1 1 0 1 0	RT 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0 2 0	th St bound TH 0 4 2 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4	0 0 0 0 26 26 20 17
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1 0 1	s - B ound TH 1 2 1 1 2 1 1	RT 1 1 2 0 2 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Westi LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 1 2 0 0 0 0 0 0	RT 1 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 North LT 1 0 1 0 0 0 0 0 0 0	th St bound TH 1 1 0 1 0 1	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 0 1 0 2 0 0 0 3	th St bound TH 0 4 2 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1	Hour Total 0 0 0 26 26 20 17 16 10 9
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso	s - B ound TH 1 2 1 1 2 1 1 0	RT 1 1 2 0 2 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0 0 0 0 0	bound TH 1 2 0 0 0 0 0 0 0	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 Northl LT 1 0 1 0 0 0 0 0	th St bound TH 1 1 0 1 0 1 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 0 1 0 2 0 0 0	th St bound TH 0 4 2 0 1 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1 1	Hour Total 0 0 0 26 26 20 17 16 10
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1 0 1 0 0 0 0 0 0	S - B on Rd cound TH 1 2 1 1 2 1 0 0 0 0	RT 1 1 2 0 2 0 0 0 0 0 0 1 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0	on Rd bound TH 1 2 0 0 0 0 0 0 0 0 0 2	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 Northi LT 1 0 1 0 0 0 0 0 0 0 0	th St bound TH 1 1 0 1 0 1 0 0 1 0 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 0 1 0 2 0 0 3 1 0	th St bound TH 0 4 2 0 1 0 1 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1 3 4 3	Hour Total 0 0 0 26 26 20 17 16 10 9
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1 0 1 0 0 0 0 0	s - B on Rd cound TH 1 2 1 1 2 1 0 0 0 0 0	RT 1 1 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0 0 0 0 0 0 0	on Rd bound TH 1 2 0 0 0 0 0 0 0 0 2 0	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 Northi LT 1 0 1 0 0 0 0 0 0 0 0	th St bound TH 1 1 0 1 0 1 0 0 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0 2 0 0 3 1 0 0	th St bound TH 0 4 2 0 1 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1 3 4 3 2	Hour Total 0 0 0 26 26 20 17 16 10 9 9 11 12
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1 0 1 0 0 0 0 0 0 0	s - B on Rd cound TH 1 2 1 1 2 1 1 0 0 0 0 0	RT 1 1 2 0 2 0 0 0 0 0 1 0 0 0 1	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0	on Rd bound TH 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 Northi LT 1 0 1 0 0 0 0 0 0 0 0	th St bound TH 1 1 0 1 0 0 1 0 0 0 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0 2 0 0 3 1 0 0	th St bound TH 0 4 2 0 1 0 1 0 1 0 1	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1 3 4 3 2 7	Hour Total 0 0 0 26 26 20 17 16 10 9 9 11
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM 4:30 PM	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Eastt LT 0 0 0 1 0 1 0 0 0 0 0 0 0	s - B on Rd cound TH 1 2 1 1 2 1 0 0 0 0 0	RT 1 1 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nelso Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0	on Rd bound TH 1 2 0 0 0 0 0 0 0 0 2 0	RT 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 Northi LT 1 0 1 0 0 0 0 0 0 0 0	th St bound TH 1 1 0 1 0 1 0 0 0 1 0 0	RT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N 75 South LT 0 0 1 0 2 0 0 3 1 0 0	th St bound TH 0 4 2 0 1 0 1 0 1 0 1 0 2	RT 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 10 7 2 7 4 4 1 1 3 4 3 2	Hour Total 0 0 0 26 26 20 17 16 10 9 9 11 12



Peak Hour

11

0

8

26

3

0

3

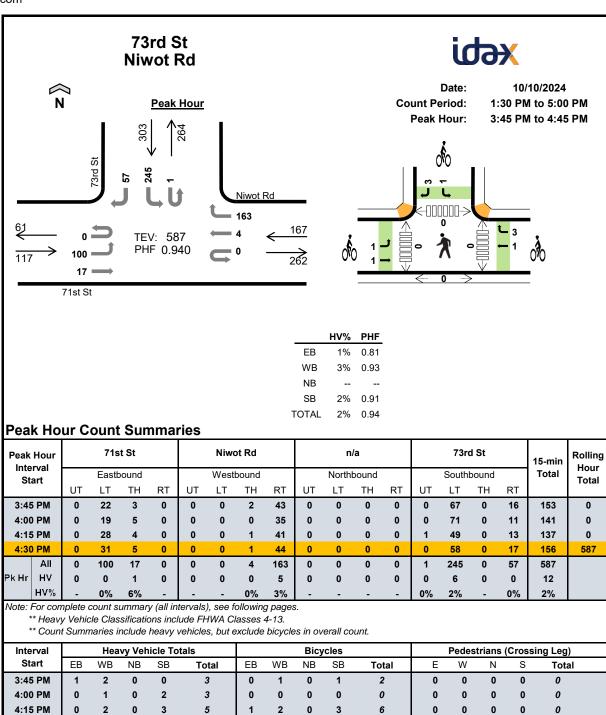
0

0

Inte	rval		71s	t St			Niw	ot Rd			n	/a			73r	d St		15-min	Rolling Hour
St	art		Eastb	ound			West	bound			North	bound			South	bound		Total	Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
7:00	MA (0	2	2	0	0	0	3	11	0	0	0	0	0	40	0	13	71	0
7:15	5 AM	0	1	1	0	0	0	2	26	0	0	0	0	0	59	0	21	110	0
7:30) AM	0	1	1	0	0	0	4	30	0	0	0	0	0	58	0	22	116	0
7:45	5 AM	0	4	2	0	0	0	3	46	0	0	0	0	0	34	0	37	126	423
8:00) AM	0	2	2	0	0	0	4	40	0	0	0	0	0	37	0	29	114	466
8:15	5 AM	0	5	1	0	0	0	8	35	0	0	0	0	0	51	0	31	131	487
8:30) AM	0	1	4	0	0	0	4	38	0	0	0	0	0	49	0	28	124	495
8:45	5 AM	0	3	4	0	0	0	2	33	0	0	0	0	0	53	0	19	114	483
Coun	t Total	0	19	17	0	0	0	30	259	0	0	0	0	0	381	0	200	906	
	All	0	12	9	0	0	0	19	159	0	0	0	0	0	171	0	125	495	
k Hr	HV	0	3	4	0	0	0	0	11	0	0	0	0	0	6	0	2	26	
	HV%	-	25%	44%	-	-	-	0%	7%	-	-	_	-	-	4%	-	2%	5%	

Interval		Hea	vy Veh	icle Tot	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0
7:15 AM	0	5	0	3	8	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	2	0	2	0	1	3	0	0	0	0	0
7:45 AM	0	4	0	0	4	0	2	0	0	2	0	0	0	0	0
8:00 AM	1	3	0	3	7	0	1	0	0	1	0	0	0	0	0
8:15 AM	2	1	0	2	5	0	0	0	0	0	0	0	0	0	0
8:30 AM	4	3	0	3	10	0	0	0	3	3	0	0	0	0	0
8:45 AM	3	0	0	3	6	1	1	0	1	3	0	0	0	0	0
Count Total	11	20	0	14	45	1	7	0	5	13	0	0	0	0	0
Peak Hour	7	11	0	8	26	0	3	0	3	6	0	0	0	0	0

Count S	umn	narie	s - H	eav	/ Vel	nicle	s											
Interval		71s	t St			Niwo	ot Rd				/a				d St		15-min	Rolling Hour
Start		Eastb	ound			West	bound			North	bound			South	bound		Total	Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	1	8	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	17
8:00 AM	0	1	0	0	0	0	0	3	0	0	0	0	0	2	0	1	7	21
8:15 AM	0	1	1	0	0	0	0	1	0	0	0	0	0	2	0	0	5	18
8:30 AM	0	1	3	0	0	0	0	3	0	0	0	0	0	2	0	1	10	26
8:45 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	6	28
Count Total	0	3	8	0	0	0	0	20	0	0	0	0	0	11	0	3	45	
Pk Hr Heavy	0	3	4	0	0	0	0	11	0	0	0	0	0	6	0	2	26	
Count S	umn	narie	s - B	ikes														
Interval		71s	t St			Niwo	nt Rd							73r	٦.04			
							, u			n	/a			7 31	a St		15-min	Rolling
Start		Easth	ound			West	bound										15-min Total	Hour
Start	UT	Eastb	ound TH	RT	UT	West		RT	UT		/ a bound TH	RT	UT		bound	RT	-1	_
7:00 AM	UT 0			RT 0	UT 0		bound	RT 0	UT 0	North	bound	RT 0	UT 0	South	bound	RT 0	-1	Hour
		LT	TH			LT	bound TH			North LT	bound TH			South LT	bound TH		Total	Hour Total
7:00 AM	0	LT 0	TH 0	0	0	LT 0	bound TH 1	0	0	North LT 0	bound TH 0	0	0	South LT 0	bound TH 0	0	Total 1	Hour Total
7:00 AM 7:15 AM	0	LT 0 0	TH 0 0	0	0	LT 0 0	bound TH 1	0	0	North LT 0	bound TH 0	0	0	South LT 0	bound TH 0	0	Total 1 0	Hour Total 0 0
7:00 AM 7:15 AM 7:30 AM	0 0 0	0 0 0	TH 0 0 0	0 0 0	0 0	LT 0 0	bound TH 1 0	0 0 1	0 0 0	North LT 0 0	bound TH 0 0	0 0 0	0 0	South LT 0 0	bound TH 0 0	0 0 1	1 0 3	Hour Total 0 0
7:00 AM 7:15 AM 7:30 AM 7:45 AM	0 0 0 0	LT 0 0 0 0 0	TH 0 0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	bound TH 1 0 1	0 0 1 2	0 0 0 0	North LT 0 0 0 0	bound TH 0 0 0 0	0 0 0	0 0 0	South LT 0 0 0 0 0	bound TH 0 0 0 0	0 0 1 0	1 0 3 2	Hour Total 0 0 0 6
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM	0 0 0 0	0 0 0 0 0	TH 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0	LT 0 0 0 0	bound TH 1 0 1 0 0	0 0 1 2 1	0 0 0 0	North LT 0 0 0 0 0 0	bound TH 0 0 0 0	0 0 0 0	0 0 0 0	South LT 0 0 0 0 0	bound TH 0 0 0 0 0	0 0 1 0 0	1 0 3 2 1	Hour Total 0 0 0 6 6
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM	0 0 0 0 0	LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TH 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 1 0 1 0 0	0 0 1 2 1	0 0 0 0 0	North LT 0 0 0 0 0	bound TH 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	South LT 0 0 0 0 0	bound TH 0 0 0 0 0 0	0 0 1 0 0	1 0 3 2 1 0	Hour Total 0 0 0 6 6 6
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM	0 0 0 0 0	LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 1 0 1 0 0 0 0	0 0 1 2 1 0	0 0 0 0 0	North LT 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	South LT 0 0 0 0 0 0 0 0 3	bound TH 0 0 0 0 0 0 0	0 0 1 0 0	1 0 3 2 1 0 3 3	Hour Total 0 0 0 6 6 6 6



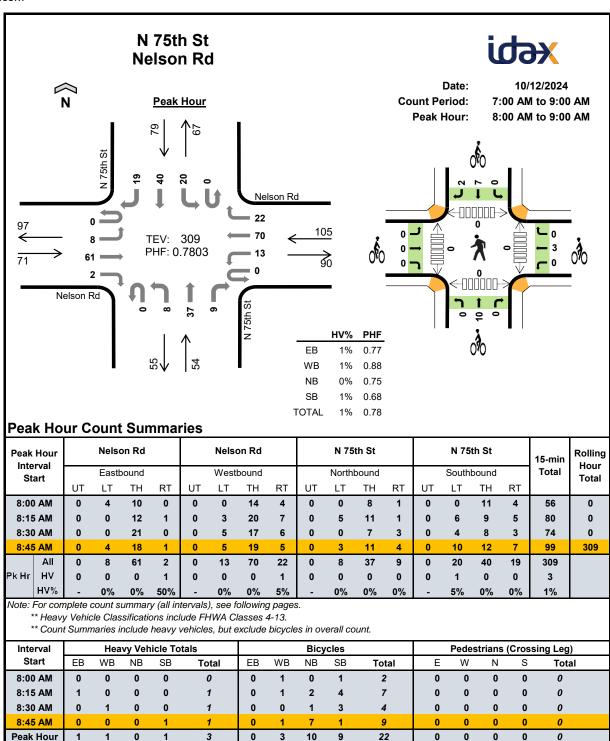
4:30 PM

Peak Hour

Inte	rval		71s	t St			Niwo	ot Rd			n	/a			73r	d St		15-min	Rolling
St	art		Eastb	ound			Westl	bound			North	bound			South	bound		Total	Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
1:30	PM	0	9	3	0	0	0	2	30	0	0	0	0	0	40	0	4	88	0
1:45	5 PM	0	5	2	0	0	0	1	32	0	0	0	0	0	23	0	6	69	0
2:00	PM (0	12	5	0	0	0	2	33	0	0	0	0	0	35	0	5	92	0
2:15	5 PM	0	9	3	0	0	0	4	36	0	0	0	0	0	33	0	12	97	346
2:30	PM (0	8	6	0	0	0	2	37	0	0	0	0	0	32	0	11	96	354
2:45	5 PM	0	9	4	0	0	0	1	51	0	0	0	0	0	36	0	11	112	397
3:00	PM (0	17	5	0	0	0	0	42	0	0	0	0	0	28	0	8	100	405
3:15	5 PM	0	14	6	0	0	0	2	42	0	0	0	0	0	40	0	8	112	420
3:30) PM	0	17	8	0	0	0	1	36	0	0	0	0	0	38	0	9	109	433
3:45	5 PM	0	22	3	0	0	0	2	43	0	0	0	0	0	67	0	16	153	474
4:00) PM	0	19	5	0	0	0	0	35	0	0	0	0	0	71	0	11	141	515
4:15	5 PM	0	28	4	0	0	0	1	41	0	0	0	0	1	49	0	13	137	540
4:30	PM (0	31	5	0	0	0	1	44	0	0	0	0	0	58	0	17	156	587
4:45	5 PM	0	20	0	0	0	0	1	42	0	0	0	0	0	48	0	9	120	554
Coun	t Total	0	220	59	0	0	0	20	544	0	0	0	0	1	598	0	140	1,582	
	All	0	100	17	0	0	0	4	163	0	0	0	0	1	245	0	57	587	
k Hr	HV	0	0	1	0	0	0	0	5	0	0	0	0	0	6	0	0	12	
	HV%	-	0%	6%	-	-	-	0%	3%	-	-	-	-	0%	2%	-	0%	2%	

Interval		Heav	/y Vehi	cle Tot	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	Е	W	N	S	Total
1:30 PM	3	1	0	2	6	1	0	0	2	3	0	0	0	0	0
1:45 PM	2	2	0	3	7	3	1	0	2	6	0	0	0	0	0
2:00 PM	2	2	0	1	5	0	0	0	4	4	0	0	0	0	0
2:15 PM	2	1	0	5	8	0	1	0	2	3	0	0	0	0	0
2:30 PM	3	1	0	1	5	1	0	0	0	1	0	0	0	0	0
2:45 PM	3	0	0	0	3	0	0	0	2	2	0	0	0	0	0
3:00 PM	3	2	0	1	6	0	2	0	0	2	0	0	0	0	0
3:15 PM	0	1	0	1	2	0	1	0	5	6	0	0	0	0	0
3:30 PM	1	1	0	1	3	0	1	0	1	2	0	0	0	0	0
3:45 PM	1	2	0	0	3	0	1	0	1	2	0	0	0	0	0
4:00 PM	0	1	0	2	3	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	3	5	1	2	0	3	6	0	0	0	0	0
4:30 PM	0	0	0	1	1	1	1	0	0	2	0	0	0	0	0
4:45 PM	0	1	0	3	4	2	2	0	2	6	0	0	0	0	0
Count Total	20	17	0	24	61	9	12	0	24	45	0	0	0	0	0
Peak Hour	1	5	0	6	12	2	4	0	4	10	0	0	0	0	0

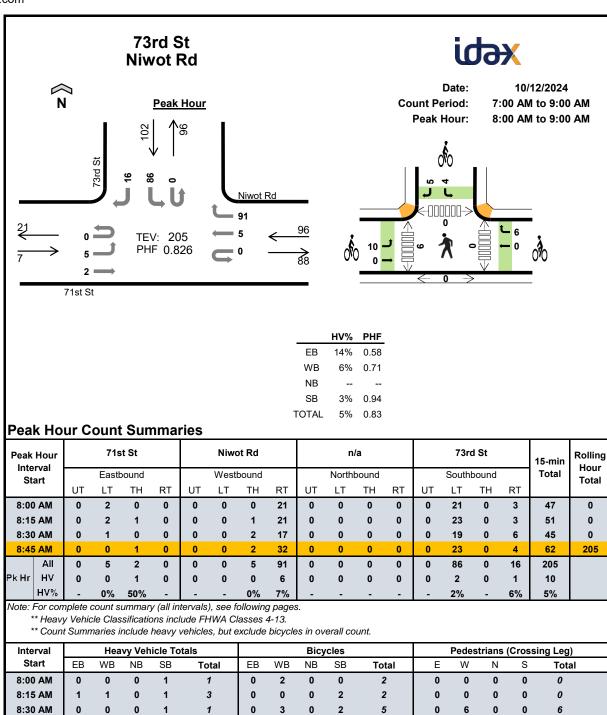
Count S	umn	narie	s - H	leavy	/ Veł	nicle	s											
Interval		71s	t St			Niwo	ot Rd			n	/a			73r	d St		15-min	Rolling
Start		East	oound			Westl	bound			North	bound			South	bound		Total	Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:30 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	2	0	0	6	0
1:45 PM	0	1	1	0	0	0	0	2	0	0	0	0	0	3	0	0	7	0
2:00 PM	0	0	2	0	0	0	1	1	0	0	0	0	0	1	0	0	5	0
2:15 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	4	0	1	8	26
2:30 PM	0	0	3	0	0	0	0	1	0	0	0	0	0	1	0	0	5	25
2:45 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	21
3:00 PM	0	0	3	0	0	0	0	2	0	0	0	0	0	1	0	0	6	22
3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	16
3:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	3	14
3:45 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	3	14
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3	11
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	5	14
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	12
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	4	13
Count Total	0	3	17	0	0	0	1	16	0	0	0	0	0	23	0	1	61	
Pk Hr Heavy	0	0	1	0	0	0	0	5	0	0	0	0	0	6	0	0	12	
Count S	umn	narie	<u>s - B</u>	ikes														
Interval		74-																
		/18	t St			Niwo	t Rd			n	/a			73r	d St		15-min	Rolling
Start			oound				ot Rd bound				/ a bound			73rd South			15-min Total	Hour
	UT			RT	UT			RT	UT			RT	UT			RT	-1	_
	UT 0	East	oound	RT 0	UT 0	West	bound	RT 0	UT 0	North	bound	RT 0	UT 0	South	bound	RT 2	-1	Hour
Start		Eastb LT	oound TH			Westl	bound TH			North LT	bound TH		_	South LT	bound TH		Total	Hour Total
Start 1:30 PM	0	Eastb LT 1	oound TH 0	0	0	Westl LT 0	bound TH 0	0	0	North	bound TH 0	0	0	South LT 0	bound TH 0	2	Total 3	Hour Total
1:30 PM 1:45 PM	0	Eastle LT 1	oound TH 0	0 0	0	Westl LT 0	oound TH 0	0 1	0	North LT 0 0	bound TH 0	0 0	0	South LT 0	bound TH 0	2 2	Total 3 6	Hour Total 0 0
1:30 PM 1:45 PM 2:00 PM	0 0 0	Eastb LT 1 3	oound TH 0 0	0 0 0	0 0	Westi LT 0 0	TH 0 0	0 1 0	0 0 0	North LT 0 0 0	bound TH 0 0	0 0 0	0 0 0	South LT 0 0 2	bound TH 0 0	2 2 2	3 6 4	Hour Total 0 0 0
1:30 PM 1:45 PM 2:00 PM 2:15 PM	0 0 0 0	Easth LT 1 3 0	oound TH 0 0 0 0	0 0 0	0 0 0 0	Westl LT 0 0 0	Dound TH 0 0 0 0	0 1 0 1	0 0 0 0	North LT 0 0 0 0	bound TH 0 0 0 0	0 0 0	0 0 0	South LT 0 0 2 1	bound TH 0 0 0 0	2 2 2 1	3 6 4 3	Hour Total 0 0 0 0
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM	0 0 0 0	Easttl LT	oound TH 0 0 0 0	0 0 0 0	0 0 0 0	Westl LT 0 0 0 0 0 0 0 0	0 0 0 0 0	0 1 0 1	0 0 0 0	North LT 0 0 0 0 0 0	bound TH 0 0 0 0 0	0 0 0 0	0 0 0 0	South LT 0 0 2 1 0 0	bound TH 0 0 0 0 0	2 2 2 1 0	3 6 4 3 1	Hour Total 0 0 0 0 16 14
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM	0 0 0 0 0	Easth LT	oound TH 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	Westl LT 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 1 0 1 0	0 0 0 0 0	North LT 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	South LT 0 0 2 1 0 1	bound TH 0 0 0 0 0	2 2 2 1 0	3 6 4 3 1 2	Hour Total 0 0 0 16 14 10
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM	0 0 0 0 0	Eastb LT	oound TH 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	Westl LT 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0	0 1 0 1 0 0 2	0 0 0 0 0	North LT 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	South LT 0 0 2 1 0 1 0 0	bound TH 0 0 0 0 0 0	2 2 2 1 0 1	3 6 4 3 1 2 2	0 0 0 16 14 10 8
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM	0 0 0 0 0 0	Eastb LT	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	Westi LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 1 0 1 0 0 2	0 0 0 0 0 0	Northi LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	South LT 0 0 2 1 0 1 0 2 2	bound TH 0 0 0 0 0 0 0 0 0	2 2 2 1 0 1 0 3	3 6 4 3 1 2 2 6	Hour Total 0 0 0 16 14 10 8 11
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM	0 0 0 0 0 0 0	Easttl LT 1 3 0 0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	Westll LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 2 1 0	0 0 0 0 0 0 0	Northi LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	South LT 0 0 2 1 0 1 0 2 1 1 0 2 1 1	bound TH 0 0 0 0 0 0 0 0 0 0 0	2 2 2 1 0 1 0 3 0	3 6 4 3 1 2 2 6 2	Hour Total 0 0 0 16 14 10 8 11 12
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM	0 0 0 0 0 0 0	Eastlt LT	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	Westll LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 1 1	0 1 0 1 0 0 2 1 0	0 0 0 0 0 0 0	Northle LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	South LT 0 0 2 1 0 1 0 2 1 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0	2 2 2 1 0 1 0 3 0	3 6 4 3 1 2 2 6 2 2 2	Hour Total 0 0 0 16 14 10 8 11 12 12
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM	0 0 0 0 0 0 0	Eastlt LT	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 2 1 0 0	0 0 0 0 0 0 0 0	Northle LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	South LT 0 0 2 1 0 1 0 2 1 0 0	bound TH	2 2 2 1 0 1 0 3 0 1 0	Total 3 6 4 3 1 2 2 6 2 0	Hour Total 0 0 0 16 14 10 8 11 12 12 10
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM	0 0 0 0 0 0 0 0	Eastt LT 1 3 0 0 1 0 0 0 0 0 0	oound TH	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 2 1 0 0 0	0 0 0 0 0 0 0 0	Northle LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	South LT 0 0 2 1 0 1 0 0 1 1 0 0 1 1	bound TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 1 0 1 0 3 0 1 0 2	Total 3 6 4 3 1 2 2 6 2 0 6	Hour Total 0 0 0 16 14 10 8 11 12 12 10 10
1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM	0 0 0 0 0 0 0 0	Eastt LT 1 3 0 0 1 0 0 0 0 0 0 1	oound TH 0 0 0 0 0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	Westl LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 1 0 0 2 1 0 0 0 2 1 0	0 0 0 0 0 0 0 0 0	North LT 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	South LT 0 0 2 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0	bound TH 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 1 0 1 0 3 0 1 0 2	Total 3 6 4 3 1 2 2 6 2 0 6 2	Hour Total 0 0 0 16 14 10 8 11 12 12 10 10



Inte	rval		Nelso	on Rd			Nelso	on Rd			N 75	th St			N 75	th St		15-min	Rolling Hour
St	art		Easth	ound			Westl	bound			North	bound			South	bound		Total	Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		lotai
7:00) AM	0	4	2	0	0	0	7	3	0	0	5	1	0	2	4	3	31	0
7:15	5 AM	0	0	6	1	0	1	11	6	0	0	5	1	0	6	4	7	48	0
7:30) AM	0	2	8	0	0	2	9	3	0	0	3	2	0	3	5	1	38	0
7:45	5 AM	0	6	9	1	0	1	23	6	0	0	10	1	0	1	7	8	73	190
8:00) AM	0	4	10	0	0	0	14	4	0	0	8	1	0	0	11	4	56	215
8:15	5 AM	0	0	12	1	0	3	20	7	0	5	11	1	0	6	9	5	80	247
8:30) AM	0	0	21	0	0	5	17	6	0	0	7	3	0	4	8	3	74	283
8:45	5 AM	0	4	18	1	0	5	19	5	0	3	11	4	0	10	12	7	99	309
Coun	t Total	0	20	86	4	0	17	120	40	0	8	60	14	0	32	60	38	499	
	All	0	8	61	2	0	13	70	22	0	8	37	9	0	20	40	19	309	
k Hr	HV	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	3	
	HV%	-	0%	0%	50%	-	0%	0%	5%	-	0%	0%	0%	-	5%	0%	0%	1%	

Interval		Hea	vy Veh	icle Tot	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	Е	W	N	S	Total
7:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	2	1	4	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	2	0	0	1	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0
8:15 AM	1	0	0	0	1	0	1	2	4	7	0	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	1	3	4	0	0	0	0	0
8:45 AM	0	0	0	1	1	0	1	7	1	9	0	0	0	0	0
Count Total	3	3	0	1	7	0	4	13	10	27	0	0	0	0	0
Peak Hour	1	1	0	1	3	0	3	10	9	22	0	0	0	0	0

Count S	umn	narie	s - H	leavy	/ Vel	nicle	S											
Interval		Nelso	on Rd			Nelse	on Rd			N 75	th St			N 75	th St		15-min	Rolling Hour
Start		Easth	ound			West	bound			North	bound			South	bound		Total	Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
Count Total	0	2	0	1	0	0	0	3	0	0	0	0	0	1	0	0	7	
Pk Hr Heavy	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	3	
Count S	umn	narie	s - B	ikes														
Interval		Nelso	on Rd			Nelse	on Rd			N 75	th St			N 75	th St		15-min	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		Total	Hour Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	4	0
		_	^	_	0	^	^	•	_	_		_	_	^	_		_	_
7:30 AM	0	0	0	0	U	0	0	0	0	0	0	0	0	0	0	0	0	0
-	0	0	0	0	0	0	0	0	0	0 1	0 0	0	0	0	0	0 0	0	5
7:30 AM	-				_	-				-	-				-	-	_	-
7:30 AM 7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	5
7:30 AM 7:45 AM 8:00 AM	0 0	0	0	0	0	0	0 1	0 0	0	1 0	0 0	0 0	0	0	0	0 0	1 2	5 7
7:30 AM 7:45 AM 8:00 AM 8:15 AM	0 0	0 0 0	0 0 0	0 0 0	0 0	0 0 0	0 1 1	0 0 0	0 0	1 0 0	0 0 2	0 0 0	0 0 0	0 0	0 1 3	0 0 1	1 2 7	5 7 10
7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 1 1 0	0 0 0 0	0 0 0 0	1 0 0 0	0 0 2 1	0 0 0 0	0 0 0 0	0 0 0 0	0 1 3 3	0 0 1 0	1 2 7 4	5 7 10 14



8:45 AM

Peak Hour

Inte	rval		71s	st St			Niw	ot Rd			n	/a			73rd	d St		15-min	Rolling Hour
St	art		East	oound			West	bound			North	bound			South	bound		Total	Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
7:00	MA (0	0	0	0	0	0	1	9	0	0	0	0	0	7	0	5	22	0
7:15	5 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	13	0	3	21	0
7:30) AM	0	1	0	0	0	0	0	7	0	0	0	0	0	12	0	1	21	0
7:45	5 AM	0	1	0	0	0	0	2	13	0	0	0	0	0	20	0	3	39	103
8:00) AM	0	2	0	0	0	0	0	21	0	0	0	0	0	21	0	3	47	128
8:15	5 AM	0	2	1	0	0	0	1	21	0	0	0	0	0	23	0	3	51	158
8:30) AM	0	1	0	0	0	0	2	17	0	0	0	0	0	19	0	6	45	182
8:45	5 AM	0	0	1	0	0	0	2	32	0	0	0	0	0	23	0	4	62	205
Coun	t Total	0	7	2	0	0	0	8	125	0	0	0	0	0	138	0	28	308	
	All	0	5	2	0	0	0	5	91	0	0	0	0	0	86	0	16	205	
k Hr	HV	0	0	1	0	0	0	0	6	0	0	0	0	0	2	0	1	10	
	HV%	-	0%	50%	-	-	-	0%	7%	-	-	-	-	-	2%	-	6%	5%	

Interval		Hea	vy Veh	icle Tot	als			Bicy	cles			Pedes	trians (Crossi	ng Leg)
Start	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
7:30 AM	0	1	0	0	1	1	0	0	1	2	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	1	0	2	0	0	2	0	0	0	0	0
8:15 AM	1	1	0	1	3	0	0	0	2	2	0	0	0	0	0
8:30 AM	0	0	0	1	1	0	3	0	2	5	0	6	0	0	6
8:45 AM	0	5	0	0	5	10	1	0	5	16	0	0	0	0	0
Count Total	1	9	0	4	14	11	7	0	11	29	0	6	0	0	6
Peak Hour	1	6	0	3	10	10	6	0	9	25	0	6	0	0	6

		71s	t St			Niw	ot Rd			n	/a			73r	d St		l	Rolling
Interval Start		Fasth	ound			West	bound			North	bound			South	hound		15-min Total	Hour
-	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		Total
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
8:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	3	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	10
Count Total	0	0	1	0	0	0	0	9	0	0	0	0	0	3	0	1	14	
Pk Hr Heavy	0	0	1	0	0	0	0	6	0	0	0	0	0	2	0	1	10	
Count S	umn	narie	s - B	ikes														
		719	t St			Niw	ot Rd			n	/a			73r	d St			Rolling
Interval																	15-min	Hour
Start		East	ound			West	bound			North	bound			South	bound		Total	Total
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0
				^	0	0	0	1	0	0	0	0	0	0	0	0	1	4
7:45 AM	0	0	0	0														
7:45 AM 8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	6
7:45 AM 8:00 AM 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	7
7:45 AM 8:00 AM 8:15 AM 8:30 AM	0 0	0 0 0	0 0 0	0 0 0	0	0	0	0 3	0	0	0	0	0	0	0	2	2 5	7 10
7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM	0	0	0	0	0	0	0	0 3 1	0	0	0	0	0	0 0 4	0	2 2 1	2 5 16	7
7:45 AM 8:00 AM 8:15 AM 8:30 AM	0 0	0 0 0	0 0 0	0 0 0	0	0	0	0 3	0	0	0	0	0	0	0	2	2 5	7 10

Intersection Capacity Worksheets: 2024 Existing

1: 75th St & Nelson Rd Year 2024 Existing - AM Peak Hour

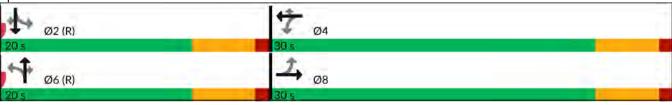
	٠	→	<	•	•	4	†	/	>	ţ	✓	
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	*	f)	7	1	7	7		7	7	1	7	
Traffic Volume (vph)	12	108	65	304	60	14	74	44	87	160	160	
Future Volume (vph)	12	108	65	304	60	14	74	44	87	160	160	
Lane Group Flow (vph)	13	131	80	375	74	16	85	51	121	222	222	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.03	0.15	0.13	0.41	0.09	0.05	0.16	0.10	0.32	0.41	0.36	
Control Delay (s/veh)	7.0	7.2	7.8	10.0	2.6	13.5	14.4	4.8	17.0	17.3	4.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.0	7.2	7.8	10.0	2.6	13.5	14.4	4.8	17.0	17.3	4.5	
Queue Length 50th (ft)	2	18	12	64	0	3	18	0	27	52	0	
Queue Length 95th (ft)	8	40	26	100	12	14	43	16	48	77	19	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	452	873	609	905	807	330	532	494	377	537	615	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.03	0.15	0.13	0.41	0.09	0.05	0.16	0.10	0.32	0.41	0.36	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



	ၨ	→	•	•	+	•	•	†	/	/	+	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	f)		ሻ	^	7	7	^	7	7	^	7
Traffic Volume (veh/h)	12	108	10	65	304	60	14	74	44	87	160	160
Future Volume (veh/h)	12	108	10	65	304	60	14	74	44	87	160	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	13	120	11	80	375	74	16	85	51	121	222	222
Peak Hour Factor	0.90	0.90	0.90	0.81	0.81	0.81	0.87	0.87	0.87	0.72	0.72	0.72
Percent Heavy Veh, %	5	5	5	2	2	2	2	2	2	1	1	1
Cap, veh/h	472	801	73	705	909	770	324	535	453	462	539	457
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	919	1648	151	1259	1870	1585	946	1870	1585	1263	1885	1598
Grp Volume(v), veh/h	13	0	131	80	375	74	16	85	51	121	222	222
Grp Sat Flow(s),veh/h/ln	919	0	1799	1259	1870	1585	946	1870	1585	1263	1885	1598
Q Serve(g_s), s	0.5	0.0	2.0	1.9	6.4	1.3	0.7	1.7	1.2	4.0	4.8	5.8
Cycle Q Clear(g_c), s	6.9	0.0	2.0	3.9	6.4	1.3	5.5	1.7	1.2	5.7	4.8	5.8
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	0	874	705	909	770	324	535	453	462	539	457
V/C Ratio(X)	0.03	0.00	0.15	0.11	0.41	0.10	0.05	0.16	0.11	0.26	0.41	0.49
Avail Cap(c_a), veh/h	472	0	874	705	909	770	324	535	453	462	539	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	0.0	7.1	8.2	8.3	6.9	16.7	13.4	13.2	15.5	14.4	14.8
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.3	1.4	0.2	0.3	0.6	0.5	1.4	2.3	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.6	0.5	2.2	0.4	0.2	0.7	0.4	1.1	1.9	2.1
Unsig. Movement Delay, s/veh	l											
LnGrp Delay(d), s/veh	10.6	0.0	7.5	8.5	9.6	7.2	16.9	14.0	13.7	16.8	16.8	18.5
LnGrp LOS	В		Α	Α	Α	Α	В	В	В	В	В	В
Approach Vol, veh/h		144			529			152			565	
Approach Delay, s/veh		7.8			9.1			14.2			17.4	
Approach LOS		Α			Α			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g_c+l1), s		7.8		8.4		7.5		8.9				
Green Ext Time (p_c), s		1.2		2.2		0.3		0.5				
$u = \gamma$						0.0		0.0				
Intersection Summary			10.0									
HCM 7th Control Delay, s/veh HCM 7th LOS			12.9 B									
Notes												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

All						
Movement	Intersection					
## Configurations						
Configurations	Intersection LOS	Α				
### Configurations						
### Configurations	Movement	RI FR	FRT WR	T WRP	SRI	SRR
raffic Vol, veh/h future Vol,						ODIN
Future Vol, veh/h Peak Hour Factor Peak						105
Peak Hour Factor 0.88 0.88 0.91 0.91 0.90 0.90 Heavy Vehicles, % 33 33 6 6 3 3 Mownt Flow 14 10 21 175 190 139 Jumber of Lanes 0 1 1 0 1 0 Approach EB WB SB SB Opposing Approach WB EB WB Conflicting Approach Left SB WB WB Conflicting Lanes Left 1 0 1 Conflicting Approach Right SB EB WB Conflicting Lanes Right 0 1 1 1 Conflicting Lanes Right 0 1 1 1 HCM Control Delay, s/veh8.8 8.6 10.1 1 HCM LOS A A B A B A B A B A B A B A B A B A						
Reavy Vehicles, % 33 33 6 6 6 3 3 3 Mort Flow						
Avmt Flow 14 10 21 175 190 139 Alumber of Lanes 0 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0						
Aumber of Lanes						
September Sept	Mvmt Flow					
Dipposing Approach WB EB Dipposing Lanes 1 1 0 Dipposing Lanes 1 1 0 Dipposing Lanes Left 1 0 1 Dipposition Approach Left SB WB Dipposition Lanes Left 1 0 1 Dipposition Lanes Left 1 0 1 Dipposition Lanes Right 0 1 1 1 Dipposition Lane Lanes Right 0 1 1 1 Dipposition Lane Lanes Right 0 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1	Number of Lanes	0	1	1 0	1	0
Dipposing Approach WB EB Dipposing Lanes 1 1 0 Dipposing Lanes 1 1 0 Dipposing Lanes Left 1 0 1 Dipposition Approach Left SB WB Dipposition Lanes Left 1 0 1 Dipposition Lanes Left 1 0 1 Dipposition Lanes Right 0 1 1 1 Dipposition Lane Lanes Right 0 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1 1 Dipposition Lanes Right 0 1 1 1 1 1	Annroach	ED	10/)	CD	
Opposing Lanes 1 1 0 Conflicting Approach Left SB WB Conflicting Lanes Left 1 0 1 Conflicting Lanes Right 0 1 1 Conflicting Lanes Right 0 1 1 IdCM Control Delay, s/veh8.8 8.6 10.1 IdCM LOS A A B **PRODUCTION OF THE CONTROL OF THE C					SD	
Conflicting Approach Left SB Conflicting Lanes Left 1 0 1 Conflicting Approach Right SB Conflicting Lanes Right 0 1 1 1 Conflicting Lanes Right 0 1 1 1 CONTROLOR A A A B CONTROLOR A A B CONTROLOR A A A	11 5 11		E		•	
Conflicting Lanes Left 1 0 1 Conflicting Approach Right SB EB Conflicting Lanes Right 0 1 1 1 CONCRIGIO Delay, s/veh8.8 8.6 10.1 CONCRIGIO DELAY, s/veh 8.8 8.6 10.1				1		
Conflicting Approach Right						
Conflicting Lanes Right 0 1 1 1 HCM Control Delay, s/veh8.8 8.6 10.1 HCM LOS A A B Sane						
ACM Control Delay, s/veh8.8 8.6 10.1 ACM LOS A A B A B A B A B A B A B A B A		nt	S	3		
A	Conflicting Lanes Right	0		1	1	
Anne EBLn1WBLn1 SBLn1 Vol Left, % 57% 0% 58% Vol Thru, % 43% 11% 0% Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Traffic Vol by Lane 21 178 296 Tr Vol 12 0 171 Through Vol 9 19 0 RT Vol 0 159 125 Anne Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	HCM Control Delay, s/veh	18.8	8	6	10.1	
Vol Left, % 57% 0% 58% Vol Thru, % 43% 11% 0% Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Irraffic Vol by Lane 21 178 296 T. Vol 12 0 171 Shrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Geometry Grp 1 1 1 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	HCM LOS	Α		4	В	
Vol Left, % 57% 0% 58% Vol Thru, % 43% 11% 0% Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Graffic Vol by Lane 21 178 296 T. Vol 12 0 171 Shrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Geometry Grp 1 1 1 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1						
Vol Left, % 57% 0% 58% Vol Thru, % 43% 11% 0% Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Irraffic Vol by Lane 21 178 296 T. Vol 12 0 171 Shrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	Long	EDIn	1 n 1\1/D1 n	1 CDI n1		
Vol Thru, % 43% 11% 0% Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Fraffic Vol by Lane 21 178 296 T. Vol 12 0 171 Chrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1						
Vol Right, % 0% 89% 42% Sign Control Stop Stop Stop Fraffic Vol by Lane 21 178 296 T. Vol 12 0 171 Chrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Jeeometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Service Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1						
Sign Control Stop Stop Stop Traffic Vol by Lane 21 178 296 T Vol 12 0 171 Shrough Vol 9 19 0 RT Vol 0 159 125 Jane Flow Rate 24 196 329 Jeeometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1						
Taffic Vol by Lane 21 178 296 T. Vol 12 0 171 Through Vol 9 19 0 RT Vol 0 159 125 Through Vol 0 159 125 Throu						
T Vol 12 0 171 Chrough Vol 9 19 0 RT Vol 0 159 125 Cane Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Cervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	Sign Control					
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RT Vol 0 159 125 ane Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	LT Vol	1:	12	0 171		
RT Vol 0 159 125 ane Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	Through Vol		9 1	9 0		
Anne Flow Rate 24 196 329 Geometry Grp 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	RT Vol		0 15	9 125		
Geometry Grp 1 1 1 1 Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1	Lane Flow Rate					
Degree of Util (X) 0.037 0.231 0.394 Departure Headway (Hd) 5.557 4.253 4.308 Departure Headway (Hd) 7.5557 4.253 4.308 Departure Headway (Hd) 7.5557 4.253 4.308 Departure Headway (Hd) 7.557 4.257 4.253 4.308 Departure Headway (Hd) 7.557 4.257 4.257 4.253 4.308 Departure Headway (Hd) 7.557 4.257 4.257 4.257 4.257 Departure Headway (Hd) 7.557 4.257 4.257 4.257 Departure Headway (Hd) 7.557 4.257 4.257 Dep						
Departure Headway (Hd) 5.557 4.253 4.308 Convergence, Y/N Yes Yes Yes Cap 644 845 835 Gervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1			-	-		
Convergence, Y/N Yes Yes Yes Cap 644 845 835 Cervice Time 3.59 2.277 2.33 HCM Lane V/C Ratio 0.037 0.232 0.394 HCM Control Delay, s/veh 8.8 8.6 10.1						
Cap 644 845 835 Service Time 3.59 2.277 2.33 ICM Lane V/C Ratio 0.037 0.232 0.394 ICM Control Delay, s/veh 8.8 8.6 10.1						
Service Time 3.59 2.277 2.33 ICM Lane V/C Ratio 0.037 0.232 0.394 ICM Control Delay, s/veh 8.8 8.6 10.1		_				
ICM Lane V/C Ratio 0.037 0.232 0.394 ICM Control Delay, s/veh 8.8 8.6 10.1						
ICM Control Delay, s/veh 8.8 8.6 10.1						
IOM I === 1 OC A A D	HCM Control Delay, s/veh					

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HCM Lane LOS

HCM 95th-tile Q

1: 75th St & Nelson Rd Year 2024 Existing - Mid-Day Peak Hour

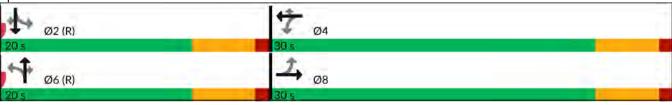
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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	f)	ሻ	<u></u>	7	7	1	7	ሻ	^	7	
Traffic Volume (vph)	186	284	37	121	76	12	163	45	63	93	23	
Future Volume (vph)	186	284	37	121	76	12	163	45	63	93	23	
Lane Group Flow (vph)	209	341	40	130	82	15	199	55	78	115	28	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.34	0.38	0.08	0.14	0.10	0.04	0.37	0.11	0.23	0.22	0.06	
Control Delay (s/veh)	10.0	9.4	7.5	7.7	2.5	13.4	16.8	5.1	15.9	15.0	2.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	10.0	9.4	7.5	7.7	2.5	13.4	16.8	5.1	15.9	15.0	2.3	
Queue Length 50th (ft)	34	55	6	19	0	3	46	0	17	25	0	
Queue Length 95th (ft)	71	100	18	41	15	12	81	15	39	50	5	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	609	901	502	914	819	363	532	494	334	527	490	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.34	0.38	0.08	0.14	0.10	0.04	0.37	0.11	0.23	0.22	0.06	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



1: 75th St & Nelson Rd Year 2024 Existing - Mid-Day Peak Hour

	۶	→	•	•	+	4	•	†	/	/	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	J.	- 1}		¥		7	ሻ	1	7	ň		7
Traffic Volume (veh/h)	186	284	20	37	121	76	12	163	45	63	93	23
Future Volume (veh/h)	186	284	20	37	121	76	12	163	45	63	93	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	209	319	22	40	130	82	15	199	55	78	115	28
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.82	0.82	0.82	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	668	841	58	531	916	776	441	535	453	368	531	450
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1170	1730	119	1048	1885	1598	1245	1870	1585	1117	1856	1572
Grp Volume(v), veh/h	209	0	341	40	130	82	15	199	55	78	115	28
Grp Sat Flow(s), veh/h/ln	1170	0	1849	1048	1885	1598	1245	1870	1585	1117	1856	1572
	6.0	0.0	5.8	1.3	1.9	1.4	0.5	4.3	1.3	3.0	2.4	0.6
Q Serve(g_s), s	7.9	0.0	5.8	7.1	1.9	1.4	2.8	4.3	1.3	7.3	2.4	0.6
Cycle Q Clear(g_c), s	1.00	0.0	0.06	1.00	1.9	1.00	1.00	4.3		1.00	2.4	
Prop In Lane		0			916	776		F2F	1.00	368	E24	1.00
Lane Grp Cap(c), veh/h	668	0	899	531			441	535	453		531	450
V/C Ratio(X)	0.31	0.00	0.38	0.08	0.14	0.11	0.03	0.37	0.12	0.21	0.22	0.06
Avail Cap(c_a), veh/h	668	0	899	531	916	776	441	535	453	368	531	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	0.0	8.1	10.3	7.1	7.0	14.7	14.3	13.2	17.2	13.6	13.0
Incr Delay (d2), s/veh	1.2	0.0	1.2	0.3	0.3	0.3	0.1	2.0	0.5	1.3	0.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.8	0.3	0.6	0.4	0.1	1.7	0.4	0.8	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.5	0.0	9.3	10.6	7.4	7.2	14.8	16.2	13.8	18.5	14.5	13.2
LnGrp LOS	В		Α	В	Α	Α	В	В	В	В	В	В
Approach Vol, veh/h		550			252			269			221	
Approach Delay, s/veh		9.8			7.9			15.7			15.8	
Approach LOS		Α			Α			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g c+l1), s		9.3		9.1		6.3		9.9				
Green Ext Time (p_c), s		0.3		0.8		0.7		2.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			11.6									
HCM 7th LOS			В									
Notes												
110100												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

Intersection						
Intersection Delay, s/vel	า10.3					
Intersection LOS	В					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		W	02.1
Traffic Vol, veh/h	100	17	4	163	246	57
Future Vol, veh/h	100	17	4	163	246	57
Peak Hour Factor	0.81	0.81	0.93	0.93	0.91	0.91
Heavy Vehicles, %	1	1	3	3	2	2
Mymt Flow	123	21	4	175	270	63
Number of Lanes	0	1	1	0	1	0
			•			
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Le					WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Rig	•		SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay, s/ve			8.7		11.5	
HCM LOS	Α		Α		В	
Lane	Е	EBLn1V	VBLn1	SBLn1		
Vol Left, %		85%	0%	81%		
Vol Thru, %		15%	2%	0%		
Vol Right, %		0%	98%	19%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		117	167	303		
LT Vol		100	0	246		
Through Vol		17	4	0		
RT Vol		0	163	57		
Lane Flow Rate		144	180	333		
Geometry Grp		1	1	1		
Degree of Util (X)		0.206	0.219	0.438		
Departure Headway (Ho	d)	5.122	4.383	4.732		
Convergence, Y/N		Yes	Yes	Yes		
Сар		698	815	759		
Service Time		3.177	2.434	2.783		
110141 N//0 D //		0.000	0.004	0.400		

0.206 0.221 0.439

8.7

0.8

Α

11.5

В

2.2

9.5

Α

8.0

HCM Lane V/C Ratio

HCM Lane LOS

HCM 95th-tile Q

HCM Control Delay, s/veh

1: 75th St & Nelson Rd Year 2024 Existing - Saturday Peak Hour

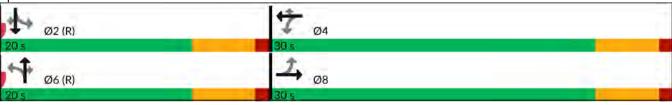
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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	f)	7	^	7	7	^	7	7	†	7	
Traffic Volume (vph)	8	61	13	70	22	8	37	9	20	40	19	
Future Volume (vph)	8	61	13	70	22	8	37	9	20	40	19	
Lane Group Flow (vph)	10	82	15	80	25	11	49	12	29	59	28	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.02	0.09	0.02	0.09	0.03	0.03	0.09	0.02	0.07	0.11	0.06	
Control Delay (s/veh)	6.8	7.1	6.8	7.3	1.0	13.3	13.7	0.1	13.8	13.9	2.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	6.8	7.1	6.8	7.3	1.0	13.3	13.7	0.1	13.8	13.9	2.3	
Queue Length 50th (ft)	1	11	2	11	0	2	10	0	6	13	0	
Queue Length 95th (ft)	6	24	9	27	4	9	24	0	15	25	2	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	644	911	643	914	807	386	537	499	390	537	499	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.09	0.02	0.09	0.03	0.03	0.09	0.02	0.07	0.11	0.06	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



1: 75th St & Nelson Rd Year 2024 Existing - Saturday Peak Hour

	ၨ	→	•	•	←	•	•	†	/	/	+	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	Դ		ሻ	^	7	ሻ	^	7	ሻ	^	7
Traffic Volume (veh/h)	8	61	2	13	70	22	8	37	9	20	40	19
Future Volume (veh/h)	8	61	2	13	70	22	8	37	9	20	40	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	10	79	3	15	80	25	11	49	12	29	59	28
Peak Hour Factor	0.77	0.77	0.77	0.88	0.88	0.88	0.75	0.75	0.75	0.68	0.68	0.68
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	746	877	33	758	916	776	491	539	457	505	539	457
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1299	1804	69	1327	1885	1598	1321	1885	1598	1352	1885	1598
Grp Volume(v), veh/h	10	0	82	15	80	25	11	49	12	29	59	28
Grp Sat Flow(s),veh/h/ln	1299	0	1873	1327	1885	1598	1321	1885	1598	1352	1885	1598
Q Serve(g_s), s	0.2	0.0	1.2	0.3	1.1	0.4	0.3	1.0	0.3	8.0	1.2	0.6
Cycle Q Clear(g_c), s	1.3	0.0	1.2	1.5	1.1	0.4	1.5	1.0	0.3	1.8	1.2	0.6
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	746	0	910	758	916	776	491	539	457	505	539	457
V/C Ratio(X)	0.01	0.00	0.09	0.02	0.09	0.03	0.02	0.09	0.03	0.06	0.11	0.06
Avail Cap(c_a), veh/h	746	0	910	758	916	776	491	539	457	505	539	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	0.0	6.9	7.3	6.9	6.7	13.7	13.1	12.8	13.7	13.2	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.2	0.1	0.1	0.3	0.1	0.2	0.4	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	0.1	0.4	0.1	0.1	0.4	0.1	0.2	0.4	0.2
Unsig. Movement Delay, s/veh	1											
LnGrp Delay(d), s/veh	7.3	0.0	7.1	7.4	7.1	6.8	13.8	13.4	12.9	13.9	13.6	13.2
LnGrp LOS	Α		Α	Α	А	Α	В	В	В	В	В	В
Approach Vol, veh/h		92			120			72			116	
Approach Delay, s/veh		7.1			7.1			13.4			13.6	
Approach LOS		Α			Α			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g_c+I1), s		3.8		3.5		3.5		3.3				
Green Ext Time (p_c), s		0.2		0.4		0.1		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			10.1									
HCM 7th LOS			В									
Notes												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

Intersection							
Intersection Delay, s/v	eh 7.6						
Intersection LOS	Α						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		च	₽		W		
Traffic Vol, veh/h	5	2	5	91	86	16	
Future Vol, veh/h	5	2	5	91	86	16	
Peak Hour Factor	0.58	0.58	0.71	0.71	0.94	0.94	
Heavy Vehicles, %	14	14	6	6	3	3	
Mvmt Flow	9	3	7	128	91	17	
Number of Lanes	0	1	1	0	1	0	
Approach	EB		WB		SB		
Opposing Approach	WB		EB				
Opposing Lanes	1		1		0		
Conflicting Approach L	eft SB				WB		
Conflicting Lanes Left	1		0		1		
Conflicting Approach F	Right		SB		EB		
Conflicting Lanes Righ			1		1		
HCM Control Delay, s/	veh7.7		7.3		8		
HCM LOS	Α		Α		Α		

Lane	EBLn1\	NBLn1	SBLn1
Vol Left, %	71%	0%	84%
Vol Thru, %	29%	5%	0%
Vol Right, %	0%	95%	16%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	7	96	102
LT Vol	5	0	86
Through Vol	2	5	0
RT Vol	0	91	16
Lane Flow Rate	12	135	109
Geometry Grp	1	1	1
Degree of Util (X)	0.015	0.136	0.129
Departure Headway (Hd)	4.576	3.631	4.281
Convergence, Y/N	Yes	Yes	Yes
Cap	773	975	836
Service Time	2.657	1.7	2.319
HCM Lane V/C Ratio	0.016	0.138	0.13
HCM Control Delay, s/veh	7.7	7.3	8
HCM Lane LOS	Α	Α	Α
HCM 95th-tile Q	0	0.5	0.4

Intersection Capacity Worksheets: 2025 Total

1: 75th St & Nelson Rd Year 2025 w/ Project - AM Peak Hour

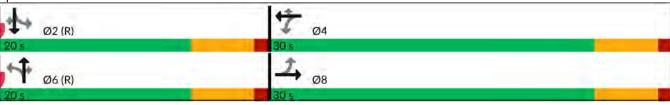
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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	f)	ሻ	<u></u>	7	7		7	ሻ	^	7	
Traffic Volume (vph)	12	108	66	304	60	14	74	44	87	162	160	
Future Volume (vph)	12	108	66	304	60	14	74	44	87	162	160	
Lane Group Flow (vph)	13	133	81	375	74	16	85	51	121	225	222	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.03	0.15	0.13	0.41	0.09	0.05	0.16	0.10	0.32	0.42	0.36	
Control Delay (s/veh)	7.0	7.1	7.8	10.0	2.6	13.5	14.4	4.8	17.0	17.4	4.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.0	7.1	7.8	10.0	2.6	13.5	14.4	4.8	17.0	17.4	4.5	
Queue Length 50th (ft)	2	18	12	64	0	3	18	0	27	53	0	
Queue Length 95th (ft)	8	40	27	100	12	14	43	16	48	77	19	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	452	872	608	905	807	329	532	494	377	537	615	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.03	0.15	0.13	0.41	0.09	0.05	0.16	0.10	0.32	0.42	0.36	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



	ၨ	→	•	•	←	•	•	†	/	/	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	f)		ሻ	^	7	7	^	7	ሻ	^	7
Traffic Volume (veh/h)	12	108	12	66	304	60	14	74	44	87	162	160
Future Volume (veh/h)	12	108	12	66	304	60	14	74	44	87	162	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	13	120	13	81	375	74	16	85	51	121	225	222
Peak Hour Factor	0.90	0.90	0.90	0.81	0.81	0.81	0.87	0.87	0.87	0.72	0.72	0.72
Percent Heavy Veh, %	5	5	5	2	2	2	2	2	2	1	1	1
Cap, veh/h	472	787	85	703	909	770	322	535	453	462	539	457
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	919	1619	175	1257	1870	1585	943	1870	1585	1263	1885	1598
Grp Volume(v), veh/h	13	0	133	81	375	74	16	85	51	121	225	222
Grp Sat Flow(s),veh/h/ln	919	0	1794	1257	1870	1585	943	1870	1585	1263	1885	1598
Q Serve(g_s), s	0.5	0.0	2.1	1.9	6.4	1.3	0.7	1.7	1.2	4.0	4.8	5.8
Cycle Q Clear(g_c), s	6.9	0.0	2.1	4.0	6.4	1.3	5.5	1.7	1.2	5.7	4.8	5.8
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	0	872	703	909	770	322	535	453	462	539	457
V/C Ratio(X)	0.03	0.00	0.15	0.12	0.41	0.10	0.05	0.16	0.11	0.26	0.42	0.49
Avail Cap(c_a), veh/h	472	0	872	703	909	770	322	535	453	462	539	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	0.0	7.1	8.2	8.3	6.9	16.7	13.4	13.2	15.5	14.5	14.8
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.3	1.4	0.2	0.3	0.6	0.5	1.4	2.4	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.6	0.5	2.2	0.4	0.2	0.7	0.4	1.1	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.6	0.0	7.5	8.6	9.6	7.2	17.0	14.0	13.7	16.8	16.8	18.5
LnGrp LOS	В		Α	Α	Α	Α	В	В	В	В	В	В
Approach Vol, veh/h		146			530			152			568	
Approach Delay, s/veh		7.8			9.1			14.2			17.5	
Approach LOS		Α			А			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g_c+l1), s		7.8		8.4		7.5		8.9				
Green Ext Time (p_c), s		1.2		2.2		0.3		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			12.9									
HCM 7th LOS			В									
Notes												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

Intersection								
Intersection Delay, s/v	/eh 9.6							
Intersection LOS	Α							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		4	1		W			
Traffic Vol, veh/h	15	9	19	161	171	125		
Future Vol, veh/h	15	9	19	161	171	125		
Peak Hour Factor	0.88	0.88	0.91	0.91	0.90	0.90		
Heavy Vehicles, %	33	33	6	6	3	3		
Mvmt Flow	17	10	21	177	190	139		
Number of Lanes	0	1	1	0	1	0		
Approach	EB		WB		SB			
Opposing Approach	WB		EB					
Opposing Lanes	1		1		0			
Conflicting Approach I	Left SB				WB			
Conflicting Lanes Left			0		1			
Conflicting Approach I			SB		EB			
Conflicting Lanes Righ			1		1			
HCM Control Delay, s			8.6		10.2			
HCM LOS	Α		Α		В			
Lane	E	EBLn ₁ V	VBLn1	SBLn1				
Vol Left, %		63%	0%	58%			 	
Vol Thru, %		38%	11%	0%				
Vol Right, %		0%	89%	42%				
Sign Control		Stop	Stop	Stop				
Traffic Vol by Lane		24	180	296				
LT Vol		15	0	171				
Through Vol		9	19	0				
RT Vol		0	161	125				
Lane Flow Rate		27	198	329				
Geometry Grp		1	1	1				
Degree of Util (X)			0.234	0.395				
Departure Headway (I	Hd)	5.572		4.32				
Convergence, Y/N		Yes	Yes	Yes				
Cap		643	843	832				

3.606 2.283 2.345

0.042 0.235 0.395

8.6

0.9

Α

10.2

В

1.9

8.9

0.1

Α

Service Time

HCM Lane LOS

HCM 95th-tile Q

HCM Lane V/C Ratio

HCM Control Delay, s/veh

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		1→			सी
Traffic Vol, veh/h	0	0	171	5	5	296
Future Vol, veh/h	0	0	171	5	5	296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	90	90	90	90
Heavy Vehicles, %	3	3	3	80	80	3
Mvmt Flow	0	0	190	6	6	329
N A - ' /N A' N	N'		1.1.1		40	
	/linor1		Major1		Major2	
Conflicting Flow All	533	193	0	0	196	0
Stage 1	193	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.9	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
	3.527		-	-	2.92	-
Pot Cap-1 Maneuver	506	846	-	-	1022	-
Stage 1	837	-	-	-	-	-
Stage 2	719	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	503	846	-	-	1022	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	714	-	-	-	-	-
, and the second						
Δ	WD		ND		00	
Approach	WB		NB		SB	
HCM Control Delay, s/v			0		0.14	
HCM LOS	Α					
Minor Lane/Major Mvmi	t	NBT	NBRV	WBLn1	SBL	SBT
Capacity (veh/h)		-		-	30	_
HCM Lane V/C Ratio		_	_		0.005	_
HCM Control Delay (s/v	/eh)	_	_	0	8.5	0
HCM Lane LOS	3,	_	_	A	A	A
HCM 95th %tile Q(veh)		_	_	-	0	-
Tom com tomo a(rom)					•	

1: 75th St & Nelson Rd Year 2025 w/ Project - Mid-Day Peak Hour

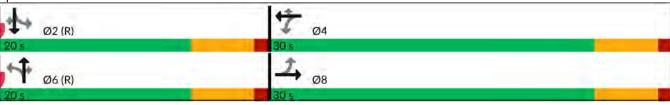
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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	4î	ሻ	↑	7	ሻ	^	7	ኘ	1	7	
Traffic Volume (vph)	186	284	38	121	76	13	164	46	63	94	23	
Future Volume (vph)	186	284	38	121	76	13	164	46	63	94	23	
Lane Group Flow (vph)	209	344	41	130	82	16	200	56	78	116	28	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.34	0.38	0.08	0.14	0.10	0.04	0.38	0.11	0.23	0.22	0.06	
Control Delay (s/veh)	10.0	9.4	7.5	7.7	2.5	13.4	16.8	5.2	16.0	15.0	2.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	10.0	9.4	7.5	7.7	2.5	13.4	16.8	5.2	16.0	15.0	2.3	
Queue Length 50th (ft)	34	56	6	19	0	3	46	0	17	26	0	
Queue Length 95th (ft)	71	101	18	41	15	13	81	16	39	50	5	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	609	900	499	914	819	363	532	494	333	527	490	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.34	0.38	0.08	0.14	0.10	0.04	0.38	0.11	0.23	0.22	0.06	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



	ၨ	→	•	•	←	•	•	†	/	/	+	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	f)		ሻ	^	7	7		7	7	†	7
Traffic Volume (veh/h)	186	284	22	38	121	76	13	164	46	63	94	23
Future Volume (veh/h)	186	284	22	38	121	76	13	164	46	63	94	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	209	319	25	41	130	82	16	200	56	78	116	28
Peak Hour Factor	0.89	0.89	0.89	0.93	0.93	0.93	0.82	0.82	0.82	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	668	832	65	529	916	776	441	535	453	367	531	450
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1170	1712	134	1045	1885	1598	1244	1870	1585	1115	1856	1572
Grp Volume(v), veh/h	209	0	344	41	130	82	16	200	56	78	116	28
Grp Sat Flow(s), veh/h/ln	1170	0	1846	1045	1885	1598	1244	1870	1585	1115	1856	1572
Q Serve(g_s), s	6.0	0.0	5.9	1.3	1.9	1.4	0.5	4.3	1.3	3.0	2.4	0.6
Cycle Q Clear(g_c), s	7.9	0.0	5.9	7.2	1.9	1.4	2.9	4.3	1.3	7.3	2.4	0.6
Prop In Lane	1.00	0.0	0.07	1.00	1.5	1.00	1.00	7.0	1.00	1.00	۷.٦	1.00
Lane Grp Cap(c), veh/h	668	0	897	529	916	776	441	535	453	367	531	450
V/C Ratio(X)	0.31	0.00	0.38	0.08	0.14	0.11	0.04	0.37	0.12	0.21	0.22	0.06
Avail Cap(c_a), veh/h	668	0.00	897	529	916	776	441	535	453	367	531	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	0.00	8.1	10.4	7.1	7.0	14.7	14.3	13.2	17.2	13.6	13.0
Incr Delay (d2), s/veh	1.2	0.0	1.2	0.3	0.3	0.3	0.2	2.0	0.6	1.3	0.9	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.9	0.0
Initial Q Delay(d3), s/veh %ile BackOfQ(50%),veh/ln	1.3		1.8	0.0	0.6	0.0	0.0	1.7	0.0	0.0	0.0	0.0
		0.0	1.0	0.3	0.0	0.4	0.1	1.7	0.4	0.0	0.9	0.2
Unsig. Movement Delay, s/veh		0.0	0.4	10.7	7.4	7.0	110	16.2	12.0	10 E	115	12.0
LnGrp Delay(d), s/veh	10.5	0.0	9.4	10.7	7.4	7.2	14.8	16.3	13.8	18.5	14.5	13.2
LnGrp LOS	В		Α	В	A	А	В	В	В	В	В	В
Approach Vol, veh/h		553			253			272			222	
Approach Delay, s/veh		9.8			7.9			15.7			15.8	
Approach LOS		Α			Α			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g_c+I1), s		9.3		9.2		6.3		9.9				
Green Ext Time (p_c), s		0.3		0.9		0.7		2.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			11.7									
HCM 7th LOS			В									
Notes												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

HCM 7th AWSC 10/29/2024

Intersection					
Intersection Delay, s/veh	10.4				
Intersection LOS	В				

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		सी	ĵ.		- M	
Traffic Vol, veh/h	102	17	4	165	247	60
Future Vol, veh/h	102	17	4	165	247	60
Peak Hour Factor	0.81	0.81	0.93	0.93	0.91	0.91
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	126	21	4	177	271	66
Number of Lanes	0	1	1	0	1	0
A mara a a b	ΓD		WD		CD	
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach L	eft SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach F	Right		SB		EB	
Conflicting Lanes Righ	it 0		1		1	
HCM Control Delay, s/			8.7		11.6	
HCM LOS	Α		Α		В	

Lane	EBLn1\	NBLn1	SBLn1
Vol Left, %	86%	0%	80%
Vol Thru, %	14%	2%	0%
Vol Right, %	0%	98%	20%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	119	169	307
LT Vol	102	0	247
Through Vol	17	4	0
RT Vol	0	165	60
Lane Flow Rate	147	182	337
Geometry Grp	1	1	1
Degree of Util (X)	0.21	0.222	0.444
Departure Headway (Hd)	5.137	4.398	4.738
Convergence, Y/N	Yes	Yes	Yes
Cap	695	812	756
Service Time	3.193	2.45	2.79
HCM Lane V/C Ratio	0.212	0.224	0.446
HCM Control Delay, s/veh	9.6	8.7	11.6
HCM Lane LOS	Α	Α	В
HCM 95th-tile Q	0.8	0.8	2.3

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		₽			4
Traffic Vol, veh/h	4	3	263	4	4	303
Future Vol, veh/h	4	3	263	4	4	303
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	90	90	90	90
Heavy Vehicles, %	43	43	3	63	63	3
Mvmt Flow	4	3	292	4	4	337
With the transfer of the trans				•	•	001
	Minor1		Major1		Major2	
Conflicting Flow All	640	294	0	0	297	0
Stage 1	294	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Critical Hdwy	6.83	6.63	-	-	4.73	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.887	3.687	-	-	2.767	-
Pot Cap-1 Maneuver	381	658	-	-	985	-
Stage 1	671	-	-	-	-	-
Stage 2	634	_	-	_	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	379	658	_	_	985	_
Mov Cap-2 Maneuver	379	-	-	_	-	_
Stage 1	671	_	_	_	_	_
Stage 2	631	_	_	_	_	_
Olago Z	001					
Approach	WB		NB		SB	
HCM Control Delay, s/\	<i>v</i> 12.91		0		0.11	
HCM LOS	В					
Minor Lane/Major Mvm	.4	NBT	NDDV	VBLn1	SBL	SBT
	L					
Capacity (veh/h) HCM Lane V/C Ratio		-	-	463	23	-
		-		0.016	8.7	-
	, a la \				X /	0
HCM Control Delay (s/v	veh)	-	-			
	,	-	-	B 0.1	A 0	A

1: 75th St & Nelson Rd Year 2025 w/ Project - Saturday Peak Hour

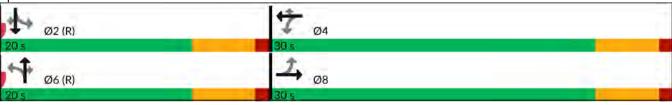
	۶	→	<	•	•	4	†	/	>	ţ	✓	
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	f)	7	^	7	7		7	7	†	7	
Traffic Volume (vph)	8	61	15	70	22	8	37	9	20	45	19	
Future Volume (vph)	8	61	15	70	22	8	37	9	20	45	19	
Lane Group Flow (vph)	10	88	17	80	25	11	49	12	29	66	28	
Turn Type	Perm	NA	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		8		4			6			2		
Permitted Phases	8		4		4	6		6	2		2	
Detector Phase	8	8	4	4	4	6	6	6	2	2	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	25.7	25.7	23.7	23.7	23.7	19.7	19.7	19.7	19.0	19.0	19.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (%)	60.0%	60.0%	60.0%	60.0%	60.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
v/c Ratio	0.02	0.10	0.03	0.09	0.03	0.03	0.09	0.02	0.07	0.12	0.06	
Control Delay (s/veh)	6.8	6.8	6.9	7.3	1.0	13.3	13.7	0.1	13.8	14.0	2.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	6.8	6.8	6.9	7.3	1.0	13.3	13.7	0.1	13.8	14.0	2.3	
Queue Length 50th (ft)	1	11	2	11	0	2	10	0	6	14	0	
Queue Length 95th (ft)	6	24	10	27	4	9	24	0	15	27	2	
Internal Link Dist (ft)		358		581			641			434		
Turn Bay Length (ft)	210		240		240	300		300	190		190	
Base Capacity (vph)	644	905	640	914	807	384	537	499	390	537	499	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.10	0.03	0.09	0.03	0.03	0.09	0.02	0.07	0.12	0.06	

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 50 Control Type: Pretimed



	≯	→	•	•	←	•	•	†	<i>></i>	\	+	✓
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	J.	ĵ.		ሻ	^	7	ሻ		7	ሻ		7
Traffic Volume (veh/h)	8	61	7	15	70	22	8	37	9	20	45	19
Future Volume (veh/h)	8	61	7	15	70	22	8	37	9	20	45	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	10	79	9	17	80	25	11	49	12	29	66	28
Peak Hour Factor	0.77	0.77	0.77	0.88	0.88	0.88	0.75	0.75	0.75	0.68	0.68	0.68
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	746	808	92	751	916	776	485	539	457	505	539	457
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1299	1662	189	1319	1885	1598	1312	1885	1598	1352	1885	1598
Grp Volume(v), veh/h	10	0	88	17	80	25	11	49	12	29	66	28
Grp Sat Flow(s), veh/h/ln	1299	0	1851	1319	1885	1598	1312	1885	1598	1352	1885	1598
Q Serve(g_s), s	0.2	0.0	1.3	0.4	1.1	0.4	0.3	1.0	0.3	0.8	1.3	0.6
Cycle Q Clear(g_c), s	1.3	0.0	1.3	1.6	1.1	0.4	1.6	1.0	0.3	1.8	1.3	0.6
Prop In Lane	1.00	0.0	0.10	1.00	1.1	1.00	1.00	1.0	1.00	1.00	1.0	1.00
Lane Grp Cap(c), veh/h	746	0	900	751	916	776	485	539	457	505	539	457
V/C Ratio(X)	0.01	0.00	0.10	0.02	0.09	0.03	0.02	0.09	0.03	0.06	0.12	0.06
Avail Cap(c_a), veh/h	746	0.00	900	751	916	776	485	539	457	505	539	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	0.00	6.9	7.4	6.9	6.7	13.8	13.1	12.8	13.7	13.2	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.1	0.9	0.1	0.1	0.3	0.1	0.2	0.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
		0.0	0.4	0.1	0.4	0.1	0.1	0.4	0.1	0.2	0.5	0.2
Unsig. Movement Delay, s/veh	7.3	0.0	7.2	7.4	7.1	6.8	13.9	13.4	12.9	13.9	13.7	13.2
LnGrp Delay(d), s/veh	7.3 A	0.0	7.2 A			0.0 A	13.9 B		12.9 B	13.9 B	13.7 B	13.2 B
LnGrp LOS	A	00	A	Α	122	A	D	72	D	D		Б
Approach Vol, veh/h		98									123	
Approach Delay, s/veh		7.2			7.1			13.4			13.6	
Approach LOS		Α			Α			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		30.0		20.0		30.0				
Change Period (Y+Rc), s		5.7		5.7		5.7		5.7				
Max Green Setting (Gmax), s		14.3		24.3		14.3		24.3				
Max Q Clear Time (g_c+l1), s		3.8		3.6		3.6		3.3				
Green Ext Time (p_c), s		0.2		0.4		0.1		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			10.1									
HCM 7th LOS			В									
Notes												

8130 N 73rd St Traffic Impact Assessment Fox Tuttle Transportation Group, LLC

User approved pedestrian interval to be less than phase max green.

HCM 7th AWSC 10/29/2024

HCM Control Delay, s/veh7.8

HCM LOS

7.3

Α

8

Α

Intersection							
Intersection Delay, s.	/veh 7.6		·				·
Intersection LOS	Α						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		4			¥		
Traffic Vol, veh/h	11	2	5	96	86	16	
Future Vol, veh/h	11	2	5	96	86	16	
Peak Hour Factor	0.58	0.58	0.71	0.71	0.94	0.94	
Heavy Vehicles, %	14	14	6	6	3	3	
Mvmt Flow	19	3	7	135	91	17	
Number of Lanes	0	1	1	0	1	0	
Approach	EB		WB		SB		
Opposing Approach	WB		EB				
Opposing Lanes	1		1		0		
Conflicting Approach					WB		
Conflicting Lanes Le	ft 1		0		1		
Conflicting Approach			SB		EB		
Conflicting Lanes Rig	ght 0		1		1		

Lane	EBLn1\	NBLn1	SBLn1
Vol Left, %	85%	0%	84%
Vol Thru, %	15%	5%	0%
Vol Right, %	0%	95%	16%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	13	101	102
LT Vol	11	0	86
Through Vol	2	5	0
RT Vol	0	96	16
Lane Flow Rate	22	142	109
Geometry Grp	1	1	1
Degree of Util (X)	0.029	0.144	0.13
Departure Headway (Hd)	4.608	3.638	4.309
Convergence, Y/N	Yes	Yes	Yes
Cap	767	972	827
Service Time	2.693	1.713	2.361
HCM Lane V/C Ratio	0.029	0.146	0.132
HCM Control Delay, s/veh	7.8	7.3	8
HCM Lane LOS	Α	Α	Α
HCM 95th-tile Q	0.1	0.5	0.4

Intersection						
Int Delay, s/veh	0.4					
		WED	NET	NDD	ODI	ODT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	À	^	∱	4.4	40	4
Traffic Vol, veh/h	0	0	96	11	12	102
Future Vol, veh/h	0	0	96	11	12	102
Conflicting Peds, #/hr	0	0	0	0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	90	90	90	90
Heavy Vehicles, %	2	2	3	35	35	3
Mvmt Flow	0	0	107	12	13	113
Major/Minor N	Minor1	N	/lajor1		Major2	
Conflicting Flow All	253	113	0	0	119	0
Stage 1	113	-	_	-	-	-
Stage 2	140	_	_	_	_	_
Critical Hdwy	6.42	6.22	_	_	4.45	_
Critical Hdwy Stg 1	5.42	-	_	_	-	_
Critical Hdwy Stg 2	5.42	_	_	_	_	_
	3.518	3.318	_	-		_
Pot Cap-1 Maneuver	736	940	_	_	1288	-
Stage 1	912	-	_	_		_
Stage 2	887	_	_	_	_	_
Platoon blocked, %	001		_	_		_
Mov Cap-1 Maneuver	728	940	-	_	1288	-
Mov Cap-1 Maneuver	728	34 0		_	1200	_
Stage 1	912	_	-	-	-	<u>-</u>
•	877	-	-		_	-
Stage 2	011	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s/v	/ 0		0		0.82	
HCM LOS	Α					
Minor Lane/Major Mvm	+	NBT	NRDV	VBLn1	SBL	SBT
Capacity (veh/h)	L	-	- INDIX	VDLIII	189	- 100
HCM Lane V/C Ratio					0.01	-
HCM Control Delay (s/v	(ah)	-	-	0	7.8	0
HCM Lane LOS	(C II)	-	-	A	7.0 A	A
					0	
HCM 95th %tile Q(veh)		_	_	_	- 11	_



Community Planning & Permitting

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Building Safety & Inspection Services Team

M E M O

TO: Pete L'Orange, Senior Planner

FROM: Michelle Huebner, Plans Examiner Supervisor

DATE: December 23, 2024

RE: Referral Response, LU-24-0017/SPR-24-0081: Starlings CO LLC Equestrian Center and Ag Worker ADU: Limited Impact Special Review for an Equestrian Center with more than 25,000 square feet of floor area, an Agricultural Worker Accessory Dwelling Unit, and non-foundational earthwork exceeding 500 cubic yards, and Site Plan Review for a new 5,352-square-foot residence where the presumed

compatible size is 5,934 square feet.

Location: 8130 N. 73rd Street

Thank you for the referral. We have the following comments for the applicants:

1. **Building Permit.** A building permit, plan review, inspection approvals, and a Certificate of Occupancy ("C.O.") are required for the proposed residence. A separate building permit is required to deconstruct the existing buildings. Separate building permit are required for each structure: Arena with stable, Hay / bedding storage, Heavy equipment storage, ADU (Single family dwelling) with equipment storage, covered round pen, horse runs with sheds and any other building. The grading must be included with one of building permits.

Geologic hazards – the required **soils report** for the residence will address the soil and bedrock swell potential on the parcel.

ADU with equipment storage. Is a mixed-use building, a code analysis from a Colorado licensed design professional, an architect, is required. The building occupancy must be classified by each space. The ADU (single family dwelling) portion of the building needs to meet all the same requirements as new single-family dwelling.

(Residential) Stairs are not permitted or approvable in crawlspaces. The crawlspace must be less than 6'-8" or will count as basement area. The 2015 Building Code Adoption & Amendments definitions:

Claire Levy County Commissioner Marta Loachamin County Commissioner Ashley Stolzmann County Commissioner

(Residential) CRAWL SPACE. An under floor space below the first story floor of the building that does not meet the definition of story above grade plane, that has a ceiling height measured from the crawlspace grade or floor to the bottom of the floor joists above of less than six feet 8 inches, and that does not contain interior stairs, windows, wall, and ceiling finish materials, trim or finished flooring

(Residential) Floor area is measure to the outside of outside walls and includes the stairs on each level. The 2015 Building Code Adoption & Amendments definitions: AREA, FLOOR. The area of the building, existing or new, under consideration including basements and attached garages calculated without deduction for corridors, stairways, closets, the thickness of interior walls, columns, or other features as measured from the exterior face of the exterior walls.

2015 Building Code Adoption & Amendments

The Commercial Plan Submittal Checklist: <u>B70 Commercial Plan Checklist</u> (bouldercounty.gov)

We are in the process of **updating the building code**. Please review the draft amendments - Board of Review - 2021 BCBC Amendments Draft

- (Residential) Automatic Fire Sprinkler System. Under the 2015 International
 Residential Code ("IRC") as adopted by Boulder County, all new one- and two-family
 dwellings and townhouses are required to be equipped with an automatic fire
 sprinkler system that is designed and installed in accordance with NFPA 13D or IRC
 Section P2904.
- 3. (Residential) BuildSmart. Please refer to the county's adoption and amendments to Chapter 11 of the IRC, the county's "BuildSmart" program, for the applicable requirements for energy conservation and sustainability for residential additions and new residential buildings. Please be aware that there are energy related requirements of this code that may require the use of renewable energy systems (such as rooftop solar systems) that will also need to be approved by your electric utility provider. In some cases, there may be limitations on the size of on-site systems allowed by your utility provider that could constrain the project design. We strongly encourage discussions between the design team and the utility company as early in the process as possible in order to identify these constraints.
- 4. **(Residential) Electric vehicle charging outlet**. Boulder County Building Code requires:
 - a. R329.1 Electric vehicle charging pre-wire option. In addition to the one 125-volt receptacle outlet required for each car space by NEC Section 210.52(G)(1.), every new garage or carport that is accessory to a one- or two-family dwelling or townhouse shall include at least one of the following, installed in accordance with the requirements of Article 625 of the Electrical Code:

- i. A Level 2 (240-volt) electric vehicle charging receptacle outlet, or
- ii. Upgraded wiring to accommodate the future installation of a Level 2 (240-volt) electric vehicle charging receptacle outlet, or
- iii. Electrical conduit to allow ease of future installation of a Level 2 (240-volt) electric vehicle charging receptacle outlet.
- 5. **(Commercial) Business.** The business use buildings and parking will be reviewed through the International Building Code (IBC) as commercial.
- 6. **(Commercial) Narrative use.** For each building permit provide a narrative of use for the building.
- 7. **(Commercial mixed-use building)** will be reviewed through the International Building Code (IBC) as commercial buildings. A code analysis from a Colorado licensed design professional, an architect, is required. The building occupancy must be classified by each space. These buildings are not all agricultural use under the International Building Code (IBC), but rather a mixed-use building see chapter 3 of the IBC. Electrical, mechanical and plumbing design is required to be prepared by a Colorado licensed design professional, an engineer.
- 8. **(Commercial) Minimum Plumbing Fixtures.** The plumbing fixtures count needs to meet or exceed the requirements of IBC Chapter 29, including the need for accessible restrooms and fixtures.
- 9. **(Commercial) Accessibility**. Chapter 11 of the IBC and referenced standard ICC A117.1-09 provide for accessibility for persons with disabilities. Any building permit submittals are to include any applicable accessibility requirements, including accessible parking, signage, accessible routes and accessible fixtures and features.
- 10. (Commercial) Energy Code. If structures, or a portion of them are to be conditioned (heated or cooled), please demonstrate compliance to 2015 International Energy Conservation Code IECC Commercial provisions.
- 11. (Grading) Grading Permit. The grading permit must be submitted with one of the building permits. The inspections approvals are required for the proposed non-foundational grading. Please refer to the county's <u>adopted 2015 editions of the International Codes and code amendments</u>, including IBC Appendix Chapter J for grading.
- **12. (Grading) Observation Reports.** The design professional responsible for the design or a similarly qualified Colorado-licensed design professional is to observe the grading and submit a stamped report to Building Safety & Inspection Services for review and approval. The final report is to state that the work has been completed in substantial conformance with the approved engineered plans.

- 13. **(General) Design Wind and Snow Loads.** The design wind and ground snow loads for the property are 155 mph (Vult) and 40 psf, respectively.
- 14. **(General) 2015 International Green Construction Code ("IGCC").** Boulder County's adoptions of the 2015 editions of the International Codes include the IGCC as applying to buildings or complexes of buildings on the same property with 25,000 sq. ft. or more of floor area. Thus, the provisions of the IGCC will apply to all new construction involved in the proposal.
- 15. **(General) Ignition-Resistant Construction and Defensible Space.** Please refer to Section R327 of the Boulder County Building Code for wildfire hazard mitigation requirements, including ignition-resistant construction and defensible space.
- **16. (General) Fire Department.** It appears that the site is served by MOUNTAIN VIEW FIRE RESCUE DISTRICT. A separate referral response from the fire department should also be forthcoming. The fire department may have additional requirements in accordance with their International Fire Code ("IFC") adoption. Also, the Fire Protection District must provide written documentation to Boulder County Building Safety and Inspection Services approving the building permit plans and specifications of projects before the building permit can be issued.
- 17. **(General) Plan Review.** The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be performed at the time of building permit application, when full details are available for review, to assure that all applicable minimum building codes requirements are to be met. Our <u>Building Safety publications</u>.

If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum building code requirements. Please call (720) 564-2640.



Community Planning & Permitting

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January 2, 2025

TO: Pete L'Orange, Senior Planner; Community Planning & Permitting, Development

Review Team - Zoning

FROM: Tim Oliver, Planner II; Community Planning & Permitting, Development Review

Team – Access & Engineering

SUBJECT: Docket # LU-24-0017/SPR-24-0081: Starlings CO LLC Equestrian Center and

Ag Worker ADU at 8130 N. 73rd Street

The Development Review Team – Access & Engineering staff have reviewed the above referenced docket and have the following comments:

- 1. The subject property is accessed via N 73rd Street, an asphalt Boulder County owned and maintained right-of-way (ROW) with a Functional Classification of Collector. Legal access has been demonstrated via adjacency to this public ROW.
- 2. The driveway design must comply with the Multimodal Transportation Standards (the Standards) for residential development, including without limitation:
 - a. Table 5.5.1 Parcel Access Design Standards (1-Lane Plains Access)
 - b. Standard Drawing 11 Private Access
 - c. Standard Drawing 14 Access with Roadside Ditch
 - d. Standard Drawing 15 Access Profiles Detail
 - e. Standard Drawing 16 Access Grade & Clearance
 - f. Standard Drawing 17 Access Pull-Outs
 - g. Standard Drawing 18 Access Turnaround
 - h. Standard Drawing 19 Typical Turnaround & Pullout Locations

The proposed emergency pullouts are more than 400 feet apart. Emergency pullouts have to be within 400 feet of each other per Standard Drawing 17 – Access Pull-Outs of the Standards.

The proposed emergency turnarounds are within 50 feet of the front of the house barn and the proposed residence. The emergency turnarounds must be no closer than 50 feet to the front of the structures per Standard Drawing 18 – Access Turnaround of the Standards.

At building permit, submit revised plans that show the proposed emergency pullouts within 400 feet of each other and the emergency turnarounds further than 50 feet from the front of structures.

- At final inspection, the Community Planning & Permitting Department must verify that the access and driveway has been constructed to comply with the Standards.
- 3. The proposed grading on sheets AS1-3 and AS1-4 is cut off at the south side of the sheets before the proposed contours tie back into the existing contours.
 - At building permit, submit revised grading plans that show the complete proposed grading, including all proposed contours tying back into existing.
- 4. On sheet number A1.0, the Overall Site Plan Existing, the site plan notes end at 18, but there are labels on the plan that are higher than 18.
 - *At building permit,* submit a revised Overall Site Plan Existing sheet that includes all of the notes in the Site Plan Notes legend.
- 5. During construction, all vehicles, machinery, dumpsters, and other items shall be staged on the subject property.
- 6. As a part of Boulder County's water quality protection and Municipal Separate Storm Sewer System (MS4) Construction Program, a Stormwater Quality Permit (SWQP) is required for this project because the disturbance illustrated in the submitted materials is over an acre.
 - At building permit, provide a complete SWQP submittal to stormwater@bouldercounty.gov.
- 7. The transportation system impact analysis (TSIR), dated November 5, 2025, was reviewed and staff agrees with its conclusions. It does not include data for the residential component of the proposal, but this exclusion does not alter the conclusions of the analysis.
- 8. The plans show 11 parking spaces, one of which must be ADA van accessible, and 6 spaces for vehicles with trailers. The parking is sufficient.
- 9. The minimum ROW width requirement for a Collector is 70 feet. However, N. 73rd Street is 60 feet at the subject property. Staff is uncertain whether ROW can be dedicated with a Limited Impact Special Use Review but recommends that a 5-foot half-width ROW be dedicated to the County at the subject property, if possible.
- 10. Staff observed stockpiles at the southern access point during the site visit. If stockpiles are going to remain for more than 30 days, they need to be vegetated.
- 11. There are no records of access permits issued for the northern and southern most agricultural accesses. They must be removed, revegetated, and restored.
- 12. A drainage letter is required for this development in order to determine if any detention or water quality treatment is required. A PDF is attached that lists the requirements in detail for this drainage letter.

At building permit, provide the required drainage letter as laid out in the attached PDF.

This concludes our comments at this time.



Public Works

2525 13th Street • Boulder, Colorado 80304 • Tel: 303-441-3900

MEMORANDUM

November 9, 2021

Subject: Allowance of the use of Drainage Letters on Private Development and

Public Capital Projects

At the discretion of the County Engineer, proposed projects may be allowed to utilize a drainage letter to satisfy the requirements of Section 204 of the Boulder County Storm Drainage Criteria Manual (SDCM), adopted November 2016. All other requirements that are not otherwise addressed by the Drainage Letter are still in force. The elements of the letter shall include, at a minimum, the following:

- Description of property location with size of property; alternately, include a vicinity map, with North arrow and nearby waterway features.
- Description of the proposed project
- Site plan showing entire property, with North arrow, scale, property size, disturbance area, and distance to waterways shown.
- Identify and address effects on adjacent or nearby major drainage features or waterways
- Existing (dashed) and proposed (solid) contours with tie-ins shown (2-foot or better resolution), and contour intervals and major contours clearly identified
- Proposed flow directions for current and proposed conditions
- Peak discharge calculations for the minor and major storm events as identified in the SDCM
- Peak flow rates to determine the sizing of drainage infrastructure, including, but not limited to, swales, inlets, storm drains, culverts, and any other infrastructure affected by the site development
- Infrastructure sizing calculations and supporting documentation
- Demonstration that detention is not required by applying one or more of the exemptions listed in SDCM section 1203.1
- Identification of potential impacts to adjacent down-gradient properties, proposed mitigation features, and certification that the project will not adversely affect downstream structures or infrastructure
- For projects that disturb an acre or more and are located within the County's MS4
 permitted area, an explanation of stormwater management facilities (SWMFs) is required.
 The explanation may include calculations for proposed SWMF or documentation that such measures are not required.
- Lots that are within a subdivision that have an approved drainage report may reference and supply the approved drainage report as well as a statement that the lot conforms to the original drainage report criteria.

Matt Jones County Commissioner Claire Levy County Commissioner Marta Loachamin County Commissioner

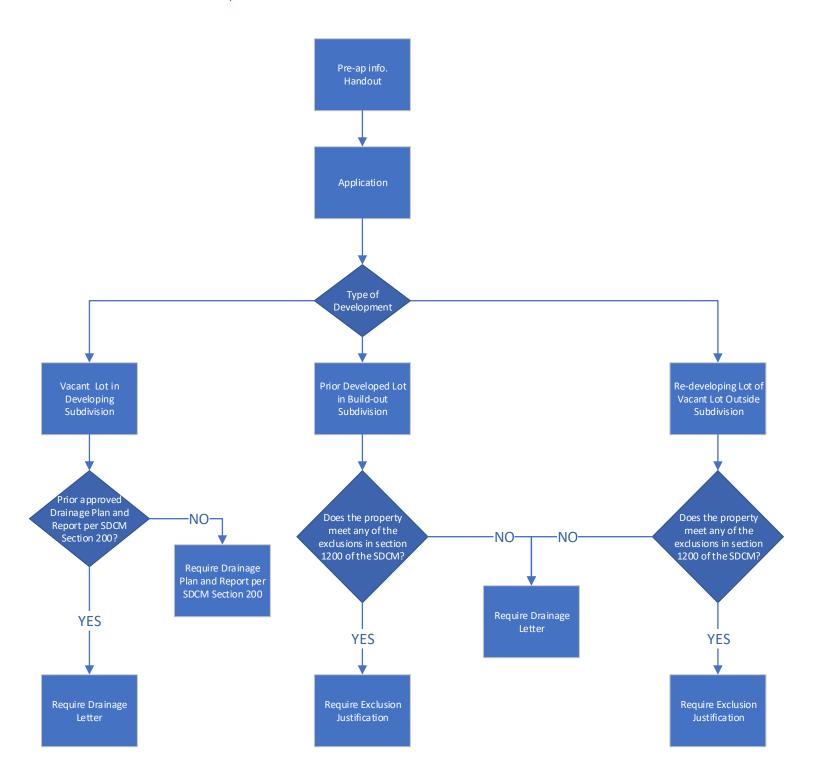
- Letter must be stamped and signed by a Colorado registered Professional Engineer in a related field
- Any other information that is necessary to satisfy drainage analysis and design for the site based on the judgement of the County Engineer.

After review of the initial letter submittal, the County Engineer may require additional information deemed necessary for adequate and appropriate drainage analysis on the site.

By: _____ Michael A. Thomas, P.E.

County Engineer, Boulder County Public Works

Effective Date: November 17, 2021





Community Planning & Permitting

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January 2, 2025

TO: Pete L'Orange, Senior Planner; Community Planning & Permitting, Development

Review Team - Zoning

FROM: Tim Oliver, Planner II; Community Planning & Permitting, Development Review

Team – Access & Engineering

Docket # LU-24-0017/SPR-24-0081: Starlings CO LLC Equestrian Center and SUBJECT:

Ag Worker ADU at 8130 N. 73rd Street

Addendum

The Access & Engineering staff requests additional information to support the Transportation System Impact Analysis (TSIR) conclusions. Specifically, the applicant should provide information regarding how many employees will be on staff, what their hours of employment will be, and how many will live onsite.

It is not clear to staff if the proposal is primarily for a breeding facility or a riding facility. Please provide a detailed description of the business model to be employed at the facility. Describe the expected schedule for trainers and students. How many trainers and students are expected on site on any given day? What days and times of day will they be on site? Similarly, describe the expected schedule for breeding activities. Also, describe any special events that will occur at the facility, when they will be held, and how many people will attend.

This concludes our comments at this time.



Community Planning & Permitting

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December 18, 2024

To: Pete L'Orange, Senior Planner

From: Kelly Watson, Principal Floodplain Planner

Subject: Docket LU-24-0017/SPR-42-0081: Starlings CO LLC Equestrian Center

and Ag Worker ADU

Request: Limited Impact Special Review for an Equestrian Center with more than

25,000 square feet of floor area, an Agricultural Worker Accessory Dwelling Unit, and non-foundational earthwork exceeding 500 cubic yards, and Site Plan Review for a new 5,352-square-foot residence where

the presumed compatible size is 5,934 square feet.

Location: 8130 N. 73rd Street, a 68-acre parcel located approximately .75-mile north

of the intersection of N. 73rd Street and Nimbus Road, in Section 24,

Township 2N, Range 70W.

The Community Planning & Permitting Department – Floodplain Management Program has reviewed the above referenced docket and has the following comments.

1. The subject parcel is located outside the Floodplain Overlay (FO) District. No Floodplain Development Permit (FDP) will be required for the proposed development. Note that FEMA and county floodplain maps changed on October 24, 2024. Previously, portions of the property were located within the 100-year floodplain. Currently, portions of the property are located within the 500-year floodplain, which is not part of the regulated FO District.

Additional / advisory notes:

- A portion of the property, specifically the southern 1/3 of the parcel, is within a known fluvial hazard zone, which is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports water, sediment, and debris. Parts of the property that are outside the regulatory FO District are still within the fluvial hazard zone and may be subject to excessive erosion, sedimentation, and/or wholesale changes in the location of the stream channel.
- The Floodplain Management Program recommends that all homeowners maintain flood insurance, regardless of whether a structure is in a mapped floodplain. In 2021, the National Flood Insurance Program (NFIP) changed how flood insurance premiums are rated. As a result, homeowners may see flood insurance savings by implementing flood mitigation measures, even for structures outside the mapped floodplain. These measures may include: building farther away from flooding sources; building on higher ground; elevating the first floor above adjacent grade; filling in crawlspaces and basements or adding flood vents to such enclosed spaces; and elevating mechanical and electrical equipment above the first floor.

Claire Levy County Commissioner

Marta Loachamin County Commissioner

Ashley Stolzmann County Commissioner

We recommend that you contact your insurance agent to discuss the impact of the proposed development on your flood insurance rate. Boulder County residents receive discounts on NFIP premiums because of the county's participation in the program, but there are also private options available.

Please contact Kelly Watson, Principal Floodplain Planner, at kwatson@bouldercounty.gov to discuss this referral.

This concludes our comments at this time.



Public Health Environmental Health Division

December 27, 2024

TO: Staff Planner, Community Planning and Permitting

FROM: Carl Job, Environmental Health Specialist

SUBJECT: LU-24-0017: Starlings CO LLC Equestrian Center and Ag Worker ADU (SPR-24-

0081)

OWNER: STARLINGS CO LLC

PROPERTY ADDRESS: 8130 N 73RD STREET

SEC-TOWN-RANGE: 24 -2N -70

The Boulder County Public Health (BCPH) – Environmental Health division has reviewed the submittals for the above referenced docket and has the following comments.

OWTS:

- 1. Boulder County Public Health issued a new permit for the installation of an absorption bed system on 03/15/1999. The permit was issued for an onsite wastewater treatment system (OWTS) adequate for a 3-bedroom house. Boulder County Public Health approved the installation of the OWTS on 05/18/2000.
- 2. Boulder County Public Health issued a new permit for the installation of an absorption bed system on 10/29/2003. The permit was issued for an onsite wastewater treatment system (OWTS) adequate for a 7-bedroom house. Boulder County Public Health approved the installation of the OWTS on 11/14/2005.
- 3. The narrative included in the Land Use Review application states that the existing 7-bedroom OWTS will be replaced and relocated to be sized in support of the proposed stable. Similarly, a new OWTS will be designed and installed to service the proposed residence.
- 4. The owner or their agent (e.g., contractor) must apply for the OWTS permit, and the OWTS permit must be issued prior to installation and before a building permit can be obtained. The OWTS components must be installed, inspected, and approved before a Certificate of Occupancy or Final Building Inspection approval will be issued by Community Planning and Permitting (CP&P).
- 5. Be sure to apply for the correct permit (Major Repair Permit Associated with Property Improvements). The permit fees can be found at:

 https://bouldercounty.gov/environment/water/septicsmart/permit-and-fee-schedule/#owts-permit-services-and-fees
- 6. Boulder County Public Health must conduct an onsite investigation and review percolation rates, soil conditions and any design plans and specifications prior to OWTS permit issuance. The OWTS absorption field must be located a minimum distance of 100' from all wells, 25' from waterlines, 50' from waterways and 10' from property lines.

- 7. Setbacks between all buildings and the OWTS serving this property and OWTS serving neighboring properties, must be in accordance with the Boulder County OWTS Regulations, Table 7-1. https://assets.bouldercounty.gov/wp-content/uploads/2017/05/boulder-county-ows-regulations.pdf
- 8. The existing septic tanks must be properly abandoned if they are not to be incorporated into the new OWTS. Pumping the tank and then either crushing it or filling it is required.

Avoid Damage to OWTS:

1. Heavy equipment should be restricted from the surface of the absorption field during construction to avoid soil compaction, which could cause premature absorption field malfunction. Caution should be used in conducting trenching and excavation activities so that sewer lines and other OWTS components are not damaged.

This concludes comments from the Public Health – Environmental Health division at this time. For additional information on OWTS, refer to the following website: www.SepticSmart.org. If you have additional questions about OWTS, please do not hesitate to contact HealthOWS@bouldercounty.org. Cc: OWTS file, owner, Community Planning and Permitting



December 26, 2024

Pete L'Orange, Senior Planner

Boulder County Community Planning & Permitting

Transmission via email: plorange@bouldercounty.gov

Re: LU-24-0017/SPR-24-0081, Starlings CO LLC Equestrian Center & Ag Worker ADU

8130 N 73rd Street, Longmont

NE¼ of the SW¼ & Pt. SE¼ of the NW¼, Sec. 24, T2N, R70W, 6^{th} P.M.

Water Division 1, Water District 5

Dear Mr. L'Orange:

We have reviewed the above-referenced Site Plan Review for a new 5,352-square-foot residence where the presumed compatible size is 5,934 square feet and Limited Impact Special Use Review for an Equestrian Center with more than 25,000 square feet of floor area, an Agricultural Worker Accessory Dwelling Unit ("ADU"), and non-foundational earthwork exceeding 500 cubic yards, all on an approximately 68-acre parcel (ID 131724000011). The submitted material does not appear to qualify as a "subdivision" as defined in section 30-28-101(10)(a), C.R.S. Therefore, pursuant to the State Engineer's March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide comments. The comments will not address the adequacy of the water supply plan for this property or the ability of the water supply plan to satisfy any County regulations or requirements.

The referral proposal is in support of equestrian training and breeding center CH Equine. Based on Boulder County property records, this property currently contains one 4,000 sq foot equipment shed and one 12,144 square foot barn. Current septic availability consists of two two systems on the property serving the existing barn and a previously-demolished residence, respectively. The current water supply is stated as being provided from an existing tap through the Left Hand Water District ("LHWD") and an existing well: Permit no. 5664--A, which was issued for the replacement of a well first put to use prior to May 8 of 1972.



The use of water from well no. 5664--A is limited to the historical uses of watering livestock on a farm or ranch. Uses that are an expansion of the historical use of the well are not permitted, meaning that water from well no. 5664--A <u>cannot</u> be used for either the proposed residential dwelling nor the ADU. In regards to the proposed equestrian center, information from the <u>CH Equine website</u> indicates that the organization's focus is on the instruction of horses brought in from external owners. Subsequent correspondence with the applicant clarified that the majority of the horses on-site will be owned by the applicant. Although the facility is intended to be for training purposes, not boarding, trainee horses will be stabled on site. It was communicated that stabling periods will vary, from a weekend up to a year. When considering historical livestock uses, well no. 5664--A may only be used if the subject animals are owned by the well owner. <u>Water from well no. no. 5664--A cannot be used for stabled trainee horses.</u>

Permit no. 5664-A was issued on the condition that the existing well under permit no. 5664 be plugged and abandoned. A Well Abandonment Report was not received for well no. 5664, therefore it is unknown if the well was plugged. To confirm well no. 5664 was plugged and abandoned, the well owner should submit a Well Abandonment Report (Form GWS-09) available at: https://dwr.colorado.gov/services/well-construction-inspection.

The applicant indicated through correspondence that the well water is currently not potable for livestock, and use of the well (rather than the LHWD tap) will be contingent on the installation feasibility of a filtration system. If well permit no. 5664-A is no longer required for the uses stated in the permit, it should be plugged and abandoned with a Well Abandonment Report submitted to this office to verify that the work has been completed. The Well Abandonment Report (GWS-09) may be found on the eForms page of the Division of Water Resources website at https://dwr.state.co.us/eforms.

Application materials also state that Holland Ditch (WDID 0500574) crosses the subject property, with the headgate located several miles from the proposed area. Should construction activities impact the ability of the Left Hand Ditch Company to deliver water to users under the Holland Ditch, the applicant will need to coordinate with the ditch company to mitigate any such impacts.

Three existing ponds are visible on satellite imagery, and confirmed by the proposed site plan. Construction information on these ponds were not provided, so it is not clear whether these ponds were constructed in accordance with Colorado Law. Ponds resulting from exposed groundwater excavations or collection and impoundment of flowing waters on the surface (or combination of both), must have a legal means of exposing groundwater and storing flowing waters on the surface (for periods of greater than 120 hours following a

Starlings CO LLC Equestrian Center & Ag Worker ADU Plan Number LU-24-0017/SPR-24-0081

precipitation event). The Applicant must coordinate with the Water Commissioner (Shera Sumerford, Shera.Sumerford@state.co.us) to ensure the ponds are in compliance, which may require obtaining a water right and augmentation plan, or eliminating the pond if the pond cannot be brought into compliance. See the Beginners Guide to Ponds for more information.

This office has no concerns with the proposed Site Plan Review nor Limited Impact Special Use Review so long as the well with permit no. 5664--A is used in accordance with its permitted terms and conditions.

Should you or the applicants have any questions regarding this matter, please contact Keian Freshwater at 303-866-3581 ext. 8237 or keian.freshwater@state.co.us for assistance.

Sincerely,

K. Fulla

Kate Fuller, P.E.

Water Resources Engineer

Ec: Referral file no. 32602

Well permit file no. 5664--A

Shera Sumerford, Water Commissioner (Shera.Sumerford@state.co.us)



Right of Way & Permits

1123 West 3rd Avenue Denver, Colorado 80223 Telephone: **303.571.3306** Facsimile: 303.571.3284 donna.l.george@xcelenergy.com

December 30, 2024

Boulder County Community Planning and Permitting PO Box 471 Boulder, CO 80306

Attn: Pete L'Orange

Re: Starlings CO LLC Equestrian Center and Ag Worker ADU

Case #s LU-24-0017 and SPR-24-0081

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the limited impact special review and site plan for **Starlings CO LLC Equestrian Center and Ag Worker ADU**. Please be aware PSCo owns and operates existing natural gas service facilities within the subject property. The property owner/developer/contractor must complete the application process for any new natural gas service, or modification to existing facilities via xcelenergy.com/InstallAndConnect. It is then the responsibility of the developer to contact the Designer assigned to the project for approval of design details.

As a safety precaution, PSCo would like to remind the developer to contact Colorado 811 for utility locates prior to construction.

If additional easements need to be acquired by separate PSCo document, a Right-of-Way Agent will need to be contacted.

Donna George
Right of Way and Permits
Public Service Company of Colorado dba Xcel Energy

Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com

From: Seth Levine
To: L"Orange, Pete

Subject: [EXTERNAL] Fwd: Additional Information re: Site Plan Review LU-24-0017-SPR-24-0081

Date: Thursday, January 9, 2025 3:05:15 PM

Hi Pete. I believe you are the planner who has been assigned to this. I haven't heard back from my email below and thought it was best to reach out directly. I'm not necessarily opposed to the planned commercial use of this property across the street from us, but we absolutely need to do something to slow the traffic down over the hill on 73rd St (variable speed sign for sure, but potentially other measures like a rumble strip, etc). It's already not safe to pull in/out of the driveways just over the proposed use will make it even more so. With the approved construction at Nelson and 75th, too many people are using 73rd St. We need to encourage them to use Airport Road instead.

Than	ks	for	your	time.
Than	KS	tor	your	time.

Seth Levine

Buy my book: https://thenewbuilders.com/#buy



----- Forwarded message -----

From: Seth Levine <seth@sethlevine.com> Date: Friday, January 3 2025 at 10:15 AM MST

Subject: Additional Information re: Site Plan Review LU-24-0017-SPR-24-0081

To: planner@bouldercounty.gov

We received a notice about the proposed structures to be built on the property located at 8130 N 73rd St. This lot is directly across from 73rd St from our property. While we generally believe that people should be able to build reasonable structures on their properties, in this case the materials suggest that the applicants anticipate operating some kind of equestrian business at this location (and will be building structures and infrastructure to support this commercial effort). As you may be aware, many neighbors have complained to Boulder County about controlling vehical speeds on this stretch of road and have been lobbying for better signage (for example a variable speed sign at the top of the hill on 73rd St to slow traffic over the hill). It was unclear from the materials submitted where the applicants

are intending on placing the driveway/access to their new commercial property. We are concerned that without either reducing speed limits or adding in additional measures to slow traffic that the addition of additional traffic turning onto and off of 73rd St will exacerbate what is already a dangerous traffic situation. We'd encourage Boulder County to work with the applicants and the neighborhood to take active measures to control traffic and reduce traffic speeds. We would be happy to provide additional information and ideas once we have a sense for the plans for access to the property as well as a better understanding of the amount of traffic the applicants anticipate their new commercial business to generate.

You can reach me at 303-378-9397 to discuss this in person or via email here.

Thank you.	
Seth Levine 8165 N 73rd St	
Buy my book: https://	//thenewbuilders.com/#buy
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From: <u>John Reber</u>
To: <u>LU Land Use Planner</u>

Subject: [EXTERNAL] Fw: LU-27-0017?SPR-24-0087 COMMENTS

Date: Wednesday, January 29, 2025 1:13:54 PM

---- Forwarded Message -----

From: John Reber

To: petelorange@bouldercounty.com

Cc: Debbie Lane; rjr@raicer.com; Leslie Ewy; Kim Kelleghan; Valdez Ron

Sent: Wednesday, January 29, 2025 at 01:08:59 PM MST

Subject: LU-27-0017?SPR-24-0087 COMMENTS

LU-27-0017 / SPR-24-0087

January 29, 20025

Comments and questions regarding the subject proposal

My family and I live at 8558 N 79th St., Longmont, CO 80503 – Boulder County

My property does not abut the subject property, and my visual and sound connection to the property are limited. I do enjoy a dark night sky, one which continues to be negatively impacted in this area. I also drive on N 73rd Street along the western border of the subject property daily and have direct knowledge//experience about the subject property for more than 30 years.

I have several comments about the proposal:

Traffic Study and direct concerns:

The Trafic Study (Study) considered the area on n 73rd at Niwot Rd. According to the Study: "The Study73rd Street has a posted speed limit of 50 miles per hour (mph) and serves approximately 5,050 vehicles per day (vpd) near the project site (Year 2024). "The speed limit is in fact 50 mph on only a portion of the North 73rd and St and south of the subject property. The current speed limit along the subject property ranges from 45 mph and then most importantly **35mph in the area of the property's driveway and blind hill.** For good reason, the speed limit was lowered years ago for safety reasons of so blind hill and at least 3 residential driveways are **NOT** visible to drivers along an extended portion of N 73rd.

Rural properties such as the ones regional to the subject properties regularly have slow moving vehicles (tractors/farm equipment, residential driveway entry/exit, and where horses or livestock are present: frequent vehicles pulling horse or stock trailers. Additionally, a substantial volume of biking and jogging occurs throughout that 35 mph zone and present challenges to drivers, joggers and bikers. This requires addressing for this proposal and must design some way to **NOT** make that safety concern worse. And, the traffic study considered biking volume in the subject

property area in October. Depending upon the weather and day of the week, the bike volumes could have varied from better weather and day of the week timing during the Summer.

Outdoor Lighting:

Reviewing the proposed project application, it was difficult to ascertain what outdoor lighting is planned for the structures and both the driveways and outdoor animal and personal use areas. One mention is made of an area that was not to be lighted and one of the structure elevation plans showed one apparent downlighting fixture.

The region has numerous residences and agricultural use areas that employ many different forms of outdoor lighting. Some are on only for portions of dark hours, and some run all night for reasons ranging from security, regular night time use or even just occasional use.

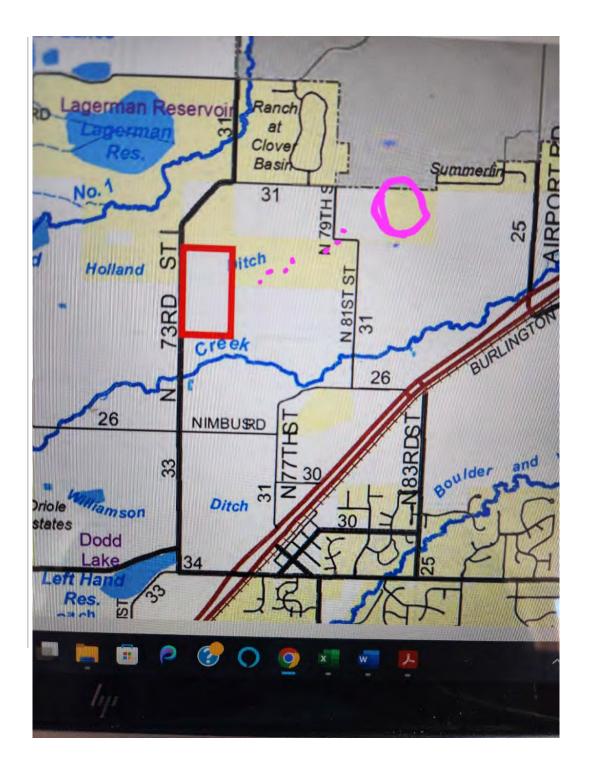
The proposal at this stage or future stages must be clear about the specific areas that are lit and that the method for that lighting meets County regulations, even considering neighbor desires for a darker night sky if possible. There is substantial (though not all, regrettably) use of down lighting in out door lighting in our neighborhood, regionally and nationally. Please consider the best available outdoor lighting practices available and apply them appropriately.

Finally, and an item likely not considered as part of the current subject property application, is the access requirement onto the property for particular Holland Ditch water rights owners. During the irrigation season, one of the head gates on the Holland Ditch must be accessible for me to turn on/turn off my water ordered and occasionally check on settings and function at the head gate. The current access to the head gate is via the existing property drive located at the brow of the hill on North 79th St. Several other water rights holders must also have such access.

I have attached an image showing the subject property in relation to my residence. The pink circle encloses my residence.

I am available by phone 303 589-6134 or email jhreber@aol.com . Please contact me if you need additional information or have guestions.

John Reber



L'Orange, Pete

From: Debbie Lane <solstice56@comcast.net>
Sent: Thursday, January 30, 2025 2:41 PM
To: LU Land Use Planner; L'Orange, Pete

Subject: [EXTERNAL] 8130 N. 73rd Docket LU-24-0017/SPR-24-0081

Dear Boulder County Commissioners and Planning Dept.

I am a neighbor of 8130 N. 73rd Street.

I have looked at the site review plan and would like to make some comments. I am inexperienced at looking a site review plans and want to thank Pete L'Orange for his answers to my many questions.

I'd like to welcome my new neighbor.

I can tell from all many hours of work that have gone into preparing this site plan that she has a passion for what she is doing.

This is a slice of paradise on Earth in this area. I can fall asleep to sounds of coyotes or owls. Recently we had a big herd of elk that visited us for a couple of day. This morning as I was leaving home, I saw a coyote bound across our field. What a joy to live in harmony with nature's creatures. I feel privileged to live here in this open space. I hope you will too. I look forward to seeing more horses in the fields. They will add to the beauty of living in the country.

When my husband Steve Szabo and I first purchase our property it was 5 acres surrounded by a 45 acre conversation easement. Through the kindness and generosity of Boulder County we were able to purchase the 45 acres and tie it to the original 5 acres.

We have lived at our home for 22 years, and for all those years as I look out my kitchen window to the west, there are just a sprinkling of lights glowing. I saw that the outdoor arena would not have lights, or amplified sound. I appreciate this consideration of the neighbors. I'm unclear about other lights that might be used for safety of the horse owners. Will the parking lot have lights? Overhead lights? I wonder if there will be lights if they can be turned off at a reasonable hour.

I'm please that BC is allowing an ADU on the project, this will support the project in a positive way. It shows BC's commitment to keeping lands agricultural. Having a on site farmer will help reduce the carbon footprint of this property.

I know that Boulder County is a leader in protecting the environment during the building process. I understand that building that are torn down will be recycled to the greatest extent possible. I know that BC has high standards for reducing energy produced from fossil fuel. I understand there will be roof top solar on the home. I wonder what will power the equestrian facility?

In 2020 Gamma Grass began leasing a piece of property out here. I began learning about carbon capture regenerative farming. This year we began a project on our farm to plant an orchard and herbs for Wishgarden Herbs in a carbon capture regenerative way. The Earthwork is complete and next Spring the orchard will be planted and cow will be grazing the fields. I'm happy that this area can remain agricultural and help prove the concept of carbon capture regenerative farming. I hope the new owners of 8130 N. 73rd will make the hay organic, as the people farming this land are working towards a certification in regenerative farming.

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I have the following requests for the commissioners to consider.

- 1. Limits on the hours that outdoor work can occur.
- 2. Move the driveway from it's current location. Currently the one lane driveway is at the crest of a hill. It is a blind spot. It concerns me that big vehicles pulling horse trailers will be using it. This is a narrow area where vehicles, bikes and runner all must share the same space. As you can see from attached photos it is difficult to see traffic exiting this driveway. The driveway is located where the mailbox is. On the north side is a row of evergreen trees and along N. 73rd is a long row of deciduous trees. I hope that you will consider requiring the driveway to the facility be moved to area with better visibility for all users. Being aware that the neighbors will need access to the head-gates to turn on water during the irrigation season.

Namaste, Debbie Lane 8449 N. 79th Street Longmont, CO 80503 303 678-0690





I acknowledge that I walk, dance and live upon traditional land stewarded by the Arapahoe, Ute, Sioux and Cheyenne People who still consider this their homeland.