



TOWN OF TROPHY CLUB

1 Trophy Wood Drive
Trophy Club, Texas 76262

MEETING AGENDA

TOWN COUNCIL

September 23, 2024

6:00 PM

Council Chambers

CALL WORK SESSION TO ORDER AND ANNOUNCE A QUORUM

WORK SESSION ITEM

1. Presentation and discussion of survey results from the Bobcat Boulevard Traffic Survey as well as proposed traffic solutions. (Brandon Wright, Town Manager)

ADJOURN WORK SESSION

CALL REGULAR MEETING TO ORDER (immediately following Work Session or 7:00 p.m., whichever is later)

INVOCATION led by Rev. Bill Eason, Fellowship United Methodist Church

PLEDGES led by Council Member

Pledge of Allegiance to the American Flag

Pledge of Allegiance to the Texas Flag

PUBLIC COMMENT(S)

This is an opportunity for citizens to address the Council on any matter pursuant to Texas Government Code 551.007. The Council is not permitted to discuss or take action on any presentations made concerning matters that are not listed on the agenda. Presentations are limited to matters over which the Council has authority. Speakers have up to three (3) minutes or the time limit determined by the Presiding Officer. Each speaker must have submitted their request to speak by completing the Speaker's Form or may email mayorandcouncil@trophyclub.org

COMMUNITY SPOTLIGHT

2. Trophy Club Tritons Swim Team
3. Working for You... Trophy Club
 - a) Update from Town Council Members

- b) Update from Town Manager (Brandon Wright, Town Manager)
- c) Quick Civic Tip (Dean Roggia, Town Attorney)

CONSENT AGENDA

This part of the agenda consists of non-controversial, or "housekeeping" items required by law. Items may be removed from Consent by any council member by making such request prior to a motion and vote.

- 4. Consider approval of the August 26, 2024, Town Council work session and regular meeting minutes. (Tammy Dixon, Town Secretary)
- 5. Consider approval of the September 9, 2024, Town Council regular meeting minutes. (Tammy Dixon, Town Secretary)
- 6. Consider an ordinance accepting and approving an update of the Service and Assessment Plan and an updated Assessment Roll for the Town of Trophy Club Public Improvement District No. 1 ("PID) in compliance with Chapter 372 (Authorized Improvements Assessment). (April Duvall, Director of Finance)
- 7. Consider authorizing the Town Manager to negotiate and execute a professional services agreement with Tyler Technologies for permitting software updates to Energov in the amount of \$47,000. (Matt Cox, Director of Community Development)
- 8. Consider an ordinance amending the Fiscal Year 2024 Budget to allocate funding for a permitting software upgrade for the Community Development Department. (April Duvall, Director of Finance)
- 9. Consider approval of the 2025 Town Council Meeting Calendar. (Tammy Dixon, Town Secretary)

PUBLIC HEARINGS

- 10. Conduct a public hearing and consider an ordinance accepting and approving a service and assessment plan for authorized services (Emergency Services) and an assessment roll for the Town of Trophy Club Public Improvement District No. 1 (The Highlands at Trophy Club); making a finding of special benefit of the property in the district; levying special assessments against property with the district; providing for payment of the assessments in accordance with Chapter 372, Texas Local Government Code. (April Duvall, Director of Finance)
- 11. Case SUP-24-003 (Pour Sports Alcohol Use)
Conduct a public hearing and consider an ordinance granting a specific use permit for alcohol beverage sales on-premises consumption in conjunction with restaurant use at Pour Sports Restaurant located at 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas. (Matt Cox, Director of Community Development)

INDIVIDUAL ITEMS

12. Case ME-24-002 (Pour Sports Sign Meritorious Exception)
Consider a meritorious exception to install a non-conforming sign at Pour Sports Restaurant, generally located at the northeast corner of SH 114 and Trophy Club Drive addressed as 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas. (Matt Cox, Director of Community Development)
13. Consider an ordinance of the Town Council amending Appendix A "Fee Schedule", Article A1.000, Section A1.014 "Water and Wastewater Fees for Public Improvement District No. 1" to establish fees and rates for water and sewer services to customers within the service area. (April Duvall, Director of Finance)
14. Consider a resolution appointing members to the Animal Shelter Advisory Board, Crime Control and Prevention District Board, Economic Development Corporation Board, Ethics Review Commission, Parks and Recreation Board, Planning and Zoning Commission, and Zoning Board of Adjustment as recommended by the Town Council Appointments Committee. (Tammy Dixon, Town Secretary)

EXECUTIVE SESSION

Pursuant to the following designated sections of the Texas Government Code, Annotated, Chapter 551 (Texas Open Meetings Act), the Town Council will recess into executive session to discuss the following:

Section 551.074 Personnel Matters to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee:

1) Town Secretary

RECONVENE INTO REGULAR SESSION

ADJOURN

The Town Council may convene into executive session to discuss posted items as allowed by Texas Government Code Sections 551.071 through 551.076 and Section 551.087.

CERTIFICATION: I do hereby certify that the Notice of Meeting was posted on the bulletin board at the Town Hall for the Town of Trophy Club, Texas, in a place convenient and readily accessible to the general public at all times on the following date and time: September 18, 2024, at 4:40 p.m., and said Notice of Meeting was also posted concurrently on the Town's website in accordance with Texas Government Code Ch. 551 at least 72 hours prior to the scheduled time of said meeting.

/s/ Tammy Dixon
Tammy Dixon, Town Secretary

If you plan to attend this public meeting and have a disability that requires special needs, please

contact the Town Secretary's Office at 6822372900, 48 hours in advance, and reasonable accommodations will be made to assist you.



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Brandon Wright, Town Manager

AGENDA ITEM: Presentation and discussion of survey results from the Bobcat Boulevard Traffic Survey as well as proposed traffic solutions. (Brandon Wright, Town Manager)

BACKGROUND/SUMMARY: In January 2024, the Town Council and Town Manager began reviewing alternative options for traffic improvements on Bobcat Boulevard between Trophy Club Drive and Marshall Creek Drive. The study area has a high volume of traffic during morning hours and late afternoon due to the presence of Byron Nelson High School, Medlin Middle School, and Beck Elementary. These three schools neighbor each other and cause higher traffic when dropping off and picking up students.

The Town Manager proposed a comprehensive review of the concerns, objectives, and solutions related to the traffic in this area. The review aimed to gather information, including resident input, to facilitate an informed decision-making process. A six-phase approach was introduced with the expectation that the decision-making process would last approximately eight months, resulting in the Town Council review of the proposed solutions. The outlined phases included:

1. Traffic watch and review
2. Identify key objectives
3. Develop solutions
4. Town Council debrief
5. Community input and surveys
6. Final presentation to the Town Council

Phase 1 and Phase 2 were completed by February 2024. During the Town Council Work Session on February 12, 2024, the Town Council and staff reviewed several objectives. These included enhancing traffic flow and pedestrian safety, improvements to left-hand movements at key intersections, minimizing pedestrian crossing delays, and improved compliance for vehicles yielding to pedestrian crosswalks. Staff collaborated with Lee Engineering to advance Phase 3 solution development, and presented those findings to the Town Council during a Phase 4 Town Council debrief on July 22, 2024. Phase 4 findings are presented below.

Based on the Lee Engineering report, the intersections of Marshall Creek Road at Bobcat Boulevard, Parkview Drive at Bobcat Boulevard, Bobcat Boulevard at Trophy Club Drive, and

High School Driveway #4 at Bobcat Boulevard currently experience failing level of service scores during peak AM and PM hours for left-hand turn movements. Intersections are given a "level of service" score to indicate how efficiently traffic moves through turns at the crossroads. A score of "A" is the highest level of service and "F" is the lowest. Scores of "E" or "F" are both considered to be failing scores, while scores of "A" through "D" are considered passing scores. Below is a chart outlining the current level of service scores and the projected scores with new control mechanisms implemented such as traffic guards, traffic lights, and roundabouts.

Intersection	Traffic Control Officer Control Level of Service Score	Traffic Light Control Level of Service Score	Roundabout Control Level of Service Score
Marshall Creek at Bobcat Boulevard (eastbound left turn)	AM: C PM: C	AM: D PM: D	AM: C PM: A
Parkview Drive at Bobcat Boulevard (northbound left turn)	AM: D PM: D	AM: D PM: C	AM: B PM: A
High School Driveway #4 at Bobcat Boulevard (southbound)	AM: F PM: C	AM: C PM: B	AM: B PM: A
High School Driveway #4 at Bobcat Boulevard (eastbound left turn)	AM: F PM: C	AM: D PM: B	AM: B PM: B
Bobcat Boulevard at Trophy Club Drive (eastbound left turn)	AM: D PM: D	AM: D PM: D	AM: B PM: B
Bobcat Boulevard at Trophy Club Drive (northbound left turn)	AM: E PM: D	AM: B PM: A	AM: B PM: B

The Lee Engineering report indicates that all intersections along Bobcat Boulevard are projected to receive the passing level of service scores with the implementation of traffic guards, with the exceptions of the northbound left turn from Trophy Club Drive onto Bobcat Boulevard and the southbound and eastbound left turn at High School Driveway #4 at Bobcat Boulevard. The Trophy Club Drive and Bobcat Boulevard intersection receives a passing level of service score with both a traffic light or a roundabout. The High School Driveway #4 at Bobcat Boulevard intersection also receives a passing level of service with a traffic light or a roundabout.

Based on these results, Lee Engineering structured a series of recommended improvements that allow for the implementation of various solutions to arrive at a passing level of service scores throughout the study area. As represented in Table 8 of the Lee Engineering report, all intersections have a passing level of service score with the recommended solutions. Below is a summary of their recommended improvements:

- Marshall Creek at Bobcat: Install a roundabout. A single-lane roundabout was predicted to accommodate the existing traffic volumes, but the design could be modified as desired.
- Mid-Block between Marshall Creek and Parkview: Install a pedestrian hybrid beacon on Bobcat Boulevard midway between Marshall Creek and Parkview. Concurrent with this installation, pedestrians should be directed to utilize the mid-block crossing rather than crossing at the intersections.
- Parkview at Bobcat: Continue with existing crossing guards/traffic control officers.
- High School Driveway #4 at Bobcat: Station a crossing guard/traffic control officer at this location. Install a westbound right turn lane on Bobcat at the driveway. Reconfigure the crosswalk to be on the west side of the intersection rather than the east to better facilitate the westbound right turn and southbound left turn. Reconfigure the southbound approach to provide two southbound lanes (10' left turn and 10' right turn) with a 14' inbound lane.
- Bobcat at Trophy Club: Install traffic signal control.

Phase 5, Public input, was solicited beginning the week of July 29. Feedback was collected through in-person focus groups as well as online surveys. A memorandum was sent to Town Council August 22, 2024 with the findings below.

Focus Groups

Key concerns included potential traffic congestion and flow issues, particularly with one-lane roundabouts that might exacerbate existing traffic problems. A significant amount of debate focused on whether installing a traffic light at Bobcat Boulevard and Trophy Club Drive would improve safety or contribute to further congestion. Pedestrian safety was another major concern, with roundabouts perceived as posing higher risks, especially for children. These discussions also highlighted the need for additional safety measures like pedestrian islands or HAWK signals. The cost of implementing roundabouts and their long-term maintenance was also a significant topic, alongside concerns about the financial impact, including potential effects on home values and light pollution from traffic lights. Speeding on Bobcat Boulevard and the anticipated impact of future developments, such as the stadium, were additional points of discussion. Overall, the feedback emphasized the need for a balanced approach that considers traffic flow, pedestrian safety, financial implications, and future changes.

Community Survey

The Town opened an online community survey on July 29, which received a total of 735 responses before it closed on August 16. Of these, 423 respondents provided written responses to question 16, and 277 provided written responses to question 17. The main concerns highlighted in the survey included congestion during school drop-off times, cited by 81.01% of respondents; pedestrian and cyclist safety, noted by 64.46%; and intersection delays, mentioned by 58.61%.

The survey evaluated different solutions for traffic management at several key intersections. For Trophy Club Drive and Bobcat Boulevard, installing a traffic signal had mixed reviews: 46.08% disapprove of the traffic light (31.36% strongly disapprove), while 53.21% believed it would improve pedestrian safety. At High School Drive #4 and Bobcat Boulevard, the idea of employing a traffic control guard received strong support, with 81.43% approving of this solution (48.83% strongly approving) and 84.86% believing it would improve pedestrian safety. The roundabout proposal for Marshall Creek and Bobcat Boulevard had 60.60% approving with the solution, but 43.99% felt it was unlikely to improve pedestrian safety compared to 35.11% responding that a roundabout at this location would improve pedestrian safety.

When asked to rank order desired solutions (traffic guard, traffic signal, roundabout, no control) at the different intersections, the results for Trophy Club and Bobcat show that 38.32% of respondents prefer traffic guards followed by traffic signal at 30.21% and roundabout at 29.51%. At High School Drive #4 and Bobcat, respondents preferred traffic guards at 68.81% followed by traffic signal at 16.67% and roundabout at 10.23%. At Parkview and Bobcat, respondents prefer traffic guards at 56.39% followed by roundabout at 21.31% and traffic signal at 19.18%. At Marshall Creek, respondents prefer roundabout at 39.53% followed by traffic guards at 39.37% and traffic signal at 18.11%.

The public feedback from question 16 (Q: If you indicated that you support some, but not all of the Lee Engineering Recommendation plan in Question 15, please provide comments below regarding what elements of the plan you do not support.) reveals a divided opinion on traffic solutions for Trophy Club, with many residents expressing strong preferences against either roundabouts or traffic signals at key intersections like Bobcat Blvd and Trophy Club Dr. While some support roundabouts for their ability to maintain traffic flow and reduce stops, a significant portion of respondents oppose them due to concerns about pedestrian safety and their effectiveness, especially for inexperienced drivers. Traffic signals also face considerable resistance, with many arguing they would disrupt the Town's charm, worsen traffic outside peak hours, and add unnecessary cost.

Conversely, there is notable support for continuing or increasing the use of crossing guards during school hours as a cost-effective and flexible solution. Alternative suggestions include pedestrian bridges or beacons, reflecting a broader desire to avoid significant, permanent infrastructure changes. Overall, the survey highlights a preference for preserving the Town's aesthetic while seeking solutions that address traffic issues during peak times without major disruptions or high costs.

The public input for question 17 (Q: Please provide any other feedback you have for traffic/pedestrian safety improvements on Bobcat Drive.) raises concerns for pedestrian safety and traffic congestion around school zones. Some residents expressed a desire for improvement with the current traffic management, particularly around Byron Nelson High School. Many respondents favored increasing the presence of crossing guards and implementing a pedestrian bridge to improve safety. There were strong objections to more intrusive measures such as traffic lights and roundabouts, which some felt would disrupt the Town's aesthetic and exacerbate problems. Suggestions for less invasive solutions included changing the entrance and exit of High School Drive #4, adjusting school start times, and improving coordination among crossing guards. Overall, the feedback underscores a desire for effective, cost-efficient solutions that prioritize pedestrian safety without overwhelming the community with extensive, high-cost infrastructure changes.

Conclusion

The public survey and input sessions reveal a strong resistance to roundabouts and traffic signals at key intersections, such as Bobcat Boulevard and Trophy Club Drive. Many residents are concerned that roundabouts may increase safety risks for pedestrians and inexperienced drivers, while traffic signals could disrupt the Town's charm and prove ineffective during non-peak hours. Instead, there is significant support for maintaining or expanding the use of crossing guards during school drop-off and pick-up times, which are seen as a practical and low-cost solution. It is worth noting that except for Marshall Creek and Bobcat, resident feedback indicates that traffic guards are the preferred solution at each location compared to more permanent improvements. At Marshall Creek and Bobcat, a roundabout and traffic guards essentially tied for first place. Additional suggestions include pedestrian bridges or beacons to improve safety. Overall, the feedback emphasizes a preference for addressing traffic issues with minimal infrastructure changes, aiming to preserve the town's aesthetic and avoid unnecessary disruptions.

Staff collaborated with Lee Engineering to advance Phase 5 solution development from the feedback provided by residents. Based on the feedback, Lee Engineering structured a series of recommended improvements. Below is a summary of their recommended improvements:

- Marshall Creek at Bobcat: Install a roundabout that discourages pedestrian crossings directly within the intersection. While a single-lane roundabout is currently anticipated to handle existing traffic volumes effectively, the design can be adjusted if needed. Additionally, incorporate a sidewalk along Bobcat Blvd up to High School Driveway #3 to enhance pedestrian access and safety.
- Mid-Block between Marshall Creek and Parkview: No mid-block crossings. Maintain the Parkview Crossing Guard as the primary solution for managing pedestrian traffic at the main entrance to Byron Nelson High School (BNHS).
- Parkview at Bobcat: Continue with existing crossing guards/traffic control officers.

- High School Driveway #4 at Bobcat: Add a right-turn lane out of High School Driveway #4, and a dedicated left-turn lane from Bobcat into the businesses. Install a traffic guard and remove one of the pedestrian crosswalks.
- Bobcat at Trophy Club: No signal or roundabout. Maintain the current traffic guard solution. Consider adding a roundabout in the future if requested. Address the slip road issue. This approach aligns best with the community's aesthetic preferences.

Based on these recommended solutions, below are the level of service scores for the previously failing intersections. Only Bobcat Boulevard at Trophy Club Drive with the northbound left turn receives a failing level-of-service score of E. This turn is predicted to exceed the existing storage length of approximately 160 feet during the AM peak hour. The median width would allow for the northbound left turn lane on Trophy Club Drive to be lengthened.

Intersection	Level of Service
Marshall Creek at Bobcat Boulevard with Roundabout (eastbound left turn)	AM: C PM: A
Parkview Drive at Bobcat Boulevard with Traffic Guard (northbound left turn)	AM: D PM: D
High School Driveway #4 at Bobcat Boulevard with Traffic Guard & Extra Turn Lane (southbound)	AM: B PM: C
High School Driveway #4 at Bobcat Boulevard (eastbound left turn)	AM: D PM: C
Bobcat Boulevard at Trophy Club Drive (eastbound left turn)	AM: D PM: D
Bobcat Boulevard at Trophy Club Drive (northbound left turn)	AM: E PM: D

The Town Council Workshop will focus on reviewing and discussing data from Phases 1 through 5.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: The following are preliminary cost estimates for certain elements associated with traffic improvements to the study area on Bobcat Boulevard.

- Bobcat Left Hand-Turn Lane: \$50,000
- HS 4/Right Hand-Turn Lane: \$100,000
- HS 4/Bobcat Traffic Control Officer (Annual): \$15,000
- One-lane roundabout at Marshall Creek and Bobcat Boulevard: \$3.25 million to \$3.5 million
- HS 3/Crosswalk (flashers): \$11,000

The preliminary cost estimate for the Lee Engineering recommended plan for Bobcat Boulevard is \$3.7 million in one-time infrastructure costs with \$15,000 in additional annual crossing guard personnel costs. A future project, based on resident support and desire may include the addition of a roundabout at the intersection of Trophy Club Drive and Bobcat. The amount of this roundabout is estimated at \$4.25 million. Annual capital cost inflation figures are between 3% and 8%, with the amount potentially being as high as \$300,000 per year before that project could be approved.

In 2023, the Town Council issued a bond in the amount of \$7 million to provide funding for traffic improvements on Bobcat Boulevard or other identified qualifying projects such as general road or park improvements. Denton County has previously agreed, subject to final approvals, to provide 50% funding up to \$3.3 million for improvements to Bobcat Boulevard that address traffic concerns. Based on the recommended plan, the Town may expect Denton County to share in the cost of approximately \$1.75 to \$1.85 million. The Town's participation would be approximately \$2 million.

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Presentation
2. Lee Engineering Updated Report After Public Input Process

ACTIONS/OPTIONS:

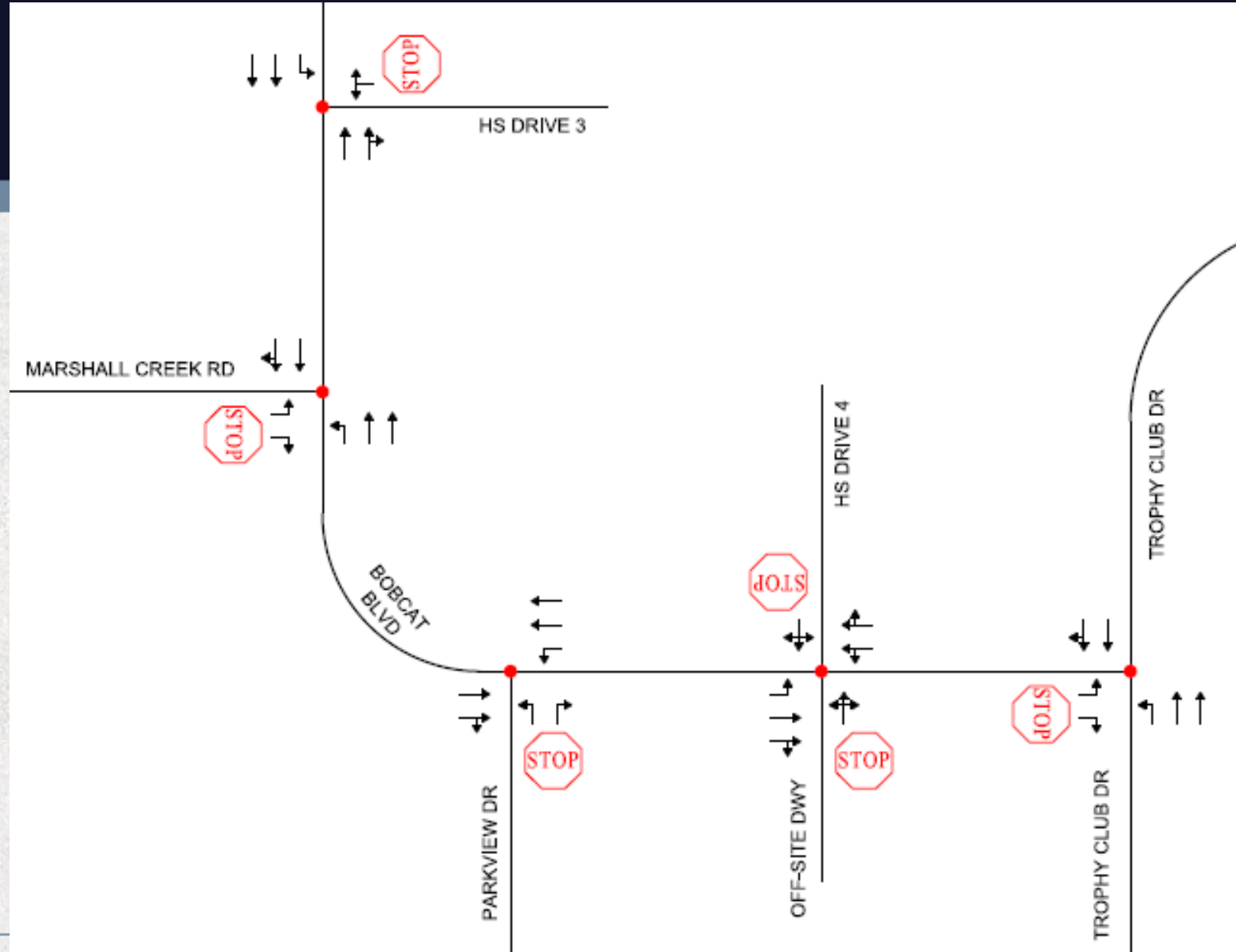
This Work Shop agenda item is being presented for discussion and feedback purposes only. Staff is seeking direction from the Council regarding the next steps for Bobcat Boulevard.



Bobcat Traffic Improvements

Town Council Workshop
September 23, 2024

Study Area Map



6-Phase Project

- ✓ 1. Traffic Watch & Review
- ✓ 2. Identify Key Objectives
- ✓ 3. Develop Solutions
- ✓ 4. Town Council Debrief
- ✓ 5. Community Input & Surveys
- 6. Final Presentation to Council



Traffic Watch & Review



Key Objectives

- Identify solutions for improved traffic flow and pedestrian safety at south BNHS exit onto Bobcat
- Identify solutions for left-hand movements at Trophy Club Drive & Bobcat, Parkview & Bobcat, and Marshall Creek & Bobcat
- Identify solutions to minimize pedestrian crossing delays
- Identify solutions for improved compliance with vehicles stopping for pedestrian crosswalks
- Identify other traffic control solutions to determine if any options provide substantial improvement over traffic-guard-controlled movements
- Avoid diverting traffic onto neighborhood streets

Lee Engineering Recommended Solutions

- **Marshall Creek & Bobcat:** Install a roundabout. A single-lane roundabout was predicted to accommodate the existing traffic volumes, but the design could be modified as desired.
- **Mid-Block between Marshall Creek & Parkview:** Install a pedestrian hybrid beacon on Bobcat Boulevard midway between Marshall Creek and Parkview. Concurrent with this installation, pedestrians should be directed to utilize the mid-block crossing rather than crossing at the intersections.
- **Parkview & Bobcat:** Continue with existing crossing guards/traffic control officers.
- **High School Driveway #4 & Bobcat:** Station a crossing guard/traffic control officer at this location. Install a westbound right turn lane on Bobcat at the driveway. Reconfigure the crosswalk to be on the west side of the intersection rather than the east to better facilitate the westbound right turn and southbound left turn. Reconfigure the southbound approach to provide two southbound lanes (10' left turn and 10' right turn) with a 14' inbound lane.
- **Bobcat & Trophy Club:** Install traffic signal control.

Town Council Debrief

Town Council Debrief Workshop

July 22, 2024



Community Input & Surveys

Total Filled Slots

24

Input Sessions

Total Responses

735

Survey

Focus Group Sessions | Input Results

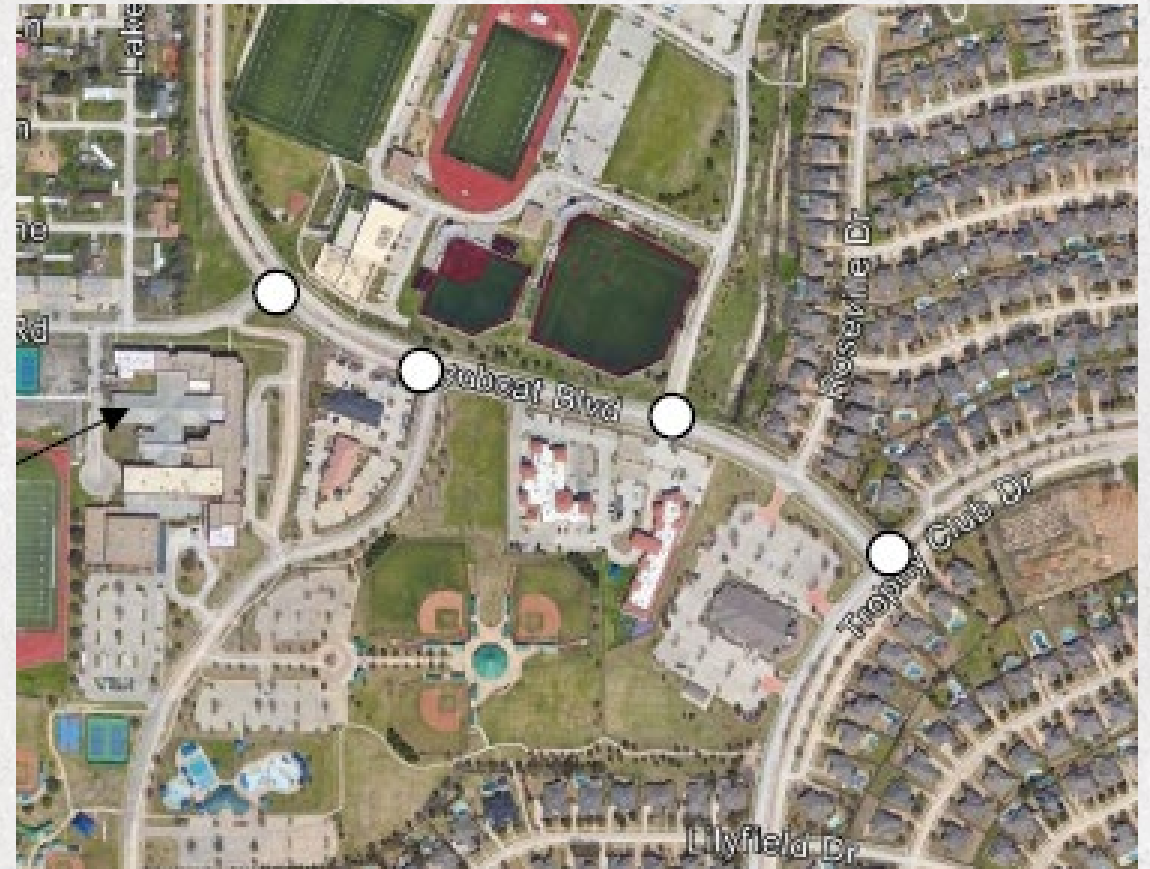
General Feedback:

- Concerns with traffic flow congestion with one-lane roundabout.
- Concern that either traffic light or roundabout at TC Drive & Bobcat would increase congestion.
- General concern with pedestrian safety at roundabouts.
- Concern and questions about the cost options for roundabouts.
- Concern of decreasing housing values with nearby traffic lights.
- Anticipated impact of future developments on Bobcat.

Focus Group Sessions | Input Results

Feedback:

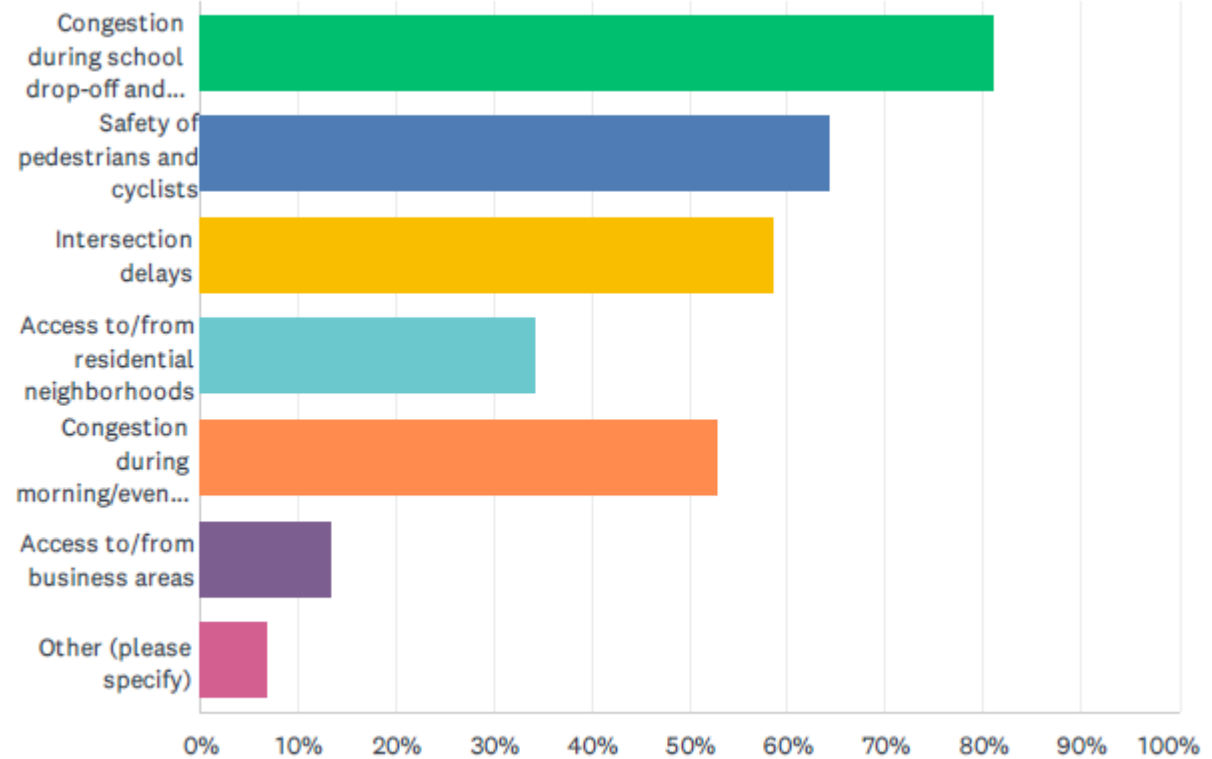
- A roundabout at Bobcat & Marshall Creek would need additional safety measures to ensure pedestrian safety, such as pedestrian islands and/or HAWK signal.
- The area needs a balanced approach that considers traffic flow, pedestrian safety, financial impacts, and future changes.



Community Survey Results

Q: What are your primary concerns about traffic flow and safety?

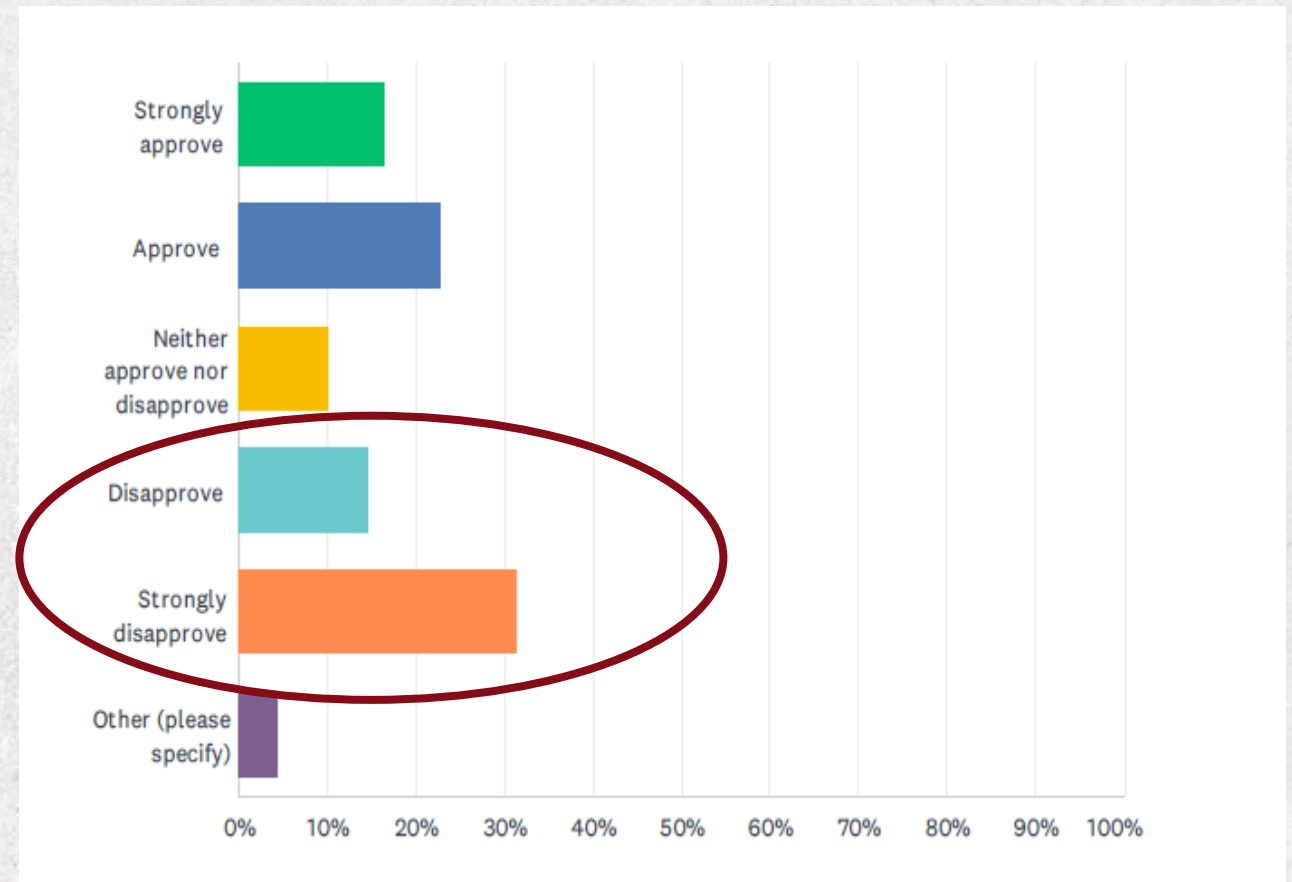
- 81.01% concerned about congestion during school drop-off and pick-up times.



Community Survey Results

Q: Opinion of installing a traffic signal at TC Drive & Bobcat

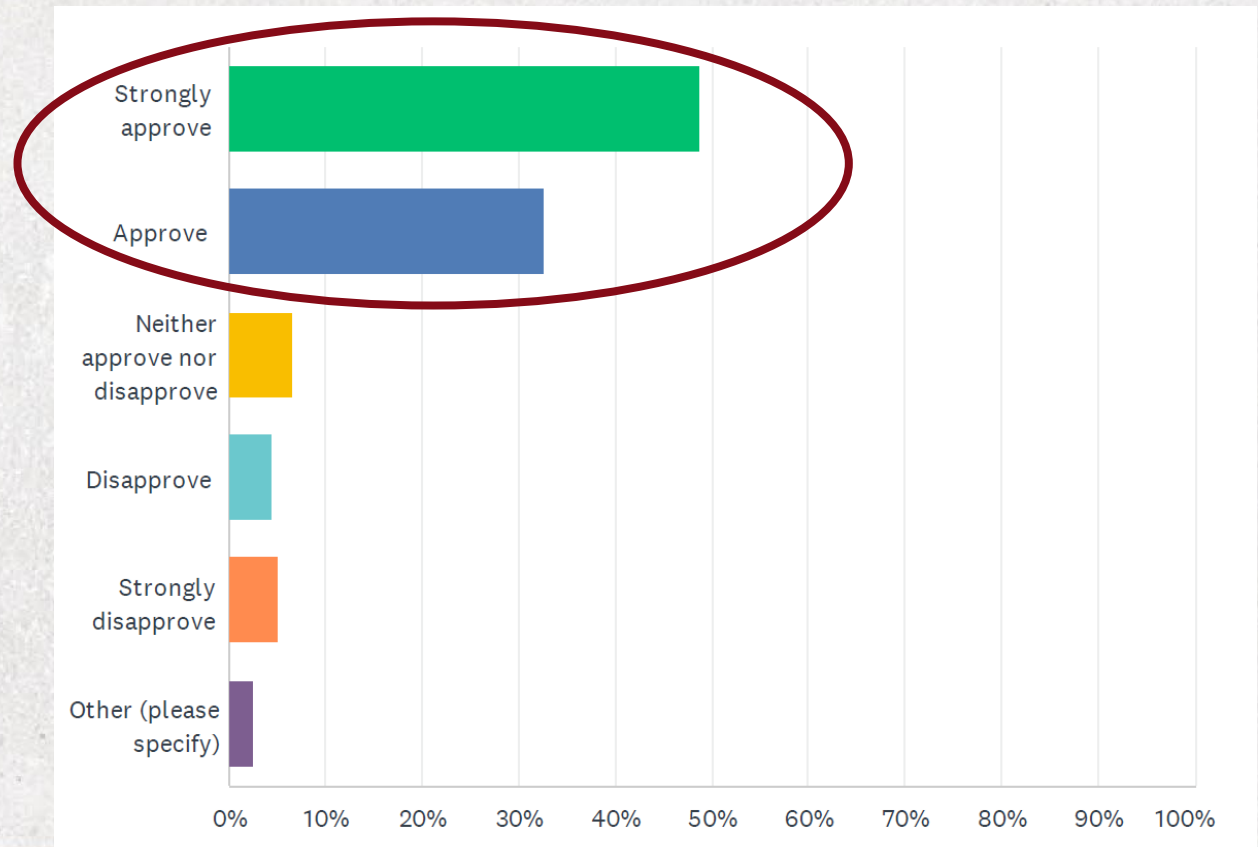
- 46.08% disapprove of installing a traffic signal at TC Drive & Bobcat.



Community Survey Results

Q: Opinion of installing a traffic control guard at High School Drive #4 & Bobcat

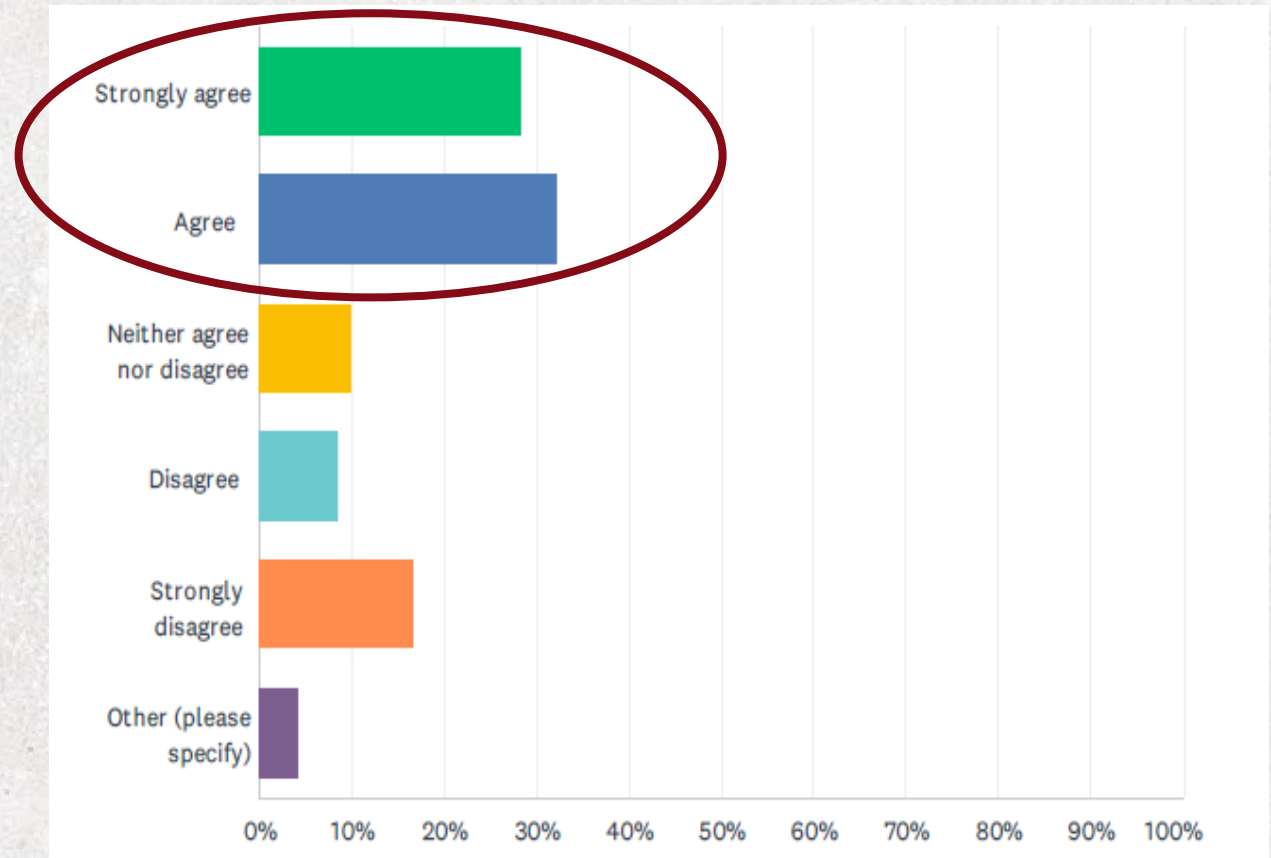
- 81.43% approve to adding a traffic control guard at High School Drive #4 & Bobcat.



Community Survey Results

Q: Opinion of installing a roundabout at Marshall Creek & Bobcat

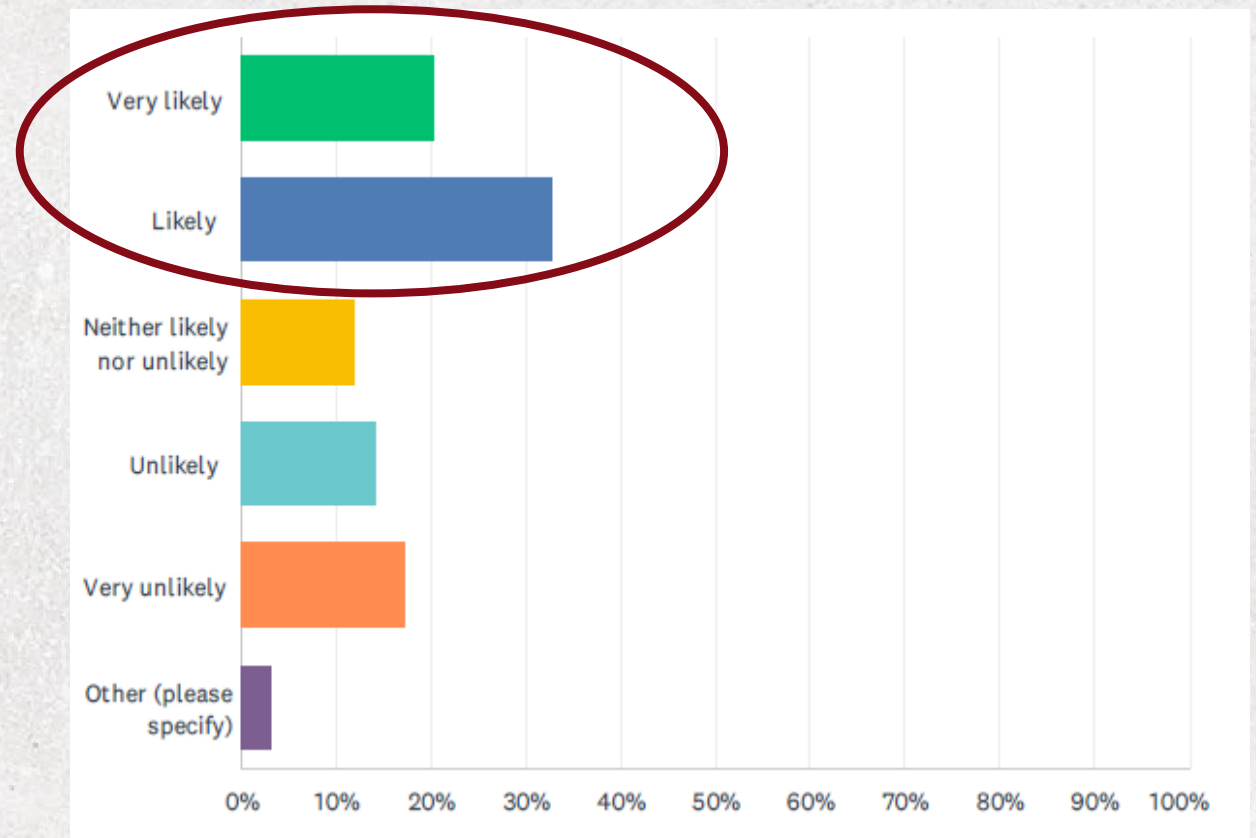
- 60.60% approve of installing a roundabout at the intersection of Marshall Creek & Bobcat.



Community Survey Results

Improve Pedestrian Safety:

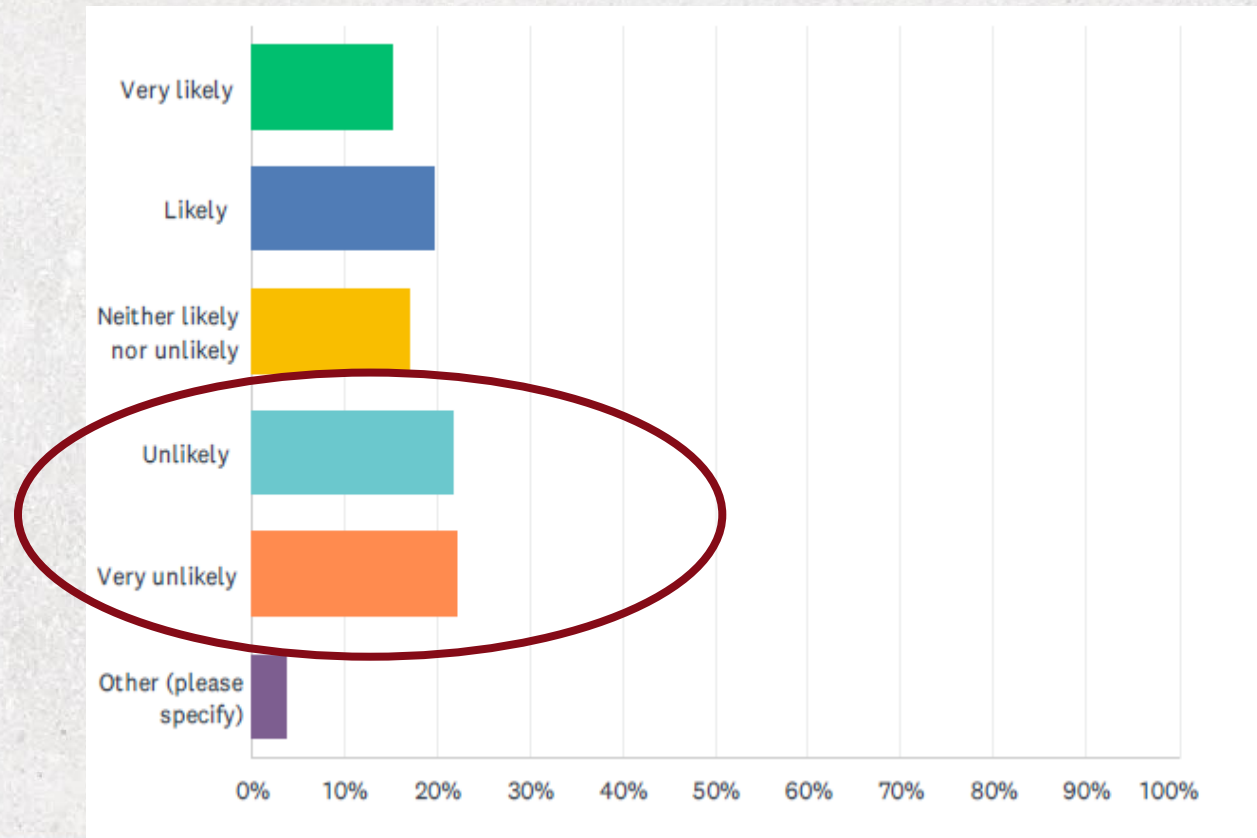
- 53.21% responded that a traffic signal at TC Drive & Bobcat would improve pedestrian safety.



Community Survey Results

Improve Pedestrian Safety:

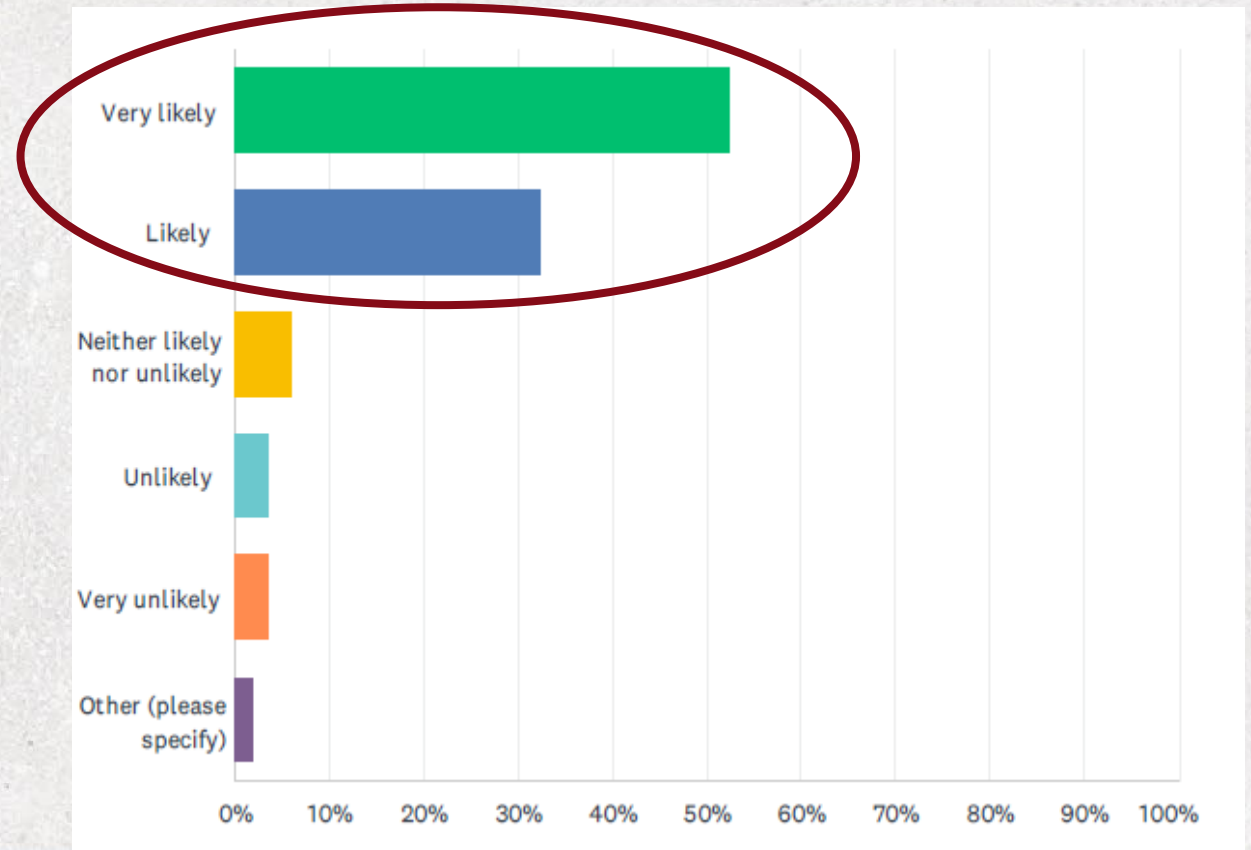
- 43.99% responded that a roundabout at Marshall Creek & Bobcat would not increase pedestrian safety.



Community Survey Results

Improve Pedestrian Safety:

- 84.86% of responses indicate that a traffic control guard at HS Drive #4 & Bobcat would improve pedestrian safety.



Community Survey Results

Lee Engineering Recommendation	Survey Response Opinion of Recommendation	Improve Pedestrian Safety
Install a traffic signal at Trophy Club Drive & Bobcat.	39.20% Agree 14.72% Neither Agree nor Disagree 46.08% Disagree	53.21% Likely to improve safety 15.19% Neither Agree nor Disagree 31.60% Not likely to improve safety
Install a roundabout at the intersection of Marshall Creek & Bobcat.	60.60% Agree 14.19% Neither Agree nor Disagree 25.21% Disagree	35.11% Likely to improve safety 20.90% Neither Agree nor Disagree 43.99% Not likely to improve safety
Provide a traffic control guard at High School Drive #4 & Bobcat.	81.43% Agree 9.08% Neither Agree nor Disagree 9.49% Disagree	84.86% Likely to improve safety 7.91% Neither Agree nor Disagree 7.23% Not likely to improve safety

Community Survey Results

Q. Prioritize proposed solution to improve traffic and pedestrian safety at the intersection of High School Drive #4 & Bobcat.

	1
Traffic Guards	68.81% 417
Traffic Signal	16.67% 101
Roundabout	10.23% 62
No Control	4.29% 26

Community Survey Results

Q. Prioritize proposed solution to improve traffic and pedestrian safety at the intersection of Parkview Drive & Bobcat.

	1
Traffic Guards	56.39% 344
Traffic Signal	19.18% 117
Roundabout	21.31% 130
No Control	3.11% 19

Community Survey Results

Q. Prioritize proposed solution to improve traffic and pedestrian safety at the intersection of Marshall Creek & Bobcat.

	1
Traffic Guards	39.37% 250
Traffic Signal	18.11% 115
Roundabout	39.53% 251
No Control	2.99% 19

Community Survey Results

Q16. Provide comments regarding what elements of the plan you do or do not support.

- Concerns are raised that traffic signals could worsen congestion and disrupt traffic flow.
- There is opposition to installing traffic signals anywhere in the town.
- Many commenters prefer roundabouts over traffic signals. Roundabouts are seen as better for maintaining traffic flow during both peak and normal times.
- Some support the use of traffic control guards, especially where roundabouts or traffic signals are not favored.
- There is concern and questions about the financial implications of the proposed solutions, including the cost of roundabouts.
- There is a strong focus on the safety concerns at High School Driveway #4.

Community Survey Results

Q17. Provide any other feedback you have for traffic/pedestrian safety improvements on Bobcat.

- Many respondents believe that adding crossing guards or police officers during peak times (morning and afternoon) is a cost-effective solution to manage traffic.
- Many responses highlight the issue of cut-through traffic, particularly due to construction on Highway 114/377.
- The impact of future developments, such as the new stadium, is a concern.
- Lowering speed limits throughout the Town to enhance safety.
- Roundabouts are generally preferred over traffic signals for improving traffic flow and safety.
- Some desire for pedestrian overpasses or underpasses continues, especially in high-traffic areas like Bobcat Blvd.

Community Survey Results

Survey and Input Session Feedback:

- Residents are resistant to roundabouts and traffic signals at key intersections, particularly at Bobcat Boulevard and Trophy Club Drive.
- Many residents are concerned that roundabouts may increase safety risks for pedestrians and inexperienced drivers.
- Residents are concerned that traffic signals will disrupt the Town's charm and prove ineffective during non-peak hours.
- Residents expressed support for maintaining or expanding the use of crossing guards during school drop-off and pick-up times.
- Residents indicate that traffic guards are the preferred solution at each location compared to more permanent improvements (except for Marshall Creek & Bobcat).
- Residents prefer addressing traffic issues with minimal infrastructure changes, aiming to preserve the Town's aesthetic and avoid unnecessary disruptions.

Incorporating Feedback to Proposed Solutions

- Lack of community support for infrastructure improvements at TC Drive & Bobcat.
 - If community support/desire grows in the future, the community feedback suggests a roundabout will be more desirable over traffic lights to maintain the Town's charm and appeal.
 - Slip road modifications may be necessary to accommodate a proper roundabout.
- Maintain the roundabout solution for Marshall Creek & Bobcat
 - BUT.... Develop a pedestrian safety plan that will include diverting pedestrians away from the roundabout for crossings at Parkview and at HS Entrance #3.
 - Develop the main high school stadium entrance at Parkview and Bobcat to avoid need for mid-block pedestrian crossing.

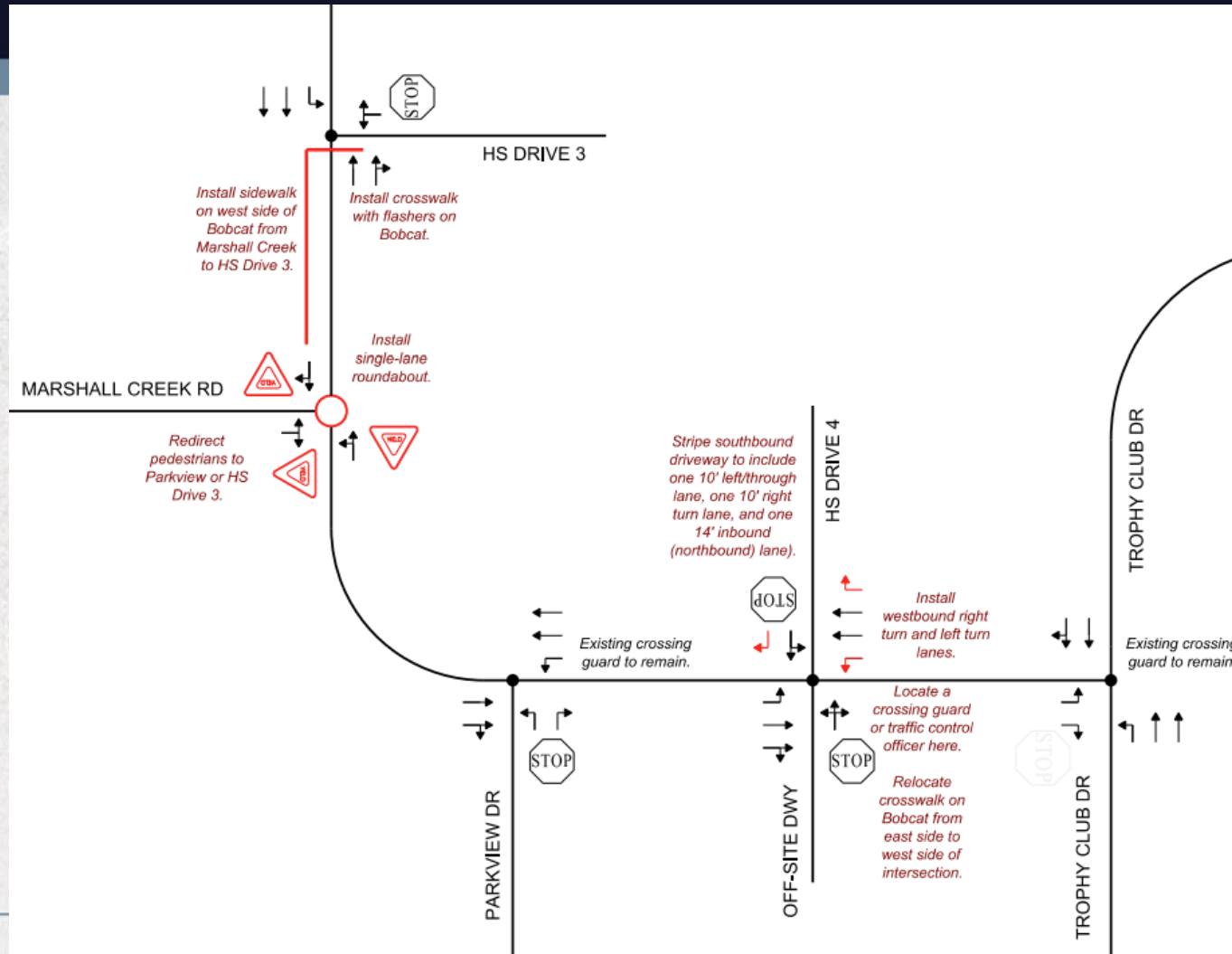
Lee Engineering Final Recommended Solutions

- **Marshall Creek & Bobcat:** Install a roundabout that discourages pedestrian crossings directly within the intersection. While a single-lane roundabout is currently anticipated to handle existing traffic volumes effectively, the design can be adjusted if needed. Additionally, incorporate a sidewalk along Bobcat Blvd up to High School Driveway #3 to enhance pedestrian access and safety.
- **Mid-Block between Marshall Creek & Parkview:** No mid-block crossings. Maintain the Parkview Crossing Guard as the primary solution for managing pedestrian traffic at the main entrance to Byron Nelson High School (BNHS).
- **Parkview & Bobcat:** Continue with existing crossing guards/traffic control officers.
- **High School Driveway #4 & Bobcat:** Add a right-turn lane out of High School Driveway #4, and a dedicated left-turn lane from Bobcat into the businesses. Install a traffic guard and remove one of the pedestrian crosswalks.
- **Bobcat & Trophy Club:** No signal or roundabout. Maintain the current traffic guard solution. Consider adding a roundabout in the future if requested. Address the slip road issue. This approach aligns best with the community's aesthetic preferences.

Lee Engineering Final Recommended Solutions

Intersection	Level of Service
Marshall Creek at Bobcat Boulevard with Roundabout (eastbound left turn)	AM: C PM: A
Parkview Drive at Bobcat Boulevard with Traffic Guard (northbound left turn)	AM: D PM: D
High School Driveway #4 at Bobcat Boulevard with Traffic Guard & Extra Turn Lane (southbound)	AM: B PM: C
High School Driveway #4 at Bobcat Boulevard (eastbound left turn)	AM: D PM: C
Bobcat Boulevard at Trophy Club Drive (eastbound left turn)	AM: D PM: D
Bobcat Boulevard at Trophy Club Drive (northbound left turn)	AM: E PM: D

Lee Engineering Final Recommended Solutions



Lee Engineering Recommendation

Solution Options

Amount

Total Costs

Bobcat Left Hand-Turn Lane

\$50,000

Construction: \$3.7 million

HS 4/Right Hand-Turn Lane

\$100,000

Annual Operations:
\$15,000

HS 4/Bobcat Traffic Control

\$15,000

Officer (Annual)

Tentative Denton County
Participation: \$1.75-
1.85 million

Marshall Creek/Bobcat
Roundabout

\$3.25 million to
\$3.5 million

Roundabout HS 3/Crosswalk
(Flashers)

\$11,000

Town Participation:
Approx. \$2 million

Future Project

Option

Bobcat & Trophy Club Roundabout*

*If community support/desire increases, plan for the installation of a roundabout in the future to conform with the Town's charm and appeal. May require modifications to the adjacent slip road to mitigate impacts to those neighbors.

Total Cost

Construction: \$4.25 million

Construction's annual inflation typically averages around 3-5%, but in recent years, inflationary pressures have pushed it to as high as 8%.
(Annual increases as much as \$300,000)

Denton County participation may cover ½ of the cost.

Questions/Discussion



[social media](#) | [email](#) | [website](#)

September 17, 2024

Mr. Matt Cox
Director of Community Development
Town of Trophy Club
1 Trophy Wood Drive
Trophy Club, TX 76262

Re: School Area Evaluation, Trophy Club, Texas – Preliminary Findings and Recommended Improvements

Dear Mr. Cox:

Lee Engineering has completed a preliminary review of the existing conditions near Byron Nelson High School, Medlin Middle School, and Samuel Beck Elementary School in the Town of Trophy Club, Texas. This study includes the following intersections:

- Bobcat Boulevard at Byron Nelson High School Driveways 1-4
- Bobcat Boulevard at Marshall Creek Road
- Bobcat Boulevard at Parkview Drive
- Bobcat Boulevard at Trophy Club Drive

Bobcat Boulevard is a four-lane divided roadway with a posted speed limit of 30 miles per hour (mph). Between the High School Drive 4 and Trophy Club Drive, Bobcat Boulevard is undivided. Bobcat Boulevard does not continue east past Trophy Club Drive. Byron Nelson High School has four access driveways on Bobcat Boulevard.

Marshall Creek Road is a two-lane undivided roadway with a posted speed limit of 25 mph. Medlin Middle School has one access driveway on Marshall Creek Road.

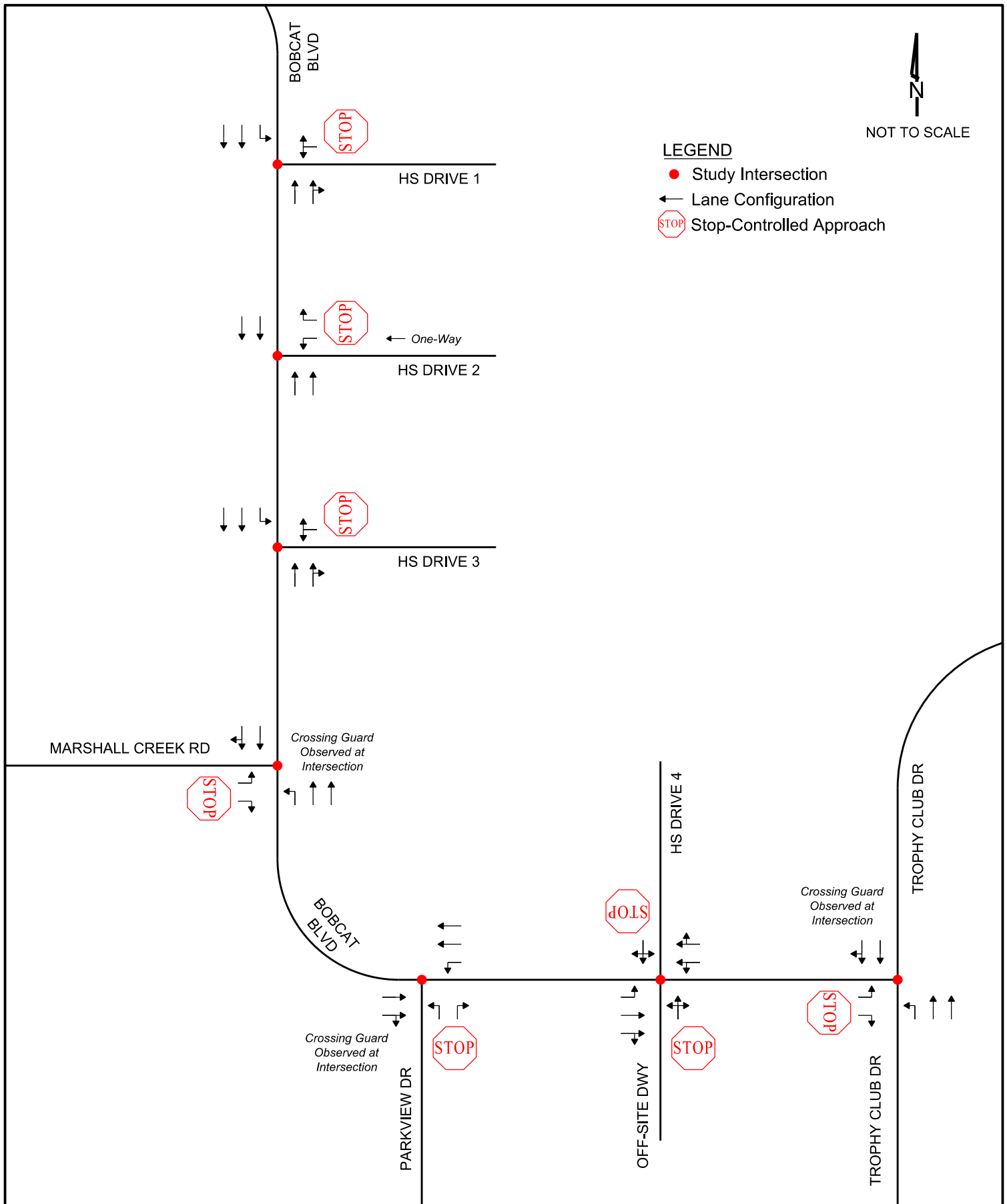
Parkview Drive is a two-lane undivided roadway with no posted speed limit. Medlin Middle School has three access driveways on Parkview Drive. Samuel Beck Elementary School has four access driveways on Parkview Drive and no access elsewhere.

Trophy Club Drive is a four-lane divided roadway with a posted speed limit of 30 mph.

A vicinity map of the study area is shown in **Figure 1** and the existing intersection lane configurations are shown in **Figure 2**. Note that all of the study intersections appear to operate with two-way stop control despite the presence of stop bars on all approaches at all intersections along the south side of the high school.

Figure 1: Vicinity Map





Field Visit Observations

Based on a field visit to the study intersection, the following observations are made:

AM Peak Hour

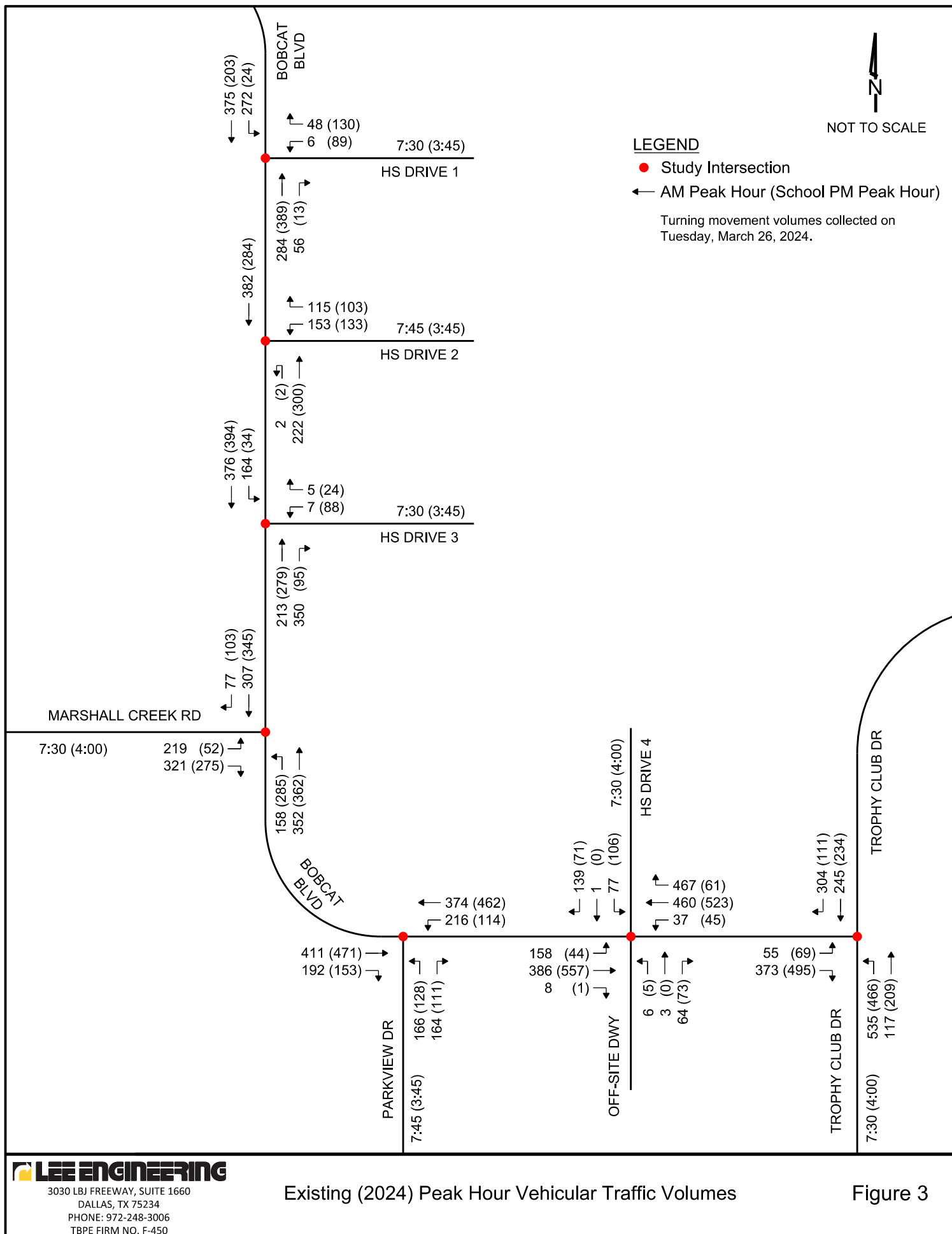
- High school arrival time occurs before arrival time for the middle school, with minimal overlap between the two arrival periods.
- The crossing guards present at the intersections of Bobcat Boulevard with Parkview Drive and with Marshal Creek Road appear to be essential to getting pedestrians across the street and allowing traffic to clear the intersections.
- The crossing guard at the intersection of Bobcat Boulevard and Trophy Club Drive is essential to keep traffic moving.
- High school students were observed crossing to the businesses on the south side of Bobcat Boulevard and then back to the high school.
- A number of heavy vehicles, specifically dirt and gravel haulers serving sites off of Trophy Park Drive, add to congestion within the study area.
- Long vehicle queues were observed on the eastbound approach of Marshall Creek Road at Bobcat Boulevard in the morning school period.

PM peak Hour

- The high school dismissal period occurs before dismissal for the middle school; however, there is some overlap between the two school dismissals.
- Exiting vehicles from the high school experience long delays from the easternmost driveway (identified as High School Driveway 4 in this study). There were also some pedestrians observed crossing at this drive, which the presence of a crossing guard would help. Note that eastbound vehicle queues from Trophy Club Drive extend to this driveway on Bobcat Boulevard.
- LEE observed high school students being picked up from vehicles parked on Roseville Drive east of the high school (approximately 300 feet east of High School Driveway 4).
- Some high school students were observed crossing to the commercial area south of Bobcat Boulevard for pickup.
- The pick-up for the middle school creates significant congestion in the area. Queues associated with the pick-up queue back up onto Bobcat Boulevard.
- Middle school students were observed to cross in large groups to Independence Park for pick-up. There is a marked school cross walk on Parkview Drive between the school exit driveway and Independence Park.
- Some middle school students also cross school driveways to be picked up from the curb on Parkview Drive south of the school rather than on campus.
- Overall, the existing crossing guards are essential for pedestrians and vehicles throughout the PM peak hour.
- Dismissal congestion was cleared by 4:35 PM.

Existing and Projected Volumes

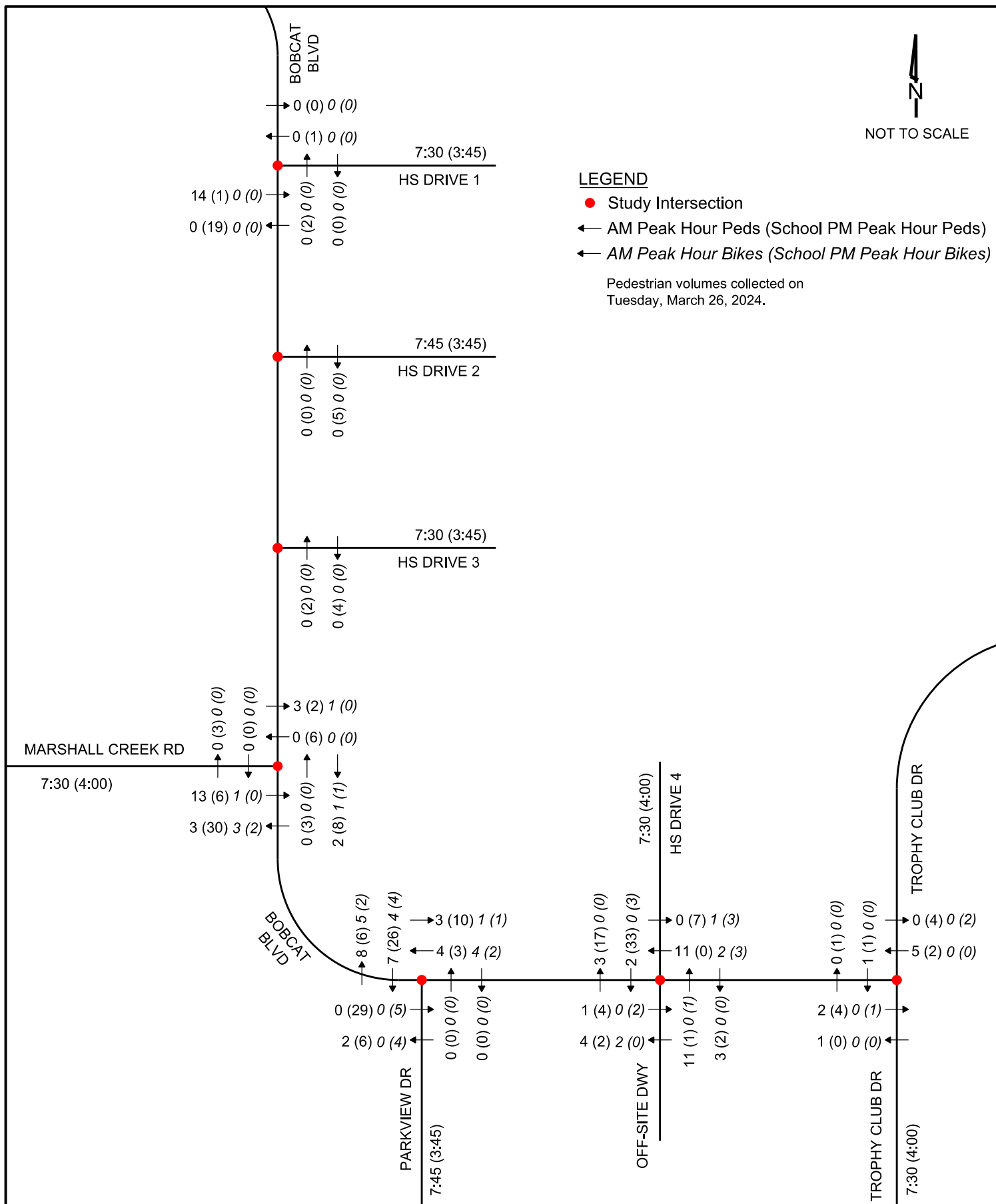
Existing turning movement volumes were collected during the AM and School PM peak hours on Tuesday, March 26, 2024 at the above study intersections. The peak hour volumes and corresponding peak time periods at each intersection are shown in **Figure 3**. Pedestrian and bicycle movements are shown in **Figure 4**.



3030 LBJ FREEWAY, SUITE 1660
DALLAS, TX 75234
PHONE: 972-248-3006
TBPE FIRM NO. F-450

Existing (2024) Peak Hour Vehicular Traffic Volumes

Figure 3



3030 LBJ FREEWAY, SUITE 1660
DALLAS, TX 75234
PHONE: 972-248-3006
TBPE FIRM NO. F-450

Existing (2024) Peak Hour Pedestrian Volumes

Figure 4

Intersection Capacity Analysis

The Level of Service (LOS) of an intersection is a qualitative measure of capacity and operating conditions and is directly related to vehicle delay. The LOS criteria for unsignalized and signalized intersections are shown in **Table 1**. LOS is given a letter designation from A to F, with LOS A representing very short delays and LOS F representing very long delays or over-capacity conditions. LOS D is typically considered the minimum acceptable condition.

Table 1: Level of Service Criteria for Intersections

Level-of-Service (LOS)	Average Delay (seconds/vehicle)	
	Unsignalized	Signalized
A	≤ 10.0	≤ 10.0
B	10.1 to 15.0	10.1 to 20.0
C	15.1 to 25.0	20.1 to 35.0
D	25.1 to 35.0	35.1 to 55.0
E	35.1 to 50.0	55.1 to 80.0
F	> 50.0 or Volume exceeds Capacity	> 80.0 or Volume exceeds Capacity

SOURCE: *Highway Capacity Manual (HCM) 6th Edition*, Transportation Research Board, 2016

Capacity analyses were conducted for the study intersection for Existing peak hour traffic conditions. The following scenarios were analyzed:

- **Table 2** - Existing traffic control
- **Table 3** – Pretimed signalization with pedestrian phase assumed at the three intersections with traffic control officers to simulate this operation. Again, these intersections include:
 - Bobcat Boulevard at Marshall Creek Road
 - Bobcat Boulevard at Parkview Drive
 - Bobcat Boulevard at Trophy Club Drive
 - For the purposes of this analysis, High School Driveway 4 was also analyzed with simulated officer control. Although there is no current crossing guard or police officer at this location, it was analyzed to determine potential improvements gained by officer control.
- **Table 4** – Installation of traffic signal control at the above three intersections with coordination along Bobcat Boulevard. Operation at the adjacent school driveways is also shown, as installation of traffic signal control results in additional gaps in traffic along Bobcat Boulevard.
- **Table 5** – Installation of traffic signal control with coordination at High School Driveway 4 along with the signalization in Table 4.
- **Table 6** – Installation of single-lane roundabouts at the above four intersections. Note that a southbound right turn by-pass lane was assumed on Trophy Club Drive in order for the roundabout to operate acceptably. Similarly, a westbound right turn by-pass lane was assumed on Bobcat Boulevard at High School Driveway 4 in order for the roundabout to operate acceptably.

The stop-control and signalized capacity analysis was performed using *Highway Capacity Manual (HCM) 6th Edition* methodologies in the *Synchro* software package. The roundabout capacity was performed using *Highway Capacity Manual (HCM) 6th Edition* methodologies in the *SIDRA* software package. Printouts of the traffic analysis results are provided as an attachment to this letter.

Table 2: Capacity Analysis Results – Existing Traffic Control

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
1	High School Driveway 1 (WB) at Bobcat Boulevard (NB/SB)	WB	25.6	D	0.32	33	27.8	D	0.66	118
		SB LT	11.5	B	0.43	55	9.8	A	0.04	3
2	High School Driveway 2 (WB) at Bobcat Boulevard (NB/SB)	WB LT	22.9	C	0.53	78	18.5	C	0.40	48
		WB RT	10.3	B	0.20	18	10.4	B	0.17	15
3	High School Driveway 3 (WB) at Bobcat Boulevard (NB/SB)	WB	27.3	D	0.09	8	20.9	C	0.39	45
		SB LT	10.9	B	0.27	28	8.6	A	0.04	3
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB)	EB LT	296.3	F	1.49	423	88.5	F	0.60	70
		EB RT	16.1	C	0.55	85	16.1	C	0.49	68
		NB LT	9.2	A	0.18	18	10.3	B	0.32	35
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB)	WB LT	10.6	B	0.28	28	10.2	B	0.15	13
		NB LT	439.0	F	1.74	368	164.7	F	1.07	193
		NB RT	13.1	B	0.29	30	14.4	B	0.24	23
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB)	EB LT	15.1	C	0.36	43	9.5	A	0.06	5
		WB LT	8.7	A	0.05	3	9.4	A	0.06	5
		NB	43.2	E	0.51	63	15.0	B	0.19	18
		SB	1487.7	F	4.03	743	202.0	F	1.23	275
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB)	EB LT	2300.7	F	4.91	238	289.7	F	1.20	155
		EB RT	24.5	C	0.73	158	18.9	C	0.69	140
		NB LT	19.9	C	0.75	178	10.5	B	0.44	58

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

Table 3: Capacity Analysis Results – Simulated 'Traffic Control Officer' Control

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB) With 'Crossing Guard'	EB LT	31.4	C	0.58	170	28.9	C	0.17	56
		EB RT	6.4	A	0.57	43	8.8	A	0.58	66
		NB LT	34.1	C	0.51	157	42.0	D	0.57	251
		NB T	32.7	C	0.57	157	36.4	D	0.36	158
		SB	32.3	C	0.66	138	39.3	D	0.79	185
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB	40.3	D	0.73	210	34.7	C	0.63	226
		WB LT	43.2	D	0.61	150	44.1	D	0.33	86
		WB T	38.8	D	0.53	128	48.2	D	0.66	173
		NB LT	37.1	D	0.56	149	39.2	D	0.52	120
		NB RT	8.0	A	0.42	50	10.3	B	0.38	44
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB LT	94.1	F	0.97	177	31.0	C	0.44	32
		EB T	5.0	A	0.27	40	13.9	B	0.42	216
		WB	29.3	C	0.97	130	15.1	B	0.68	78
		NB	25	C	0.56	38	14.8	B	0.37	43
		SB	100.5	F	1.07	201	28.6	C	0.60	124
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB) With 'Crossing Guard'	EB LT	37.0	D	0.24	57	36.9	D	0.21	67
		EB RT	18.7	B	0.73	119	20.9	C	0.72	209
		NB LT	75.1	E	1.04	467	37.3	D	0.83	397
		NB T	17.3	B	0.11	38	18.6	B	0.19	66
		SB	34.6	C	0.90	132	47.6	D	0.86	154

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

Table 4: Capacity Analysis Results – Installation of Traffic Signal Control

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
1	High School Driveway 1 (WB) at Bobcat Boulevard (NB/SB)	WB	19.6	C	0.25	25	16.1	C	0.48	65
		SB LT	10.2	B	0.38	45	8.8	A	0.03	3
2	High School Driveway 2 (WB) at Bobcat Boulevard (NB/SB)	WB LT	17.8	C	0.45	58	14.0	B	0.30	33
		WB RT	9.3	A	0.17	15	9.3	A	0.14	13
3	High School Driveway 3 (WB) at Bobcat Boulevard (NB/SB)	WB	24.0	C	0.08	8	15.9	C	0.30	30
		SB LT	10.4	B	0.26	25	8.1	A	0.04	3
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB) With Signal	EB LT	48.4	D	0.73	201	49.3	D	0.38	73
		EB RT	16.6	B	0.65	121	19.2	C	0.66	126
		NB LT	6.6	A	0.30	81	2.3	A	0.40	24
		NB T	5.0	A	0.17	80	0.7	A	0.13	14
		SB	12.0	B	0.24	113	8.0	A	0.22	109
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB) With Signal	EB	14.7	B	0.39	92	11.5	B	0.52	127
		WB LT	7.6	A	0.48	48	5.6	A	0.27	27
		WB T	4.4	A	0.18	37	4.9	A	0.22	52
		NB LT	35.6	D	0.43	165	31.4	C	0.27	123
		NB RT	3.8	A	0.27	37	4.5	A	0.20	33
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB)	EB LT	15.1	C	0.36	43	9.5	A	0.06	5
		WB LT	8.1	A	0.04	3	8.2	A	0.04	3
		NB	32.3	D	0.42	48	11.4	B	0.13	10
		SB	1109.9	F	3.24	695	46.0	E	0.72	125
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB) With Signal	EB LT	48.1	D	0.43	62	45.7	D	0.45	66
		EB RT	10.6	B	0.61	38	23.3	C	0.87	229
		NB LT	17.2	B	0.79	235	5.6	A	0.56	121
		NB T	2.1	A	0.05	13	2.2	A	0.08	23
		SB	14.7	B	0.45	146	10.8	B	0.20	95

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

Table 5: Capacity Analysis Results – Installation of Traffic Signal Control at High School Driveway 4

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB)	EB LT	38.4	D	0.73	123	12.0	B	0.13	32
		EB T	6.9	A	0.25	52	13.4	B	0.31	148
		WB	25.3	C	0.90	240	20.2	C	0.47	218
		NB	22.1	C	0.50	40	13.9	B	0.45	33
		SB	32.8	C	0.62	174	17.9	B	0.36	117

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

Table 6: Capacity Analysis Results – Installation of Roundabout Control

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB) Single-Lane Roundabout	EB	17.5	C	0.73	281	8.6	A	0.40	53
		NB	12.2	B	0.62	171	9.4	A	0.57	120
		SB	7.9	A	0.43	66	10.1	B	0.51	95
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB) Single-Lane Roundabout	EB	13.4	B	0.66	226	10.0	A	0.57	114
		WB	11.3	B	0.61	122	9.3	A	0.53	99
		NB	10.3	B	0.46	74	8.5	A	0.33	39
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB)	EB	11.2	B	0.62	129	10.5	B	0.58	112
		WB	9.7	A	0.57	96	7.1	A	0.47	79
		NB	8.2	A	0.16	16	7.8	A	0.14	14
		SB	10.9	B	0.41	56	8.5	A	0.28	31
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB) Single-Lane Roundabout with SB RT Bypass Lane	EB	10.9	B	0.55	120	11.8	B	0.61	161
		NB	11.5	B	0.66	165	10.2	B	0.60	134
		SB T	10.4	B	0.42	56	7.6	A	0.30	33
		SB RT	12.6	B	0.52	85	5.7	A	0.14	14

¹ Average Delay in Seconds per Vehicle² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

As shown, with only stop-control, the left turn movements on the approaches of Marshall Creek Road and Parkview Drive operate poorly during the AM and School PM peak hours. Similarly, the eastbound left turn of Bobcat Boulevard at Trophy Club Drive operates with significant delay. In addition, southbound High School Driveway 4 operates well above capacity with significant queuing.

With the simulated crossing guard/traffic control officer, those three intersections generally appear to operate at acceptable levels of service. The northbound left turn from Trophy Club Drive operates above capacity with significant queuing during the AM peak hour due to heavy traffic volumes for this movement. In addition, while a crossing guard/traffic control officer would improve operation for the southbound approach of High School Driveway 4, this would result in the eastbound left turn and the westbound approach to be approaching capacity during the AM peak hour.

With installation of traffic signal control, the three public street intersections are predicted to operate at acceptable levels of service. The stop-controlled high school driveways also experience improvement with additional gaps in traffic due to upstream signals. However, the southbound High School Driveway 4 still operates with significant delay, particularly during the AM peak hour. Operation would be improved at High School Driveway 4 with traffic signal control, as shown in Table 5.

Roundabout control generally results in better delay and level of service than traffic signal control at the above four intersections and could be considered as a viable option along Bobcat Boulevard. As noted previously, while single lane roundabouts could accommodate the existing traffic, right turn by-pass lanes would be needed at two locations:

- On southbound Trophy Club Drive at Bobcat Boulevard
- On westbound Bobcat Boulevard at High School Driveway 4

Preliminary Signal Warrant Analysis

Preliminary signal warrant analysis was conducted for the three public street intersections and for High School Driveway 4. The traffic signal warrant analysis presented in this letter is based on the traffic signal warrants contained in Chapter 4C, "Traffic Control Signal Needs Studies," of the 2011 *Texas Manual on Uniform Traffic Control Devices*. Nine warrants are included in the manual for warranting a traffic signal installation. These warrants are:

- Warrant 1 – Eight-Hour Vehicular Volume;
- Warrant 2 – Four-Hour Vehicular Volume;
- Warrant 3 – Peak Hour;
- Warrant 4 – Pedestrian Volume;
- Warrant 5 – School Crossing;
- Warrant 6 – Coordinated Signal System;
- Warrant 7 – Crash Experience;
- Warrant 8 – Roadway Network;
- Warrant 9 – Intersection Near a Grade Crossing

For the purposes of this study, Warrant 1, Warrant 2, Warrant 3, Warrant 5, and Warrant 7 were evaluated. Based on the predicted traffic volumes at these intersections, Bobcat Boulevard would be considered the *Major Roadway* and the other roadways would all be considered the *Minor Roadway*. However, at the intersection of Bobcat Boulevard and Trophy Club Drive, Bobcat Boulevard would be considered the *Minor Roadway*.

The Texas *MUTCD* recommends considering the effects of right turn volumes on the minor street approach if the movement enters the major street with minimal conflict, primarily with the presence of a right turn lane. However, for this preliminary analysis all right turn volumes were included and the minor street approaches were evaluated as two-lane approaches where applicable. High School Driveway 4 is a single-lane approach.

Finally, this analysis was performed for four (4) hours of the day at each intersection based on the collected traffic data. In order to fully evaluate traffic volume warrants, additional data should be collected. The analysis volumes are included as an attachment to this letter along with the volume warrant results for each intersection. Additionally, a description of each of the above warrants is included as an attachment for reference. A summary of the warrant results is shown in **Table 6**. Highlighted cells indicate values which exceed the threshold value.

Table 7: Preliminary Traffic Signal Warrant Results

Intersection	Vehicle Volume Warrants - Hours Met					Warrant 5			Warrant 7
	Warrant 1A	Warrant 1B	Warrant 1C	Warrant 2	Warrant 3	Max Peds/Hr	Required Gap (sec)	Adequate Gaps/Hr	Correctable Crashes/Yr
Marshall Creek at Bobcat	3	1	3	3	2	52	17	-	0
Parkview at Bobcat	3	3	4	3	1	38	17	-	1
HS Drive 4 at Bobcat	3	4	3	3	1	57	19	-	1
Bobcat at Trophy Club	4	2	4	4	2	13	18	-	4
Minimum Required to Meet:	8	8	8	4	1	20		60	5

Based on the volume warrants, all intersections are anticipated to meet traffic thresholds for Warrant 3, the Peak Hour Warrant. However, this warrant is typically applicable for "unusual cases such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time", per the Texas *MUTCD*. It is unclear whether a high school would qualify for this warrant.

The intersection of Bobcat Boulevard at Trophy Club Drive is predicted to meet Warrant 2, the Four-Hour Warrant. The other three intersections meet thresholds for Warrant 2 for three hours of the day, and it is possible that an additional hour may be met with additional traffic data collected. Similarly, it is possible that Warrant 1 could be met at one or more intersections with additional data collection.

Warrant 5 was evaluated based on the collected pedestrian volumes. This warrant requires a minimum of 20 school pedestrians crossing the major road in an hour, which is met at Marshall Creek Road, Parkview Drive, and High School Driveway 4. This warrant also requires that the number of gaps in traffic on the major road exceeds the number of minutes in the evaluated time period. However, gap data was not collected as part of this study. Additionally, this warrant recommends consideration of alternative remedial measures such as a crossing guard before considering a traffic signal.

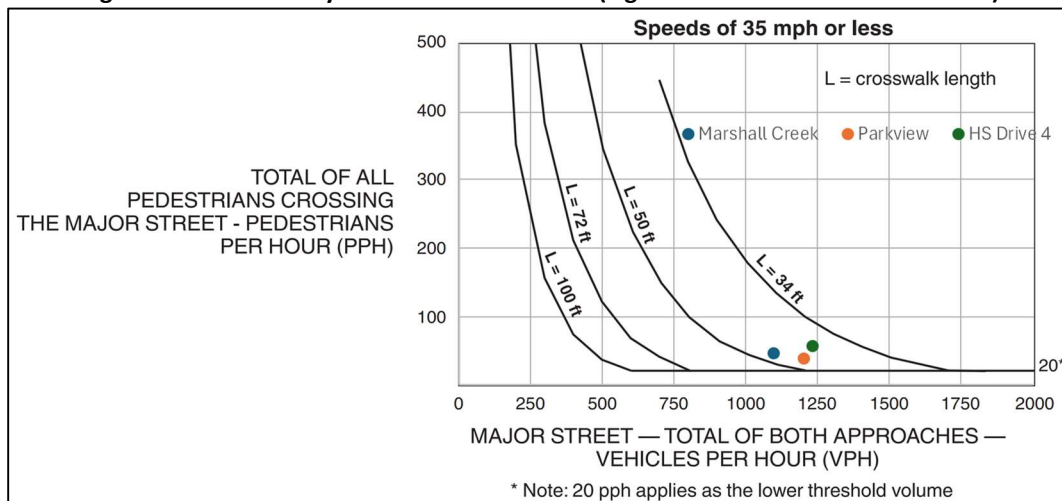
Warrant 7 was evaluated based on available crash data from TxDOT's online C.R.I.S. query tool for each intersection. Based on available data, none of the study intersections are anticipated to meet the crash warrant.

Based on these results, installation of traffic signal control should be considered at the intersection of Bobcat Boulevard and Trophy Club Drive. It is recommended to collect 24-hour turning movement data and perform a full traffic signal warrant analysis. Similarly, consider conducting a full traffic signal warrant analysis at the other intersections.

Preliminary Pedestrian Hybrid Beacon Analysis

A pedestrian hybrid beacon is used to warn and control vehicular traffic at an unsignalized location to assist pedestrians crossing the roadway at a marked crosswalk. A pedestrian hybrid beacon may be considered at marked crosswalk locations that do not meet traffic signal warrants or where a decision is made to not install a traffic signal. The need for a pedestrian hybrid beacon should be considered when the point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street, when plotted on Figure 4F-1 (or 4F-2 when applicable) of the *Texas MUTCD*, falls above the curve for the appropriate length of crosswalk. Based on the posted speed limit on Bobcat Boulevard (30 mph) the reduced warrant threshold was not used for this warrant. This warrant requires a minimum of 20 pedestrians per hour, so the intersection of Bobcat Boulevard at Trophy Club Drive would not meet this threshold based on the data in Table 6. **Figure 5** shows the results of this analysis for the other three intersections in Table 6.

Figure 5: Pedestrian Hybrid Beacon Guidelines (Figure 4F-1 from the *Texas MUTCD*)



Crossing distance on Bobcat Boulevard at High School Driveway 4 is approximately 50 feet from center of curb ramp to center of curb ramp. At Parkview Drive and at Marshall Creek Road, the full crossing distance is approximately 75 feet, although it is possible that the median could act as a pedestrian refuge on the west side of each roadway. Based on these distances and the results in Figure 5, a pedestrian hybrid beacon could be considered at all three locations.

Additionally, thresholds would also be met if pedestrians were relocated to a new mid-block crossing on Bobcat Boulevard, particularly if pedestrians from multiple intersections were relocated.

Suggested Mitigation

Based on the results of this analysis, the following mitigation measures are recommended:

- Marshall Creek at Bobcat: Install a roundabout. A single-lane roundabout was predicted to accommodate the existing traffic volumes, but the design could be modified as desired.
- Mid-Block between Marshall Creek and Parkview: Install a pedestrian hybrid beacon (HAWK signal) on Bobcat Boulevard midway between Marshall Creek and Parkview. Concurrent with this installation, pedestrians should be directed to utilize the mid-block crossing rather than crossing at the intersections.
- Parkview at Bobcat: Continue with existing crossing guards/traffic control officers.
- High School Driveway 4 at Bobcat: Station a crossing guard/traffic control officer at this location. Install a westbound right turn lane on Bobcat at the driveway. Reconfigure the crosswalk to be on the west side of the intersection rather than the east to better facilitate the westbound right turn and southbound left turn. Reconfigure the southbound approach to provide two southbound lanes (10' left turn and 10' right turn) with a 14' inbound lane.
- Bobcat at Trophy Club: Install traffic signal control.

The resulting operation is shown in **Table 8**. Note that some results may differ from previous tables due to different arrival patterns in the model. Additionally, pedestrians crossing Bobcat Boulevard were relocated from Marshall Creek and Parkview to the proposed mid-block crossing.

Table 8: Capacity Analysis Results – Recommended Mitigation

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB) With Roundabout (Single-Lane)	EB	17.5	C	0.73	281	8.6	A	0.40	53
		NB	12.2	B	0.62	171	9.4	A	0.57	120
		SB	7.9	A	0.43	66	10.1	B	0.51	95
	Mid-Block Pedestrian Signal	EB	4.0	A	0.26	75	4.0	A	0.25	74
		WB	12.1	B	0.22	157	17.1	B	0.24	185
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB	6.8	A	0.47	71	9.0	A	0.50	86
		WB LT	13.3	B	0.53	66	7.3	A	0.25	23
		WB T	9.8	A	0.46	45	9.3	A	0.50	45
		NB LT	21.9	C	0.48	95	19.8	B	0.35	74
		NB RT	6.0	A	0.38	38	6.4	A	0.29	31
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB LT	46.6	D	0.62	180	43.6	D	0.21	66
		EB T	10.9	B	0.28	104	15.0	B	0.40	156
		WB	20.3	C	0.73	194	31.3	C	0.72	213
		NB	24.0	C	0.52	42	13.6	B	0.31	46
		SB	21.3	C	0.46	92	28.1	C	0.37	119
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB) With Traffic Signal	EB LT	39.9	D	0.43	68	50.7	D	0.45	101
		EB RT	4.8	A	0.54	45	43.2	D	0.86	221
		NB LT	20.7	C	0.74	276	5.8	A	0.58	121
		NB T	2.1	A	0.05	13	2.2	A	0.08	37
		SB	16.3	B	0.52	132	9.3	A	0.19	88

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

For reference, the spacing between these intersections is shown in **Table 9**.

Table 9: Spacing Between Intersections on Bobcat Boulevard

Roadway Segment	Approx. Distance
High School Driveway 3 to Marshall Creek	820'
Marshall Creek to Mid-Block Crossing	210'
Mid-Block Crossing to Parkview	215'
Parkview to High School Driveway 4	530'
High School Driveway Dwy 4 to Trophy Club	600'

Based on the results above, predicted queues are not anticipated to extend to adjacent intersections. Additionally, most of the predicted 95th percentile left turn queues are predicted to be accommodated by existing left turn lane storage lengths, where applicable. However, the northbound left turn queue on Trophy Club Drive at Bobcat Boulevard is predicted to exceed the existing storage length of approximately 160 feet during the AM peak hour. As part of the improvements at this location, it is recommended to lengthen the northbound left turn lane on Trophy Club Drive. This should be possible with the existing median width.

For reference, the delay values for the proposed mitigation are compared to the existing operation in **Table 10**. For ease of comparison, only the operation for the overall approach is shown. Existing conditions include a simulated crossing guard at the three locations where one is currently present. High School Driveway 4 existing condition is just two-way stop control.

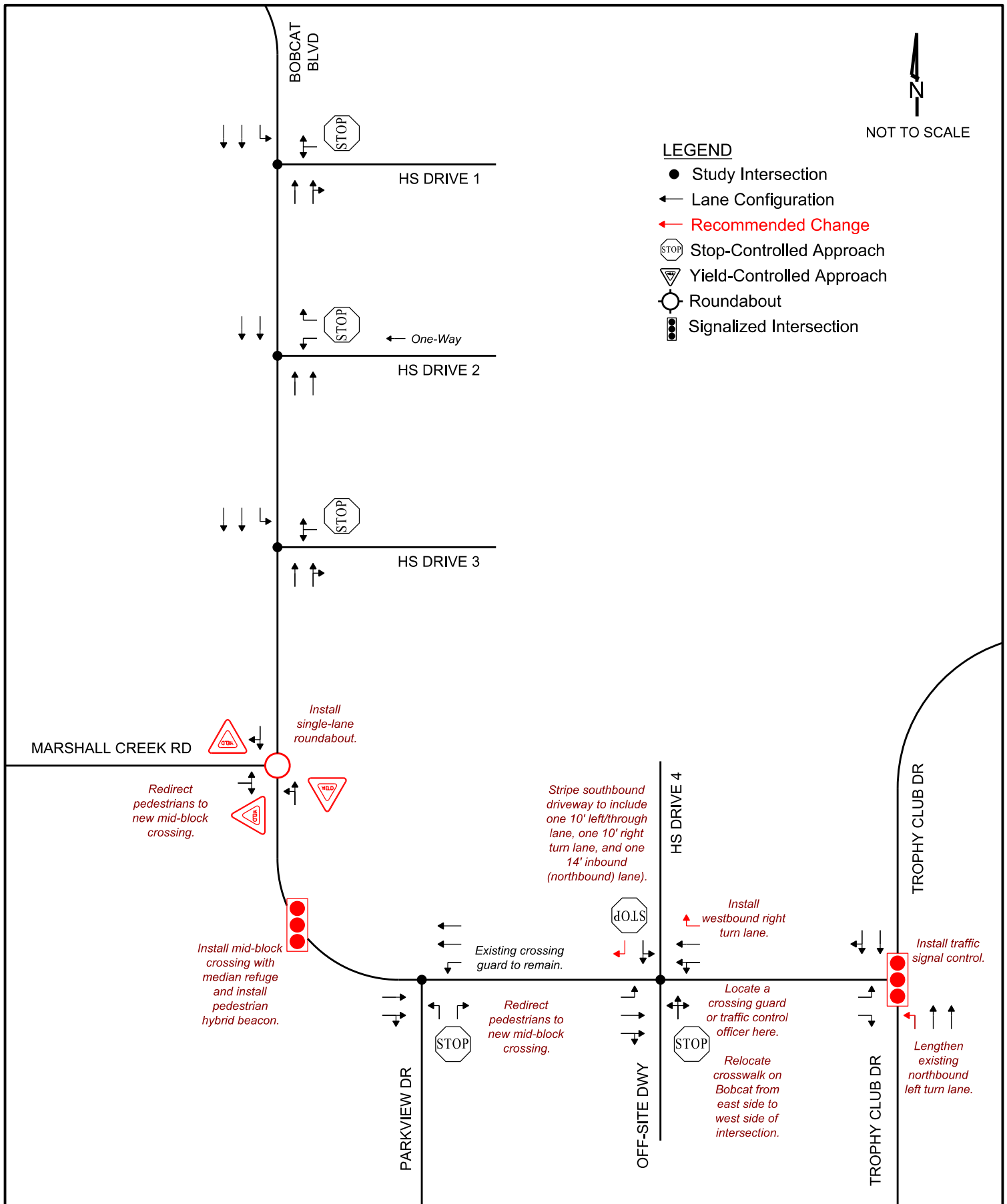
Table 10: Capacity Analysis Results – Comparison of Existing to Recommended Mitigation

Intersection		Critical Approach/ Movement	Existing (2024) Volumes			
			AM Peak		School PM Peak	
			Existing Operation	Mitigated Operation	Existing Operation	Mitigated Operation
			Delay (LOS) ¹	Delay (LOS)	Delay (LOS)	Delay (LOS)
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB)	EB	16.6 (B)	17.5 (C)	12.0 (B)	8.6 (A)
		NB	33.2 (C)	12.2 (B)	38.9 (D)	9.4 (A)
		SB	32.3 (C)	7.9 (A)	39.3 (D)	10.1 (B)
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB)	EB	40.3 (D)	6.8 (A)	34.7 (C)	9.0 (A)
		WB	40.4 (D)	11.1 (B)	47.3 (D)	8.9 (A)
		NB	22.6 (C)	14.0 (B)	25.8 (C)	13.8 (B)
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB)	EB LT / EB	15.1 (C)	21.1 (C)	9.5 (A)	17.1 (B)
		WB LT / WB	8.1 (A)	20.3 (C)	8.7 (A)	31.3 (C)
		NB	32.5 (D)	24.0 (C)	11.4 (B)	13.6 (B)
		SB	1146.4 (F)	21.3 (C)	82.8 (F)	28.1 (C)
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB)	EB	21.0 (C)	8.7 (A)	22.9 (C)	44.1 (D)
		NB	64.7 (E)	17.4 (B)	31.5 (C)	4.7 (A)
		SB	34.6 (C)	16.3 (B)	47.6 (D)	9.3 (A)

¹ Average Delay in Seconds per Vehicle (Level of Service)

As shown, for most approaches the recommended mitigation is predicted to improve the average delay compared to existing conditions. Some approaches experience significant improvement, including the southbound High School Driveway 4 approach and both approaches of Trophy Club Drive at Bobcat Boulevard.

The recommended lane configurations and traffic control are shown in **Figure 6** for reference.



Additional Analysis Based on Town Feedback

An updated desired mitigation scenario was developed in response to feedback obtained at Town of Trophy Club public meetings over the summer. Based on this feedback, the following mitigation measures were analyzed:

- Marshall Creek at Bobcat: Install a roundabout. A single-lane roundabout was predicted to accommodate the existing traffic volumes, but the design could be modified as desired. Discourage pedestrian crossing at this location.
- Parkview at Bobcat: Continue with existing crossing guards/traffic control officers.
- High School Driveway 4 at Bobcat: Station a crossing guard/traffic control officer at this location. Install a westbound right turn lane on Bobcat at the driveway and install a westbound left turn lane to service the commercial driveway. Reconfigure the southbound approach to provide two southbound lanes (10' left turn and 10' right turn) with a 14' inbound lane. Remove the crosswalk on the east side of the intersection to better facilitate the westbound right turn and southbound left turn.
- Bobcat at Trophy Club: Continue with existing crossing guards/traffic control officers. Consider installation of a roundabout in the future.
- High School Driveway 3 at Bobcat: Install sidewalk on the west side of Bobcat from Marshall Creek to Driveway 3 and install a crosswalk with flashers on Bobcat at Driveway 3.

The resulting operation is shown in **Table 11**. Note that some results may differ from previous tables due to different arrival patterns in the model.

Table 11: Capacity Analysis Results – Updated Mitigation Based on Meeting

Intersection		Critical Approach/ Movement	Existing (2024) Volumes							
			AM Peak				School PM Peak			
			Delay ¹	LOS	V/C	Queue ²	Delay	LOS	V/C	Queue
3	High School Driveway 3 (WB) at Bobcat Boulevard (NB/SB) With New Crosswalk and Relocated Peds	WB	29.4	D	0.10	8	26.5	D	0.46	58
		SB LT	11.2	B	0.28	30	8.8	A	0.05	3
4	Marshall Creek Road (EB) at Bobcat Boulevard (NB/SB) With Roundabout (Single-Lane)	EB	17.5	C	0.73	281	8.6	A	0.40	53
		NB	12.1	B	0.62	170	9.3	A	0.56	120
		SB	7.9	A	0.43	66	10.1	B	0.51	94
5	Parkview Drive (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB	33.1	C	0.80	209	28.9	C	0.71	206
		WB LT	52.1	D	0.55	202	49.0	D	0.28	120
		WB T	48.6	D	0.48	164	52.6	D	0.56	193
		NB LT	37.1	D	0.56	149	39.2	D	0.52	120
		NB RT	8.0	A	0.42	50	10.3	B	0.38	44
6	High School Driveway 4 (SB)/ Off-Site Dwy (NB) at Bobcat Boulevard (EB/WB) With 'Crossing Guard'	EB LT	38.6	D	0.74	90	30.9	C	0.44	29
		EB T	6.6	A	0.30	43	13.7	B	0.42	218
		WB	16.1	B	0.72	102	12.7	B	0.49	67
		NB	25.0	C	0.56	38	14.8	B	0.37	43
		SB	17.1	B	0.43	75	25.1	C	0.40	101
7	Bobcat Boulevard (EB) at Trophy Club Drive (NB/SB) With 'Crossing Guard'	EB LT	45.8	D	0.24	66	37.4	D	0.21	83
		EB RT	24.3	C	0.73	163	23.0	C	0.72	250
		NB LT	75.1	E	1.04	467	37.3	D	0.83	397
		NB T	17.3	B	0.11	38	18.6	B	0.19	66
		SB	34.6	C	0.90	132	47.6	D	0.86	154

¹ Average Delay in Seconds per Vehicle

² 95th Percentile Queue in Feet (based on an assumed 25 ft/veh)

As shown, delay is for High School Driveway 3 is predicted to slightly increase with pedestrians relocated from Marshall Creek Road to this intersection; however, operation is still acceptable. The proposed roundabout at Marshall Creek Road experiences slight delay improvements with pedestrians removed. Operation at Parkview Drive and at Trophy club Drive remains similar to existing conditions with traffic control officers. Inclusion of a traffic control officer at High School

Driveway 4 offers improvement over existing conditions. With additional capacity installed on westbound Bobcat Boulevard, High School Driveway 4 is predicted to operate at acceptable levels of service.

Based on the results above, predicted queues are not anticipated to extend to adjacent intersections (see intersection spacing previously shown in Table 9). However, the northbound left turn queue on Trophy Club Drive at Bobcat Boulevard is predicted to exceed the existing storage length of approximately 160 feet during the AM peak hour. Again, lengthening of the northbound left turn lane on Trophy Club Drive should be possible with the existing median width.

The updated lane configurations and traffic control recommended as a result of this meeting are shown in **Figure 7** for reference.

If you have any questions, please contact me or Joseph Short at (972) 248-3006. We appreciate the opportunity to provide these services and are available to address any additional comments or concerns.

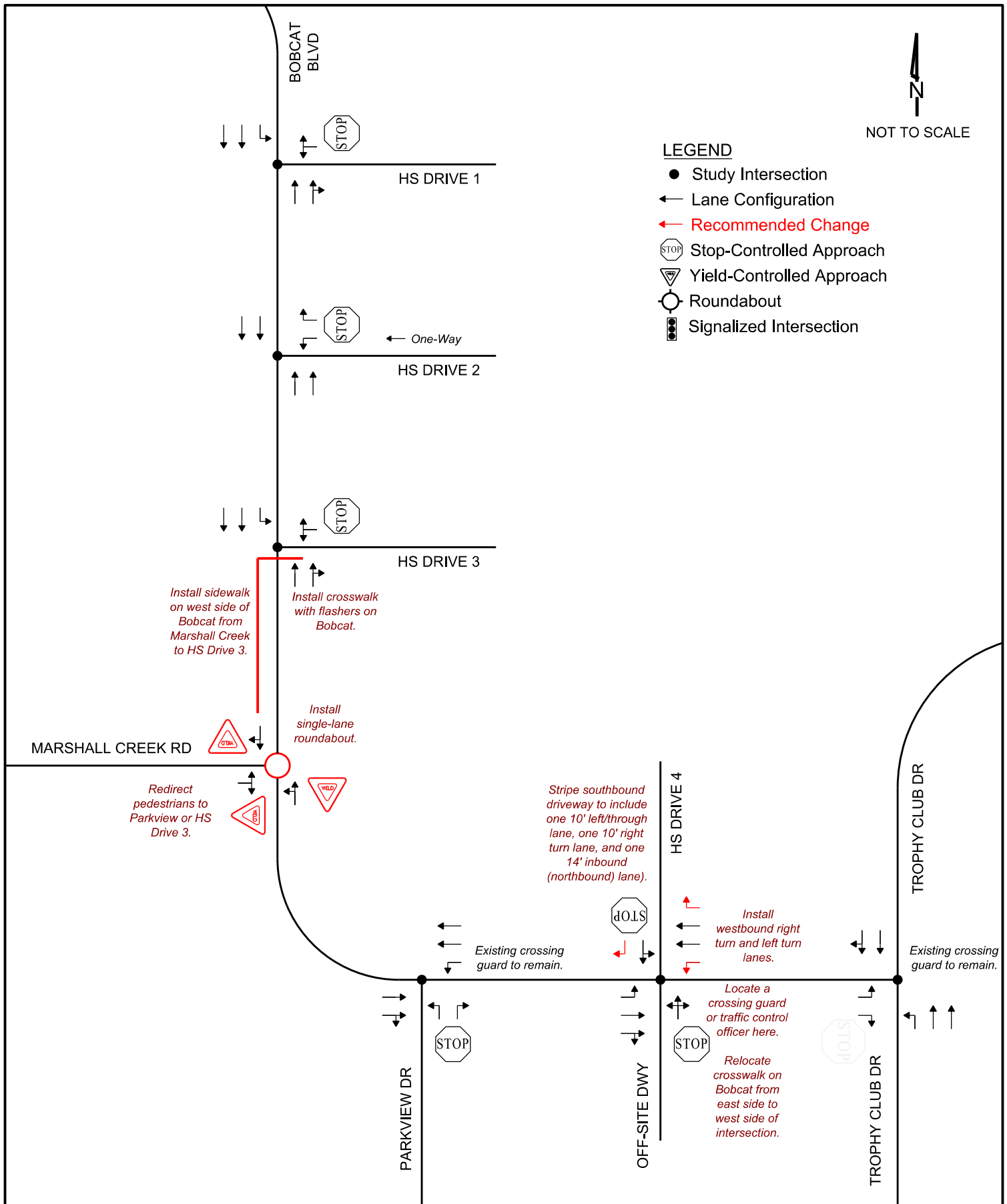
Sincerely,



Kristen Novak, P.E., PTOE
Senior Project Engineer
Lee Engineering
TBPE Firm F-450

Attachments

- Synchro* Output Sheets
- SIDRA* Output Sheets
- Signal Warrant Data and Description
- Additional Analysis Resulting from Town Meetings



Existing (2024) AM Peak Hour
1: Bobcat Blvd & HS Drive 1

04/19/2024

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	48	284	56	272	375
Future Vol, veh/h	6	48	284	56	272	375
Conflicting Peds, #/hr	14	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	125	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	17	25	2	2	8	2
Mvmt Flow	9	74	437	86	418	577
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1633	276	0	0	537	0
Stage 1	494	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	7.14	7.4	-	-	4.26	-
Critical Hdwy Stg 1	6.14	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-
Follow-up Hdwy	3.67	3.55	-	-	2.28	-
Pot Cap-1 Maneuver	79	657	-	-	987	-
Stage 1	538	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	44	648	-	-	974	-
Mov Cap-2 Maneuver	44	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	25.6	0		4.8		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 257		974	-	
HCM Lane V/C Ratio	-	- 0.323		0.43	-	
HCM Control Delay (s)	-	- 25.6		11.5	-	
HCM Lane LOS	-	- D		B	-	
HCM 95th %tile Q(veh)	-	- 1.3		2.2	-	

Existing (2024) AM Peak Hour
2: Bobcat Blvd & HS Drive 2

04/19/2024

Intersection							
Int Delay, s/veh	5.4						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	153	115	2	222	0	0	382
Future Vol, veh/h	153	115	2	222	0	0	382
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	225	169	3	326	0	0	562

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	613	163	562
Stage 1	332	-	-
Stage 2	281	-	-
Critical Hdwy	6.84	6.94	6.44
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.52
Pot Cap-1 Maneuver	424	853	632
Stage 1	699	-	-
Stage 2	741	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	421	853	632
Mov Cap-2 Maneuver	421	-	-
Stage 1	695	-	-
Stage 2	741	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.5	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBT
Capacity (veh/h)	- 421 853	-
HCM Lane V/C Ratio	- 0.534 0.198	-
HCM Control Delay (s)	- 22.9 10.3	-
HCM Lane LOS	- C B	-
HCM 95th %tile Q(veh)	- 3.1 0.7	-

Existing (2024) AM Peak Hour
3: Bobcat Blvd & HS Drive 3

04/19/2024

Intersection							
Int Delay, s/veh	1.9						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	7	5	1	213	350	164	376
Future Vol, veh/h	7	5	1	213	350	164	376
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	10	7	1	296	486	228	522

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1258	391	522	0	0	782
Stage 1	541	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	2.22
Pot Cap-1 Maneuver	163	608	670	-	-	832
Stage 1	548	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	608	670	-	-	832
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.3	0	3.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	178	832
HCM Lane V/C Ratio	-	-	0.094	0.274
HCM Control Delay (s)	-	-	27.3	10.9
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.3	1.1

Existing (2024) AM Peak Hour
4: Bobcat Blvd & Marshall Creek Rd

04/19/2024

Intersection						
Int Delay, s/veh	49.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	219	321	158	352	307	77
Future Vol, veh/h	219	321	158	352	307	77
Conflicting Peds, #/hr	3	16	16	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	175	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	267	391	193	429	374	94
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1041	266	484	0	-	0
Stage 1	437	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 226	732	1075	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 179	710	1059	-	-	-
Mov Cap-2 Maneuver	~ 179	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	129.7	2.8		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1059	-	179	710	-	-
HCM Lane V/C Ratio	0.182	-	1.492	0.551	-	-
HCM Control Delay (s)	9.2	-	296.3	16.1	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.7	-	16.9	3.4	-	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Existing (2024) AM Peak Hour
5: Parkview Dr & Bobcat Blvd

04/19/2024

Intersection						
Int Delay, s/veh	50.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	411	192	216	374	166	164
Future Vol, veh/h	411	192	216	374	166	164
Conflicting Peds, #/hr	0	17	2	0	17	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	462	216	243	420	187	184
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	695	0	1300	358
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	713	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	897	-	~ 153	638
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	447	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	882	-	~ 107	626
Mov Cap-2 Maneuver	-	-	-	-	~ 107	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	318	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.9		227.3	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	107	626	-	-	882	-
HCM Lane V/C Ratio	1.743	0.294	-	-	0.275	-
HCM Control Delay (s)	\$ 439	13.1	-	-	10.6	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	14.7	1.2	-	-	1.1	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Existing (2024) AM Peak Hour
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

04/19/2024

Intersection												
Int Delay, s/veh	182.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱		↰			↰	↱
Traffic Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Future Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Conflicting Peds, #/hr	16	0	10	19	0	25	10	0	19	25	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	203	495	10	47	590	599	8	4	82	99	1	178

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1214	0	0	524	0	0	1331	2233	297	1690	1939	636
Stage 1	-	-	-	-	-	-	925	925	-	1009	1009	-
Stage 2	-	-	-	-	-	-	406	1308	-	681	930	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	570	-	-	1039	-	-	113	42	699	~ 61	65	421
Stage 1	-	-	-	-	-	-	290	346	-	257	316	-
Stage 2	-	-	-	-	-	-	593	228	-	407	344	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	556	-	-	1020	-	-	38	21	670	~ 28	33	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	21	-	~ 28	33	-
Stage 1	-	-	-	-	-	-	181	216	-	159	256	-
Stage 2	-	-	-	-	-	-	270	185	-	217	215	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.3	0.6	43.2	\$ 1487.7
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	184	556	-	-	1020	-	-	69
HCM Lane V/C Ratio	0.509	0.364	-	-	0.047	-	-	4.032
HCM Control Delay (s)	43.2	15.1	-	-	8.7	0.6		\$ 1487.7
HCM Lane LOS	E	C	-	-	A	A	-	F
HCM 95th %tile Q(veh)	2.5	1.7	-	-	0.1	-	-	29.7

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Existing (2024) AM Peak Hour
7: Trophy Club Dr & Bobcat Blvd

04/19/2024

Intersection						
Int Delay, s/veh	89.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	373	535	117	245	304
Future Vol, veh/h	55	373	535	117	245	304
Conflicting Peds, #/hr	6	4	4	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	4	2	2	3	2	2
Mvmt Flow	69	466	669	146	306	380
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1919	353	692	0	-	0
Stage 1	502	-	-	-	-	-
Stage 2	1417	-	-	-	-	-
Critical Hdwy	6.88	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 58	643	899	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 14	637	894	-	-	-
Mov Cap-2 Maneuver	~ 14	-	-	-	-	-
Stage 1	142	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	\$ 317	16.4		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	894	-	14	637	-	-
HCM Lane V/C Ratio	0.748	-	4.911	0.732	-	-
HCM Control Delay (s)	19.9	\$ 2300.7	24.5	-	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	7.1	-	9.5	6.3	-	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Existing (2024) PM Peak Hour
1: Bobcat Blvd & HS Drive 1

04/19/2024

Intersection							
Int Delay, s/veh	7.5						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	89	130	389	13	1	24	203
Future Vol, veh/h	89	130	389	13	1	24	203
Conflicting Peds, #/hr	22	3	0	22	1	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	125	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	75	75	75	75	75	75	75
Heavy Vehicles, %	7	12	2	23	2	33	2
Mvmt Flow	119	173	519	17	1	32	271

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	774	293	0	0	536	558	0
Stage 1	550	-	-	-	-	-	-
Stage 2	224	-	-	-	-	-	-
Critical Hdwy	6.94	7.14	-	-	6.44	4.76	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-	-
Follow-up Hdwy	3.57	3.42	-	-	2.52	2.53	-
Pot Cap-1 Maneuver	325	674	-	-	657	822	-
Stage 1	528	-	-	-	-	-	-
Stage 2	777	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	298	658	-	-	788	788	-
Mov Cap-2 Maneuver	298	-	-	-	-	-	-
Stage 1	517	-	-	-	-	-	-
Stage 2	729	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.8	0	1.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	441	788
HCM Lane V/C Ratio	-	-	0.662	0.042
HCM Control Delay (s)	-	-	27.8	9.8
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	4.7	0.1

Existing (2024) PM Peak Hour
2: Bobcat Blvd & HS Drive 2

04/19/2024

Intersection							
Int Delay, s/veh	4.3						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	133	103	2	300	0	0	284
Future Vol, veh/h	133	103	2	300	0	0	284
Conflicting Peds, #/hr	5	5	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	3
Mvmt Flow	173	134	3	390	0	0	369

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	586	200	369
Stage 1	396	-	-
Stage 2	190	-	-
Critical Hdwy	6.84	6.94	6.44
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.52
Pot Cap-1 Maneuver	441	808	838
Stage 1	649	-	-
Stage 2	823	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	437	804	838
Mov Cap-2 Maneuver	437	-	-
Stage 1	646	-	-
Stage 2	819	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBT
Capacity (veh/h)	-	437	804
HCM Lane V/C Ratio	-	0.395	0.166
HCM Control Delay (s)	-	18.5	10.4
HCM Lane LOS	-	C	B
HCM 95th %tile Q(veh)	-	1.9	0.6

Existing (2024) PM Peak Hour
3: Bobcat Blvd & HS Drive 3

04/19/2024

Intersection							
Int Delay, s/veh	2.9						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	88	24	279	95	1	34	394
Future Vol, veh/h	88	24	279	95	1	34	394
Conflicting Peds, #/hr	6	6	0	6	0	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	111	30	353	120	1	43	499

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	763	249	0	0	473	479	0
Stage 1	419	-	-	-	-	-	-
Stage 2	344	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	6.44	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.52	2.22	-
Pot Cap-1 Maneuver	341	751	-	-	720	1080	-
Stage 1	632	-	-	-	-	-	-
Stage 2	689	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	323	742	-	-	1058	1058	-
Mov Cap-2 Maneuver	323	-	-	-	-	-	-
Stage 1	628	-	-	-	-	-	-
Stage 2	657	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	367	1058
HCM Lane V/C Ratio	-	-	0.386	0.042
HCM Control Delay (s)	-	-	20.9	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.8	0.1

Existing (2024) PM Peak Hour
4: Bobcat Blvd & Marshall Creek Rd

04/19/2024

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	275	285	362	345	103
Future Vol, veh/h	52	275	285	362	345	103
Conflicting Peds, #/hr	11	39	39	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	175	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	302	313	398	379	113

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1311	324	531	0	-	0
Stage 1	475	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	150	672	1033	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	95	623	995	-	-	-
Mov Cap-2 Maneuver	95	-	-	-	-	-
Stage 1	391	-	-	-	-	-
Stage 2	372	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.6	4.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	995	-	95	623	-	-
HCM Lane V/C Ratio	0.315	-	0.602	0.485	-	-
HCM Control Delay (s)	10.3	-	88.5	16.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.4	-	2.8	2.7	-	-

Existing (2024) PM Peak Hour
5: Parkview Dr & Bobcat Blvd

04/19/2024

Intersection						
Int Delay, s/veh	16.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	↑
Traffic Vol, veh/h	471	153	114	462	128	111
Future Vol, veh/h	471	153	114	462	128	111
Conflicting Peds, #/hr	0	67	44	0	67	44
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	506	165	123	497	138	119

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	738
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	864
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	809
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	94.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	129	501	-	-	809	-
HCM Lane V/C Ratio	1.067	0.238	-	-	0.152	-
HCM Control Delay (s)	164.7	14.4	-	-	10.2	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	7.7	0.9	-	-	0.5	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Existing (2024) PM Peak Hour
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

04/19/2024

Intersection												
Int Delay, s/veh	25.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰			↱			↰	
Traffic Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Future Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Conflicting Peds, #/hr	57	0	56	9	0	10	56	0	9	10	0	57
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	2	2
Mvmt Flow	48	605	1	49	568	66	5	0	79	115	0	77

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	662	0	0	1197	1547	369	1165	1514	431
Stage 1	-	-	-	-	-	-	758	758	-	756	756	-
Stage 2	-	-	-	-	-	-	439	789	-	409	758	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.56	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.53	4.02	3.32
Pot Cap-1 Maneuver	900	-	-	922	-	-	141	113	628	148	119	573
Stage 1	-	-	-	-	-	-	365	413	-	364	414	-
Stage 2	-	-	-	-	-	-	567	400	-	588	413	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	851	-	-	873	-	-	96	87	589	~ 107	92	512
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	87	-	~ 107	92	-
Stage 1	-	-	-	-	-	-	326	369	-	325	357	-
Stage 2	-	-	-	-	-	-	415	345	-	476	369	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1	15	202
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	443	851	-	-	873	-	-	157
HCM Lane V/C Ratio	0.191	0.056	-	-	0.056	-	-	1.225
HCM Control Delay (s)	15	9.5	-	-	9.4	0.4	-	202
HCM Lane LOS	C	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0.2	-	-	11

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Existing (2024) PM Peak Hour
7: Trophy Club Dr & Bobcat Blvd

04/19/2024

Intersection						
Int Delay, s/veh	21.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	69	495	466	209	234	111
Future Vol, veh/h	69	495	466	209	234	111
Conflicting Peds, #/hr	8	6	6	0	0	8
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	2	2	2	3	2
Mvmt Flow	76	544	512	230	257	122
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1473	204	387	0	-	0
Stage 1	326	-	-	-	-	-
Stage 2	1147	-	-	-	-	-
Critical Hdwy	6.88	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	115	803	1168	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 63	792	1159	-	-	-
Mov Cap-2 Maneuver	~ 63	-	-	-	-	-
Stage 1	387	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	52	7.3		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1159	-	63	792	-	-
HCM Lane V/C Ratio	0.442	-	1.204	0.687	-	-
HCM Control Delay (s)	10.5	-	289.7	18.9	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.3	-	6.2	5.6	-	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Existing (2024) AM Peak Hour with Traffic Control Officer
1: Bobcat Blvd & HS Drive 1

05/07/2024

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	48	284	56	272	375
Future Vol, veh/h	6	48	284	56	272	375
Conflicting Peds, #/hr	14	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	125	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	17	25	2	2	8	2
Mvmt Flow	9	74	437	86	418	577
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1633	276	0	0	537	0
Stage 1	494	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	7.14	7.4	-	-	4.26	-
Critical Hdwy Stg 1	6.14	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-
Follow-up Hdwy	3.67	3.55	-	-	2.28	-
Pot Cap-1 Maneuver	79	657	-	-	987	-
Stage 1	538	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	44	648	-	-	974	-
Mov Cap-2 Maneuver	44	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	25.6	0		4.8		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 257		974	-	
HCM Lane V/C Ratio	-	- 0.323		0.43	-	
HCM Control Delay (s)	-	- 25.6		11.5	-	
HCM Lane LOS	-	- D		B	-	
HCM 95th %tile Q(veh)	-	- 1.3		2.2	-	

Existing (2024) AM Peak Hour with Traffic Control Officer
2: Bobcat Blvd & HS Drive 2

05/07/2024

Intersection							
Int Delay, s/veh	5.4						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	153	115	2	222	0	0	382
Future Vol, veh/h	153	115	2	222	0	0	382
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	225	169	3	326	0	0	562

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	613	163	562
Stage 1	332	-	-
Stage 2	281	-	-
Critical Hdwy	6.84	6.94	6.44
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.52
Pot Cap-1 Maneuver	424	853	632
Stage 1	699	-	-
Stage 2	741	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	421	853	632
Mov Cap-2 Maneuver	421	-	-
Stage 1	695	-	-
Stage 2	741	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.5	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBT
Capacity (veh/h)	- 421 853	-
HCM Lane V/C Ratio	- 0.534 0.198	-
HCM Control Delay (s)	- 22.9 10.3	-
HCM Lane LOS	- C B	-
HCM 95th %tile Q(veh)	- 3.1 0.7	-

Existing (2024) AM Peak Hour with Traffic Control Officer
3: Bobcat Blvd & HS Drive 3

05/07/2024

Intersection							
Int Delay, s/veh	1.9						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	7	5	1	213	350	164	376
Future Vol, veh/h	7	5	1	213	350	164	376
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	10	7	1	296	486	228	522

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1258	391	522	0	0	782
Stage 1	541	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	2.22
Pot Cap-1 Maneuver	163	608	670	-	-	832
Stage 1	548	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	608	670	-	-	832
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.3	0	3.3
HCM LOS	D		

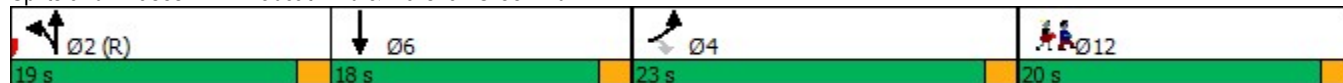
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	178	832
HCM Lane V/C Ratio	-	-	0.094	0.274
HCM Control Delay (s)	-	-	27.3	10.9
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.3	1.1

Existing (2024) AM Peak Hour with Traffic Control Officer
4: Bobcat Blvd & Marshall Creek Rd

05/07/2024

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	219	321	158	352	307	
Future Volume (vph)	219	321	158	352	307	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	4		2	2	6	12
Permitted Phases		4				
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	23.0	23.0	19.0	19.0	18.0	20.0
Total Split (%)	28.8%	28.8%	23.8%	23.8%	22.5%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	21.0	21.0	17.0	17.0	16.0	
Actuated g/C Ratio	0.26	0.26	0.21	0.21	0.20	
v/c Ratio	0.58	0.57	0.51	0.57	0.66	
Control Delay	31.4	6.4	34.1	32.7	32.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	31.4	6.4	34.1	32.7	32.3	
LOS	C	A	C	C	C	
Approach Delay	16.6			33.2	32.3	
Approach LOS	B			C	C	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green						
Natural Cycle: 60						
Control Type: Pretimed						
Maximum v/c Ratio: 0.66						
Intersection Signal Delay: 26.7				Intersection LOS: C		
Intersection Capacity Utilization 41.9%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 4: Bobcat Blvd & Marshall Creek Rd



Existing (2024) AM Peak Hour with Traffic Control Officer
4: Bobcat Blvd & Marshall Creek Rd

05/07/2024

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	267	391	193	429	468
v/c Ratio	0.58	0.57	0.51	0.57	0.66
Control Delay	31.4	6.4	34.1	32.7	32.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	6.4	34.1	32.7	32.3
Queue Length 50th (ft)	116	0	107	124	105
Queue Length 95th (ft)	170	43	157	157	138
Internal Link Dist (ft)	376			396	791
Turn Bay Length (ft)		175	125		
Base Capacity (vph)	464	690	376	752	710
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.57	0.51	0.57	0.66
Intersection Summary					

Existing (2024) AM Peak Hour with Traffic Control Officer
5: Parkview Dr & Bobcat Blvd

05/07/2024

	→	↖	←	↗	↘	
Lane Group	EBT	WBL	WBT	NBL	NBR	Ø12
Lane Configurations	↑↑	↖	↑↑	↖	↖	
Traffic Volume (vph)	411	216	374	166	164	
Future Volume (vph)	411	216	374	166	164	
Turn Type	NA	Split	NA	Prot	Perm	
Protected Phases	2	6	6	4		12
Permitted Phases					4	
Detector Phase	2	6	6	4	4	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	23.0	20.0	20.0	17.0	17.0	20.0
Total Split (%)	28.8%	25.0%	25.0%	21.3%	21.3%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	21.0	18.0	18.0	15.0	15.0	
Actuated g/C Ratio	0.26	0.22	0.22	0.19	0.19	
v/c Ratio	0.73	0.61	0.53	0.56	0.42	
Control Delay	40.3	43.2	38.8	37.1	8.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	40.3	43.2	38.8	37.1	8.0	
LOS	D	D	D	D	A	
Approach Delay	40.3		40.4	22.6		
Approach LOS	D		D	C		

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 10 (13%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 36.5

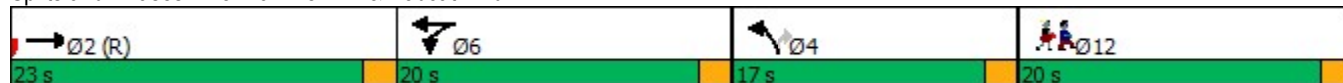
Intersection LOS: D

Intersection Capacity Utilization 49.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd



	→	↙	←	↖	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	678	243	420	187	184
v/c Ratio	0.73	0.61	0.53	0.56	0.42
Control Delay	40.3	43.2	38.8	37.1	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	43.2	38.8	37.1	8.0
Queue Length 50th (ft)	147	124	111	86	0
Queue Length 95th (ft)	210	m150	m128	149	50
Internal Link Dist (ft)	396		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	935	398	796	331	441
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.73	0.61	0.53	0.56	0.42
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Existing (2024) AM Peak Hour with Traffic Control Officer
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

05/07/2024

Intersection												
Int Delay, s/veh	140.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Future Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Conflicting Peds, #/hr	16	0	10	19	0	25	10	0	19	25	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	203	495	10	47	590	599	8	4	82	99	1	178
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1214	0	0	524	0	0	1331	2233	297	1690	1939	636
Stage 1	-	-	-	-	-	-	925	925	-	1009	1009	-
Stage 2	-	-	-	-	-	-	406	1308	-	681	930	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	570	-	-	1216	-	-	145	43	*954	~ 72	70	421
Stage 1	-	-	-	-	-	-	376	410	-	257	316	-
Stage 2	-	-	-	-	-	-	593	228	-	549	408	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	556	-	-	1194	-	-	49	22	*915	~ 35	36	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	49	22	-	~ 35	36	-
Stage 1	-	-	-	-	-	-	234	256	-	159	264	-
Stage 2	-	-	-	-	-	-	279	190	-	305	255	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.3			0.6			32.5			\$ 1146.4		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	222	556	-	-	1194	-	-	84				
HCM Lane V/C Ratio	0.422	0.364	-	-	0.04	-	-	3.312				
HCM Control Delay (s)	32.5	15.1	-	-	8.1	0.5		\$ 1146.4				
HCM Lane LOS	D	C	-	-	A	A	-	F				
HCM 95th %tile Q(veh)	1.9	1.7	-	-	0.1	-	-	28				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Existing (2024) AM Peak Hour with Traffic Control Officer
7: Trophy Club Dr & Bobcat Blvd

05/07/2024

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	55	373	535	117	245	
Future Volume (vph)	55	373	535	117	245	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	2		4	4	8	12
Permitted Phases		2				
Detector Phase	2	2	4	4	8	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	15.0	15.0	31.0	31.0	14.0	20.0
Total Split (%)	18.8%	18.8%	38.8%	38.8%	17.5%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	13.0	13.0	29.0	29.0	12.0	
Actuated g/C Ratio	0.16	0.16	0.36	0.36	0.15	
v/c Ratio	0.24	0.73	1.04	0.11	0.90	
Control Delay	37.0	18.7	75.1	17.3	34.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	37.0	18.7	75.1	17.3	34.6	
LOS	D	B	E	B	C	
Approach Delay	21.0			64.7	34.6	
Approach LOS	C			E	C	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 10 (13%), Referenced to phase 6:, Start of Green						
Natural Cycle: 90						
Control Type: Pretimed						
Maximum v/c Ratio: 1.04						
Intersection Signal Delay: 43.1				Intersection LOS: D		
Intersection Capacity Utilization 60.7%				ICU Level of Service B		
Analysis Period (min) 15						

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd

			
Ø2	Ø4	Ø8	Ø12
15 s	31 s	14 s	20 s

Existing (2024) AM Peak Hour with Traffic Control Officer
7: Trophy Club Dr & Bobcat Blvd

05/07/2024



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	69	466	669	146	686
v/c Ratio	0.24	0.73	1.04	0.11	0.90
Control Delay	37.0	18.7	75.1	17.3	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	18.7	75.1	17.3	34.6
Queue Length 50th (ft)	34	82	~368	25	93
Queue Length 95th (ft)	m57	119	#467	38	#132
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	282	642	641	1270	760
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.73	1.04	0.11	0.90

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Existing (2024) PM Peak Hour with Traffic Control Officer
1: Bobcat Blvd & HS Drive 1

05/07/2024

Intersection							
Int Delay, s/veh	7.5						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	89	130	389	13	1	24	203
Future Vol, veh/h	89	130	389	13	1	24	203
Conflicting Peds, #/hr	22	3	0	22	1	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	125	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	75	75	75	75	75	75	75
Heavy Vehicles, %	7	12	2	23	2	33	2
Mvmt Flow	119	173	519	17	1	32	271

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	774	293	0	0	536	558	0
Stage 1	550	-	-	-	-	-	-
Stage 2	224	-	-	-	-	-	-
Critical Hdwy	6.94	7.14	-	-	6.44	4.76	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-	-
Follow-up Hdwy	3.57	3.42	-	-	2.52	2.53	-
Pot Cap-1 Maneuver	325	674	-	-	657	822	-
Stage 1	528	-	-	-	-	-	-
Stage 2	777	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	298	658	-	-	788	788	-
Mov Cap-2 Maneuver	298	-	-	-	-	-	-
Stage 1	517	-	-	-	-	-	-
Stage 2	729	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.8	0	1.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	441	788
HCM Lane V/C Ratio	-	-	0.662	0.042
HCM Control Delay (s)	-	-	27.8	9.8
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	4.7	0.1

Existing (2024) PM Peak Hour with Traffic Control Officer
2: Bobcat Blvd & HS Drive 2

05/07/2024

Intersection							
Int Delay, s/veh	4.3						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	133	103	2	300	0	0	284
Future Vol, veh/h	133	103	2	300	0	0	284
Conflicting Peds, #/hr	5	5	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	3
Mvmt Flow	173	134	3	390	0	0	369

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	586	200	369
Stage 1	396	-	-
Stage 2	190	-	-
Critical Hdwy	6.84	6.94	6.44
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.52
Pot Cap-1 Maneuver	441	808	838
Stage 1	649	-	-
Stage 2	823	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	437	804	838
Mov Cap-2 Maneuver	437	-	-
Stage 1	646	-	-
Stage 2	819	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBT
Capacity (veh/h)	-	437	804
HCM Lane V/C Ratio	-	0.395	0.166
HCM Control Delay (s)	-	18.5	10.4
HCM Lane LOS	-	C	B
HCM 95th %tile Q(veh)	-	1.9	0.6

Existing (2024) PM Peak Hour with Traffic Control Officer
3: Bobcat Blvd & HS Drive 3

05/07/2024

Intersection							
Int Delay, s/veh	2.9						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	88	24	279	95	1	34	394
Future Vol, veh/h	88	24	279	95	1	34	394
Conflicting Peds, #/hr	6	6	0	6	0	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	111	30	353	120	1	43	499

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	763	249	0	0	473	479	0
Stage 1	419	-	-	-	-	-	-
Stage 2	344	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	6.44	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.52	2.22	-
Pot Cap-1 Maneuver	341	751	-	-	720	1080	-
Stage 1	632	-	-	-	-	-	-
Stage 2	689	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	323	742	-	-	1058	1058	-
Mov Cap-2 Maneuver	323	-	-	-	-	-	-
Stage 1	628	-	-	-	-	-	-
Stage 2	657	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	0.7
HCM LOS	C		

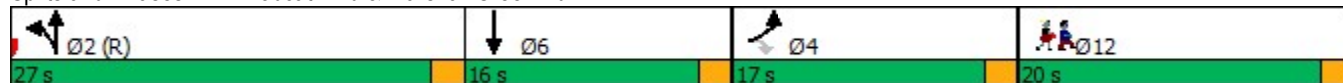
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	367	1058
HCM Lane V/C Ratio	-	-	0.386	0.042
HCM Control Delay (s)	-	-	20.9	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.8	0.1

Existing (2024) PM Peak Hour with Traffic Control Officer
4: Bobcat Blvd & Marshall Creek Rd

05/07/2024

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	52	275	285	362	345	
Future Volume (vph)	52	275	285	362	345	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	4		2	2	6	12
Permitted Phases		4				
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	17.0	17.0	27.0	27.0	16.0	20.0
Total Split (%)	21.3%	21.3%	33.8%	33.8%	20.0%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	15.0	15.0	25.0	25.0	14.0	
Actuated g/C Ratio	0.19	0.19	0.31	0.31	0.18	
v/c Ratio	0.17	0.58	0.57	0.36	0.79	
Control Delay	28.9	8.8	42.0	36.4	39.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	28.9	8.8	42.0	36.4	39.3	
LOS	C	A	D	D	D	
Approach Delay	12.0			38.9	39.3	
Approach LOS	B			D	D	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green						
Natural Cycle: 55						
Control Type: Pretimed						
Maximum v/c Ratio: 0.79						
Intersection Signal Delay: 32.9				Intersection LOS: C		
Intersection Capacity Utilization 43.0%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 4: Bobcat Blvd & Marshall Creek Rd



Existing (2024) PM Peak Hour with Traffic Control Officer
4: Bobcat Blvd & Marshall Creek Rd

05/07/2024



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	57	302	313	398	492
v/c Ratio	0.17	0.58	0.57	0.36	0.79
Control Delay	28.9	8.8	42.0	36.4	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	8.8	42.0	36.4	39.3
Queue Length 50th (ft)	24	0	170	113	114
Queue Length 95th (ft)	56	66	251	158	#185
Internal Link Dist (ft)	376			396	791
Turn Bay Length (ft)		175	125		
Base Capacity (vph)	331	519	553	1105	625
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.58	0.57	0.36	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Existing (2024) PM Peak Hour with Traffic Control Officer
5: Parkview Dr & Bobcat Blvd

05/07/2024

	→	↖	←	↗	↘	
Lane Group	EBT	WBL	WBT	NBL	NBR	Ø12
Lane Configurations	↑↑	↑	↑↑	↑	↑	
Traffic Volume (vph)	471	114	462	128	111	
Future Volume (vph)	471	114	462	128	111	
Turn Type	NA	Split	NA	Prot	Perm	
Protected Phases	2	6	6	4		12
Permitted Phases					4	
Detector Phase	2	6	6	4	4	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	27.0	19.0	19.0	14.0	14.0	20.0
Total Split (%)	33.8%	23.8%	23.8%	17.5%	17.5%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	25.0	17.0	17.0	12.0	12.0	
Actuated g/C Ratio	0.31	0.21	0.21	0.15	0.15	
v/c Ratio	0.63	0.33	0.66	0.52	0.38	
Control Delay	34.7	44.1	48.2	39.2	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	34.7	44.1	48.2	39.2	10.3	
LOS	C	D	D	D	B	
Approach Delay	34.7		47.3	25.8		
Approach LOS	C		D	C		

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 38.3

Intersection LOS: D

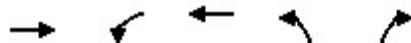
Intersection Capacity Utilization 42.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd





Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	671	123	497	138	119
v/c Ratio	0.63	0.33	0.66	0.52	0.38
Control Delay	34.7	44.1	48.2	39.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.7	44.1	48.2	39.2	10.3
Queue Length 50th (ft)	164	65	140	64	0
Queue Length 95th (ft)	m226	m86	m173	120	44
Internal Link Dist (ft)	396		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1067	376	752	265	312
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.33	0.66	0.52	0.38

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Existing (2024) PM Peak Hour with Traffic Control Officer
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

05/07/2024

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Future Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Conflicting Peds, #/hr	57	0	56	9	0	10	56	0	9	10	0	57
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	2	2
Mvmt Flow	48	605	1	49	568	66	5	0	79	115	0	77
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	691	0	0	662	0	0	1197	1547	369	1165	1514	431
Stage 1	-	-	-	-	-	-	758	758	-	756	756	-
Stage 2	-	-	-	-	-	-	439	789	-	409	758	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.56	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.53	4.02	3.32
Pot Cap-1 Maneuver	900	-	-	1195	-	-	234	148	*876	*248	156	573
Stage 1	-	-	-	-	-	-	609	577	-	*364	414	-
Stage 2	-	-	-	-	-	-	567	400	-	*824	577	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	851	-	-	1131	-	-	161	117	*822	*191	123	512
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	117	-	*191	123	-
Stage 1	-	-	-	-	-	-	544	516	-	*325	365	-
Stage 2	-	-	-	-	-	-	424	353	-	*696	516	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0.7		0.8			11.4			52.4			
HCM LOS						B			F			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	651	851	-	-	1131	-	-	255				
HCM Lane V/C Ratio	0.13	0.056	-	-	0.043	-	-	0.754				
HCM Control Delay (s)	11.4	9.5	-	-	8.3	0.2	-	52.4				
HCM Lane LOS	B	A	-	-	A	A	-	F				
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.1	-	-	5.4				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Existing (2024) PM Peak Hour with Traffic Control Officer
7: Trophy Club Dr & Bobcat Blvd

05/07/2024

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	69	495	466	209	234	
Future Volume (vph)	69	495	466	209	234	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	2		4	4	8	12
Permitted Phases		2				
Detector Phase	2	2	4	4	8	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	19.0	19.0	30.0	30.0	11.0	20.0
Total Split (%)	23.8%	23.8%	37.5%	37.5%	13.8%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	17.0	17.0	28.0	28.0	9.0	
Actuated g/C Ratio	0.21	0.21	0.35	0.35	0.11	
v/c Ratio	0.21	0.72	0.83	0.19	0.86	
Control Delay	36.9	20.9	37.3	18.6	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	36.9	20.9	37.3	18.6	47.6	
LOS	D	C	D	B	D	
Approach Delay	22.9			31.5	47.6	
Approach LOS	C			C	D	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 0 (0%), Referenced to phase 2:EBL, Start of Green						
Natural Cycle: 70						
Control Type: Pretimed						
Maximum v/c Ratio: 0.86						
Intersection Signal Delay: 31.9				Intersection LOS: C		
Intersection Capacity Utilization 50.3%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Existing (2024) PM Peak Hour with Traffic Control Officer
7: Trophy Club Dr & Bobcat Blvd

05/07/2024



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	76	544	512	230	379
v/c Ratio	0.21	0.72	0.83	0.19	0.86
Control Delay	36.9	20.9	37.3	18.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	36.9	20.9	37.3	18.6	47.6
Queue Length 50th (ft)	37	143	230	41	78
Queue Length 95th (ft)	m67	209	#397	66	#154
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	368	757	619	1238	443
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.72	0.83	0.19	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Traffic Control Officer

							
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	Ø12
Lane Configurations							
Traffic Volume (vph)	158	386	37	460	3	1	
Future Volume (vph)	158	386	37	460	3	1	
Turn Type	Prot	NA	Perm	NA	NA	NA	
Protected Phases	7	4		8	2	6	12
Permitted Phases			8				
Detector Phase	7	4	8	8	2	6	
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	14.0	45.0	31.0	31.0	7.0	11.0	17.0
Total Split (%)	17.5%	56.3%	38.8%	38.8%	8.8%	13.8%	21%
Yellow Time (s)	3.5	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5	2.0		2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	9.5	43.0		29.0	5.0	9.0	
Actuated g/C Ratio	0.12	0.54		0.36	0.06	0.11	
v/c Ratio	0.97	0.27		0.97	0.56	1.07	
Control Delay (s/veh)	94.1	5.0		29.3	25.0	100.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)	94.1	5.0		29.3	25.0	100.5	
LOS	F	A		C	C	F	
Approach Delay (s/veh)		30.6		29.3	25.0	100.5	
Approach LOS		C		C	C	F	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

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

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.07

Intersection Signal Delay (s/veh): 38.1

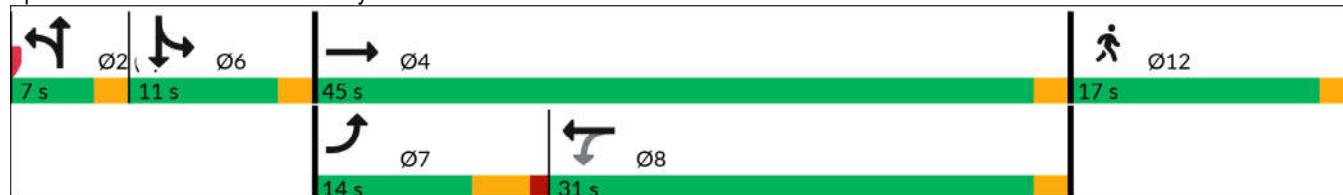
Intersection LOS: D

Intersection Capacity Utilization 71.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Traffic Control Officer



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	203	505	1236	94	278
v/c Ratio	0.97	0.27	0.97	0.56	1.07
Control Delay (s/veh)	94.1	5.0	29.3	25.0	100.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	94.1	5.0	29.3	25.0	100.5
Queue Length 50th (ft)	92	26	130	6	~112
Queue Length 95th (ft)	m#177	40	m130	38	#201
Internal Link Dist (ft)		523	603	280	279
Turn Bay Length (ft)	250				
Base Capacity (vph)	210	1897	1274	169	261
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.97	0.27	0.97	0.56	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Traffic Control Officer

							
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	Ø12
Lane Configurations							
Traffic Volume (vph)	44	557	45	523	0	0	
Future Volume (vph)	44	557	45	523	0	0	
Turn Type	Prot	NA	Perm	NA	NA	NA	
Protected Phases	7	4		8	2	6	12
Permitted Phases			8				
Detector Phase	7	4	8	8	2	6	
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	7.0	35.0	28.0	28.0	10.0	15.0	20.0
Total Split (%)	8.8%	43.8%	35.0%	35.0%	12.5%	18.8%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0		2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	5.0	33.0		26.0	8.0	13.0	
Actuated g/C Ratio	0.06	0.41		0.33	0.10	0.16	
v/c Ratio	0.44	0.42		0.68	0.37	0.60	
Control Delay (s/veh)	31.0	13.9		15.1	14.8	28.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	
Total Delay (s/veh)	31.0	13.9		15.1	14.8	28.6	
LOS	C	B		B	B	C	
Approach Delay (s/veh)		15.1		15.1	14.8	28.6	
Approach LOS		B		B	B	C	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.68

Intersection Signal Delay (s/veh): 16.7

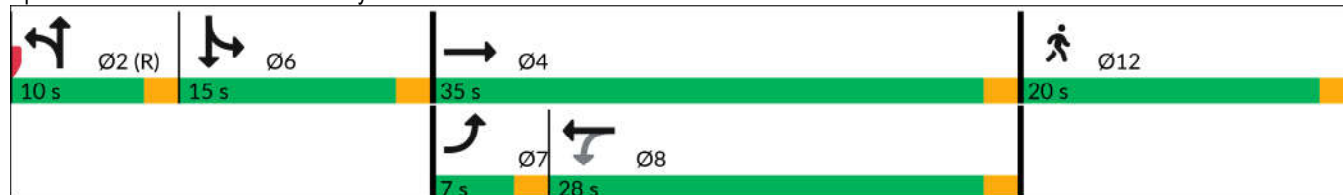
Intersection LOS: B

Intersection Capacity Utilization 61.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Traffic Control Officer

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	48	606	683	84	192
v/c Ratio	0.44	0.42	0.68	0.37	0.60
Control Delay (s/veh)	31.0	13.9	15.1	14.8	28.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.0	13.9	15.1	14.8	28.6
Queue Length 50th (ft)	16	154	47	2	57
Queue Length 95th (ft)	m32	216	m78	43	124
Internal Link Dist (ft)		523	603	280	279
Turn Bay Length (ft)	250				
Base Capacity (vph)	110	1459	1004	226	319
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.44	0.42	0.68	0.37	0.60
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Existing (2024) AM Peak Hour with Signals

1: Bobcat Blvd & HS Drive 1

05/07/2024

Intersection						
Int Delay, s/veh	3.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	48	284	56	272	375
Future Vol, veh/h	6	48	284	56	272	375
Conflicting Peds, #/hr	14	0	0	14	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	125	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	17	25	2	2	8	2
Mvmt Flow	9	74	437	86	418	577
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1633	276	0	0	537	0
Stage 1	494	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	7.14	7.4	-	-	4.26	-
Critical Hdwy Stg 1	6.14	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-
Follow-up Hdwy	3.67	3.55	-	-	2.28	-
Pot Cap-1 Maneuver	90	*917	-	-	1121	-
Stage 1	672	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	54	*905	-	-	1106	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	146	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	19.6	0		4.3		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	329	1106	-	
HCM Lane V/C Ratio	-	-	0.253	0.378	-	
HCM Control Delay (s)	-	-	19.6	10.2	-	
HCM Lane LOS	-	-	C	B	-	
HCM 95th %tile Q(veh)	-	-	1	1.8	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Existing (2024) AM Peak Hour with Signals
2: Bobcat Blvd & HS Drive 2

05/07/2024

Intersection							
Int Delay, s/veh	4.4						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	153	115	2	222	0	0	382
Future Vol, veh/h	153	115	2	222	0	0	382
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	225	169	3	326	0	0	562
Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	613	163	562	0	-	-	-
Stage 1	332	-	-	-	-	-	-
Stage 2	281	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	-	-
Pot Cap-1 Maneuver	506	*1011	632	-	0	0	-
Stage 1	812	-	-	-	0	0	-
Stage 2	741	-	-	-	0	0	-
Platoon blocked, %	1	1		-			-
Mov Cap-1 Maneuver	503	*1011	632	-	-	-	-
Mov Cap-2 Maneuver	503	-	-	-	-	-	-
Stage 1	807	-	-	-	-	-	-
Stage 2	741	-	-	-	-	-	-
Approach	WB		NB		SB		
HCM Control Delay, s	14.2		0.1		0		
HCM LOS	B						
Minor Lane/Major Mvmt	NBTWBLn1WBLn2		SBT				
Capacity (veh/h)	-		503	1011	-		
HCM Lane V/C Ratio	-		0.447	0.167	-		
HCM Control Delay (s)	-		17.8	9.3	-		
HCM Lane LOS	-		C	A	-		
HCM 95th %tile Q(veh)	-		2.3	0.6	-		
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

Existing (2024) AM Peak Hour with Signals
3: Bobcat Blvd & HS Drive 3

05/07/2024

Intersection							
Int Delay, s/veh	1.8						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	7	5	1	213	350	164	376
Future Vol, veh/h	7	5	1	213	350	164	376
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	10	7	1	296	486	228	522

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1258	391	522	0	0	782
Stage 1	541	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	2.22
Pot Cap-1 Maneuver	183	747	670	-	-	889
Stage 1	627	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %	1	1		-	-	1
Mov Cap-1 Maneuver	136	747	670	-	-	889
Mov Cap-2 Maneuver	136	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	331	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	3.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	206	889
HCM Lane V/C Ratio	-	-	0.081	0.256
HCM Control Delay (s)	-	-	24	10.4
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.3	1

Timings

4: Bobcat Blvd & Marshall Creek Rd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	219	321	158	352	307
Future Volume (vph)	219	321	158	352	307
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	6		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	43.0	23.0	23.0	57.0	34.0
Total Split (%)	43.0%	23.0%	23.0%	57.0%	34.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Max	C-Max
Act Effect Green (s)	20.7	30.3	65.8	70.3	56.2
Actuated g/C Ratio	0.21	0.30	0.66	0.70	0.56
v/c Ratio	0.73	0.65	0.30	0.17	0.24
Control Delay (s/veh)	48.4	16.6	6.6	5.0	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.4	16.6	6.6	5.0	12.0
LOS	D	B	A	A	B
Approach Delay (s/veh)	29.5			5.5	12.0
Approach LOS	C			A	B

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 86 (86%), Referenced to phase 2:NBT and 6:NBSB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 16.3

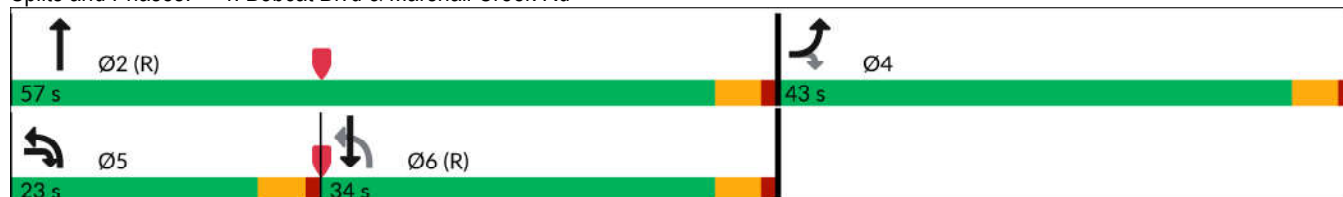
Intersection LOS: B

Intersection Capacity Utilization 48.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Bobcat Blvd & Marshall Creek Rd



Queues

4: Bobcat Blvd & Marshall Creek Rd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	267	391	193	429	468
v/c Ratio	0.73	0.65	0.30	0.17	0.24
Control Delay (s/veh)	48.4	16.6	6.6	5.0	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.4	16.6	6.6	5.0	12.0
Queue Length 50th (ft)	160	94	19	22	68
Queue Length 95th (ft)	201	121	81	80	113
Internal Link Dist (ft)	376			396	791
Turn Bay Length (ft)		175	125		
Base Capacity (vph)	681	728	764	2489	1931
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.54	0.25	0.17	0.24
Intersection Summary					

Timings

5: Parkview Dr & Bobcat Blvd

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑	↙	↗
Traffic Volume (vph)	411	216	374	166	164
Future Volume (vph)	411	216	374	166	164
Turn Type	NA	D.P+P	NA	Prot	pm+ov
Protected Phases	6	5	2	4	5
Permitted Phases		6			4
Detector Phase	6	5	2	4	5
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	9.5
Total Split (s)	43.0	28.0	71.0	29.0	28.0
Total Split (%)	43.0%	28.0%	71.0%	29.0%	28.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	Max	None
Act Effect Green (s)	51.1	62.0	66.5	24.5	35.4
Actuated g/C Ratio	0.51	0.62	0.67	0.25	0.35
v/c Ratio	0.39	0.48	0.18	0.43	0.27
Control Delay (s/veh)	14.7	7.6	4.4	35.6	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.7	7.6	4.4	35.6	3.8
LOS	B	A	A	D	A
Approach Delay (s/veh)	14.7		5.6	19.8	
Approach LOS	B		A	B	

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 87 (87%), Referenced to phase 2:WBT and 6:EBWB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay (s/veh): 12.3

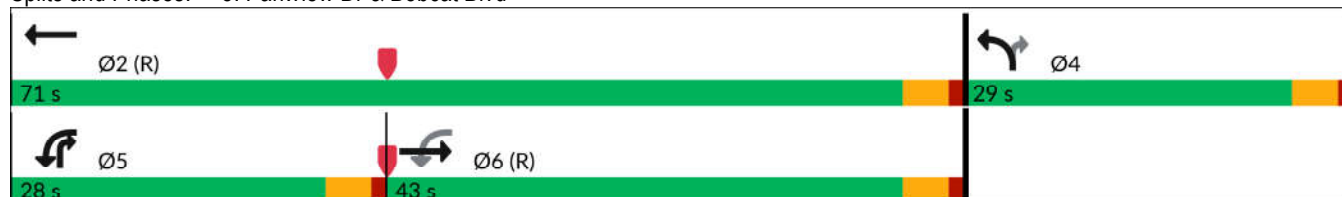
Intersection LOS: B

Intersection Capacity Utilization 56.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd



Queues

5: Parkview Dr & Bobcat Blvd

	→	↙	←	↖	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	678	243	420	187	184
v/c Ratio	0.39	0.48	0.18	0.43	0.27
Control Delay (s/veh)	14.7	7.6	4.4	35.6	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.7	7.6	4.4	35.6	3.8
Queue Length 50th (ft)	148	42	37	101	0
Queue Length 95th (ft)	118	m48	37	165	37
Internal Link Dist (ft)	396		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1724	683	2353	433	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.36	0.18	0.43	0.22
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Existing (2024) AM Peak Hour with Signals
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

05/07/2024

Intersection												
Int Delay, s/veh	136.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱		↰			↰	↱
Traffic Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Future Vol, veh/h	158	386	8	37	460	467	6	3	64	77	1	139
Conflicting Peds, #/hr	16	0	10	19	0	25	10	0	19	25	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	203	495	10	47	590	599	8	4	82	99	1	178

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1214	0	0	524	0	0	1331	2233	297	1690	1939	636
Stage 1	-	-	-	-	-	-	925	925	-	1009	1009	-
Stage 2	-	-	-	-	-	-	406	1308	-	681	930	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	570	-	-	1227	-	-	147	43	*949	~ 74	70	421
Stage 1	-	-	-	-	-	-	381	414	-	257	316	-
Stage 2	-	-	-	-	-	-	593	228	-	558	411	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	556	-	-	1204	-	-	50	22	*910	~ 36	37	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	22	-	~ 36	37	-
Stage 1	-	-	-	-	-	-	237	258	-	159	264	-
Stage 2	-	-	-	-	-	-	279	191	-	310	256	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.3	0.5	32.3	\$ 1109.9
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	223	556	-	-	1204	-	-	86
HCM Lane V/C Ratio	0.42	0.364	-	-	0.039	-	-	3.235
HCM Control Delay (s)	32.3	15.1	-	-	8.1	0.5		\$ 1109.9
HCM Lane LOS	D	C	-	-	A	A	-	F
HCM 95th %tile Q(veh)	1.9	1.7	-	-	0.1	-	-	27.8

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Timings

7: Trophy Club Dr & Bobcat Blvd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	55	373	535	117	245
Future Volume (vph)	55	373	535	117	245
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	6	7	7	4	8
Permitted Phases		6	8		
Detector Phase	6	7	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	29.0	46.0	46.0	71.0	25.0
Total Split (%)	29.0%	46.0%	46.0%	71.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	C-Min	None	None	Max	Max
Act Effect Green (s)	9.3	43.7	77.2	81.7	42.8
Actuated g/C Ratio	0.09	0.44	0.77	0.82	0.43
v/c Ratio	0.43	0.61	0.79	0.05	0.45
Control Delay (s/veh)	48.1	10.6	17.2	2.1	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.1	10.6	17.2	2.1	14.7
LOS	D	B	B	A	B
Approach Delay (s/veh)	15.5			14.5	14.7
Approach LOS	B			B	B

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 5 (5%), Referenced to phase 6:EBL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 14.8

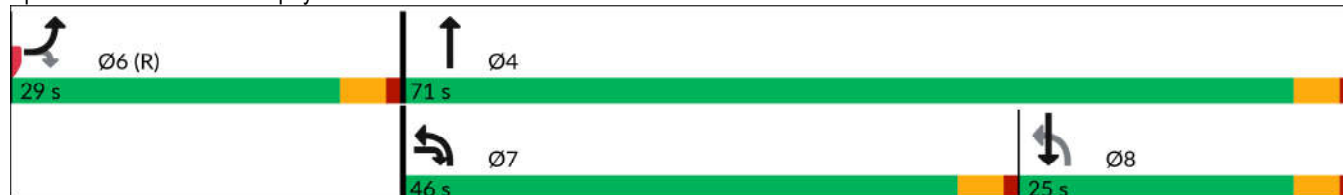
Intersection LOS: B

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	69	466	669	146	686
v/c Ratio	0.43	0.61	0.79	0.05	0.45
Control Delay (s/veh)	48.1	10.6	17.2	2.1	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.1	10.6	17.2	2.1	14.7
Queue Length 50th (ft)	33	47	177	6	88
Queue Length 95th (ft)	62	38	235	13	146
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	425	889	966	2862	1533
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.52	0.69	0.05	0.45
Intersection Summary					

Existing (2024) PM Peak Hour with Signals

1: Bobcat Blvd & HS Drive 1

05/07/2024

Intersection								
Int Delay, s/veh	4.4							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT	
Lane Configurations								
Traffic Vol, veh/h	89	130	389	13	1	24	203	
Future Vol, veh/h	89	130	389	13	1	24	203	
Conflicting Peds, #/hr	22	3	0	22	1	3	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	-	None	
Storage Length	0	-	-	-	-	125	-	
Veh in Median Storage, #	0	-	0	-	-	-	0	
Grade, %	0	-	0	-	-	-	0	
Peak Hour Factor	75	75	75	75	75	75	75	
Heavy Vehicles, %	7	12	2	23	2	33	2	
Mvmt Flow	119	173	519	17	1	32	271	
Major/Minor	Minor1	Major1		Major2				
Conflicting Flow All	774	293	0	0	536	558	0	
Stage 1	550	-	-	-	-	-	-	
Stage 2	224	-	-	-	-	-	-	
Critical Hdwy	6.94	7.14	-	-	6.44	4.76	-	
Critical Hdwy Stg 1	5.94	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.94	-	-	-	-	-	-	
Follow-up Hdwy	3.57	3.42	-	-	2.52	2.53	-	
Pot Cap-1 Maneuver	454	*921	-	-	954	1013	-	
Stage 1	697	-	-	-	-	-	-	
Stage 2	777	-	-	-	-	-	-	
Platoon blocked, %	1	1	-	-	1	1	-	
Mov Cap-1 Maneuver	420	*899	-	-	984	984	-	
Mov Cap-2 Maneuver	420	-	-	-	-	-	-	
Stage 1	683	-	-	-	-	-	-	
Stage 2	735	-	-	-	-	-	-	
Approach	WB	NB		SB				
HCM Control Delay, s	16.1	0		1				
HCM LOS	C							
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT			
Capacity (veh/h)	-	-	614	984	-			
HCM Lane V/C Ratio	-	-	0.476	0.034	-			
HCM Control Delay (s)	-	-	16.1	8.8	-			
HCM Lane LOS	-	-	C	A	-			
HCM 95th %tile Q(veh)	-	-	2.6	0.1	-			
Notes								
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon		

Existing (2024) PM Peak Hour with Signals
2: Bobcat Blvd & HS Drive 2

05/07/2024

Intersection							
Int Delay, s/veh	3.5						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations	↰	↰		↱↱			↱↱
Traffic Vol, veh/h	133	103	2	300	0	0	284
Future Vol, veh/h	133	103	2	300	0	0	284
Conflicting Peds, #/hr	5	5	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	3
Mvmt Flow	173	134	3	390	0	0	369
Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	586	200	369	0	-	-	-
Stage 1	396	-	-	-	-	-	-
Stage 2	190	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	-	-
Pot Cap-1 Maneuver	577	*980	838	-	0	0	-
Stage 1	805	-	-	-	0	0	-
Stage 2	823	-	-	-	0	0	-
Platoon blocked, %	1	1		-			-
Mov Cap-1 Maneuver	571	*976	838	-	-	-	-
Mov Cap-2 Maneuver	571	-	-	-	-	-	-
Stage 1	801	-	-	-	-	-	-
Stage 2	819	-	-	-	-	-	-
Approach	WB		NB		SB		
HCM Control Delay, s	11.9		0.1		0		
HCM LOS	B						
Minor Lane/Major Mvmt	NBTWBLn1WBLn2		SBT				
Capacity (veh/h)	-	571	976	-			
HCM Lane V/C Ratio	-	0.302	0.137	-			
HCM Control Delay (s)	-	14	9.3	-			
HCM Lane LOS	-	B	A	-			
HCM 95th %tile Q(veh)	-	1.3	0.5	-			
Notes							
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon							

Existing (2024) PM Peak Hour with Signals
3: Bobcat Blvd & HS Drive 3

05/07/2024

Intersection							
Int Delay, s/veh	2.3						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	88	24	279	95	1	34	394
Future Vol, veh/h	88	24	279	95	1	34	394
Conflicting Peds, #/hr	6	6	0	6	0	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	111	30	353	120	1	43	499
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	763	249	0	0	473	479	0
Stage 1	419	-	-	-	-	-	-
Stage 2	344	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	6.44	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.52	2.22	-
Pot Cap-1 Maneuver	434	*980	-	-	958	1225	-
Stage 1	782	-	-	-	-	-	-
Stage 2	689	-	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	1	-
Mov Cap-1 Maneuver	414	*969	-	-	1208	1208	-
Mov Cap-2 Maneuver	414	-	-	-	-	-	-
Stage 1	777	-	-	-	-	-	-
Stage 2	660	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, s	15.9	0		0.7			
HCM LOS	C						
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT			
Capacity (veh/h)	-	-	472	1208	-		
HCM Lane V/C Ratio	-	-	0.3	0.037	-		
HCM Control Delay (s)	-	-	15.9	8.1	-		
HCM Lane LOS	-	-	C	A	-		
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-		
Notes							
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon	

Timings

4: Bobcat Blvd & Marshall Creek Rd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	52	275	285	362	345
Future Volume (vph)	52	275	285	362	345
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	6		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	35.0	32.0	32.0	65.0	33.0
Total Split (%)	35.0%	32.0%	32.0%	65.0%	33.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Max	C-Max
Act Effect Green (s)	8.6	21.1	79.9	85.3	66.3
Actuated g/C Ratio	0.09	0.21	0.80	0.85	0.66
v/c Ratio	0.38	0.66	0.40	0.13	0.22
Control Delay (s/veh)	49.3	19.2	2.3	0.7	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.3	19.2	2.3	0.7	8.0
LOS	D	B	A	A	A
Approach Delay (s/veh)	24.0			1.4	8.0
Approach LOS	C			A	A

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 24 (24%), Referenced to phase 2:NBT and 6:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay (s/veh): 8.7

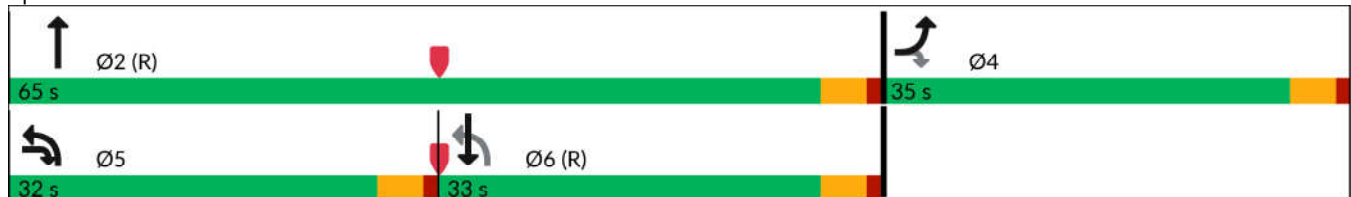
Intersection LOS: A

Intersection Capacity Utilization 54.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Bobcat Blvd & Marshall Creek Rd



Queues

4: Bobcat Blvd & Marshall Creek Rd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	57	302	313	398	492
v/c Ratio	0.38	0.66	0.40	0.13	0.22
Control Delay (s/veh)	49.3	19.2	2.3	0.7	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.3	19.2	2.3	0.7	8.0
Queue Length 50th (ft)	35	67	8	5	56
Queue Length 95th (ft)	73	126	24	14	109
Internal Link Dist (ft)	376			396	791
Turn Bay Length (ft)		175	125		
Base Capacity (vph)	539	657	955	3018	2254
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.11	0.46	0.33	0.13	0.22
Intersection Summary					

Timings

5: Parkview Dr & Bobcat Blvd

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑	↙	↗
Traffic Volume (vph)	471	114	462	128	111
Future Volume (vph)	471	114	462	128	111
Turn Type	NA	D.P+P	NA	Prot	pm+ov
Protected Phases	6	5	2	4	5
Permitted Phases		6			4
Detector Phase	6	5	2	4	5
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	9.5
Total Split (s)	50.0	19.0	69.0	31.0	19.0
Total Split (%)	50.0%	19.0%	69.0%	31.0%	19.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	Max	None
Act Effect Green (s)	51.9	60.0	64.5	26.5	34.6
Actuated g/C Ratio	0.52	0.60	0.65	0.27	0.35
v/c Ratio	0.39	0.27	0.22	0.29	0.20
Control Delay (s/veh)	11.5	5.6	4.9	31.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.5	5.6	4.9	31.4	4.5
LOS	B	A	A	C	A
Approach Delay (s/veh)	11.5		5.0	18.9	
Approach LOS	B		A	B	

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 83 (83%), Referenced to phase 2:WBT and 6:EBWB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay (s/veh): 10.2

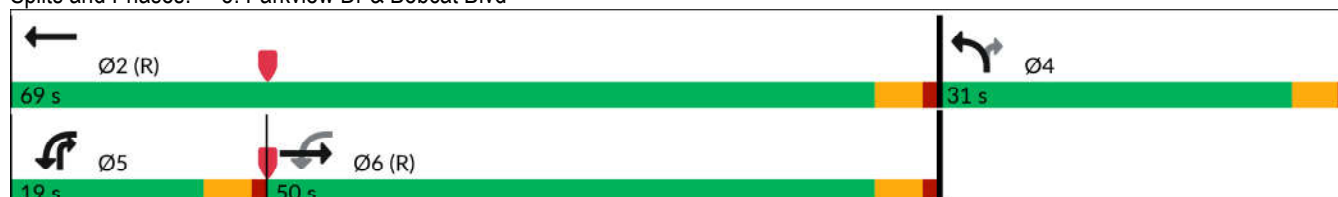
Intersection LOS: B

Intersection Capacity Utilization 51.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd



Queues

5: Parkview Dr & Bobcat Blvd

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	671	123	497	138	119
v/c Ratio	0.39	0.27	0.22	0.29	0.20
Control Delay (s/veh)	11.5	5.6	4.9	31.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.5	5.6	4.9	31.4	4.5
Queue Length 50th (ft)	110	24	54	70	0
Queue Length 95th (ft)	127	27	52	123	33
Internal Link Dist (ft)	396		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1702	562	2282	469	682
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.22	0.22	0.29	0.17
Intersection Summary					

Existing (2024) PM Peak Hour with Signals
6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

05/07/2024

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Future Vol, veh/h	44	557	1	45	523	61	5	0	73	106	0	71
Conflicting Peds, #/hr	57	0	56	9	0	10	56	0	9	10	0	57
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	2	2
Mvmt Flow	48	605	1	49	568	66	5	0	79	115	0	77

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	662	0	0	1197	1547	369	1165	1514	431
Stage 1	-	-	-	-	-	-	758	758	-	756	756	-
Stage 2	-	-	-	-	-	-	439	789	-	409	758	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.56	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.53	4.02	3.32
Pot Cap-1 Maneuver	900	-	-	1239	-	-	250	153	*855	*266	163	573
Stage 1	-	-	-	-	-	-	651	603	-	*364	414	-
Stage 2	-	-	-	-	-	-	567	400	-	*804	603	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	851	-	-	1173	-	-	173	121	*802	*204	129	512
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	121	-	*204	129	-
Stage 1	-	-	-	-	-	-	582	539	-	*325	366	-
Stage 2	-	-	-	-	-	-	426	354	-	*677	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	11.4	46
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	650	851	-	-	1173	-	-	269
HCM Lane V/C Ratio	0.13	0.056	-	-	0.042	-	-	0.715
HCM Control Delay (s)	11.4	9.5	-	-	8.2	0.2	-	46
HCM Lane LOS	B	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.1	-	-	5

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Timings

7: Trophy Club Dr & Bobcat Blvd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	69	495	466	209	234
Future Volume (vph)	69	495	466	209	234
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	6	7	7	4	8
Permitted Phases		6	8		
Detector Phase	6	7	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	27.0	47.0	47.0	73.0	26.0
Total Split (%)	27.0%	47.0%	47.0%	73.0%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	C-Min	None	None	Max	Max
Act Effect Green (s)	9.7	30.9	76.8	81.3	55.6
Actuated g/C Ratio	0.10	0.31	0.77	0.81	0.56
v/c Ratio	0.45	0.87	0.56	0.08	0.20
Control Delay (s/veh)	45.7	23.3	5.6	2.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.7	23.3	5.6	2.2	10.8
LOS	D	C	A	A	B
Approach Delay (s/veh)	26.0			4.5	10.8
Approach LOS	C			A	B

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 8 (8%), Referenced to phase 6:EBL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 13.6

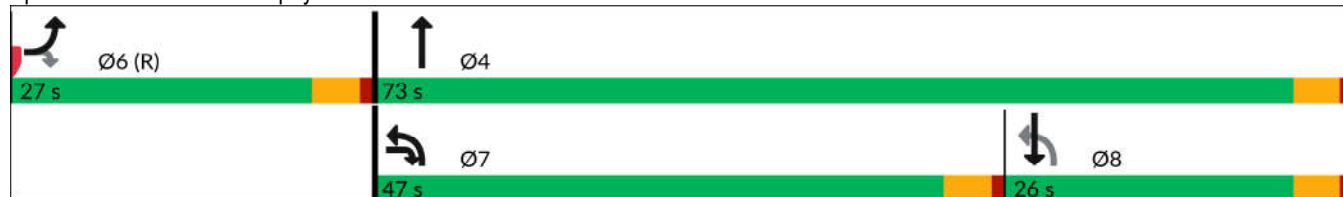
Intersection LOS: B

Intersection Capacity Utilization 67.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	76	544	512	230	379
v/c Ratio	0.45	0.87	0.56	0.08	0.20
Control Delay (s/veh)	45.7	23.3	5.6	2.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.7	23.3	5.6	2.2	10.8
Queue Length 50th (ft)	34	165	64	11	47
Queue Length 95th (ft)	66	229	121	23	95
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	390	922	1123	2875	1876
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.19	0.59	0.46	0.08	0.20
Intersection Summary					

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Signals

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	158	386	37	460	3	1
Future Volume (vph)	158	386	37	460	3	1
Turn Type	D.P+P	NA	Perm	NA	NA	NA
Protected Phases	1	6		2	4	8
Permitted Phases	2		2			
Detector Phase	1	6	2	2	4	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5	9.5
Total Split (s)	16.0	62.0	46.0	46.0	15.0	23.0
Total Split (%)	16.0%	62.0%	46.0%	46.0%	15.0%	23.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lag		Lead	Lead		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	None	Max
Act Effect Green (s)	53.0	57.5		41.5	7.2	23.8
Actuated g/C Ratio	0.53	0.58		0.42	0.07	0.24
v/c Ratio	0.73	0.25		0.90	0.50	0.62
Control Delay (s/veh)	38.4	6.9		25.3	22.1	32.8
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	38.4	6.9		25.3	22.1	32.8
LOS	D	A		C	C	C
Approach Delay (s/veh)		15.9		25.3	22.1	32.8
Approach LOS		B		C	C	C

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 68 (68%), Referenced to phase 2:EBWB and 6:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 23.2

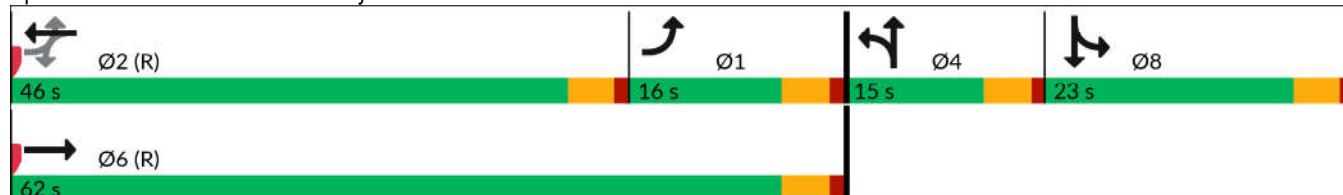
Intersection LOS: C

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Signals

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	203	505	1236	94	278
v/c Ratio	0.73	0.25	0.90	0.50	0.62
Control Delay (s/veh)	38.4	6.9	25.3	22.1	32.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.4	6.9	25.3	22.1	32.8
Queue Length 50th (ft)	68	41	316	7	115
Queue Length 95th (ft)	123	52	240	40	174
Internal Link Dist (ft)		523	603	280	279
Turn Bay Length (ft)	250				
Base Capacity (vph)	279	2028	1377	238	448
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.73	0.25	0.90	0.39	0.62
Intersection Summary					

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Signals

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	44	557	45	523	0	0
Future Volume (vph)	44	557	45	523	0	0
Turn Type	D.P+P	NA	Perm	NA	NA	NA
Protected Phases	1	6		2	4	8
Permitted Phases	2		2			
Detector Phase	1	6	2	2	4	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5	9.5
Total Split (s)	10.0	66.0	56.0	56.0	18.0	26.0
Total Split (%)	9.1%	60.0%	50.9%	50.9%	16.4%	23.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	None	Max
Act Effect Green (s)	57.9	61.5		53.5	6.3	30.7
Actuated g/C Ratio	0.53	0.56		0.49	0.06	0.28
v/c Ratio	0.13	0.31		0.47	0.45	0.36
Control Delay (s/veh)	12.0	13.4		20.2	13.9	17.9
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	12.0	13.4		20.2	13.9	17.9
LOS	B	B		C	B	B
Approach Delay (s/veh)		13.3		20.2	13.9	17.9
Approach LOS		B		C	B	B

Intersection Summary

Cycle Length: 110

Actuated Cycle Length: 110

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

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay (s/veh): 16.8

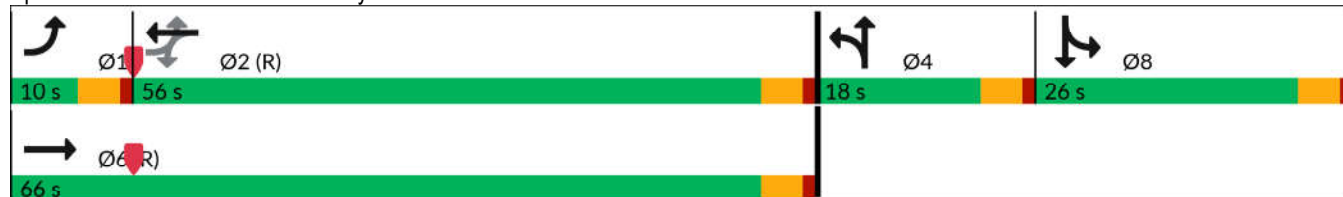
Intersection LOS: B

Intersection Capacity Utilization 63.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Signals

					
Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	48	606	683	84	192
v/c Ratio	0.13	0.31	0.47	0.45	0.36
Control Delay (s/veh)	12.0	13.4	20.2	13.9	17.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.0	13.4	20.2	13.9	17.9
Queue Length 50th (ft)	15	113	165	0	48
Queue Length 95th (ft)	32	148	218	33	117
Internal Link Dist (ft)		523	603	280	279
Turn Bay Length (ft)	250				
Base Capacity (vph)	363	1978	1463	283	529
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.31	0.47	0.30	0.36
Intersection Summary					

Timings

5: Parkview Dr & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑	↖	↖
Traffic Volume (vph)	411	216	374	166	164
Future Volume (vph)	411	216	374	166	164
Turn Type	NA	Split	NA	Prot	Perm
Protected Phases	2	6	6	4	
Permitted Phases					4
Detector Phase	2	6	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0
Total Split (s)	22.0	15.0	15.0	13.0	13.0
Total Split (%)	44.0%	30.0%	30.0%	26.0%	26.0%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	Max	Max	Max
Act Effect Green (s)	20.0	13.0	13.0	11.0	11.0
Actuated g/C Ratio	0.40	0.26	0.26	0.22	0.22
v/c Ratio	0.47	0.53	0.46	0.48	0.38
Control Delay (s/veh)	6.7	11.6	8.5	21.9	6.0
Queue Delay	0.2	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.8	11.6	8.5	21.9	6.0
LOS	A	B	A	C	A
Approach Delay (s/veh)	6.8		9.6	14.0	
Approach LOS	A		A	B	

Intersection Summary

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.53

Intersection Signal Delay (s/veh): 9.5

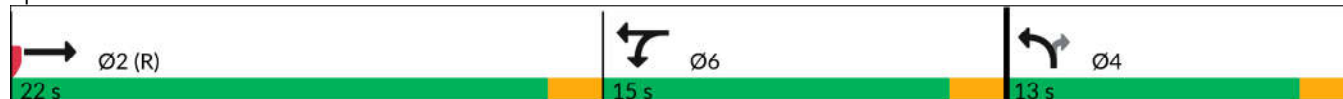
Intersection LOS: A

Intersection Capacity Utilization 48.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd



Queues

5: Parkview Dr & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	678	243	420	187	184
v/c Ratio	0.47	0.53	0.46	0.48	0.38
Control Delay (s/veh)	6.7	11.6	8.5	21.9	6.0
Queue Delay	0.2	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.8	11.6	8.5	21.9	6.0
Queue Length 50th (ft)	51	41	33	48	0
Queue Length 95th (ft)	71	m66	m48	95	38
Internal Link Dist (ft)	180		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1448	460	920	389	486
Starvation Cap Reductn	186	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.53	0.46	0.48	0.38
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	Ø12
Lane Configurations								
Traffic Volume (vph)	158	386	37	460	467	3	1	
Future Volume (vph)	158	386	37	460	467	3	1	
Turn Type	Prot	NA	Perm	NA	Perm	NA	NA	
Protected Phases	7	4		8		2	6	12
Permitted Phases			8		8			
Detector Phase	7	4	8	8	8	2	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	7.0	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	22.0	52.0	30.0	30.0	30.0	9.0	19.0	20.0
Total Split (%)	22.0%	52.0%	30.0%	30.0%	30.0%	9.0%	19.0%	20%
Yellow Time (s)	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	2.0		2.0	2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	17.5	50.0		28.0	28.0	7.0	17.0	
Actuated g/C Ratio	0.18	0.50		0.28	0.28	0.07	0.17	
v/c Ratio	0.66	0.29		0.73	0.71	0.52	0.82	
Control Delay (s/veh)	49.3	11.4		32.0	7.9	24.0	49.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)	49.3	11.4		32.0	7.9	24.0	49.1	
LOS	D	B		C	A	C	D	
Approach Delay (s/veh)		22.3		20.3		24.0	49.1	
Approach LOS		C		C		C	D	

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

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

Natural Cycle: 75

Control Type: Pretimed

Maximum v/c Ratio: 0.82

Intersection Signal Delay (s/veh): 24.5

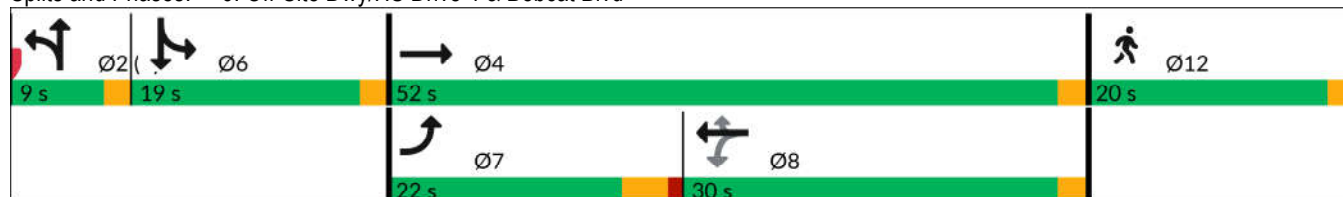
Intersection LOS: C

Intersection Capacity Utilization 58.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

						
Lane Group	EBL	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	203	505	637	599	94	278
v/c Ratio	0.66	0.29	0.73	0.71	0.52	0.82
Control Delay (s/veh)	49.3	11.4	32.0	7.9	24.0	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.3	11.4	32.0	7.9	24.0	49.1
Queue Length 50th (ft)	131	93	181	30	7	126
Queue Length 95th (ft)	181	107	194	49	42	#184
Internal Link Dist (ft)		523	603		280	279
Turn Bay Length (ft)	250			150		
Base Capacity (vph)	309	1764	875	844	181	340
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.29	0.73	0.71	0.52	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	55	373	535	117	245
Future Volume (vph)	55	373	535	117	245
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	6	7	7	4	8
Permitted Phases		6	8		
Detector Phase	6	7	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	29.0	46.0	46.0	71.0	25.0
Total Split (%)	29.0%	46.0%	46.0%	71.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lag	Lag		Lead
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	C-Min	None	None	Max	Max
Act Effect Green (s)	9.3	50.8	77.2	81.7	35.7
Actuated g/C Ratio	0.09	0.51	0.77	0.82	0.36
v/c Ratio	0.43	0.54	0.74	0.05	0.52
Control Delay (s/veh)	38.5	4.3	20.7	2.1	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.5	4.3	20.7	2.1	16.3
LOS	D	A	C	A	B
Approach Delay (s/veh)	8.7			17.4	16.3
Approach LOS	A			B	B

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 79 (79%), Referenced to phase 6:EBL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 14.8

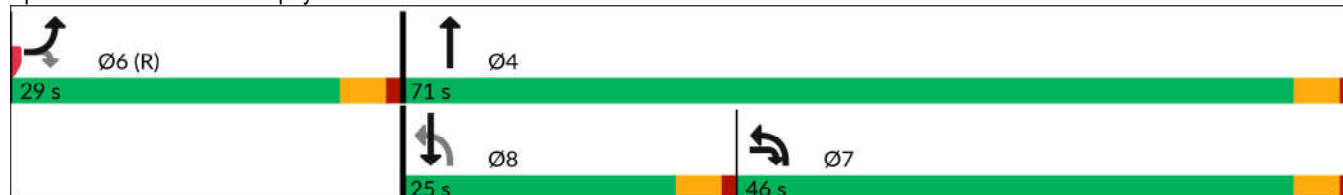
Intersection LOS: B

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	69	466	669	146	686
v/c Ratio	0.43	0.54	0.74	0.05	0.52
Control Delay (s/veh)	38.5	4.3	20.7	2.1	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.5	4.3	20.7	2.1	16.3
Queue Length 50th (ft)	38	29	197	6	102
Queue Length 95th (ft)	m63	28	276	13	132
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	425	871	908	2862	1324
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.54	0.74	0.05	0.52
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Timings

18: Bobcat Blvd

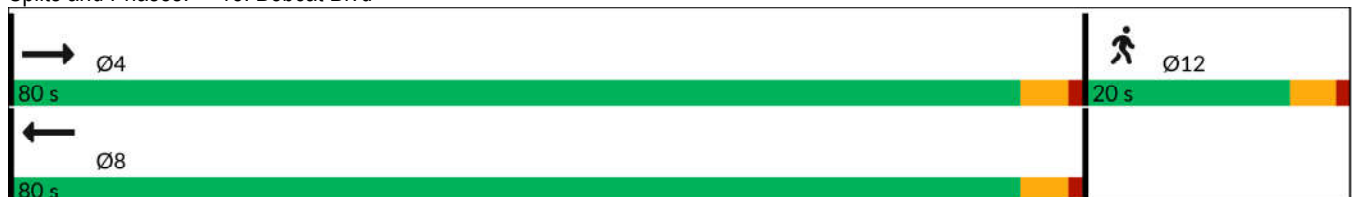
Existing (2024) AM Peak Hour with Mitigation

→

←

Lane Group	EBT	WBT	Ø12
Lane Configurations	↑↑	↑↑	
Traffic Volume (vph)	628	540	
Future Volume (vph)	628	540	
Turn Type	NA	NA	
Protected Phases	4	8	12
Permitted Phases			
Detector Phase	4	8	
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5
Total Split (s)	80.0	80.0	20.0
Total Split (%)	80.0%	80.0%	20%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	4.5	4.5	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	Max	Max	Max
Act Effct Green (s)	75.5	75.5	
Actuated g/C Ratio	0.76	0.76	
v/c Ratio	0.26	0.22	
Control Delay (s/veh)	4.0	13.6	
Queue Delay	0.0	0.5	
Total Delay (s/veh)	4.0	14.2	
LOS	A	B	
Approach Delay (s/veh)	4.0	14.2	
Approach LOS	A	B	
Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 8.7		Intersection LOS: A	
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 18: Bobcat Blvd



Queues

18: Bobcat Blvd

Existing (2024) AM Peak Hour with Mitigation

	→	←
Lane Group	EBT	WBT
Lane Group Flow (vph)	683	587
v/c Ratio	0.26	0.22
Control Delay (s/veh)	4.0	13.6
Queue Delay	0.0	0.5
Total Delay (s/veh)	4.0	14.2
Queue Length 50th (ft)	57	146
Queue Length 95th (ft)	75	171
Internal Link Dist (ft)	143	180
Turn Bay Length (ft)		
Base Capacity (vph)	2671	2671
Starvation Cap Reductn	0	1597
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.26	0.55
Intersection Summary		

Timings

5: Parkview Dr & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↖	↑↑	↖	↗
Traffic Volume (vph)	471	114	462	128	111
Future Volume (vph)	471	114	462	128	111
Turn Type	NA	Split	NA	Prot	Perm
Protected Phases	2	6	6	4	
Permitted Phases					4
Detector Phase	2	6	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0
Total Split (s)	21.0	16.0	16.0	13.0	13.0
Total Split (%)	42.0%	32.0%	32.0%	26.0%	26.0%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	Max	Max	Max
Act Effect Green (s)	19.0	14.0	14.0	11.0	11.0
Actuated g/C Ratio	0.38	0.28	0.28	0.22	0.22
v/c Ratio	0.50	0.25	0.50	0.35	0.29
Control Delay (s/veh)	8.8	7.6	9.8	19.6	6.4
Queue Delay	0.2	0.0	0.0	0.2	0.0
Total Delay (s/veh)	9.0	7.6	9.8	19.8	6.4
LOS	A	A	A	B	A
Approach Delay (s/veh)	9.0		9.3	13.6	
Approach LOS	A		A	B	

Intersection Summary

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 9.9

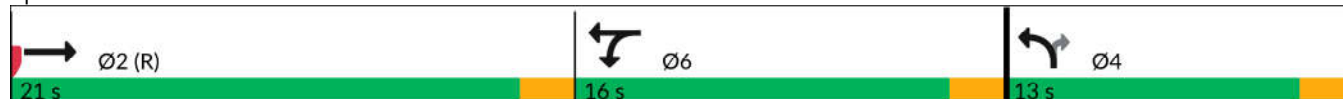
Intersection LOS: A

Intersection Capacity Utilization 42.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd



Queues

5: Parkview Dr & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	671	123	497	138	119
v/c Ratio	0.50	0.25	0.50	0.35	0.29
Control Delay (s/veh)	8.8	7.6	9.8	19.6	6.4
Queue Delay	0.2	0.0	0.0	0.2	0.0
Total Delay (s/veh)	9.0	7.6	9.8	19.8	6.4
Queue Length 50th (ft)	63	12	45	34	0
Queue Length 95th (ft)	86	m22	67	74	31
Internal Link Dist (ft)	176		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1333	495	990	389	416
Starvation Cap Reductn	142	0	0	0	0
Spillback Cap Reductn	0	0	0	32	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.56	0.25	0.50	0.39	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	Ø12
Lane Configurations								
Traffic Volume (vph)	44	557	45	523	61	0	0	
Future Volume (vph)	44	557	45	523	61	0	0	
Turn Type	Prot	NA	Perm	NA	Perm	NA	NA	
Protected Phases	7	4		8		2	6	12
Permitted Phases			8		8			
Detector Phase	7	4	8	8	8	2	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	14.0	44.0	30.0	30.0	30.0	15.0	21.0	20.0
Total Split (%)	14.0%	44.0%	30.0%	30.0%	30.0%	15.0%	21.0%	20%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	12.0	42.0		28.0	28.0	13.0	19.0	
Actuated g/C Ratio	0.12	0.42		0.28	0.28	0.13	0.19	
v/c Ratio	0.23	0.41		0.72	0.14	0.31	0.54	
Control Delay (s/veh)	45.0	15.6		34.0	5.8	13.6	32.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)	45.0	15.6		34.0	5.8	13.6	32.3	
LOS	D	B		C	A	B	C	
Approach Delay (s/veh)		17.8		31.3		13.6	32.3	
Approach LOS		B		C		B	C	

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

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

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 25.0

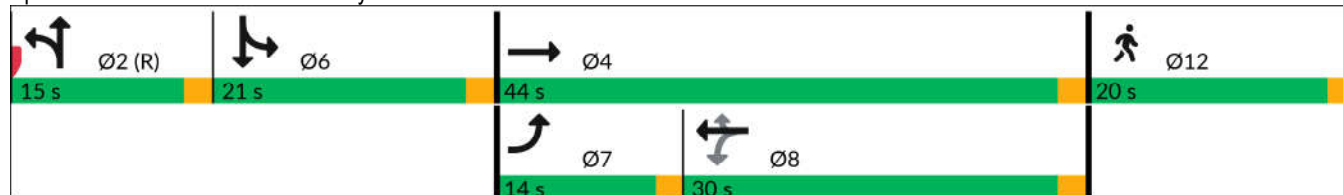
Intersection LOS: C

Intersection Capacity Utilization 59.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

						
Lane Group	EBL	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	48	606	617	66	84	192
v/c Ratio	0.23	0.41	0.72	0.14	0.31	0.54
Control Delay (s/veh)	45.0	15.6	34.0	5.8	13.6	32.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.0	15.6	34.0	5.8	13.6	32.3
Queue Length 50th (ft)	32	126	186	1	3	78
Queue Length 95th (ft)	m66	157	213	23	46	151
Internal Link Dist (ft)		523	603		280	279
Turn Bay Length (ft)	250			150		
Base Capacity (vph)	212	1486	857	470	272	353
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.41	0.72	0.14	0.31	0.54
Intersection Summary						
m Volume for 95th percentile queue is metered by upstream signal.						

Timings

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	69	495	466	209	234
Future Volume (vph)	69	495	466	209	234
Turn Type	Prot	pm+ov	D.P+P	NA	NA
Protected Phases	6	7	7	4	8
Permitted Phases		6	8		
Detector Phase	6	7	7	4	8
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	9.5	22.5	22.5
Total Split (s)	27.0	43.0	43.0	73.0	30.0
Total Split (%)	27.0%	43.0%	43.0%	73.0%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	C-Min	None	None	Max	Max
Act Effect Green (s)	9.7	27.4	76.8	81.3	59.1
Actuated g/C Ratio	0.10	0.27	0.77	0.81	0.59
v/c Ratio	0.45	0.87	0.58	0.08	0.19
Control Delay (s/veh)	49.0	43.2	5.8	2.2	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.0	43.2	5.8	2.2	9.2
LOS	D	D	A	A	A
Approach Delay (s/veh)	43.9			4.7	9.2
Approach LOS	D			A	A

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 6:EBL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 19.7

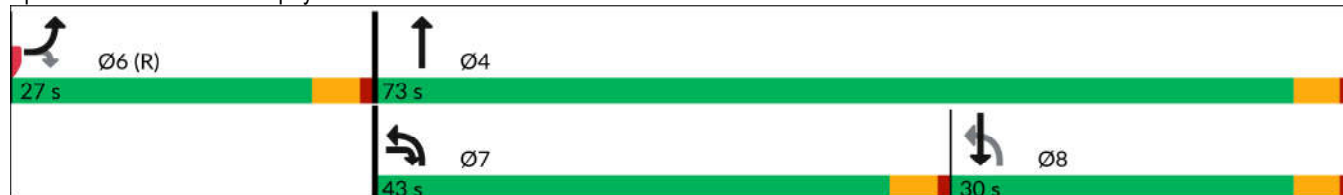
Intersection LOS: B

Intersection Capacity Utilization 67.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	76	544	512	230	379
v/c Ratio	0.45	0.87	0.58	0.08	0.19
Control Delay (s/veh)	49.0	43.2	5.8	2.2	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.0	43.2	5.8	2.2	9.2
Queue Length 50th (ft)	52	243	64	11	42
Queue Length 95th (ft)	m100	311	121	23	88
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	390	900	1094	2875	1992
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.19	0.60	0.47	0.08	0.19
Intersection Summary					
m Volume for 95th percentile queue is metered by upstream signal.					

Timings 18: Bobcat Blvd

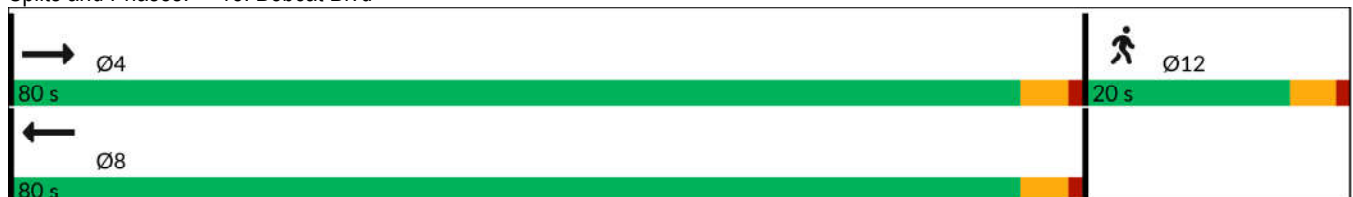
Existing (2024) PM Peak Hour with Mitigation

→

←

Lane Group	EBT	WBT	Ø12
Lane Configurations	↑↑	↑↑	
Traffic Volume (vph)	620	590	
Future Volume (vph)	620	590	
Turn Type	NA	NA	
Protected Phases	4	8	12
Permitted Phases			
Detector Phase	4	8	
Switch Phase			
Minimum Initial (s)	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5
Total Split (s)	80.0	80.0	20.0
Total Split (%)	80.0%	80.0%	20%
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	4.5	4.5	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	Max	Max	Max
Act Effct Green (s)	75.5	75.5	
Actuated g/C Ratio	0.76	0.76	
v/c Ratio	0.25	0.24	
Control Delay (s/veh)	4.0	16.5	
Queue Delay	0.0	0.6	
Total Delay (s/veh)	4.0	17.1	
LOS	A	B	
Approach Delay (s/veh)	4.0	17.1	
Approach LOS	A	B	
Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.25			
Intersection Signal Delay (s/veh): 10.4		Intersection LOS: B	
Intersection Capacity Utilization 20.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 18: Bobcat Blvd



Queues

18: Bobcat Blvd

Existing (2024) PM Peak Hour with Mitigation

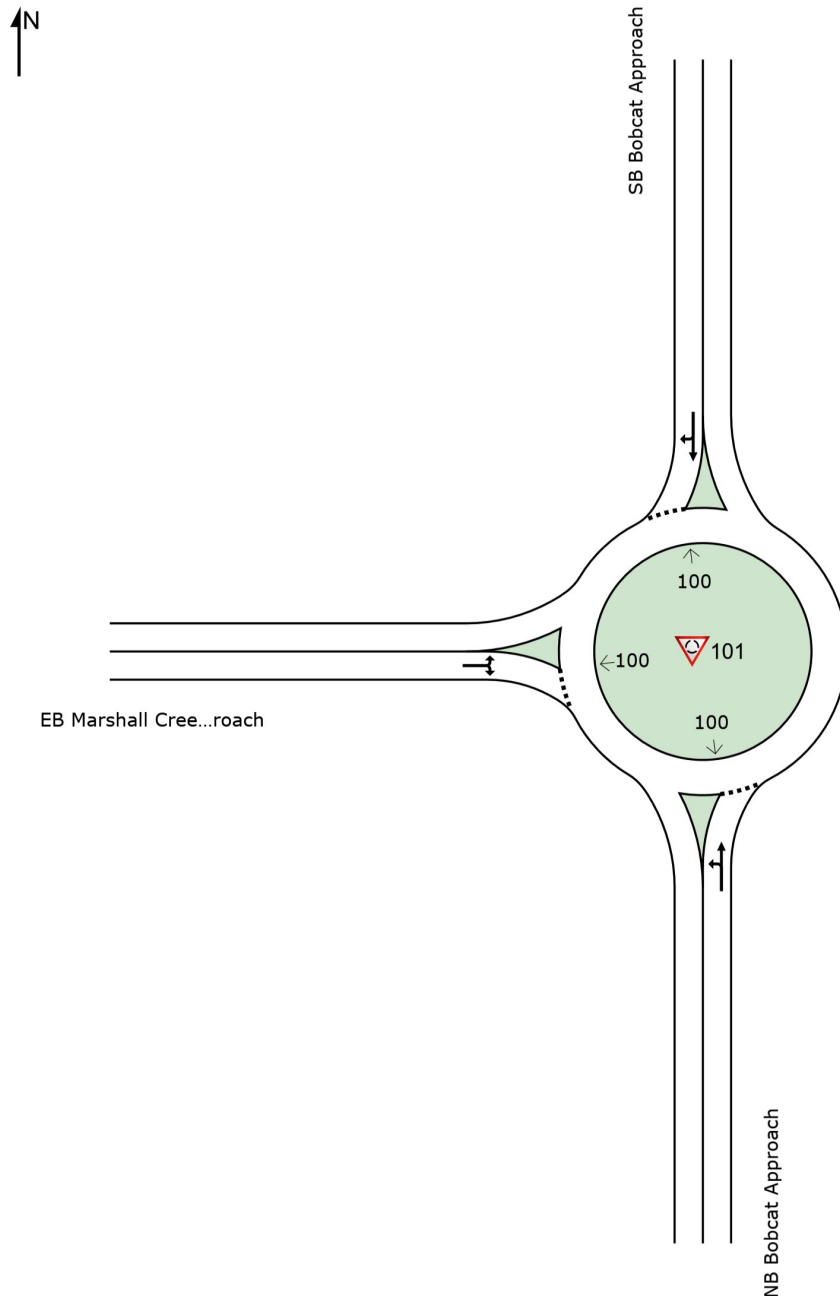
	→	←
Lane Group	EBT	WBT
Lane Group Flow (vph)	674	641
v/c Ratio	0.25	0.24
Control Delay (s/veh)	4.0	16.5
Queue Delay	0.0	0.6
Total Delay (s/veh)	4.0	17.1
Queue Length 50th (ft)	56	182
Queue Length 95th (ft)	74	185
Internal Link Dist (ft)	144	176
Turn Bay Length (ft)		
Base Capacity (vph)	2671	2671
Starvation Cap Reductn	0	1547
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.25	0.57
Intersection Summary		

SITE LAYOUT

 **Site: 101 [4. 2024 AM - Marshall Creek at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 **Site: 101 [4. 2024 AM - Marshall Creek at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: NB Bobcat Approach														
3	L2	158	3.0	193	3.0	0.616	12.2	LOS B	6.7	171.3	0.69	0.69	0.94	31.0
8	T1	352	3.0	429	3.0	0.616	12.2	LOS B	6.7	171.3	0.69	0.69	0.94	31.0
Approach		510	3.0	622	3.0	0.616	12.2	LOS B	6.7	171.3	0.69	0.69	0.94	31.0
North: SB Bobcat Approach														
4	T1	307	3.0	374	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	33.7
14	R2	77	3.0	94	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	32.8
Approach		384	3.0	468	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	33.5
West: EB Marshall Creek Approach														
5	L2	219	3.0	267	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	28.6
12	R2	321	3.0	391	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	27.9
Approach		540	3.0	659	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	28.2
All Vehicles		1434	3.0	1749	3.0	0.728	13.0	LOS B	11.0	281.0	0.69	0.76	1.07	30.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [4. 2024 PM - Marshall Creek at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: NB Bobcat Approach														
3	L2	285	3.0	313	3.0	0.567	9.4	LOS A	4.7	120.2	0.33	0.15	0.33	31.9
8	T1	362	3.0	398	3.0	0.567	9.4	LOS A	4.7	120.2	0.33	0.15	0.33	31.9
Approach		647	3.0	711	3.0	0.567	9.4	LOS A	4.7	120.2	0.33	0.15	0.33	31.9
North: SB Bobcat Approach														
4	T1	345	3.0	379	3.0	0.511	10.1	LOS B	3.7	94.5	0.64	0.59	0.74	32.6
14	R2	103	3.0	113	3.0	0.511	10.1	LOS B	3.7	94.5	0.64	0.59	0.74	31.7
Approach		448	3.0	492	3.0	0.511	10.1	LOS B	3.7	94.5	0.64	0.59	0.74	32.4
West: EB Marshall Creek Approach														
5	L2	52	3.0	57	3.0	0.400	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	32.9
12	R2	275	3.0	302	3.0	0.400	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	31.9
Approach		327	3.0	359	3.0	0.400	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	32.0
All Vehicles		1422	3.0	1563	3.0	0.567	9.5	LOS A	4.7	120.2	0.49	0.38	0.52	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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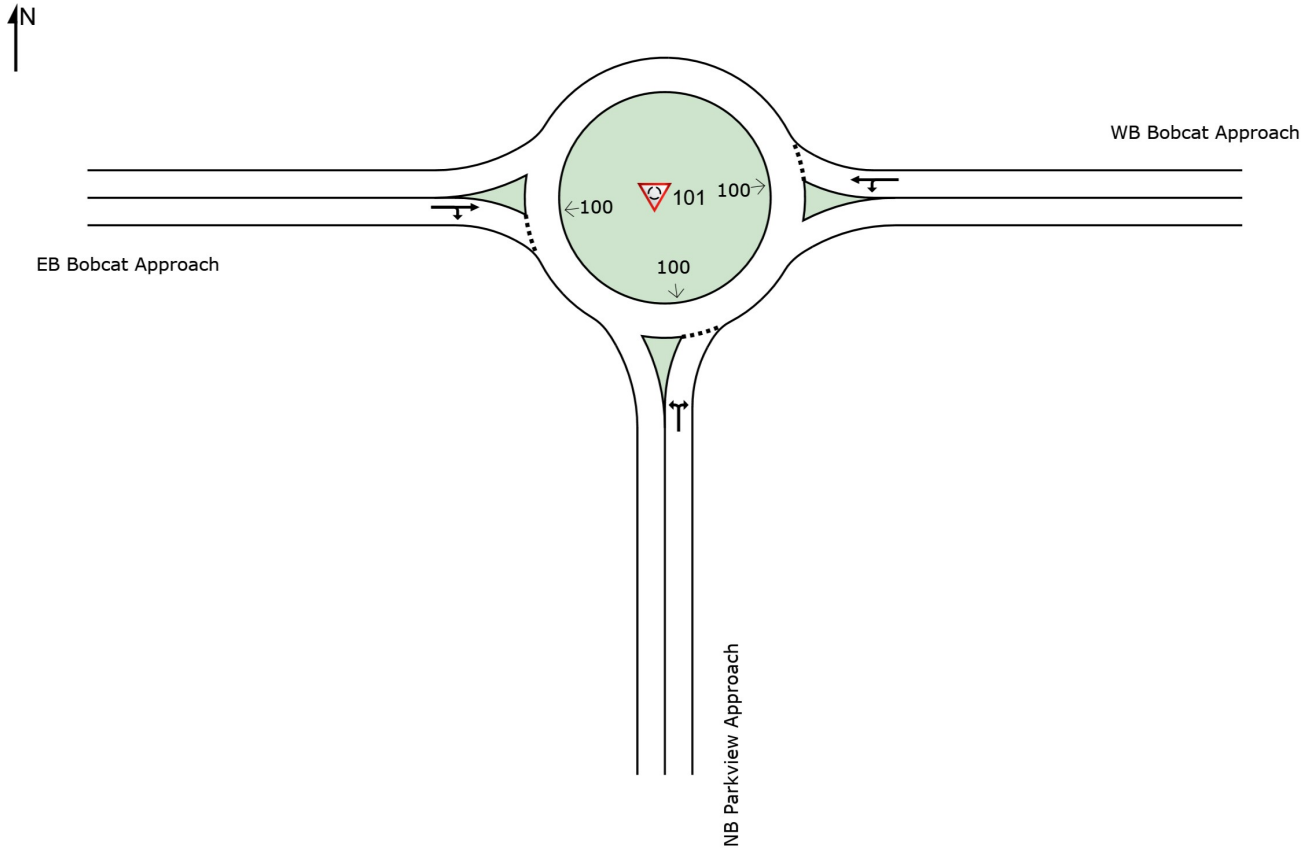
Project: H:\T2124.01 - School Area Eval-Traffic Flow_Control Devices\SIDRA\Bobcat Blvd roundabout test.sip9

SITE LAYOUT

 **Site: 101 [5. 2024 AM - Parkview at Bobcat (Site Folder: General)]**

Parkview Dr at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

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MOVEMENT SUMMARY

 **Site: 101 [5. 2024 AM - Parkview at Bobcat (Site Folder: General)]**

Parkview Dr at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: NB Parkview Approach														
3	L2	166	3.0	189	3.0	0.457	10.3	LOS B	2.9	73.6	0.68	0.72	0.84	31.3
18	R2	164	3.0	186	3.0	0.457	10.3	LOS B	2.9	73.6	0.68	0.72	0.84	30.4
Approach		330	3.0	375	3.0	0.457	10.3	LOS B	2.9	73.6	0.68	0.72	0.84	30.9
East: WB Bobcat Approach														
1	L2	216	3.0	245	3.0	0.610	11.3	LOS B	4.8	122.0	0.61	0.45	0.62	31.3
6	T1	374	3.0	425	3.0	0.610	11.3	LOS B	4.8	122.0	0.61	0.45	0.62	31.2
Approach		590	3.0	670	3.0	0.610	11.3	LOS B	4.8	122.0	0.61	0.45	0.62	31.2
West: EB Bobcat Approach														
2	T1	411	3.0	467	3.0	0.664	13.4	LOS B	8.8	225.7	0.72	0.74	1.05	31.1
12	R2	192	3.0	218	3.0	0.664	13.4	LOS B	8.8	225.7	0.72	0.74	1.05	30.3
Approach		603	3.0	685	3.0	0.664	13.4	LOS B	8.8	225.7	0.72	0.74	1.05	30.9
All Vehicles		1523	3.0	1731	3.0	0.664	11.9	LOS B	8.8	225.7	0.67	0.62	0.84	31.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [5. 2024 PM - Parkview at Bobcat (Site Folder: General)]**

Parkview Dr at Bobcat Blvd
Single-lane Roundabout
Existing (2024) PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: NB Parkview Approach														
3	L2	128	3.0	138	3.0	0.329	8.5	LOS A	1.5	38.6	0.63	0.61	0.63	32.0
18	R2	111	3.0	119	3.0	0.329	8.5	LOS A	1.5	38.6	0.63	0.61	0.63	31.1
Approach		239	3.0	257	3.0	0.329	8.5	LOS A	1.5	38.6	0.63	0.61	0.63	31.6
East: WB Bobcat Approach														
1	L2	114	3.0	123	3.0	0.534	9.3	LOS A	3.9	99.0	0.48	0.31	0.48	32.6
6	T1	462	3.0	497	3.0	0.534	9.3	LOS A	3.9	99.0	0.48	0.31	0.48	32.5
Approach		576	3.0	619	3.0	0.534	9.3	LOS A	3.9	99.0	0.48	0.31	0.48	32.6
West: EB Bobcat Approach														
2	T1	471	3.0	506	3.0	0.573	10.0	LOS A	4.4	113.5	0.49	0.30	0.49	32.7
12	R2	153	3.0	165	3.0	0.573	10.0	LOS A	4.4	113.5	0.49	0.30	0.49	31.8
Approach		624	3.0	671	3.0	0.573	10.0	LOS A	4.4	113.5	0.49	0.30	0.49	32.5
All Vehicles		1439	3.0	1547	3.0	0.573	9.4	LOS A	4.4	113.5	0.51	0.35	0.51	32.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

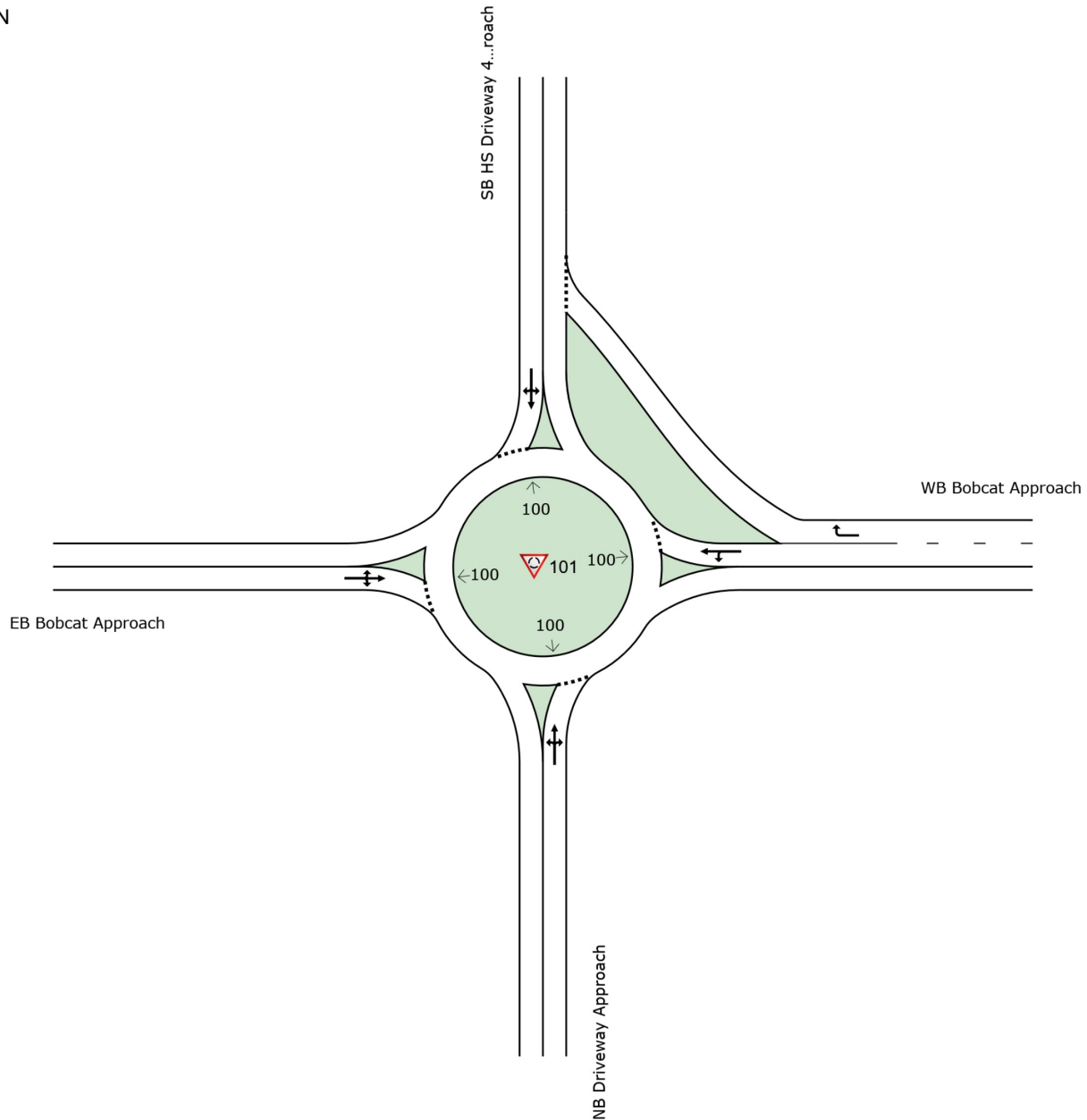
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Project: H:\T2124.01 - School Area Eval-Traffic Flow_Control Devices\SIDRA\Bobcat Blvd roundabout test.sip9

SITE LAYOUT

 **Site: 101 [6. 2024 AM - HS Dwy 4 at Bobcat w RT Lane (Site Folder: General)]**

High School Driveway 4 at Bobcat Blvd
Single-lane Roundabout with WB Right Turn Lane
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 **Site: 101 [6. 2024 AM - HS Dwy 4 at Bobcat w RT Lane (Site Folder: General)]**

High School Driveway 4 at Bobcat Blvd
Single-lane Roundabout with WB Right Turn Lane
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: NB Driveway Approach														
3	L2	6	3.0	8	3.0	0.161	8.2	LOS A	0.6	15.9	0.65	0.65	0.65	33.3
8	T1	3	3.0	4	3.0	0.161	8.2	LOS A	0.6	15.9	0.65	0.65	0.65	33.2
18	R2	64	3.0	82	3.0	0.161	8.2	LOS A	0.6	15.9	0.65	0.65	0.65	32.3
Approach		73	3.0	94	3.0	0.161	8.2	LOS A	0.6	15.9	0.65	0.65	0.65	32.4
East: WB Bobcat Approach														
1	L2	37	3.0	47	3.0	0.565	10.1	LOS B	3.7	95.8	0.56	0.42	0.56	32.5
6	T1	460	3.0	590	3.0	0.565	10.1	LOS B	3.7	95.8	0.56	0.42	0.56	32.5
16	R2	467	3.0	599	3.0	0.527	9.3	LOS A	3.3	85.3	0.52	0.38	0.52	32.0
Approach		964	3.0	1236	3.0	0.565	9.7	LOS A	3.7	95.8	0.54	0.40	0.54	32.3
North: SB HS Driveway 4 Approach														
7	L2	77	3.0	99	3.0	0.409	10.9	LOS B	2.2	55.9	0.70	0.76	0.88	31.3
4	T1	1	3.0	1	3.0	0.409	10.9	LOS B	2.2	55.9	0.70	0.76	0.88	31.3
14	R2	139	3.0	178	3.0	0.409	10.9	LOS B	2.2	55.9	0.70	0.76	0.88	30.5
Approach		217	3.0	278	3.0	0.409	10.9	LOS B	2.2	55.9	0.70	0.76	0.88	30.8
West: EB Bobcat Approach														
5	L2	158	3.0	203	3.0	0.619	11.2	LOS B	5.0	129.1	0.57	0.38	0.57	31.5
2	T1	386	3.0	495	3.0	0.619	11.2	LOS B	5.0	129.1	0.57	0.38	0.57	31.5
12	R2	8	3.0	10	3.0	0.619	11.2	LOS B	5.0	129.1	0.57	0.38	0.57	30.6
Approach		552	3.0	708	3.0	0.619	11.2	LOS B	5.0	129.1	0.57	0.38	0.57	31.5
All Vehicles		1806	3.0	2315	3.0	0.619	10.2	LOS B	5.0	129.1	0.57	0.45	0.59	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [6. 2024 PM - HS Dwy 4 at Bobcat w RT Lane (Site Folder: General)]**

High School Driveway 4 at Bobcat Blvd
Single-lane Roundabout with WB Right Turn Lane
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: NB Driveway Approach														
3	L2	5	3.0	5	3.0	0.144	7.8	LOS A	0.6	14.1	0.64	0.64	0.64	33.6
8	T1	1	3.0	1	3.0	0.144	7.8	LOS A	0.6	14.1	0.64	0.64	0.64	33.5
18	R2	73	3.0	79	3.0	0.144	7.8	LOS A	0.6	14.1	0.64	0.64	0.64	32.5
Approach		79	3.0	86	3.0	0.144	7.8	LOS A	0.6	14.1	0.64	0.64	0.64	32.6
East: WB Bobcat Approach														
1	L2	45	3.0	49	3.0	0.471	7.5	LOS A	3.1	79.4	0.25	0.11	0.25	33.8
6	T1	523	3.0	568	3.0	0.471	7.5	LOS A	3.1	79.4	0.25	0.11	0.25	33.7
16	R2	61	3.0	66	3.0	0.050	3.1	LOS A	0.2	5.0	0.14	0.05	0.14	35.1
Approach		629	3.0	684	3.0	0.471	7.1	LOS A	3.1	79.4	0.24	0.10	0.24	33.8
North: SB HS Driveway 4 Approach														
7	L2	106	3.0	115	3.0	0.278	8.5	LOS A	1.2	30.5	0.64	0.64	0.64	31.9
4	T1	1	3.0	1	3.0	0.278	8.5	LOS A	1.2	30.5	0.64	0.64	0.64	31.8
14	R2	71	3.0	77	3.0	0.278	8.5	LOS A	1.2	30.5	0.64	0.64	0.64	31.0
Approach		178	3.0	193	3.0	0.278	8.5	LOS A	1.2	30.5	0.64	0.64	0.64	31.5
West: EB Bobcat Approach														
5	L2	44	3.0	48	3.0	0.583	10.5	LOS B	4.4	112.4	0.56	0.39	0.56	32.3
2	T1	557	3.0	605	3.0	0.583	10.5	LOS B	4.4	112.4	0.56	0.39	0.56	32.3
12	R2	1	3.0	1	3.0	0.583	10.5	LOS B	4.4	112.4	0.56	0.39	0.56	31.4
Approach		602	3.0	654	3.0	0.583	10.5	LOS B	4.4	112.4	0.56	0.39	0.56	32.3
All Vehicles		1488	3.0	1617	3.0	0.583	8.7	LOS A	4.4	112.4	0.44	0.31	0.44	32.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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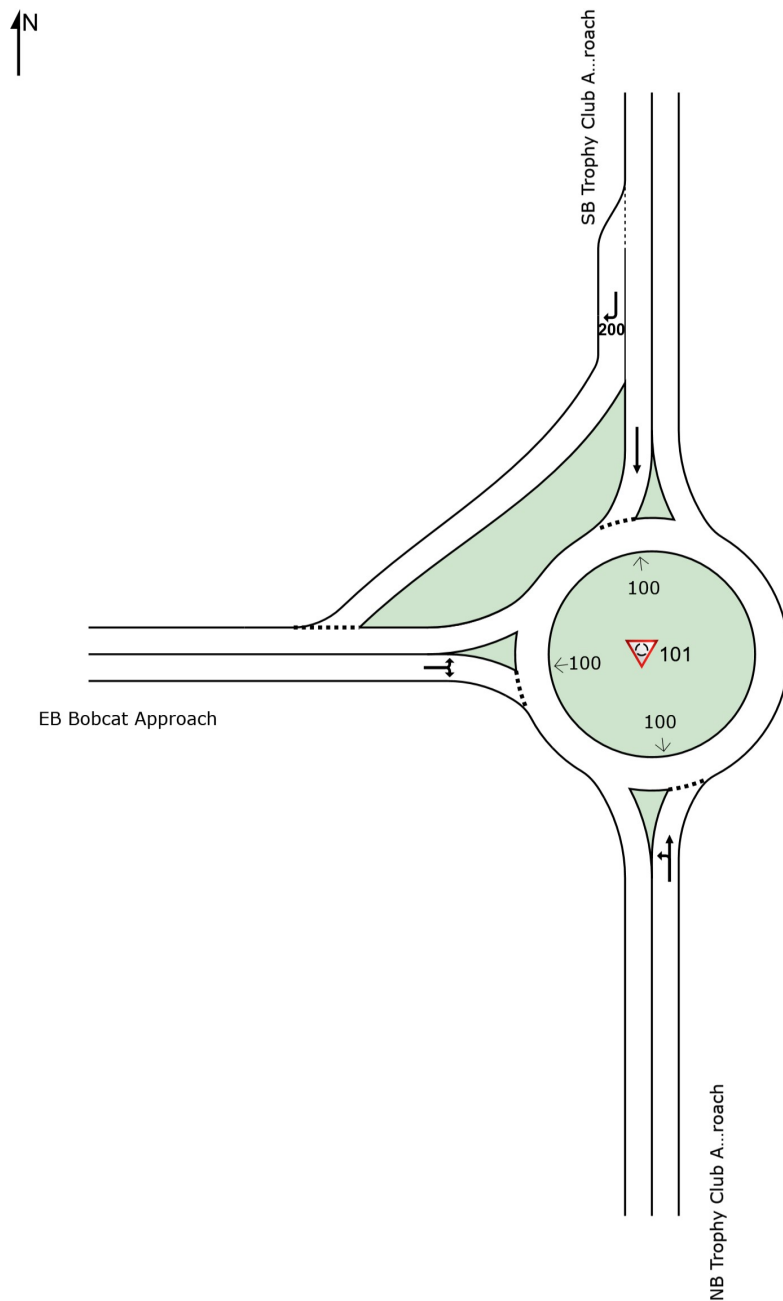
Project: H:\T2124.01 - School Area Eval-Traffic Flow_Control Devices\SIDRA\Bobcat Blvd roundabout test.sip9

SITE LAYOUT

 **Site: 101 [7. 2024 AM - Trophy Club at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 **Site: 101 [7. 2024 AM - Trophy Club at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) AM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: NB Trophy Club Approach														
3	L2	535	3.0	669	3.0	0.655	11.5	LOS B	6.4	165.0	0.44	0.22	0.44	30.2
8	T1	117	3.0	146	3.0	0.655	11.5	LOS B	6.4	165.0	0.44	0.22	0.44	30.2
Approach		652	3.0	815	3.0	0.655	11.5	LOS B	6.4	165.0	0.44	0.22	0.44	30.2
North: SB Trophy Club Approach														
4	T1	245	3.0	306	3.0	0.417	10.4	LOS B	2.2	55.7	0.67	0.74	0.87	32.5
14	R2	304	3.0	380	3.0	0.517	12.6	LOS B	3.3	85.4	0.72	0.85	1.10	30.5
Approach		549	3.0	686	3.0	0.517	11.6	LOS B	3.3	85.4	0.70	0.80	1.00	31.4
West: EB Bobcat Approach														
5	L2	55	4.0	69	4.0	0.552	11.0	LOS B	4.7	120.0	0.66	0.65	0.84	31.8
12	R2	373	3.0	466	3.0	0.552	10.9	LOS B	4.7	120.0	0.66	0.65	0.84	30.9
Approach		428	3.1	535	3.1	0.552	10.9	LOS B	4.7	120.0	0.66	0.65	0.84	31.1
All Vehicles		1629	3.0	2036	3.0	0.655	11.4	LOS B	6.4	165.0	0.59	0.53	0.73	30.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [7. 2024 PM - Trophy Club at Bobcat (Site Folder: General)]**

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: NB Trophy Club Approach														
3	L2	466	3.0	512	3.0	0.600	10.2	LOS B	5.2	133.8	0.41	0.21	0.41	31.0
8	T1	209	3.0	230	3.0	0.600	10.2	LOS B	5.2	133.8	0.41	0.21	0.41	30.9
Approach		675	3.0	742	3.0	0.600	10.2	LOS B	5.2	133.8	0.41	0.21	0.41	31.0
North: SB Trophy Club Approach														
4	T1	234	3.0	257	3.0	0.303	7.6	LOS A	1.3	33.2	0.58	0.55	0.58	33.9
14	R2	111	3.0	122	3.0	0.144	5.7	LOS A	0.6	14.1	0.52	0.46	0.52	33.8
Approach		345	3.0	379	3.0	0.303	7.0	LOS A	1.3	33.2	0.56	0.52	0.56	33.9
West: EB Bobcat Approach														
5	L2	69	4.0	76	4.0	0.607	11.9	LOS B	6.3	160.8	0.67	0.65	0.88	31.4
12	R2	495	3.0	544	3.0	0.607	11.8	LOS B	6.3	160.8	0.67	0.65	0.88	30.6
Approach		564	3.1	620	3.1	0.607	11.8	LOS B	6.3	160.8	0.67	0.65	0.88	30.7
All Vehicles		1584	3.0	1741	3.0	0.607	10.1	LOS B	6.3	160.8	0.54	0.44	0.61	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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TRAFFIC SIGNAL WARRANT – PRELIMINARY ANALYSIS

A description of the evaluated warrants is provided below.

Warrant 1 – Eight-Hour Vehicular Volume

Warrant 1 is based on the volumes from both approaches on the major street and the higher approach volume on the minor street. It also uses the number of lanes for moving traffic on each approach. Either Condition A or Condition B of this warrant must be met for Warrant 1 to be satisfied.

The *Texas MUTCD* allows for the use of a reduced warranting threshold (70%) for intersections where the posted or 85th-percentile speed exceeds 40 mph or if the intersection is located in a community with a population under 10,000. Since the posted speed limits (30 mph) on the major roads (Bobcat Boulevard and/or Trophy Club Road) are less than 40 mph, the reduced warranting threshold was not utilized for this analysis.

Condition A of Warrant 1 is met when, for each of any eight (8) hours of an average day, the warranting volumes exist on the major street and on the higher-volume minor street approach to the intersection during the same eight hours. The warranting threshold for an approach with two or more lanes on the major street and an approach with two or more lanes on the minor street is:

Major Street: 600 vph (total for both directions)
Minor Street: 200 vph (higher volume approach)

Condition B of Warrant 1 applies to operating conditions where the major street traffic is so heavy that it creates excessive delay or hazardous conditions for minor street traffic when entering or crossing the major street. The warrant condition is met when, for each of any eight hours of an average day, the warranting volumes exist on the major street and on the higher-volume minor street approach to an intersection. The warranting threshold for an approach with two or more lanes on the major street and an approach with two or more lanes on the minor street is:

Major Street: 900 vph (total for both directions)
Minor Street: 100 vph (higher volume approach)

A combination of Conditions A and B may be applied at locations where Conditions A and B are not satisfied. The same eight hours of the day are not required to be used for meeting both conditions. Under the combination warrant, the warranting thresholds are:

Major Street: 480 vph and 720 vph for Conditions A and B, respectively
(total for both directions)
Minor Street: 160 vph and 80 vph for Conditions A and B, respectively
(higher volume approach)

Warrant 2 – Four-Hour Volumes

Warrant 2 is satisfied when the volumes for any four (4) hours of an average day, when plotted on Figure 4C-1 (or 4C-2 when applicable) of the *Texas MUTCD*, fall above the curve for the appropriate number of lanes. Since the posted speed limits (30 mph) on the major roads (Bobcat Boulevard and/or Trophy Club Road) are less than 40 mph, the reduced warranting threshold was not utilized for this analysis and Figure 4C-1 was utilized for all four intersections.

Warrant 3 – Peak Hour Volume

Warrant 3 is intended for application when traffic conditions are such that for at least one (1) hour of the day, the minor street traffic experiences undue delays entering or crossing the major street. Warrant 3 is satisfied when either of the following conditions is met:

1. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:
 - a. The delay experienced by the traffic on the minor-street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach, and
 - b. The volume on the same minor-street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and
 - c. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

TRAFFIC SIGNAL WARRANT – PRELIMINARY ANALYSIS

A description of the evaluated warrants is provided below.

Warrant 1 – Eight-Hour Vehicular Volume

Warrant 1 is based on the volumes from both approaches on the major street and the higher approach volume on the minor street. It also uses the number of lanes for moving traffic on each approach. Either Condition A or Condition B of this warrant must be met for Warrant 1 to be satisfied.

The *Texas MUTCD* allows for the use of a reduced warranting threshold (70%) for intersections where the posted or 85th-percentile speed exceeds 40 mph or if the intersection is located in a community with a population under 10,000. Since the posted speed limits (30 mph) on the major roads (Bobcat Boulevard and/or Trophy Club Road) are less than 40 mph, the reduced warranting threshold was not utilized for this analysis.

Condition A of Warrant 1 is met when, for each of any eight (8) hours of an average day, the warranting volumes exist on the major street and on the higher-volume minor street approach to the intersection during the same eight hours. The warranting threshold for an approach with two or more lanes on the major street and an approach with two or more lanes on the minor street is:

Major Street: 600 vph (total for both directions)
Minor Street: 200 vph (higher volume approach)

Condition B of Warrant 1 applies to operating conditions where the major street traffic is so heavy that it creates excessive delay or hazardous conditions for minor street traffic when entering or crossing the major street. The warrant condition is met when, for each of any eight hours of an average day, the warranting volumes exist on the major street and on the higher-volume minor street approach to an intersection. The warranting threshold for an approach with two or more lanes on the major street and an approach with two or more lanes on the minor street is:

Major Street: 900 vph (total for both directions)
Minor Street: 100 vph (higher volume approach)

A combination of Conditions A and B may be applied at locations where Conditions A and B are not satisfied. The same eight hours of the day are not required to be used for meeting both conditions. Under the combination warrant, the warranting thresholds are:

Major Street: 480 vph and 720 vph for Conditions A and B, respectively
(total for both directions)
Minor Street: 160 vph and 80 vph for Conditions A and B, respectively
(higher volume approach)

Warrant 2 – Four-Hour Volumes

Warrant 2 is satisfied when the volumes for any four (4) hours of an average day, when plotted on Figure 4C-1 (or 4C-2 when applicable) of the *Texas MUTCD*, fall above the curve for the appropriate number of lanes. Since the posted speed limits (30 mph) on the major roads (Bobcat Boulevard and/or Trophy Club Road) are less than 40 mph, the reduced warranting threshold was not utilized for this analysis and Figure 4C-1 was utilized for all four intersections.

Warrant 3 – Peak Hour Volume

Warrant 3 is intended for application when traffic conditions are such that for at least one (1) hour of the day, the minor street traffic experiences undue delays entering or crossing the major street. Warrant 3 is satisfied when either of the following conditions is met:

1. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:
 - a. The delay experienced by the traffic on the minor-street approach controlled by a STOP sign equals or exceeds 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach, and
 - b. The volume on the same minor-street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and
 - c. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

2. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 (or Figure 4C-4) for the existing combination of approach lanes.

As further specified in the *Texas MUTCD*:

“This signal warrant shall be applied only in unusual cases such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.”

It is unclear if traffic characteristics at these intersections fall under the unusual cases identified above. A school does tend to attract or discharge a large number of vehicles over a short time. However, schools are not specifically mentioned in the *Texas MUTCD*. However, Warrant 3 graphs were evaluated for reference. Since the posted speed limits (30 mph) on the major roads (Bobcat Boulevard and/or Trophy Club Road) are less than 40 mph, the reduced warranting threshold was not utilized for this analysis and Figure 4C-3 was utilized for all four intersections.

For the delay portion of Warrant 3, delay was estimated using *Synchro* traffic analysis software, as presented in the letter. Based on this analysis, all four intersections are anticipated to meet the delay portion of Warrant 3 during the AM peak hour. Additionally, all intersections except at Marshall Creek Road are anticipated to meet delay thresholds during the School PM peak hour. See the estimated delay values for each intersection below for reference.

Intersection	Delay in Vehicle-Hours for Minor Street Approach	
	AM Peak Hour	School PM Peak Hour
Marshall Creek at Bobcat	19.5	2.5
Parkview at Bobcat	20.8	6.3
High School Dwy 4 at Bobcat	89.7	9.9
Bobcat at Trophy Club	37.7	8.1

Warrant 5 – School Crossing

This warrant applies at an established school crossing where a traffic engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of school children at the school crossing shows that the number of adequate gaps in the traffic during the period when the children are using the crossing is less than the number of minutes in the same period and there are a minimum of 20 school children during the highest crossing hour. This warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless the proposed traffic control signal will not restrict progression. It is recommended to consider implementing other remedial measures prior to signal installation, such as warning signs/flashers, school speed zones, crossing guards, and grade-separated crossings.

Each of the four intersections has at least one marked crosswalk on the major roadway. As identified in Table 6 of the letter, there are enough pedestrians crossing to satisfy this warrant at all intersections except the intersection of Bobcat Boulevard and Trophy Club Drive.

As previously noted, gap studies were not performed as part of this work effort. For reference, the length of gap required is based on average walking speed (assumed 3.5 ft/sec), pedestrian start-up and clearance time (assumed 5 seconds) and crossing distance. The crossing distance is impacted by whether a median exists such that a pedestrian can stop in the median to wait for additional gaps in traffic and thus make a two-stage crossing. At the intersections at Marshall Creek Road and at Parkview Drive, there is a median present and the crossing may be completed in two stages. When treated as a two-stage crossing, the crossing distance across Bobcat Boulevard at the crosswalk is approximately 42 feet from the center of curb ramp to center of the median. In this case, pedestrians would require a 17-second gap in vehicular traffic to cross each leg of Bobcat Boulevard. At the High School Driveway 4 intersection, there is no median and the crossing distance across Bobcat Boulevard at the crosswalk is approximately 50 feet from the center of curb ramp to center of curb ramp. In this case, pedestrians would require a 19-second gap in vehicular traffic to cross the entirety of Bobcat Boulevard.

In order to evaluate whether an adequate number of gaps exists, a gap study would be required on Bobcat Boulevard. However, as noted above, this warrant recommends other measures before traffic signal installation. These locations are already within a 20-mph reduced speed school zone and there are crossing guards present during school peak hours.

Warrant 7 – Crash Experience

The warrant is satisfied when:

1. Adequate trial of less restrictive remedies with satisfactory observance and enforcement has failed to reduce the crash frequency; and
2. Five or more reported crashes, of types susceptible to correction by traffic signal control, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
3. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1, or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours. If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Lee Engineering obtained all available crash reports that have occurred at these intersections between 2014 and present from TxDOT's online C.R.I.S. Query tool. As noted in Table 6 of this letter, none of the intersections had five or more crashes susceptible to correction by traffic signal control within a 12-month period. The highest number of crashes occurred at the intersection of Bobcat Boulevard and Trophy Club Drive, where four (4) crashes susceptible to correction by traffic signal control occurred within a 12-month period. A summary of all available crash data is shown below for reference. The highest number of crashes susceptible to correction by traffic signal control within a 12-month period are highlighted for each intersection.

Crash ID	Crash Type	Potentially Correctible by Signal?	Crash Date	Crash Severity	Light Condition	Pavement Surface Condition
Marshall Creek Road at Bobcat Boulevard						
13703655	Right Turn	No	2/6/2014	Not Injured	Daylight	Snow
Parkview Drive at Bobcat Boulevard						
14352739	Right Angle	YES	2/27/2015	Not Injured	Daylight	Slush
16538943	Fixed Object	No	7/15/2018	Fatal Injury	Daylight	Dry
17355925	Fixed Object	No	10/21/2019	Not Injured	Daylight	Dry
17969728	Right Angle	YES	11/13/2020	Not Injured	Daylight	Dry
High School Driveway 4 at Bobcat Boulevard						
15331510	Pedestrian	YES	9/15/2016	Suspected Minor Injury	Daylight	Dry
16418931	Rear End	No	5/16/2018	Not Injured	Daylight	Dry
19152169	Fixed Object	No	10/5/2022	Suspected Minor Injury	Daylight	Dry
19507546	Fixed Object	No	4/23/2023	Not Injured	Daylight	Dry
19892782	Right Angle	YES	11/6/2023	Not Injured	Daylight	Dry
Bobcat Boulevard at Trophy Club Drive						
13698685	Sideswipe	No	2/6/2014	Not Injured	Daylight	Snow
13757587	Fixed Object	No	2/8/2014	Not Injured	Daylight	Dry
13836908	Left Turn	YES	5/10/2014	Possible Injury	Daylight	Dry
15543732	Rear End	No	1/15/2017	Not Injured	Daylight	Wet
16849370	Right Angle	YES	1/10/2019	Suspected Minor Injury	Dark, Lighted	Dry
18785601	Rear End	No	2/28/2022	Not Injured	Daylight	Dry
19165980	Left Turn	YES	10/8/2022	Not Injured	Daylight	Dry
19458297	Right Angle	YES	3/26/2023	Not Injured	Daylight	Dry
19600321	Right Angle	YES	6/14/2023	Not Injured	Daylight	Dry
19705873	Right Angle	YES	8/16/2023	Not Injured	Daylight	Dry
19855903	Left Turn	YES	11/4/2023	Not Injured	Daylight	Dry
20159027	Left Turn	YES	4/23/2024	Not Injured	Daylight	Dry

Warrant Volume Data

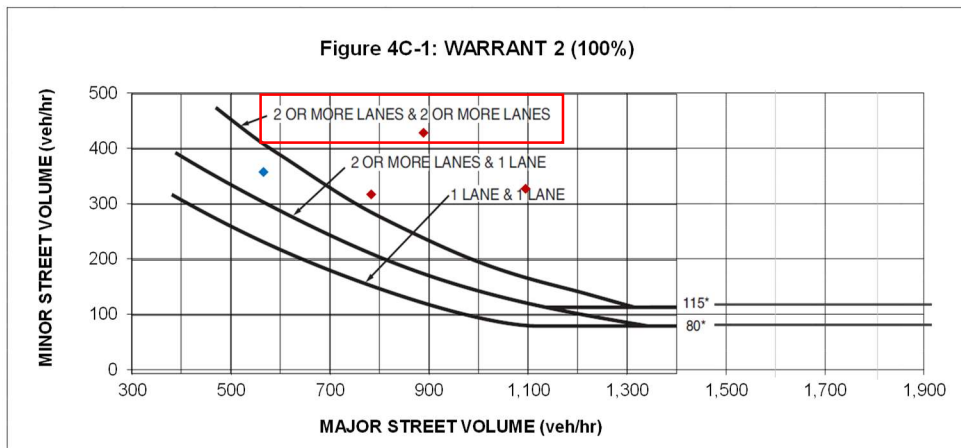
The following four pages include traffic volume data and applicable graphs for Warrants 2 and 3 for each intersection.

Marshall Creek Road at Bobcat Boulevard

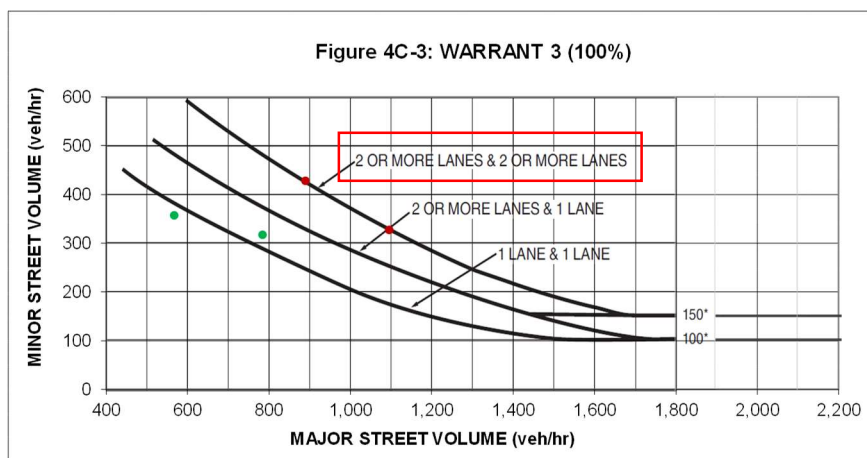
The four-hour volumes and volume warrant results for the intersection of Marshall Creek Road and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			Marshall Creek Rd			Pedestrians Crossing Major	Meets Warrants?					
	NB Volume	SB Volume	Total Volume	EB Volume	WB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	306	260	566	357	0	357	11	-	-	Y	-	-	-
8:00	513	376	889	428	0	428	20	Y	-	Y	Y	Y	Y
15:00	449	334	783	317	0	317	16	Y	-	Y	Y	Y	-
16:00	647	448	1,095	327	0	327	46	Y	Y	Y	Y	Y	Y
TOTAL	1,915	1,418	3,333	1,429	0	1,429	93	3	1	4	3	3	2
										3			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

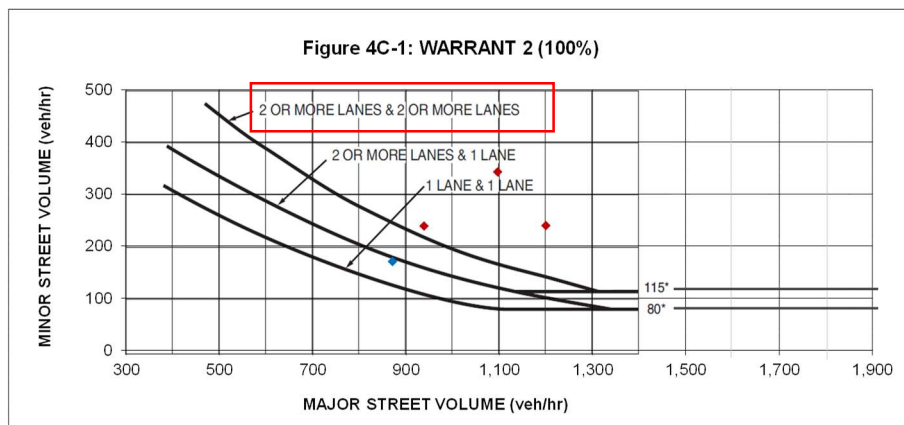


Parkview Drive at Bobcat Boulevard

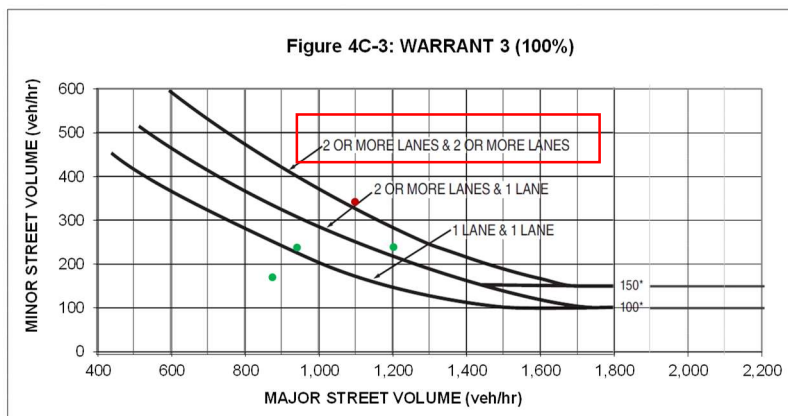
The four-hour volumes and volume warrant results for the intersection of Parkview Drive and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			Parkview Drive			Pedestrians Crossing Major	Meets Warrants?					
	EB Volume	WB Volume	Total Volume	NB Volume	SB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	514	425	939	238		238	12	Y	Y	Y	Y	Y	-
8:00	546	550	1,096	342		342	14	Y	Y	Y	Y	Y	Y
15:00	415	457	872	170		170	7	-	-	Y	Y	-	-
16:00	624	576	1,200	239		239	38	Y	Y	Y	Y	Y	-
TOTAL	2,099	2,008	4,107	989	0	989	71	3	3	4	4	3	1
										4			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

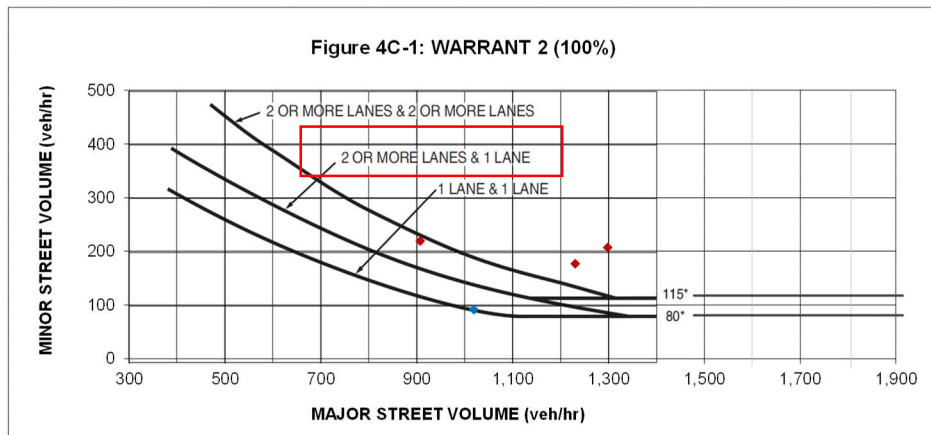


High School Driveway 4 at Bobcat Boulevard

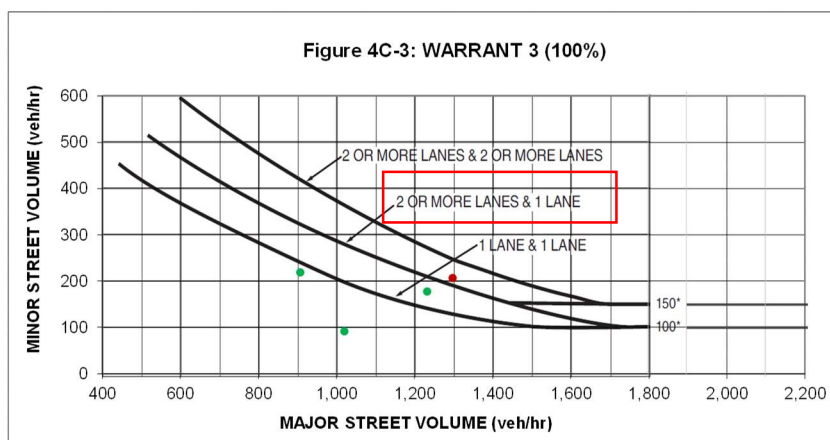
The four-hour volumes and volume warrant results for the intersection of High School Driveway 4 and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			High School Driveway 4			Pedestrians Crossing Major	Meets Warrants?					
	EB Volume	WB Volume	Total Volume	NB Volume	SB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	485	535	1,020	30	91	91	1	-	Y	-	Y	-	-
8:00	484	814	1,298	84	207	207	22	Y	Y	Y	Y	Y	Y
15:00	468	439	907	48	219	219	13	Y	Y	Y	Y	Y	-
16:00	602	629	1,231	78	177	177	53	Y	Y	Y	Y	Y	-
TOTAL	2,039	2,417	4,456	240	694	694	89	3	4	3	4	3	1
										3			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

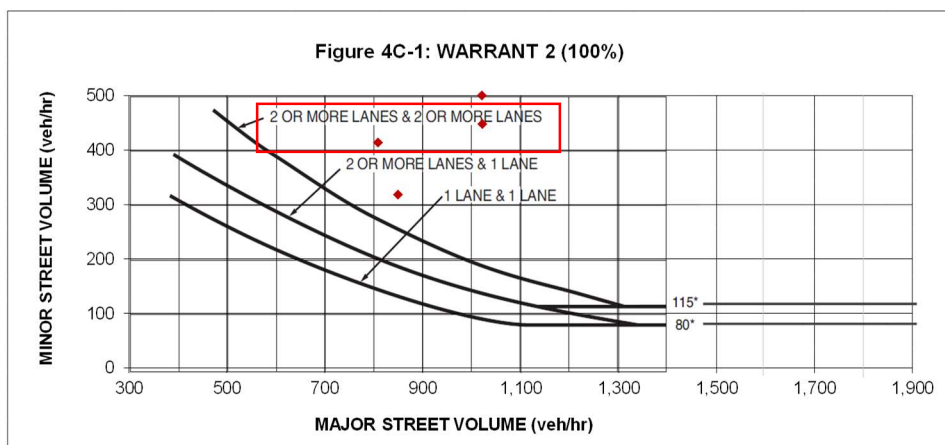


Bobcat Boulevard at Trophy Club Drive

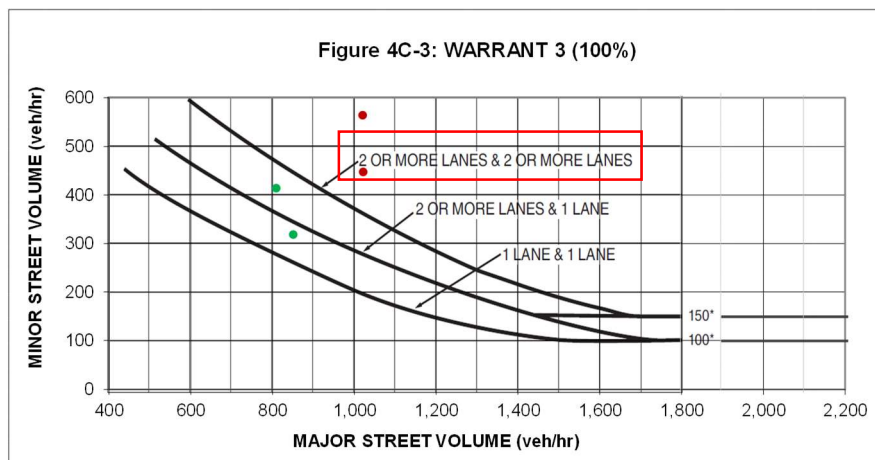
The four-hour volumes and volume warrant results for the intersection of Bobcat Boulevard and Trophy Club Drive are shown below.

Hour Begin	Trophy Club Drive			Bobcat Blvd			Pedestrians Crossing Major	Meets Warrants?					
	NB Volume	SB Volume	Total Volume	EB Volume	WB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	345	504	849	318		318	0	Y	-	Y	Y	Y	-
8:00	554	467	1,021	448		448	9	Y	Y	Y	Y	Y	Y
15:00	540	268	808	414		414	0	Y	-	Y	Y	Y	-
16:00	675	345	1,020	564		564	13	Y	Y	Y	Y	Y	Y
TOTAL	2,114	1,584	3,698	1,744	0	1,744	22	4	2	4	4	4	2
										4			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.



Warrant 7 – Crash Experience

The warrant is satisfied when:

1. Adequate trial of less restrictive remedies with satisfactory observance and enforcement has failed to reduce the crash frequency; and
2. Five or more reported crashes, of types susceptible to correction by traffic signal control, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
3. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1, or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours. If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Lee Engineering obtained all available crash reports that have occurred at these intersections between 2014 and present from TxDOT's online C.R.I.S. Query tool. As noted in Table 6 of this letter, none of the intersections had five or more crashes susceptible to correction by traffic signal control within a 12-month period. The highest number of crashes occurred at the intersection of Bobcat Boulevard and Trophy Club Drive, where four (4) crashes susceptible to correction by traffic signal control occurred within a 12-month period. A summary of all available crash data is shown below for reference. The highest number of crashes susceptible to correction by traffic signal control within a 12-month period are highlighted for each intersection.

Crash ID	Crash Type	Potentially Correctible by Signal?	Crash Date	Crash Severity	Light Condition	Pavement Surface Condition
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14352739	Right Angle	YES	2/27/2015	Not Injured	Daylight	Slush
16538943	Fixed Object	No	7/15/2018	Fatal Injury	Daylight	Dry
17355925	Fixed Object	No	10/21/2019	Not Injured	Daylight	Dry
17969728	Right Angle	YES	11/13/2020	Not Injured	Daylight	Dry
High School Driveway 4 at Bobcat Boulevard						
15331510	Pedestrian	YES	9/15/2016	Suspected Minor Injury	Daylight	Dry
16418931	Rear End	No	5/16/2018	Not Injured	Daylight	Dry
19152169	Fixed Object	No	10/5/2022	Suspected Minor Injury	Daylight	Dry
19507546	Fixed Object	No	4/23/2023	Not Injured	Daylight	Dry
19892782	Right Angle	YES	11/6/2023	Not Injured	Daylight	Dry
Bobcat Boulevard at Trophy Club Drive						
13698685	Sideswipe	No	2/6/2014	Not Injured	Daylight	Snow
13757587	Fixed Object	No	2/8/2014	Not Injured	Daylight	Dry
13836908	Left Turn	YES	5/10/2014	Possible Injury	Daylight	Dry
15543732	Rear End	No	1/15/2017	Not Injured	Daylight	Wet
16849370	Right Angle	YES	1/10/2019	Suspected Minor Injury	Dark, Lighted	Dry
18785601	Rear End	No	2/28/2022	Not Injured	Daylight	Dry
19165980	Left Turn	YES	10/8/2022	Not Injured	Daylight	Dry
19458297	Right Angle	YES	3/26/2023	Not Injured	Daylight	Dry
19600321	Right Angle	YES	6/14/2023	Not Injured	Daylight	Dry
19705873	Right Angle	YES	8/16/2023	Not Injured	Daylight	Dry
19855903	Left Turn	YES	11/4/2023	Not Injured	Daylight	Dry
20159027	Left Turn	YES	4/23/2024	Not Injured	Daylight	Dry

Warrant Volume Data

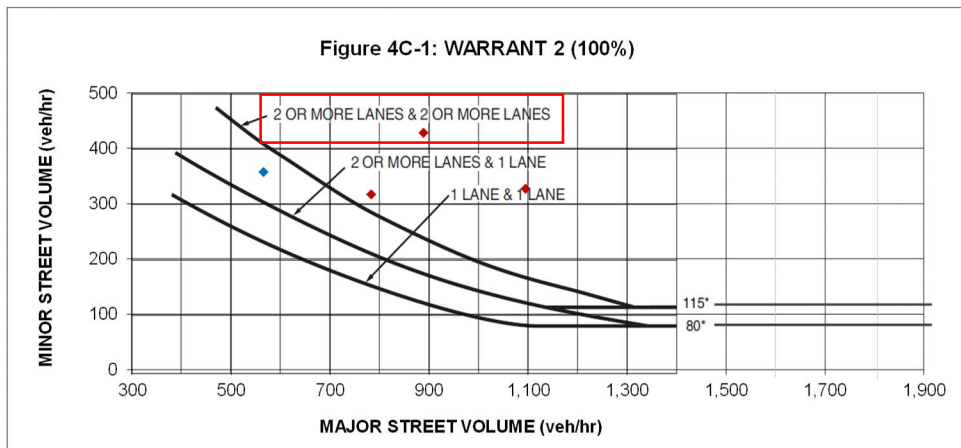
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Marshall Creek Road at Bobcat Boulevard

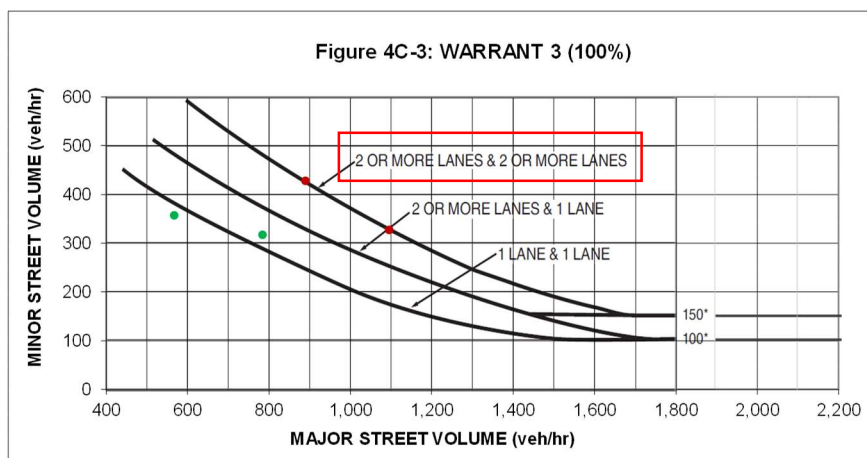
The four-hour volumes and volume warrant results for the intersection of Marshall Creek Road and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			Marshall Creek Rd			Pedestrians Crossing Major	Meets Warrants?					
	NB Volume	SB Volume	Total Volume	EB Volume	WB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	306	260	566	357	0	357	11	-	-	Y	-	-	-
8:00	513	376	889	428	0	428	20	Y	-	Y	Y	Y	Y
15:00	449	334	783	317	0	317	16	Y	-	Y	Y	Y	-
16:00	647	448	1,095	327	0	327	46	Y	Y	Y	Y	Y	Y
TOTAL	1,915	1,418	3,333	1,429	0	1,429	93	3	1	4	3	3	2
										3			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

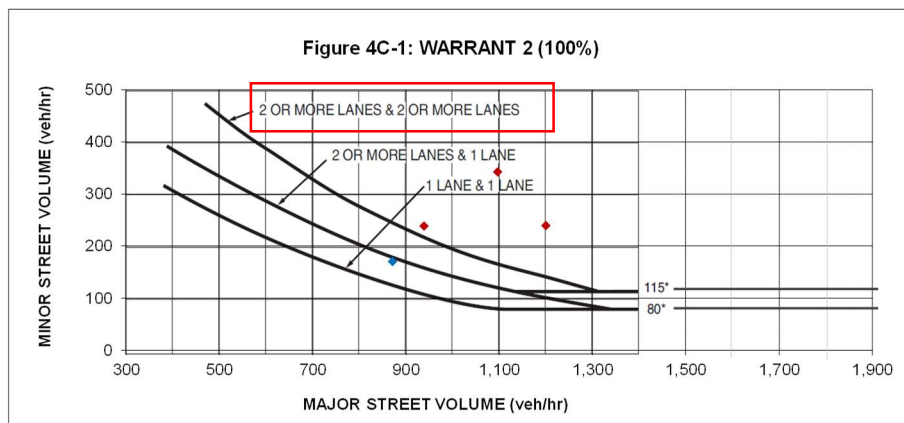


Parkview Drive at Bobcat Boulevard

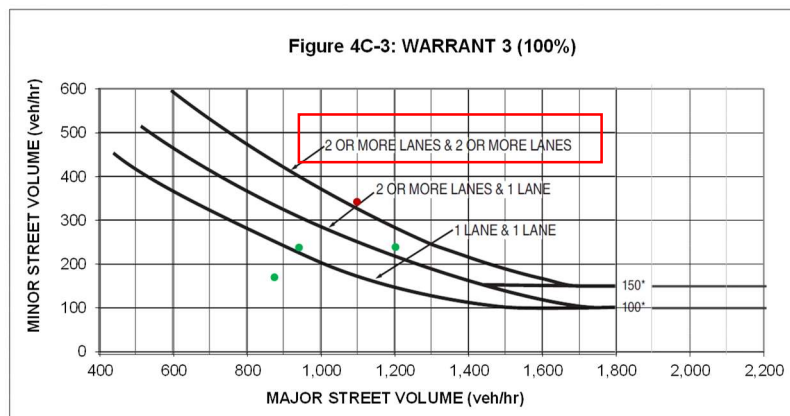
The four-hour volumes and volume warrant results for the intersection of Parkview Drive and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			Parkview Drive			Pedestrians Crossing Major	Meets Warrants?					
	EB Volume	WB Volume	Total Volume	NB Volume	SB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	514	425	939	238		238	12	Y	Y	Y	Y	Y	-
8:00	546	550	1,096	342		342	14	Y	Y	Y	Y	Y	Y
15:00	415	457	872	170		170	7	-	-	Y	Y	-	-
16:00	624	576	1,200	239		239	38	Y	Y	Y	Y	Y	-
TOTAL	2,099	2,008	4,107	989	0	989	71	3	3	4	4	3	1
										4			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

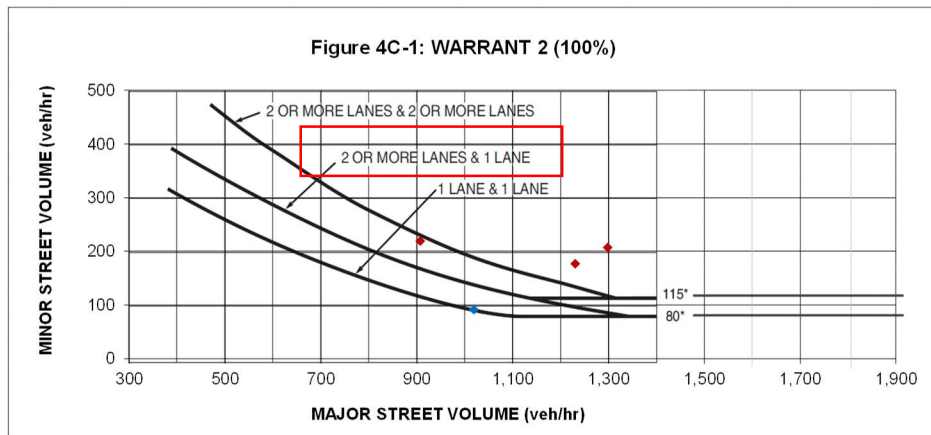


High School Driveway 4 at Bobcat Boulevard

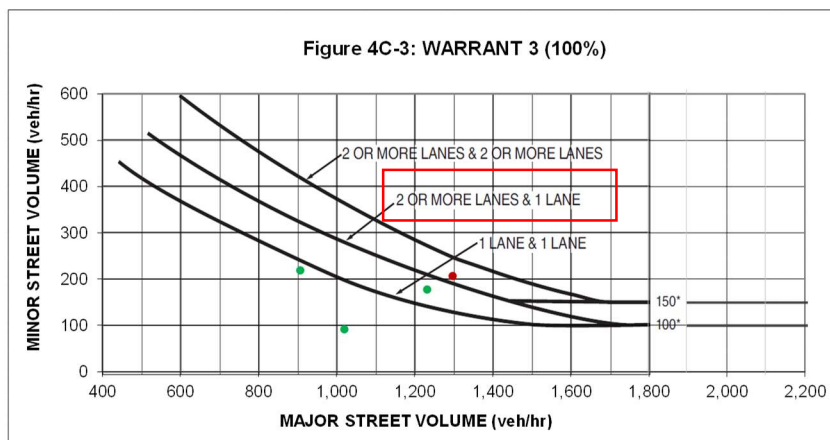
The four-hour volumes and volume warrant results for the intersection of High School Driveway 4 and Bobcat Boulevard are shown below.

Hour Begin	Bobcat Blvd			High School Driveway 4			Pedestrians Crossing Major	Meets Warrants?					
	EB Volume	WB Volume	Total Volume	NB Volume	SB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	485	535	1,020	30	91	91	1	-	Y	-	Y	-	-
8:00	484	814	1,298	84	207	207	22	Y	Y	Y	Y	Y	Y
15:00	468	439	907	48	219	219	13	Y	Y	Y	Y	Y	-
16:00	602	629	1,231	78	177	177	53	Y	Y	Y	Y	Y	-
TOTAL	2,039	2,417	4,456	240	694	694	89	3	4	3	4	3	1
										3			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.

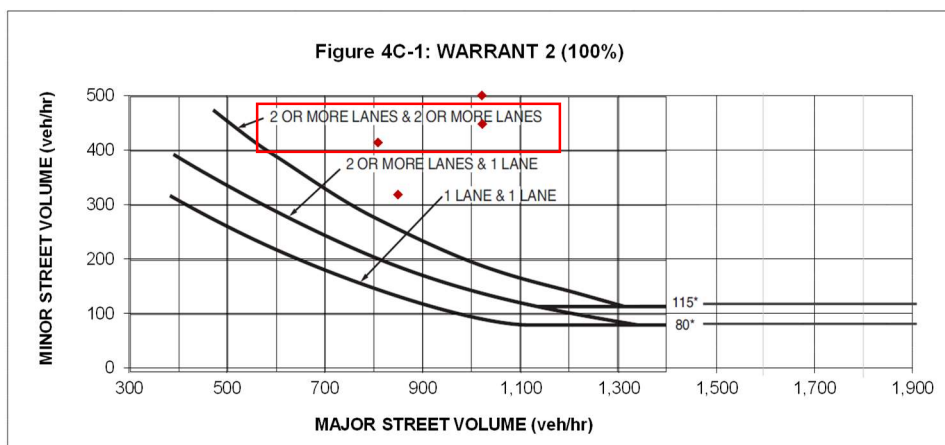


Bobcat Boulevard at Trophy Club Drive

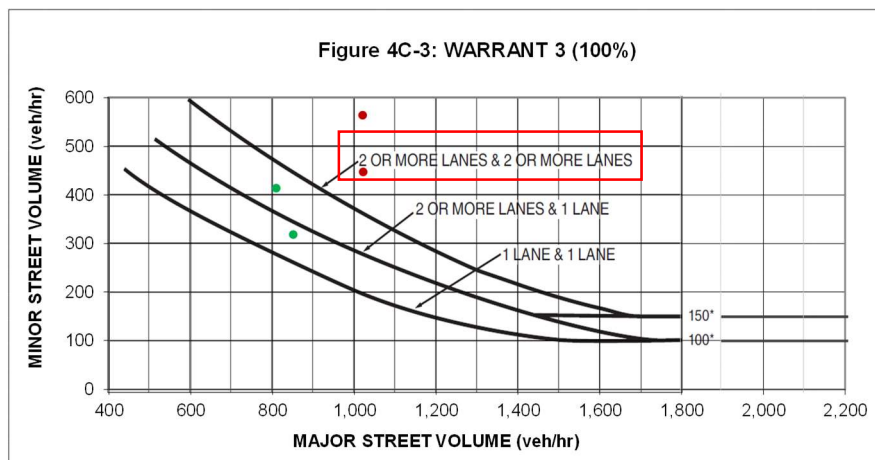
The four-hour volumes and volume warrant results for the intersection of Bobcat Boulevard and Trophy Club Drive are shown below.

Hour Begin	Trophy Club Drive			Bobcat Blvd			Pedestrians Crossing Major	Meets Warrants?					
	NB Volume	SB Volume	Total Volume	EB Volume	WB Volume	Max Volume		1A	1B	1-Combo		2	3
										A	B		
7:00	345	504	849	318		318	0	Y	-	Y	Y	Y	-
8:00	554	467	1,021	448		448	9	Y	Y	Y	Y	Y	Y
15:00	540	268	808	414		414	0	Y	-	Y	Y	Y	-
16:00	675	345	1,020	564		564	13	Y	Y	Y	Y	Y	Y
TOTAL	2,114	1,584	3,698	1,744	0	1,744	22	4	2	4	4	4	2
										4			

The applicable graph for Warrant 2 is shown below.



The applicable graph for Warrant 3 is shown below.



HCM 6th TWSC

3: Bobcat Blvd & HS Drive 3

Existing (2024) AM Peak Hour based on Meeting

Intersection							
Int Delay, s/veh	2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations	↔			↕		↔	↕
Traffic Vol, veh/h	7	5	1	213	350	164	376
Future Vol, veh/h	7	5	1	213	350	164	376
Conflicting Peds, #/hr	16	0	0	0	16	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	10	7	1	296	486	228	522
Major/Minor	Minor1	Major1		Major2			
Conflicting Flow All	1290	407	522	0	0	798	0
Stage 1	557	-	-	-	-	-	-
Stage 2	733	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	2.22	-
Pot Cap-1 Maneuver	155	593	670	-	-	820	-
Stage 1	537	-	-	-	-	-	-
Stage 2	436	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	108	584	670	-	-	808	-
Mov Cap-2 Maneuver	108	-	-	-	-	-	-
Stage 1	527	-	-	-	-	-	-
Stage 2	308	-	-	-	-	-	-
Approach	WB	NB		SB			
HCM Control Delay, s/v	29.4	0		3.4			
HCM LOS	D						
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT		
Capacity (veh/h)	-	- 164		808	-		
HCM Lane V/C Ratio	-	- 0.102		0.282	-		
HCM Control Delay (s/veh)	-	- 29.4		11.2	-		
HCM Lane LOS	-	- D		B	-		
HCM 95th %tile Q (veh)	-	- 0.3		1.2	-		

Timings

5: Parkview Dr & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

						
Lane Group	EBT	WBL	WBT	NBL	NBR	Ø12
Lane Configurations						
Traffic Volume (vph)	411	216	374	166	164	
Future Volume (vph)	411	216	374	166	164	
Turn Type	NA	Split	NA	Prot	Perm	
Protected Phases	2	6	6	4		12
Permitted Phases					4	
Detector Phase	2	6	6	4	4	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	21.0	22.0	22.0	17.0	17.0	20.0
Total Split (%)	26.3%	27.5%	27.5%	21.3%	21.3%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	19.0	20.0	20.0	15.0	15.0	
Actuated g/C Ratio	0.24	0.25	0.25	0.19	0.19	
v/c Ratio	0.80	0.55	0.48	0.56	0.42	
Control Delay (s/veh)	33.1	52.1	48.6	37.1	8.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	33.1	52.1	48.6	37.1	8.0	
LOS	C	D	D	D	A	
Approach Delay (s/veh)	33.1		49.9	22.6		
Approach LOS	C		D	C		
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 10 (13%), Referenced to phase 2:EBT, Start of Green						
Natural Cycle: 60						
Control Type: Pretimed						
Maximum v/c Ratio: 0.80						
Intersection Signal Delay (s/veh): 37.3				Intersection LOS: D		
Intersection Capacity Utilization 49.2%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 5: Parkview Dr & Bobcat Blvd

→ Ø2 (R)	↖ Ø6	↖ Ø4	⤴ Ø12
21 s	22 s	17 s	20 s

Queues

5: Parkview Dr & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

	→	↙	←	↖	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	678	243	420	187	184
v/c Ratio	0.80	0.55	0.48	0.56	0.42
Control Delay (s/veh)	33.1	52.1	48.6	37.1	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.1	52.1	48.6	37.1	8.0
Queue Length 50th (ft)	146	129	116	86	0
Queue Length 95th (ft)	#209	202	164	149	50
Internal Link Dist (ft)	194		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	851	442	884	331	441
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.80	0.55	0.48	0.56	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR	Ø12
Lane Configurations									
Traffic Volume (vph)	158	386	37	460	467	3	1	139	
Future Volume (vph)	158	386	37	460	467	3	1	139	
Turn Type	Prot	NA	Perm	NA	Perm	NA	NA	Perm	
Protected Phases	7	4		8		2	6		12
Permitted Phases			8		8			6	
Detector Phase	7	4	8	8	8	2	6	6	
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	17.0	40.0	23.0	23.0	23.0	7.0	16.0	16.0	17.0
Total Split (%)	21.3%	50.0%	28.8%	28.8%	28.8%	8.8%	20.0%	20.0%	21%
Yellow Time (s)	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	12.5	38.0	21.0	21.0	21.0	5.0	14.0	14.0	
Actuated g/C Ratio	0.16	0.48	0.26	0.26	0.26	0.06	0.18	0.18	
v/c Ratio	0.74	0.30	0.21	0.64	0.72	0.56	0.32	0.43	
Control Delay (s/veh)	38.6	6.6	24.6	25.5	6.1	25.0	32.2	8.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	38.6	6.6	24.6	25.5	6.1	25.0	32.2	8.6	
LOS	D	A	C	C	A	C	C	A	
Approach Delay (s/veh)		15.8		16.1		25.0	17.1		
Approach LOS		B		B		C	B		

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

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

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 16.5

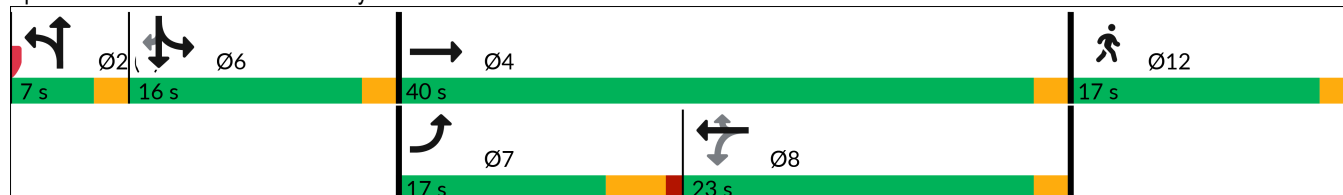
Intersection LOS: B

Intersection Capacity Utilization 56.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd



Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

								
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	203	505	47	590	599	94	100	178
v/c Ratio	0.74	0.30	0.21	0.64	0.72	0.56	0.32	0.43
Control Delay (s/veh)	38.6	6.6	24.6	25.5	6.1	25.0	32.2	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	6.6	24.6	25.5	6.1	25.0	32.2	8.6
Queue Length 50th (ft)	53	30	14	97	32	6	44	0
Queue Length 95th (ft)	m90	43	m16	m102	m40	38	75	33
Internal Link Dist (ft)		523		603		280	279	
Turn Bay Length (ft)	250		200		200			
Base Capacity (vph)	276	1676	223	928	827	169	310	412
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.30	0.21	0.64	0.72	0.56	0.32	0.43
Intersection Summary								
m Volume for 95th percentile queue is metered by upstream signal.								

Timings

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	55	373	535	117	245	
Future Volume (vph)	55	373	535	117	245	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	2		4	4	8	12
Permitted Phases		2				
Detector Phase	2	2	4	4	8	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	15.0	15.0	31.0	31.0	14.0	20.0
Total Split (%)	18.8%	18.8%	38.8%	38.8%	17.5%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	13.0	13.0	29.0	29.0	12.0	
Actuated g/C Ratio	0.16	0.16	0.36	0.36	0.15	
v/c Ratio	0.24	0.73	1.04	0.11	0.90	
Control Delay (s/veh)	45.8	24.3	75.1	17.3	34.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	45.8	24.3	75.1	17.3	34.6	
LOS	D	C	E	B	C	
Approach Delay (s/veh)	27.1			64.7	34.6	
Approach LOS	C			E	C	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 10 (13%), Referenced to phase 6:, Start of Green						
Natural Cycle: 90						
Control Type: Pretimed						
Maximum v/c Ratio: 1.04						
Intersection Signal Delay (s/veh): 44.7				Intersection LOS: D		
Intersection Capacity Utilization 60.7%				ICU Level of Service B		
Analysis Period (min) 15						

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) AM Peak Hour based on Meeting

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	69	466	669	146	686
v/c Ratio	0.24	0.73	1.04	0.11	0.90
Control Delay (s/veh)	45.8	24.3	75.1	17.3	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.8	24.3	75.1	17.3	34.6
Queue Length 50th (ft)	36	132	~368	25	93
Queue Length 95th (ft)	m66	163	#467	38	#132
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	282	642	641	1270	760
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.73	1.04	0.11	0.90
Intersection Summary					
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.					
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.					
m Volume for 95th percentile queue is metered by upstream signal.					

HCM 6th TWSC

3: Bobcat Blvd & HS Drive 3

Existing (2024) PM Peak Hour based on Meeting

Intersection							
Int Delay, s/veh	3.6						
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	88	24	279	95	1	34	394
Future Vol, veh/h	88	24	279	95	1	34	394
Conflicting Peds, #/hr	45	6	0	45	0	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	111	30	353	120	1	43	499

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	841	288	0	0	473	518	0
Stage 1	458	-	-	-	-	-	-
Stage 2	383	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	6.44	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.52	2.22	-
Pot Cap-1 Maneuver	304	709	-	-	720	1044	-
Stage 1	604	-	-	-	-	-	-
Stage 2	659	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	266	675	-	-	987	987	-
Mov Cap-2 Maneuver	266	-	-	-	-	-	-
Stage 1	578	-	-	-	-	-	-
Stage 2	602	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	26.5	0	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	306	987
HCM Lane V/C Ratio	-	-	0.463	0.045
HCM Control Delay (s/veh)	-	-	26.5	8.8
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q (veh)	-	-	2.3	0.1

Timings

5: Parkview Dr & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting

	→	↖	←	↙	↗	
Lane Group	EBT	WBL	WBT	NBL	NBR	Ø12
Lane Configurations	↑↑	↖	↑↑	↙	↗	
Traffic Volume (vph)	471	114	462	128	111	
Future Volume (vph)	471	114	462	128	111	
Turn Type	NA	Split	NA	Prot	Perm	
Protected Phases	2	6	6	4		12
Permitted Phases					4	
Detector Phase	2	6	6	4	4	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	24.0	22.0	22.0	14.0	14.0	20.0
Total Split (%)	30.0%	27.5%	27.5%	17.5%	17.5%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	22.0	20.0	20.0	12.0	12.0	
Actuated g/C Ratio	0.28	0.25	0.25	0.15	0.15	
v/c Ratio	0.71	0.28	0.56	0.52	0.38	
Control Delay (s/veh)	28.9	49.0	52.6	39.2	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	28.9	49.0	52.6	39.2	10.3	
LOS	C	D	D	D	B	
Approach Delay (s/veh)	28.9		51.9	25.8		
Approach LOS	C		D	C		

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 37.6

Intersection LOS: D

Intersection Capacity Utilization 42.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Parkview Dr & Bobcat Blvd

→ Ø2 (R)	↖ Ø6	↙ Ø4	⤴ Ø12
24 s	22 s	14 s	20 s

Queues

5: Parkview Dr & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting

	→	↖	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	671	123	497	138	119
v/c Ratio	0.71	0.28	0.56	0.52	0.38
Control Delay (s/veh)	28.9	49.0	52.6	39.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.9	49.0	52.6	39.2	10.3
Queue Length 50th (ft)	146	66	142	64	0
Queue Length 95th (ft)	206	120	193	120	44
Internal Link Dist (ft)	239		523	340	
Turn Bay Length (ft)		125			
Base Capacity (vph)	940	442	884	265	312
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.71	0.28	0.56	0.52	0.38
Intersection Summary					

Timings

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR	Ø12
Lane Configurations									
Traffic Volume (vph)	44	557	45	523	61	0	0	71	
Future Volume (vph)	44	557	45	523	61	0	0	71	
Turn Type	Prot	NA	Perm	NA	Perm	NA	NA	Perm	
Protected Phases	7	4		8		2	6		12
Permitted Phases			8		8			6	
Detector Phase	7	4	8	8	8	2	6	6	
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	7.0	35.0	28.0	28.0	28.0	10.0	15.0	15.0	20.0
Total Split (%)	8.8%	43.8%	35.0%	35.0%	35.0%	12.5%	18.8%	18.8%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	5.0	33.0	26.0	26.0	26.0	8.0	13.0	13.0	
Actuated g/C Ratio	0.06	0.41	0.33	0.33	0.33	0.10	0.16	0.16	
v/c Ratio	0.44	0.42	0.20	0.49	0.12	0.37	0.40	0.27	
Control Delay (s/veh)	30.9	13.7	14.6	13.6	3.1	14.8	34.9	10.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	30.9	13.7	14.6	13.6	3.1	14.8	34.9	10.4	
LOS	C	B	B	B	A	B	C	B	
Approach Delay (s/veh)		15.0		12.7		14.8	25.1		
Approach LOS		B		B		B	C		

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

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

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.49

Intersection Signal Delay (s/veh): 15.2

Intersection LOS: B

Intersection Capacity Utilization 42.1%

ICU Level of Service A

Analysis Period (min) 15

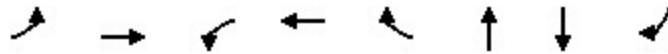
Splits and Phases: 6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

	Ø2 (R)		Ø6		Ø4		Ø12
10 s		15 s		35 s		20 s	
					Ø7		Ø8
				7 s		28 s	

Queues

6: Off-Site Dwy/HS Drive 4 & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBT	SBR
Lane Group Flow (vph)	48	606	49	568	66	84	115	77
v/c Ratio	0.44	0.42	0.20	0.49	0.12	0.37	0.40	0.27
Control Delay (s/veh)	30.9	13.7	14.6	13.6	3.1	14.8	34.9	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.9	13.7	14.6	13.6	3.1	14.8	34.9	10.4
Queue Length 50th (ft)	16	152	7	42	0	2	52	0
Queue Length 95th (ft)	m29	218	m11	m67	m2	43	101	36
Internal Link Dist (ft)		523		603		280	279	
Turn Bay Length (ft)	250		200		200			
Base Capacity (vph)	110	1459	243	1150	538	226	284	289
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.42	0.20	0.49	0.12	0.37	0.40	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Timings

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting

						
Lane Group	EBL	EBR	NBL	NBT	SBT	Ø12
Lane Configurations						
Traffic Volume (vph)	69	495	466	209	234	
Future Volume (vph)	69	495	466	209	234	
Turn Type	Prot	Perm	Split	NA	NA	
Protected Phases	2		4	4	8	12
Permitted Phases		2				
Detector Phase	2	2	4	4	8	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	7.0	7.0	7.0	7.0	7.0	20.0
Total Split (s)	19.0	19.0	30.0	30.0	11.0	20.0
Total Split (%)	23.8%	23.8%	37.5%	37.5%	13.8%	25%
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	2.0	2.0	2.0	2.0	2.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	17.0	17.0	28.0	28.0	9.0	
Actuated g/C Ratio	0.21	0.21	0.35	0.35	0.11	
v/c Ratio	0.21	0.72	0.83	0.19	0.86	
Control Delay (s/veh)	37.4	23.0	37.3	18.6	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	37.4	23.0	37.3	18.6	47.6	
LOS	D	C	D	B	D	
Approach Delay (s/veh)	24.7			31.5	47.6	
Approach LOS	C			C	D	
Intersection Summary						
Cycle Length: 80						
Actuated Cycle Length: 80						
Offset: 0 (0%), Referenced to phase 2:EBL, Start of Green						
Natural Cycle: 70						
Control Type: Pretimed						
Maximum v/c Ratio: 0.86						
Intersection Signal Delay (s/veh): 32.6				Intersection LOS: C		
Intersection Capacity Utilization 50.3%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 7: Trophy Club Dr & Bobcat Blvd



Queues

7: Trophy Club Dr & Bobcat Blvd

Existing (2024) PM Peak Hour based on Meeting

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	76	544	512	230	379
v/c Ratio	0.21	0.72	0.83	0.19	0.86
Control Delay (s/veh)	37.4	23.0	37.3	18.6	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.4	23.0	37.3	18.6	47.6
Queue Length 50th (ft)	41	182	230	41	78
Queue Length 95th (ft)	83	250	#397	66	#154
Internal Link Dist (ft)	603			321	332
Turn Bay Length (ft)			125		
Base Capacity (vph)	368	757	619	1238	443
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.72	0.83	0.19	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

MOVEMENT SUMMARY

 **Site: 101 [4. 2024 AM - Marshall Creek at Bobcat - No Peds**
(Site Folder: General)]

Marshall Creek Rd at Bobcat Blvd
 Single-lane Roundabout
 Existing (2024) AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: NB Bobcat Approach														
3	L2	158	3.0	193	3.0	0.615	12.1	LOS B	6.6	170.1	0.69	0.69	0.94	31.1
8	T1	352	3.0	429	3.0	0.615	12.1	LOS B	6.6	170.1	0.69	0.69	0.94	31.0
Approach		510	3.0	622	3.0	0.615	12.1	LOS B	6.6	170.1	0.69	0.69	0.94	31.0
North: SB Bobcat Approach														
4	T1	307	3.0	374	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	33.7
14	R2	77	3.0	94	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	32.8
Approach		384	3.0	468	3.0	0.428	7.9	LOS A	2.6	65.6	0.48	0.34	0.48	33.5
West: EB Marshall Creek Approach														
5	L2	219	3.0	267	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	28.6
12	R2	321	3.0	391	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	27.9
Approach		540	3.0	659	3.0	0.728	17.5	LOS C	11.0	281.0	0.85	1.12	1.60	28.2
All Vehicles		1434	3.0	1749	3.0	0.728	13.0	LOS B	11.0	281.0	0.69	0.76	1.06	30.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Roundabout LOS Method: Same as Sign Control.
 Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
 LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
 Roundabout Capacity Model: US HCM 6.
 Delay Model: HCM Delay Formula (Geometric Delay is not included).
 Queue Model: HCM Queue Formula.
 Gap-Acceptance Capacity: Traditional M1.
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [4. 2024 PM - Marshall Creek at Bobcat - No Peds**
(Site Folder: General)]

Marshall Creek Rd at Bobcat Blvd
Single-lane Roundabout
Existing (2024) PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: NB Bobcat Approach														
3	L2	285	3.0	313	3.0	0.563	9.3	LOS A	4.7	120.2	0.33	0.15	0.33	32.0
8	T1	362	3.0	398	3.0	0.563	9.3	LOS A	4.7	120.2	0.33	0.15	0.33	31.9
Approach		647	3.0	711	3.0	0.563	9.3	LOS A	4.7	120.2	0.33	0.15	0.33	31.9
North: SB Bobcat Approach														
4	T1	345	3.0	379	3.0	0.511	10.1	LOS B	3.7	94.3	0.64	0.59	0.74	32.6
14	R2	103	3.0	113	3.0	0.511	10.1	LOS B	3.7	94.3	0.64	0.59	0.74	31.7
Approach		448	3.0	492	3.0	0.511	10.1	LOS B	3.7	94.3	0.64	0.59	0.74	32.4
West: EB Marshall Creek Approach														
5	L2	52	3.0	57	3.0	0.399	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	32.9
12	R2	275	3.0	302	3.0	0.399	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	31.9
Approach		327	3.0	359	3.0	0.399	8.6	LOS A	2.1	53.1	0.61	0.54	0.61	32.0
All Vehicles		1422	3.0	1563	3.0	0.563	9.4	LOS A	4.7	120.2	0.49	0.38	0.52	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Tammy Dixon, Town Secretary

AGENDA ITEM: Consider approval of the August 26, 2024, Town Council work session and regular meeting minutes. (Tammy Dixon, Town Secretary)

BACKGROUND/SUMMARY: The Town Council held a work session and regular meeting on August 26, 2024.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. 08.26.2024 draft minutes

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the August 26, 2024, Town Council work session and regular meeting minutes.

Town of Trophy Club Town Council Meeting Minutes
August 26, 2024, 6:00 p.m., Work Session and Regular Meeting
1 Trophy Wood Drive, Trophy Club, Texas 76262

CALL WORK SESSION TO ORDER

Mayor Tiffany called the work session to order at 6:00 p.m.

COUNCIL MEMBERS PRESENT

Jeannette Tiffany, Mayor
Steve Flynn, Mayor Pro Tem
Stacey Bauer, Council Member Place 1
Jeff Beach, Council Member Place 2
Rhylan Rowe, Council Member Place 4 (*arrived at 6:30 p.m.*)
LuAnne Oldham, Council Member Place 5

COUNCIL MEMBERS ABSENT

Dennis Sheridan, Council Member Place 3

STAFF MEMBERS PRESENT

Brandon Wright, Town Manager
Tammy Dixon, Town Secretary
Dean Roggia, Town Attorney
Jason Wise, Fire Chief
April Duvall, Director of Finance
Matt Cox, Director of Community Development
Denise Deprato, Director of Human Resources
Chase Ellis, Director of Parks and Recreation
Jill Lind, Director of Communications and Marketing
Tamara Smith, Assistant to the Town Manager

WORK SESSION ITEM

1. Presentation and discussion on the Town's solid waste contract that expires in May 2025 and service options to consider for inclusion in future contracts. (Tamara Smith, Assistant to the Town Manager)

Tamara Smith, Assistant to the Town Manager, gave a presentation on the solid waste contract highlighting and noting the following, and also answered questions from the Town Council:

- Purpose and Objectives
- Contract Overview
- Current Service Report
- Opportunities
- Proposal Structure

- Feedback
- Proposed Timeline

Following the presentation, the Town Council engaged in a discussion regarding the solid waste contract request for proposals. Key points raised included the amount of revenue generated from the 12% franchise fee and clarification of those utilizing the HHW Landfill Drop Off services.

The Council provided the following feedback for consideration in the proposal:

- Some council members expressed a desire to maintain current service levels.
- There was a request to provide as many options to homeowners as possible, including pricing for HHW at the door.
- The Council suggested exploring an option for recycling bins with attached lids.
- The idea of a dedicated webpage on the provider's website was proposed.
- A larger recycling bin option was also discussed.
- Contributions from the contractor for events like the 4th of July were encouraged.
- The Council expressed a preference against forming a subcommittee in the RFP review process.
- The session concluded with these considerations to be integrated into the forthcoming request for proposal (RFP).

ADJOURN

Mayor Tiffany adjourned the work session at 6:54 p.m.

CALL REGULAR MEETING TO ORDER

Mayor Tiffany called the regular meeting to order at 7:04 p.m.

INVOCATION

Chaplain David Impwi led the invocation.

PLEDGES

Mayor Tiffany led the Pledge of Allegiance to the American and Texas Flags.

PUBLIC COMMENTS

There were none.

COMMUNITY SPOTLIGHT

2. Northwest ISD - Destination Imagination Global Finals.

Mayor Tiffany introduced Team Bacon on Deck. Team Managers Kimberly Fine and Bambi Trotter introduced the team members: Victoria Duet, Carter Ceman, Crosby Fine, Liam Hicks, and Camden Trotter. They gave a presentation on their Destination Imagination project, which involved planting trees in the Rainforest and successfully raising over \$500, exceeding their initial goal of \$250. The team competed locally, at Regionals, and at the state level, ultimately winning 3rd place at the Global competition in Kansas City, MO, for their impactful community project.

3. Working for You . . . Trophy Club

a) Update from Town Council Members

Mayor Tiffany acknowledged and praised the Parks & Recreation team featured in the latest *Trophy Club Neighbors* magazine, highlighting the department's dedication to providing exceptional experiences for the community's children throughout the year and recognized the magazine as an important source of information for Trophy Club residents.

Council Member Bauer provided a reminder that the National Day of Service event would be held on September 14, 2024.

b) Update from Town Manager

Town Manager Wright provided the following updates:

- Patriot Day Ceremony –September 11th at the fire station, starting at 8:45 AM. The event will honor those lost in the 2001 attacks with remarks from local leaders, a moment of silence at 8:59 AM, and an opportunity to thank first responders.
- National Day of Service – September 14th, there will be three volunteer shifts (8:00–10:00 AM, 10:00 AM–12:00 PM, and 12:00–2:00 PM) for participants to help clean Trophy Club Park. The Town will provide litter grabbers and trash bags, but participants should bring their own gloves, bug spray, and sunscreen. Registration is available at perfectlove.org.
- Dive-In Movie – August 30th, at the pool. Gates open at 7:30 PM, and the movie, *Disney Pixar's Elemental*, will start at 8:15 PM.
- Taste of Trophy Club – A food festival will be held on September 7th, from 6:00–9:00 PM at Independence Park East, featuring diverse food options, live music, and family-friendly activities.
- Upcoming Boards and Commissions Meetings
 - The Arts and Culture Ad Hoc Committee, September 5th at 6:00 PM at Town Hall.

c) Quick Civic Tip

Town Attorney Roggia spoke in reference to Franchise Agreements. He explained that the Town, as a home rule municipality, controls its roads and regulates utilities through franchise agreements. These agreements, governed by the Town Charter, allow the Town Council to grant, renew, and amend franchises via ordinance after a public hearing, ensuring they are reviewed periodically rather than indefinitely.

CONSENT AGENDA

4. Consider approval of the August 12, 2024, Town Council Work Session and Regular Meeting Minutes. (Tammy Dixon, Town Secretary)
5. **TUP-24-001 PD-30 Retail Construction Trailer**
Consider a resolution approving a temporary use permit to allow a construction trailer on PD-30 Lot 1, Block A property, generally located approximately 260 feet east of Trophy Club Drive and approximately 253 feet north of SH 114, currently zoned Planned Development District 30, Trophy Club Town Center, Trophy Club, Denton County, Texas. (Matt Cox, Community Development Director). The caption of the resolution reads as follows:

RESOLUTION NO. 2024-13

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB APPROVING A TEMPORARY USE PERMIT FOR MIDTOWN DEVELOPMENT INC., TO PLACE A CONSTRUCTION TRAILER ON THE PD-30 LOT 1, BLOCK A PROPERTY, GENERALLY LOCATED APPROXIMATELY 260 FEET EAST OF TROPHY CLUB DRIVE AND APPROXIMATELY 253 FEET NORTH OF SH 114, AND PROVIDING FOR CONDITIONS OF APPROVAL.

6. Consider an ordinance of the Town of Trophy Club, Texas amending Section 1.08.032 "Board Established, Membership; Meetings" of Chapter 1 "General Provisions"; Article 1.08 "Parks and Recreation"; and Division 2 "Parks and Recreation Board" of the Town's Code of Ordinances, by decreasing the number of board members from nine (9) to seven (7) and dissolving regular board member places eight (8) and nine (9). (Tammy Dixon, Town Secretary). The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-15

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS; AMENDING SECTION 1.08.032 "BOARD ESTABLISHED, MEMBERSHIP; MEETINGS" OF CHAPTER 1 "GENERAL PROVISIONS"; ARTICLE 1.08 "PARKS AND RECREATION"; AND DIVISION 2 "PARKS AND RECREATION BOARD" OF THE TOWN'S CODE OF ORDINANCES, BY DECREASING THE NUMBER OF BOARD MEMBERS FROM NINE (9) TO SEVEN (7), AND DISSOLVING REGULAR BOARD MEMBER PLACES EIGHT (8) AND NINE (9); PROVIDING THIS ORDINANCE IS CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

7. Consider an ordinance of the Town of Trophy Club, Texas, amending Section 3.15.002 “Members” of Article 3.15 entitled “Building Standards Commission” of Chapter 3 “Building Regulations” of the Code of Ordinances, regarding the composition of the Building Standards Commission. (Tammy Dixon, Town Secretary) The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-16

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS; AMENDING CHAPTER 3 “BUILDING REGULATIONS”; ARTICLE 3.15 “BUILDING STANDARDS COMMISSION”; SECTION 63.15.002 “MEMBERS” OF THE CODE OF ORDINANCES, TOWN OF TROPHY CLUB, TEXAS, TO MODIFY THE COMPOSITION OF THE BUILDING STANDARDS COMMISSION; PROVIDING THIS ORDINANCE IS CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

8. Consider an ordinance approving a negotiated settlement between the Atmos Cities Steering Committee and Atmos Energy Corp., Mid-Tex Division regarding the company’s 2024 Rate Review Mechanism filing. (Brandon Wright, Town Manager). The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-17

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, APPROVING A NEGOTIATED SETTLEMENT BETWEEN THE ATMOS CITIES STEERING COMMITTEE (“ACSC”) AND ATMOS ENERGY CORP., MID-TEX DIVISION REGARDING THE COMPANY’S 2024 RATE REVIEW MECHANISM FILING; DECLARING EXISTING RATES TO BE UNREASONABLE; ADOPTING TARIFFS THAT REFLECT RATE ADJUSTMENTS CONSISTENT WITH THE NEGOTIATED SETTLEMENT; FINDING THE RATES TO BE SET BY THE ATTACHED SETTLEMENT TARIFFS TO BE JUST AND REASONABLE AND IN THE PUBLIC INTEREST; APPROVING AN ATTACHMENT ESTABLISHING A BENCHMARK FOR PENSIONS AND RETIREE MEDICAL BENEFITS; REQUIRING THE COMPANY TO REIMBURSE ACSC’S REASONABLE RATEMAKING EXPENSES; DETERMINING THAT THIS ORDINANCE WAS PASSED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TEXAS OPEN MEETINGS ACT; ADOPTING A SAVINGS CLAUSE; DECLARING AN EFFECTIVE DATE; AND REQUIRING DELIVERY OF THIS ORDINANCE TO THE COMPANY AND THE ACSC’S LEGAL COUNSEL.

9. Consider approval of the FY 2025 Compensation Pay Plan, effective October 6, 2024. (Denise Deprato, Director of Human Resources)
10. Consider authorizing the Town Manager to execute an audit services engagement letter and agreement amendment with Forvis Mazars, LLP for the FY2024 annual audit. (April Duvall, Director of Finance)

11. Consider approval of the annual rate increase for solid waste services from Allied Waste, dba Republic Services effective September 1, 2024. (April Duvall, Director of Finance)
12. Consider authorizing the Town Manager to negotiate and execute an interlocal agreement with the City of Watauga, Texas for vehicle maintenance services in an annual amount not to exceed \$40,000. (Brandon Wright, Town Manager)
13. Consider a first amendment to the interlocal cooperation agreement for administration of fire protection services with the Trophy Club Municipal Utility District No. 1 ("District") Section C. Payment to change the timing of District payments to the Town of Trophy Club from monthly to bi-annually; and authorize the Town Manager to execute same on behalf of the Town. (Brandon Wright, Town Manager)
14. Consider rescheduling the November 11, 2024 Town Council Meeting to Tuesday, November 12, 2024 to avoid a conflict with Veterans Day, which is a Town-recognized holiday. (Tammy Dixon, Town Secretary)

Council Member Beach requested the removal of item 13 from the Consent Agenda.

Mayor Pro Tem Flynn moved to approve Consent Items 4-12, and 14. Council Member Rowe seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham
NAYES: None
ABSENT: Sheridan
VOTE: 6-0-1

13. Consider a first amendment to the interlocal cooperation agreement for administration of fire protection services with the Trophy Club Municipal Utility District No. 1 ("District") Section C. Payment to change the timing of District payments to the Town of Trophy Club from monthly to bi-annually; and authorize the Town Manager to execute same on behalf of the Town.

Council Member Beach asked Town Manager Wright to provide a summary of the agenda item.

Town Manager Wright explained during the FY 2025 Budget process, discussions with the District resulted in a need for the District's operating reserves for fire services to be drawn below the 25% target established in the interlocal agreement. Due to limited cash on hand, Town and District staff recommend that the timing of payments be changed to line up with the bi-annual receipt of property tax disbursements from Denton and Tarrant Counties. If approved, the amendment would change the timing of bi-annual payments to be made in February and September.

Council Member Beach moved to approve a first amendment to the interlocal cooperation agreement for administration of fire protection services with the Trophy Club Municipal Utility District No. 1 ("District") Section C. Payment to change the timing of District payments to the Town of Trophy Club from monthly to bi-annually; and authorize the Town Manager to execute same on behalf of the Town. Council Member Bauer seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham

NAYES: None

ABSENT: Sheridan

VOTE: 6-0-1

PUBLIC HEARINGS

15. Case PD-AMD-24-003 PD-30 Amendment Multi-tenant Monument

Conduct a public hearing and consider an ordinance amending Planned Development District 30 (PD-30) to allow a multi-tenant monument sign with a changeable electronic variable message sign (CEVMS) display located at 2200-2300 SH 114 on Lot 2, Block A, of the Trophy Club Town Center Addition, of the C. Medlin Survey, Abstract No. 823, Trophy Club, Denton County, Texas. (Matt Cox, Director of Community Development)

Mayor Tiffany opened the public hearing at 7:35 p.m.

Mr. Cox provided an overview of the proposal, previously reviewed in June. Concerns were raised about the sign's height, the placement of the Town Center logo, and the use of an LED sign. In response, the sign's height was reduced from 35 to 32 feet, the LED display was lowered, and the Town Center logo was moved to the top. These changes were presented to the Planning and Zoning Commission (P&Z) on August 1st. Public notices were sent out, and no responses or opposition had been received as of that morning.

Mike Biggs, P&Z Chairman, stated that P&Z revisited the proposal, focusing on concerns about height and LED effectiveness. After discussions, the Commission emphasized the sign's purpose in supporting local businesses and boosting the Town's tax base by attracting attention. Despite debates on visibility and readability, P&Z supported maintaining the sign's height at 32 feet for optimal advertising effectiveness with a vote of 5 to 1.

Those who spoke in favor:

Ben Lee, Owner Social Oak Wine & Whiskey Lounge, 2230 SH 114, Ste 550

Yochoua Arrouas, Director of Development for Beck Ventures, reiterated that the sign was primarily designed for tenants and business attraction. He emphasized that the \$200,000 investment required the sign to be large and bright to effectively reach drivers

on Highway 114. Reducing the screen size would diminish its effectiveness, and a smaller sign would not justify the investment.

No one spoke in opposition.

Mayor Tiffany closed the public hearing at 7:41 p.m.

A discussion followed with Council members expressing concerns about the height and size of the sign, particularly the LED portion. Several members questioned whether reducing the size would impact visibility for drivers on the highway and affect the ability to effectively advertise for the businesses in the center.

Bill Swift, Legacy Signs, explained that shrinking the sign would reduce the number of visible lines and potentially impact its effectiveness.

Council members continued to discuss the aesthetic impact and visibility concerns, with some suggesting minor design changes, such as incorporating the Town's clock tower as a landmark. There was general support for the sign due to its potential to increase sales tax revenue, promote local businesses, and improve the visibility of the Town Center.

Council Member Rowe moved to approve Ordinance No. 2024-18 amending PD-30 to allow the multi-tenant monument sign with a CEVMS display as presented, with an amendment that the sign be no less than 32 feet and no more than 35 feet in height. Council Member Bauer seconded the motion.

Mayor Pro Tem Flynn moved to amend the motion, setting the sign height to a maximum of 32 feet. Council Member Beach seconded the motion.

VOTE ON AMENDMENT TO MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham
NAYES: None
ABSENT: Sheridan
VOTE: 6-0-1

VOTE ON MAIN MOTION AS AMENDED

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham
NAYES: None
ABSENT: Sheridan
VOTE: 6-0-1

The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-18

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS, AMENDING ORDINANCE NO. 2024-05 P&Z, WHICH AMENDED ORDINANCE NOS. 2016-11 P&Z, 2014-06 P&Z, AND 2012-04 P&Z, KNOWN AS PD PLANNED DEVELOPMENT NO. 30

(“PD-30”), AND ALSO KNOWN AS TROPHY CLUB TOWN CENTER, WHICH IS DESCRIBED ON EXHIBIT “A” HERETO, BY PROVIDING AN AMENDMENT TO EXHIBIT “B” OF ORDINANCE NO. 2024-05 ENTITLED “PLANNED DEVELOPMENT DISTRICT DEVELOPMENT STANDARDS” BY AN AMENDMENT TO SECTION II “DEVELOPMENT STANDARDS”, SUBSECTION H “SIGNAGE, CLOCK TOWER AND MISCELLANEOUS”, AND SUBPARAGRAPH 1.c. “FREESTANDING DEVELOPMENT IDENTIFICATION SIGNS”, TO ALLOW A MULTI-TENANT MONUMENT SIGN WITH CEVMS DISPLAY, AS MORE SPECIFICALLY SET FORTH IN EXHIBITS “B” AND “B-1”, ATTACHED HERETO AND INCORPORATED HEREIN, AMENDING ORDINANCE NO. 2000-06 THE COMPREHENSIVE ZONING ORDINANCE AND THE OFFICIAL ZONING MAP; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SAVINGS CLAUSE; PROVIDING SEVERABILITY; PROVIDING A PENALTY NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham

NAYES: None

ABSENT: Sheridan

VOTE: 6-0-1

16. Conduct a public hearing for the FY 2025 Proposed Budget and FY 2025-2030 Capital Improvement Plan and schedule adoption of the FY 2025 Budget and FY 2025-2030 Capital Improvement Plan for the September 9, 2024, Town Council Meeting. (April Duvall, Director of Finance)

Mayor Tiffany opened the public hearing at 8:09 p.m.

Ms. Duvall, presented the FY 2025 Proposed Budget, explaining that it is based on a tax rate of \$0.415469, with an M&O rate of \$0.316042 for daily operations and an I&S rate of \$0.099427 for debt repayment. Total revenues are projected at \$28,514,279, with \$16,316,611 allocated to the general fund for operations, and total expenditures amounting to \$38,000,500 with \$16,395,500 of this related to General Fund expenditures. The M&O rate is capped at a 3.5% annual increase, by law.

Ms. Duvall noted the following budget inclusions:

- 3% cost of living adjustment (COLA) for all staff
- Up to 2% merit increase based on performance
- New positions:
 - Additional crossing guard for the high school
 - Part-time staff member for the Parks Department
- Community pool separated into its own department

- Events like Taste of Trophy Club and Christmas in the Park moved to the hotel occupancy fund
- Funding for:
 - Parks Master Plan
 - Replacement vehicles for Police, Fire, EMS, and Community Development Departments
 - Shared costs for a SWAT vehicle
 - Economic Development Corporation's Thrive Grant Program
- Budget savings:
 - \$56,000 reduction in Town Manager's contingency fund
 - \$12,000 saved by eliminating offsite storage
 - \$200,000 in IT savings from software consolidation
 - \$50,000 saved in electricity costs across departments

No one spoke in favor or opposition.

Mayor Tiffany closed the public hearing at 8:14 p.m.

Mayor Pro Tem Flynn expressed his appreciation for the smooth and well-organized budget subcommittee process led by Town Manager Wright and Ms. Duvall, thanking them and their staff for their assistance and support throughout the process.

Council Member Rowe moved to schedule adoption of the FY 2025 Budget and FY 2025-2030 Capital Improvement Plan for the September 9, 2024, Town Council meeting. Council Member Council Member Beach seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham

NAYES: None

ABSENT: Sheridan

VOTE: 6-0-1

INDIVIDUAL ITEMS

17. Consider an ordinance of the Town of Trophy Club amending Chapter 2 "Animal Control," Article 2.02 "Impoundment," Section 2.02.001 "Generally," Subsection (c) "Disposition of Unclaimed Animals" to provide for forfeiture; and amending Appendix A "Fee Schedule," Article A1.000 "General Provisions," Section A1.006 "Animal Control," Subsection (a) "Impound Fee," of the Code of Ordinances. (Patrick Arata, Chief of Police)

Town Manager Wright provided an overview of proposed ordinance, including revisions to the fee schedule for animal impoundment, the introduction of a tiered structure, and additional boarding and rabies vaccination fees. Changes to the disposition of unclaimed animals were also proposed, offering multiple options, including adoption, transfer to a rescue organization, and euthanasia in specific cases.

Animal Shelter Advisory Board Chair, Susan Edstrom, expressed concerns about the decision-making process for euthanizing animals, advocating for more oversight and the development of clear procedures.

Pam Swan, 2809 Sherwood, spoke on this issue.

After a lengthy discussion, the Town Council reached a consensus to defer a decision on the proposed ordinance until after policies are finalized and reviewed by the Animal Shelter Advisory Board.

Council Member Beach moved to defer this item until staff has developed a policy, to be reviewed by the Animal Shelter Advisory Board. Council Member Bauer seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham

NAYES: None

ABSENT: Sheridan

VOTE: 6-0-1

18. Consider a resolution authorizing the defeasance of a portion of the Town's 2014 Certificates of Obligation for an additional amount not to exceed \$125,000 to enable the Town to lower future interest expenses and reduce its overall debt burden. (April Duvall, Director of Finance)

Ms. Duvall presented and reviewed the proposed resolution.

Council Member Rowe moved to approve Resolution No. 2024-14 authorizing the defeasance of a portion of the Town's 2014 Certificates of Obligation for an additional amount not to exceed \$125,000 to enable the Town to lower future interest expenses and reduce its overall debt burden. Council Member Bauer seconded the motion. The caption of the resolution reads as follows:

RESOLUTION NO. 2024-14

A RESOLUTION OF THE TOWN OF TROPHY CLUB, TEXAS, AUTHORIZING THE REDEMPTION AND DEFEASANCE OF CERTAIN OUTSTANDING BONDS; AUTHORIZING THE DEPOSIT OF FUNDS WITH THE PAYING AGENT/REGISTRAR; AND RESOLVING OTHER MATTERS RELATED THERETO; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Tiffany, Rowe, Oldham

NAYES: None

ABSENT: Sheridan

VOTE: 6-0-1

EXECUTIVE SESSION/OPEN SESSION

Pursuant to the Open Meetings Act, Chapter 551, the Town Council convened into a Closed Executive Session at 8:54 p.m. and reconvened into Regular Session at 9:44 p.m. in accordance with the Texas Government Code regarding:

Section 551.071 Consultation with Town Attorney to seek legal advice regarding the Trophy Club Municipal Utility District Boundaries. **No Action Taken.**

Section 551.074 Personnel Matters to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee, to wit: 1) Town Manager. **No Action Taken.**

ADJOURNMENT

Mayor Tiffany adjourned the Town Council meeting at 9:44 p.m.

Jeannette Tiffany, Mayor

Attest:

Tammy Dixon, Town Secretary



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Tammy Dixon, Town Secretary

AGENDA ITEM: Consider approval of the September 9, 2024, Town Council regular meeting minutes. (Tammy Dixon, Town Secretary)

BACKGROUND/SUMMARY: The Town Council held a regular meeting on September 9, 2024.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. 09.09.2024 draft minutes

ACTIONS/OPTIONS:

Move to approve the September 9, 2024, Town Council regular meeting minutes.

Town of Trophy Club Town Council Meeting Minutes
September 09, 2024, 7:00 p.m., Regular Meeting
1 Trophy Wood Drive, Trophy Club, Texas 76262

CALL REGULAR MEETING TO ORDER

Mayor Tiffany called the regular meeting to order at 7:00 p.m.

COUNCIL MEMBERS PRESENT

Jeannette Tiffany, Mayor
Steve Flynn, Mayor Pro Tem
Stacey Bauer, Council Member Place 1
Jeff Beach, Council Member Place 2
Dennis Sheridan, Council Member Place 3
Rhylan Rowe, Council Member Place 4
LuAnne Oldham, Council Member Place 5

STAFF MEMBERS PRESENT

Brandon Wright, Town Manager
Tammy Dixon, Town Secretary
Dean Roggia, Town Attorney
Jason Wise, Fire Chief
Patrick Arata, Chief of Police
April Duvall, Director of Finance
Matt Cox, Director of Community Development
Denise Deprato, Director of Human Resources
Chase Ellis, Director of Parks and Recreation
Jill Lind, Director of Communications and Marketing
Tamara Smith, Assistant to the Town Manager

INVOCATION

Due to the absence of the scheduled pastor, the invocation was not delivered.

PLEDGES

Council Member Oldham led the Pledge of Allegiance to the American and Texas Flags.

PUBLIC COMMENTS

Written public comment was submitted by Pat Keefer, 216 Fresh Meadow, regarding ways to avoid industrializing Trophy Club.

COMMUNITY SPOTLIGHT

2. Metroport Meals on Wheels

Mayor Tiffany introduced Mary King, Executive Director and John Thane, President, of Metroport Meals on Wheels. Ms. King gave a presentation on the Metroport Meals on Wheels program and its positive impact on the community.

3. Working for You . . . Trophy Club

a) Update from Town Council Members

Council Member Bauer and Mayor Pro Tem Flynn expressed their appreciation to the Parks and Recreation Department for organizing the Taste of Trophy Club event on September 7th. They praised the event for its great turnout, delicious food, entertaining music, and fantastic weather.

Mayor Tiffany and Council Member Oldham spoke on the Northwest ISD Annual Communities Luncheon held on September 6th, noting that it was insightful. A key takeaway from the event was that construction on the BNHS Stadium is projected to begin in August 2026.

b) Update from Town Manager

Jill Lind, Director of Communications and Marketing announced the launch of Ask Indy, the Town's new AI-powered customer service platform. She demonstrated how the tool works, showing how users can ask questions through the Town website or by texting, and how the platform helps provide answers or routes issues to the appropriate department.

Chase Ellis, Director of Parks and Recreation, provided an update on the Parks Master Plan process, noting that the RFQ closed on August 30th, with eight firms submitting proposals. The evaluation process is underway, and scores are expected later this week. The top three to four firms will be interviewed on September 19th, with the goal of presenting a consultant recommendation to the Council at the first meeting in October.

Town Manager Wright provided the upcoming events and meetings:

- The Patriot Day Ceremony will be held at Fire Station 1 on September 11th at 8:45 AM to honor those who lost their lives in the 2001 attacks. The event will include remarks from community leaders, a moment of silence at 8:59 AM, and an opportunity to thank first responders.
- A community cleanup day is scheduled for Saturday, September 14th at Trophy Club Park, with three volunteer shifts from 8:00 AM to 2:00 PM. Volunteers are encouraged to register online.
- National Night Out will take place on October 1st, where neighborhoods are encouraged to participate in the annual event against crime by organizing block parties and notifying the Trophy Club Police Department.

- Upcoming Boards and Commissions Meetings and Events
 - September 16, Parks and Recreation Board, 6:00 p.m.
 - September 19, Economic Development Corporation Board, 6:00 p.m.

c) Quick Civic Tip

Town Attorney Roggia provided an overview of the budget process, explaining that it is governed by the Town Charter and various sections of the Texas Government Code and Tax Code.

CONSENT AGENDA

3. Consider an ordinance of the Town of Trophy Club, Texas amending Chapter 1 "General Provisions", Article 1.02 "Administration and Finance", Section 1.02.002 "Signature Authority of Mayor and Town Manager" of the Code of Ordinances to authorize the Town Manager to execute interlocal cooperation agreements equal to or less than \$25,000. (Dean Roggia, Town Attorney). **Removed from Consent.**
4. Consider an ordinance amending the FY 2024 Budget to appropriate funding for claims related to vehicle hail damage and for repairs to the Fire Department's ladder truck. (April Duvall, Director of Finance). The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-20

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, AMENDING THE TOWN'S ANNUAL BUDGET FOR THE FISCAL YEAR BEGINNING ON OCTOBER 1, 2023, AND ENDING ON SEPTEMBER 30, 2024, AS ADOPTED BY ORDINANCE NO. 2023-15, AND AMENDED BY ORDINANCE NO. 2024-11 AND ORDINANCE NO. 2024-13, BY PROVIDING FOR ADJUSTMENTS TO THE GENERAL FUND; PROVIDING THAT EXPENDITURES FOR SAID FISCAL YEAR SHALL BE MADE IN ACCORDANCE WITH THE ANNUAL BUDGET, AS AMENDED; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

5. Consider authorizing the Town Manager to negotiate and execute a vehicle repair contract with Siddons-Martin (Emergency Group, LLC) in an amount not to exceed \$32,447.23 for fire apparatus repairs and testing. (Jason Wise, Fire Chief)

Council Member Sheridan requested item 3 be removed from Consent.

Council Member Beach moved to approve Consent Items 4-5. Council Member Bauer seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

3. Consider an ordinance of the Town of Trophy Club, Texas amending Chapter 1 "General Provisions", Article 1.02 "Administration and Finance", Section 1.02.001 "Signature Authority of Mayor and Town Manager" of the Code of Ordinances to authorize the Town Manager to execute interlocal cooperation agreements equal to or less than \$25,000. (Dean Roggia, Town Attorney).

Councilmember Sheridan raised questions regarding the approval process for Interlocal Agreements (ILAs), particularly whether they need to be tied to budgeted funds and whether the Town Manager can approve ILAs without council approval if there are no associated costs. The Town Attorney clarified that under the Interlocal Cooperation Act, governing bodies must approve all ILAs, but by ordinance, the Town Council can grant certain approval authority to the Town Manager.

Council Member Rowe moved to approve Ordinance No. 2024-19 of the Town of Trophy Club, Texas amending Chapter 1 "General Provisions", Article 1.02 "Administration and Finance", Section 1.02.001 "Signature Authority of Mayor and Town Manager" of the Code of Ordinances to authorize the Town Manager to execute interlocal cooperation agreements equal to or less than \$25,000. Council Member Bauer seconded the motion. The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-19

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS; AMENDING CHAPTER 1 "GENERAL PROVISIONS"; ARTICLE 1.02 "ADMINISTRATION AND FINANCE"; SECTION 1.02.001 "SIGNATURE AUTHORITY OF MAYOR AND TOWN MANAGER" OF THE CODE OF ORDINANCES, TOWN OF TROPHY CLUB, TEXAS, TO AUTHORIZE THE TOWN MANAGER TO EXECUTE INTERLOCAL COOPERATION AGREEMENTS EQUAL TO OR LESS THAN \$25,000.00; PROVIDING THIS ORDINANCE IS CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION

AYES: Bauer, Flynn, Tiffany, Rowe, Oldham

NAYES: Beach, Sheridan

VOTE: 5-2

INDIVIDUAL ITEMS

6. Consider an ordinance accepting an Annual Service and Assessment Plan update for authorized services (emergency services) for Trophy Club Public Improvement District No. 1 (The Highlands at Trophy Club), and the proposed assessment roll; setting a date for public hearing on September 23, 2024; authorizing the

publication of notice and directing the mailing of notices as required by law; enacting other provisions relating thereto; and providing an effective date. (April Duvall, Director of Finance)

Town Manager Wright recommended an adjustment to this item to focus solely on setting the public hearing date and time, explaining that the ordinance would be considered during the public hearing on September 23, 2024.

Mayor Pro Tem Flynn moved set to a date for public hearing on September 23, 2024, at 6:00 p.m. and authorize the publication of notice and directing the mailing of notices as required by law. Council Member Sheridan seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

7. Consider a resolution establishing the debt financing plan and tax rate goal for the FY 2025 Budget and the FY 2025-2030 Capital Improvement Plan. (Brandon Wright, Town Manager)

Town Manager Wright provided an overview of the debt financing plan, which outlines the process for issuing debt over the next several years to fund capital improvements, primarily for street and sidewalk repairs. The plan anticipates issuing approximately \$7 million every 2-3 years to support \$16 million in infrastructure projects over the next six years. The next debt issuance is planned for 2025. He explained that the strategy is designed to minimize costs and maintain financial flexibility. The plan will be reviewed and updated annually as part of the budget process to account for changes in the bond market and town needs.

Council Member Beach moved to approve Resolution 2024-15 establishing the debt financing plan and tax rate goal for the FY 2025 Budget and the FY 2025-2030 Capital Improvement Plan. Mayor Pro Tem Flynn seconded the motion. The caption of the resolution reads as follows:

RESOLUTION NO. 2024-15

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB ESTABLISHING THE DEBT FINANCING PLAN AND TAX RATE GOAL FOR THE FISCAL YEAR 2025 BUDGET AND THE FISCAL YEAR 2025-2030 CAPITAL IMPROVEMENT PLAN; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

8. Consider a resolution adopting the Town of Trophy Club FY 2025 Business Plan. (Brandon Wright, Town Manager)

Town Manager Wright provided an update on the strategic plan and the business plan for fiscal year 2025. He explained the business plan focuses on the top six goals prioritized by the Town Council for the next one to two years, including emergency management, public safety, park planning, asset maintenance, senior housing regulations, and redevelopment strategies. These goals are incorporated into the annual budget, with progress to be tracked and reported quarterly.

Council Member Oldham moved to approve Resolution 2024-16 adopting the Town of Trophy Club FY 2025 Business Plan. Council Member Beach seconded the motion. The caption of the resolution reads as follows:

RESOLUTION NO. 2024-16

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB ADOPTING THE FISCAL YEAR 2025 BUSINESS PLAN FOR THE STRATEGIC PLAN.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham
NAYES: None
VOTE: 7-0

9. Consider a resolution adopting the FY 2025-2030 Capital Improvement Plan. (April Duvall, Director of Finance)

Ms. Duvall presented the updated six-year Capital Improvement Plan which allocates over \$16 million towards infrastructure replacement and maintenance. The plan addresses critical needs, ensuring Trophy Club remains well-maintained and prepared for future growth. Key projects include street improvements, sidewalk enhancements, storm drainage upgrades, and new pickleball courts. She stated the full plan was available on the town's website and in the council agenda packet.

Council Member Oldham moved to approve Resolution 2024-17 adopting the FY 2025-2030 Capital Improvement Plan. Council Member Beach seconded the motion. The caption of the resolution reads as follows:

RESOLUTION NO. 2024-17

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB ADOPTING THE FISCAL YEAR 2025-2030 CAPITAL IMPROVEMENT PLAN; AND PROVIDING AN EFFECTIVE DATE.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham
NAYES: None
VOTE: 7-0

10. Consider an ordinance adopting the FY 2025 Annual Budget for the fiscal year beginning October 1, 2024, through September 30, 2025 making appropriations for each fund and department and ratify the property tax increase reflected in the FY 2025 Budget. (April Duvall, Director of Finance)

Ms. Duvall presented the FY 2025 Proposed Budget, based on a tax rate of \$0.415469, with projected revenues of \$28,514,279 and expenditures totaling \$38,000,500. Key budget highlights include a 3% cost of living adjustment for staff, up to 2% merit increases, new positions (a crossing guard and part-time Parks staff), and funding for various projects such as the Parks Master Plan and replacement vehicles. Savings were achieved through reductions in the Town Manager's contingency fund, IT consolidation, and electricity costs. Additionally, community events were moved to the hotel occupancy fund.

Ms. Duvall extended a special thanks to the Finance Subcommittee members, Mayor Pro Tem Flynn, Council Member Sheridan, and Council Member Rowe, for their dedication and time in contributing to the budget process.

Mayor Pro Tem Flynn moved to approve Ordinance 2024-21 adopting the FY 2025 Budget for the fiscal year beginning October 1, 2024, through September 30, 2025, making appropriations for each fund and department. Council Member Sheridan seconded the motion. The caption of the ordinance reads as follows:

ORDINANCE NO. 2024-21

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS, ADOPTING AND APPROVING THE BUDGET FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2024 AND ENDING SEPTEMBER 30, 2025, AND MAKING APPROPRIATIONS FOR EACH DEPARTMENT, PROJECT, OPERATION, ACTIVITY, PURCHASE, ACCOUNT, AND OTHER EXPENDITURES; PROVIDING FOR EMERGENCY EXPENDITURES AND EXPENDITURES AS ALLOWED BY APPLICABLE LAW; PROVIDING FOR FILING OF DOCUMENTS; REPEALING CONFLICTING ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

ROLL CALL VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

Town Manager Wright stated the ratification of the property tax increase would be considered following the consideration of tax rate levy item.

11. Conduct a public hearing and consider an ordinance levying municipal ad valorem taxes for FY 2025 from October 1, 2024, to September 30, 2025, at the rate of \$0.415469 per \$100 assessed valuation on all taxable property within the corporate limits of the Town of Trophy Club. (April Duvall, Director of Finance)

Mayor Tiffany opened the public hearing at 8:13 p.m.

Ms. Duvall presented the proposed tax rate for fiscal year 2025 explaining the proposed rate of \$0.415469 remains unchanged from the previous year, with a maintenance and operations component of \$0.316042 and an interest and sinking component of \$0.099427. While the overall rate remains the same, it will generate more revenue for maintenance and operations, effectively resulting in a 5.16% increase. For a home valued at \$100,000, this would result in an increase of approximately \$0.37 in maintenance and operations taxes. She stated no public comments were received on this item.

No one spoke in favor or opposition.

Mayor Tiffany closed the public hearing at 8:14 p.m.

Mayor Pro Tem Flynn moved that the property tax rate be increased by the adoption of a tax rate of \$0.415469, which is effectively a 4.99 percent increase in the tax rate; and moved to approve Ordinance 2024-22 adopting the 2024 tax rolls and fixing and levying municipal ad valorem taxes for the fiscal year beginning on October 1, 2024, and ending on September 30, 2025, and for each fiscal year thereafter until otherwise provided, at the rate of \$0.415469 per \$100 assessed valuation on all taxable property within the corporate limits of the Town of Trophy Club as of January 1, 2024. Council Member Beach seconded the motion. The caption of the ordinance reads as follows:

ORDINANCE 2024-22

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS, FIXING AND LEVYING MUNICIPAL AD VALOREM TAXES FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2024 AND ENDING SEPTEMBER 30, 2025, AND FOR EACH FISCAL YEAR THEREAFTER UNTIL OTHERWISE PROVIDED, AT A RATE OF \$0.415469 PER ONE HUNDRED DOLLARS (\$100.00) ASSESSED VALUATION ON ALL TAXABLE PROPERTY WITHIN THE CORPORATE LIMITS OF THE TOWN; DIRECTING THE ASSESSMENT THEREOF TO PROVIDE REVENUES FOR THE PAYMENT OF CURRENT OPERATION AND MAINTENANCE EXPENSES AND INDEBTEDNESS OF THE TOWN; APPROVING THE TAX RATE AND LEVY AND NOTIFYING THE PUBLIC THAT THIS TAX RATE WILL RAISE MORE TAXES FOR MAINTENANCE AND OPERATIONS THAN LAST YEAR'S TAX RATE; PROVIDING FOR DUE AND DELINQUENT DATES TOGETHER WITH PENALTIES AND INTEREST; PROVIDING FOR PAYMENT TO THE TOWN ASSESSOR/COLLECTOR; PROVIDING FOR PENALTY AND INTEREST; PROVIDING A CUMULATIVE CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

ROLL CALL VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham
NAYES: None
VOTE: 7-0

Second part of Item 10. Ratification of the property tax increase reflected in the FY 2025 Budget.

Mayor Pro Tem Flynn moved to ratify the property tax revenue increase reflected in the FY 2025 Budget. "This budget will raise more total property taxes than last year's budget by \$628,512 or 6.14%, and of that amount, \$134,787 is tax revenue to be raised from new property added to the tax roll this year. Council Member Bauer seconded the motion.

ROLL CALL VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

12. Consider casting a vote for the official ballot of the Texas Municipal League Regional 8 Director Election. (Brandon Wright, Town Manager)

Town Manager Wright explained that the Town of Trophy Club participates in the election of the director for Region 8 of the Texas Municipal League (TML) Board of Directors and a brief biography of each of the four candidates was provided in the agenda packet.

Mayor Tiffany moved to cast the Town's vote for Kim Greaves, Mayor of Westlake for the Texas Municipal League Region 8 Director election. Council Member Beach seconded the motion.

VOTE ON MOTION

AYES: Bauer, Beach, Flynn, Sheridan, Tiffany, Rowe, Oldham

NAYES: None

VOTE: 7-0

EXECUTIVE SESSION/OPEN SESSION

Pursuant to the Open Meetings Act, Chapter 551, the Town Council convened into a Closed Executive Session at 8:18 p.m. and reconvened into Regular Session at 9:27 p.m. in accordance with the Texas Government Code regarding: Section 551.074 Personnel Matters to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee, to wit: 1) Town Secretary. **No Action Taken.**

ADJOURNMENT

Mayor Tiffany adjourned the Town Council meeting at 9:27 p.m.

Jeannette Tiffany, Mayor

Attest:

Tammy Dixon, Town Secretary



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: April Duvall, Director of Finance

AGENDA ITEM: Consider an ordinance accepting and approving an update of the Service and Assessment Plan and an updated Assessment Roll for the Town of Trophy Club Public Improvement District No. 1 ("PID") in compliance with Chapter 372 (Authorized Improvements Assessment). (April Duvall, Director of Finance)

BACKGROUND/SUMMARY: Each year, the Town Council reviews and approves the updated Service and Assessment Plan (SAP) and Assessment Roll for Public Improvement District No. 1 (PID) in Trophy Club. Revenue bonds were originally issued in 2007 to finance the acquisition, construction, and maintenance of properties within The Highlands of Trophy Club. In 2015, the bonds were refinanced, reducing the interest rate with a savings passed on to homeowners. With completion of the public improvements in infrastructure necessary for the properties within The Highlands of Trophy Club, all funds were fully expended on the agreed-upon authorized improvements. This ordinance includes making and adopting necessary findings, formally accepting the annual Service Plan Update and Assessment Roll, and establishing an effective date. This action is a requirement of the PID Infrastructure Plan, which contains no significant changes from the plan approved in the previous year.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: The Service and Assessment Plan (SAP) outlines the authorized improvements to be provided by the PID, detailing the associated costs, indebtedness, and the method for assessing properties within the PID. The 2024 update includes an assessment roll that identifies each parcel based on the assessment method outlined in the amended SAP. Notably, there have been no parcel subdivisions added since the last update in 2023.

The original PID indebtedness from the 2015 Bonds, which are to repaid from assessments, is \$26,154,979. Assessments on any property may be paid in full at any time. If not paid in full, the assessments are payable in annual installments of principal and interest, the last of which is scheduled for the 2032 tax year. The 2024 annual installments will be billed by the Town in 2024 and will be delinquent on February 1, 2025. Below is a chart with the annual installment amount per lot type for the current year.

LOT TYPE	ANNUAL INSTALLMENT
Type 1	\$2,420.91
Type 2	\$1,839.89
Type 3	\$1,500.97

Type 4	\$1,283.08
Type 5	\$1,065.20

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Ordinance
2. Exhibit A: 2024 Annual Service Plan Update

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the ordinance accepting and approving an update of the Service and Assessment Plan and an updated Assessment Roll for the Town of Trophy Club Public Improvement District No. 1 ("PID) in compliance with Chapter 372 (Authorized Improvements Assessment).

**TOWN OF TROPHY CLUB
ORDINANCE NO. 2024-XX**

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, ACCEPTING AND APPROVING AN UPDATE OF THE SERVICE AND ASSESSMENT PLAN AND AN UPDATED ASSESSMENT ROLL FOR THE TOWN OF TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1 (“PID”) IN COMPLIANCE WITH CHAPTER 372 (AUTHORIZED IMPROVEMENT ASSESSMENT); MAKING AND ADOPTING FINDINGS; PROVIDING FOR THE INCORPORATION OF FINDINGS; ACCEPTING AND APPROVING THE ANNUAL SERVICE AND ASSESSMENT PLAN UPDATE AND UPDATED ASSESSMENT ROLL FOR THE PID ATTACHED AS EXHIBIT “A” HERETO; PROVIDING A CUMULATIVE REPEALER CLAUSE; PROVIDING SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Trophy Club (the “Town”) is a home rule municipality acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, on May 7, 2007, after due notice, the Town Council held a public hearing in the manner required by law on the advisability of the public improvements and services described in the petition as required by Sec. 372.009 of the Public Improvement District Assessment Act, Chapter 372, Texas Local Government Code, as amended (the “PID Act”) and made the findings required by Sec. 372.009(b) of the PID Act and, by Resolution No. 2007-08 adopted by a majority of the members of the Town Council, authorized the PID in accordance with its finding as to the advisability of the public improvements and services; and

WHEREAS, on November 5, 2007, after notice and a public hearing conducted in the manner required by law, the Town Council adopted Ordinance No. 2007-29, which was supplemented by Ordinance No. 2009-24 adopted by the Town Council on September 28, 2009 (as supplemented, the “Assessment Ordinance”); and

WHEREAS, on December 13, 2007, the Town Council issued special assessment revenue bonds secured by the assessments levied pursuant to the Assessment Ordinance (the “2007 Bonds”); and

WHEREAS, on December 22, 2015, the Town Council issued special assessment revenue refunding bonds (the “2015 Bonds”), to refund in full the 2007 Bonds, such 2015 Bonds being secured by the assessments levied pursuant to the Assessment Ordinance; and

WHEREAS, Section 372.013 of the PID Act and the Service and Assessment Plan require that the Service and Assessment Plan and Assessment Roll be annually reviewed and updated; and

WHEREAS, pursuant to the issuance of the 2015 Bonds, the Service and Assessment Plan should be updated to reflect the issuance of the 2015 Bonds; and

WHEREAS, the Annual Service and Assessment Plan Update and updated Assessment Roll attached as **Exhibit “A”** hereto conform the original Assessment Roll to the principal and interest payment schedule required for the 2015 Bonds, thereby reducing the amounts listed on the original Assessment Roll, and update the Assessment Roll to reflect prepayments, property divisions and changes to the budget allocation for District public improvements that occur during the year, if any; and

WHEREAS, the Town Council now desires to proceed with the adoption of this Ordinance which supplements the Assessment Ordinance and approves and adopts the Annual Service and Assessment Plan Update and the Updated Assessment Roll attached thereto, in conformity with the requirements of the PID Act, for the fiscal year beginning October 1, 2024, and ending September 30, 2025.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS:

**SECTION 1.
INCORPORATION OF FINDINGS**

The findings and determinations set forth in the preambles above are incorporated herein for all purposes and are hereby adopted.

**SECTION 2.
ANNUAL SERVICE AND ASSESSMENT PLAN UPDATE AND UPDATED
ASSESSMENT ROLL**

The Annual Service and Assessment Plan Update and Updated Assessment Roll attached hereto as **Exhibit “A”** are hereby accepted and approved in compliance with the PID Act in all matters as required by law.

**SECTION 3.
CUMULATIVE REPEALER**

That this Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances or parts thereof in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim, or lawsuit which has been initiated or has arisen under or pursuant to such Ordinance on the date of adoption of this Ordinance shall continue to be governed by the provisions of that Ordinance and for that purpose the Ordinance shall remain in full force and effect.

**SECTION 4.
SEVERABILITY**

If any provision, section, subsection, sentence, clause, or phrase of this Ordinance, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, void, or invalid, the validity of the remaining portions of this Ordinance or the application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the Town Council that no portion hereof, or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality, voidness, or invalidity of any other portion hereof, and all provisions of this Ordinance are declared to be severable for that purpose.

**SECTION 5.
EFFECTIVE DATE**

This Ordinance shall take effect, and the levy of the Assessments, and the provisions and terms of the Service and Assessment Plan and Assessment Role shall be and become effective upon passage and execution hereof in accordance with the law.

ADOPTED, PASSED, and APPROVED by the Town Council, by a vote of _____ members voting “for”, _____ members voting “against”, and with _____ absentees on this 23rd day of September 2024.

Jeannette Tiffany, Mayor
Town of Trophy Club, Texas

[SEAL]

ATTEST:

APPROVED AS TO FORM:

Tammy Dixon, Town Secretary
Town of Trophy Club, Texas

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Exhibit "A"
Annual Service and Assessment Plan Update
and Updated Assessment Roll



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ANNUAL SERVICE PLAN UPDATE (2024)

TOWN OF TROPHY CLUB

TROPHY CLUB PID NO. 1 (PID4)

THE HIGHLANDS AT TROPHY CLUB

Report Date: SEPTEMBER 23, 2024

Public Finance
Public-Private Partnerships
Development Economics
Clean Energy Bonds

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TOWN OF TROPHY CLUB



ANNUAL SERVICE PLAN UPDATE (2024) TOWN OF TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1 (PID4) THE HIGHLANDS AT TROPHY CLUB

Prepared for:
The Town of Trophy Club
1 Trophy Wood Drive
Trophy Club, TX 76262

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I PLAN DESCRIPTION AND DEFINED TERMS

A Introduction

The Town of Trophy Club Public Improvement District No. 1 (the "PID") was created pursuant to the Public Improvement District Assessment Act, Subchapter A of Chapter 372, Texas Local Government Code, as amended (the "PID Act") and a resolution of the Town Council (the "Council") on April 16, 2007 to finance certain public improvement projects for the benefit of the property in the PID. The Town of Trophy Club Public Improvement District No. 1 Special Assessment Revenue Bonds, Series 2007 (the "2007 Bonds") in the aggregate principal amount of \$27,500,000 were issued to finance, refinance, provide or otherwise assist in the acquisition, construction and maintenance of the public improvements provided for the benefit of the property in the PID (the "Authorized Improvements"). Refunding of the 2007 Bonds occurred in December 2015 through the issuance of the Town of Trophy Club Public Improvement District No. 1 Special Assessment Revenue Refunding Bonds, Series 2015 (the "2015 Bonds") in the aggregate principal amount of \$26,154,979. All funds have been expended for the acquisition, construction and maintenance of the Authorized Improvements, and no further expenditures are anticipated to be made for such purposes.

A service and assessment plan (the "Service and Assessment Plan") was prepared at the direction of the Town identifying the Authorized Improvements to be provided by the PID, the costs of the Authorized Improvements, the indebtedness to be incurred for the Authorized Improvements, and the manner of assessing the property in the PID for the costs of the Authorized Improvements. Pursuant to Sections 372.013, 372.014, and 372.015 of the PID Act, the Service and Assessment Plan is to be reviewed and updated annually. The update of the Service and Assessment Plan (the "Annual Service and Assessment Plan Update") for 2024 includes the 2024 assessment roll (the "2024 Assessment Roll") identifying the assessments on each parcel, based on the method of assessment set forth in the Service and Assessment Plan, as amended, and pursuant to this Annual Service Plan Update. Section 372.015 of the PID Act states that the governing body of the municipality shall apportion the cost of an improvement to be assessed against property in an improvement district, and the apportionment shall be made on the basis of special benefits accruing to the property because of the improvement. The method of assessing the costs of the Authorized Improvements to the property in the PID is summarized in Section III of this Annual Service and Assessment Plan Update.

II UPDATE OF THE SERVICE PLAN

A Annual Budget for the Public Improvements

Table II-1 below shows the sources and uses of funds for the 2015 Bonds. As also shown in Table II-1, the original PID indebtedness is the \$26,154,979 par amount of the 2015 Bonds, which are to be repaid from Assessments.

Pursuant to the PID Act, a service plan must cover a period of at least five years (Sec. 372.013(b)). The projected Assessment Installments and annual debt service related to the Authorized Improvements are shown in Table II-2 on the following page.

Table II-1: Sources and Uses of Funds

SOURCES OF FUNDS	
Par Amount of Bonds	\$26,154,979.00
Reoffering Premium	\$4,482,842.45
Transfer from Lawfully Available Funds	\$2,781,503.81
TOTAL SOURCES OF FUNDS	\$33,419,325.26
USE OF FUNDS	
Total Underwriter's Discount	\$179,005.53
Costs of Issuance	\$550,000.00
Gross Bond Insurance Premium	\$413,130.74
Deposit to Debt Service Reserve Fund	\$2,200,000.00
Deposit to Net Cash Escrow Fund	\$29,734,499.88
Prepayment/Delinquency Fund	\$250,000.00
Collection Costs Fund	\$90,000.00
Deposit to Bond Fund	\$2,689.11
TOTAL USES OF FUNDS	\$33,419,325.26

Table II-2: Cash Flow Projections

Description	Total	Tax Year				
		2024	2025	2026	2027	2028
Revenues						
Assessment Installments	\$11,772,579	\$2,281,393	\$2,324,683	\$2,357,329	\$2,388,999	\$2,420,175
Credits Due to Refunding	\$437,096	\$87,419	\$87,419	\$87,419	\$87,419	\$87,419
Total Revenues	\$12,209,675	\$2,368,813	\$2,412,102	\$2,444,748	\$2,476,418	\$2,507,595
Expenditures						
Interest	\$2,885,216	\$691,843	\$633,383	\$580,268	\$522,165	\$457,558
Principal	\$9,067,000	\$1,627,000	\$1,728,000	\$1,813,000	\$1,902,000	\$1,997,000
Collection Costs	\$257,459	\$49,970	\$50,720	\$51,480	\$52,253	\$53,036
Total Expenditures	\$12,209,675	\$2,368,813	\$2,412,102	\$2,444,748	\$2,476,418	\$2,507,595

Note: May not sum due to rounding.

B Annual Installments

The Assessment imposed on any parcel may be paid in full at any time. If not paid in full, the Assessments are payable in annual installments of principal and interest (the "Annual Installments") the last of which is scheduled for the 2032 tax year. Pursuant to the Service and Assessment Plan, each Assessment bears interest at the rate of interest borne by the 2015 Bonds. The 2024 Annual Installments shall be billed by the Town in 2024 and will be delinquent on February 1, 2025.

Pursuant to the Service and Assessment Plan, the Annual Service Plan Update shall show the remaining balance of the Assessments, the Annual Installment and the Annual Collection Costs to be collected from each Parcel. Annual Collection Costs shall be allocated to each Parcel pro rata based upon the amount the Annual Installment on a Parcel bears to the amount of Annual Installments in the PID as a whole that are payable at the time of such allocation. Each Annual Installment shall be reduced by any credits applied under the Indenture.

C Estimated vs. Actual Costs of Authorized Improvements

The original estimated cost of the Authorized Improvements as set forth in the Service and Assessment Plan, including contingency, was \$22,438,977, with \$20,449,965 allocated to the PID as shown in Table II-3 on the following page. The 2016 Annual Service and Assessment Plan Update revised the cost for the Authorized Improvements to \$22,704,189 which reflects actual costs to-date, with \$20,703,427 allocated to the PID.

As stated above in the Introduction to this Annual Service and Assessment Plan Update, all funds have been expended for the acquisition, construction and maintenance of the Authorized Improvements and no further expenditures are anticipated to be made for such purposes.

Table II-3: Actual v. Estimated Costs of the Project

PROJECT	ACTUAL COSTS EXPENDED	ORIGINAL ESTIMATED PID COST	STATUS
HARD COSTS			
THOROUGHFARE IMPROVEMENTS			
Thoroughfare Improvements South of NW Pkwy	\$2,976,933	\$3,046,144	100%
Thoroughfare Improvements not South of NW Pkwy	\$5,197,124	\$3,794,484	100%
WATER PROJECTS			
Water Distribution System	\$1,064,797	\$1,148,100	100%
Elevated Water Tank	\$1,032,838	\$960,000	100%
Wastewater Collection System	\$941,591	\$796,050	100%
TRAILS, LANDSCAPING/IRRIGATION, & SCREENING WALLS			
Trail System and Open Space	\$922,863	\$1,011,039	100%
Thoroughfare Landscaping and Irrigation	\$1,393,452	\$1,916,746	100%
Screening Walls and Neighborhood Entry Features	\$1,201,681	\$700,000	100%
MONUMENT			
Development Signature Monument	\$0	\$0	100%
PARKS			
Public Parks	\$4,914,806	\$4,914,916	100%
Park Drainage Improvements	\$1,048,799	\$925,049	100%
TOTAL HARD COSTS	\$20,694,884	\$19,212,528	100%
SOFT COSTS			
Construction Administration/Management	\$8,543	\$50,000	100%
Contingency		\$1,187,437	100%
GRAND TOTAL	\$20,703,427	\$20,449,965	100%

D Description of Projects

The PID consists of approximately 1,408 residential units, two parks, entry monuments, and associated rights-of-way, landscaping, and infrastructure necessary to provide roadways, drainage and utilities to the PID. A brief description of the Authorized Improvement projects follows below.

1. *Thoroughfare Improvements*

Northwest Parkway, Trophy Club Drive South of Northwest Parkway, and Intersection Improvements.

2. *Thoroughfare Improvements*

Trophy Club Drive other than South of Northwest Parkway, Trophy Club Park Drive.

3. *Water Distribution System*

12"/16" water line; 12" water lines in Trophy Club Drive, along Marshall Creek Road West, and in School Site Oversizing.

4. *Elevated Water Tank*

5. *Wastewater Collection System*

Sanitary sewer line within Trophy Club Drive and sewer line to existing system.

6. *Trail System and Open Space*

Improvements to the trail system include the construction of new access paths (including paving) to the Town's existing parks and green space.

7. *Thoroughfare Landscaping and Irrigation*

Thoroughfare streetscape, median landscaping, sidewalks, irrigation ponds, and irrigation wells.

8. *Screening Walls and Neighborhood Entry Features*

Trophy Club Drive decorative masonry screening walls, Marshall Creek Road East thin screening wall, and neighborhood entry features.

9. *Development Signature Monument (Tower)*

10. *Public Parks*

Improvements to the Northeast and Northwest parks including playgrounds, pavilions, restrooms, soccer fields, baseball fields, and aquatic facility.

11. Park Drainage Improvements

The park drainage improvements consist of burying drainage improvements to the land on which the improvements are located so that the recovered land can be used for a park and commercial development.

12. Construction Administration/Management

E Annual Budget for the Repayment of Indebtedness

PID budgeted revenues and expenditures as well as a year-end cash flow analysis are shown by Table II-4. The 2024 Annual Installments equal \$2,281,393.47 and reflect a credit resulting from the refunding of the 2007 Bonds in December 2015.

Table II-4: 2024 Budget for Annual Installments

Revenues	
Annual Installments to be Collected (Debt Service)	\$2,281,393.47
Add: Credit Due to Refunding	\$87,419.11
Subtotal Revenues	\$2,368,812.58
Expenditures	
Interest Payment on June 1, 2025	(\$362,191.25)
Interest Payment on December 1, 2025	(\$329,651.25)
Principal Payment on June 1, 2025	(\$1,627,000.00)
Subtotal Debt Service	(\$2,318,842.50)
Budgeted Collection Costs	(\$49,970.08)
Subtotal Expenditures	(\$2,368,812.58)

F Prepayments

Debt service on the 2015 Bonds reflects the redemption of bonds from Assessment prepayments and/or from funds transferred to the Redemption Fund. Table II-6 lists the parcels for which prepayment was received in 2016 through 2019. Prior to 2016, assessments were prepaid for parcels 533293, 533259, 533337, 583659, 583498, 470263, 470265, 470249, 534877, 470253, 469327, 465559, 534876, 498935, 533413, 567359, 558503, 558502, 558370, 583378, 469281, 557674, 465572, and 558448. In addition, mandatory Assessment prepayments were made in connection with the reduction of one unit within Phase 3C Neighborhood 7 and the reclassification of Phases I, IIA, and IIB of the Neighborhood 8 parcels in 2010, 2012, and 2013, respectively.

Table II-5: Principal Redeemed from Prepayments

REDEMPTION DATE	BONDS REDEEMED
May 31, 2016	\$16,000.00
September 2, 2016	\$49,000.00
March 15, 2017	\$33,000.00
June 30, 2017	\$34,000.00
February 28, 2018	\$43,000.00
TOTAL AMOUNT REDEEMED	\$175,000.00

Table II-6: 2016-2024 Prepaid Parcels

PARCEL NUMBER	PRINCIPAL
635087	\$16,974.15
583521	\$20,807.03
533318	\$27,377.67
635079	\$16,727.35
635149	\$16,727.35
558342	\$16,727.35
635113	\$16,727.35
469290	\$26,568.79
635088	\$16,572.69
470252	\$20,232.28
583484	\$16,518.51
557655	\$13,416.69
583586	\$18,174.35
533365	\$18,174.35
583316	\$11,900.20
470081	\$11,916.45
533328	\$22,453.21
558521	\$22,483.86
TOTAL PRINCIPAL PREPAID	\$330,479.63

According to the Service and Assessment Plan, 1,474 units were estimated to be built within the PID, representing a total of 986.19 Equivalent Units. Note, however, that Phases I, IIA, and IIB of the Preliminary Plat of The Highlands at Trophy Club Neighborhood 8 and corresponding to the amended Service and Assessment Plan Update approved by the Town on September 27, 2010, resulted in a reduction of Equivalent Units and a corresponding Assessment prepayment. The current totals are shown in Table II-7 below.

The Annual Installment for each Lot Type is calculated by multiplying the Annual Installment for one Equivalent Unit by the equivalent unit factor for each Lot Type. The Annual Installment to be collected from each of the remaining Lot Types is calculated and shown in Table II-7 below.

Table II-7: Annual Installment per Lot Type

Lot Type	Total Units	EU Per Unit	Annual Installment Per EU	Annual Installment Per Unit	Total Annual Installment
Type 1	154	1.00	\$2,420.91	\$2,420.91	\$372,820.14
Type 2	492	0.76	\$2,420.91	\$1,839.89	\$905,225.88
Type 3	365	0.62	\$2,420.91	\$1,500.97	\$547,854.05
Type 4	355	0.53	\$2,420.91	\$1,283.08	\$455,493.40
Type 5	0	0.44	\$2,420.91	\$1,065.20	\$0.00
Total	1,366	N/A	N/A	N/A	\$2,281,393.47

III UPDATE OF THE ASSESSMENT PLAN

The Service and Assessment Plan, as amended by the Town pursuant to ordinance 2010-24 adopted September 27, 2010, provides for the "Assessed Property" to be classified into one of five categories for purpose of allocating the Assessments, as follows:

- i. Lot Type 1 (12,000 square foot minimum lots),
- ii. Lot Type 2 (10,000 square foot minimum lots),
- iii. Lot Type 3 (8,400 square foot minimum lots),
- iv. Lot Type 4 (5,250 square foot minimum lots), and
- v. Lot Type 5 (3,000 square foot minimum lots).

The Service and Assessment Plan identified Equivalent Units for each Lot Type as follows:

Lot Type 1 Lots	1.00 per dwelling unit
Lot Type 2 Lots	0.76 per dwelling unit
Lot Type 3 Lots	0.62 per dwelling unit
Lot Type 4 Lots	0.53 per dwelling unit
Lot Type 5 Lots	0.44 per dwelling unit

The equivalent unit values are the ratio of the Assessments as allocated to each lot in each property class and are based on the average estimated unit value for each class.

IV UPDATE OF THE ASSESSMENT ROLL

The Assessment Roll is to be updated each year to reflect:

The identification of each Assessed Parcel in the PID (including, if available, the tax parcel identification number for such Parcel), (ii) the Assessments, including any adjustments as provided for in the Service and Assessment Plan or in the Act; (iii) the Annual Installment for the relevant year (if such Assessment is payable) for each Parcel; (iv) prepayments of the Assessments as provided for in this Service and Assessment Plan and (B) any other changes helpful to the administration of the PID and permitted by law.

The 2024 Assessment Roll is shown in **Appendix A**. Each Parcel is identified, along with the Assessment on each Parcel and the Annual Installment to be collected for 2024. Assessments are to be reallocated for the subdivision of any Parcels. According to the Service and Assessment Plan, upon the subdivision of any Parcel, the Administrator shall reallocate the Assessment for the Parcel prior to the subdivision among the new subdivided Parcels according to the following formula:

$$A = B \times (C \div D)$$

Where the terms have the following meanings:

A = the Assessment for each new subdivided Parcel.

B = the Assessment for the Parcel prior to subdivision.

C = the Equivalent Units allocated to each newly subdivided Parcel

D = the sum or the Equivalent Units for all of the new subdivided Parcels

The calculation of the Equivalent Units as to a Parcel shall be performed by the Administrator and confirmed by the Town Council based on the information available regarding the use of the Parcel. The estimate as confirmed shall be conclusive. The number of units to be built on a Parcel may be estimated by net land area and reasonable density ratios. Lot type shall be determined by the description that is most similar to the lots being classified.

There have been no parcel subdivisions since the last update of the Assessment Plan in 2017. The list of current parcels within the PID, the anticipated land use, the estimated number of units by lot type to be developed on the current residential parcels, the corresponding total assessments and current annual installment are shown in the 2024 Assessment Roll attached hereto as **Appendix A**. The complete 2024 Assessment Roll is also available at the Town of Trophy Club, 1 Trophy Wood Drive, Trophy Club, Texas, 76262.

APPENDIX A

Town of Trophy Club
Annual Service Plan Update (2024)
Trophy Club Public Improvement District No. 1 (PID4)



2024 ASSESSMENT ROLL

Lot Type 1

Parcel ID								
67687	469275	469276	469277	469278	469279	469280	469282	469283
469284	469286	469287	469288	469289	469291	469292	469293	469296
469297	469298	469299	469300	469301	469302	469303	469304	469305
498867	533315	533316	533317	533319	533320	533321	533322	533323
533324	533325	533326	533327	533329	533330	533331	533332	533333
533334	533335	533336	533338	533339	533340	533341	533342	533343
533344	533345	533346	533347	533348	533349	533350	533351	533352
534852	534853	534854	534855	534856	534857	534859	534860	534861
534862	534863	534864	534865	534866	534867	534868	534869	534870
534871	534872	534873	534874	534875	534878	534879	534880	534881
534882	534883	534884	534885	534886	534887	534888	534889	534890
534891	534892	534893	534894	534895	534896	534897	534898	536564
536572	536575	536587	558447	558449	558450	558451	558452	558453
558454	558455	558456	558457	558458	558513	558514	558515	558516
558517	558518	558519	558520	558522	558523	558524	558525	558526
558527	558528	558529	558538	558545	567352	567361	567362	567369
583247	583256	583274	583283	583329	583338	583550	583558	583559
583567								

Exhibit A
Annual Installments By Lot Type

Tax Year: 2024

Lot Type: 1

Tax Year (a)	PID Bonds			Collections Costs	Refunding Credit	Annual Installment (b)	Assessment Balance
	Principal	Interest	Net Debt Service				
2024	\$1,726.50	\$734.15	\$2,460.65	\$53.03	(\$92.76)	\$2,420.91	\$19,341.66
2025	\$1,833.67	\$672.12	\$2,505.79	\$53.82	(\$92.76)	\$2,466.85	\$17,615.16
2026	\$1,923.87	\$615.75	\$2,539.63	\$54.63	(\$92.76)	\$2,501.49	\$15,781.49
2027	\$2,018.32	\$554.10	\$2,572.41	\$55.45	(\$92.76)	\$2,535.10	\$13,857.61
2028	\$2,119.13	\$485.54	\$2,604.66	\$56.28	(\$92.76)	\$2,568.18	\$11,839.30
2029	\$2,229.49	\$412.16	\$2,641.64	\$57.12	(\$92.76)	\$2,606.00	\$9,720.17
2030	\$2,339.85	\$316.04	\$2,655.88	\$57.98	(\$92.76)	\$2,621.10	\$7,490.69
2031	\$2,493.71	\$195.20	\$2,688.91	\$58.85	(\$92.76)	\$2,655.00	\$5,150.84
2032	\$2,657.13	\$66.43	\$2,723.56	\$59.73	(\$92.76)	\$2,690.53	\$2,657.13
Total	\$20,985.39	\$4,844.82	\$25,830.21	\$559.14	(\$927.64)	\$25,461.71	

(a) Tax Year 2024 corresponds to Bond Year 2025. Tax Year 2024 Annual Installments will become due by January 31, 2025.

(b) Subject to change.

Lot Type 2

Parcel ID								
469306	469307	469308	469309	469310	469311	469312	469313	469314
469315	469316	469317	469318	469319	469320	469321	469322	469323
469324	469325	469326	469328	469329	469330	469331	469332	469333
469334	469335	469336	469337	470167	470168	470169	470170	470171
470172	470173	470174	470175	470176	470177	470178	470179	470180
470196	470197	470198	470204	470205	470250	470251	470254	470255
470256	470257	470258	470259	470260	470261	470262	470264	470266
470267	470268	470270	470271	470272	470273	470274	470275	470276
470277	470278	470279	470280	470281	470282	470283	470284	470285
470286	470287	470288	470289	470290	470291	470292	470293	470294
470295	470296	470297	470298	470299	470300	498868	498869	498870
498871	498873	498874	498875	498876	498877	498878	498879	498880
498912	498913	498914	498915	498916	498917	498918	498919	498920
498922	498923	498924	498925	498926	498927	498928	498929	498930
498931	498932	498933	498934	498936	498937	498938	498939	498940
498945	498946	498947	498948	498949	498950	498951	498952	498953
498954	498955	498956	533255	533256	533257	533258	533262	533264
533287	533289	533290	533291	533292	533294	533295	533296	533297
533298	533307	533309	533310	533311	533312	533313	533314	533353
533354	533355	533356	533357	533358	533359	533360	533361	533362
533363	533364	533366	533367	533368	533369	533370	533371	533372
533373	533374	533375	533376	533377	533378	533379	533380	533381
533382	533383	533384	533385	533386	533387	533388	533389	533390
533391	533392	533393	533394	533395	533396	533397	533398	533399
533400	533401	533402	533403	533404	533405	533406	533407	533408
533409	533411	533412	533414	533415	533416	533417	533418	533419
533420	533421	533422	536565	536566	536567	536568	536569	536570
536571	536576	536577	536578	536579	536580	536581	536582	536583
536584	536585	536586	558459	558460	558461	558462	558463	558464
558465	558467	558468	558469	558470	558471	558472	558473	558474
558475	558476	558477	558478	558479	558480	558481	558482	558483
558484	558485	558486	558487	558488	558489	558490	558491	558492
558493	558494	558495	558496	558497	558498	558499	558500	558501
558504	558505	558506	558507	558508	558509	558510	558511	558512
558530	558531	558532	558533	558534	558535	558536	558537	558539
558540	558541	558542	558543	558544	567353	567354	567355	567356
567357	567358	567360	567363	567364	567365	567366	567367	567368
583248	583249	583250	583251	583252	583253	583254	583255	583275
583276	583277	583278	583279	583280	583281	583282	583330	583331
583332	583333	583334	583335	583336	583337	583519	583520	583522
583523	583524	583525	583526	583527	583528	583529	583530	583531
583532	583533	583534	583535	583536	583537	583538	583539	583540
583541	583542	583543	583544	583545	583546	583547	583548	583551
583552	583553	583554	583555	583556	583557	583560	583561	583562
583563	583564	583565	583566	583573	583574	583575	583576	583577
583578	583579	583580	583581	583582	583583	583584	583585	583587
583588	583589	583590	583591	583592	583593	583594	583595	583596
583597	583598	583599	583600	583601	583602	583603	583604	583605
583606	583607	583608	583609	583612	583613	583614	583615	583616
583617	583618	583619	583620	583621	583622	583623	583624	583625
583626	583627	583628	583629	583630	583631	583632	583633	583634
622299	622300	622301	622302	622303	622304	622305	622306	622307
622308	622309	622310	622311	622312	622313	622314	622315	622316
622317	622318	622319	622320	622321	622322	622323	622324	622325
622326	622327	622328	622329	622330	631471			

Exhibit A
Annual Installments By Lot Type

Tax Year: 2024

Lot Type: 2

Tax Year (a)	PID Bonds			Collections Costs	Refunding Credit	Annual Installment (b)	Assessment Balance
	Principal	Interest	Net Debt Service				
2024	\$1,312.14	\$557.96	\$1,870.09	\$40.30	(\$70.50)	\$1,839.89	\$14,699.66
2025	\$1,393.59	\$510.81	\$1,904.40	\$40.90	(\$70.50)	\$1,874.81	\$13,387.52
2026	\$1,462.14	\$467.97	\$1,930.12	\$41.52	(\$70.50)	\$1,901.13	\$11,993.93
2027	\$1,533.92	\$421.11	\$1,955.03	\$42.14	(\$70.50)	\$1,926.67	\$10,531.79
2028	\$1,610.54	\$369.01	\$1,979.55	\$42.77	(\$70.50)	\$1,951.82	\$8,997.87
2029	\$1,694.41	\$313.24	\$2,007.65	\$43.41	(\$70.50)	\$1,980.56	\$7,387.33
2030	\$1,778.28	\$240.19	\$2,018.47	\$44.07	(\$70.50)	\$1,992.04	\$5,692.92
2031	\$1,895.22	\$148.35	\$2,043.57	\$44.73	(\$70.50)	\$2,017.80	\$3,914.64
2032	\$2,019.42	\$50.49	\$2,069.90	\$45.40	(\$70.50)	\$2,044.80	\$2,019.42
Total	\$15,948.89	\$3,682.06	\$19,630.96	\$424.94	(\$705.00)	\$19,350.90	

(a) Tax Year 2024 corresponds to Bond Year 2025. Tax Year 2024 Annual Installments will become due by January 31, 2025.

(b) Subject to change.

Lot Type 3

Parcel ID								
470048	470049	470050	470051	470052	470053	470054	470055	470153
470154	470155	470156	470157	470158	470159	470160	470161	470162
470163	470164	470165	470166	470181	470182	470183	470184	470185
470186	470187	470188	470189	470190	470191	470192	470193	470194
470195	470199	470200	470201	470202	470203	558332	558333	558334
558335	558336	558337	558338	558339	558340	558341	558343	558344
558345	558346	558347	558348	558349	558350	558351	558352	558353
558354	558355	558356	558357	558358	558359	558360	558361	558362
558363	558364	558365	558366	558367	558368	558369	558371	558372
558373	558374	558375	558376	558377	558378	558379	558380	558381
558382	558383	558384	558385	558386	558387	558388	558389	558390
558391	558392	558393	558394	558395	558396	558397	558398	558399
558400	558401	558402	558403	558404	558405	558406	558407	558408
558409	558410	558411	558412	558413	558414	558415	558416	558417
558418	558419	558421	558422	558423	558424	558425	558426	558427
558428	558429	558430	558431	558432	558433	558434	558435	558436
558437	558438	558439	558440	558441	558442	558443	558444	558445
558446	583295	583296	583297	583298	583299	583300	583319	583320
583321	583322	583323	583324	583325	583375	583376	583377	583379
583380	583381	583470	583471	583472	583473	583474	583475	583476
583477	583478	583479	583480	583481	583482	583483	583485	583486
583487	583488	583489	583490	583491	583492	583493	583494	583495
583499	583500	583501	583502	583503	583504	583505	583506	583507
583508	583509	583510	583511	583512	583513	583514	583643	583644
583645	583646	583647	583648	583649	583650	583651	583652	583653
583654	583655	583656	583657	583658	583660	583661	583662	583663
583664	583665	583666	583667	583668	583669	583670	583671	583672
583673	583674	583675	583676	583678	583679	583680	583681	583682
583683	583684	583685	583686	583687	583688	583689	583690	583691
583692	583693	635052	635053	635054	635055	635056	635057	635058
635059	635060	635061	635062	635063	635064	635065	635066	635067
635068	635069	635070	635071	635072	635073	635074	635075	635076
635077	635078	635080	635081	635082	635083	635084	635085	635086
635089	635090	635091	635092	635093	635094	635095	635096	635097
635098	635099	635100	635101	635102	635103	635104	635105	635106
635107	635108	635109	635114	635115	635116	635117	635118	635119
635120	635121	635122	635123	635124	635125	635126	635127	635128
635129	635130	635131	635133	635134	635135	635136	635137	635138
635139	635140	635141	635142	635143	635144	635145	635146	635147
635148	635150	635151	635152	635153	635154	635155	635156	635157
635158	635159	635160	635161	635162				

Exhibit A
Annual Installments By Lot Type

Tax Year: 2024

Lot Type: 3

Tax Year (a)	PID Bonds			Collections Costs	Refunding Credit	Annual Installment (b)	Assessment Balance
	Principal	Interest	Net Debt Service				
2024	\$1,070.43	\$455.17	\$1,525.60	\$32.88	(\$57.51)	\$1,500.97	\$11,991.83
2025	\$1,136.88	\$416.71	\$1,553.59	\$33.37	(\$57.51)	\$1,529.45	\$10,921.40
2026	\$1,192.80	\$381.77	\$1,574.57	\$33.87	(\$57.51)	\$1,550.92	\$9,784.52
2027	\$1,251.36	\$343.54	\$1,594.90	\$34.38	(\$57.51)	\$1,571.76	\$8,591.72
2028	\$1,313.86	\$301.03	\$1,614.89	\$34.89	(\$57.51)	\$1,592.27	\$7,340.37
2029	\$1,382.28	\$255.54	\$1,637.82	\$35.42	(\$57.51)	\$1,615.72	\$6,026.51
2030	\$1,450.70	\$195.94	\$1,646.65	\$35.95	(\$57.51)	\$1,625.08	\$4,644.23
2031	\$1,546.10	\$121.02	\$1,667.13	\$36.49	(\$57.51)	\$1,646.10	\$3,193.52
2032	\$1,647.42	\$41.19	\$1,688.61	\$37.03	(\$57.51)	\$1,668.13	\$1,647.42
Total	\$13,010.94	\$3,003.79	\$16,014.73	\$346.66	(\$575.13)	\$15,786.26	

(a) Tax Year 2024 corresponds to Bond Year 2025. Tax Year 2024 Annual Installments will become due by January 31, 2025.

(b) Subject to change.

Lot Type 4

Parcel ID								
465509	465510	465511	465512	465513	465514	465515	465516	465517
465518	465519	465520	465521	465522	465523	465524	465525	465526
465527	465528	465529	465530	465531	465532	465533	465534	465535
465536	465537	465538	465539	465540	465541	465542	465543	465544
465545	465546	465547	465548	465549	465550	465551	465552	465553
465554	465555	465556	465557	465558	465560	465561	465562	465563
465564	465565	465566	465567	465568	465569	465570	465571	465573
465574	465575	465576	465577	465578	465579	465580	465581	465582
470056	470057	470058	470059	470060	470061	470062	470063	470064
470065	470066	470067	470068	470069	470070	470071	470072	470073
470074	470075	470076	470077	470078	470079	470080	470082	470083
470084	470085	470086	470087	470088	470089	470090	470091	470092
470093	470094	470095	470096	470097	470098	470099	470100	470101
470102	470103	470104	470105	470106	470107	470108	470109	470110
470111	557641	557642	557643	557644	557645	557646	557647	557648
557649	557650	557651	557652	557653	557654	557656	557657	557658
557659	557660	557661	557662	557663	557665	557666	557667	557668
557669	557670	557671	557672	557673	557675	557676	557677	557678
557679	557680	557681	557682	557683	557684	557685	557686	580345
580346	580347	580348	580349	580350	580351	580352	580353	580354
580355	580356	580357	580358	580359	580360	580361	580362	580363
580364	580365	580366	580367	580368	580369	580370	580372	580373
580374	580375	580376	580377	580378	580379	580380	580381	580382
580384	580385	580386	580387	580388	580389	580390	580393	580394
580395	580396	580397	580398	580399	580400	580401	580403	580404
580405	580406	580407	580408	580409	580410	580411	580412	580413
580414	583215	583216	583217	583218	583219	583220	583221	583222
583223	583224	583225	583226	583227	583228	583229	583230	583231
583232	583233	583234	583235	583236	583237	583238	583239	583240
583241	583242	583243	583244	583245	583258	583259	583260	583261
583262	583263	583264	583265	583266	583267	583268	583269	583270
583271	583272	583285	583286	583287	583288	583289	583290	583291
583292	583293	583294	583301	583302	583303	583304	583305	583306
583307	583308	583309	583310	583311	583312	583313	583314	583315
583317	583318	583382	583383	583384	583385	583386	583387	583388
583389	583390	583391	583392	583393	583394	583395	583396	583398
583399	583400	583401	583402	583403	583404	583405	583406	583407
583408	583409	583410	583411	583412	583413	583414	583415	583416
583417	583418	583419	583420	583421	583422	583423	583424	583425
583426	583427	583428	583429					

Exhibit A
Annual Installments By Lot Type

Tax Year: 2024

Lot Type: 4

Tax Year (a)	PID Bonds			Collections Costs	Refunding Credit	Annual Installment (b)	Assessment Balance
	Principal	Interest	Net Debt Service				
2024	\$915.04	\$389.10	\$1,304.14	\$28.10	(\$49.16)	\$1,283.08	\$10,251.08
2025	\$971.85	\$356.22	\$1,328.07	\$28.53	(\$49.16)	\$1,307.43	\$9,336.04
2026	\$1,019.65	\$326.35	\$1,346.00	\$28.95	(\$49.16)	\$1,325.79	\$8,364.19
2027	\$1,069.71	\$293.67	\$1,363.38	\$29.39	(\$49.16)	\$1,343.60	\$7,344.54
2028	\$1,123.14	\$257.34	\$1,380.47	\$29.83	(\$49.16)	\$1,361.14	\$6,274.83
2029	\$1,181.63	\$218.44	\$1,400.07	\$30.28	(\$49.16)	\$1,381.18	\$5,151.69
2030	\$1,240.12	\$167.50	\$1,407.62	\$30.73	(\$49.16)	\$1,389.18	\$3,970.06
2031	\$1,321.67	\$103.46	\$1,425.12	\$31.19	(\$49.16)	\$1,407.15	\$2,729.95
2032	\$1,408.28	\$35.21	\$1,443.49	\$31.66	(\$49.16)	\$1,425.98	\$1,408.28
Total	\$11,122.26	\$2,567.75	\$13,690.01	\$296.34	(\$491.65)	\$13,494.70	

(a) Tax Year 2024 corresponds to Bond Year 2025. Tax Year 2024 Annual Installments will become due by January 31, 2025.

(b) Subject to change.

APPENDIX B

Town of Trophy Club
Annual Service Plan Update (2024)
Trophy Club Public Improvement District No. 1 (PID4)



BUYER DISCLOSURE FORM

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

NOTICE OF OBLIGATIONS RELATED TO PUBLIC IMPROVEMENT DISTRICT

A person who proposes to sell or otherwise convey real property that is located in a public improvement district established under Subchapter A, Chapter 372, Local Government Code (except for public improvement districts described under Section 372.005), or Chapter 382, Local Government Code, shall first give to the purchaser of the property this written notice, signed by the seller.

For the purposes of this notice, a contract for the purchase and sale of real property having a performance period of less than six months is considered a sale requiring the notice set forth below.

This Notice requirement does not apply to a transfer:

- 1) Under a court order or foreclosure;
- 2) By a trustee in bankruptcy;
- 3) To a mortgagee by a mortgagor or successor in interest or to a beneficiary of a deed of trust by a trustor or successor in interest;
- 4) By a mortgagee or a beneficiary under a deed of trust who has acquired the land at a sale conducted under a power of sale under a deed of trust or a sale under a court-ordered foreclosure or has acquired the land by a deed in lieu of foreclosure;
- 5) By a fiduciary in the course of the administration of a decedent's estate, guardianship, conservatorship, or trust;
- 6) From one co-owner to another co-owner of an undivided interest in the real property;
- 7) To or from a government entity; or,
- 8) Of only a mineral interest, leasehold interest, or security interest.

The following notice shall be given to the prospective purchaser before the execution of a binding contract of purchase and sale, either separately or as an addendum or paragraph of a purchase contract. In the event a contract of purchase and sale is entered into without the seller having provided the required notice, the purchases, subject to certain exception, is entitled to terminate the contract.

A separate copy of this notice shall be executed by the seller and the purchase and must be filed in the real property records of the county in which the property is located at the closing of the purchase and sale of the property.

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

NOTICE OF OBLIGATION TO PAY
PUBLIC IMPROVEMENT DISTRICT ASSESSMENT TO TROPHY CLUB, TEXAS
TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1

CONCERNING THE FOLLOWING PROPERTY

As the purchaser of the real property described above, you are obligated to pay assessments to Trophy Club, Texas, for the costs of a portion of a public improvement or services project (the "Authorized Improvements") undertaken for the benefit of the property within **Trophy Club Public Improvement District No. 1** (the "District") created under Subchapter A, Chapter 372, Local Government Code.

AN ASSESSMENT HAS BEEN LEVIED AGAINST YOUR PROPERTY FOR THE AUTHORIZED IMPROVEMENTS, WHICH MAY BE PAID IN FULL AT ANY TIME. IF THE ASSESSMENT IS NOT PAID IN FULL, IT WILL BE DUE AND PAYABLE IN ANNUAL INSTALLMENTS THAT WILL VARY FROM YEAR TO YEAR DEPENDING ON THE AMOUNT OF INTEREST PAID, COLLECTION COSTS, ADMINISTRATIVE COSTS, AND DELINQUENCY COSTS.

The exact amount of the assessment may be obtained from Trophy Club. The exact amount of each annual installment will be approved each year by Trophy Club Town Council in the annual service plan update for the district. More information about the assessments, including the amounts and due dates, may be obtained from Trophy Club.

Your failure to pay any assessment or any annual installment may result in penalties and interest being added to what you owe or in a lien on and the foreclosure of your property.

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

The undersigned purchaser acknowledges receipt of this notice before the effective date of a binding contract for the purchase of the real property at the address described above.

Buyer (Print Name)	Signature	Date
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Buyer (Print Name)	Signature	
--------------------	-----------	--

The undersigned seller acknowledges providing this notice to the potential purchaser before the effective date of a binding contract for the purchase of the real property at the address described above.

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

AFTER RECORDING RETURN TO:

NOTICE OF OBLIGATION TO PAY
PUBLIC IMPROVEMENT DISTRICT ASSESSMENT TO TROPHY CLUB, TEXAS
TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1

CONCERNING THE FOLLOWING PROPERTY

As the purchaser of the real property described above, you are obligated to pay assessments to Trophy Club, Texas, for the costs of a portion of a public improvement or services project (the "Authorized Improvements") undertaken for the benefit of the property within **Trophy Club Public Improvement District No. 1** (the "District") created under Subchapter A, Chapter 372, Local Government Code.

AN ASSESSMENT HAS BEEN LEVIED AGAINST YOUR PROPERTY FOR THE AUTHORIZED IMPROVEMENTS, WHICH MAY BE PAID IN FULL AT ANY TIME. IF THE ASSESSMENT IS NOT PAID IN FULL, IT WILL BE DUE AND PAYABLE IN ANNUAL INSTALLMENTS THAT WILL VARY FROM YEAR TO YEAR DEPENDING ON THE AMOUNT OF INTEREST PAID, COLLECTION COSTS, ADMINISTRATIVE COSTS, AND DELINQUENCY COSTS.

The exact amount of the assessment may be obtained from Trophy Club. The exact amount of each annual installment will be approved each year by Trophy Club Town Council in the annual service plan update for the district. More information about the assessments, including the amounts and due dates, may be obtained from Trophy Club.

Your failure to pay any assessment or any annual installment may result in penalties and interest being added to what you owe or in a lien on and the foreclosure of your property.

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

The undersigned purchaser acknowledges receipt of this notice before the effective date of a binding contract for the purchase of the real property at the address described above. The undersigned purchaser acknowledged the receipt of this notice including the current information required by Section 5.0143, Texas Property Code, as amended.

Buyer (Print Name)	Signature	Date
--------------------	-----------	------

Buyer (Print Name)	Signature	
--------------------	-----------	--

STATE OF TEXAS §
 §
COUNTY OF _____ §

The foregoing instrument was acknowledged before me by _____ and _____, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he or she executed the same for the purposes therein expressed.

Given under my hand and seal of office on this _____, 20__

Notary Public, State of Texas

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

The undersigned seller acknowledges providing a separate copy of the notice required by Section 5.014 of the Texas Property Code including the current information required by Section 5.0143, Texas Property Code, as amended, at the closing of the purchase of the real property at the address above.

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Seller (Print Name)	Signature	
---------------------	-----------	--

STATE OF TEXAS §
 §
COUNTY OF _____ §

The foregoing instrument was acknowledged before me by _____ and _____, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he or she executed the same for the purposes therein expressed.

Given under my hand and seal of office on this _____, 20__

Notary Public, State of Texas



www.FinanceDTA.com

8117 PRESTON ROAD, SUITE 300
DALLAS, TX 75225
PHONE: (800) 969-4DTA

Public Finance
Public-Private Partnerships
Development Economics
Clean Energy Bonds



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Matt Cox, Director of Community Development

AGENDA ITEM: Consider authorizing the Town Manager to negotiate and execute a professional services agreement with Tyler Technologies for permitting software updates to Energov in the amount of \$47,000. (Matt Cox, Director of Community Development)

BACKGROUND/SUMMARY: The Town of Trophy Club utilizes Tyler Technologies' Energov software to facilitate processes for permitting, building, health and fire inspections, code compliance, and planning & zoning. The software was first adopted in 2015, and an upgrade was implemented in 2019 to improve its functionality. However, since July 2023, a more advanced upgrade has been available, addressing several critical areas that the current system struggles to meet effectively.

An upgrade to the citizen access portal is now essential to enhance the user experience for residents and contractors when applying for permits, scheduling inspections, lodging code complaints, and making online payments. The outdated portal has presented inefficiencies, underscoring the urgency of this enhancement to provide a smoother, more responsive customer service for users. Staff has preemptively discussed with the Town IT Department and Energov to ensure a smooth transition and avoid service disruptions.

Energov is a cloud-based enterprise permitting and licensing software platform that is used to coordinate, manage, and track the day-to-day planning, permitting, inspections, code enforcement, and compliance functions. The system upgrade will also streamline operations by automatically processing online payments to the Town's Finance Department through our existing provider, Tyler Technologies.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: The Energov upgrade cost is \$47,000. This amount is not currently budgeted for in the FY 2024 Budget and will require a budget amendment. The budget amendment is included for Town Council consideration on this agenda.

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the contract as to form and legality.

ATTACHMENTS:

1. Implementation Quote

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to authorize the Town Manager to negotiate and execute a professional services agreement with Tyler Technologies for permitting software updates to Energov in the amount of \$47,000.



Quoted By:
Quote Expiration:
Quote Name:

Ally Maddox
7/29/24

Sales Quotation For:
Town of Trophy Club
100 Municipal Dr
Trophy Club TX 76262

Professional Services

Description	Quantity	Unit Price	Extended Price	Maintenance
Professional Services				
End User Training - Onsite	40	\$ 225	\$ 9,000	\$ 0
Professional Implementation Services - Remote	150	\$ 200	\$ 30,000	\$ 0
Project Management Services - Remote	40	\$ 200	\$ 8,000	\$ 0
TOTAL:			\$ 47,000	\$ 0

Summary	One Time Fees	Recurring Fees
Total Services	\$ 47,000	\$ 0
Total Third-Party Hardware, Software, Services	\$ 0	\$ 0
Summary Total	\$ 47,000	\$ 0
Contract Total	\$ 47,000	
Estimated Travel Expenses	\$ 4,000	

Customer Approval: _____ Date: _____

Print Name: _____ P.O.#: _____

Client agrees that items in this sales quotation are, upon Client's signature or approval of same, hereby added to the existing agreement ("Agreement") between the parties and subject to its terms. Additionally, payment for said items, as applicable but subject to any listed assumptions herein, shall conform to the following terms:

- License fees for Tyler and third party software are invoiced upon the earlier of (i) delivery of the license key or (ii) when Tyler makes such software available for download by the Client;
- Fees for hardware are invoiced upon delivery;
- Fees for year one of hardware maintenance are invoiced upon delivery of the hardware;
- Annual Maintenance and Support fees, SaaS fees, Hosting fees, and Subscription fees are first payable when Tyler makes the software available for download by the Client (for Maintenance) or on the first day of the month following the date this quotation was signed (for SaaS, Hosting, and Subscription), and any such fees are prorated to align with the applicable term under the Agreement, with renewals invoiced annually thereafter in accord with the Agreement.
- Fees for services included in this sales quotation shall be invoiced as indicated below.
 - Implementation and other professional services fees shall be invoiced as delivered.

- Expenses associated with onsite services are invoiced as incurred.

Comments

Implementation service hours are scheduled and delivered in four (4) or eight (8) hour increments.

Implementation:

Tyler leads the configuration of Citizen Access for 54 case types. These case types already exist in Enterprise Permitting and Licensing and the only changes to back office configuration will be those strictly necessary to update the case types for Citizen Access.

Case types included in the scope of this implementation:

- Residential Permit types: 19
- Commercial Permit types: 16
- Other Permit types: 11
- Plan types: 5
- Business license types: 3

Tyler's implementation team is responsible for the following tasks:

- Tyler will ensure that the online portal is operating and connected to the Client's GIS. The Client is responsible for maintaining their GIS in accordance with Tyler's GIS deployment guidelines.
- Tyler will not create any custom automations or Geo Rules for Citizen Access.
- Tyler will provide documentation and up to 40 hours of training on Citizen Access Administration pages.
- Tyler will provide basic setup and testing of Tyler Payments connection to Citizen Access.

Integrations:

The only integrations included in this quote are:

- Enterprise Permitting and Licensing to Citizen Access
- Citizen Access to Tyler Payments

There are no custom documents or reports included in the scope of this implementation.

There are no conversion services included in the scope of this implementation.

Training:

Training Engagements – For each 40-hour training engagement, the client receives and is billed four (4) 8-hour days of direct instruction and up to 8 hours of preparatory and administrative time to allow trainers to familiarize themselves with client needs, develop schedules, prepare software

environments, and complete documentation.

The following training engagement is included in the scope of this implementation:

End User Training: software functionality training for all end users in all purchased modules with client SMEs present to address business process questions. Designed to prepare all users for transitioning production processing to EPL. Following production cutover, it is recommended that client SMEs offer business process training for staff/others on an ongoing basis.



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: April Duvall, Director of Finance

AGENDA ITEM: Consider an ordinance amending the Fiscal Year 2024 Budget to allocate funding for a permitting software upgrade for the Community Development Department. (April Duvall, Director of Finance)

BACKGROUND/SUMMARY: The attached budget amendment is the fourth proposed adjustment for the FY 2024 Budget. In accordance with Section 9.06 of the Town Charter, which states, "If during or before the fiscal year the Town Manager certifies that there are available for appropriation, revenues in excess of those estimated in the budget, the Council by ordinance may make supplemental appropriations for the year up to the amount of such excess." This amendment addresses budget variances and reallocates resources for unanticipated expenditures.

Amendment Changes Include:

- **General Fund Expenditures:** An increase of \$47,000, raising total expenditures from \$14,650,487 to \$14,697,487.

Specific Adjustments:

- **EnerGov Software update (Permitting Department):** Tyler Technologies requires a software upgrade to integrate credit card processing with their EnerGov platform, which is used by the Community Development Department for permit processing.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: This budget amendment will result in an increase in General Fund expenditures from \$14,650,487 to \$14,697,487.

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Ordinance

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the ordinance amending the FY 2024 Budget to appropriate funding for an essential upgrade to the Permitting Department's EnerGov software.

**TOWN OF TROPHY CLUB
ORDINANCE NO. 2024-XX**

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, AMENDING THE TOWN'S ANNUAL BUDGET FOR THE FISCAL YEAR BEGINNING ON OCTOBER 1, 2023, AND ENDING ON SEPTEMBER 30, 2024, AS ADOPTED BY ORDINANCE NO. 2023-15, AND AMENDED BY ORDINANCE NO. 2024-11, ORDINANCE NO. 2024-13 AND ORDINANCE NO. 2024-20, BY PROVIDING FOR ADJUSTMENTS TO THE GENERAL FUND; PROVIDING THAT EXPENDITURES FOR SAID FISCAL YEAR SHALL BE MADE IN ACCORDANCE WITH THE ANNUAL BUDGET, AS AMENDED; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Trophy Club, Texas (the "Town"), is a home rule municipality acting under its Town Charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, the Town Council previously adopted its budget for the fiscal year beginning on October 1, 2023, and ending on September 30, 2024 (the "Annual Budget"); and

WHEREAS, the Annual Budget was adopted by Ordinance No. 2023-15 on September 11, 2023; and

WHEREAS, the Annual Budget was amended by Ordinance No. 2024-11 on May 28, 2024, Ordinance No. 2024-13 on July 22, 2024 and Ordinance No. 2024-20 on September 9, 2024; and

WHEREAS, after the Town Council's approval of the Annual Budget, unexpected needs have arisen which require amendment of the Annual Budget; and

WHEREAS, Town Charter Sec. 9.13 and Section 102.010 of the Texas Local Government Code allow the Town to amend its Annual Budget as deemed necessary for any municipal purpose; and

WHEREAS, the Town is also allowed to amend its Annual Budget for emergency appropriations to meet a pressing need for public expenditure to protect the public health, safety, and welfare as a result of unusual and unforeseen conditions; and

WHEREAS, the Town Council has determined that an amendment to the Annual Budget pursuant to this Ordinance is a public necessity and in the best interest of the public health and general welfare of the Town and its citizens.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, THAT:

SECTION 1.

All of the above premises are hereby found to be true and correct factual and legislative determinations of the Town and are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

SECTION 2.

The Annual Budget of the Town for the fiscal year beginning on October 1, 2023, and ending on September 30, 2024, as adopted by Ordinance No. 2023-15, and as amended by Ordinance No. 2024-11, 2024-13 and 2024-20, is hereby amended to provide for adjustments to the General Fund, as shown in Exhibit "A," which is attached hereto and incorporated herein, and expenditures for said fiscal year shall be made in accordance with the Annual Budget, as amended.

SECTION 3.

The expenditures and amendments authorized by this Ordinance are necessary to meet unusual and/or unforeseen conditions or circumstances that could not have been included in the original budget through the use of reasonably diligent thought and attention.

SECTION 4.

A true and correct copy of this Ordinance showing the approved budget amendments shall be filed with the Town Secretary and in the office of the County Clerk as required by Section 102.009 of the Local Government Code.

SECTION 5.

This Ordinance shall be cumulative of all other provisions of ordinances of the Town, except where the provisions of this Ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

SECTION 6.

It is hereby declared to be the intention of the Town Council that the phrases, clauses, sentences, paragraphs, and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph, or section of this Ordinance should be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, or sections of this Ordinance, since the same would have been enacted by the Town Council without incorporation in this Ordinance of such unconstitutional phrase, clause, sentence, paragraph, or section.

SECTION 7.

This Ordinance shall be in full force and effect from and after its date of passage and it is so ordained.

PASSED AND APPROVED by the Town Council of the Town of Trophy Club, Texas, this 23rd day of September, 2024.

APPROVED:

Jeannette Tiffany, Mayor

ATTEST:

Tammy Dixon, Town Secretary

APPROVED AS TO FORM:

Dean Roggia, Town Attorney

Exhibit "A"
Town of Trophy Club
Budget Amendment No. 4

FY24 BUDGET AMENDMENT #4:

Department	Line Item	Line Item Description		Budget Total	Recommended Change	Amended Budget
<u>Section 1</u>						
<u>Community Development</u>						
	01-522-60800	Software & Support		\$ -	\$ 47,000	\$ 47,000
		Total Community Development:		\$ -	\$ 47,000	\$ 47,000
<u>Total Expenditure Increase</u>					\$ 47,000	



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Tammy Dixon, Town Secretary

AGENDA ITEM: Consider approval of the 2025 Town Council Meeting Calendar. (Tammy Dixon, Town Secretary)

BACKGROUND/SUMMARY: Per the Town Charter, the Town Council shall hold at least two (2) regular meetings a month for at least seven (7) months and a minimum of one meeting during each of the other five (5) months, for a minimum of nineteen (19) regular meetings per year. The Town Council may hold as many other meetings as may be necessary for the transaction of the business of the Town. All regular meetings shall be held at the Municipal Building or at such other places within Town limits as will permit the attendance of the general public.

The proposed schedule includes two (2) regular meetings in February, April, May, July, August, September, and October, and (1) regular meeting in January, March, June, November, and December. The Town Council Retreats are scheduled for January 23rd/24th and July 17th/18th.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: There is no financial impact associated with this agenda item.

LEGAL REVIEW: N/A

ATTACHMENTS:

1. 2025 Town Council Meeting Calendar

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the 2025 Town Council Meeting Calendar.

Town of Trophy Club

Proposed 2025 Town Council Meeting Schedule

January 2025						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2025						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

March 2025						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

April 2025						
Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

May 2025						
Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

June 2025						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

July 2025						
Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

August 2025						
Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September 2025						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

October 2025						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

November 2025						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

December 2025						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Regular Meetings
 Council Retreat
 Town Offices Close 1/2 Day
 NISD Spring Break
 Town Offices Closed-Holidays

Agenda Item/Backup Deadline
 Agenda Posting Date

DRAFT

Date	Meeting Type	HARD deadline by 12 pm	Posting Date
1/13	Regular - 7 pm	1/3	1/8
1/23	Council RETREAT		
1/24	Council RETREAT		
2/10	Regular - 7 pm	1/31	2/5
2/24	Regular - 7 pm	2/14	2/19
3/10	Regular - 7 pm	2/28	3/5
4/14	Regular - 7 pm	4/4	4/9
4/28	Regular - 7 pm	4/18	4/23
5/12	Regular - 7 pm	5/2	5/7
5/14	*Possible Special Mtg to Canvass		
5/27	Regular - 7 pm	5/16	5/21
6/23	Regular - 7 pm	6/13	6/18
7/14	Regular - 7 pm	7/3	7/9
7/17	Council RETREAT		
7/18	Council RETREAT		
7/28	Regular - 7 pm	7/18	7/23
8/11	Regular - 7 pm	8/1	8/6
8/25	Regular - 7 pm	8/15	8/20
9/8	Regular - 7 pm	8/29	9/3
9/22	Regular - 7 pm	9/12	9/17
10/13	Regular - 7 pm	10/3	10/8
10/16	Director's Retreat		
10/17	Director's Retreat		
10/27	Regular - 7 pm	10/17	10/22
11/10	Regular - 7 pm	10/31	11/5
12/8	Regular - 7 pm	11/21	12/3

MAY MEETINGS

*If an election is held, last day to canvass is 5/14.
 A special meeting may have to be held 5/14 to canvass.

4th Monday holdiay. Meeting set for 4th Tuesday



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: April Duvall, Director of Finance

AGENDA ITEM: Conduct a public hearing and consider an ordinance accepting and approving a service and assessment plan for authorized services (Emergency Services) and an assessment roll for the Town of Trophy Club Public Improvement District No. 1 (The Highlands at Trophy Club); making a finding of special benefit of the property in the district; levying special assessments against property within the district; providing for payment of the assessments in accordance with Chapter 372, Texas Local Government Code. (April Duvall, Director of Finance)

BACKGROUND/SUMMARY: Each year, the Town Council approves the updated Service and Assessment Plan for authorized services (emergency services) within the Town of Trophy Club Public Improvement District No. 1 (The Highlands at Trophy Club). Prior to adopting the budget, the Town Council conducts a public hearing regarding the provision of emergency services requiring the assessment placed on properties within The Highlands at Trophy Club. Notice of the assessment and public hearing were mailed to property owners within the designated area.

The authorized services provided under the Public Improvement District (PID) are fire suppression and control, inspection services, arson investigation, hazardous material response, search and rescue, emergency recovery and extraction, and pre-hospital medical stabilization or transportation of persons who are sick, injured, wounded, or otherwise incapacitated or helpless. Pre-hospital medical stabilization and transportation services include basic life support ambulance services, advanced life support ambulance service, air ambulance services, and quick-response unit services provided by the Town. The Town and Trophy Club Municipal Utility District (TCMUD) No. 1 cooperatively work together in providing these services and collecting the funding necessary to sustain these services. The assessment rate is determined as the same rate charged to TCMUD customers who receive the same charge on their property tax bills from TCMUD.

BOARD REVIEW/CITIZEN FEEDBACK: N/A

FISCAL IMPACT: The Emergency Services District (ESD) in the PID covers \$572,690 of fire-related expenses at a rate of \$0.05136, which is slightly lower than last year's rate of \$0.05186. This amount represents the PID's share of fire services, with the remainder funded through the MUD. Without the ESD assessment, these expenditures would fall to the Town to cover.

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Ordinance
2. Exhibit A: 2024 Annual Service Plan Update
3. PID Assessment Description Notice
4. Notice of Public Hearing

ACTIONS/OPTIONS:

Staff recommends that the Town Council conduct the public hearing and move to approve the ordinance accepting and approving a service and assessment plan for authorized services (Emergency Services) and an assessment roll for the Town of Trophy Club Public Improvement District No. 1 (The Highlands at Trophy Club); making a finding of special benefit of the property in the district; levying special assessments against property within the district; providing for payment of the assessments in accordance with Chapter 372, Texas Local Government Code.

TOWN OF TROPHY CLUB, TEXAS
ORDINANCE NO. 2024-xx

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, ACCEPTING AND APPROVING A SERVICE AND ASSESSMENT PLAN FOR AUTHORIZED SERVICES (EMERGENCY SERVICES) AND AN ASSESSMENT ROLL FOR THE TOWN OF TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1 (THE HIGHLANDS AT TROPHY CLUB); MAKING A FINDING OF SPECIAL BENEFIT TO THE PROPERTY IN THE DISTRICT; LEVYING SPECIAL ASSESSMENTS AGAINST PROPERTY WITHIN THE DISTRICT; PROVIDING FOR PAYMENT OF THE ASSESSMENTS IN ACCORDANCE WITH CHAPTER 372, TEXAS LOCAL GOVERNMENT CODE, AS AMENDED; PROVIDING FOR THE METHOD OF ASSESSMENT AND THE PAYMENT OF THE ASSESSMENT; PROVIDING PENALTIES AND INTEREST ON DELINQUENT ASSESSMENTS; PROVIDING A CUMULATIVE REPEALER CLAUSE; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Trophy Club (the “Town”) is a home rule municipality acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, on March 16, 2007, a petition was submitted and filed with the Town Secretary of the Town (the “Town Secretary”) pursuant to the Public Improvement District Assessment Act, Chapter 372, Texas Local Government Code (the “PID Act”), requesting the creation of a public improvement district over a portion of the area of the Town to be known as The Town of Trophy Club Public Improvement District No. 1 (the “District”); and

WHEREAS, the petition contained the signatures of the owners of taxable property representing more than fifty percent of the appraised value of taxable real property liable for assessment within the District, as determined by the then current ad valorem tax rolls of the Denton Central Appraisal District and the signatures of property owners who own taxable real property that constitutes more than fifty percent of the area of all taxable property that is liable for assessment by the District; and

WHEREAS, on May 7, 2007, after due notice, the Town Council of the Town (the “Town Council”) held the public hearing in the manner required by law on the advisability of the public improvements and services described in the petition as required by Sec. 372.009 of the PID Act and made the findings required by Sec. 372.009(b) of the PID Act and, by Resolution No. 2007-08 adopted by a majority of the members of the Town Council, authorized the District in accordance with its finding as to the advisability of the public improvements and services; and

WHEREAS, on May 18, 2007, the Town published notice of its authorization of the District in the Trophy Club Times, a newspaper of general circulation in the Town; and

WHEREAS, no written protests of the District from any owners of record of property within the District were filed with the Town Secretary within 20 days after May 18, 2007; and

WHEREAS, on May 21, 2007, the Council adopted a resolution directing the filing of a proposed assessment roll, and directing related action; and

WHEREAS, the Town has conducted annual reviews from 2008 through 2023 as provided in the PID Act and has annually adopted ordinances approving a Service and Assessment Plan for Authorized Services and an Assessment Roll for The Town of Trophy Club Public Improvement District No. 1; and

WHEREAS, on September 23, 2024, through the adoption of Ordinance No. 2024-XX and as part of its 2023-2024 annual review of the special assessments for emergency services, the Town Council, pursuant to Section 372.016(b) of the PID Act, caused the publication on September 11, 2024 of notice of a public hearing in a newspaper of general circulation in the Town to consider the proposed "Assessment Roll" and the "Service and Assessment Plan for Authorized Services" (the "Plan") and the levy of the "Assessments" on property in the District; and

WHEREAS, the Town Council, pursuant to Section 372.016(c) of the PID Act, directed the mailing of notice of the public hearing to consider the proposed Assessment Roll and the Plan and the levy of Assessments on property in the District to the last known address of the owners of the property liable for the Assessments; and

WHEREAS, the Town Council convened the hearing at 7:00 p.m. on the 23rd day of September, 2024, at which all persons who appeared, or requested to appear, in person or by their attorney, were given the opportunity to contend for or contest the Plan, the Assessment Roll, and each proposed assessment, and to offer testimony pertinent to any issue presented on the amount of the assessment, the allocation of costs of the Authorized Services, the purposes of the assessment, the special benefits of the assessment, and the penalties and interest on delinquent Assessments; and

WHEREAS, pursuant to Sections 372.013 and 372.014 of the PID Act, the Town Council has directed the preparation of a Service and Assessment Plan for Authorized Services for the District (the "Plan"), such Plan is attached hereto as **Exhibit "A,"** covers a period of at least five (5) years, and defines the annual indebtedness and the projected costs of the Authorized Services, as identified and defined in the Plan; and

WHEREAS, the Plan includes an assessment plan that apportions the cost of the Authorized Services to be assessed against property in the District and such apportionment is made on the basis of special benefits accruing to the property because of the Authorized Services; and

WHEREAS, the Town Council finds and determines that the Assessment Roll and the Plan should be approved and that the assessments should be levied as provided in the Plan and Assessment Roll; and

WHEREAS, the Town Council further finds that there were no written objections or evidence submitted to the Town Secretary in opposition to the Plan, the allocation of costs, the Assessment Roll, and the levy of assessments; and

WHEREAS, the Town Council closed the hearing, and, after considering all written and documentary evidence presented at the hearing, including all written comments and statements filed with the Town, determined to proceed with the adoption of this Ordinance in conformity with the requirements of the PID Act.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, THAT:

SECTION 1. TERMS

Terms not otherwise defined herein are defined in the Service and Assessment Plan for Authorized Services (the "Plan") attached hereto and incorporated herein as **Exhibit "A."**

SECTION 2. FINDINGS

The findings and determinations set forth in the preambles are hereby incorporated by reference for all purposes. The Town Council hereby finds, determines, and ordains, as follows:

- (a) The apportionment of the costs of the Authorized Services pursuant to the Plan is fair and reasonable, reflects an accurate presentation of the special benefit each property will receive from the public improvements identified in the Plan, and is hereby approved;
- (b) The Plan covers a period of at least five years and defines projected costs for the Authorized Services;
- (c) The Plan apportions the cost of the Authorized Services to be assessed against property in the District and such apportionment is made on the basis of special benefits accruing to the property because of the Authorized Services;
- (d) All of the real property in the District which is being assessed in the amounts shown in the Assessment Roll will be benefited by the Authorized Services proposed to be provided through the District in the Plan, and each parcel of real property will receive special benefits in each year equal to or greater than each annual Assessment and

will receive special benefits during the term of the Assessments equal to or greater than the total amount assessed;

- (e) The method of apportionment of the costs of the Authorized Services set forth in the Plan results in imposing equal shares of the costs on property similarly benefited, and results in a reasonable classification and formula for the apportionment of the costs of the Authorized Services;
- (f) The Plan should be approved as the service plan and assessment plan for the District as described in Sections 372.013 and 372.014 of the PID Act;
- (g) The 2023 Assessment Roll in the form attached as **Appendix "A"** to the Plan (the "Assessment Roll") should be approved as the 2024 Assessment Roll for the District;
- (h) The provisions of the Plan relating to due and delinquency dates for the Assessments, interest and penalties on delinquent Assessments and procedures in connection with the imposition and collection of Assessments should be approved and will expedite collection of the Assessments in a timely manner in order to provide the services needed and required for the area within the District; and
- (i) A written notice of the date, hour, place and subject to this meeting of the Town Council was posted at a place convenient to the public for the time required by law preceding this meeting, as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended, and that this meeting has been open to the public as required by law at all times during which this Ordinance and the subject matter hereof has been discussed, considered, and formally acted upon.

SECTION 3. ASSESSMENT PLAN

The Plan is hereby accepted and approved pursuant to the PID Act Sections 372.013 and 372.014 as the Service and Assessment Plan for the District.

SECTION 4. ASSESSMENT ROLL

The Assessment Roll is hereby accepted and approved pursuant to the PID Act Section 372.016 Assessment Roll of the District.

SECTION 5. LEVY AND PAYMENT OF SPECIAL ASSESSMENTS FOR COSTS OF IMPROVEMENT PROJECT

- (a) The Town Council hereby levies an assessment on each tract of property located within the District, as shown and described in the Plan and the Assessment Roll, in

the respective amounts shown on the Assessment Roll as a special assessment on the properties set forth in the Assessment Roll.

- (b) The levy of the Assessments shall be effective on the date of execution of this Ordinance levying assessments and strictly in accordance with the terms of the Plan.
- (c) Each Assessment shall be paid annually pursuant to the terms of the Plan.
- (d) Each Assessment shall be collected each year in the manner set forth in the Plan by the Denton County Tax Assessor Collector or other qualified collection agent, duly authorized by the Town Council.

SECTION 6. METHOD OF ASSESSMENT

The method of apportioning the costs of the Authorized Services is as set forth in the Plan.

SECTION 7. APPOINTMENT OF ADMINISTRATOR

DTA (www.FinanceDTA.com) is hereby appointed and designated as the Administrator of the Service and Assessment Plan for Authorized Services and of the Assessments levied by this Ordinance. The Administrator shall perform the duties of the Administrator described in the Plan and in this Ordinance. In addition to other applicable costs of collection, whether legally authorized by contract or other District document, the Administrator's fees, charges, and expenses for providing such service shall constitute Collection Costs.

SECTION 8. PENALTIES AND INTEREST ON DELINQUENT ASSESSMENTS

Delinquent assessments shall be subject to the penalties, interest, procedures, and foreclosure sales set forth in the Plan. The Assessments shall have lien priority as specified in the PID Act and the Plan.

SECTION 9. APPLICABILITY OF TAX CODE

To the extent not inconsistent with this Ordinance, and not inconsistent with the PID Act or the other laws governing public improvement districts, the provisions of the Texas Tax Code shall be applicable to the imposition and collection of Assessments by the Town.

**SECTION 10.
CUMULATIVE REPEALER**

This Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances or parts thereof in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim, or lawsuit which has been initiated or has arisen under or pursuant to such Ordinance on the date of adoption of this Ordinance shall continue to be governed by the provisions of that Ordinance and for that purpose the Ordinance shall remain in full force and effect.

**SECTION 11.
SEVERABILITY**

If any provision, section, subsection, sentence, clause, or phrase of this Ordinance, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, void, or invalid, the validity of the remaining portions of this Ordinance or the application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the Town Council that no portion hereof, or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality, voidness, or invalidity of any other portion hereof, and all provisions of this Ordinance are declared to be severable for that purpose.

**SECTION 12.
EFFECTIVE DATE**

This Ordinance shall take effect, and the levy of the Assessments, and the provisions and terms of the Plan shall be and become effective on upon passage and execution hereof.

ADOPTED, PASSED, and APPROVED by the Town Council, by a vote of _____ members voting “for” and _____ members voting “against” and with _____ absentee, on this 23rd day of September 2024.

Jeannette Tiffany, Mayor
Town of Trophy Club, Texas

ATTEST:

[SEAL]

Tammy Dixon, Town Secretary
Town of Trophy Club, Texas

APPROVED TO AS FORM:

Dean Roggia, Town Attorney
Town of Trophy Club, Texas

EXHIBIT A

SERVICE AND ASSESSMENT PLAN FOR AUTHORIZED SERVICES FOR THE DISTRICT (THE “PLAN”)



www.FinanceDTA.com

ANNUAL SERVICE PLAN UPDATE (2024)

TOWN OF TROPHY CLUB

TROPHY CLUB PID NO. 1 (ESD2)

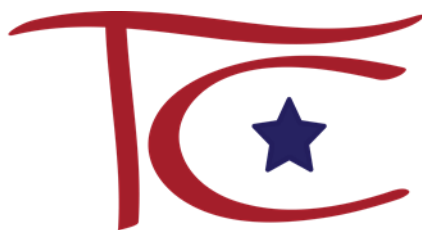
THE HIGHLANDS AT TROPHY CLUB

Report Date: SEPTEMBER 23, 2024

Public Finance
Public-Private Partnerships
Development Economics
Clean Energy Bonds

*Newport Beach | San Jose | San Francisco | Riverside
Dallas | Houston | Raleigh | Tampa*

TOWN OF TROPHY CLUB



**TOWN OF
TROPHY CLUB**

ANNUAL SERVICE PLAN UPDATE (2024)

TOWN OF TROPHY CLUB

PUBLIC IMPROVEMENT DISTRICT NO. 1 (ESD2)

THE HIGHLANDS AT TROPHY CLUB

Prepared for:

The Town of Trophy Club

1 Trophy Wood Drive

Trophy Club, TX 76262

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APPENDICES

APPENDIX A	ASSESSMENT ROLL
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I PLAN DESCRIPTION AND DEFINED TERMS

A Introduction

On April 16, 2007, the Town of Trophy Club Town Council passed and approved a resolution approving and authorizing the creation of the Town of Trophy Club Public Improvement District No. 1 (the Highlands at Trophy Club) (the "PID") to finance certain public services (the "Authorized Services") for the benefit of certain property in the PID, all of which is located within the Town.

A service and assessment plan (the "Service and Assessment Plan") was prepared at the direction of the Town identifying the Authorized Services to be provided by the PID, an estimate of the cost of the Authorized Services for the 2007-08 fiscal year, and the manner of assessing the property in the PID for the costs of the Authorized Services. Pursuant to Sections 372.013, 372.014, and 372.015 of the Public Improvement District Act (the "PID Act"), the Service and Assessment Plan is to be reviewed and updated annually. The update of the Service and Assessment Plan (the "Annual Service and Assessment Plan Update") for 2024 includes the 2024 assessment roll (the "2024 Assessment Roll") identifying the assessments on each parcel, based on the method of assessment set forth in the Service and Assessment Plan. Section 372.015 of the PID Act states that the governing body of the municipality shall apportion the cost of an improvement to be assessed against property in an improvement district, and the apportionment shall be made on the basis of special benefits accruing to the property because of the improvement.

Capitalized terms used herein shall have the meanings ascribed to them in this section of the Annual Service and Assessment Plan Update.

B Definitions — The terms used herein shall have the following meanings:

"Annual Collection Costs" means the following actual or budgeted costs, as applicable, related to the annual collection costs of outstanding Assessments, including the costs or anticipated costs of: (i) computing, levying, collecting and transmitting the Assessments (whether by the Town or otherwise), (ii) the Town in any way related to the collection of the Assessments, including, without limitation, the administration of the PID, maintaining the record of the Assessments, including, without limitation, any associated legal expenses, the reasonable costs of other consultants and advisors and contingencies and reserves for such costs as deemed appropriate by the Town Council.

"Assessed Property" means, for any year, Parcels within the PID other than Non-Benefited Property.

"Assessment" means the assessment levied against a Parcel imposed pursuant to the Assessment Ordinance and the provisions herein, as shown on the Assessment Roll.

"Assessment Ordinance" means the Assessment Ordinance approved by the Town Council to approve the imposition of the Assessments.

"Assessment Rate" means the rate determined by dividing the costs of the Authorized Services for a fiscal year plus the Annual Collection Costs by the taxable value of the Assessed Property (expressed in multiples of one hundred) for the same fiscal year.

"Authorized Services" means those public services providing a special benefit to the Assessed Property and described in Section III herein and Section 372.003 of the PID Act.

"Delinquent Collection Costs" means interest, penalties and expenses incurred or imposed with respect to any delinquent Assessments in accordance with §372.018(f) of the PID Act and the costs related to pursuing collection of a delinquent Assessment and foreclosing the lien against the assessed property, including attorneys' fees.

"Non-Benefited Property" means Parcels within the boundaries of the PID that accrue no special benefit from the Authorized Services, including Public Property and any other property exempt from regular property taxes.

"Parcel" means a parcel identified by a tax map identification number assigned by the Denton Central Appraisal District for real property tax purposes.

"PID" has the meaning set forth in Section I.A of this Annual Service and Assessment Plan Update.

"PID Act" means Texas Local Government Code Chapter 372, Improvement Districts in Municipalities and Counties, Subchapter A, Public Improvement Districts, as amended.

"Public Property" means property within the boundaries of the PID that is owned by the federal government, the State of Texas, the Town, a school district, a public utility provider or any other public agency.

"Town" means the Town of Trophy Club, Texas.

"Town Council" means the duly elected governing body of the Town.

II PROPERTY INCLUDED IN THE PID

The Highlands of Trophy Club is located in the Town of Trophy Club within Denton County, Texas. The property in the PID consists of most of the property within The Highlands of Trophy Club planned development.

The Highlands of Trophy Club planned development contains approximately 696 acres, of which approximately 609 acres is within the PID. Approximately 49 acres is within the planned development but outside of the PID boundaries. This excluded property is located within Trophy Club Municipal District No. 1 (MUD 1). Approximately 38 acres of land designated for commercial uses are also within the planned development but not within the PID.

At completion, the PID is expected to consist of approximately 1,409¹ residential units, two parks, entry monuments, and associated rights-of-way, landscaping, and infrastructure necessary to provide roadways, drainage and utilities to the PID. The estimated number of lots is based upon the Planned Development Ordinance and the Developer's estimated highest and best use of the property within the PID.

¹ The original expected number of units was 1,474. The reclassification of the Neighborhood 8 units reduced the number of expected units by 65.

III DESCRIPTION OF THE AUTHORIZED SERVICES

Pursuant to the PID Act, the services that may be provided by a PID include "special supplemental services for improvement and promotion of the district, including services relating to advertising, promotion, health and sanitation, water and wastewater, public safety, security, business recruitment, development, recreation, and cultural enhancement." (Section 372.003).

After analyzing the Authorized Services authorized by the PID Act, the Town has determined that emergency services (the "Authorized Services") should be undertaken by the Town and will be of special benefit to Assessed Property within the PID. These emergency services shall include, without limitation, fire suppression and control, inspection services, arson investigations, hazardous material response, search and rescue, emergency recovery and extraction, and pre-hospital medical stabilization or transportation of persons who are sick, injured, wounded, or otherwise incapacitated or helpless. Pre-hospital medical stabilization and transportation services include basic life support ambulance services, advanced life support ambulance services, air ambulance services, and quick-response unit services provided by the Town.

IV SERVICE PLAN

The PID Act requires that a service plan cover a period of at least five years. The plan shall be reviewed and updated annually for the purpose of determining the annual budget for improvements. The annual projected costs are shown in the following table (Table IV-A). This budget is based on the provision of emergency services to existing residents and businesses, including construction workers, within the PID.

Table IV-1: Annual Projected Costs

YEAR	ANNUAL PROJECTED COSTS OF AUTHORIZED SERVICES	ANNUAL COLLECTION COSTS ²	TOTAL COSTS
2024	\$572,690	\$0	\$572,690
2025	\$572,690	\$0	\$572,690
2026	\$572,690	\$0	\$572,690
2027	\$572,690	\$0	\$572,690
2028	\$572,690	\$0	\$572,690

The annual projected costs are subject to annual revision and shall be updated in the Annual Service and Assessment Plan Update to reflect any changes in the costs of the Authorized Services expected to be provided each year. The annual projected sources of funds to pay the costs of the Authorized Services are shown by the following table (Table IV-B).

² Annual Collections Costs will be paid by the Trophy Club Municipal Utility District.

Table IV-2: Annual Projected Sources of Funds

YEAR	ASSESSMENTS	ANNUAL INDEBTEDNESS AND OTHER FUNDS	TOTAL SOURCES OF FUNDS
2024	\$583,923	\$0	\$583,923
2025	\$583,923	\$0	\$583,923
2026	\$583,923	\$0	\$583,923
2027	\$583,923	\$0	\$583,923
2028	\$583,923	\$0	\$583,923

The projected sources of funds are subject to annual revision based on any changes in the costs of the Authorized Services to be provided to the PID. The sources of funds for the Authorized Services shown in **Table IV-B** shall be updated each year in the Annual Service and Assessment Plan Update to reflect any changes in the sources of funds.

V ASSESSMENT PLAN

The PID Act requires the Town Council to apportion the cost of Authorized Services on the basis of special benefits conferred upon the property from the Authorized Services. The Act provides that the cost of Authorized Services may be assessed: (i) equally per front foot or square foot; (ii) according to the value of the property as determined by the governing body, with or without regard to improvements on the property; or (iii) in any other manner that results in imposing equal shares of the cost on property similarly benefited.

The Town Council has determined to apportion the costs of the Authorized Services "according to the value of the property as determined by the governing body." The costs of the Authorized Services will be assessed to all real property according to the certified tax roll each year, excluding only Non-Benefited Property. Personal property is not assessed.

The costs of the Authorized Services for the 2024-2025 fiscal year are estimated to be \$572,690.00. Annual Collection Costs of \$1,228.36 (1,498 parcels x \$0.82 per parcel) will be paid by the Trophy Club Municipal Utility District.

Table V-1: Calculation of the Assessment Rate

Cost of Authorized Services	\$572,690
PID Real Property Valuation	\$1,136,920,956
Tax Rate	0.05136
Projected Sources of Funds	\$583,923

The Assessment Rate shall be applied to each Parcel of Assessed Property to determine the Assessment to be collected for the 2024-2025 fiscal year. The Assessments shall be paid in the same manner and at the same time and subject to the same remedies upon the failure to pay, to the extent allowed by law, as regular ad valorem property taxes. Delinquent Assessments shall be subject to Delinquent Collection Costs.

The determination by the Town Council of the assessment methodology set forth above is the result of the discretionary exercise by the Town Council of its legislative authority and governmental powers and is conclusive and binding on the current and all future owners of the Assessed Property.

VI MISCELLANEOUS PROVISIONS

A Amendments

The Town Council reserves the right to the extent permitted by the Act to amend this Annual Service and Assessment Plan Update without notice under the Act and without notice to property owners of Parcels: (i) to correct mistakes and clerical errors; (ii) to clarify ambiguities; and (iii) to provide procedures for the collection and enforcement of Assessments, Collection Costs, and other charges imposed by the Annual Service and Assessment Plan Update.

B Administration and Interpretation of Provisions

The Town Council shall administer the PID consistent with the PID Act and shall make all interpretations and determinations related to the application of this Annual Service and Assessment Plan Update unless stated otherwise herein or in the indenture of trust, and as long as there is a rational basis for the determination made by the Town, such determination shall be conclusive.

C Severability

If any provision, section, subsection, sentence, clause or phrase of this Annual Service and Assessment Plan Update, or the application of same to a Parcel or any person or set of circumstances is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this Annual Service and Assessment Plan Update or the application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the Town Council in adopting this Annual Service and Assessment Plan Update that no part hereof, or provision or regulation contained herein shall become inoperative or fail by reason of any unconstitutionality, voidness or invalidity of any other part hereof, and all provisions of this Annual Service and Assessment Plan Update are declared to be severable for that purpose.

APPENDIX A

Town of Trophy Club
Annual Service Plan Update (2024)
Trophy Club Public Improvement District No. 1 (ESD2)



ASSESSMENT ROLL

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

67687	470277	537349	580362	583540
73937	470278	557641	580363	583541
82144	470279	557642	580364	583542
83515	470280	557643	580365	583543
84263	470281	557644	580366	583544
98639	470282	557645	580367	583545
98641	470283	557646	580368	583546
171483	470284	557647	580369	583547
305643	470285	557648	580370	583548
315393	470286	557649	580371	583549
329833	470287	557650	580372	583550
338637	470288	557651	580373	583551
465509	470289	557652	580374	583552
465510	470290	557653	580375	583553
465511	470291	557654	580376	583554
465512	470292	557655	580377	583555
465513	470293	557656	580378	583556
465514	470294	557657	580379	583557
465515	470295	557658	580380	583558
465516	470296	557659	580381	583559
465517	470297	557660	580382	583560
465518	470298	557661	580383	583561
465519	470299	557662	580384	583562
465520	470300	557663	580385	583563
465521	498867	557665	580386	583564
465522	498868	557666	580387	583565
465523	498869	557667	580388	583566
465524	498870	557668	580389	583567
465525	498871	557669	580390	583568
465526	498873	557670	580392	583569
465527	498874	557671	580393	583570
465528	498875	557672	580394	583571
465529	498876	557673	580395	583573
465530	498877	557674	580396	583574
465531	498878	557675	580397	583575
465532	498879	557676	580398	583576
465533	498880	557677	580399	583577
465534	498911	557678	580400	583578
465535	498912	557679	580401	583579
465536	498913	557680	580402	583580

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

465537	498914	557681	580403	583581
465538	498915	557682	580404	583582
465539	498916	557683	580405	583583
465540	498917	557684	580406	583584
465541	498918	557685	580407	583585
465542	498919	557686	580408	583586
465543	498920	557687	580409	583587
465544	498922	558332	580410	583588
465545	498923	558333	580411	583589
465546	498924	558334	580412	583590
465547	498925	558335	580413	583591
465548	498926	558336	580414	583592
465549	498927	558337	581612	583593
465550	498928	558338	583215	583594
465551	498929	558339	583216	583595
465552	498930	558340	583217	583596
465553	498931	558341	583218	583597
465554	498932	558342	583219	583598
465555	498933	558343	583220	583599
465556	498934	558344	583221	583600
465557	498935	558345	583222	583601
465558	498936	558346	583223	583602
465559	498937	558347	583224	583603
465560	498938	558348	583225	583604
465561	498939	558349	583226	583605
465562	498940	558350	583227	583606
465563	498945	558351	583228	583607
465564	498946	558352	583229	583608
465565	498947	558353	583230	583609
465566	498948	558354	583231	583612
465567	498949	558355	583232	583613
465568	498950	558356	583233	583614
465569	498951	558357	583234	583615
465570	498952	558358	583235	583616
465571	498953	558359	583236	583617
465572	498954	558360	583237	583618
465573	498955	558361	583238	583619
465574	498956	558362	583239	583620
465575	523472	558363	583240	583621
465576	525439	558364	583241	583622

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

465577	533255	558365	583242	583623
465578	533256	558366	583243	583624
465579	533257	558367	583244	583625
465580	533258	558368	583245	583626
465581	533259	558369	583246	583627
465582	533262	558370	583247	583628
465583	533264	558371	583248	583629
466259	533287	558372	583249	583630
466260	533289	558373	583250	583631
466261	533290	558374	583251	583632
469275	533291	558375	583252	583633
469276	533292	558376	583253	583634
469277	533293	558377	583254	583643
469278	533294	558378	583255	583644
469279	533295	558379	583256	583645
469280	533296	558380	583257	583646
469281	533297	558381	583258	583647
469282	533298	558382	583259	583648
469283	533307	558383	583260	583649
469284	533309	558384	583261	583650
469286	533310	558385	583262	583651
469287	533311	558386	583263	583652
469288	533312	558387	583264	583653
469289	533313	558388	583265	583654
469290	533314	558389	583266	583655
469291	533315	558390	583267	583656
469292	533316	558391	583268	583657
469293	533317	558392	583269	583658
469294	533318	558393	583270	583659
469295	533319	558394	583271	583660
469296	533320	558395	583272	583661
469297	533321	558396	583273	583662
469298	533322	558397	583274	583663
469299	533323	558398	583275	583664
469300	533324	558399	583276	583665
469301	533325	558400	583277	583666
469302	533326	558401	583278	583667
469303	533327	558402	583279	583668
469304	533328	558403	583280	583669
469305	533329	558404	583281	583670

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

469306	533330	558405	583282	583671
469307	533331	558406	583283	583672
469308	533332	558407	583284	583673
469309	533333	558408	583285	583674
469310	533334	558409	583286	583675
469311	533335	558410	583287	583676
469312	533336	558411	583288	583677
469313	533337	558412	583289	583678
469314	533338	558413	583290	583679
469315	533339	558414	583291	583680
469316	533340	558415	583292	583681
469317	533341	558416	583293	583682
469318	533342	558417	583294	583683
469319	533343	558418	583295	583684
469320	533344	558419	583296	583685
469321	533345	558420	583297	583686
469322	533346	558421	583298	583687
469323	533347	558422	583299	583688
469324	533348	558423	583300	583689
469325	533349	558424	583301	583690
469326	533350	558425	583302	583691
469327	533351	558426	583303	583692
469328	533352	558427	583304	583693
469329	533353	558428	583305	620681
469330	533354	558429	583306	621956
469331	533355	558430	583307	622299
469332	533356	558431	583308	622300
469333	533357	558432	583309	622301
469334	533358	558433	583310	622302
469335	533359	558434	583311	622303
469336	533360	558435	583312	622304
469337	533361	558436	583313	622305
469338	533362	558437	583314	622306
469343	533363	558438	583315	622307
469372	533364	558439	583316	622308
470048	533365	558440	583317	622309
470049	533366	558441	583318	622310
470050	533367	558442	583319	622311
470051	533368	558443	583320	622312
470052	533369	558444	583321	622313

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

470053	533370	558445	583322	622314
470054	533371	558446	583323	622315
470055	533372	558447	583324	622316
470056	533373	558448	583325	622317
470057	533374	558449	583326	622318
470058	533375	558450	583327	622319
470059	533376	558451	583328	622320
470060	533377	558452	583329	622321
470061	533378	558453	583330	622322
470062	533379	558454	583331	622323
470063	533380	558455	583332	622324
470064	533381	558456	583333	622325
470065	533382	558457	583334	622326
470066	533383	558458	583335	622327
470067	533384	558459	583336	622328
470068	533385	558460	583337	622329
470069	533386	558461	583338	622330
470070	533387	558462	583339	631471
470071	533388	558463	583356	635052
470072	533389	558464	583375	635053
470073	533390	558465	583376	635054
470074	533391	558466	583377	635055
470075	533392	558467	583378	635056
470076	533393	558468	583379	635057
470077	533394	558469	583380	635058
470078	533395	558470	583381	635059
470079	533396	558471	583382	635060
470080	533397	558472	583383	635061
470081	533398	558473	583384	635062
470082	533399	558474	583385	635063
470083	533400	558475	583386	635064
470084	533401	558476	583387	635065
470085	533402	558477	583388	635066
470086	533403	558478	583389	635067
470087	533404	558479	583390	635068
470088	533405	558480	583391	635069
470089	533406	558481	583392	635070
470090	533407	558482	583393	635071
470091	533408	558483	583394	635072
470092	533409	558484	583395	635073

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

470093	533410	558485	583396	635074
470094	533411	558486	583397	635075
470095	533412	558487	583398	635076
470096	533413	558488	583399	635077
470097	533414	558489	583400	635078
470098	533415	558490	583401	635079
470099	533416	558491	583402	635080
470100	533417	558492	583403	635081
470101	533418	558493	583404	635082
470102	533419	558494	583405	635083
470103	533420	558495	583406	635084
470104	533421	558496	583407	635085
470105	533422	558497	583408	635086
470106	533425	558498	583409	635087
470107	533428	558499	583410	635088
470108	533429	558500	583411	635089
470109	533430	558501	583412	635090
470110	533431	558502	583413	635091
470111	533432	558503	583414	635092
470153	533433	558504	583415	635093
470154	533434	558505	583416	635094
470155	533464	558506	583417	635095
470156	533480	558507	583418	635096
470157	533490	558508	583419	635097
470158	533498	558509	583420	635098
470159	533500	558510	583421	635099
470160	533501	558511	583422	635100
470161	534852	558512	583423	635101
470162	534853	558513	583424	635102
470163	534854	558514	583425	635103
470164	534855	558515	583426	635104
470165	534856	558516	583427	635105
470166	534857	558517	583428	635106
470167	534858	558518	583429	635107
470168	534859	558519	583470	635108
470169	534860	558520	583471	635109
470170	534861	558521	583472	635110
470171	534862	558522	583473	635111
470172	534863	558523	583474	635112
470173	534864	558524	583475	635113

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

470174	534865	558525	583476	635114
470175	534866	558526	583477	635115
470176	534867	558527	583478	635116
470177	534868	558528	583479	635117
470178	534869	558529	583480	635118
470179	534870	558530	583481	635119
470180	534871	558531	583482	635120
470181	534872	558532	583483	635121
470182	534873	558533	583484	635122
470183	534874	558534	583485	635123
470184	534875	558535	583486	635124
470185	534876	558536	583487	635125
470186	534877	558537	583488	635126
470187	534878	558538	583489	635127
470188	534879	558539	583490	635128
470189	534880	558540	583491	635129
470190	534881	558541	583492	635130
470191	534882	558542	583493	635131
470192	534883	558543	583494	635132
470193	534884	558544	583495	635133
470194	534885	558545	583496	635134
470195	534886	567352	583497	635135
470196	534887	567353	583498	635136
470197	534888	567354	583499	635137
470198	534889	567355	583500	635138
470199	534890	567356	583501	635139
470200	534891	567357	583502	635140
470201	534892	567358	583503	635141
470202	534893	567359	583504	635142
470203	534894	567360	583505	635143
470204	534895	567361	583506	635144
470205	534896	567362	583507	635145
470249	534897	567363	583508	635146
470250	534898	567364	583509	635147
470251	536563	567365	583510	635148
470252	536564	567366	583511	635149
470253	536565	567367	583512	635150
470254	536566	567368	583513	635151
470255	536567	567369	583514	635152
470256	536568	567370	583519	635153

Town of Trophy Club
Public Improvement District No. 1
Emergency Services District

2024 Assessment Roll

PID Assessment Rate 0.05136

470257	536569	567371	583520	635154
470258	536570	567372	583521	635155
470259	536571	567373	583522	635156
470260	536572	580345	583523	635157
470261	536573	580346	583524	635158
470262	536574	580347	583525	635159
470263	536575	580348	583526	635160
470264	536576	580349	583527	635161
470265	536577	580350	583528	635162
470266	536578	580351	583529	650739
470267	536579	580352	583530	657776
470268	536580	580353	583531	667200
470269	536581	580354	583532	681973
470270	536582	580355	583533	730909
470271	536583	580356	583534	730930
470272	536584	580357	583535	733756
470273	536585	580358	583536	744759
470274	536586	580359	583537	942882
470275	536587	580360	583538	
470276	536588	580361	583539	

APPENDIX B

Town of Trophy Club
Annual Service Plan Update (2024)
Trophy Club Public Improvement District No. 1 (ESD2)



**BUYER DISCLOSURE
NOTICE**

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

NOTICE OF OBLIGATIONS RELATED TO PUBLIC IMPROVEMENT DISTRICT

A person who proposes to sell or otherwise convey real property that is located in a public improvement district established under Subchapter A, Chapter 372, Local Government Code (except for public improvement districts described under Section 372.005), or Chapter 382, Local Government Code, shall first give to the purchaser of the property this written notice, signed by the seller.

For the purposes of this notice, a contract for the purchase and sale of real property having a performance period of less than six months is considered a sale requiring the notice set forth below.

This Notice requirement does not apply to a transfer:

- 1) Under a court order or foreclosure;
- 2) By a trustee in bankruptcy;
- 3) To a mortgagee by a mortgagor or successor in interest or to a beneficiary of a deed of trust by a trustor or successor in interest;
- 4) By a mortgagee or a beneficiary under a deed of trust who has acquired the land at a sale conducted under a power of sale under a deed of trust or a sale under a court-ordered foreclosure or has acquired the land by a deed in lieu of foreclosure;
- 5) By a fiduciary in the course of the administration of a decedent's estate, guardianship, conservatorship, or trust;
- 6) From one co-owner to another co-owner of an undivided interest in the real property;
- 7) To or from a government entity; or,
- 8) Of only a mineral interest, leasehold interest, or security interest.

The following notice shall be given to the prospective purchaser before the execution of a binding contract of purchase and sale, either separately or as an addendum or paragraph of a purchase contract. In the event a contract of purchase and sale is entered into without the seller having provided the required notice, the purchaser, subject to certain exception, is entitled to terminate the contract.

A separate copy of this notice shall be executed by the seller and the purchase and must be filed in the real property records of the county in which the property is located at the closing of the purchase and sale of the property.

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

NOTICE OF OBLIGATION TO PAY
PUBLIC IMPROVEMENT DISTRICT ASSESSMENT TO TROPHY CLUB, TEXAS
TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1
EMERGENCY SERVICES DISTRICT

CONCERNING THE FOLLOWING PROPERTY

As the purchaser of the real property described above, you are obligated to pay assessments to Trophy Club, Texas, for the costs of a portion of a public improvement or services project (the "Authorized Improvements") undertaken for the benefit of the property within **Trophy Club Public Improvement District No. 1 Emergency Services District** (the "District") created under Subchapter A, Chapter 372, Local Government Code.

AN ASSESSMENT HAS BEEN LEVIED AGAINST YOUR PROPERTY FOR THE AUTHORIZED IMPROVEMENTS, WHICH MAY BE PAID IN FULL AT ANY TIME. IF THE ASSESSMENT IS NOT PAID IN FULL, IT WILL BE DUE AND PAYABLE IN ANNUAL INSTALLMENTS THAT WILL VARY FROM YEAR TO YEAR DEPENDING ON THE AMOUNT OF INTEREST PAID, COLLECTION COSTS, ADMINISTRATIVE COSTS, AND DELINQUENCY COSTS.

The exact amount of the assessment may be obtained from Trophy Club. The exact amount of each annual installment will be approved each year by Trophy Club Town Council in the annual service plan update for the district. More information about the assessments, including the amounts and due dates, may be obtained from Trophy Club.

Your failure to pay any assessment or any annual installment may result in penalties and interest being added to what you owe or in a lien on and the foreclosure of your property.

**Texas Property Code Section 5.014(A) Notice
(Required Before Contract Execution)**

The undersigned purchaser acknowledges receipt of this notice before the effective date of a binding contract for the purchase of the real property at the address described above.

Buyer (Print Name)	Signature	Date
--------------------	-----------	------

Buyer (Print Name)	Signature	
--------------------	-----------	--

The undersigned seller acknowledges providing this notice to the potential purchaser before the effective date of a binding contract for the purchase of the real property at the address described above.

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

AFTER RECORDING RETURN TO:

NOTICE OF OBLIGATION TO PAY
PUBLIC IMPROVEMENT DISTRICT ASSESSMENT TO TROPHY CLUB, TEXAS
TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1
EMERGENCY SERVICES DISTRICT

CONCERNING THE FOLLOWING PROPERTY

As the purchaser of the real property described above, you are obligated to pay assessments to Trophy Club, Texas, for the costs of a portion of a public improvement or services project (the "Authorized Improvements") undertaken for the benefit of the property within **Trophy Club Public Improvement District No. 1 Emergency Services District** (the "District") created under Subchapter A, Chapter 372, Local Government Code.

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The exact amount of the assessment may be obtained from Trophy Club. The exact amount of each annual installment will be approved each year by Trophy Club Town Council in the annual service plan update for the district. More information about the assessments, including the amounts and due dates, may be obtained from Trophy Club.

Your failure to pay any assessment or any annual installment may result in penalties and interest being added to what you owe or in a lien on and the foreclosure of your property.

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

The undersigned purchaser acknowledges receipt of this notice before the effective date of a binding contract for the purchase of the real property at the address described above. The undersigned purchaser acknowledged the receipt of this notice including the current information required by Section 5.0143, Texas Property Code, as amended.

Buyer (Print Name)	Signature	Date
Buyer (Print Name)	Signature	

STATE OF TEXAS §
 §
COUNTY OF _____ §

The foregoing instrument was acknowledged before me by _____ and _____, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he or she executed the same for the purposes therein expressed.

Given under my hand and seal of office on this _____, 20__

Notary Public, State of Texas

Texas Property Code Section 5.0143 Notice
(Required At Closing And Must Be Recorded In Denton County Deed Of Records)

The undersigned seller acknowledges providing a separate copy of the notice required by Section 5.014 of the Texas Property Code including the current information required by Section 5.0143, Texas Property Code, as amended, at the closing of the purchase of the real property at the address above.

Seller (Print Name)	Signature	Date
---------------------	-----------	------

Seller (Print Name)	Signature	
---------------------	-----------	--

STATE OF TEXAS §
 §
COUNTY OF _____ §

The foregoing instrument was acknowledged before me by _____ and _____, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument and acknowledged to me that he or she executed the same for the purposes therein expressed.

Given under my hand and seal of office on this _____, 20__

Notary Public, State of Texas



www.FinanceDTA.com

8117 PRESTON ROAD, SUITE 300
DALLAS, TX 75225
PHONE: (800) 969-4DTA

Public Finance
Public-Private Partnerships
Development Economics
Clean Energy Bonds

PUBLIC IMPROVEMENT DISTRICT ASSESSMENTS:

In 2007 the Town of Trophy Club created the first municipally bonded Public Improvement District (PID) in the State of Texas. The District was created principally to finance certain public improvement projects for the remaining portions of the residential component of the master planned development known as "The Highlands". A Service and Assessment Plan was then established setting forth a plan to cover the costs for improvement projects and services which would be assessed against the properties within the District for payment of the special assessments.



1 FIRE SERVICES ASSESSMENT:

This assessment pays for the proportionate share of Fire Services, just as residents outside of the PID pay their proportionate share through the MUD.

FY 24 TAX RATE = \$0.05186

FY 25 TAX RATE = \$0.05136



The **AVERAGE**
Trophy Club \$614,425
home pays annually

\$315.57, which is approx.
\$3.07 LESS
than last year, in
FY 24.

TOTAL COST FOR FY 24 = **\$541,701**

TOTAL COST FOR FY 25 = **\$572,690**



ARSON INVESTIGATIONS



FIRE SUPPRESSION & CONTROL



HAZARDOUS MATERIAL RESPONSE



INSPECTION SERVICES



SEARCH AND RESCUE

2 FIXED ASSESSMENT:

Property owners in the Public Improvement District also pay an assessment on public improvements constructed in the PID. In 2007, \$27,500,000 in Series 2007 Bonds were issued for payment on thoroughfare improvements, water distribution systems, elevated water tanks, wastewater collection systems, trail systems, open spaces, and public parks within the boundaries of the PID.

The annual assessment for FY25 is between \$1,065.20 and \$2,420.91 based on lot size and is programmed to increase by 1.5% each year. These payments are applicable until 2032. For information on individual payoff amounts, contact DTA at (949)955-1500.



DRAINAGE IMPROVEMENTS



LANDSCAPING AND IRRIGATION



PARKS



ROADS



TRAILS



WATER DISTRIBUTION LINES

PUBLIC IMPROVEMENT DISTRICT BOUNDARIES:

The PID District includes approximately 609 acres or 23% of the corporate limits located within the Town of Trophy Club. The District is generally located in the North and Northwest areas of Town. For a more precise location of the PID's boundaries or to find out if your home is located in the PID, contact us at (682)237-2900.

**TOWN OF TROPHY CLUB
NOTICE OF PUBLIC HEARING**

NOTICE IS HEREBY GIVEN THAT a public hearing will be conducted by the Town Council of the Town of Trophy Club, Texas on the 23rd day of September, 2024 at 6:00 p.m. at the Municipal Building at 1 Trophy Wood Drive, Trophy Club, Texas 76262. The public hearing will be held to consider proposed assessments to be levied against the assessable property within THE TOWN OF TROPHY CLUB PUBLIC IMPROVEMENT DISTRICT NO. 1 (the "District") pursuant to the provisions of Chapter 372 of the Texas Local Government Code, as amended.

The general nature of the improvements are emergency services (the "Authorized Services"), including, without limitation, fire suppression and control, inspection services, arson investigations, hazardous material response, search and rescue, emergency recovery and extraction, pre-hospital medical stabilization or transportation of persons who are sick, injured, wounded, or otherwise incapacitated or helpless including basic life support ambulance services, advanced life support ambulance services, air ambulance services, and quick-response unit services provided by the Town. The Town has provided such services pursuant to an annual assessment within the District since 2007.

The total annual cost of the Authorized Services for the Town's Fiscal Year 2024-2025 is approximately \$572,690.

The boundaries of the District are described as follows:

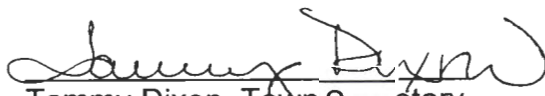
The District includes approximately 609.683 acres located within the corporate limits of the Town of Trophy Club, Denton County, Texas. The District is generally located to the north of Oakmont Drive, Oak Hill Drive and the Quorum Condominiums, east of the Lakes Subdivision and Parkview Drive, south of the Corp of Engineers Property and west of the Town's eastern town limits. The District is more particularly described by metes and bounds and such description is available for inspection at Town Hall, 1 Trophy Wood Drive, Trophy Club, Texas 76262.

All written or oral objections will be considered at the public hearing.

A copy of the Service and Assessment Plan for Authorized Services and proposed Assessment Roll, which includes the assessments to be levied against each parcel in the District, is available for public inspection at the office of the Town Secretary, Town of Trophy Club, at 1 Trophy Wood Drive, Trophy Club, Texas 76262.

WITNESS MY HAND AND THE OFFICIAL SEAL OF THE TOWN, this 9th day of September, 2024.




Tammy Dixon, Town Secretary
Town of Trophy Club, Texas



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Matt Cox, Director of Community Development

AGENDA ITEM: Case SUP-24-003 (Pour Sports Alcohol Use)
Conduct a public hearing and consider an ordinance granting a specific use permit for alcohol beverage sales on-premises consumption in conjunction with restaurant use at Pour Sports Restaurant located at 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas. (Matt Cox, Director of Community Development)

BACKGROUND/SUMMARY: Pour Sports Restaurant is requesting approval of a Specific Use Permit (SUP) for alcoholic beverage sales for on-premises consumption in conjunction with restaurant use according to Section 14.02.252 of the Town's Code of Ordinances. The property's zoning of Planned Development District 30 (PD-30) does not restrict the sales of alcoholic beverages beyond the regulations of the Town Code and State Law.

Pour Sports is applying for a SUP to obtain a mixed beverage restaurant permit (MB/FB) and a mixed beverage late hours permit (LH) that will allow for the sale and consumption of wine, beer, and liquor on the premises and during late hours (12:00 pm midnight - 2:00 am). The Town Code does not restrict hours of operation beyond TABC's regulations.

Section 14.02.252(b) of the Code of Ordinances states that no alcoholic beverages may be sold within 300 feet of a church, public school or private school, or public hospital. Subsection (g) describes the methods of measurement as front door to front door and along the street from property line when measuring for churches and public hospitals, and in a direct line from the nearest property line to property line when measuring to public schools and private schools. Pour Sports complies with Town and State requirements, as the closest church (Fellowship United Methodist Church) is approximately 1,205 feet away, the closest public school (Lakeview Elementary School) is approximately 6,600 feet away, and the closest private school (Primrose School of Westlake at Entrada) is approximately 3,400 feet away. The nearby Baylor Scott & White Medical Center - Trophy Club is a private hospital, so there are no separation requirements.

The Chief of Police has reviewed this application, as required by Code, and has no objections. A notice of a public hearing was distributed as required by State law. To date, staff has not received any inquiries.

BOARD REVIEW/CITIZEN FEEDBACK: The Planning & Zoning Commission reviewed the SUP application at their September 5, 2024 meeting and unanimously recommended the item for approval (4-0).

FISCAL IMPACT: There is no financial impact associated with this agenda item.

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Ordinance
2. Pour Sports Location Map
3. Special Use Permit Application

ACTIONS/OPTIONS:

Staff recommends that the Town Council conduct the public hearing and move to approve the ordinance granting a specific use permit for alcohol beverage sales on-premises consumption in conjunction with restaurant use at Pour Sports Restaurant located at 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas.

**TOWN OF TROPHY CLUB, TEXAS
ORDINANCE NO. 2024-XX**

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS APPROVING A SPECIFIC USE PERMIT FOR ALCOHOLIC BEVERAGE SALES FOR ON-PREMISES CONSUMPTION IN CONJUNCTION WITH A RESTAURANT USE OPERATED BY POUR SPORTS RESTAURANT, 2230 E SH 114 #500 OF TC TOWN CENTER, WITHIN PD PLANNED DEVELOPMENT NO. 30; PROVIDING FOR INCORPORATION OF PREMISES; PROVIDING APPLICABLE REGULATIONS, DISCONTINUATION, & REVOCATION; PROVIDING A SAVINGS AND REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES; PROVIDING FOR PUBLICATION; PROVIDING FOR ENGROSSMENT AND ENROLLMENT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the applicant seeks to sell alcoholic beverages, including beer and wine, for on-premises consumption in conjunction with a restaurant use operated by Pour Sports Restaurant, located at 2230 E SH 114 #500 of TC Town Center; and

WHEREAS, all legal requirements and conditions were complied with, and after public notices were given in compliance with State law and public hearings were conducted, and after considering the information submitted at those public hearings and all other relevant information and materials, the Planning & Zoning Commission of the Town has recommended to the Town Council the adoption of this Ordinance; and

WHEREAS, after due deliberations and consideration of the recommendation of the Planning & Zoning Commission and the information and other materials received at the public hearing, the Town Council has concluded that the adoption of this Ordinance is in the best interests of the Town of Trophy Club, Texas and of the public health, safety, and welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS:

**SECTION 1.
INCORPORATION OF PREMISES**

The above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

SECTION 2.
APPLICABLE REGULATIONS, DISCONTINUATION, & REVOCATION

In all respects the Land shall be subject to the applicable regulations contained in the Comprehensive Zoning Ordinance and all other applicable and pertinent ordinances and regulations of the Town, including without limitation regulations governing PD Planned Development No. 30 and all amendments thereto. The Specific Use Permit granted by this Ordinance shall control in cases of conflict between this Ordinance and/or PD Planned Development No. 30 and/or the Comprehensive Zoning Ordinance. The Specific Use Permit granted hereby shall discontinue if the use for which this Specific Use Permit is granted ceases to be operated at the permitted location for a minimum period of six (6) continuous months. Further, this Specific Use Permit shall be subject to revocation in accordance with the Town of Trophy Club Code of Ordinances.

SECTION 3.
SAVINGS AND REPEALER

This Ordinance shall be cumulative of all other ordinances of the Town affecting the regulation of land and zoning and shall not repeal any of the provisions of those ordinances except in those instances where the provisions of those Ordinances are in direct conflict with the provisions of this Ordinance whether such Ordinances are codified or uncoded, and all other provisions of the Ordinances of the Town of Trophy Club, codified or uncoded, not in conflict with the provisions of this Ordinance, shall remain in full force and effect. Notwithstanding the foregoing, any complaint, action, cause of action or claim which prior to the effective date of this Ordinance has been initiated or has arisen under or pursuant to such repealed Ordinance(s) shall continue to be governed by the provisions of that Ordinance and for that purpose the Ordinance shall be deemed to remain and continue in full force and effect.

SECTION 4.
SEVERABILITY

The sections, paragraphs, sentences, phrases, clauses and words of this Ordinance are severable, and if any section, paragraph, sentence, phrase, clause or word in this Ordinance or application thereof to any person or circumstance is held invalid or unconstitutional by a Court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this Ordinance, and the Town Council hereby declares that it would have passed such remaining portions of this Ordinance despite such invalidity, which remaining portions shall remain in full force and effect.

SECTION 5.
PENALTY

It shall be unlawful for any person to violate any provision of this Ordinance, and any person violating or failing to comply with any provision hereof shall be fined, upon conviction, in an amount not less than One Dollar (\$1.00) nor more than Two Thousand

Dollars (\$2,000.00), and a separate offense shall be deemed committed each day during or on which a violation occurs or continues. The penalty provided by this section shall be cumulative of all other penalties allowed by law, including without limitation, civil remedies available for enforcement of this Ordinance.

**SECTION 6.
PUBLICATION**

The Town Secretary of the Town of Trophy Club is hereby directed to publish the Caption, Penalty and Effective Date of this Ordinance as required by Section 3.16 of the Town's Charter.

**SECTION 7.
EFFECTIVE DATE**

This Ordinance shall become effective from and after its date of adoption and publication as provided by law, and it is so ordained.

PASSED AND APPROVED by the Town Council of the Town of Trophy Club, Texas, this 23rd day of September 2024.

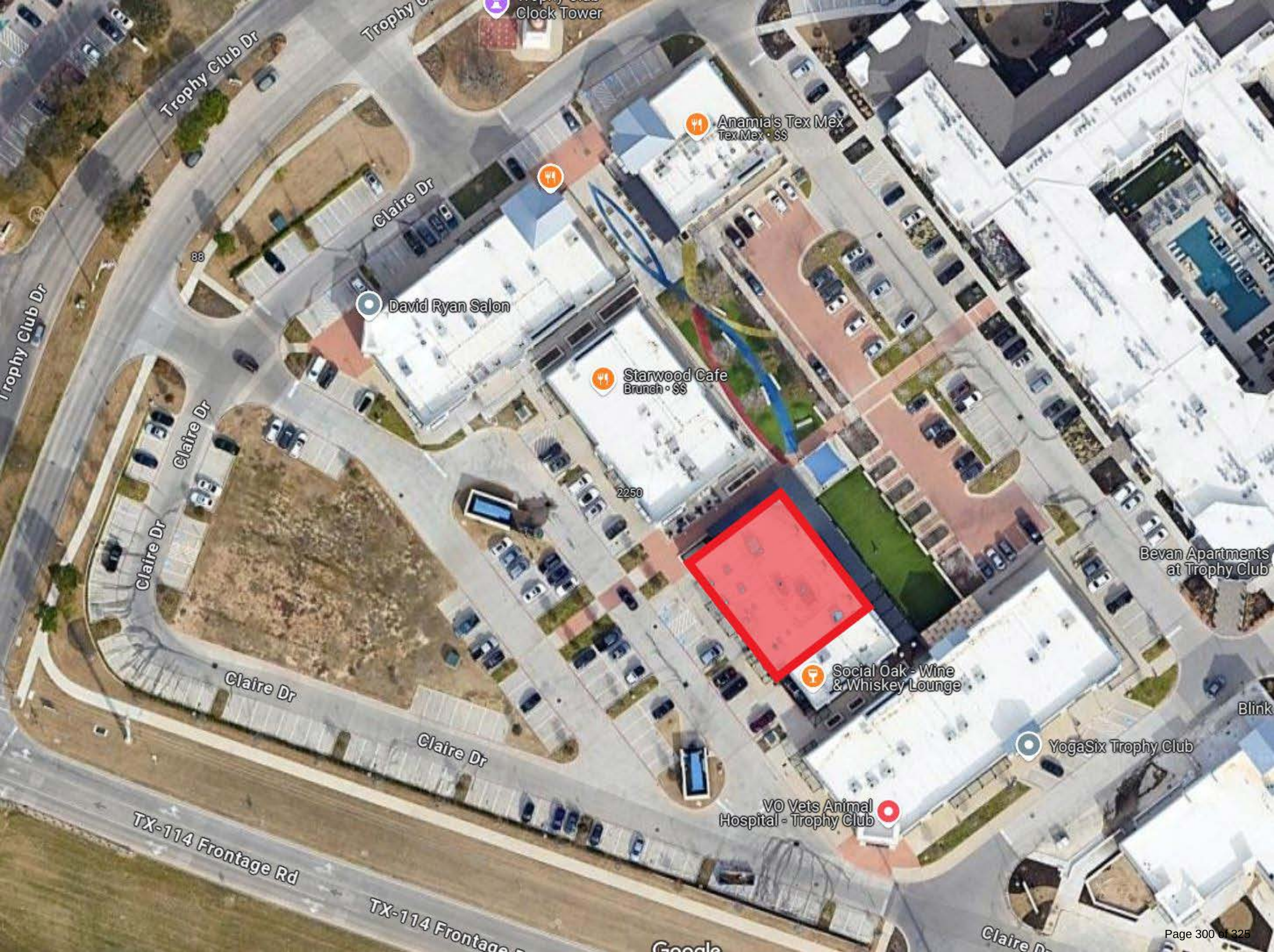
Jeannette Tiffany, Mayor

ATTEST:

Tammy Dixon, Town Secretary

APPROVED AS TO FORM:

Dean Roggia, Town Attorney



Trophy Club Dr

Trophy Club Dr

Claire Dr

88

David Ryan Salon

Anamia's Tex Mex
Tex Mex • \$\$

Starwood Cafe
Brunch • \$\$

2250

Bevan Apartments
at Trophy Club

Social Oak - Wine
& Whiskey Lounge

VO Vets Animal
Hospital - Trophy Club

YogaSix Trophy Club

TX-114 Frontage Rd

TX-114 Frontage Rd

Google

SITE PLAN/ZONING APPLICATION

APPLICATION TYPE – CHECK THE APPROPRIATE BOX BELOW

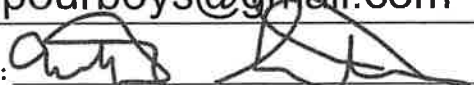
- ☐ Straight Zone Change
 ☐ Planned Development (PD) District
 ☒ Conditional/Specific Use Permit (CUP/SUP)
☐ Temporary Use Permit (TUP)
 ☐ Meritorious Exception
☐ Site Plan
☐ Amendment to PD, CUP, SUP, Site Plan

PROPERTY INFORMATION

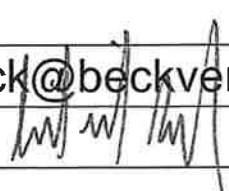
Project Name: Pour Sports- TC LLC DBA POUR SPORTS Total Lots: 1
 Property Address: 2230 TX 114 STE 500 TROPHY CLUB, TX 76262 Total Acres: _____
 Legal Description: Mix Use - Lot 1 Block A DCAD/TAD TAX ID: _____
 Current Use of Property: Vacant- 2nd GEN Current Zoning: PD 30
 Description of Request: SUP for Restaraunt with alcohol Proposed Zoning: N/A

APPLICANT / OWNER INFORMATION

Applicant

Company Name: Pour Boys Entertainment LLC
 Contact Name: Anthony Smith
 Address: 6301 Windhaven Pkwy # 1212
 City, State, Zip: Plano, TX 75093
 Phone: 972-965-8171
 Email: 2pourboys@gmail.com
 Signature: 

Owner (If Different)

Company Name: Trophy Club Town Center, LLC
 Contact Name: Scott Beck
 Address: 13101 Preston Rd
 City, State, Zip: Dallas, TX 75240
 Phone: _____
 Email: sbeck@beckventures.com
 Signature: 

NOTE: The property owner must sign the application or submit a notarized letter of authorization.

APPLICATION REQUIREMENTS

- DISCLAIMER: The Town of Trophy Club only enforces Town ordinances, and approval or denial of an application is based on that authority. Permit approval does not exempt the applicant from Covenants & Restrictions and/or HOA regulations.
- All required information, plans and signatures shall be completed prior to application submittal. INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.
- One (1) folded and collated 24" x 36" plan sets shall be submitted with this application in addition to a digital set in pdf format on a thumb drive or emailed to Planning staff.
- All required application fees shall be paid upon submittal of this application.
- In addition to this application form, a detailed description of the request including all relevant project information shall be attached on a separate sheet to this application.

STAFF USE ONLY

Date Received: 8-6-24
 Received by: Thad
 Fee Paid: \$300.00
 Payment Type/Check #: Online
 Receipt #: 00010909
 Case #: RPR-000208-2024



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Matt Cox, Director of Community Development

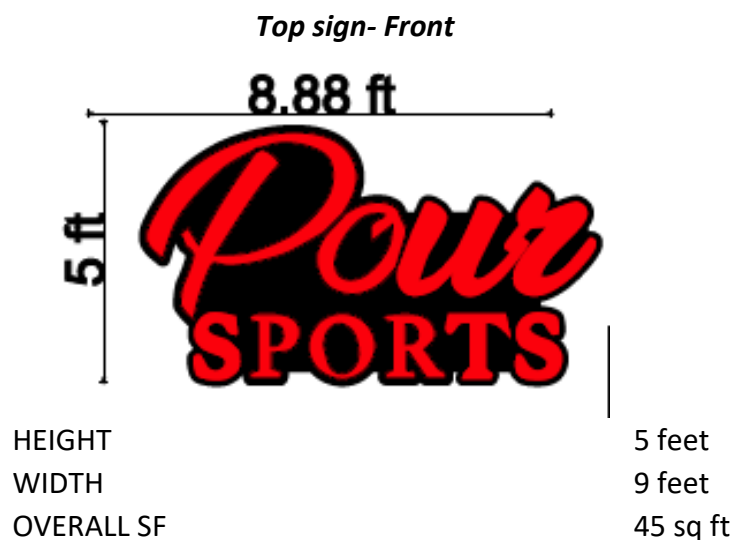
AGENDA ITEM: Case ME-24-002 (Pour Sports Sign Meritorious Exception)

Consider a meritorious exception to install a non-conforming sign at Pour Sports Restaurant, generally located at the northeast corner of SH 114 and Trophy Club Drive addressed as 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas. (Matt Cox, Director of Community Development)

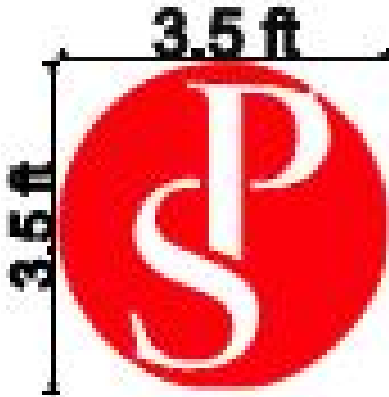
BACKGROUND/SUMMARY: Section 3.09.010 of the Town's Code of Ordinances allows an interested party to make a request for a meritorious exception to the Planning & Zoning Commission and Town Council to consider a proposal that does not conform to the sign regulations but may have merit and make a positive contribution to the visual environment. A request for a meritorious exception is necessary for the proposed sign at Pour Sports because it exceeds the sign height prescribed in Planned Development District 30 (PD-30). PD-30 states that a sign shall fit within:

HEIGHT	2 feet, 6 inches (30 inches)
WIDTH	40 feet

As shown on Exhibit A, Pour Sports signs dimensions for Front elevation (Southwest) are:



Bottom sign- Front



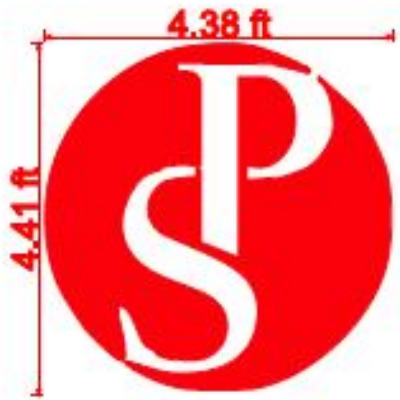
HEIGHT	3.5 feet
WIDTH	3.5 feet
OVERALL SF	12.25 sq ft

Exhibit A



As shown on Exhibit B, Pour Sports sign dimension for Rear elevation (Northeast) is:

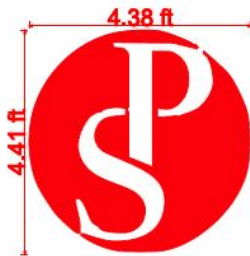
Rear Logo Sign-



Height	4.5
Width	4.5
Overall SF	20.25

Exhibit B

elevation: Northeast Store front : 21 ft tall x 77 ft long
DAY VIEW :



BOARD REVIEW/CITIZEN FEEDBACK: The Planning & Zoning Commission reviewed this item at their September 5, 2024 meeting and unanimously recommended the item for approval (4-0).

FISCAL IMPACT: There is no financial impact associated with this agenda item.

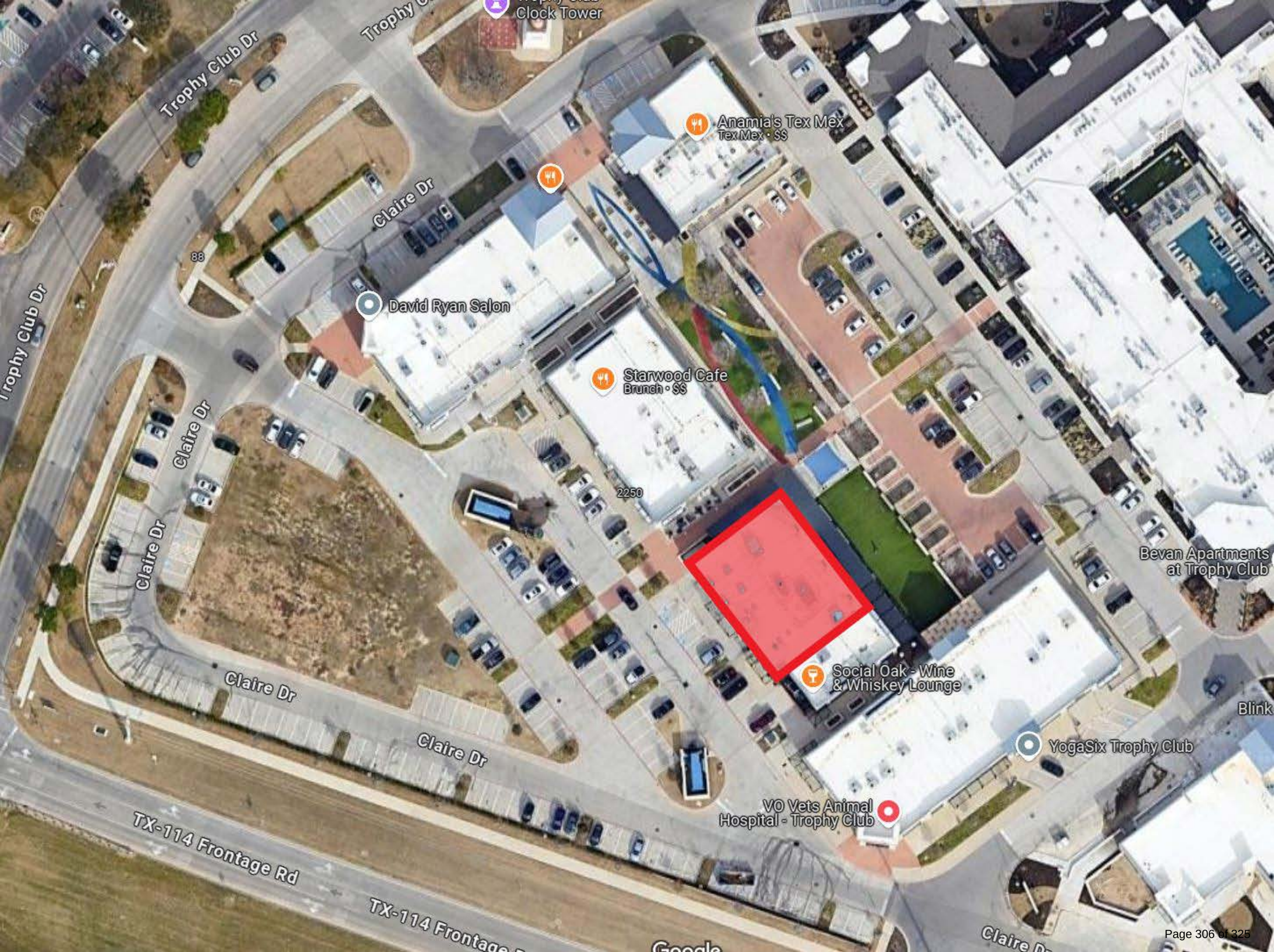
LEGAL REVIEW: N/A

ATTACHMENTS:

1. Pour Sports Location Map
2. Pour Sports Sign Elevation Front
3. Pour Sports Sig Elevation Rear
4. Pour Sport Meritorious Exception Application

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the meritorious exception to install a non-conforming sign at Pour Sports Restaurant, generally located at the northeast corner of SH 114 and Trophy Club Drive addressed as 2230 SH 114 Suite 500, Trophy Club, Denton County, Texas.



Clock Tower

Trophy Club Dr

Anamia's Tex Mex
Tex Mex • \$\$

Claire Dr

David Ryan Salon

Starwood Cafe
Brunch • \$\$

2250

Bevan Apartments
at Trophy Club

Social Oak - Wine
& Whiskey Lounge

VO Vets Animal
Hospital - Trophy Club

YogaSix Trophy Club

TX-114 Frontage Rd

TX-114 Frontage Rd

Google

Elevation : Southwest



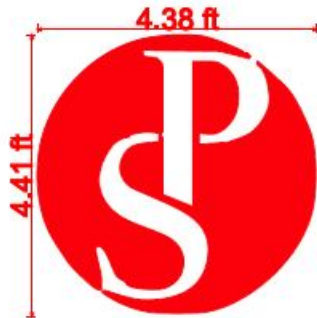
A Front-Lit, Plex-Face Channel Letters w/ LED, Individually Mounted on a Cloud W/wireway
SCALE: 0/0" = 1' 0" • For Production / For Presentation • Front View

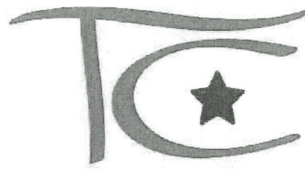
Store front : 23.5 ft tall x 77 ft long

elevation: Northeast

Store front : 21 ft tall x 77 ft long

DAY VIEW :





TOWN OF TROPHY CLUB

1 Trophy Wood Drive | Trophy Club, TX 76262 | 682.237.2900

SITE PLAN/ZONING APPLICATION

APPLICATION TYPE – CHECK THE APPROPRIATE BOX BELOW

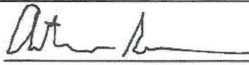
- ☐ Straight Zone Change ☐ Planned Development (PD) District ☐ Conditional/Specific Use Permit (CUP/SUP)
☐ Temporary Use Permit (TUP) ☒ Meritorious Exception ☐ Site Plan ☐ Amendment to PD, CUP, SUP, Site Plan

PROPERTY INFORMATION

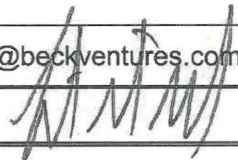
Project Name: Pour Sports - TC LLC DBA POUR SPORTS Total Lots: 1
Property Address: 2230 TX 114 STE 500 Trophy Club, TX 76262 Total Acres: _____
Legal Description: MIX USE - LOT 1 BLOCK A DCAD/TAD TAX ID: _____
Current Use of Property: VACANT- 2nd GEN Current Zoning: PD 30
Description of Request: Variance for Signage Proposed Zoning: N/A

APPLICANT / OWNER INFORMATION

Applicant

Company Name: Pour Boys Entertainment LLC
Contact Name: Anthony Smith
Address: 6301 Windhaven Pkwy #1212
City, State, Zip: Plano, TX 75093
Phone: 972-965-8171
Email: 2pourboys@gmail.com
Signature: 

Owner (If Different)

Company Name: Trophy Club Town Center LLC
Contact Name: Scott Beck
Address: 13101 Preston Rd
City, State, Zip: Dallas, TX 75240
Phone: _____
Email: sbeck@beckventures.com
Signature: 

NOTE: The property owner must sign the application or submit a notarized letter of authorization.

APPLICATION REQUIREMENTS

- DISCLAIMER: The Town of Trophy Club only enforces Town ordinances, and approval or denial of an application is based on that authority. Permit approval does not exempt the applicant from Covenants & Restrictions and/or HOA regulations.
- All required information, plans and signatures shall be completed prior to application submittal. INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.
- One (1) folded and collated 24" x 36" plan sets shall be submitted with this application in addition to a digital set in pdf format on a thumb drive or emailed to Planning staff.
- All required application fees shall be paid upon submittal of this application.
- In addition to this application form, a detailed description of the request including all relevant project information shall be attached on a separate sheet to this application.

STAFF USE ONLY

Date Received: 8-9-24
Received by: Thad
Fee Paid: \$300.00
Payment Type/Check #: _____
Receipt #: 00010926
Case #: RPR-000209-2024



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: April Duvall, Director of Finance

AGENDA ITEM: Consider an ordinance of the Town Council amending Appendix A "Fee Schedule", Article A1.000, Section A1.014 "Water and Wastewater Fees for Public Improvement District No. 1" to establish fees and rates for water and sewer services to customers within the service area. (April Duvall, Director of Finance)

BACKGROUND/SUMMARY: On September 18, 2024, the TCMUD No. 1 Board of Directors convened to review and approve adjustments to its water and sewer rates. Per the Amended and Restated Contract for Wholesale Water Supply, Wastewater Treatment Services, and Water/Wastewater Operational Services, the Town is required to adopt a Town Rate Order mirroring any changes made by the MUD Board.

The attached documents outline these modifications, which include a 2% increase in water service volumetric rates to reflect the pass thru increase from the City of Fort Worth.

BOARD REVIEW/CITIZEN FEEDBACK: The TCMUD No. 1 Board approved Rate Order No. 2024-0918A, implementing amendments to water meter fees.

FISCAL IMPACT:

Water Service		
Volumetric Rate Increase		
Gallons Used	Rate per 1,000 gallons	Change effective October 1, 2024

0 to 6,000	\$ 4.60	\$ 4.69
6,001 to 17,000	\$ 5.35	\$ 5.46
17,001 to 25,000	\$ 6.19	\$ 6.32
25,001 to 50,000	\$ 7.19	\$ 7.34

50,001+	\$ 8.36	\$ 8.53
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LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the ordinance as to form and legality.

ATTACHMENTS:

1. Ordinance
2. Current Water and Wastewater Fees for Public Improvement District No. 1 Article A1.014

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the ordinance of the Town Council amending Appendix A "Fee Schedule", Article A1.000, Section A1.014 "Water and Wastewater Fees for Public Improvement District No. 1" to establish fees and rates for water and sewer services to customers within the service area.

**TOWN OF TROPHY CLUB, TEXAS
ORDINANCE NO. 2024-XX**

AN ORDINANCE OF THE TOWN OF TROPHY CLUB, TEXAS, AMENDING SUBSECTION (D)(2) “VOLUMETRIC RATES”, OF SECTION A1.014 “WATER AND WASTEWATER FEES FOR PUBLIC IMPROVEMENT DISTRICT NO. 1”, OF ARTICLE A1.000 “GENERAL PROVISIONS”, OF APPENDIX A “FEE SCHEDULE”, OF THE CODE OF ORDINANCES, TOWN OF TROPHY CLUB, TEXAS; PROVIDING FOR INCORPORATION OF PREMISES; PROVIDING FOR AMENDMENT; PROVIDING THIS ORDINANCE IS CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR A PENALTY NOT TO EXCEED THE SUM OF FIVE HUNDRED DOLLARS (\$500.00) FOR EACH OFFENSE AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Trophy Club, Texas (the “Town”) is a home rule municipality acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, fees imposed by the Town are adopted by Ordinance and are codified in Appendix A of the Code of Ordinances of the Town; and

WHEREAS, Appendix A, Article A1.000, Section A1.014 of the Code of Ordinances, Town of Trophy Club, Texas, contains water and wastewater fees for the Trophy Club Public Improvement District No. 1 (hereinafter “PID”), including monthly residential (single-family) and commercial water fees; and

WHEREAS, the Town is the owner and operator of a water and sewer system designed to serve present and future inhabitants of the PID (the “Town System”); and

WHEREAS, under the Amended and Restated Contract for Wholesale Water Supply and Wastewater Treatment Services and Water and Wastewater Operational Services between the Town and Trophy Club Municipal Utility District No. 1 (the “MUD”) dated July 25, 2017, as amended by that “First Amendment” dated March 22, 2023 (collectively the “Contract”), the MUD has agreed to provide the Town with wholesale water and wastewater services and with operations services related to the Town System within the boundaries of the PID Property, as that term is defined in the Contract; and

WHEREAS, the Contract requires that the MUD shall provide to Town any amended or revised MUD Rate Order adopted by the MUD and the Town shall adopt a Town Rate Order identical to the amended or revised MUD Rate Order; and

WHEREAS, the Town received MUD Rate Order No. 2024-0918A, which was approved by the MUD on September 18, 2024, with an effective date of October 1, 2024; and

WHEREAS, Town Council finds and determines that this Ordinance meets its contractual obligations pursuant to the Contract and is adopted in the exercise of the Town’s governmental functions and legislative power and is necessary to protect the health, safety, and welfare of the general public and the citizens of the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, THAT:

SECTION 1.
INCORPORATION OF PREMISES

The above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

SECTION 2.
AMENDMENTS

Only Subsection (d)(2) “Volumetric rates” of Section A1.014 “Water and wastewater fees for Public Improvement District No. 1”, of Article A1.000 “General Provisions”, of Appendix A “Fee Schedule”, of the Code of Ordinances, Town of Trophy Club, Texas, is hereby amended and replaced in its entirety as follows, and all other subsections not expressly mentioned hereafter shall remain the same:

“(2) Volumetric rates:

Gallons Used	Rate per 1,000 gallons
0 to 6,000	\$4.69
6,001 to 17,000	\$5.46
17,001 to 25,000	\$6.32
25,001 to 50,000	\$7.34
50,001+	\$8.53

”

SECTION 3.
CUMULATIVE

This Ordinance shall be cumulative of all other provisions of ordinances of the Town, except where the provisions of this Ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

SECTION 4.
SEVERABILITY

It is hereby declared to be the intention of the Town Council that the sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable, and if any section, paragraph, sentence, clause, or phrase of this Ordinance shall be declared unconstitutional by a valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining sections, paragraphs, sentences, clauses, or phrases of this Ordinance; since the same would have been enacted by the Town Council without the incorporation in this Ordinance of any such unconstitutional section, paragraph, sentence, clause, or phrase.

SECTION 5.
SAVINGS

All rights and remedies of the Town are expressly saved as to any and all violations of the ordinances of the Town that have accrued at the time of the effective date of this Ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this Ordinance, but may be prosecuted until final disposition by the courts.

SECTION 6.
PENALTY

It shall be unlawful for any person to violate any provision of this Ordinance, and any person violating or failing to comply with any provision of this Ordinance shall be fined, upon conviction, not less than One Dollar (\$1.00) nor more than Five Hundred Dollars (\$500.00), and a separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.

SECTION 7.
PUBLICATION

The Town Secretary of the Town is hereby directed to publish the caption and penalty of this Ordinance as required by Section 3.16 of the Town's Charter.

SECTION 8.
EFFECTIVE DATE

This Ordinance shall take effect on October 1st, 2024, in accordance with law, and it is so ordained.

PASSED AND APPROVED by the Town Council of the Town of Trophy Club, Texas, this 23rd day of September 2024.

Jeannette Tiffany, Mayor

ATTEST:

Tammy Dixon, Town Secretary

APPROVED AS TO FORM:

Dean Roggia, Town Attorney

§ A1.014. Water and wastewater fees for Public Improvement District No. 1.

- (a) Connection fee - 1": \$2,300.00.
- (b) Impact fee: Each customer requesting an initial connection shall also pay to the district the applicable City of Fort Worth Impact Fee.
- (c) Meter fee: Meter fees for meter sizes less than or greater than 1" shall be based upon the fee charged by the Trophy Club Municipal Utility District No. 1 ("MUD1") in accordance with its duly adopted rate order.
 - (1) 5/8" meter: \$358.00.
 - (2) 1" meter: \$428.00.
 - (3) 1-1/2" meter: \$905.00.
 - (4) 2"–10": Quoted at time of purchase.
- (d) Monthly residential (single-family homes) and commercial water fees:
 - (1) Base rates:

Meter Size	Monthly Base Rate
5/8" & 3/4"	\$20.26
1"	\$38.08
1.5"	\$67.54
2"	\$108.06
3"	\$204.80
4"	\$337.68
6"	\$675.38

- (2) Volumetric rates:

Gallons Used	Rate per 1,000 gallons
0 to 6,000	\$4.60
6,001 to 17,000	\$5.35
17,001 to 25,000	\$6.19
25,001 to 50,000	\$7.19
50,001 +	\$8.36

- (e) Multi-unit buildings: Each multi-unit building (apartments, townhomes, business complex, etc.) served by a single 5/8" meter or 1" meter shall be billed the base rate for the meter size servicing the building multiplied by the number of units in the building or complex.

(f) Monthly residential (single-family homes) wastewater fees - effective April 1, 2022:

- (1) The district uses winter averaging for the purpose of calculating sewer charges on utility bills. The sewer charges are based on average water consumption for three months (December, January and February billing). The average consumption will be analyzed annually and take affect the first of April each year.
- (2) New customers will be assigned a default value user charge that is equal to the average winter water use for all residential customers. The winter average used for new residential customer is 7,000 gallons.
- (3) A customer with a water leak during the averaging months may request a reduction in the sewer usage calculation. Any customer filling a pool after resurfacing, construction or major repairs during the averaging months may request that their winter average calculation be adjusted. Requests for a reduction in sewer usage calculations must be submitted in writing to the general manager and have documentation showing the construction or repairs as applicable to the issue. The general manager or a duly authorized representative may adjust the metered water usage in determining the winter average. To assist in establishing winter averaging sewer rates, customers are encouraged to submit requests for sewer average reductions no later than March 15th.

(A) Base rate: \$22.15.

(B) 0–4,000 gallons: \$3.57/1,000 gallons

(C) 4,001–8,000 gallons: \$5.09/1,000 gallons.

(D) 8,001–12,000 gallons: \$7.18/1,000 gallons.

(E) >12,001 gallons: \$10.22/1,000 gallons.

(g) Monthly commercial wastewater fees - effective April 1, 2023:

- (1) Base rate: \$22.15.
- (2) Volumetric rate: \$8.57/1,000 gallons.

Commercial sewer usage is billed based on actual water usage per month.

- (h) Multi-unit buildings: Each multi-unit building (apartments, townhomes, business complex, etc.) shall be billed the base rate for each meter servicing the building and sewer usage will be billed based on actual water usage per month.
- (i) Annual capital improvement and maintenance charge: \$8.27 (monthly fee per connection).
- (j) Returned checks: \$25.00.
- (k) Security deposits:
 - (1) Builders: \$100.00.
 - (2) Residential and lessees: \$100.00.

(3) Commercial:

Meter Size	Water	Sewer
3/4"	\$75	\$60
1"	\$100	\$100
1.5"	\$250	\$200
2"	\$500	\$320
3"	\$1,000	\$700
4"	\$1,800	\$1,200
6"	\$3,750	\$2,500
8"	\$5,400	\$3,600

(l) Residential fire lines, connections, and fees:

- (1) Residences between 6,000–8,000 square feet shall have installed on its one-inch water service line, for fire protection, a one-inch U-branch, with a separate meter and meter-box. Cost will be quoted at the time of request and payable at time of permitting.
- (2) Residences over 8,000 square feet, in addition to its regular one-inch water service line, shall have installed a separate one- and one-half inch water service line for fire protection with its own meter and meter-box. Cost will be quoted at the time of request and payable at time of permitting.

(m) Water and sewer service taps: Actual cost plus 10%. An estimate will be provided prior to work being performed. When water taps have been made by someone other than the district personnel, there is an installation/inspection fee of fifty dollars (\$50.00) plus the cost of the appropriate meter.

(n) Temporary water service - construction meters - security deposit: \$1,500.00.

(o) Billing procedures and charges:

(1) Disconnection fees for nonpayment for residential homeowners and lessees:

- (A) Additional security deposit of \$100.00.
- (B) Service fee: \$50.00.
- (C) After hours reconnection fees, if applicable.
- (D) All outstanding balances must be paid.

(2) Same-day service: \$25.00 (for the start or termination of water and sewer service, or to perform re-reads the same day as requested).

(3) Accuracy reading fee:

- (A) \$25.00 if the original reading appears to be accurate. If the original meter reading appears to be in error, no fee will be charged.
- (B) \$125.00 to remove meter and bench test.
- (4) Meter data logging fee: One data log per year allowed at no charge. Each subsequent data logging service is \$25.00.
- (p) Service line inspection and lead test: \$150.00.
- (q) Water and wastewater rates and fees are the same for all properties within the corporate boundaries of the town whether service is received directly from MUD1 or service is received from town as a wholesale customer of MUD1.
- (r) Town fees as set forth above are applicable to the boundaries of the Trophy Club Public Improvement District No. 1 and are based upon a rate order adopted by Trophy Club Municipal Utility District No 1 ("MUD1"). Customers of the town receiving service to property located within the boundaries of the PID shall be subject to the duly adopted MUD1 Service Rules and Policies, including all fees imposed thereby, as amended from time to time.
- (s) Rates and fees for water and wastewater service applicable to the boundaries of MUD1 are imposed pursuant to a rate order duly adopted by MUD1.
(2006 Code, ch. 1, sec. 8.16; Ordinance 2008-10, sec. II, adopted 3/3/08; Ordinance 2008-17 adopted 7/7/08; Ordinance 2008-37 adopted 11/17/08; Ordinance 2008-42 adopted 12/15/08; Ordinance 2014-16 adopted 6/16/14; Ordinance 2014-32 adopted 9/23/14; Ordinance 2015-24 adopted 8/25/15; Ordinance 2016-01 adopted 1/12/16; Ordinance 2016-44 adopted 9/27/16; Ordinance 2017-06 adopted 2/20/17; Ordinance 2017-07 adopted 3/28/17; Ordinance 2017-27 adopted 9/26/17; Ordinance 2018-04 adopted 2/13/18; Ordinance 2018-07 adopted 3/27/18; Ordinance 2018-20 adopted 9/25/18; Ordinance 2018-28 adopted 11/13/18; Ordinance 2019-09 adopted 3/26/19; Ordinance 2019-20 adopted 9/24/19; Ordinance 2019-27 adopted 11/12/19; Ordinance 2020-05 adopted 4/14/20; Ordinance 2020-18 adopted 10/13/20; Ordinance 2021-22 adopted 9/27/21; Ordinance 2021-24 adopted 10/25/21; Ordinance 2022-09 adopted 4/14/22; Ordinance 2022-30 adopted 9/27/22; Ordinance 2022-32 adopted 10/25/22; Ordinance 2023-05 adopted 3/28/2023; Ordinance 2023-20 adopted 11/13/2023)



TOWN COUNCIL COMMUNICATION

MEETING DATE: September 23, 2024

FROM: Tammy Dixon, Town Secretary

AGENDA ITEM: Consider a resolution appointing members to the Animal Shelter Advisory Board, Crime Control and Prevention District Board, Economic Development Corporation Board, Ethics Review Commission, Parks and Recreation Board, Planning and Zoning Commission, and Zoning Board of Adjustment as recommended by the Town Council Appointments Committee. (Tammy Dixon, Town Secretary)

BACKGROUND/SUMMARY: The Town Council appointed Mayor Tiffany and Council Members Oldham and Beach to the Town Council Appointments Committee (Committee), tasking them with making recommendations to the full Council regarding appointments to all Boards, Commissions, and Corporations (Boards). On August 26, 2024, the Town Council approved an ordinance reducing the number of Parks and Recreation Board members from nine (9) to seven (7), and an ordinance aligning the composition of the Building Standards Commission with the Zoning Board of Adjustment, making their members the same.

Following these changes, there are now twenty-four (24) positions to fill, including four (4) positions with unexpired terms ending in 2025. A total of thirty-three (33) applications were received, including fifteen (15) from current members and eighteen (18) from new applicants. The Committee conducted thirty (30) interviews between July 10, 2024, and August 23, 2024. Two applicants did not respond to interview invitations. Susan Edstrom was not interviewed, as she was the only qualified applicant for the Animal Welfare representative position. In some instances, the number of applicants greatly exceeded the available positions, while for other boards, there were fewer applicants than vacancies. After discussions with several applicants, many expressed a willingness to serve on other boards where there was a need. This flexibility was factored into the Committee's balanced recommendations across all Boards.

Following the interviews, the Committee compiled recommendations that achieve a thoughtful mix of experienced and new members. Where appropriate, individuals were also recommended for Chair and Vice Chair positions.

BOARD REVIEW/CITIZEN FEEDBACK: After reviewing applications and conducting interviews, the Appointment Committee recommends the slate of individuals presented in the resolution for appointment to Trophy Club's Boards and Commissions.

FISCAL IMPACT: There is no financial impact associated with this agenda item.

LEGAL REVIEW: Town Attorney, Dean Roggia, has reviewed the resolution as to form and legality.

ATTACHMENTS:

1. Resolution
2. List of Applicants

ACTIONS/OPTIONS:

Staff recommends that the Town Council move to approve the resolution appointing members to the Animal Shelter Advisory Board, Crime Control and Prevention District Board, Economic Development Corporation Board, Ethics Review Commission, Parks and Recreation Board, Planning and Zoning Commission, and Zoning Board of Adjustment as recommended by the Town Council Appointments Committee.

**TOWN OF TROPHY CLUB, TEXAS
RESOLUTION NO. 2024-XX**

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, PROVIDING FOR THE APPOINTMENT OF MEMBERS TO SERVE ON THE ANIMAL SHELTER ADVISORY BOARD; CRIME CONTROL AND PREVENTION DISTRICT BOARD; ECONOMIC DEVELOPMENT CORPORATION BOARD; ETHICS REVIEW COMMISSION; PARKS AND RECREATION BOARD; PLANNING AND ZONING COMMISSION; AND ZONING BOARD OF ADJUSTMENT; DESIGNATING TERMS OF SERVICE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Trophy Club, Texas, benefits by having its citizens involved in local government through service on Boards, Commissions, and Corporations; and

WHEREAS, the Trophy Club Town Council is responsible for making appointments to the Boards, Commissions, and Corporations serving the Town whose terms are expiring; and

WHEREAS, the Town Council is responsible for appointing a Chairperson to the Animal Advisory Board, Parks and Recreation Board, Zoning Board of Adjustment; and responsible for appointing a Chairperson and Vice Chairperson to the Planning and Zoning Commission.

NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF TROPHY CLUB, TEXAS, THAT:

SECTION 1. The facts and recitals set forth in the preamble of this resolution are hereby found to be true and correct.

SECTION 2. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Animal Services Board with the respective chairperson as specified below:

Name	Place	Term Ending Date
Brian Hall	Animal Control Officer	09/30/2026
Susan Edstrom	Animal Welfare Representative	09/30/2026
Deanna Polner	Member	09/30/2026
Chair: Susan Edstrom		

SECTION 3. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Crime Control and Prevention District Board as specified below:

Name	Place	Term Ending Date
Marc Bartels	Place 1	09/30/2026
Marion Hawker	Place 5	09/30/2026
Garry Ash	Place 7	09/30/2026

SECTION 4. That the Town Council of Trophy Club, Texas, hereby appoints the

following individuals to serve on the Economic Development Corporation Board as specified below:

Name	Place	Term Ending Date
Terry Addington	Place 1	09/30/2026
Garrett Wallace	Place 3	09/30/2026
Allan Pedersen	Place 4	09/30/2026

SECTION 5. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Ethics Commission as specified below:

Name	Place	Term Ending Date
Jennifer Olson	Place 1	09/30/2026
Amy Mancuso	Place 2	09/30/2026
Julie Edwards	Place 3	09/30/2025 (unexpired term)
Jacqueline Ross	Place 4	09/30/2025
Lisa DeLong	Alternate	09/30/2025
Victoria Heguy	Alternate	09/30/2025

SECTION 6. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Parks and Recreation Board with the respective chairperson as specified below:

Name	Place	Term Ending Date
Robert Ferguson	Place 2	09/30/2026
Gary Packan	Place 4	09/30/2026
Jeffrey Eason	Place 5	09/30/2025
Steven Ford	Place 6	09/30/2026
Dana Kizer	Place 7	09/30/2025
Chair: Jennifer Kashner		

SECTION 7. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Planning and Zoning Commission with the respective chairperson and vice-chairperson as specified below:

Name	Place	Term Ending Date
Srinath Sadam	Place 1	09/30/2025 (unexpired term)
Terry Kesterson	Place 5	09/30/2026
Sean Holmes	Place 6	09/30/2026
Michael Biggs	Place 7	09/30/2026
Chair: Michael Biggs		
Vice Chair: Mike Branum		

SECTION 8. The Town Council of Trophy Club, Texas, hereby appoints the following individuals to serve on the Zoning Board of Adjustment with the respective chairperson as specified below:

Name	Place	Term Ending Date
Steve Boedeker	Place 2	09/30/2026
Stephen Bowman	Place 3	09/30/2026
Aaron Ross	Place 5	09/30/2025 (unexpired)
Robert Stevens	Alternate 3	09/30/2026
Daniel Parham	Alternate 4	09/30/2026
Chair: Stephen Bowman		

SECTION 9. This resolution shall become effective October 1, 2024.

PASSED AND APPROVED THIS THE 23rd DAY OF SEPTEMBER 2024.

Jeannette Tiffany, Mayor

ATTEST:

Tammy Dixon, Town Secretary

APPROVED TO AS FORM:

Dean Roggia, Town Attorney

List of Boards and Commissions Applicants

Animal Shelter Advisory Board

2 positions (Animal Welfare Rep & Regular Member)

Susan	Edstrom
Deanna	Polner
Jacqueline	Ross

Crime Control & Prevention District

3 open positions

Marc	Bartels
Gene	Popik

Economic Development Corporation

3 open positions

Teri	Addington
Steven	Boedeker
Stephen	Boulware
Greg	Fox
Allan	Pedersen
Garrett	Wallace

Ethics Review Commission

2 open positons/2 vacancies

Amy	Mancuso
Jennifer	Olson

Parks & Recreation Board

3 open positions

Garry	Ash
Wendie	Bailey
Lisa	DeLong
Robert	Ferguson
Steven	Ford
Marion	Hawker
Dean	Murray
Gary	Packan
Daniel	Parham
Stephanie	Presley

Planning & Zoning Commission

3 open positons/1 vacancy

Josh	Appling
Michael	Biggs
Victoria	Heguy
Sean	Holmes
Terry	Kesterson
Jonathan	Poole
Aaron	Ross
Srinath	Sadam
Robert	Stevens

Zoning Board of Adjustment

4 open positons/1 vacancy

Steven	Boedeker
Steve	Bowman
Garrett	Wallace