

Midway City Council
7 December 2021
Regular Meeting

The Village Development /
Concept and Master Plan



Midway

CITY COUNCIL MEETING STAFF REPORT

DATE OF MEETING: December 7, 2021
NAME OF PROJECT: The Village
NAME OF APPLICANT: Midway Heritage Development, LLC
AUTHORIZED REPRESENTATIVE: Daniel Luster
AGENDA ITEM: Master Plan Concept Amendment
LOCATION OF ITEM: 541 East Main Street
ZONING DESIGNATIONS: C-2

ITEM: 5

Dan Luster, agent for Midway Heritage Development LLC, is proposing a master plan amendment for The Village. The proposed revised plan is a mixed-use development that contains both commercial and residential uses. The proposal includes at least 44,128 square feet of commercial space in multiple buildings, 143 dwellings, park, and trails, to be developed in five phases. The master plan is on 27.47 acres and contains 8.81 acres of open space. The property located at 541 East Main is in the C-2 zone.

BACKGROUND:

Dan Luster, agent for Midway Heritage Development LLC, is proposing to amend the approved concept of the master plan for The Village that was originally approved by the City Council on May 18, 2021. On August 17, 2021, the City Council approved a conditional zone map amendment that, once all conditions have been met, will rezone the entire property to C-2. The applicant is now proposing to amend the approved concept master plan to a revised master plan that is based on the C-2 zoning regulations for

mixed-use projects and on the conditions approved by the City Council for the rezoning for the property. The City Council's motion for the conditional zone map amendment included the following conditions:

- The amendment to the Land Use Map was not official until a master plan agreement was signed and recorded by the applicant and the City.
- The concept plan, recorded with the master plan, was the only development that could occur on the property and the layout would be substantially similar to the approved concept plan.
- The density of the development was limited to 143 residential units.
- The minimum setbacks would correspond with what was shown on the concept plan included as Exhibit 5 (Proposed Rezone Concept Plan (August 17)) in the supplemental file for the meeting.
- Adjustments could be made if all parties agreed.
- The automotive shop and other buildings on Parcel 00-0006-6261 would be included in the master plan application as open space.
- Acknowledged that the first application would have to be withdrawn so that the second application could be approved.
- All commercial uses except Home Occupation Businesses, as defined in the City Code, would be located only in the buildings designated as commercial on the revised concept plan.
- Both the Developer and the City agreed that gas stations and car washes were not compatible with the design and were no longer permitted uses with the acceptance of the agreement.
- A maximum of 20% of the residential units would have direct driveway access to a public road with the garage facing a public road.
- The area proposed as open space, as currently defined in the City Code, would be no less than 8.32 acres.
- Any large buildings on Main Street would have architectural and landscaping design elements to reduce noise reflection as reviewed by the Vision Architecture Committee and City Architect.
- The TROD line would remain as drawn on the map prior to this motion. The TROD would no longer encompass all of the commercial zones.
- If any portion or all of a unit was in the rezoned area, then it could not be a transient rental.

The property is located at 541 East Main and encompasses 27.47 acres and contains 8.81 acres of open space. The proposal includes at least 44,128 square feet of commercial space in multiple buildings, 143 townhomes, park, trails, pool, and sports club. The proposed plan is a mixed-use development that will be developed in five phases.

The property has historically and is currently in agricultural production except of the land occupied by the automotive shops, storage units, and dwelling. Sensitive land area located on the property will be left undisturbed as required by the land use ordinance. These sensitive lands include the sloped areas at the base of Memorial Hill.

The C-2 zone allows mixed-use development. The proposal is to create a mixed-use development that will include commercial uses along Main Street and residential uses in the remainder of the property. The application covers the largest commercial properties in town. Development of the property could greatly increase the City's tax base and add more commercial space that has become increasingly more difficult to find in the past few years. The property is also very visible from Main Street and because of its location at the base of Memorial Hill, many residents and visitors of Midway are familiar with the property. There are existing residents and commercial businesses in the area that will be impacted by the development and careful planning must be taken to mitigate negative impacts wherever reasonably possible. Because mixed-use projects are a conditional use, the City Council may require reasonable conditions to mitigate negative impacts to the neighbors and the area.

Most of the property has been in the C-2 zone and four applications have been submitted for commercial development on the site over the past ten years. Two of the applications included commercial development and storage units. Both applications were reviewed but, in the end, neither project was ever built. Since then, the City has removed storage units as a potential use in the C-2 zone. The City has also received two large mixed-use development applications on the property. Both applications were reviewed but neither progressed through the approval process and eventually, the applicants pulled their applications. The City also considered amending the zoning on the property to a new commercial zone that was a performance-based code that focused on creating a community gathering area by incentivizing the developer to create a unique place. After some public hearings, it was apparent that the proposal did not have broad public support.

The Land Use Code requires that a Master Plan request must demonstrate that approval of the project in multiple phases can occur such that the project can still function autonomously if subsequent phases are not completed. Therefore, the Master Plan application must demonstrate that sufficient property, water rights, roads, sensitive lands protection, and open space are proposed with the first phase to allow the project to function without the subsequent phase or phases. All water rights required will be held in escrow before the master plan agreement is recorded and then dedicated to the City as required per phase. Not every issue and detail will need to be resolved for master plan approval but any issue regarding the aforementioned items do need to be resolved before master plan approval is granted. Some items will be reviewed and resolved during the preliminary and final approval of each phase.

LAND USE SUMMARY:

- 27.47 acres
- 8.81 acres of open space
- C-2 zone

- Five phases
- All remaining roads and alleys are private, including the connector road to River Road.
- Private roads, alleys, parking areas, and open space will be maintained by the HOA or POA
- Potential trail connection to Memorial Hill
- Sensitive lands on the property include sloped areas

ANALYSIS:

Water Rights – Master plans require that water rights be held in escrow with the City before the master plan agreement can be recorded. The required water rights per phase are then dedicated to the City before the recording of each plat. The Water Advisory Board has approved an estimated 166.6 acre-feet will need to be held by the City in escrow before the master plan can be recorded.

Roads and Traffic Circulation – Each phase of the subdivision must meet access requirements. All phases comply with access requirements.

Traffic Study – A traffic study has been submitted to the City for review. The study has determined the impact of traffic generated from the proposal on the surrounding UDOT and City streets. One significant finding is a third access is required for better traffic distribution and to lower the impact on the intersection of River Road and Main Street. The third access will be from River Road. There are off-site improvements required based on the traffic study. More information on this issue is provided in Horrocks Engineers review letter that is attached to this report.

Alley Access – The proposed plan has street access to each unit but there is also additional alley access proposed for parking access. The alley access areas will be private and will be owned and maintained by the HOA or POA. Snow removal and storage from the alley is a concern and staff has asked that a snow removal and storage plan is prepared for review and approval. The developer is developing a plan to assure functionality of the proposed master plan. The developer has also provided a will-serve letter from Wasatch County Solid Waste (previous concept master plan). The County will enter private alley areas to unload trash containers. The Fire District did meet with staff and the developer to review all fire related issues. The proposed plan has been modified to address concerns raised in that meeting.

Main Street Improvements – The developer will be required to improve Main Street to UDOT requirements.

Public Participation Meeting – The developers will hold a public participation meeting on October 11, 2021, as required by the ordinance for master plan applications. This requirement is to give the developer an opportunity to present the development to the surrounding residents of the proposed project. The developer provided a report of that meeting which is attached to this staff report.

Density – The maximum number of residential units is 143 as per the condition of the conditionally approved rezone of the property.

Trails – There are no planned trails on the property as per the Trails Master Plan though all trails shown on the will have a public trail easement. Staff has asked the developer to consider a trail connection from the development to Memorial Hill. Wasatch County, owner of Memorial Hill, would need to approve the trail. It is anticipated that if a trail is built, it would be a backcountry soft surface trail to eliminate impact on Memorial Hill and to limit a visual impact when looking at the hill. Staff's concern is that without a trail plan and design, the public will create their own trails that may have a visual impact and an erosion impact on Memorial Hill.

Architecture Theme – The developer is required to receive architectural approval of all structures in the mixed-use development, this includes all commercial and residential buildings, along with any other features that require architectural approval. Specific review of each building will be required through the approval process.

Parking – The developer is providing 189 commercial stalls and 358 residential stalls for a total of 547 parking stalls. Of the residential stalls, two stalls per unit will be provided in the garage of the unit with the other 72 residential stalls dispersed in the residential area of the development. At master plan, calculating the exact number of commercial stalls is not realistic because until the exact use and size of a structure is known, the exact amount of parking cannot be calculated. The goal at master plan is to make sure there is the possibility of enough parking for future planned uses. The typical amount of parking required is one stall for every 250 square feet for areas accessible to the public. Generally, this should be an adequate number of stalls for master plan but as each individual permit is submitted, parking will need to be reviewed.

Required Commercial Square Footage – The mixed-use code requires 20% of the gross square footage of all structures (except residential garages) is deed restricted as commercial. The plan presented appears to meet the requirements of the code as outlined on page 3 of the submitted plans dated October 4, 2021. The developer is proposing at a minimum 44,128 square feet of commercial and 81,401 square feet of residential based on building pad area and one-story buildings above grade. Most likely, most structures will be two stories above grade and the commercial building area will be 83,184 square feet and the residential space will be 336,050 square feet

(the residential number is based on 143 units at 2,350 square feet and excludes garage area). To assure that the commercial square feet requirement is met, staff is proposing that approvals of phases 4 and 5 (which are fully residential) are not approved for preliminary approval until the commercial structures are built. The details to this provision will need to be outlined in the master plan agreement.

The following are examples of potential areas of the residential and commercial buildings. It is most likely the actual area of the buildings will be different from what is represented but the 80% and 20% ratios must be met and will be monitored through the building permit approval process.

Building	Building Description	Overall	Footprint	Usable	Usable			Storage
					1st Floor	Retail	Office	
1	Restaurant	6,412	3,206.00	4,132	1,877	0		3,206
2	Retail	10,600	5,300.00	7,422	3,711	5,300		5,300
3	Restaurant	4,786	2,393.00	3,572	1,786	0		2,393
4	Restaurant	2,800	1,400.00	1,784	834	0		1,400
5	Office	4,786	2,393.00	3,572	1,786	0	4,786	0
6	Office	2,800	1,400.00	1,784	834	0	2,800	0
7A	Gym	27,788	13,894	20,016				
	Gym							
7B	Restaurant	6,412	3,206	4,132				3,206
	Gym							
7C	Restaurant	2,800	1,400	1,784				1,400
8	Pool & Patio	14,000	14,000	14,000				
Total		83,184	48,592	62,198		5,300	7,586	16,905

Ratio of Commercial to Residential				
	Residential Space			
		Units	143	
		Unit Size	2,350	
		Total Residential sf	336,050	
	Ratio Commercial/Residential		(sf)	(%)
		Total Residential Space	336,050	80.2%
		Total Commercial Space	83,184	19.8%
		Total Built Space	419,234	

Sensitive Lands – Sensitive land area located on the property will be left undisturbed as required by the land use ordinance. These sensitive lands include the sloped areas at the base of Memorial Hill. No building pads are located on any slopes 25% or greater.

Open Space – The proposal is required to provide 8.32 acres of open space; 8.81 acres have been provided.

Setbacks – The proposed development is required to meet the setback requirements for the mixed-use code and the conditions placed on the project through the rezoning approval. All commercial buildings are required to have an 8' setback and all residential structures are required to have a 10' setback. Residential setbacks along the western boundary are a minimum of 36' and residential setbacks along the eastern boundary are a minimum of 100'.

Height of structures – Structures cannot exceed 35' in height, measured from natural grade to the roof. Architectural elements may exceed the 35' limit as per code.

Transient Rental Overlay District – The transient rental overlay district (TROD) covers the roughly 600' area of the project north of Mains Street. Per the conditional approval of the rezone of some of the project area, only units that fall completely in the rezone area may be rented as short-term nightly rentals, and only if the units comply with all requirements. An exhibit will be included in the master plan agreement that clearly show which units available as nightly rentals.

One Property Owners Association – All residential phases of the master plan are required to be part of one property owner's association. The commercial areas will all be required to be part of one property owner's association. This is required to maintain all private areas including, private roads, alleys, roads, and common areas. The requirement to be part of one POA is to reduce conflict in the future. Sometimes in phased developments, phases are sold to different developers and the new developers of a phase do not want to be part of the POA. This has created problems in other phased developments in Midway and for that reason the code requires that all phases be part of one POA.

Geotechnical Report – The City has received two geotechnical reports for the property. One from 2017 and one from 2021. The geotechnical report from 2017 found water in some of the test pits on the west side of the property. The report from 2021 did not find water in any of the test pits, including pits dug near the test pits with water from 2017. A high-water table is a concern because the proposed plan is dependent on below grade parking. Without the below grade parking, the master plan would need to be amended. Staff is recommending piezometers are installed in multiple areas of the development to monitor water levels over the next few years, especially in the areas of phases 2-6. The piezometers will provide information regarding the water table over multiple years. This will give information regarding the ability to develop future phases. If the water table is a problem for some phases,

then the master plan will need to be amended to continue to comply with code requirements.

Landscaping – The proposed development has a significant amount of frontage along Main Street. The view of Midway along Main Street is of high importance for the City for a couple of reasons. First, it is important to the residents of Midway that Main Street is aesthetically beautiful. Most residents of Midway use Main Street at least once a day and maintaining a beautiful corridor through town is of high priority. Second, the Midway economy is dependent on tourism and a clean and orderly Main Street is vital for creating the atmosphere needed to create a beautiful community that will attract tourists. For these reasons staff is proposing a requirement that the commercial areas of the development be either kept in agricultural production until constructed or, once those areas are developed, the commercial pads and surrounding area are landscaped until the structures are built. The landscaping may be minimal with grass and an irrigation system, but they will need to be kept orderly and maintained. There are many examples of commercial developments where the commercial pads are not maintained and become weed infested and an eyesore for the community. It is important that this situation is avoided along Midway's main corridor.

Traffic signal at Main Street and River Road – UDOT has studied the traffic related issues for the intersection of Main Street and River Road. The study concluded that a traffic signal is warranted for the intersection, but UDOT does not have a timeline established for when the signal will be installed. The Village will create more traffic to the area and the developer will need to contribute to the installation of the traffic signal and other required related infrastructure including right-of-way acquisition, expansion of pavement, etc. Because UDOT's timeline for installation of the traffic signal is unknown, staff is recommending that the traffic signal improvements are required as part of phase 3. Before the application for preliminary approval of phase 3 is submitted, the developer's contribution towards completion of the traffic signal and related improvements will need to be determined.

PLANNING COMMISSION RECOMMENDATION:

Motion: Commissioner Whitney: I make a motion that we recommend approval of the master plan amendment for The Village. The proposed revised plan is a mixed-use development that contains both commercial and residential uses. The proposal includes 44,128 square feet of commercial space in multiple buildings, 143 dwellings, park, and trails, to be developed in five phases. The master plan is on 27.47 acres and contains 8.68 acres of open space. The property located at 541 East Main is in the C-2 zone. We accept the staff findings and the proposed five conditions. Also, including a sixth condition of having the required parking plan resolved before going to City Council.

Seconded: Commissioner Ream

Chairman Nicholas: Any discussion on the motion?

Chairman Nicholas: All in favor.

2. Continuance. This action can be taken if the City Council finds that there are unresolved issues.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for continuance
 - i. Unresolved issues that must be addressed
 - d. Date when the item will be heard again

3. Denial. This action can be taken if the City Council finds that the request does not comply with the requirements of the code.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for denial

PROPOSED CONDITIONS:

1. Piezometers are installed in multiple areas of the development to monitor water levels over the next few years, especially in the areas of phases 2-5. The piezometers will provide information regarding the water table over multiple years. This will give information regarding the ability to develop future phases. If the water table is a problem for some phases, then the master plan will need to be amended to continue to comply with code requirements.
2. The timing of required off-site improvements, including the traffic signal at River Road and Main Street, are included in the master plan agreement.
3. All private road rights-of-ways must have a dedicated public access easement.
4. Phases 4 and 5, which are completely residential, are not allowed to submit for preliminary approval until the correct ratio of commercial square feet has been built for each phase. 60% of the required commercial would need to be built to submit for preliminary approval of phase 4 and 80% of the required commercial would need to be built to submit for the preliminary of phase 5.
5. The commercial areas of Phases 1 and 2, which front Main Street, must either be in agricultural production or landscaped, even in areas where future buildings will be located. The landscaping may be minimal with grass and an irrigation system, but they will need to be kept orderly and maintained.

March 9th, 2021

Midway City
Attn: Michael Henke
75 North 100 West
Midway, Utah 84049

Subject: The Village Development – Master Plan Review

Dear Michael:

Horrocks Engineers recently reviewed The Village development plans for Master Plan approval. The proposed development borders Memorial Hill to the North and Main Street to the South. The development is a mixed-use development and PUD. The proposed development consists of 28,170 SF of commercial building space, 151 residential units zoned C-2, and 25 PUD residential units. The following issues should be addressed.

General Comments

- There are 6 phases within the development, each phase within the Master Plan appears to be a stand-alone phase.
- All drawings and standards should meet the Midway City updated 2020 specifications.
- Snow removal and snow storage needs to be addressed.

Water

- The proposed development will be served from the Gerber / Mahogany pressure zone.
- The proposed development will connect to the existing 12" culinary water line in Main Street.

Roads

- The proposed roads within the C-2 Zone of the development will be public and have right-of-way widths of 56' with sidewalk on both sides of the road.
- The roads within the PUE will be private and have right-of-way widths of 56' with sidewalk on both sides of the road.
- There are private alley ways within the development. Each alley way will need two points of access.
- The access and improvement onto 870 East will require permission and documentation from land owner.
- Main Street access and cross sections will need to go through the UDOT approval process.
- A traffic study has been submitted. Our traffic engineers in our Pleasant Grove office have reviewed the study. Some clarifications are required regarding the study.
- The traffic study shall include an evaluation of an access off of River Road.

Pressure Irrigation

- The subdivision will be serviced by Midway Irrigation Company.
- All removal, additions, or revisions to pressure irrigation system must be approved by Midway Irrigation Company.
- The ditch towards north end of the property that runs west to east must be maintained.

Trails

- The majority of the development has 5' or 6' sidewalk. There is one 8' trail in front of the park / open space area that connects to 5' sidewalk on each side.

Storm Drain

- The storm drain system will be a combination of public and private and will be collected within the proposed curb and gutter and discharged to a series of catch basins, sumps, and detention basins with the development.

Sewer

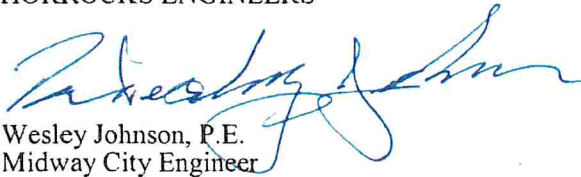
- Sewer will be provided by Midway Sanitary Sewer District.

The following items will need to be submitted prior to preliminary review:

- Geotechnical Report for the east half of development that was not done as part of previous geotechnical report.
 - Perc tests need to be located near all retention ponds / basins and sumps in alley ways. Perc tests should be done at the bottom of the proposed sump elevations.
- Access approval from UDOT for the two new access points onto Main Street.

Please feel free to call our office with any questions.

Sincerely,
HORROCKS ENGINEERS



Wesley Johnson, P.E.
Midway City Engineer

cc: Berg Engineering

Exhibits

Exhibit 1 – Location maps

Exhibit 2 – Proposed revised master plan

Exhibit 3 – Developer supplementary documents

Exhibit 4 – Updated traffic impact study

Exhibit 5 – Public participation developer's report

Exhibit 1

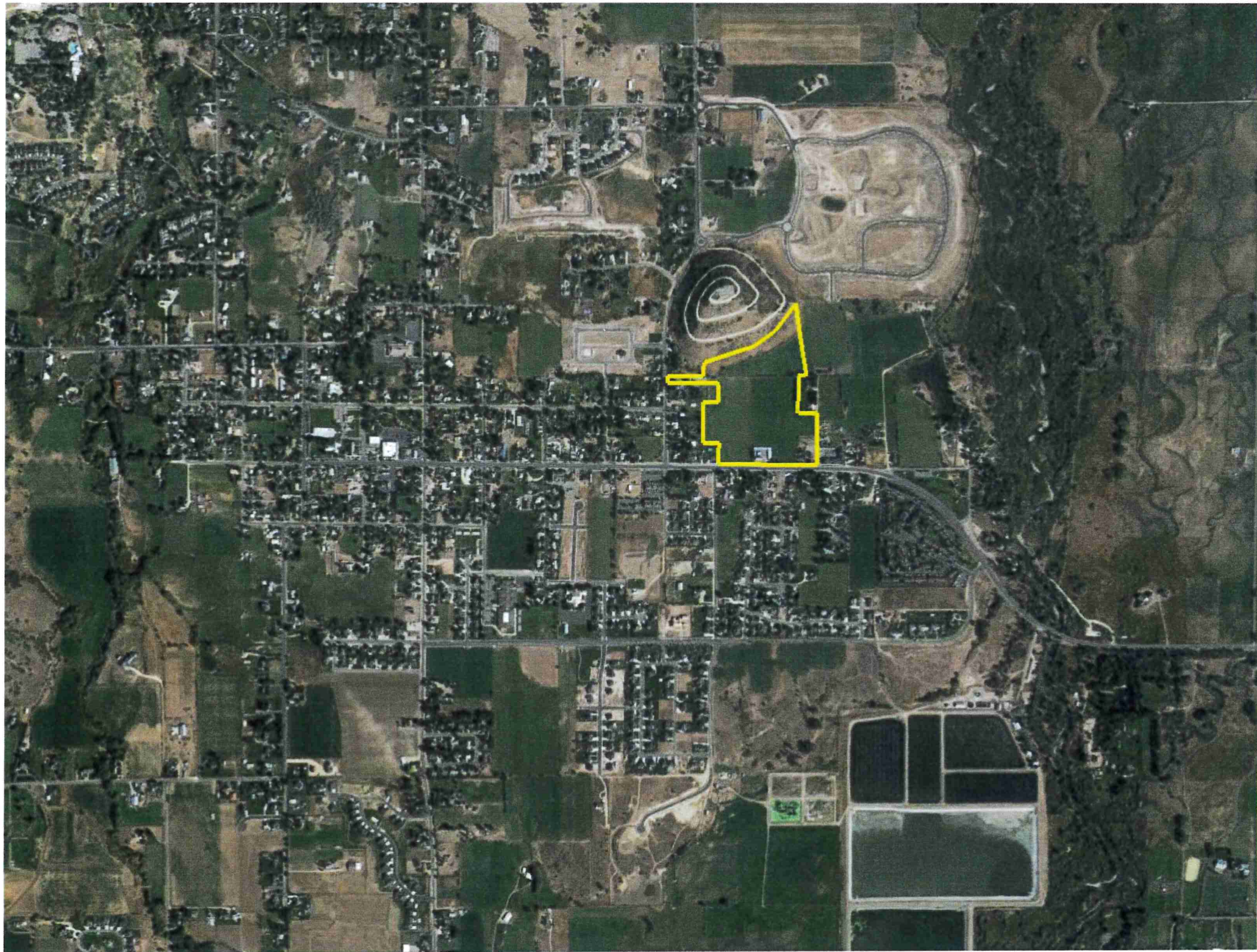


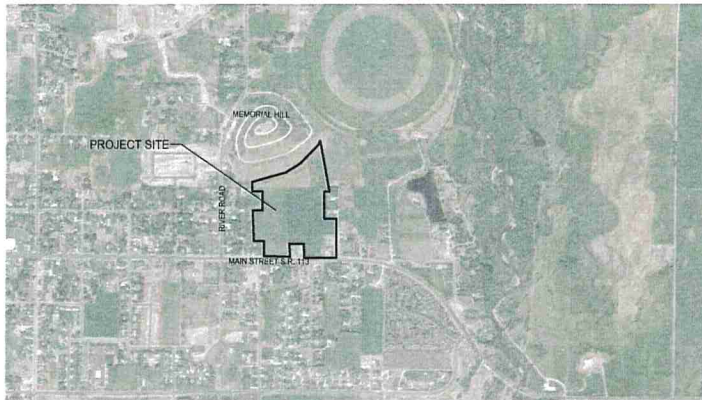




Exhibit 2

THE VILLAGE

A MIXED USE DEVELOPMENT REVISED MASTER PLAN APPLICATION



MIDWAY CITY
VICINITY MAP

SHEET INDEX

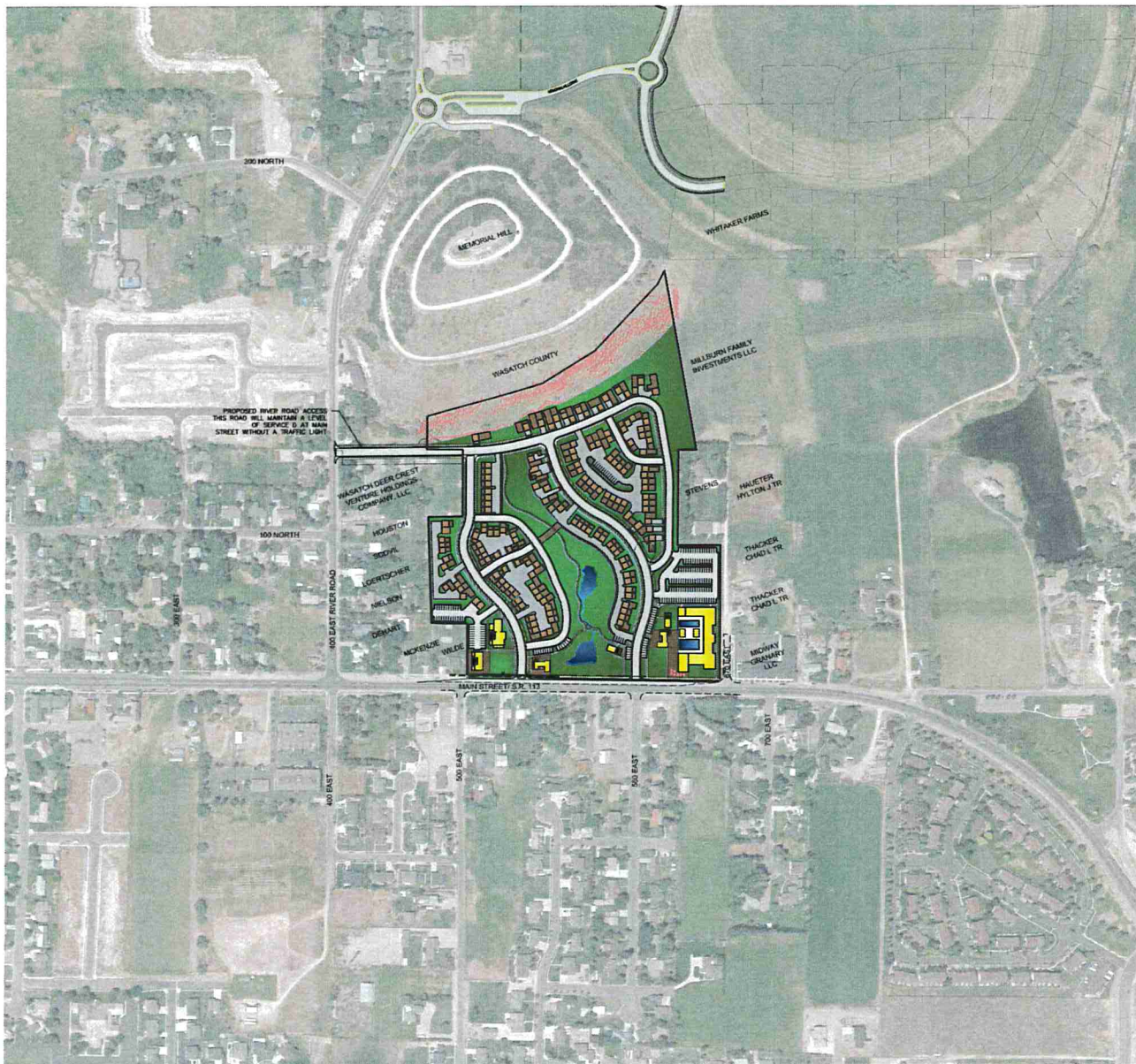
1. VICINITY MAP
2. SENSITIVE LANDS MAP
3. REVISED MASTER PLAN
4. MASTER LANDSCAPE PLAN
5. PHASING PLAN
6. OPEN SPACE PLAN
7. ROADS & TRAILS MASTER PLAN
8. SEWER MASTER PLAN
9. WATER MASTER PLAN
10. IRRIGATION MASTER PLAN
11. STORM DRAIN MASTER PLAN

THE VILLAGE - REVISED MASTER PLAN APPLICATION - 4 OCTOBER 2021

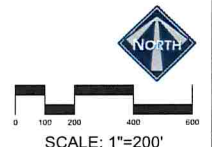
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INTENDED FOR CONSTRUCTION
UNLESS SIGNED AND SEALED.

PAUL D. BERG P.E.
SERIAL NO. 292562
DATE: 4 OCT 2021

LUSTER THE VILLAGE		
COVER SHEET		
		
DESIGN BY: CNB	DATE: 4 OCT 2021	SHEET
DRAWN BY: DEJ	REV:	0

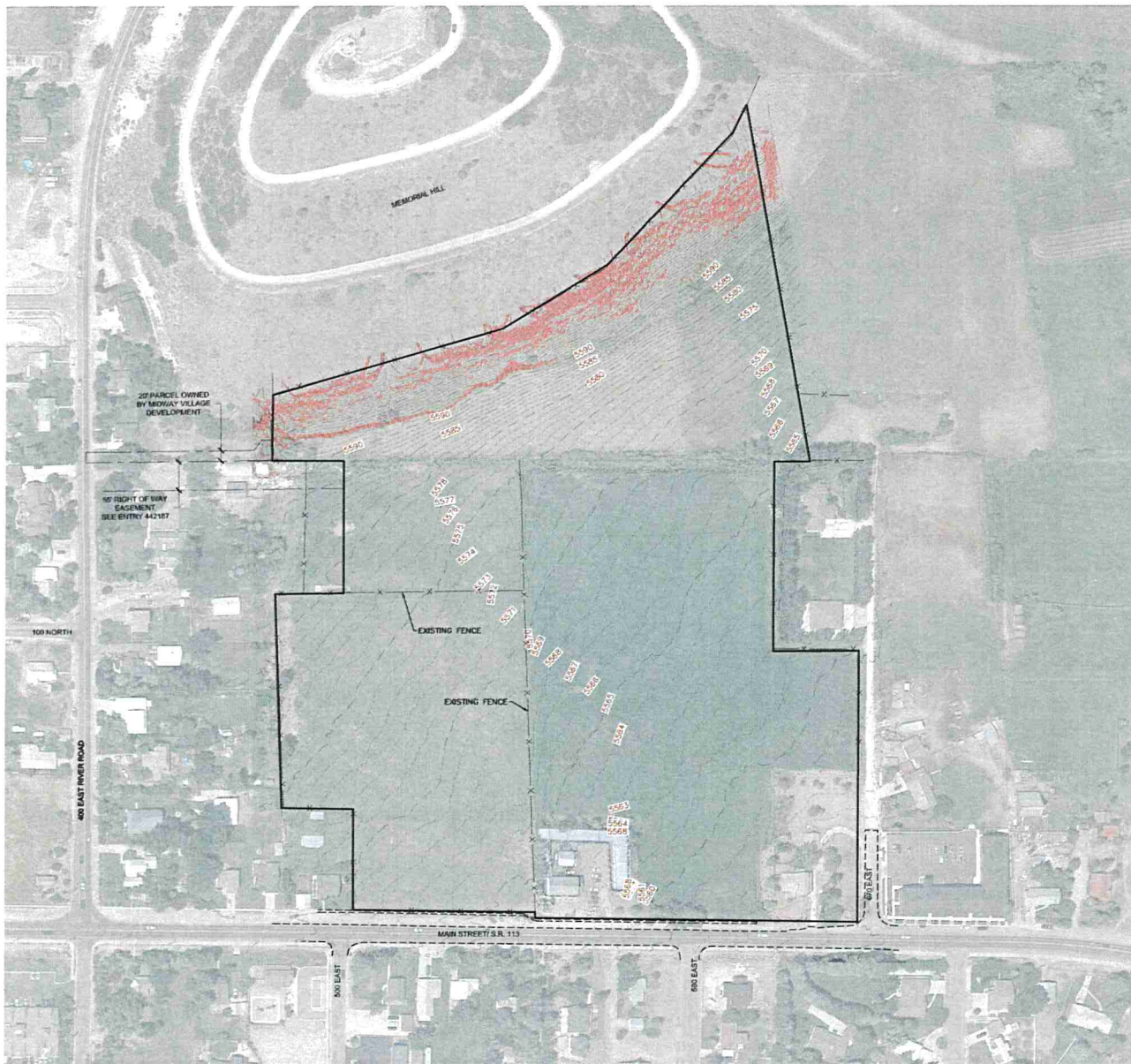


- LEGEND
- NON-BUILDABLE AREA (25%+ SLOPES)
 - COMMERCIAL BUILDINGS
 - RESIDENTIAL UNIT
 - GARAGE
 - LANDSCAPED AREAS



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 PAUL D. BOSE P.E.
 SERIAL NO. 293383
 DATE: 4 OCT 2021

LUSTER THE VILLAGE	
VICINITY MAP	
 BERG ENGINEERING <small>380 E Main St. Suite 204 Midway, UT 84049 ph 435.657.9749</small>	
DESIGN BY: PDB	DATE: 4 OCT 2021
DRAWN BY: DEJ	REV: 1
	SHEET 1



SENSITIVE LANDS NOTES

LANDSLIDES

THE LANDSLIDE HAZARD POTENTIAL ON THE PROPERTY IS LOW PER THE MIDWAY CITY LANDSLIDE AND PROBLEM SOIL MAP CONTAINED IN THE CITY GENERAL PLAN

SHALLOW GROUND WATER

THE PROPERTY DOES NOT CONTAIN SHALLOW GROUND WATER PER MAP 26 OF THE GENERAL PLAN. PLEASE SEE THE GEOTECHNICAL REPORT FOR MORE INFORMATION.

SPRINGS, STREAMS OR SEEPS

NO SPRINGS, STREAMS OR SEEPS HAVE BEEN FOUND ON THE PROPERTY.

ALLUVIAL FANS

NO ALLUVIAL FANS ARE FOUND ON THE PROPERTY PER MAP 26 OF THE WASATCH COUNTY GENERAL PLAN.

FLOOD HAZARDS

THERE ARE NO 100 YEAR FEMA FLOOD HAZARDS ON THIS PROPERTY PER FEMA MAPS.

WETLANDS

NO WETLANDS ARE ON THE PROPERTY PER THE NATIONAL WETLANDS INVENTORY PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.

FAULT LINES

NO FAULT LINES CROSS THE PROPERTY PER MAP 26- FLOOD HAZARDS, EARTHQUAKE HAZARDS AND PROBLEM SOILS OF THE WASATCH COUNTY GENERAL PLAN.

VEGETATION REMOVAL

EXISTING HAY FIELD WILL BE DISTURBED FOR CONSTRUCTION OF HOMES, COMMERCIAL BUILDINGS, ROADS AND PARKING. TOPSOIL WILL BE STORED FOR USE ON SITE. EXCESS SOIL MATERIALS TO BE DISPOSED OF. TREES ON MEMORIAL HILL WILL BE PRESERVED. TREES ALONG THE NORTH DITCH BANK WILL BE REMOVED AND DISPOSED OF.

WATER QUALITY

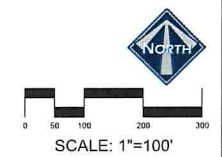
STORM WATER RUNOFF WILL BE COLLECTED AND RETAINED ON SITE. STORM WATER POLLUTION PREVENTION MEASURES WILL BE INSTALLED DURING CONSTRUCTION. MEASURES INCLUDE SILT FENCING, STABILIZED CONSTRUCTION ENTRANCE AND INLET PROTECTION.

LEGEND

NON-BUILDABLE AREA
(25%+ SLOPES)

EXISTING FENCE

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PAUL D. BECK P.E.
SERIAL NO. 385985
DATE: 4_OCT_2021



LUSTER THE VILLAGE		
SENSITIVE LANDS MAP		
BERG ENGINEERING 300 E Main St Suite 204 Midway, UT 84049 PH: 435.657.9749		
DESIGN BY: FBI	DATE: 4_OCT_2021	SHEET
DRAWN BY: DJJ	REV:	2



AREA
 TOTAL PROJECT AREA 27.47 ACRES
 R.O.W. DEDICATION ON MAIN 0.18 ACRES

BUILDING CALCULATIONS

	PAD AREA (SQ. FT.)	%
COMMERCIAL	48,592	37%
RESIDENTIAL	81,401	83%
TOTAL	129,993	100%

GROSS BUILDING AREA

COMMERCIAL	83,184 SF	26%
RESIDENTIAL (TOTAL)	242,731 SF	74%
RESIDENTIAL 2 STORY	162,622 SF	
RESIDENTIAL ABOVE GARAGE	79,909 SF	
TOTAL GROSS BUILDING	325,915	100%

COMMERCIAL PARKING
 TOTAL PARKING SPACES 189 SPACES

PARKING CALCULATIONS:
 TOTAL GROSS COMMERCIAL 83,184 SF
 NET USEABLE COMMERCIAL AREA WITHOUT POOL PER ARCHITECT 48,188 SF

PARKING RATIO = $\frac{48,188 \text{ SF}}{189 \text{ SPACES}} = 1 \text{ SPACE FOR } 255 \text{ SF}$

NOTES:
 * THE FINAL NUMBER OF REQUIRED SPACES WILL DEPEND ON THE BUILDING TENANT, USE AND FINAL BUILDING DESIGN.

RESIDENTIAL PARKING NOTES:
 * EACH RESIDENTIAL UNIT HAS A 2 CAR GARAGE. THERE ARE ALSO 72 OUTDOOR PARKING SPACES IN THE RESIDENTIAL AREA.
 * PLAN HAS A TOTAL OF 358 PARKING SPACES.

PARKING CALCULATIONS:
 TOTAL UNITS 143
 143x2.5 = 358 SPACES (REQUIRED)

PARKING SPACES PROVIDED:
 GARAGES 143x2 = 286
 ON SITE PARKING 72
 TOTAL 358 SPACES (PROVIDED)

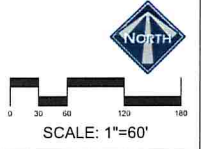
- LEGEND**
- NON-BUILDABLE AREA (25%+ SLOPES)
 - COMMERCIAL BUILDINGS
 - RESIDENTIAL UNIT
 - RESIDENTIAL GARAGES
 - LANDSCAPE AREA

REVISION NOTE - 21 OCT 2021:
 REVISED TO ADD RESIDENTIAL PARKING FOR 3 BEDROOM UNITS. ALSO SEE PARKING TABLE

REVISION NOTE - 20 OCT 2021:
 COMMERCIAL BUILDINGS PAD, GROSS AND NET USEABLE SQUARE FOOTAGES HAVE BEEN UPDATED BY ARCHITECT.

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PAUL D. BERG, P.E.
 SERIAL NO. 202089
 DATED 28 OCT 2021



LUSTER THE VILLAGE
 REVISED MASTER PLAN

BERG ENGINEERING
 380 E Main St. Suite 204
 Midway, LA 84049
 ph 435.657.9749

DESIGN BY: PDB DATE: 4 OCT 2021 SHEET 3
 DRAWN BY: DEJ REV: 29 OCT 2021

10/21/2021 10:00 AM (C:\Users\pberge\OneDrive\Documents\Projects\2021\2021-10-21\2021-10-21.dwg)

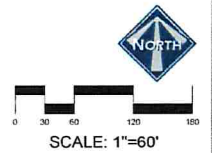


PLANT SCHEDULE

TREES	QTY	COMMON / BOTANICAL NAME	CONT.	CAL.	SIZE
	33	Autumn Blaze Maple / Acer freemanii 'Autumn Blaze'	B&B	2"	Cal
	66	Canada Red Chokecherry / Prunus virginiana 'Canada Red'	B&B	2"	Cal
	4	Eastern Cottonwood Shrubland / Populus deltoides 'Shrubland'	B&B	2.5"	Cal
	61	Spring Snow Crab Apple / Malus x 'Spring Snow'	B&B	2"	Cal
	5	Weeping Willow / Salix babingtonii	B&B	2"	Cal
EVERGREEN TREES	QTY	COMMON / BOTANICAL NAME	CONT.	CAL.	SIZE
	11	Colorado Spruce / Picea pungens	B&B		8-10"
GROUND COVERS	QTY	COMMON / BOTANICAL NAME	CONT.		
	483,080 sf	Kentucky Bluegrass / Poa pratensis	sod		
MULCH	QTY	COMMON / BOTANICAL NAME	CONT.		
	11,299 sf	4" Wood Mulch / 4" Wood Mulch	Mulch		

LEGEND

- NON-BUILDABLE AREA (25%+ SLOPES)
- COMMERCIAL BUILDINGS
- RESIDENTIAL BUILDINGS
- GARAGE

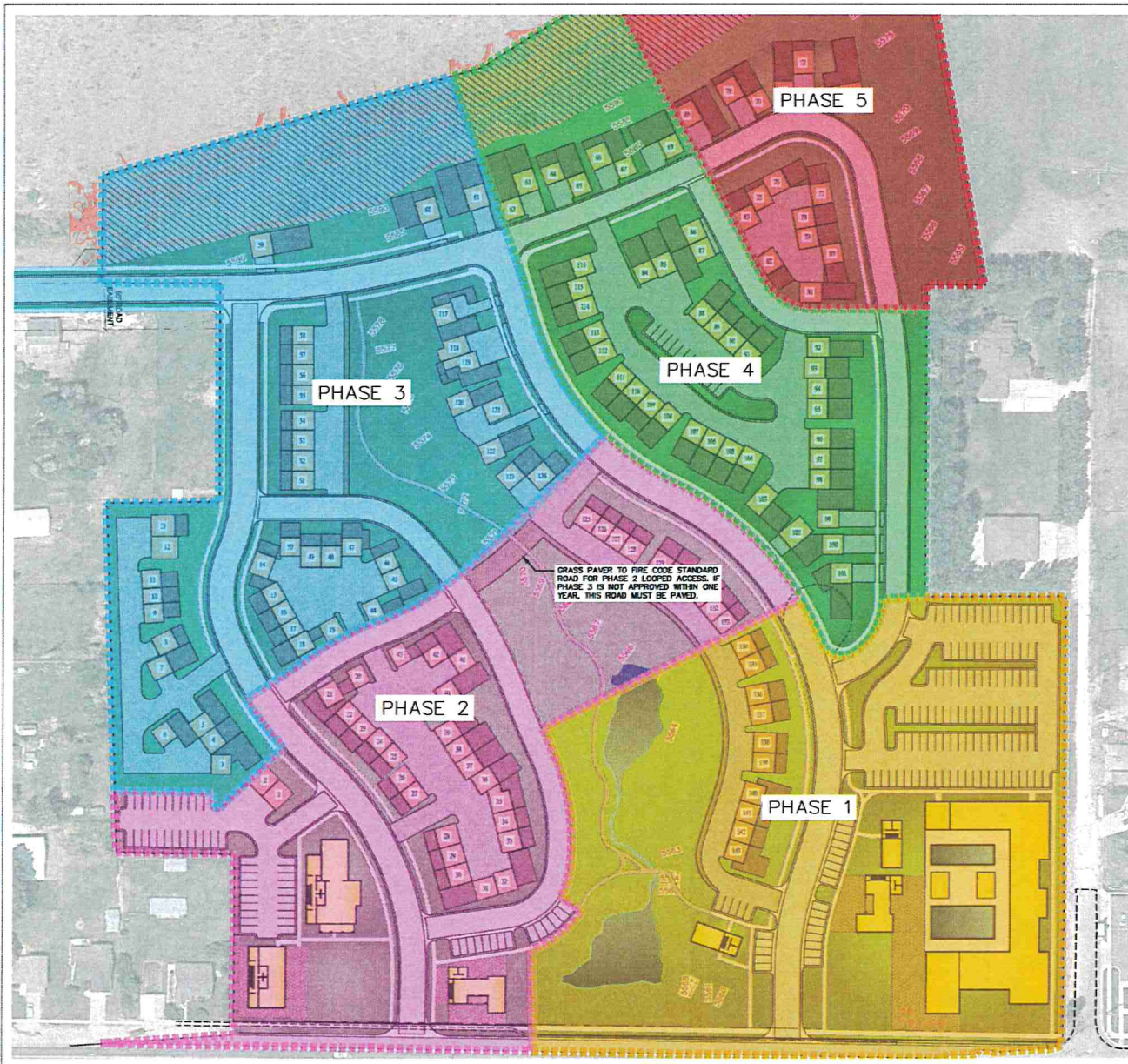


LUSTER
THE VILLAGE
MASTER LANDSCAPE PLAN

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FALL 0, 1990 P.L.
SERIAL NO. 292595
DATE: 4 OCT 2021



DESIGN BY: POB DATE: 4 OCT 2021 SHEET
DRAWN BY: DEB REV: 4



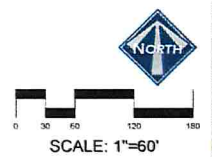
- LEGEND**
- NON-BUILDABLE AREA (25%+ SLOPES)
 - COMMERCIAL BUILDINGS
 - RESIDENTIAL BUILDINGS
 - GARAGES

NOTES
 TEMPORARY CUL-DE-SAC TO BE INSTALLED WITH PHASE 1 AS SHOWN.

PHASING PLAN

PHASE	AREA	COMMERCIAL	RESIDENTIAL	RESIDENTIAL UNITS	OPEN SPACE
1	6.55 AC	25,045 SF	11,065 SF	10	1.94 ac
2	5.70 AC	11,285 SF	34,383 SF	35	1.23 ac
3	6.64 AC	0 SF	46,486 SF	43	2.28 ac
4	4.58 AC	0 SF	50,251 SF	40	0.67 ac
5	3.99 AC	0 SF	18,643 SF	15	2.69 ac
	27.47 AC	36,330 SF	160,828 SF	143	8.81 ac

PHASE	IRRIGATED AREA	NON-IRRIGATED HILLSIDE
1	3.16 ac	0 ac
2	2.20 ac	0 ac
3	2.28 ac	1.13 ac
4	1.79 ac	0.52 ac
5	1.68 ac	1.35 ac
	11.09 ac	3.00 ac

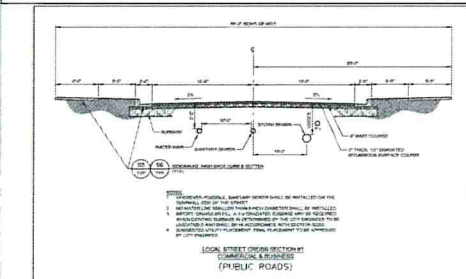
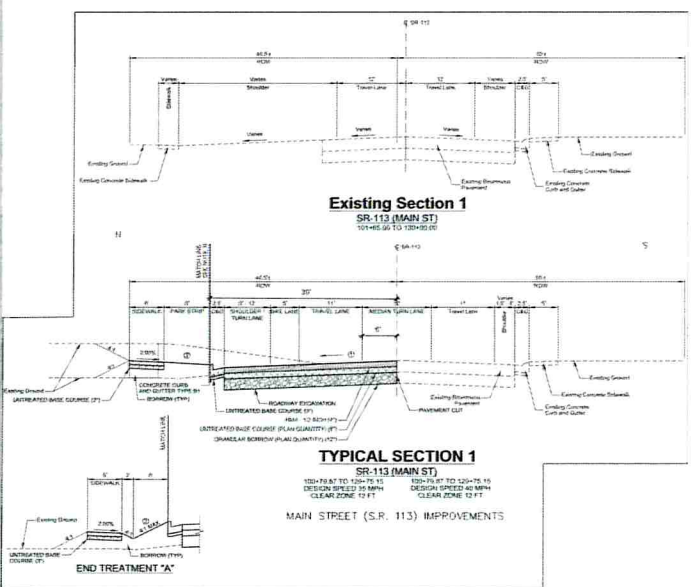


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 PAUL D. BERG, P.E.
 SERIAL NO. 265585
 DATE: 4 OCT 2021

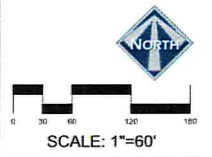
LUSTER
 THE VILLAGE
 PHASING PLAN

BERG ENGINEERING
 300 E Main St, Suite 204
 Redway, UT 84207
 ph: 435.657.9749

DESIGN BY: POB DATE: 4 OCT 2021 SHEET 5
 DRAWN BY: DEJ REV:



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LUSTER THE VILLAGE
ROAD & TRAIL PLAN

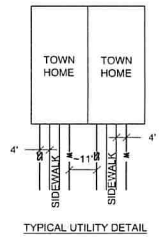
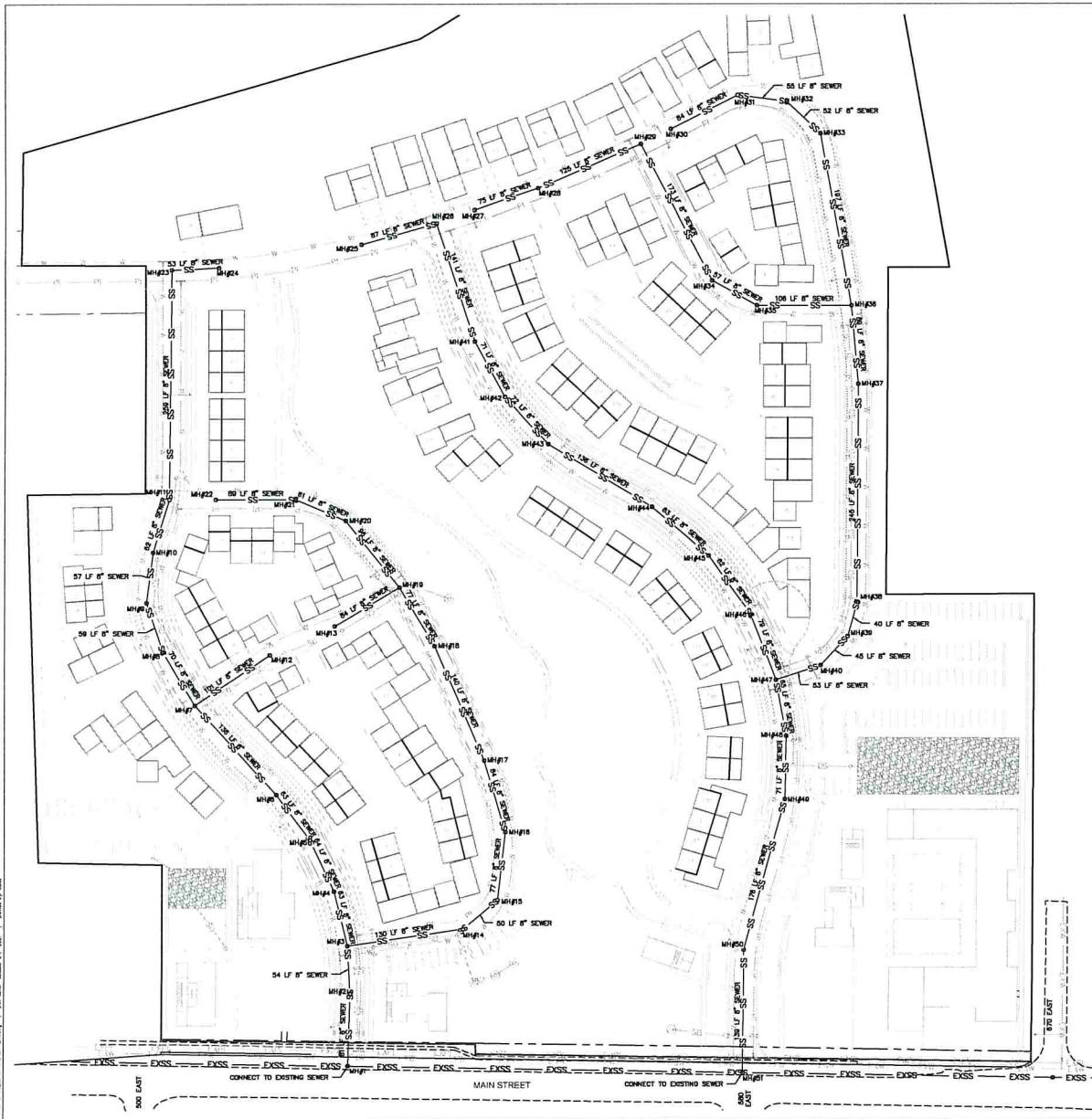
BERG ENGINEERING
380 E MAIN ST, Suite 204
MIDWAY, IA 50449
PH 435.657.9749

DESIGN BY: PER DATE: 4 OCT 2021 SHEET: 7
DRAWN BY: DEJ REV:

HORROCKS ENGINEERS

MIDWAY CITY STANDARD DRAWING

MIDWAY CITY STANDARD DRAWING
STREETS - 1

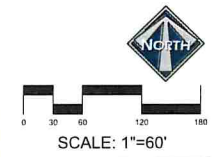
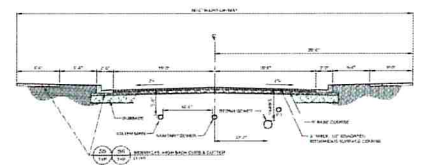


- LEGEND**
- EXISTING SEWER
 - PROPOSED SEWER
 - EXISTING WATER
 - PROPOSED WATER
 - EXISTING PRESSURIZED IRRIGATION
 - PROPOSED PRESSURIZED IRRIGATION
 - PROPOSED STORM DRAIN

- BLUE STAKE NOTE:**
- LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.
- SEWER NOTES:**
- ALL SEWER LATERALS ARE 4"
 - ALL SEWER IMPROVEMENTS SHALL MEET MIDWAY SANITATION DISTRICT STANDARDS AND SPECIFICATIONS

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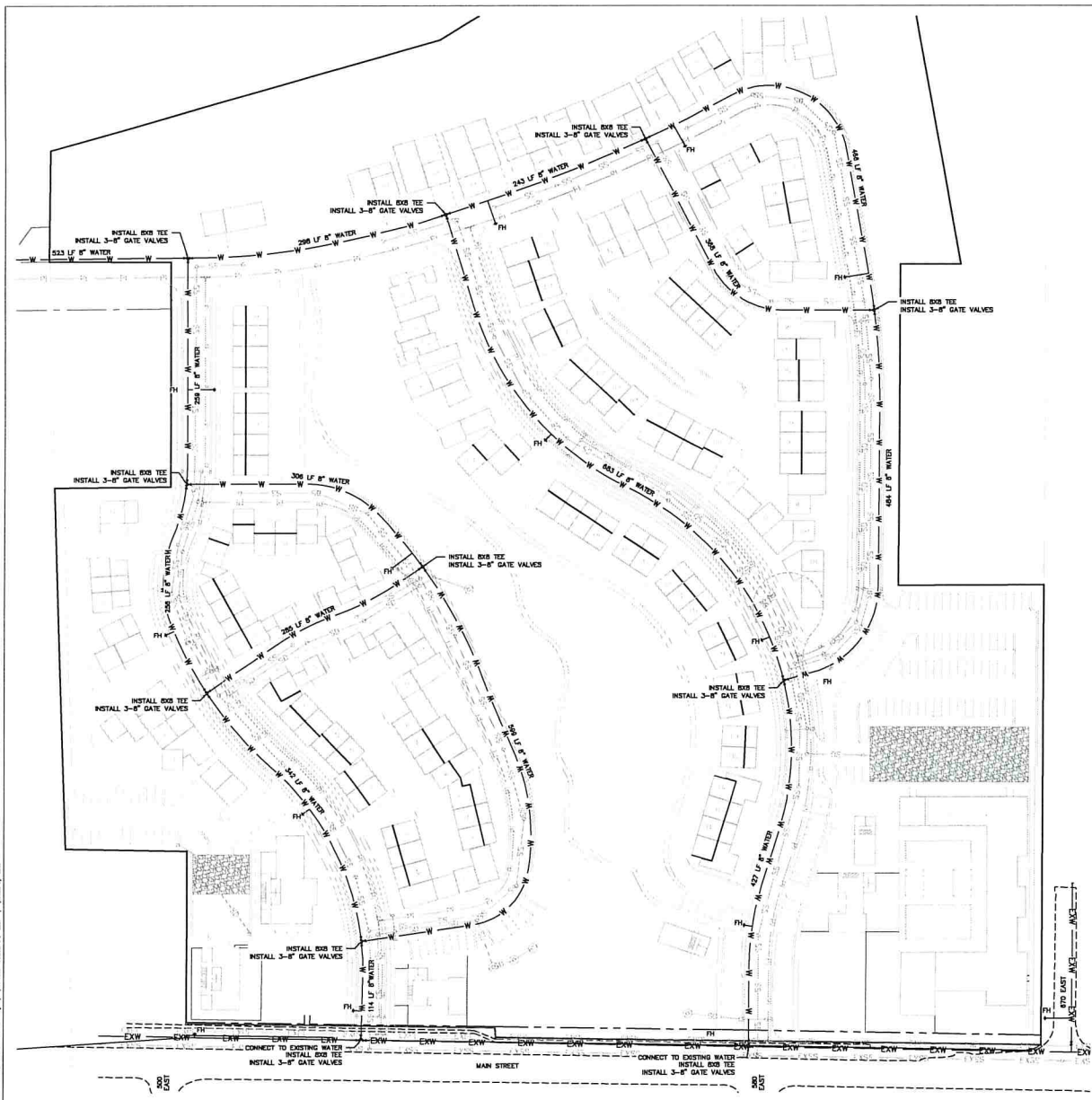
PAUL D. BERG, P.E.
 SERIAL NO. 295595
 DATE: 4 OCT 2021



LUSTER THE VILLAGE
SEWER PLAN

BERG ENGINEERING
 300 E Main St, Suite 204
 Midway, IL 61859
 ph 435.657.9749

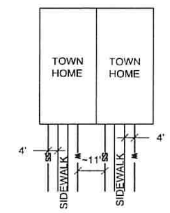
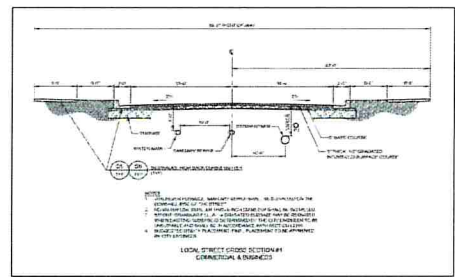
DESIGN BY: PDB DATE: 4 OCT 2021 SHEET: 8
 DRAWN BY: DEJ REV:



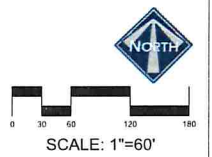
- LEGEND**
- EXISTING SEWER
 - PROPOSED SEWER
 - EXISTING WATER
 - PROPOSED WATER
 - EXISTING PRESSURIZED IRRIGATION
 - PROPOSED PRESSURIZED IRRIGATION
 - PROPOSED STORM DRAIN

BLUE STAKE NOTE:
 * LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.

WATER NOTES:
 * ALL WATER IMPROVEMENTS SHALL MEET MIDWAY CITY STANDARDS AND SPECIFICATIONS AS ADOPTED IN JULY 2022 EDITION.
 * ALL WATER LINES ARE 8" UNLESS OTHERWISE NOTED.



TYPICAL UTILITY DETAIL



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PAUL S. BERG P.E.
 SERIAL NO. 295558
 DATE: 4 OCT 2021

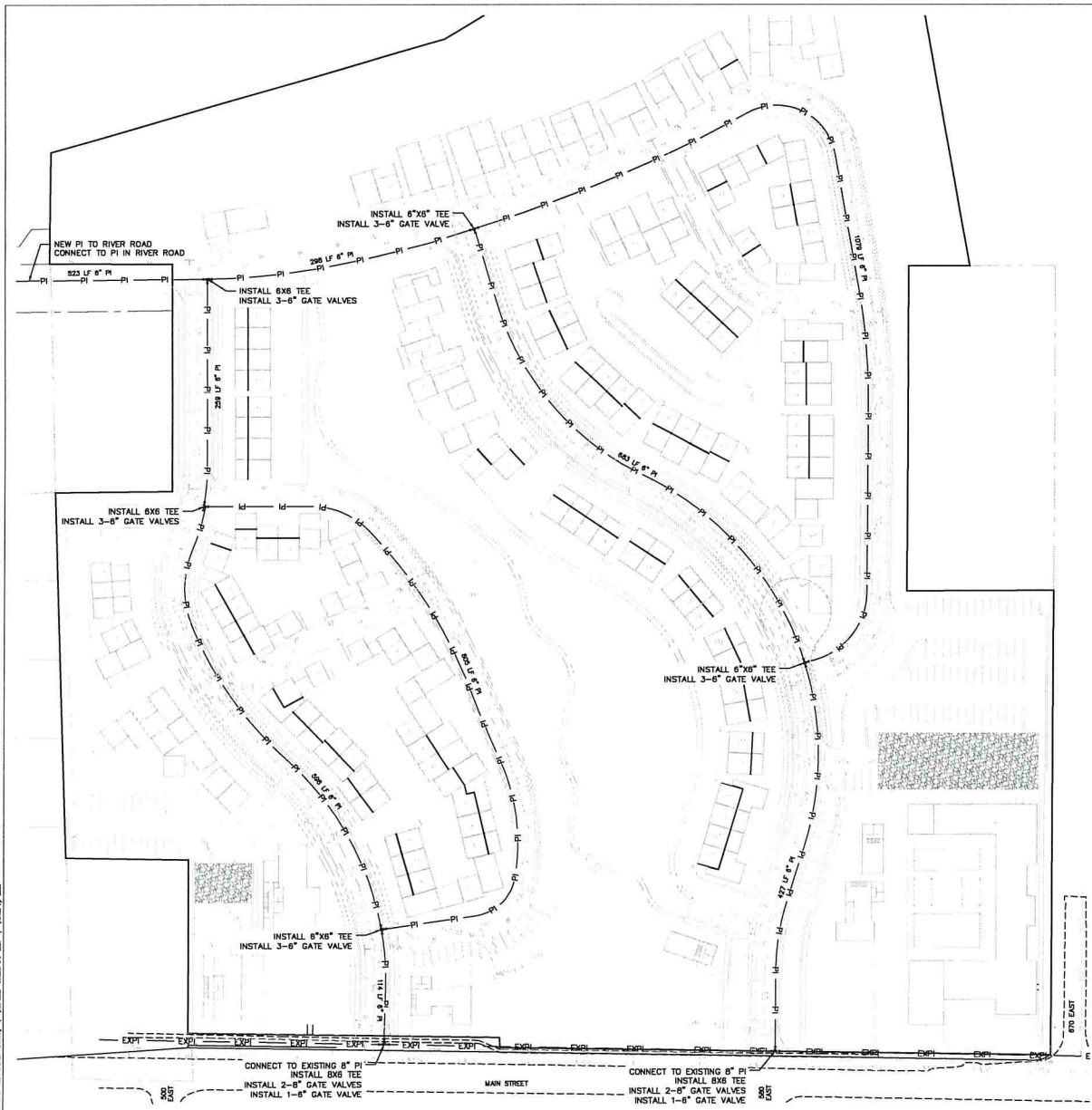
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DESIGN BY: PDB
 DRAWN BY: DJJ

DATE: 4 OCT 2021
 REV:

SHEET
 9

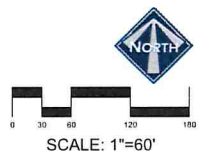
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- LEGEND**
- - - EXISTING SEWER
 - - - PROPOSED SEWER
 - - - EXISTING WATER
 - - - PROPOSED WATER
 - - - EXISTING PRESSURIZED IRRIGATION
 - - - PROPOSED PRESSURIZED IRRIGATION
 - - - PROPOSED STORM DRAIN

- PRESSURIZED IRRIGATION NOTES:**
- ALL PRESSURIZED IRRIGATION IMPROVEMENTS SHALL MEET MIDWAY IRRIGATION COMPANY STANDARDS AND SPECIFICATIONS
 - ALL PRESSURIZED IRRIGATION MAIN SHALL BE AWWA C300 DR18 PURPLE PIPE

EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR BLUE STAKING OF ALL ON-SITE UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF DIFFERENCES BETWEEN BLUE STAKED LOCATIONS AND THOSE SHOWN ON THIS PLAN.



LUSTER
THE VILLAGE
PRESSURIZED IRRIGATION PLAN

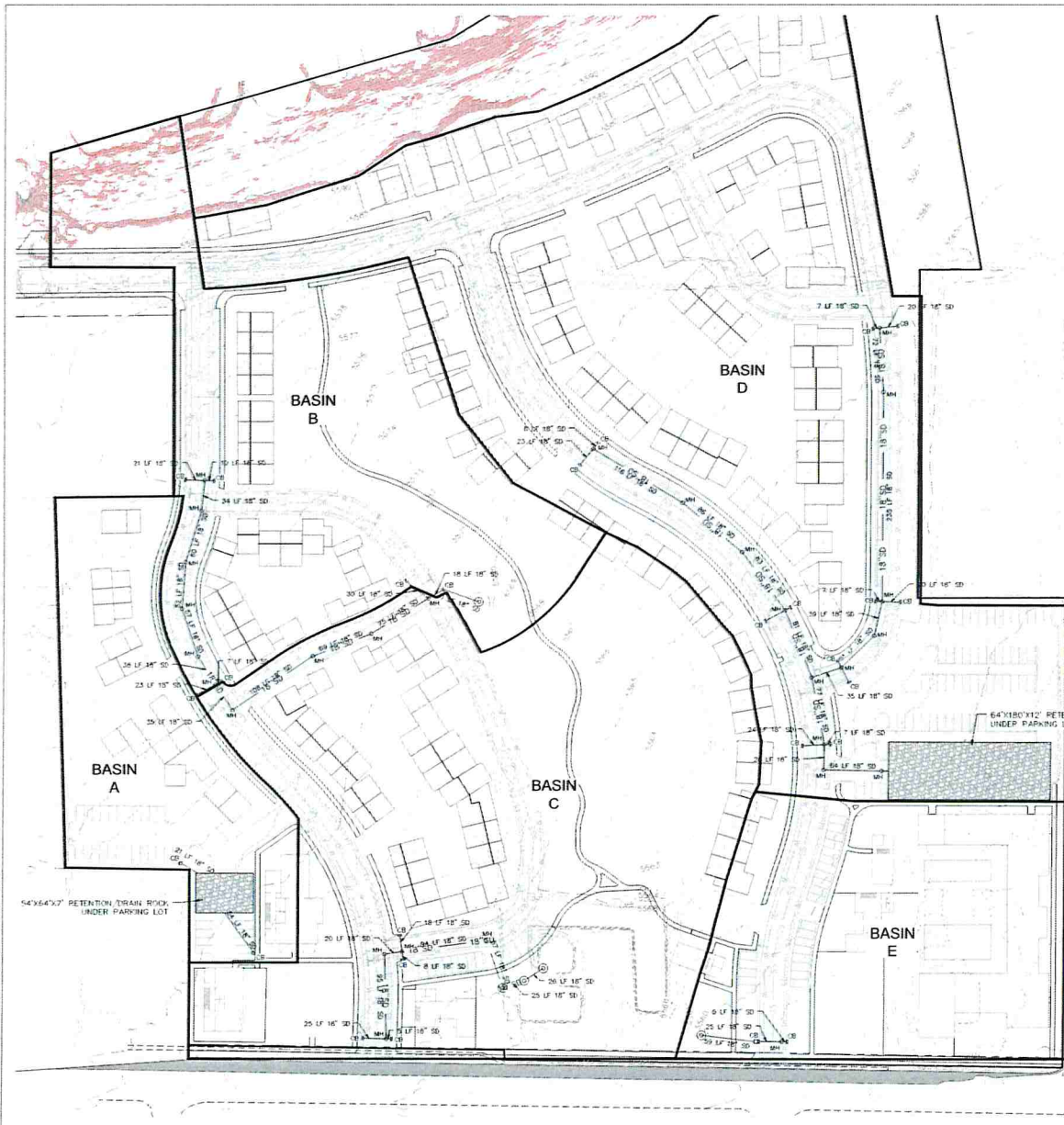


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PAUL D. IRIG P.E.
SERIAL NO. 255985
DATE: 4 OCT 2021

DESIGN BY: PDB DATE: 4 OCT 2021 SHEET
DRAWN BY: DEJ REV: 10

DATE: 4 OCT 2021
 DRAWN BY: DEJ
 DESIGN BY: PDB
 CHECKED BY: PDB
 PROJECT NO: 255985
 SHEET NO: 10



Test pits in the gutter report generally show a peak runoff of 1 of equal
 Assume permeability of 2.0 inches per hour for parking
 Drainage area to the west of parking is 1.80 acres
 Retention area under the parking is 0.18'

Test pits in the gutter report generally show a peak runoff of 1 of equal
 Assume permeability of 2.0 inches per hour for parking
 Drainage area to the west of parking is 0.34 acres

Test pits in the gutter report generally show a peak runoff of 1 of equal
 Assume permeability of 2.0 inches per hour for parking
 Drainage area to the west of parking is 0.34 acres

Table 1. Runoff Coefficient for Basin A (500 Parking Lot)

Change	Total Area (Acres)	Roofs (Acres)	Asphalt (Acres)	Concrete (Acres)	Grass (Acres)	Permeable (Acres)	Runoff Coefficient
A	1.80	0.72	0.72	0.36	0.00	0.00	0.80

Table 2. Runoff Coefficient for Basin B

Change	Total Area (Acres)	Roofs (Acres)	Asphalt (Acres)	Concrete (Acres)	Grass (Acres)	Permeable (Acres)	Runoff Coefficient
B	1.80	0.72	0.72	0.36	0.00	0.00	0.80

Table 3. Runoff Coefficient for Basin C

Change	Total Area (Acres)	Roofs (Acres)	Asphalt (Acres)	Concrete (Acres)	Grass (Acres)	Permeable (Acres)	Runoff Coefficient
C	1.80	0.72	0.72	0.36	0.00	0.00	0.80

Table 4. 100 Year Storm Peak Runoff and Volume from Basin A

Time Period (Hours)	Runoff Intensity (in/hr)	Area (Acres)	Runoff Volume (cu ft)	Retention Volume (cu ft)	Total Volume (cu ft)
15	4.00	1.80	108,000	108,000	216,000
30	2.00	1.80	54,000	54,000	108,000
45	1.33	1.80	36,000	36,000	72,000
60	1.00	1.80	27,000	27,000	54,000
75	0.80	1.80	21,600	21,600	43,200
90	0.72	1.80	19,440	19,440	38,880
105	0.67	1.80	18,000	18,000	36,000
120	0.60	1.80	16,200	16,200	32,400
135	0.56	1.80	15,120	15,120	30,240
150	0.53	1.80	14,040	14,040	28,080
165	0.51	1.80	13,230	13,230	26,460
180	0.49	1.80	12,540	12,540	25,080
195	0.47	1.80	11,916	11,916	23,832
210	0.46	1.80	11,340	11,340	22,680
225	0.45	1.80	10,800	10,800	21,600
240	0.44	1.80	10,296	10,296	20,592
255	0.43	1.80	9,816	9,816	19,632
270	0.42	1.80	9,360	9,360	18,720
285	0.41	1.80	8,928	8,928	17,856
300	0.41	1.80	8,514	8,514	17,028
315	0.40	1.80	8,124	8,124	16,248
330	0.40	1.80	7,752	7,752	15,504
345	0.39	1.80	7,404	7,404	14,808
360	0.39	1.80	7,080	7,080	14,160
375	0.38	1.80	6,780	6,780	13,560
390	0.38	1.80	6,504	6,504	13,008
405	0.38	1.80	6,252	6,252	12,504
420	0.37	1.80	6,024	6,024	12,048
435	0.37	1.80	5,814	5,814	11,628
450	0.37	1.80	5,624	5,624	11,248
465	0.37	1.80	5,454	5,454	10,908
480	0.36	1.80	5,304	5,304	10,608
495	0.36	1.80	5,172	5,172	10,344
510	0.36	1.80	5,054	5,054	10,108
525	0.36	1.80	4,950	4,950	9,900
540	0.35	1.80	4,860	4,860	9,720
555	0.35	1.80	4,784	4,784	9,568
570	0.35	1.80	4,722	4,722	9,444
585	0.35	1.80	4,672	4,672	9,344
600	0.35	1.80	4,632	4,632	9,264
615	0.35	1.80	4,602	4,602	9,204
630	0.34	1.80	4,582	4,582	9,164
645	0.34	1.80	4,570	4,570	9,140
660	0.34	1.80	4,566	4,566	9,132
675	0.34	1.80	4,568	4,568	9,136
690	0.34	1.80	4,576	4,576	9,152
705	0.34	1.80	4,588	4,588	9,176
720	0.34	1.80	4,604	4,604	9,208
735	0.34	1.80	4,624	4,624	9,248
750	0.34	1.80	4,648	4,648	9,296
765	0.34	1.80	4,676	4,676	9,352
780	0.34	1.80	4,708	4,708	9,416
795	0.34	1.80	4,744	4,744	9,488
810	0.34	1.80	4,784	4,784	9,568
825	0.34	1.80	4,828	4,828	9,656
840	0.34	1.80	4,876	4,876	9,752
855	0.34	1.80	4,928	4,928	9,856
870	0.34	1.80	4,984	4,984	9,968
885	0.34	1.80	5,044	5,044	10,088
900	0.34	1.80	5,108	5,108	10,216
915	0.34	1.80	5,176	5,176	10,352
930	0.34	1.80	5,248	5,248	10,496
945	0.34	1.80	5,324	5,324	10,648
960	0.34	1.80	5,404	5,404	10,808
975	0.34	1.80	5,488	5,488	10,976
990	0.34	1.80	5,576	5,576	11,152
1005	0.34	1.80	5,668	5,668	11,336
1020	0.34	1.80	5,764	5,764	11,528
1035	0.34	1.80	5,864	5,864	11,728
1050	0.34	1.80	5,968	5,968	11,936
1065	0.34	1.80	6,076	6,076	12,152
1080	0.34	1.80	6,188	6,188	12,376
1095	0.34	1.80	6,304	6,304	12,608
1110	0.34	1.80	6,424	6,424	12,848
1125	0.34	1.80	6,548	6,548	13,096
1140	0.34	1.80	6,676	6,676	13,352
1155	0.34	1.80	6,808	6,808	13,616
1170	0.34	1.80	6,944	6,944	13,888
1185	0.34	1.80	7,084	7,084	14,168
1200	0.34	1.80	7,228	7,228	14,456
1215	0.34	1.80	7,376	7,376	14,752
1230	0.34	1.80	7,528	7,528	15,056
1245	0.34	1.80	7,684	7,684	15,368
1260	0.34	1.80	7,844	7,844	15,688
1275	0.34	1.80	8,008	8,008	16,016
1290	0.34	1.80	8,176	8,176	16,352
1305	0.34	1.80	8,348	8,348	16,696
1320	0.34	1.80	8,524	8,524	17,048
1335	0.34	1.80	8,704	8,704	17,408
1350	0.34	1.80	8,888	8,888	17,776
1365	0.34	1.80	9,076	9,076	18,152
1380	0.34	1.80	9,268	9,268	18,536
1395	0.34	1.80	9,464	9,464	18,928
1410	0.34	1.80	9,664	9,664	19,328
1425	0.34	1.80	9,868	9,868	19,736
1440	0.34	1.80	10,076	10,076	20,152
1455	0.34	1.80	10,288	10,288	20,576
1470	0.34	1.80	10,504	10,504	21,008
1485	0.34	1.80	10,724	10,724	21,448
1500	0.34	1.80	10,948	10,948	21,896
1515	0.34	1.80	11,176	11,176	22,352
1530	0.34	1.80	11,408	11,408	22,816
1545	0.34	1.80	11,644	11,644	23,288
1560	0.34	1.80	11,884	11,884	23,768
1575	0.34	1.80	12,128	12,128	24,256
1590	0.34	1.80	12,376	12,376	24,752
1605	0.34	1.80	12,628	12,628	25,256
1620	0.34	1.80	12,884	12,884	25,768
1635	0.34	1.80	13,144	13,144	26,288
1650	0.34	1.80	13,408	13,408	26,816
1665	0.34	1.80	13,676	13,676	27,352
1680	0.34	1.80	13,948	13,948	27,896
1695	0.34	1.80	14,224	14,224	28,448
1710	0.34	1.80	14,504	14,504	29,008
1725	0.34	1.80	14,788	14,788	29,576
1740	0.34	1.80	15,076	15,076	30,152
1755	0.34	1.80	15,368	15,368	30,736
1770	0.34	1.80	15,664	15,664	31,328
1785	0.34	1.80	15,964	15,964	31,928
1800	0.34	1.80	16,268	16,268	32,536
1815	0.34	1.80	16,576	16,576	33,152
1830	0.34	1.80	16,888	16,888	33,776
1845	0.34	1.80	17,204	17,204	34,408
1860	0.34	1.80	17,524	17,524	35,048
1875	0.34	1.80	17,848	17,848	35,696
1890	0.34	1.80	18,176	18,176	36,352
1905	0.34	1.80	18,508	18,508	37,016
1920	0.34	1.80	18,844	18,844	37,688
1935	0.34	1.80	19,184	19,184	38,368
1950	0.34	1.80	19,528	19,528	39,056
1965	0.34	1.80	19,876	19,876	39,752
1980	0.34	1.80	20,228	20,228	40,456
1995	0.34	1.80	20,584	20,584	41,168
2010	0.34	1.80	20,944	20,944	41,888
2025	0.34	1.80	21,308	21,308	42,616
2040	0.34	1.80	21,676	21,676	43,352
2055	0.34	1.80	22,048	22,048	44,096
2070	0.34	1.80	22,424	22,424	44,848
2085	0.34	1.80	22,804	22,804	45,608
2100	0.34	1.80	23,188	23,188	46,376
2115	0.34	1.80	23,576	23,576	47,152
2130	0.34	1.80	23,968	23,968	47,936
2145	0.34	1.80	24,364	24,364	48,728
2160	0.34	1.80	24,764	24,764	49,528
2175	0.34	1.80	25,168	25,168	50,336
2190	0.34	1.80	25,576	25,576	51,152
2205	0.34	1.80	25,988	25,988	51,976
2220	0.34	1.80	26,404	26,404	52,808
2235	0.34	1.80	26,824	26,824	53,648
2250	0.34	1.80	27,248	27,248	54,496
2265	0.34	1.80	27,676	27,676	55,352
2280	0.34	1.80	28,108	28,108	56,216
2295	0.34	1.80	28,544	28,544	57,088
2310	0.34	1.80	28,984	28,984	57,968
2325	0.34	1.80	29,428	29,428	58,856
2340	0.34	1.80	29,876		

Exhibit 3

The Village Mixed-Use Project

Master Plan Submission

January 12th, 2020

The Village and Midway's Vision

The Village is a mixed-use development on Midway's historic Main Street that seeks to preserve the rural and historic European character of Midway in the face of unprecedented growth in the Heber Valley. The Village will contribute to Midway's vision in three key ways:

- Architecture. The Village is designed as a European walking village modeled after authentic villages in France and Switzerland. Key elements include hanging flowers, a flowing canal, and quality natural materials and building techniques that evoke timeless and practical design. Far from a "theme park," The Village will include live/work residences that lend themselves to village life and walkability. Tourists and residents will enjoy walking these streets as much as visiting the retail along main street.
- Village Life/Rural Character. The Village will include restaurants, retail, and office space on main street with a distinctly rural character. The goal is to drive agriculture-based tourism including farm animals, nature walks, farm-to-market dining, European furnishing imports, and to promote local/historic craftsman and boutique restaurants. This can be achieved by linking farm/grazing space directly with main street retail. Retail will share a common courtyard with access/views to grazing areas and trails to encourage both locals and tourists to think of Midway as an agritourism destination.
- Trail Access/Connectivity. The Village will form a critical link to open the south east corner of Midway to Memorial Hill and a trail system that connects North to the Dutch Fields, and West to the Homestead with European-style trails through wide open preserved agricultural land on Whitaker Farm. Biking, or walking to Memorial Hill or the Homestead will now be a practical reality with residents and tourists avoiding busy roads and enjoying much of the preserved rural character of Midway. With links to the Homestead, Memorial Hill, the Kohler Dairy, and the Provo River, The Village and Whitaker Farm to the north will be the key link in a trail system that sets a new standard for an open-space based, European style walkable/bikeable community.

The Village and Midway's Vision

- Walkability, historic quality, adjacent to nature/agriculture



Typical Building Renderings: Streetscape



Typical Building Rendering: Commercial Buildings



Typical Building Rendering: Commercial Buildings



Typical Building Rendering: Commercial/Residential



Typical Building Rendering: Commercial/Residential

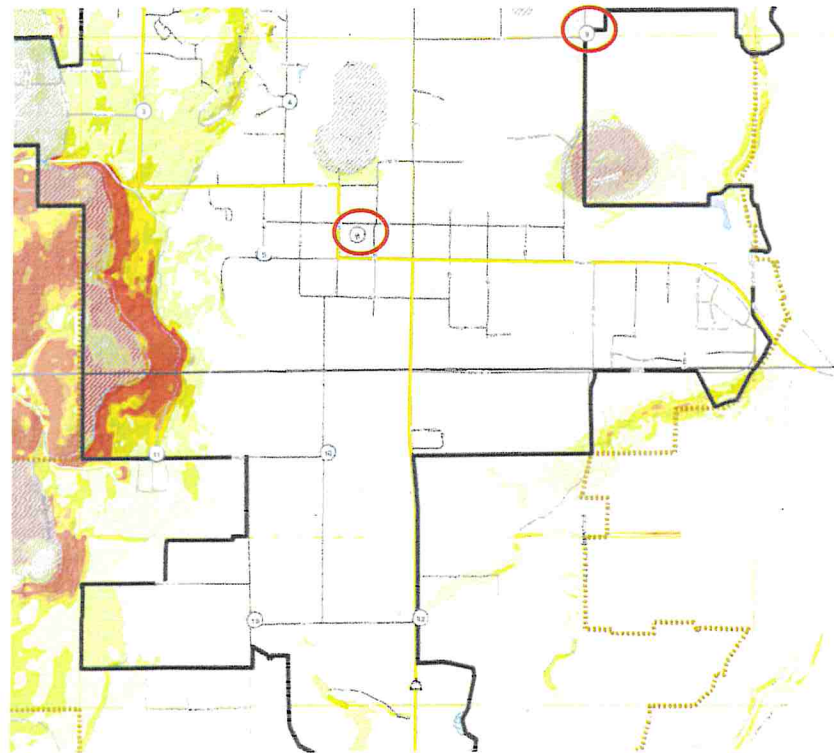


Typical Building Rendering: Residential



View-shed Analysis

- None of the observation points are impacted. Points 6 and 9 are nearest, but have no observable view of The Village Subdivision



View-shed Analysis

- Care is being taken to create view corridors up to the hill through the development



Community Impact Assumptions

- Estimated 50% of home sites will be second homes
- Average home value will be \$550,000
- Estimated \$300k+ in annual Wasatch County property tax
- 30 transient rental units (90 bedrooms).
- Access to Memorial Hill Trail and North/South East/West Midway trail systems

Fiscal Analysis: Services Budget

Sample HOA Budget

	Per household	Total	Notes
Annual Fee	1,500.00	210,000.00	\$125 per household per month
Open Space & Common Gardens			
Landscape Maintenance	405.00	56,700.00	Assumes 1.5 employees full time for 7 months @ \$30/hr
Materials	142.86	20,000.00	Lump sum
Streets			
Maintenance Budget	357.14	50,000.00	Lump sum
Snow Removal	85.71	12,000.00	Assumes 2 employees working 25 full days @ \$30/hr
Clubhouse and Pool			
Management	231.43	32,400.00	Assumes 1 employees working 20 hours per week @ \$30/hr
Utilities and Repairs	277.86	38,900.00	Lump sum, includes utilities and repairs

Sample Commercial OA Budget

	Per business	Total	Notes
Annual Fee	3,000.00	36,000.00	\$125 per household per month
Open Space & Common Gardens			
Landscape Maintenance	94.50	13,230.00	Assumes 1 employee 14 hours a week for 7 months @ \$30/hr
Materials	35.71	5,000.00	Lump sum
Parking and Sidewalks			
Maintenance Budget	41.21	5,770.00	Lump sum
Snow Removal	85.71	12,000.00	Assumes 2 employees working 25 full days @ \$30/hr

Exhibit 4

The Village

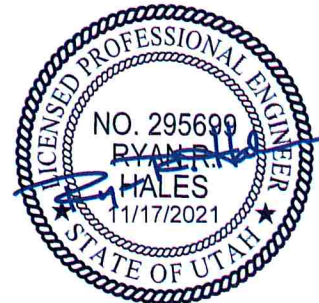
Traffic Impact Study



Midway, Utah

November 17, 2021

UT21-1835



EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed The Village development located in Midway, Utah. The Village project is located on the north side of Main Street, east of River Road.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021) conditions with and without the proposed project and to recommend mitigation measures as needed. The evening peak hour level of service (LOS) results are shown in Table ES-1. Recommended storage lengths are shown in Table ES-2.

Table ES-1: Evening Peak Hour Level of Service Results

Intersection	Level of Service		
	Existing (2021)		
	Background	Mitigated Background	Plus Project
1 River Road / Main Street (S.R. 113)	e	A	A
2 Fox Den Road / Main Street (S.R. 113)	b	b	c
3 580 East / Main Street (S.R. 113)	b	b	c
4 670 East / Main Street (S.R. 113)	a	b	b
5 Access 1 / Main Street (S.R. 113)	-	-	c
6 Access 3 / River Road	-	-	a

1. Intersection LOS values represent the overall intersection average for roundabout, signalized, and all-way stop-controlled (AWSC) intersections (uppercase letter) and the worst movement for all other unsignalized intersections (lowercase letter)
2. BG = Background (without project traffic), PP = Plus Project (with project traffic)

Source: Hales Engineering, October 2021

Table ES-2: Recommended Storage Lengths

Intersection	Recommended Storage Lengths (feet)															
	Northbound				Southbound				Eastbound				Westbound			
	LT		RT		LT		RT		LT		RT		LT		RT	
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
1 580 East / Main Street (S.R. 113)	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	50
2 West Access / Main Street (S.R. 113)	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-

1. Storage lengths are based on 2021 95th percentile queue lengths and do not include required deceleration / taper distances
2. E = Existing storage length (approximate), if applicable; P = proposed storage length for new turn lanes or changes to existing turn lanes, if applicable

Source: Hales Engineering, October 2021

SUMMARY OF KEY FINDINGS & RECOMMENDATIONS

Project Conditions

- The development will consist of residential townhome and single-family units and some commercial
- The project is anticipated to generate approximately 4,412 new weekday daily trips, including 302 trips in the morning peak hour, and 395 trips in the evening peak hour

2021	Background	Plus Project
Assumptions	<ul style="list-style-type: none"> • Traffic volumes from Whitaker Farms, Remund Farms, Indian Summer, Alder Meadows, Midway Crest, and St Prex developments added 	<ul style="list-style-type: none"> • 580 East / Main St (S.R. 113): Construct EB left-turn pocket and stripe WB right-turn pocket • West Access / Main St (S.R. 113): Construct EB left-turn pocket
Findings	<ul style="list-style-type: none"> • Poor LOS at the River Rd / Main St (S.R. 113) intersection 	<ul style="list-style-type: none"> • Acceptable LOS
Mitigations	<ul style="list-style-type: none"> • River Rd / Main St (S.R. 113): Install signal, left-turn pockets on all approaches, and right-turn pockets on EB and WB approaches 	<ul style="list-style-type: none"> • None

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed The Village development located in Midway, Utah. The proposed project is located on the north side of Main Street, east of River Road. Figure 1 shows a vicinity map of the proposed development.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021) conditions with and without the proposed project and to recommend mitigation measures as needed.



Figure 1: Vicinity map showing the project location in Midway, Utah

B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- River Road / Main Street (S.R. 113)
- Fox Den Road / Main Street (S.R. 113)
- 580 East / Main Street (S.R. 113)
- 670 East / Main Street (S.R. 113)

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections.







The *Highway Capacity Manual* (HCM), 6th Edition, 2016 methodology was used in this study to remain consistent with “state-of-the-practice” professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized, roundabout, and all-way stop-controlled (AWSC) intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections, LOS is reported based on the worst movement.

Using Synchro/SimTraffic software, which follow the HCM methodology, the peak hour LOS was computed for each study intersection. Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. The detailed LOS reports are provided in Appendix B. Hales Engineering also calculated the 95th percentile queue lengths for the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix D.

D. Level of Service Standards

For the purposes of this study, a minimum acceptable intersection performance for each of the study intersections was set at LOS D. If levels of service E or F conditions exist, an explanation and/or mitigation measures will be presented. A LOS D threshold is consistent with “state-of-the-practice” traffic engineering principles for urbanized areas.

Table 1: Level of Service Description

LOS	Description of Traffic Conditions	Average Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	 Free Flow / Insignificant Delay	≤ 10	≤ 10
B	 Stable Operations / Minimum Delays	> 10 to 20	> 10 to 15
C	 Stable Operations / Acceptable Delays	> 20 to 35	> 15 to 25
D	 Approaching Unstable Flows / Tolerable Delays	> 35 to 55	> 25 to 35
E	 Unstable Operations / Significant Delays	> 55 to 80	> 35 to 50
F	 Forced Flows / Unpredictable Flows / Excessive Delays	> 80	> 50

Source: Hales Engineering Descriptions, based on the *Highway Capacity Manual (HCM)*, 6th Edition, 2016 Methodology (Transportation Research Board)

II. EXISTING (2021) BACKGROUND CONDITIONS

A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis provides a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

Main Street (S.R. 113) – is a state-maintained roadway (classified by UDOT access management standards as a “Community – Urban Importance” facility, or access category 8 roadway). Main Street (S.R. 113) has one travel lane in each direction. As identified and controlled by UDOT, a “Community – Urban Importance” access classification identifies minimum signalized intersection spacing of one-quarter mile (1,320 feet), minimum unsignalized street spacing of 300 feet, and minimum driveway spacing of 150 feet. The posted speed limit on Main Street (S.R. 113) is 35 mph.

River Road – is a city-maintained roadway. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

C. Traffic Volumes

Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- River Road / Main Street (S.R. 113)
- Fox Den Road / Main Street (S.R. 113)
- 580 East / Main Street (S.R. 113)
- 670 East / Main Street (S.R. 113)

The counts were performed on Thursday, February 4, Tuesday, February 9, and Tuesday, May 25, 2021. The morning peak hour was determined to be between 7:30 and 8:30 a.m., and the evening peak hour was determined to be between 5:00 and 6:00 p.m. The evening peak hour volumes were approximately 22% higher than the morning peak hour volumes. Therefore, the evening peak hour volumes were used in the analysis to represent the worst-case conditions. Detailed count data are included in Appendix A.

The traffic counts were collected during the COVID-19 pandemic when traffic volumes were slightly reduced due to social distancing measures. According to the UDOT Automatic Traffic

Signal Performance Measures (ATSPM) website, the traffic volumes on February 6, 2020 (pre-social distancing) were approximately 17% higher than those on February 4, 2021. Therefore, the collected data were increased by 17% to represent normal conditions.

Traffic volumes were added from other incomplete or planned developments, including the following:

- Whitaker Farms
- Remund Farms
- Indian Summer
- Alder Meadows
- Midway Crest
- St Prex

Figure 2 shows the existing evening peak hour volumes as well as intersection geometry at the study intersections.

D. Level of Service Analysis

Hales Engineering determined that the River Road / Main Street (S.R. 113) intersection currently operates at a poor LOS during the evening peak hour, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2021) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing was observed during the evening peak hour.

F. Mitigation Measures

According to UDOT guidelines, a traffic signal is warranted at the River Road / Main Street (S.R. 113) intersection. Because it performs at a poor LOS, it is recommended that one be installed. This may require some widening at the intersection to accommodate separate left-turn pockets on all approaches and right-turn pockets on the east- and westbound approaches.

With the proposed improvement, it is anticipated that all study intersections will perform at an acceptable LOS, as shown in Table 3.



Table 2: Existing (2021) Background Evening Peak Hour LOS

Intersection		Level of Service		
Description	Control	Movement ¹	Aver. Delay (Sec. / Veh.)	LOS ²
River Road / Main Street (S.R. 113)	NB/SB Stop	SBL	41.3	e
Fox Den Road / Main Street (S.R. 113)	NB Stop	NBL	11.2	b
580 East / Main Street (S.R. 113)	NB Stop	NBL	11.3	b
670 East / Main Street (S.R. 113)	SB Stop	SBL	10.0	a

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.

2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, October 2021

Table 3: Mitigated Existing (2021) Background Evening Peak Hour LOS

Intersection		Level of Service		
Description	Control	Movement ¹	Aver. Delay (Sec. / Veh.)	LOS ²
River Road / Main Street (S.R. 113)	Signal	-	8.1	A
Fox Den Road / Main Street (S.R. 113)	NB Stop	NBL	12.3	b
580 East / Main Street (S.R. 113)	NB Stop	NBL	12.8	b
670 East / Main Street (S.R. 113)	SB Stop	SBL	10.9	b

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.

2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, October 2021

III. PROJECT CONDITIONS

A. Purpose

The project conditions discussion explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in Chapter I.

B. Project Description

The proposed The Village development is located on the north side of Main Street, east of River Road. The development will consist of residential townhome and single-family units and some commercial, including retail, restaurant(s), office, and a clubhouse. A concept plan for the proposed development is provided in Appendix C. The commercial square footage used for this study is conservatively high to account for the possibility that additional space may be constructed. The proposed land use for the development has been identified in Table 4.

Table 4: Project Land Uses

Land Use	Intensity
Townhomes	143 Units
Retail	10,200 sq. ft.
Restaurant	23,900 sq. ft.
Office	11,100 sq. ft.
Health/Fitness Club	40,900 sq. ft.

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 10th Edition, 2017. Due to the mixed-use nature of the development, it is likely that several trips will be made via walking internally. Based on standard ITE methodology, mixed-use trip reductions of 7% and 43% were calculated for the morning and evening peak hour, respectively. These reductions were applied to all but the clubhouse land use as this type does not have its own field in the methodology. To be conservative, the evening peak hour reduction was lowered to 35%. For the clubhouse, because the HOA is anticipated to include memberships in its fees, it was assumed that approximately 12% of trips to and from it would be internal to keep the number of internal trips consistent with the prior square footage. Trip generation for the proposed project is included in Table 5.

The total new trip generation for the development is as follows:

- Daily Trips: 4,412
- Morning Peak Hour Trips: 302
- Evening Peak Hour Trips: 395

Table 5: Trip Generation

Trip Generation Midway - The Village TIS											
Weekday Daily Land Use ¹	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Internal Capture	New Trips Entering	New Trips Exiting	Total New Daily Trips
Multifamily Housing (Low-Rise) (220)	143	Dwelling Units	1,042	50%	50%	521	521	19%	422	422	844
Shopping Center (820)	10.2	1,000 Sq. Ft. GLA	1,274	50%	50%	637	637	19%	516	516	1,032
Quality Restaurant (931)	23.9	1,000 Sq. Ft. GFA	2,004	50%	50%	1,002	1,002	19%	812	812	1,624
General Office Building (710)	11.1	1,000 Sq. Ft. GFA	126	50%	50%	63	63	19%	51	51	102
Health/Fitness Club (492)	40.9	1,000 Sq. Ft. GFA	1,000	50%	50%	500	500	19%	405	405	810
Total			5,446			2,723	2,723		2,206	2,206	4,412
Morning Peak Hour Land Use ¹	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Internal Capture	New Trips Entering	New Trips Exiting	Total New AM Trips
Multifamily Housing (Low-Rise) (220)	143	Dwelling Units	68	23%	77%	16	52	8%	15	48	63
Shopping Center (820)	10.2	1,000 Sq. Ft. GLA	158	62%	38%	98	60	8%	90	55	145
Quality Restuaruant (931)	23.9	1,000 Sq. Ft. GFA	18	50%	50%	9	9	8%	8	8	16
General Office Building (710)	11.1	1,000 Sq. Ft. GFA	38	86%	14%	33	5	8%	30	5	35
Health/Fitness Club (492)	40.9	1,000 Sq. Ft. GFA	54	51%	49%	28	26	20%	22	21	43
Total			336			184	152		165	137	302
Evening Peak Hour Land Use ¹	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	Internal Capture	New Trips Entering	New Trips Exiting	Total New PM Trips
Multifamily Housing (Low-Rise) (220)	143	Dwelling Units	82	63%	37%	52	30	30%	36	21	57
Shopping Center (820)	10.2	1,000 Sq. Ft. GLA	102	48%	52%	49	53	30%	34	37	71
Quality Restuaruant (931)	23.9	1,000 Sq. Ft. GFA	188	67%	33%	126	62	30%	88	43	131
General Office Building (710)	11.1	1,000 Sq. Ft. GFA	16	16%	84%	3	13	30%	2	9	11
Health/Fitness Club (492)	40.9	1,000 Sq. Ft. GFA	142	57%	43%	81	61	12%	71	54	125
Total			530			311	219		231	164	395

1. Land Use Code from the Institute of Transportation Engineers (ITE) *Trip Generation*, 10th Edition, 2017.

SOURCE: Hales Engineering, October 2021

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially near the site. The resulting distribution of project generated trips during the evening peak hour is shown in Table 6.

Table 6: Trip Distribution

Direction	% To/From Project
North	15%
South	5%
East	40%
West	40%

These trip distribution assumptions were used to assign the evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 3.

Midway - The Village TIS
Trip Assignment

Evening Peak Hour
Figure 3



E. Access

The proposed access for the site will be gained at the following locations (see also concept plan in Appendix C):

Main Street (S.R. 113):

- Access 1 will be located approximately 200 feet east of the Fox Den Road / Main Street (S.R. 113) intersection. It will access the project on the north side of Main Street (S.R. 113). It is anticipated that the access will be stop-controlled.
- Access 2 will be located directly across from the 580 East / Main Street (S.R. 113) intersection. It will access the project on the north side of Main Street (S.R. 113). It is anticipated that the access will be stop-controlled.

River Road:

- Access 3 will be located approximately 880 feet north of the River Road / Main Street (S.R. 113) intersection. It will access the project on the east side of River Road. It is anticipated that the access will be stop-controlled.

F. Auxiliary Lane Requirements

UDOT Administrative Rule R930-6 outlines minimum turn volumes (measured in vehicles per hour) to warrant auxiliary lanes. It is anticipated that auxiliary lanes are required for these accesses, as shown in Table 7 and Table 8.

Table 7: Auxiliary Lane Summary – Access 1

Auxiliary Lane Type		Minimum Requirement	Measure	Met?
Left turn	Deceleration (EB-to-NB)	25 vph	72 vph	Yes
Right turn	Deceleration (WB-to-NB)	50 vph	27 vph	No

Table 8: Auxiliary Lane Summary – Access 2

Auxiliary Lane Type		Minimum Requirement	Measure	Met?
Left turn	Deceleration (EB-to-NB)	25 vph	38 vph	Yes
Right turn	Deceleration (WB-to-NB)	50 vph	65 vph	Yes

IV. EXISTING (2021) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2021) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the existing (2021) background traffic volumes to predict turning movement volumes for existing (2021) plus project conditions. Existing (2021) plus project evening peak hour turning movement volumes are shown in Figure 4.

C. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the evening peak hour with project traffic added, as shown in Table 9.

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing is anticipated during the evening peak hour.

E. Mitigation Measures

No additional mitigation measures are recommended.

F. Recommended Storage Lengths

Hales Engineering determined recommended storage lengths based on the 95th percentile queue lengths given in the future (2021) plus project scenario. These storage lengths do not include the taper length. Recommended storage lengths for the study intersections are shown in Table 10. Intersections shown in Table 10 include new intersections and existing intersections that have recommended storage length changes.

Table 9: Existing (2021) Plus Project Evening Peak Hour LOS

Intersection		Level of Service		
Description	Control	Movement ¹	Aver. Delay (Sec. / Veh.)	LOS ²
River Road / Main Street (S.R. 113)	Signal	-	8.8	A
Fox Den Road / Main Street (S.R. 113)	NB Stop	NBL	17.8	c
580 East / Main Street (S.R. 113)	NB/SB Stop	NBL	18.0	c
670 East / Main Street (S.R. 113)	SB Stop	SBL	14.4	b
Access 1 / Main Street (S.R. 113)	SB Stop	SBL	15.7	c
Access 3 / River Road	WB Stop	WBR	3.7	a

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, October 2021

Table 10: Recommended Storage Lengths

Intersection	Recommended Storage Lengths (feet)																
	Northbound				Southbound				Eastbound				Westbound				
	LT		RT		LT		RT		LT		RT		LT		RT		
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	
1	580 East / Main Street (S.R. 113)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
2	West Access / Main Street (S.R. 113)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1. Storage lengths are based on 2021 95th percentile queue lengths and do not include required deceleration / taper distances

2. E = Existing storage length (approximate), if applicable; P = proposed storage length for new turn lanes or changes to existing turn lanes, if applicable

Source: Hales Engineering, October 2021



APPENDIX A

Turning Movement Counts

Intersection Turning Movement Summary

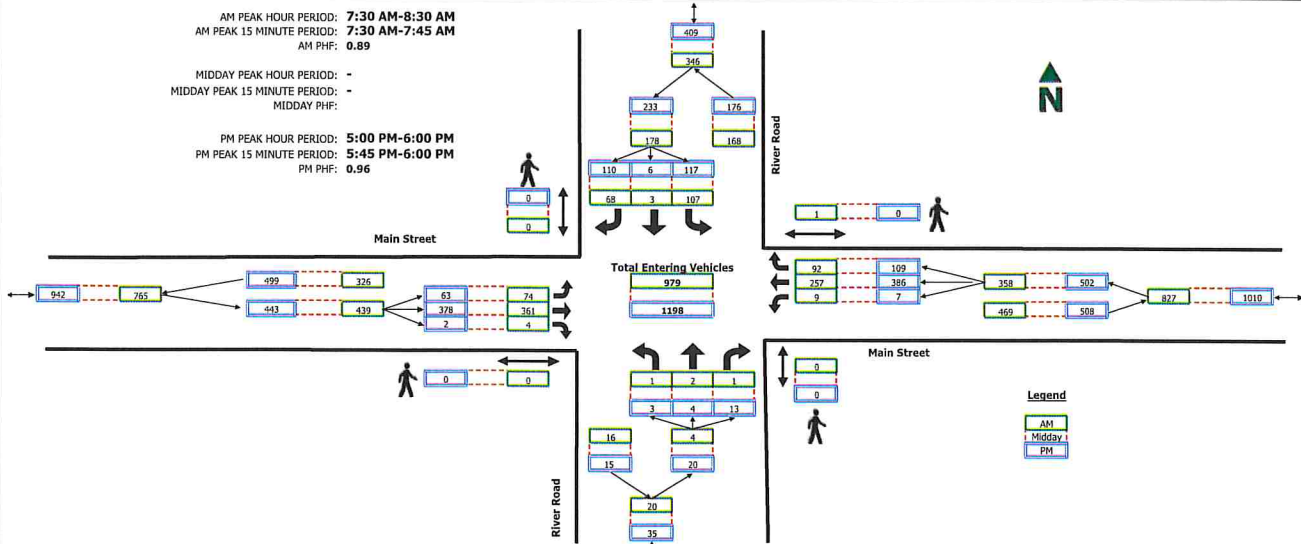
Intersection: River Road / Main Street
North/South: River Road
East/West: Main Street
Jurisdiction: Midway
Project Title: Beaujeany TIS Update
Project No: UT21-1835
Weather: Clear

Date: 2-4-21, Thu
COVID-19 Adjustment: 85.5%
Month of Year Adjustment: 100.0%
Adjustment Station #: 0
Growth Rate: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: 7:30 AM-8:30 AM
AM PEAK 15 MINUTE PERIOD: 7:30 AM-7:45 AM
AM PHF: 0.89

MIDDAY PEAK HOUR PERIOD: -
MIDDAY PEAK 15 MINUTE PERIOD: -
MIDDAY PHF: -

PM PEAK HOUR PERIOD: 5:00 PM-6:00 PM
PM PEAK 15 MINUTE PERIOD: 5:45 PM-6:00 PM
PM PHF: 0.96

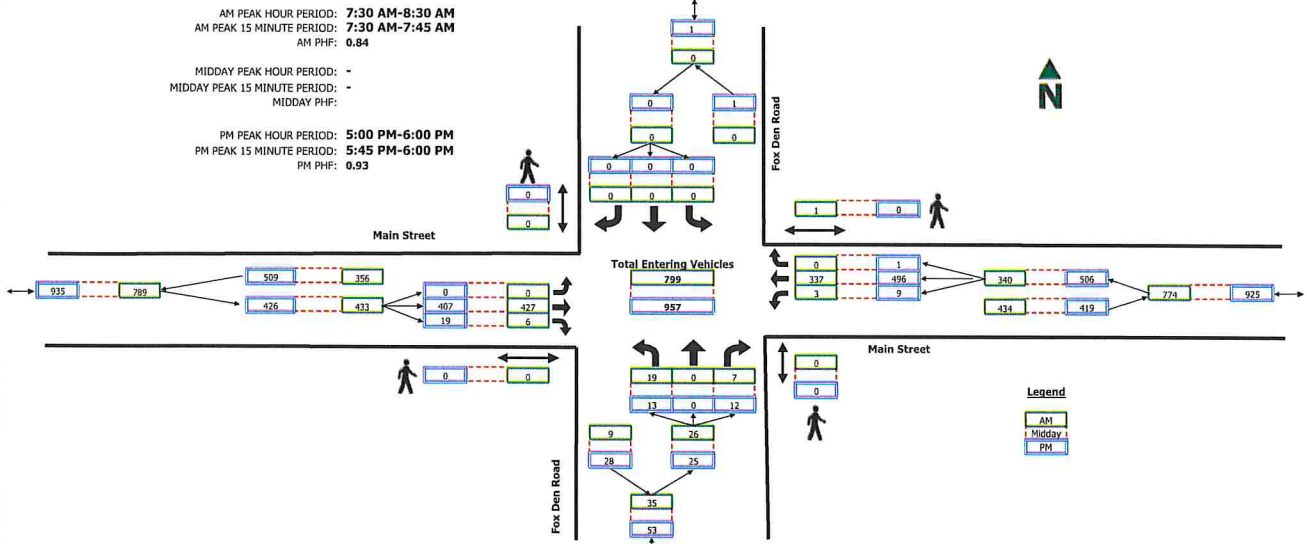


RAW COUNT SUMMARIES	River Road Northbound				River Road Southbound				Main Street Eastbound				Main Street Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00 - 7:15	0	0	2	0	9	1	6	0	12	43	0	0	6	36	18	0	133
7:15 - 7:30	0	0	0	0	25	0	4	0	12	74	0	0	1	32	21	0	169
7:30 - 7:45	0	1	1	0	50	1	13	0	16	117	0	0	2	55	20	0	276
7:45 - 8:00	0	1	0	0	26	1	16	0	16	84	2	0	5	76	34	1	261
8:00 - 8:15	1	0	0	0	12	0	16	0	16	76	1	0	1	65	25	0	213
8:15 - 8:30	0	0	0	0	19	1	23	0	26	84	1	0	1	61	13	0	229
8:30 - 8:45	1	0	2	0	26	0	23	1	30	91	2	0	0	76	18	0	269
8:45 - 9:00	1	0	2	0	30	0	12	0	28	78	0	0	1	82	22	0	256
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00 - 16:15	0	0	2	0	12	0	16	1	26	92	1	0	1	111	32	0	293
16:15 - 16:30	0	1	1	0	37	0	26	0	11	110	1	0	2	90	13	0	292
16:30 - 16:45	2	1	2	0	28	0	32	0	12	85	0	5	2	106	32	0	302
16:45 - 17:00	0	0	5	0	28	1	25	0	5	76	2	0	2	87	36	0	267
17:00 - 17:15	1	2	7	0	30	2	28	0	16	87	1	0	4	98	33	0	309
17:15 - 17:30	2	1	4	0	26	2	33	0	11	105	0	0	1	102	23	0	310
17:30 - 17:45	0	0	2	0	33	0	27	0	21	101	0	0	0	71	12	0	267
17:45 - 18:00	0	1	0	0	28	2	22	0	15	85	1	0	2	115	41	0	312

Intersection Turning Movement Summary

Intersection: Fox Den Road / Main Street
North/South: Fox Den Road
East/West: Main Street
Jurisdiction: Midway
Project Title: Beaugency TIS Update
Project No: UT21-1835
Weather: Clear

Date: 2-4-21, Thu
COVID-19 Adjustment: 85.5%
Month of Year Adjustment: 100.0%
Adjustment Station #: 0
Growth Rate: 0.0%
Number of Years: 0



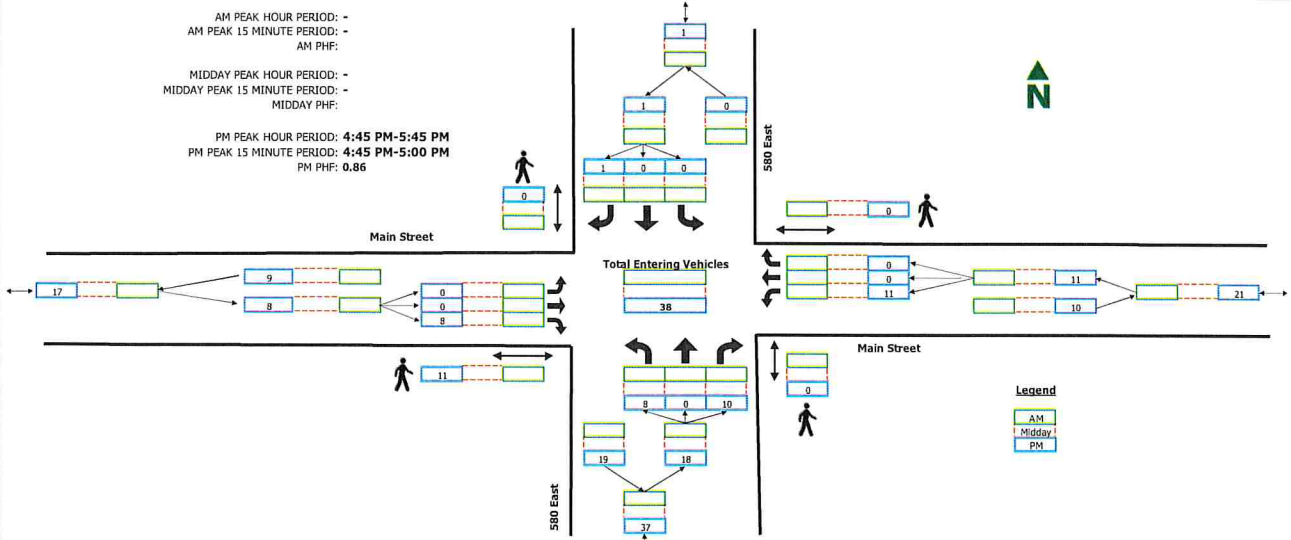
RAW COUNT SUMMARIES	Fox Den Road Northbound				Fox Den Road Southbound				Main Street Eastbound				Main Street Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00 - 7:15	2	1	2	0	1	0	0	0	1	44	1	0	1	61	0	0	114
7:15 - 7:30	4	0	2	0	0	0	0	0	0	89	4	0	0	48	0	0	147
7:30 - 7:45	4	0	2	0	0	0	0	0	0	157	0	0	0	75	0	0	238
7:45 - 8:00	6	0	2	0	0	0	0	0	0	98	1	0	1	104	0	1	212
8:00 - 8:15	5	0	1	0	0	0	0	0	0	81	1	0	1	87	0	0	176
8:15 - 8:30	4	0	2	0	0	0	0	0	0	91	4	0	1	71	0	0	173
8:30 - 8:45	1	1	0	0	0	0	0	0	0	102	4	1	5	97	0	0	210
8:45 - 9:00	2	0	5	0	0	0	0	0	0	96	6	0	5	104	0	0	220
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00 - 16:15	4	0	1	0	0	0	0	0	0	97	4	0	1	139	0	0	246
16:15 - 16:30	4	0	2	0	0	0	0	0	0	129	7	0	2	97	0	1	241
16:30 - 16:45	1	0	2	0	0	0	0	0	0	111	0	4	2	130	0	0	246
16:45 - 17:00	1	0	1	0	0	0	0	0	0	82	1	0	1	132	0	0	218
17:00 - 17:15	1	0	0	0	0	0	0	0	0	104	1	0	0	144	0	0	250
17:15 - 17:30	1	0	6	0	0	0	0	0	0	102	5	0	1	123	1	0	239
17:30 - 17:45	4	0	2	0	0	0	0	0	0	119	5	0	4	78	0	0	212
17:45 - 18:00	7	0	4	0	0	0	0	0	0	82	8	0	4	151	0	0	256

Intersection Turning Movement Summary

Intersection: 580 East / Main Street
North/South: 580 East
East/West: Main Street
Jurisdiction: Midway
Project Title: The Village TIS
Project No: UT21-1835
Weather: Clear

Date: 5-25-21, Tue
COVID-19 Adjustment: 85.5%
Month of Year Adjustment: 100.0%
Adjustment Station #: 0
Growth Rates: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: -
AM PEAK 15 MINUTE PERIOD: -
AM PHF: -
MIDDAY PEAK HOUR PERIOD: -
MIDDAY PEAK 15 MINUTE PERIOD: -
MIDDAY PHF: -
PM PEAK HOUR PERIOD: 4:45 PM-5:45 PM
PM PEAK 15 MINUTE PERIOD: 4:45 PM-5:00 PM
PM PHF: 0.86

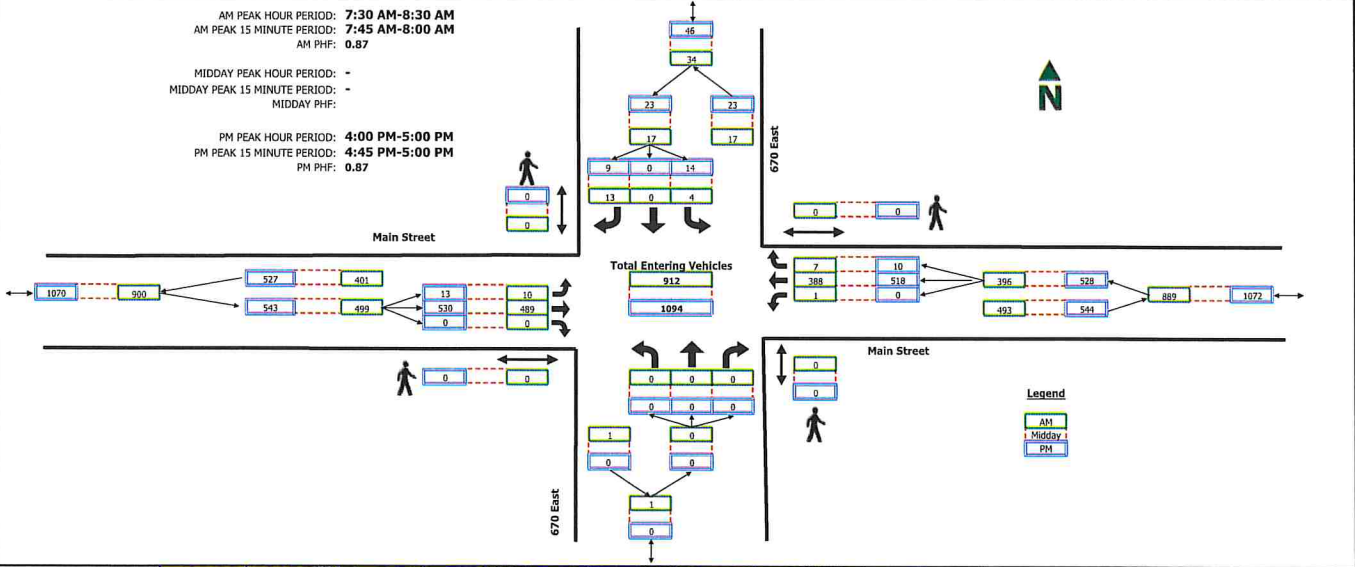


RAW COUNT SUMMARIES	580 East Northbound				580 East Southbound				Main Street Eastbound				Main Street Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 - 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00 - 16:15	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	5	5
16:15 - 16:30	0	0	1	0	0	0	0	0	0	0	2	0	5	0	0	8	8
16:30 - 16:45	0	0	0	0	0	0	0	0	0	1	12	2	2	0	0	3	3
16:45 - 17:00	2	0	2	0	0	0	0	0	0	6	6	1	0	0	0	11	11
17:00 - 17:15	2	0	2	0	0	0	0	0	0	0	0	4	0	0	0	8	8
17:15 - 17:30	4	0	1	0	0	0	0	0	0	1	1	2	0	0	0	8	8
17:30 - 17:45	0	0	5	0	0	0	1	0	0	1	4	4	0	0	0	11	11
17:45 - 18:00	2	0	1	0	0	0	0	0	0	2	5	1	0	0	0	6	6

Intersection Turning Movement Summary

Intersection: 670 East / Main Street
North/South: 670 East
East/West: Main Street
Jurisdiction: Midway
Project Title: Beaugency TIS Update
Project No: UT21-1835
Weather: Clear

Date: 2-9-21, Tue
COVID-19 Adjustment: 85.5%
Month of Year Adjustment: 100.0%
Adjustment Station #: 0
Growth Rate: 0.0%
Number of Years: 0



RAW COUNT SUMMARIES	670 East Northbound				670 East Southbound				Main Street Eastbound				Main Street Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00 - 7:15	0	0	0	0	0	0	0	0	0	46	0	0	0	47	0	0	93
7:15 - 7:30	0	0	0	0	2	0	0	0	0	108	0	0	0	50	0	0	160
7:30 - 7:45	0	0	0	0	2	0	1	0	0	171	0	0	0	78	1	0	253
7:45 - 8:00	0	0	0	0	2	0	2	0	4	143	0	0	0	109	2	0	262
8:00 - 8:15	0	0	0	0	0	0	5	0	4	87	0	0	1	113	4	0	214
8:15 - 8:30	0	0	0	0	0	0	5	0	2	88	0	0	0	88	0	0	183
8:30 - 8:45	0	0	0	0	1	0	2	0	2	104	0	0	0	97	0	0	206
8:45 - 9:00	0	0	0	0	4	0	0	0	2	143	0	0	0	91	1	0	241
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00 - 16:15	0	0	0	0	1	0	5	0	5	117	0	0	0	135	4	0	267
16:15 - 16:30	0	0	0	0	5	0	2	0	1	131	0	0	0	124	4	0	267
16:30 - 16:45	0	0	0	0	2	0	1	0	1	116	0	0	0	123	1	0	244
16:45 - 17:00	0	0	0	0	6	0	1	0	6	166	0	0	0	136	1	0	316
17:00 - 17:15	0	0	0	0	1	0	2	0	1	125	0	0	0	133	4	0	266
17:15 - 17:30	0	0	0	0	2	0	2	0	1	96	0	0	0	126	4	0	231
17:30 - 17:45	0	0	0	0	1	0	4	0	1	101	0	0	0	133	0	0	240
17:45 - 18:00	0	0	0	0	2	0	4	0	0	132	0	0	0	108	1	0	247

APPENDIX B

LOS Results

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Existing (2021) Background
Time Period: Evening Peak Hour
Project #: UT21-1835

Intersection: River Road & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	3	2	67	20.9	C
	T	4	3	75	26.5	D
	R	13	13	98	7.3	A
	Subtotal	20	18	90	12.0	B
SB	L	140	138	99	41.3	E
	T	6	4	67	35.2	E
	R	137	138	101	7.6	A
	Subtotal	283	280	99	24.6	C
EB	L	106	103	97	7.6	A
	T	386	380	98	4.0	A
	R	2	2	100	4.2	A
	Subtotal	494	485	98	4.8	A
WB	L	7	5	71	5.3	A
	T	410	426	104	2.8	A
	R	146	150	103	1.3	A
	Subtotal	563	581	103	2.4	A
Total		1,360	1,364	100	8.0	A

Intersection: Fox Den Road & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	14	14	98	11.2	B
	R	12	12	98	4.9	A
	Subtotal	26	26	100	8.3	A
EB	T	526	520	99	1.3	A
	R	21	20	94	1.0	A
	Subtotal	547	540	99	1.3	A
WB	L	9	7	78	4.1	A
	T	541	556	103	1.0	A
	Subtotal	550	563	102	1.0	A
Total		1,124	1,129	100	1.3	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Existing (2021) Background
Time Period: Evening Peak Hour

Project #: UT21-1835

Intersection: 580 East & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	8	8	100	11.3	B
	R	10	13	130	5.1	A
	Subtotal	18	21	117	7.5	A
EB	T	523	515	99	0.8	A
	R	8	8	100	0.5	A
	Subtotal	531	523	98	0.8	A
WB	L	11	10	91	4.0	A
	T	542	556	103	0.6	A
	Subtotal	553	566	102	0.7	A
Total		1,102	1,110	101	0.9	A

Intersection: Main Street & 670 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	14	14	98	10.0	A
	R	9	10	111	5.7	A
	Subtotal	23	24	104	8.2	A
EB	L	13	14	106	3.5	A
	T	520	515	99	0.6	A
	Subtotal	533	529	99	0.7	A
WB	T	544	557	102	1.3	A
	R	10	10	100	1.2	A
	Subtotal	554	567	102	1.3	A
Total		1,110	1,120	101	1.2	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Mitigated Existing (2021) Background
Time Period: Evening Peak Hour **Project #:** UT21-1835

Intersection: River Road & Main Street
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	3	3	100	12.6	B
	T	4	4	100	7.1	A
	R	13	14	106	4.6	A
	Subtotal	20	21	105	6.2	A
SB	L	140	140	100	13.4	B
	T	6	7	117	9.0	A
	R	137	132	96	5.4	A
	Subtotal	283	279	99	9.5	A
EB	L	106	107	101	16.5	B
	T	386	386	100	7.3	A
	R	2	3	150	1.5	A
	Subtotal	494	496	100	9.2	A
WB	L	7	6	86	11.7	B
	T	410	395	96	7.5	A
	R	146	147	101	3.3	A
	Subtotal	563	548	97	6.4	A
Total		1,360	1,344	99	8.1	A

Intersection: Fox Den Road & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	14	15	105	12.3	B
	R	12	14	114	4.6	A
	Subtotal	26	29	112	8.6	A
EB	T	526	527	100	1.9	A
	R	21	21	99	1.5	A
	Subtotal	547	548	100	1.9	A
WB	L	9	10	111	4.3	A
	T	541	525	97	1.2	A
	Subtotal	550	535	97	1.3	A
Total		1,124	1,112	99	1.8	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Mitigated Existing (2021) Background
Time Period: Evening Peak Hour
Project #: UT21-1835

Intersection: 580 East & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	8	9	112	12.8	B
	R	10	10	100	5.5	A
	Subtotal	18	19	106	9.0	A
EB	T	523	525	100	0.9	A
	R	8	8	100	0.4	A
	Subtotal	531	533	100	0.9	A
WB	L	11	11	100	4.1	A
	T	542	525	97	0.7	A
	Subtotal	553	536	97	0.8	A
Total		1,102	1,088	99	0.9	A

Intersection: Main Street & 670 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	14	13	91	10.9	B
	R	9	10	111	5.1	A
	Subtotal	23	23	100	8.4	A
EB	L	13	12	91	3.8	A
	T	520	523	101	0.7	A
	Subtotal	533	535	100	0.8	A
WB	T	544	526	97	1.3	A
	R	10	10	100	0.7	A
	Subtotal	554	536	97	1.3	A
Total		1,110	1,094	99	1.2	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Existing (2021) Plus Project
Time Period: Evening Peak Hour

Project #: UT21-1835

Intersection: River Road & Main Street
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	3	3	100	10.8	B
	T	4	4	100	9.9	A
	R	13	14	106	5.8	A
	Subtotal	20	21	105	7.3	A
SB	L	146	144	99	15.5	B
	T	6	6	100	12.8	B
	R	137	138	101	6.4	A
	Subtotal	289	288	100	11.1	B
EB	L	106	105	99	19.0	B
	T	478	481	101	7.7	A
	R	2	2	100	3.1	A
	Subtotal	586	588	100	9.7	A
WB	L	7	8	114	16.0	B
	T	476	477	100	7.9	A
	R	151	145	96	3.3	A
	Subtotal	634	630	99	6.9	A
Total		1,529	1,527	100	8.8	A

Intersection: Fox Den Road & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	14	13	91	17.8	C
	R	24	24	99	7.0	A
	Subtotal	38	37	97	10.8	B
EB	T	624	627	101	2.2	A
	R	21	19	89	1.5	A
	Subtotal	645	646	100	2.2	A
WB	L	17	19	110	5.9	A
	T	612	610	100	1.1	A
	Subtotal	629	629	100	1.2	A
Total		1,312	1,312	100	2.0	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Existing (2021) Plus Project
Time Period: Evening Peak Hour
Project #: UT21-1835

Intersection: 580 East & Main Street
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	8	8	100	18.0	C
	R	10	12	120	6.3	A
	Subtotal	18	20	111	11.0	B
SB	L	44	40	91	17.4	C
	R	40	38	96	8.2	A
	Subtotal	84	78	93	12.9	B
EB	L	38	37	98	4.8	A
	T	545	549	101	0.7	A
	R	8	9	112	0.2	A
	Subtotal	591	595	101	0.9	A
WB	L	11	10	91	3.7	A
	T	573	574	100	0.9	A
	R	65	68	105	0.4	A
	Subtotal	649	652	100	0.9	A
Total		1,341	1,345	100	1.7	A

Intersection: Main Street & 670 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	14	15	105	14.4	B
	R	9	9	100	6.5	A
	Subtotal	23	24	104	11.4	B
EB	L	13	14	106	5.7	A
	T	586	587	100	0.8	A
	Subtotal	599	601	100	0.9	A
WB	T	636	639	100	1.5	A
	R	10	11	110	1.1	A
	Subtotal	646	650	101	1.5	A
Total		1,269	1,275	100	1.4	A

SimTraffic LOS Report

Project: Midway - The Village TIS
Analysis Period: Existing (2021) Plus Project
Time Period: Evening Peak Hour
Project #: UT21-1835

Intersection: Main Street & Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	22	21	94	15.7	C
	R	38	39	103	7.8	A
	Subtotal	60	60	100	10.6	B
EB	L	72	68	94	4.9	A
	T	571	577	101	0.6	A
	Subtotal	643	645	100	1.1	A
WB	T	592	590	100	1.0	A
	R	27	26	95	0.4	A
	Subtotal	619	616	100	1.0	A
Total		1,322	1,321	100	1.4	A

Intersection: River Road & Access 3
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	262	255	98	0.9	A
	Subtotal	262	255	97	0.9	A
SB	L	29	28	96	2.7	A
	T	289	290	100	0.4	A
	Subtotal	318	318	100	0.6	A
WB	R	20	22	109	3.7	A
	Subtotal	20	22	110	3.7	A
Total		600	595	99	0.8	A

APPENDIX C

Site Plan



AREA

TOTAL PROJECT AREA	27.47 ACRES
R.O.W. DEDICATION ON MAIN	0.18 ACRES

BUILDING CALCULATIONS

	PAV. AREA (SF)	%
COMMERCIAL	48,592	37%
RESIDENTIAL	81,401	63%
TOTAL	129,993	100%

GROSS BUILDING AREA

COMMERCIAL (TOTAL)	83,184 SF	26%
RESIDENTIAL (TOTAL)	242,731 SF	74%
RESIDENTIAL 2 STORY	162,622 SF	
RESIDENTIAL ABOVE GARAGE	79,909 SF	
TOTAL GROSS BUILDING	325,915	100%

COMMERCIAL PARKING
TOTAL PARKING SPACES 189 SPACES

PARKING CALCULATIONS:
TOTAL GROSS COMMERCIAL 83,184 SF
NET USEABLE COMMERCIAL AREA WITHOUT POOL PER ARCHITECT 48,188 SF

PARKING RATIO = $\frac{48,188 \text{ SF}}{189 \text{ SPACES}} = 1 \text{ SPACE FOR 255 SF}$

NOTES:
* THE FINAL NUMBER OF REQUIRED SPACES WILL DEPEND ON THE BUILDING TENANT, USE AND FINAL BUILDING DESIGN.

RESIDENTIAL PARKING NOTES:
* EACH RESIDENTIAL UNIT HAS A 2 CAR GARAGE. THERE ARE ALSO 72 OUTDOOR PARKING SPACES IN THE RESIDENTIAL AREA.
* PLAN HAS A TOTAL OF 358 PARKING SPACES.

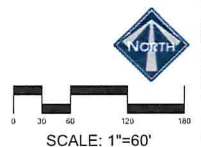
PARKING CALCULATIONS:
TOTAL UNITS 143
3 BEDROOMS 143x2.5 = 358 SPACES (REQUIRED)

PARKING SPACES PROVIDED:
GARAGES ON SITE PARKING 143x2 = 286
TOTAL 72
358 SPACES (PROVIDED)

- LEGEND**
- NON-BUILDABLE AREA (25%+ SLOPES)
 - COMMERCIAL BUILDINGS
 - RESIDENTIAL UNIT
 - RESIDENTIAL GARAGES
 - LANDSCAPE AREA

REVISION NOTE - 21 OCT 2021:
REVISED TO ADD RESIDENTIAL PARKING FOR 3 BEDROOM UNITS. ALSO SEE PARKING TABLE

REVISION NOTE - 29 OCT 2021:
COMMERCIAL BUILDINGS PAV. GROSS AND NET USEABLE SQUARE FOOTAGES HAVE BEEN UPDATED BY ARCHITECT.



LUSTER
THE VILLAGE
REVISED MASTER PLAN



DESIGN BY: PDB DATE: 4 OCT 2021 SHEET: 3
DRAWN BY: DEJ REV: 29 OCT 2021

10/29/2021 10:00 AM C:\Users\paul.berg\OneDrive\Documents\Projects\The Village\The Village.dwg
 10/29/2021 10:00 AM C:\Users\paul.berg\OneDrive\Documents\Projects\The Village\The Village.dwg

APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report



Project: Midway - The Village TIS

Analysis: Existing (2021) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)

Project #: UT21-1835

Intersection	NB		SB		EB		WB		
	LR	LTR	LR	LT	LT	LTR	LT	LTR	TR
01: River Road & Main Street	--	43	--	190	--	125	--	38	--
02: Fox Den Road & Main Street	46	--	--	--	--	--	27	--	--
03: 580 East & Main Street	43	--	--	--	--	--	39	--	--
04: Main Street & 670 East	--	--	44	--	43	--	--	--	2

SimTraffic Queueing Report
Project: Midway - The Village TIS
Analysis: Mitigated Existing (2021) Background
Time Period: Evening Peak Hour
95th Percentile Queue Length (feet)



Project #: UT21-1835

Intersection	NB			SB			EB			WB				
	L	LR	TR	L	LR	TR	L	LT	R	T	L	LT	R	T
01: River Road & Main Street	13	--	26	92	--	67	85	--	8	137	22	--	80	152
02: Fox Den Road & Main Street	--	46	--	--	--	--	--	--	--	--	--	--	38	--
03: 580 East & Main Street	--	43	--	--	--	--	--	--	--	--	--	--	40	--
04: Main Street & 670 East	--	--	--	--	43	--	--	40	--	--	--	--	--	--

SimTraffic Queuing Report

Project: Midway - The Village TIS

Analysis: Existing (2021) Plus Project

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet)



Project #: UT21-1835

Intersection	NB			SB			EB			WB								
	L	LR	TR	L	LR	TR	L	LR	TR	L	LR	TR						
01: River Road & Main Street	13	--	--	28	--	--	73	88	--	7	165	--	25	--	--	70	170	--
02: Fox Den Road & Main Street	--	52	--	--	--	--	--	--	--	--	--	--	--	--	77	--	--	--
03: 580 East & Main Street	--	--	44	--	--	65	--	45	--	--	--	--	--	--	--	36	5	--
04: Main Street & 670 East	--	--	--	--	47	--	--	--	55	--	--	--	--	--	--	--	--	--
05: Main Street & Access 1	--	--	--	--	63	--	--	51	--	--	--	--	--	--	--	--	--	3
06: River Road & Access 3	--	--	--	--	--	39	--	--	--	--	--	--	--	42	--	--	--	--

Exhibit 5

MIDWAY VILLAGE

COMMUNITY MEETING OCTOBER 11, 2021

14 CITIZENS ATTENDED

DISCUSSION TOPICS:

1. Nightly rentals and location within the project
 - a. No community feedback, just wondering what the lines were.
2. Commercial buildings along Main Street, Restaurant options
 - a. Inez and daughter expressed concern about garbage proximity to their home
3. Garages for the townhomes – hoping to be underground
4. Inez Wilde had questions about the center turn lane on Main St.
 - a. Concern about Inez's driveway and any lane changes in that area
 - b. Question about if/when UDOT will give approvals and what they might do
5. Questions and discussion on phasing the project.
 - a. Question about phase timing—Scovils hoped to be in the last phase
6. Dan wants to get the Swim and Racquet Club started at Phase 1, or maybe before.
7. Discussion with Scovils about possible landscaping and berms along the west side of project.
8. Discussion on next steps, working with the developer, approval process with the city.
 - a. Scovils and Stevens would like to settle on landscaping/berms
 - b. Scovils (probably others) would like to know when everything is firm so they don't have to keep attending meetings...
9. Everybody was very pleased to have had the meeting.
 - a. Very cordial meeting—we've all gotten to know each other over the past year...
10. Hauters were not present to express their desire for attaching road
11. Nephi was present and reinforced his desire for no river road connection, but did so before/after the meeting.
12. Questions about open space being open to public for walks and any possible trail to Memorial Hill were discussed (most agreed the county would't allow it and thought the trail to river road and then the backside of Memorial Hill would suffice so long as a good cross walk exists at the River Road access area).
13. Steve Dougherty asked to attend and was there to observe.
14. In general there were few comments/questions. Most had seen the new design and like it much better than the old design. Developer showed new design, discussed probable uses for commercial spaces and probable architecture. Townhome designs interior and exterior were also discussed.