June 2013

Project No. HPR3212

Town of Bar Nunn, Wyoming

Bar Nunn I-25 Interchange Feasibility Study

Morrison Maierle, Inc.

BAR NUNN I-25 INTERCHANGE FEASIBILITY STUDY
Bar Nunn, Wyoming
Project No. HPR3212

June, 2013

Prepared For:

Wyoming Department of Transportation

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EXECUTIVE SUMMARY

- ***Purpose and Need Statement***: The purpose of this project is to provide improved connectivity with Interstate 25 to address the changing transportation needs of the Town of Bar Nunn within the Casper Metropolitan Planning Area and Natrona County, Wyoming (See Page 5).
- ***Feasibility Study Goals***: It is the intent of this study to provide a conclusive recommendation on whether an interchange is feasible for the Town of Bar Nunn. Further, the study will screen two interchange alternative locations as well as consider the no-build alternative (See Page 5).
- ***Build on Previous Studies***: This feasibility study references three prior interchange related studies performed for the area. The approach and conclusions of this study builds off of these previous efforts by narrowing down the focus to justification of interchange alternatives complying with FHWA Pre-NEPA requirements (See Page 7).
- ***Interchange Justification - Eight Policy Compliance***: In accordance with the FHWA Eight Policy Criteria for interchange justification, four of the justification criteria are currently met. The remaining four criteria are expected to be met based on projected development trends in Bar Nunn (See Page 10).
- ***Alternative identification***: Three alternatives are included in this study; Alternative A – No Build Option (Baseline Alternative), Alternative B – McMurry Boulevard Interchange, and Alternative C – Westwinds Road Interchange (See Page 14).
- ***Traffic Forecasting*** (see Page 15):
  - Under the Alternative A No-Build Option, future area growth will overwhelm the Wardwell Interchange and Salt Creek Highway,
  - Both Alternatives B and C improve the travel demand and corresponding level of service at major intersections,
  - Emergency Services response time is improved with both Alternatives B and C,
  - Alternative C has a slight advantage over Alternative B in relation to enhancement of area traffic operations.
- ***Alternatives Screening Summary***: Based on several screening criteria, the No-Build Alternative A ranks very low in relation to Alternatives B and C. Alternative C "Westwinds Road Interchange" ranks slightly higher than Alternative B "McMurry Boulevard Interchange" (See Page 40).
- ***Environmental Screening***: There is no indication of any major environmental concerns with the three alternative scenarios presented herein (See Page 47).
- ***Public Relations***: The Consultant and WYDOT prepared a public involvement plan to guide the landowner coordination and public relations process. The public relations program addresses the general public but places special emphasis on agencies and property owners who are directly and indirectly impacted by the proposed corridor (See Page 48).

1.0 INTRODUCTION

1.1 Background

The Town of Bar Nunn, Wyoming, is located approximately 3 miles north of the City of Casper. Bordered by Salt Creek Highway (WY 254) and I-25 to the east, the community is principally accessed by the Wardwell Interchange located a mile south of the Town limits. Access to Bar Nunn requires traveling a short distance on Howard Street and between 1 and 2 miles along Salt Creek Highway, depending on home location. Figure 1 is a location map for Bar Nunn in relation to the City of Casper and the Natrona County Airport. Figure 2 shows the Town of Bar Nunn including major roadways and access to I-25 at the Wardwell Interchange.

The Wardwell Interchange and Salt Creek Highway currently serves as the only existing access to the Bar Nunn Area. Previous forecast studies, and recent field observations indicate that neither Wardwell Interchange, the intersection of Howard Street and Salt Creek Highway (Hwy 254), and Salt Creek Highway extending north of Howard Street meet capacity and safety standards to adequately serve Bar Nunn. Costs to improve this existing network are prohibitive. Likewise, improving this system does not provide the desired direct access to an otherwise circuitous route to the community.

Over the past several years there has been local effort to pursue the feasibility and development of an interchange on Interstate 25 in the Town of Bar Nunn. Various planning level studies have evaluated the local transportation network to determine the benefit an interchange would have to the local community and the regional transportation system. The previous three formal studies (summarized herein) provided a broad spectrum view of the local transportation network, systems planning, and general discussions on the impacts and benefits associated with a new interchange.

The primary goal of this Bar Nunn I-25 Interchange Feasibility Study is to focus on the applicability of a new interchange located somewhere along I-25 between milepost 193.4 and milepost 194.3 within the town limits. This study provides findings and conclusions related to whether interchange is deemed feasible in accordance with guidelines established in the FHWA Guidance on Corridor and Subarea Planning to Inform NEPA. The Wyoming Department of Transportation retained Morrison-Maierle, Inc. to perform a Pre-NEPA study of the area and provide a recommendation on possible locations of a new interchange, including rankings to identify the preferred location. The scope of the study includes:

- Develop a Purpose and Need statement;
- Evaluate and build on the progression of prior planning studies;
- Assess the benefits associated with providing direct connectivity to The Town of Bar Nunn off of I-25;
- Identify up to two interchange location alternatives and respective configurations, including a no-build alternative;
- Conduct a preliminary environmental screening;

- Prepare planning level cost estimates;
- Evaluate impacts to existing undeveloped and developed properties and where possible, mitigate or minimize impacts to private properties; and
- Conduct a public involvement and stakeholder review process.

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				LOCATION MAP	FIGURE NO. FIG. 1

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BAR NUNN 1-25 INTERCHANGE FEASIBILITY STUDY
BAR NUNN WYOMING

PROJECT NO. 1806.015

TOWN OF BAR NUNN

FIGURE NO. FIG. 2

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1.2 Organization of The Study

This study is organized in a logical sequence that builds on the previous studies and focuses on the current vision for interstate assess from the Town of Bar Nunn. Following is a brief summary of the progression and theme of the various study sections:

INTRODUCTION

- Define the project background,
- Establish the Purpose and Need of the study,
- Outline future planning steps to develop the project.

FINDINGS AND CONCLUSIONS OF PREVIOUS STUDIES

- Summarize the conclusions of three previous transportation traffic planning studies.

FHWA NEPA GUIDELINES

- Outline the FHWA guidance requirements for Pre-NEPA efforts.

INTERCHANGE JUSTIFICATION

- Build the case that an interchange is, in fact, warranted in Bar Nunn,
- Address the FHWA Eight Policy criteria for future interstate access/interchange,
- Summarize other interchange justification issues.

TRAFFIC FORECAST AND ANALYSIS

- Describe the three alternatives which include: No-Build baseline alternative; and two new interchange alternatives,
- Summarize regional development and corresponding traffic growth,
- Provide updated traffic forecasting & analysis,
- Summarize LOS and capacity impacts.

INTERCHANGE ALTERNATIVE DESIGNS AND SCREENING

- Outline basic design standards and criteria used for the preliminary interchange layouts,
- Describe interchange alternative settings and major design details,
- Prepare planning level cost estimates,
- Develop an alternative screening tool that looks at all three alternatives and ranks them commensurate with their respective benefits,
- Provide a recommended alternative.

ENVIRONMENTAL SCREENING

- Outline the environmental setting,
- Provide a summary of public agency contacts and coordination, including their respective preliminary findings related to environmental impacts.

PUBLIC RELATIONS

- Summarize the public outreach efforts related to this study.

1.3 Draft Purpose and Need for this Project

The purpose of this project is to provide improved connectivity with Interstate 25 to address the changing transportation needs of the Town of Bar Nunn within the Casper Metropolitan Planning Area and Natrona County, Wyoming. This project would address the following six concerns:

- Improve vehicle safety by reducing commercial truck and passenger vehicle interface on existing local street system of Bar Nunn by providing alternate access for industrial and commercial truck traffic to I-25 separated from residential areas;
- Use existing transportation infrastructure and public right of way to the maximum extent possible;
- Accommodate plans for future arterial loop road north and west of Bar Nunn in accordance with the Town and regional planning goals;
- Reduce travel commute times to and from the Town of Bar Nunn and the Greater Casper Metropolitan Area; and
- Provide potential east/west connectivity from I-25 in the Casper Metropolitan Planning Area to the Casper Airport.
- Relieve congestion and improve the level of service of the existing Wardwell Interchange.

1.4 Process for Project Development

As stated herein, there have been three previous planning studies leading up to this study. The previous studies represent a progression of evaluations that have drilled down from broader regional investigations to a more focused Bar Nunn transportation needs investigation.

Interchange Feasibility Study Goal - It is the intent of this study to provide a conclusive recommendation on whether an interchange is feasible for the Town of Bar Nunn. Further, the study will screen two interchange alternative locations as well as consider the no-build alternative. This written document is intended to be used by WYDOT for a future interstate system access change request to be submitted to FHWA. The format and contents of this study complies with the FHWA "Guidance on Using Corridor and Subarea Planning to Inform NEPA (April 5, 2011)".

Based on the assumption that an interchange is warranted for Bar Nunn, the next step would be to undertake the formal NEPA process to validate the interchange, followed by the development of detailed engineering documents. It is important to note that there are currently no funds available to undertake right-of-way acquisition, utility relocations, or design and construction of an interchange. A funding source would be secured in the future should WYDOT and local agencies decide to advance the project.

2.0 FINDINGS AND CONCLUSIONS OF PREVIOUS STUDIES

2.1 General Discussion

Since 2007, three formal transportation studies were performed to evaluate the transportation system and mobility of the Casper region and the Town of Bar Nunn. The studies, as summarized below, represent a progression of regional transportation plans intended to evaluate the existing and future transportation needs of the City of Casper, portions of Natrona County, and the Town of Mills, Evansville, and Bar Nunn. Following are brief summaries of the three studies and general findings associated with the Town of Bar Nunn interstate accessibility:

2.2 Previous Transportation Planning Efforts

2.2.1 Connecting Casper, 2030 Long Range Transportation Plan (Prepared for the Casper Area MPO, June 2007)

Study Goals and Objectives – *Provide a long-range, planning level evaluation of area-wide or regional transportation system components, existing and future roadway conditions, interrelationships between individual transportation modes, and gaining public involvement to identify important issues and establish specific guidelines for the Casper Metropolitan Planning Organization area transportation facilities.*

Following are the primary conclusions out of the described long-range transportation plan:

- Creation of a NE corridor belt loop system east of Bar Nunn would include a north-south extension of Bryan Stock Trail north, then west to Bar Nunn at or near McMurry Boulevard.
- McMurry Boulevard at I-25 was identified as a potential interchange location.
- A connection from I-25 near Bar Nunn to the Natrona County Airport on WY Hwy 20/26 would improve regional mobility.

2.2.2 Evaluation of Existing Roadway Geometrics of Salt Creek Highway and Preliminary Corridor Analysis of McMurry Boulevard (Prepared for the Casper MPO, July 2008)

Study Goals and Objectives – *With a focus on the Bar Nunn transportation system, the study evaluated potential improvements to Salt Creek Highway and McMurry Boulevard to facilitate access to the Town of Bar Nunn and nearby developments.*

Following are the primary conclusions out of the described study:

- There is preliminary justification for an interchange in the Town of Bar Nunn based on community growth and projected truck and commuter traffic.
- Continued use of the Wardwell Interchange to serve the growing community is not feasible. The Salt Creek Highway cannot safely and effectively accommodate projected increases without major improvements to the highway.

- Westwinds Road would facilitate existing and future industrial and commercial needs. The roadway is designated in the plan as a future arterial that would connect Salt Creek Hwy/I-25 and the proposed Westside Highway belt loop planned to be constructed on the west edge of Bar Nunn.
- The preliminary analysis targets the Salt Creek under-crossing under I-25 near Westwinds Road as a feasible location for an interchange.
- Placement of an interchange at McMurry Boulevard could result in adverse impacts to the residential access and mobility.

2.2.3 Bar Nunn Salt Creek Intersection & Bar Nunn Subarea Planning Traffic Study (Prepared for the Casper MPO, January 2012)

Study Goals and Objectives - *potential cost effective improvements to Salt Creek Highway from the intersection of Antelope Drive to the intersection of McMurry Boulevard. Also included in this study is development of interim and final street network configurations that would accommodate growth as it occurs.*

Following are the primary conclusions out of the described study:

- There is preliminary justification for an interchange in the Town of Bar Nunn based on community growth and projected truck and commuter traffic.
- Traffic modeling and LOS analysis justifies a new north-south arterial roadway (referred to as the "Westside Boulevard") along the west edge of Bar Nunn. Construction of an east-west direction arterial along Westwinds Road would enhance regional mobility and develop a belt loop around the Bar Nunn community.
- The study references the recently adopted Town Zoning Map which provides for industrial and commercial development in the north portion of the town. Development of an interchange at Westwinds Road (Salt Creek Hwy undercrossing under I-25) would allow truck traffic generated by the commercial/industrial development to avoid the residential areas.
- Anticipated Growth – Historic growth trends conclude the Town has grown by 136% between 2000 and 2010 (based on 2010 Census data). The study concludes that based on available space and newly adopted zoning maps, the Town would continue at an aggressive rate until full build-out.

3.0 FHWA NEPA GUIDELINES

On April 5, 2011, Federal Highway Administration (FHWA) published their "Guidance on Using Corridor and Sub Area Planning to Inform NEPA (National Environmental Protection Act)" document. The guidance document is provided to assist agencies and their transportation planners to better integrate transportation planning with the NEPA process. This interchange feasibility study is not required to undergo a formal NEPA environmental review process. However, the FHWA guidance document provides recommended procedures so that it (the study document) is consistent with future NEPA compliance. The Wyoming Department of Transportation directed that the Bar Nunn I-25 Interchange Feasibility Study adhere to the NEPA guidance document, including the development of the applicable Purpose and Need statement defined herein.

4.0 INTERCHANGE JUSTIFICATION

All states own and operate the Interstate System within their respective jurisdiction. However, in order to provide close and consistent control of interstate access, FHWA is required to approve all new access, or changes in access points, pursuant to 23 U.S.C. 111. The FHWA's interest is to ensure all new or revised access points:

- Are considered using a decision-making process that is based on information and analysis of the planning, environmental, design, safety and operational effects of the proposed change.
- Support the intended purpose of the interstate system.
- Do not have an adverse impact on the safety or operations of the interstate system and connecting local roadway network or other elements of the transportation system.
- Are designed to acceptable standards.

Access to the nation's interstate system must follow strict guidelines. Provided the interchange is deemed feasible, the WYDOT would need to issue an "Interstate System Access Change Request" to the FHWA. These requests are inclusive of the written documentation that supports the formal request and the documentation of the coordination with other agencies. State DOTs utilize various terms for the requests submitted to the FHWA, usually in the form of reports including an Interchange Justification Report (IJR).

At the request of FHWA, the Eight Policy worksheet was reviewed and to the best of our ability at this early stage, completed for the new interchange. Note that there are a number of unknown issues and/or conditions that would need to be addressed in the future NEPA documentation. However, this preliminary checklist does not appear to raise any major flaws with the proposed improvements. The completed document is included in Appendix A herein.

4.1 FHWA Interchange Policy Compliance

Previous studies provided findings and conclusion that implied that an interchange is justified. Building on the findings of these prior studies, plus the analysis performed with this study, following is the Eight-Policy justification criteria. Text in italics explains the characteristics of the proposed interchange with respect to each criterion. The text in all caps summarizes whether the requirement is satisfied or not, or explains the future conditions leading to compliance:

Policy 1: The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a)).

Salt Creek Highway and the existing Wardwell Interchange cannot be improved to provide the desired access to Bar Nunn. Based on the findings of the July 2008 "Evaluation of Existing Roadway Geometrics of Salt Creek Highway and Preliminary Corridor Analysis of McMurry Boulevard Report" referenced herein, the north bound off ramp has queued vehicles onto the I-25 mainline with the existing conditions and cannot be efficiently upgraded to provide access to Bar Nunn for the proposed development. The study also concluded that once 1000 of the proposed 3000 dwelling units are constructed in Bar Nunn, the operational level of service of Salt Creek Highway would be approaching a level of service F. Improving the capacity and safety of Salt Creek Highway would be extensive widening and access controls along Salt Creek Highway, and improvements to the Howard Street/Salt creek High way intersection. This approach would require right-of-way acquisition/condemnation, and major utility relocations. The Casper MPO proposed upgrades to the network include a new arterial on the west side of Bar Nunn to provide a more direct route to and from Casper. This arterial would ease congestion but cannot satisfactorily accommodate the design year traffic. THIS REQUIREMENT IS NOT SATISFIED. HOWEVER, IT WOULD BE SATISFIED BEFORE ALL PROPOSED GROWTH CAN OCCUR IN THE BAR NUNN AREA.

Policy 2: The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a)).

Management type improvements would not provide alternate access for Bar Nunn. These types of improvements would not provide improved access to the interstate for the truck traffic from the proposed commercial and industrial Development along Westwinds Road. THIS REQUIREMENT IS SATISFIED.

Policy 3: An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).

The distance between the proposed interchange and the nearest interchange to the south, Howard Street, is approximately 1.7 miles from McMurry Boulevard and 2.6 miles from the Salt Creek Undercrossing (Westwinds Road). The nearest interchange to the north, Ormsby Road, is 3.1 miles north of Westwinds Road. The proposed arterial network would provide sufficient roadways to collect and distribute traffic to and from the interchange. Because of the low traffic and rural nature of Interstate 25 and the distance between adjacent interchanges, weaving issues would be minimal in this area. There is ample spacing between existing interchanges to the future interchange for motorists to safely merge into traffic. The network improvements near Bar Nunn would be designed and constructed in conjunction with this interchange. THIS REQUIREMENT IS NOT SATISFIED. HOWEVER, IT WOULD BE SATISFIED WHEN DEVELOPMENT OCCURS AND THE PROPOSED WESTSIDE BOULEVARD AND THE ARTERIAL ROAD NORTH OF BAR NUNN ARE CONSTRUCTED.

Policy 4: The proposed access connects to a public road only and would provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access would be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)).

With the construction of this interchange, efficient access would be available to the proposed industrial and residential area. The proposed access would be designed to meet or exceed current standards for federal aid projects on the interstate system. THIS REQUIREMENT IS SATISFIED.

Policy 5: The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93.

The proposed interchange near Bar Nunn is identified in the 2030 Long Range Transportation Plan adopted by the Casper MPO in 2007.

Coordination with the MPO - §450.210 requires WYDOT to provide for a fully coordinated planning process with the Casper MPO. Public involvement is also carried out for the statewide and metropolitan planning processes. In accordance with these regulations, WYDOT was actively involved in the steering committee, data collecting, traffic modeling, funding, and review process during the formation and final draft of the Casper Long Range Transportation Plan which led to the proposal for the proposed interchange.

Citizen Input – Citizen Involvement was an integral part of this study. Two public meetings were held during the preparation of the final study.

Coordination with Local Developers – Two of TEA-21's planning factors [1203(f)] to be considered in the planning process are to "support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency" and to "increase the accessibility and mobility options available to people and for freight." A ready-mix plant and a pre-cast concrete plant are planned in the vicinity of the proposed interchange. Also the train to truck station (located near the airport) and airport traffic would use the interchange to access I-25 when the arterial grid is constructed. These businesses are vital to the economic vitality of Casper and Natrona County. In addition, residential development continues to increase in, and around the Town of Bar Nunn. The proposed interchange allows safe and efficient access and egress to the proposed developments. The existing interchange and roadways do not accommodate efficient regional access to the proposed facilities. THIS REQUIREMENT IS SATISFIED.

Policy 6: In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111).

This interchange is the only interchange identified in the 2007 Long Range Transportation Plan in the metropolitan area. THIS REQUIREMENT IS SATISFIED.

Policy 7: When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d)).

This interchange location provides appropriate access to the Town of Bar Nunn and the proposed development in the area. The location would give future commercial and industrial facilities direct access to the interstate and can provide more direct access to the airport and the train to truck station. Development of an interchange in Bar Nunn would also provide connectivity and enhanced mobility to the future Westside Highway as well as future extension of the Bryan Stock Trail Belt Loop when the arterial grid east and west of Bar Nunn is constructed. THIS REQUIREMENT IS SATISFIED.

Policy 8: The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111).

A preliminary environmental screening related to the proposed interchange locations indicates no wetlands nor endangered, threatened, proposed or candidate species would be affected by the interchange project. Likewise preliminary research indicates no historical or cultural conflicts occur with the future interchange locations. THIS REQUIREMENT IS NOT SATISFIED PENDING FORMAL ENVIRONMENTAL IMPACT EVALUATION.

4.2 Supplemental Justification Items

In addition to the discussion in the eight policy points discussed above, there are various other factors that seem to justify a new interchange in Bar Nunn:

4.2.1 Public Safety

All local and commercial traffic from Bar Nunn accessing the interstate are required to travel along an approximate 0.7 mile stretch of Salt Creek Highway. This section of Salt Creek Hwy is primarily commercial with direct driveway access, i.e., no access control. The roadway is a narrow paved section (24-26 feet wide) with dirt shoulders. This road is currently operating at LOS C with a LOS F projected once Bar Nunn builds out. In addition, there are no provisions for on-street bike lanes or pedestrian walkways. Several local citizens testified at the public meetings that the roadway does not feel safe for either motorists or pedestrians, especially during peak periods.

4.2.2 Emergency Responders

Testimony was received from local law enforcement and other emergency responders that the community would benefit by having a second, more direct access to Bar Nunn off of the Interstate. By providing a second interstate access, responders are provided more options and are not hampered with road closures or detours.

4.2.3 Operations and Maintenance

Heavy haul trucks and construction traffic accessing north Bar Nunn are required to travel along Salt Creek Highway to connect to the interstate. The future high volume of heavy vehicles will take a toll on the asphalt pavement section. Consequently the roadway requires frequent maintenance and repairs to provide a safe and functional surface. By providing a second local access to the interstate, the majority of the truck traffic would be diverted off of Salt Creek Highway resulting in reduced loading and maintenance requirements.

4.2.4 Increased Truck Traffic

WYDOT has been recently notified by representatives of Granite Peak Development that plans to activate the Bishop Rail crude oil loading facility located near the Natrona Airport could be activated as early as fall 2013. It is projected up to 350 trucks will access the facility on a daily basis. It is projected that a majority of these trucks will use I-25 and Hwy 20/26 to access the facility. The Rail Company indicates they are in the early stages of acquiring right of way for the future connection of the rail facility to Bar Nunn. Their preferred route is to connect with Westwinds Road. It is unknown at this time the scheduled design and construction of the roadway. However, they are anticipating the future interchange and are planning accordingly.

5.0 TRAFFIC FORECAST AND ANALYSIS

5.1 Regional Development and Projected Growth Potential

Access to Bar Nunn is expected to become an issue over time as the community grows and traffic volumes increase within the region. According to the *Bar Nunn Salt Creek Intersection & Bar Nunn Subarea Planning Traffic Study*, Bar Nunn is primed for development as a bedroom community to Casper. The Town was most recently noted to support a population of 2,213 with 748 households according to year 2010 US Census data. This has increased from a population of 936 with 315 households, as reported by year 2000 US Census data. Thus, the community has experienced a 9 percent annual growth rate over a recorded ten year timeframe (136 percent increase overall), which is significant compared to the 1 to 2 percent annual growth rate experienced by Casper and Natrona County.

Also, recent zoning designations allow for the development of 2,416 additional residential dwelling units located throughout the current Town proper, and within northern urban growth areas. Approximately 650 acres of business and industrial uses have also been zoned and designated for development principally within the northern urban growth areas of Bar Nunn. As such, there is no reason to expect that high growth would not continue as housing is in demand within the County.

Community growth will significantly increase traffic approaching and departing Bar Nunn over the next 15 to 20 years, impacting the Wardwell Interchange and Salt Creek Highway. The increased traffic means a reduction in roadway and intersection levels of service; a reduction in travel speeds with increased average vehicle/travel delays; driver safety may be impacted with increased congestion potentials; and emergency vehicle response times would decrease with elevated traffic.

The July 2008 Salt Creek Highway/McMurry Boulevard Corridor Study (referenced herein) concludes several deficiencies associated with the Wardell Interchange, Howard Street, and Salt Creek Highway. These deficiencies include:

- Northbound interchange off ramp peak hour queue extend onto the interstate,
- Howard Street and Salt Creek Road both lack adequate drainage systems,
- The Howard Street/Salt Creek Hwy. intersection operates at LOS F,
- Major utilities encumber future lane widening/intersection improvements,
- Salt Creek Highway lacks access control – numerous closely spaced private approaches extend all along Salt Creek Highway,
- Sight distance is compromised by vertical and horizontal obstructions,
- The pavement on the roadways is distressed and in need of major repairs and/or reconstruction.

For these reasons, officials with the Wyoming Department of Transportation are exploring alternatives to improve access to Bar Nunn; principally the improvement of the existing Wardwell Interchange versus the construction of a new interchange options further north along I-25 closer to Bar Nunn.

5.2 Alternative Summary

In accordance with general pre-NEPA compliance practices, three interchange related alternatives are identified and are considered herein. Attached Figure 3 illustrates the locations of the three alternatives. Following is a description of each of the three alternatives being considered:

Alternative A – No Build

Rehabilitation of the Wardwell Interchange is essentially a "no-build" from the perspective of traffic impacts to Bar Nunn, whereas available transportation funds would funnel into the improvement of the current Wardwell Interchange. Thus, no change in approaching or departing traffic is expected. Improvements could include widening of interchange ramps and Howard Street to a standard accommodating of forecast traffic volumes. The project could also include the addition of new or modified turn pockets and the development of signals at ramp intersections and/or the Howard Street/Salt Creek Highway intersection.

Alternative B – McMurry Boulevard Interchange

The McMurry Boulevard alternative would provide a new interchange developed in-line with McMurry Boulevard, located centric to the existing Bar Nunn population center. This project would include full acceleration and deceleration ramps constructed between the I-25 and McMurry Boulevard, as extended west from its current terminus to the Interstate. As discussed in further detail later, ramp intersections and the McMurry Boulevard/Salt Creek Highway intersection may require turn lane improvements and signalization. The Alternative would accommodate nearly all commute traffic to/from the north and a high level of commute traffic to/from the south of McMurry Boulevard. Figure 4 shows the location of the potential McMurry Boulevard intersection in relation to the Bar Nunn.

Alternative C – Westwinds Road Interchange

The Westwinds Road alternative would locate an interchange along the northern end of the community, more centric to future development areas of Bar Nunn and in line with Westwinds Road. This project would include full acceleration and deceleration ramps constructed between the I-25 and Westwinds Road. The northbound off and on-ramps would need to be shifted east to avoid impacting the existing Salt Creek Booster Station owned and operated by the Casper Regional Water District. The interchange ramp intersections and the Westwinds Road/Salt Creek Highway intersection may require turn lane improvements and signalization; and may necessitate future widening improvements to Salt Creek Highway to assure community access. This alternative would accommodate the majority of new development traffic within the northern areas of the town. Figure 5 highlights the potential Westwinds Road Interchange in relationship to Bar Nunn.

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BAR NUNN WYOMING

PROJECT NO. 1806.015

INTERCHANGE ALTERNATIVES

FIGURE NO. FIG. 3

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5.3 Traffic Forecasts

Traffic forecasts were developed based on traffic count and land use information provided within the *Bar Nunn Salt Creek Intersection & Bar Nunn Subarea Planning Traffic Study*; baseline traffic growth rate information derived from the *Casper Area Metropolitan Planning Area Long Range Transportation Plan* (CAMPO, URS, 2007); and travel time assessments provided for the new interchange locations. The following sections describe the traffic forecasting process used for this traffic evaluation. Traffic forecasts were developed for year 2030 to be consistent with the current planning/horizon year used by the CAMPO in long range analyses.

5.3.1 Traffic Counts

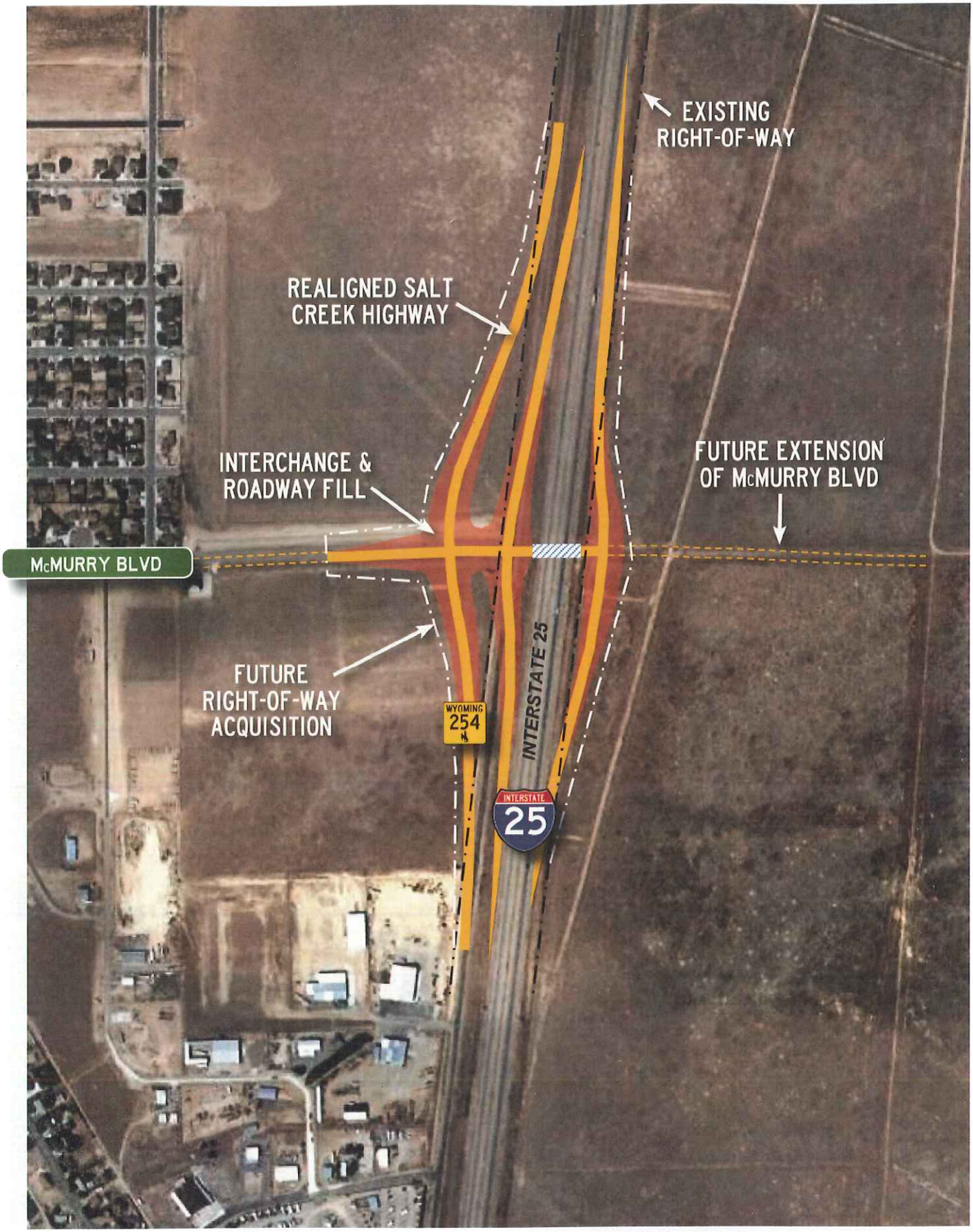
This study addresses traffic conditions principally along Salt Creek Highway, as the capacity impacts or benefits of interchange alternatives will be most considerable along this stretch of roadway. The study addresses travel changes within Bar Nunn, ending at the southern Town limits and extending north to the urban growth boundary. Thus, even the impacts of the "no-build" condition are limited to changes on Salt Creek Highway within the Town.

As discussed later, the principal measures-of-effectiveness for this study include intersection LOS and travel time assessments for Salt Creek Highway. The travel time assessment was performed for the Highway extending between Town limits. The intersections evaluated include:

- Westwinds Road/Salt Creek Highway.
- McMurry Boulevard/Salt Creek Highway,
- Prairie Lane/Salt Creek Highway,
- Sunset Boulevard/Salt Creek Highway, and
- Antelope Drive/Salt Creek Highway.

Traffic counts were gathered from the *Bar Nunn Salt Creek Intersection & Bar Nunn Subarea Planning Traffic Study* in order for this work to be consistent with the prior subarea study. The study indicates *"On May 10, 2011 peak hour turning movement counts were collected at the Antelope, Sunset, Prairie, and McMurry intersections along Salt Creek Highway"*; further describing counts were collected for the PM peak hour of the homebound work commute of the typical weekday (being the high period of traffic throughout the weekday). Thus, these counts were used for four study intersections.

Counts from the McMurry Boulevard/Salt Creek Highway were extrapolated to/from the north and distributed evenly to generate PM peak hour traffic volumes for the Westwinds Road/Salt Creek Highway intersection. As these volumes were very moderate, they had little bearing on future analyses in context to land use trip assignments and were appropriate to use as background data for this study. A summary of PM peak hour counts/volumes used in this study is therefore shown on Figure 6 for the PM peak hour of the typical weekday.



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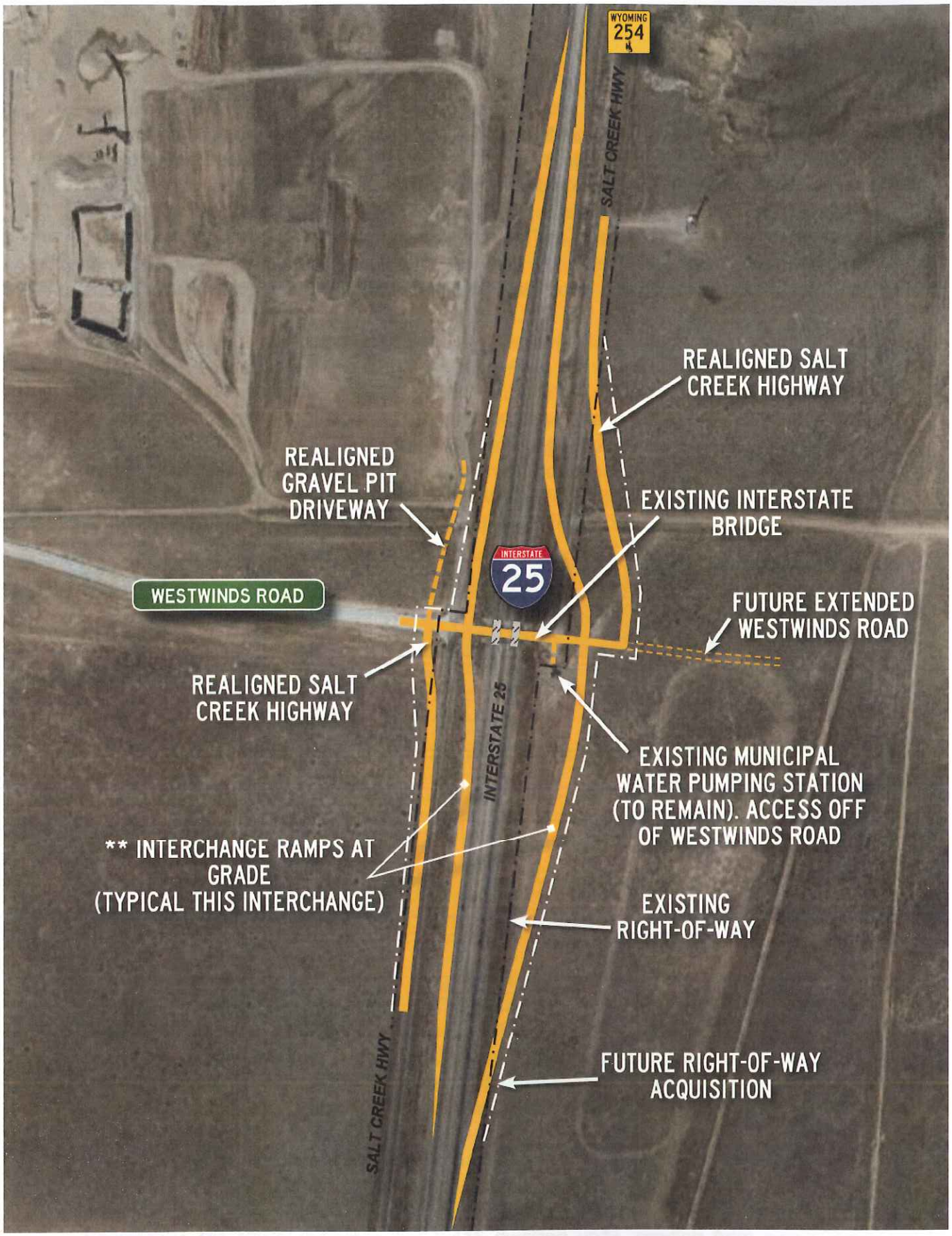

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BAR NUNN 1-25 INTERCHANGE FEASIBILITY STUDY
BAR NUNN WYOMING

PROJECT NO. 1806.015

WESTWINDS ROAD INTERCHANGE (ALTERNATIVE C)

FIGURE NO. FIG. 5

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homes to apartments and mobile homes, can be developed within Bar Nunn on 462 acres.

The study also indicates that significant areas of the community are available for industrial and business development. A 160 acre industrial development was platted in 2011, with 490 acres zoned for further absorption in the future. Thus, a total of 650 acres were reflected in land use trip/generation forecasts of the Study. Figure 8 shows a zoning plat of Bar Nunn, with undeveloped areas highlighted for future residential and industrial/commercial construction.

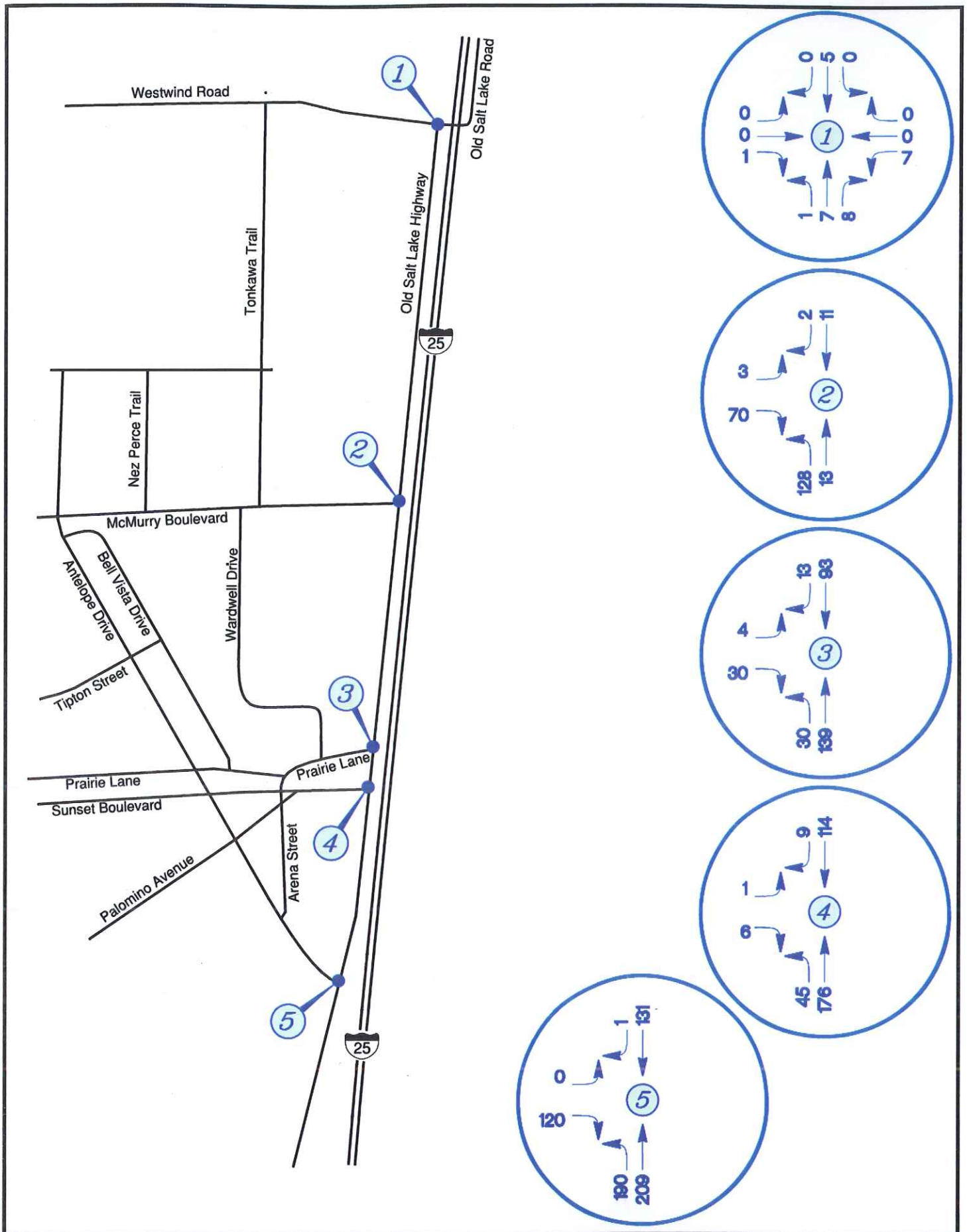
The Study predicted trip generation based on methods provided in the *Institute of Transportation Engineers, Trip Generation Manual* (8th Edition, 2008), with trip generation summaries provided in the appendix. A summary of platted and zoned trip totals is shown on Table 2 for the PM peak hour.

Table 2. Trip Generation Summaries for Bar Nunn Land Uses

Land Use (ITE Code)	Area or Dwell Units	PM Peak Hour Trips		
		Inbound	Outbound	Total
Zoned General Light Industrial (LU 150)	411 acres	863	2,016	2,879
Zoned Business Park (LU 770)	79 acres	813	520	1,333
Zoned Single Family Housing (LU 210)	1,348 units	670	378	1,048
Zoned Apartments (LU 220)	711 units	306	195	501
Zoned Mobile Home (LU 240)	82 units	147	87	234
Platted Industrial and Business	160 acres	301	636	937
Platted Single Family Homes	275 units	225	127	352
Year 2030 Land Use Trips	----	3,325	3,959	7,284

- Source. Bar Nunn Salt Creek Intersection & Subarea Planning Study (CAMPO, DOWL, HKM, 2012)

As shown, 650 acres of industrial and business development and 2,416 residential units are expected to generate 7,248 PM peak hour trips during the typical weekday. The assignment of these land use trips was based on distribution data provided in the Bar Nunn Study, which in turn was founded on link assignments generated by the CAMPO TransCAD forecast travel demand model.



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BAR NUNN INTERCHANGE
ALTERNATIVES STUDY
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EXISTING TRAFFIC VOLUMES
PM PEAK HOUR

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FIGURE NUMBER
FIG. 6

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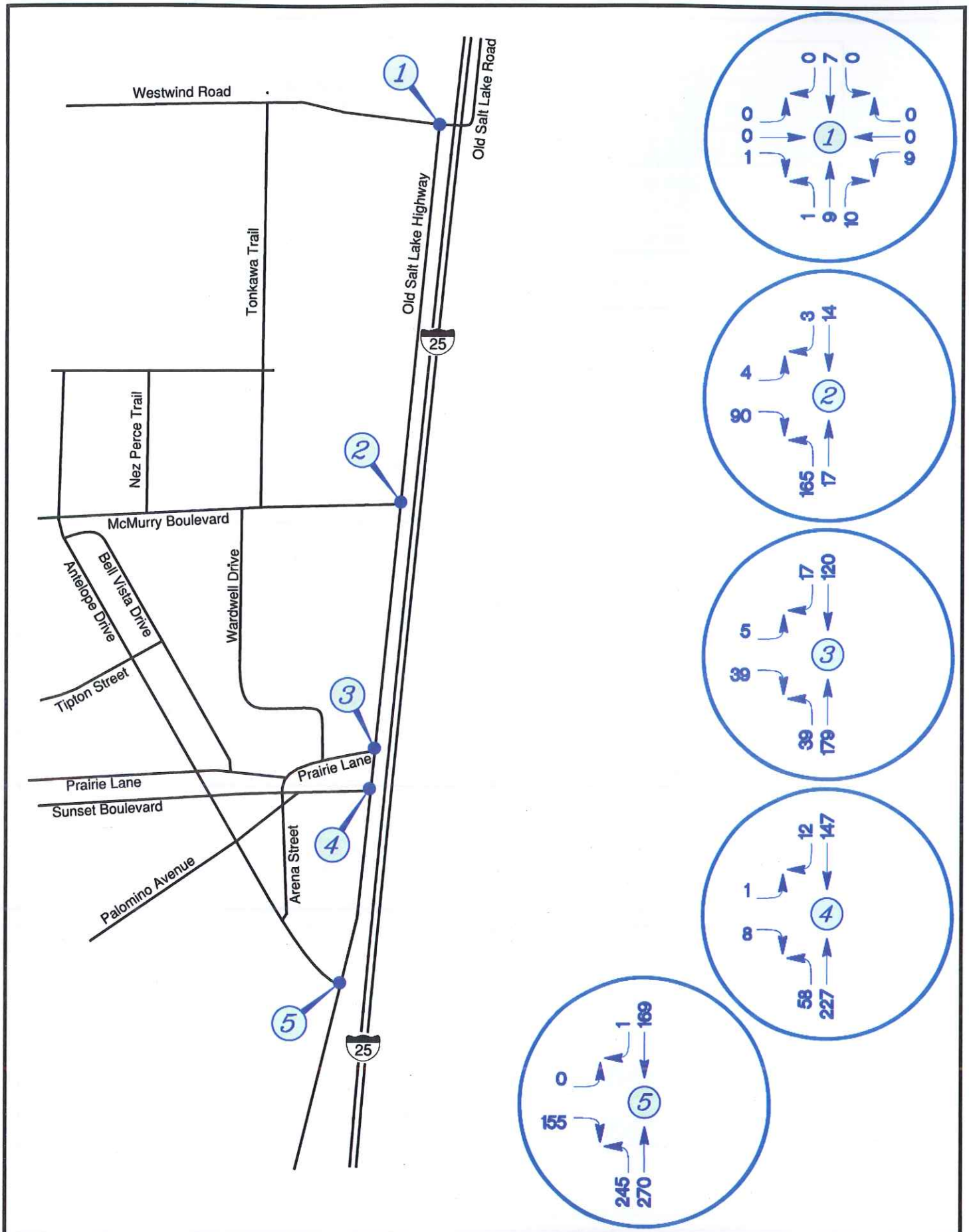

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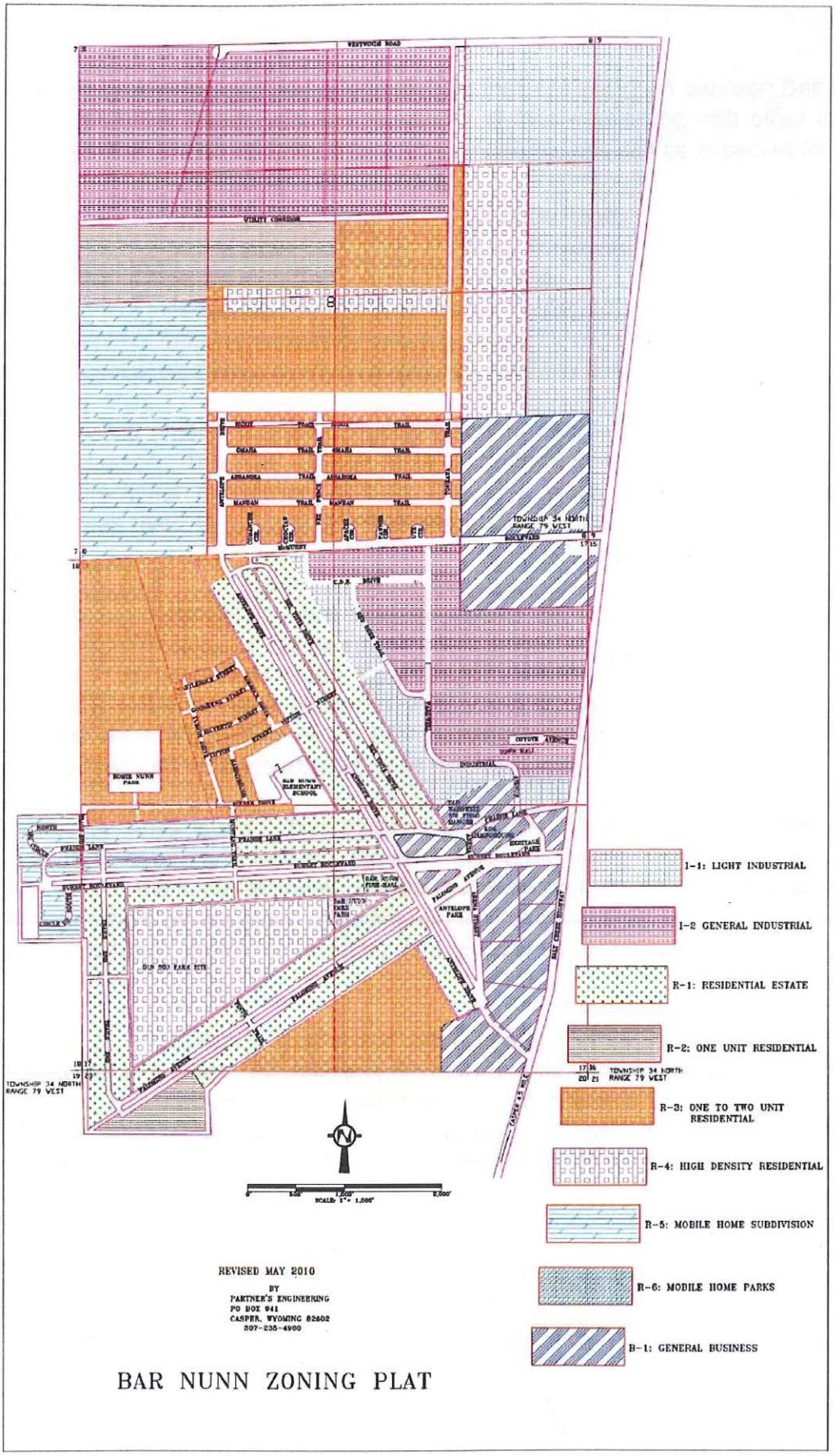

BAR NUNN ZONING PLAT

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BAR NUNN WYOMING

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BAR NUNN ZONING MAP REVISED MAY 2010

FIGURE NO. FIG. 8

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Based on the Study/model, 4,451 PM peak hour trips are assigned between Salt Creek Highway to/from Bar Nunn, with the remainder of trips connecting with other internal destinations within the community. The following distributions can be expected for Town roadways intersecting with Salt Creek Highway:

- 38.8 percent of trips are expected to/from Westwinds Road,
- 5.9 percent of trips are expected to/from McMurry Boulevard,
- 0.8 percent of trips are expected to/from Prairie Lane,
- 0.3 percent of trips are expected to/from Sunset Boulevard,
- 24.9 percent of trips are expected to/from Antelope Drive, and
- 29.3 percent of trips are expected to/from new roadway connections.

The inbound and outbound directional distribution of trips varies, depending upon ITE land use guidance. However, overall there is a 46 percent inbound and 54 percent outbound directional distribution of land use trips when tallied. This directional distribution was used to forecast inbound and outbound trip assignments for site land uses.

Three assignment conditions were then developed for land use trips, reflecting the alternative improvements of the Wardwell Interchange (No Build), McMurry Boulevard Interchange, and Westwinds Road Interchange. As the speed limit of Salt Creek Highway is consistent, travel distances were used as the basis for assigning trips between Bar Nunn arterials and each interchange alternative, respectively. Trips were assigned for each interchange alternative as follows:

Alternative A – No Build. This alternative reflects the minor improvement of the Wardwell Interchange and Howard Street. The assignment of land use trips would continue to/from the south as travel patterns currently exist, as no alternative access to the highway would be available. As such, all new land use trips were assigned to/from the south. Figure 9 shows the resulting land use trip assignments for Alternative A for the PM peak hour.

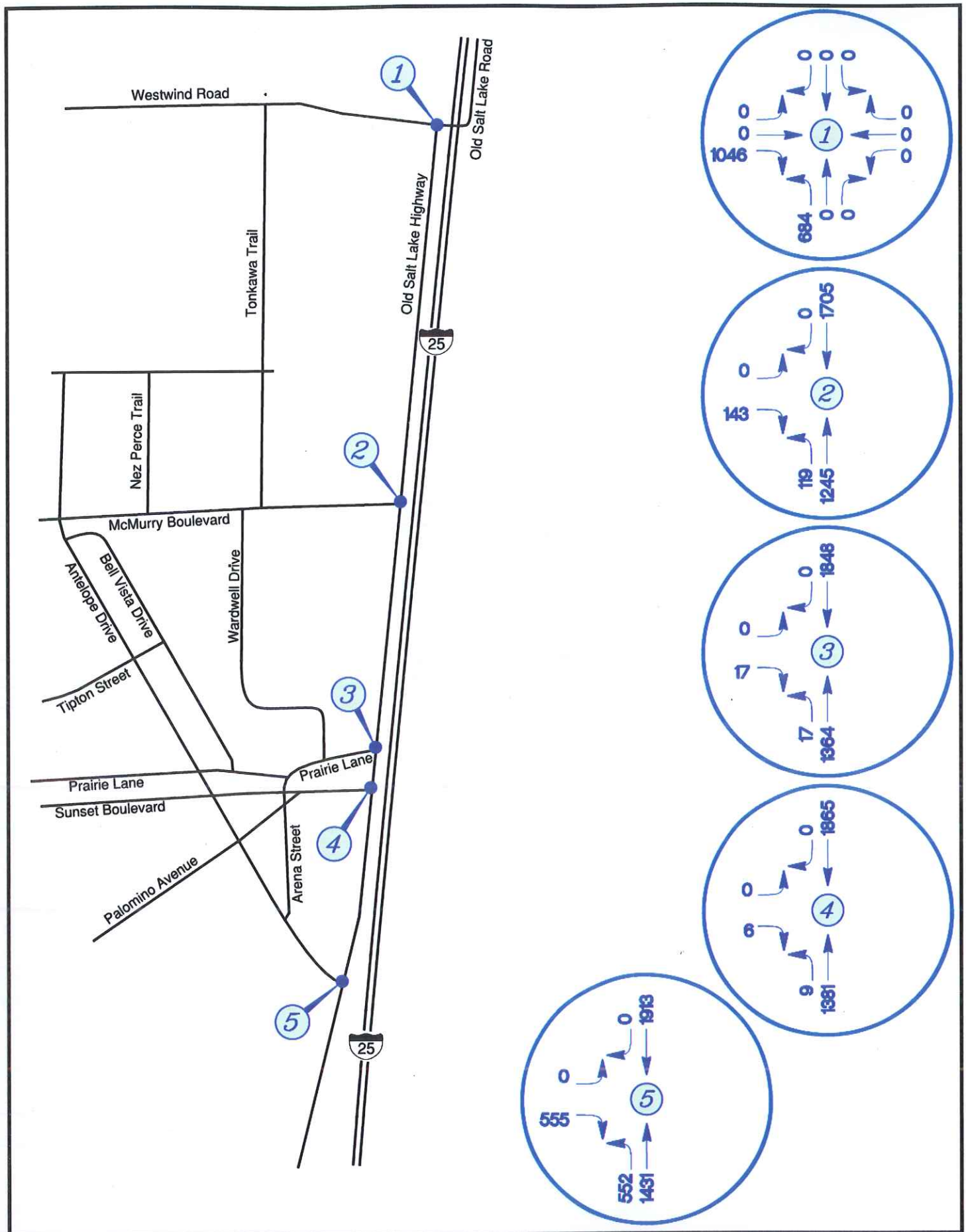
Alternative B – McMurry Boulevard Interchange. This would provide a new interchange on I-25 in line with McMurry Boulevard. The interchange would not replace the Wardwell Interchange; rather it would provide an alternate access to I-25. Thus, project trips were distributed between interchanges based on the travel distance comparisons shown on Table 3. The resulting assignments are shown on Figure 10 for the PM peak hour.

Table 3. Distribution Summary – Study Road with McMurry I/C Alternative				
Roadway Location	Distance To/From		Distribution To/From	
	McMurry I/C	Howard I/C	McMurry I/C	Howard I/C
Westwinds Road	0.9 miles	2.6 miles	100%	0%
McMurry Boulevard	0.0 miles	1.7 miles	100%	0%
Prairie Lane	0.55 miles	1.15 miles	68%	32%
Sunset Boulevard	0.65 miles	1.05 miles	62%	38%
Antelope Drive	1.05 miles	0.65 miles	38%	62%

Alternative C – Westwinds Road Interchange. This alternative locates an interchange along the northern end of the community in-line with Westwinds Road, more centric to future development areas of Bar Nunn. As with the previous alternative, this would not replace the Wardwell Interchange, but would provide an alternate access to the Interstate. Project trips were again distributed between interchanges based on the travel distance comparisons, as shown on Table 4. Assignments for this Alternative are shown on Figure 11 for the PM peak hour.

Table 4. Distribution Summary – Study Road with Salt Creek I/C Alternative				
Roadway Location	Distance To/From		Distribution To/From	
	McMurry I/C	Howard I/C	McMurry I/C	Howard I/C
Westwinds Road	0.0 miles	2.6 miles	100%	0%
McMurry Boulevard	0.9 miles	1.7 miles	65%	35%
Prairie Lane	1.45 miles	1.15 miles	44%	56%
Sunset Boulevard	1.55 miles	1.05 miles	40%	60%
Antelope Drive	1.95 miles	0.65 miles	25%	75%

Baseline year 2030 traffic volumes were then combined with the trip assignments to generate traffic forecasts for study alternatives. Figure 12 illustrates the Alternative A PM peak hour forecast traffic volumes at five major Bar Nunn intersections along Salt Creek Highway. Traffic volumes for Alternative B are shown on Figure 13. Finally, forecast traffic volumes for Alternative C are shown on Figure 14 for the PM peak hour.



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LAND USE TRIP ASSIGNMENTS - ALTERNATIVE A
PM PEAK HOUR

FIGURE NUMBER
FIG. 9

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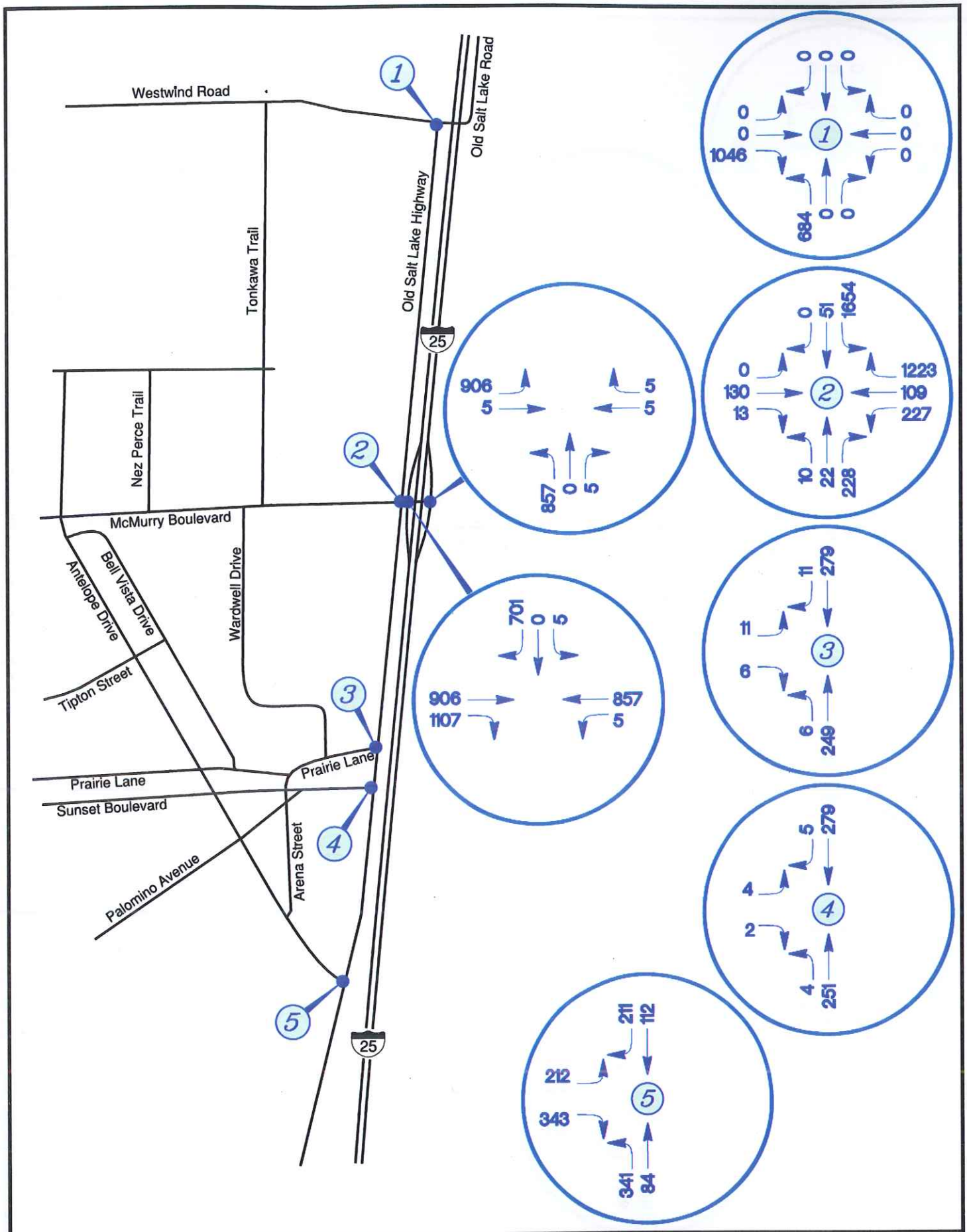

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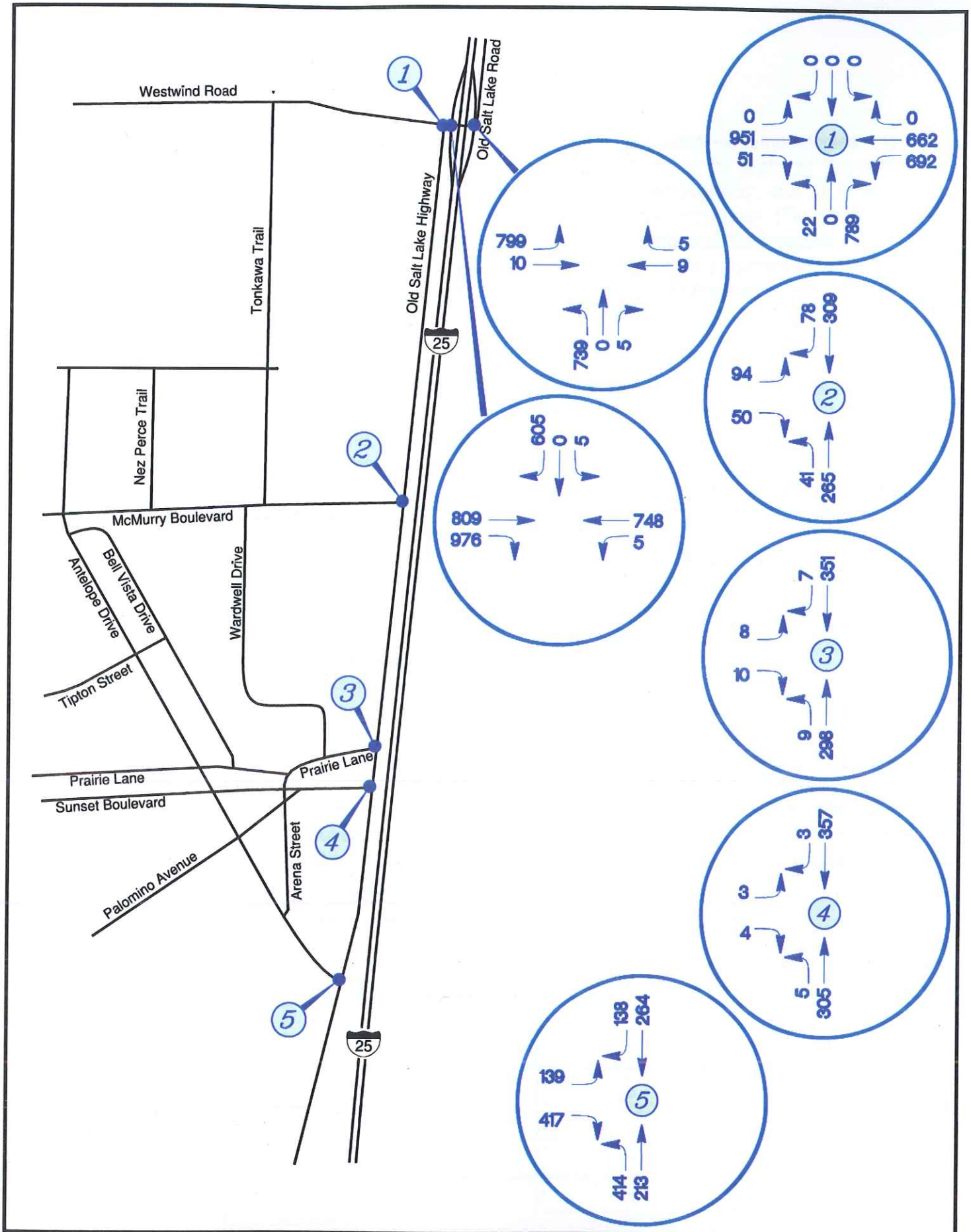

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5.4 Traffic Analysis

Traffic conditions were evaluated based on three approaches/methodologies: 1) Intersection levels-of-service (LOS) methodologies as defined by the Highway Capacity Manual (TRB, 2010), 2) Travel time analyses for Salt Creek Highway, and 3) Arterial capacity evaluations based on the Quality/Level of Service Handbook (Florida DOT, 2012). Traffic analyses were performed based on 2011 counts and the forecasts. Only basic geometries and traffic controls were assumed initially for the purposes of providing a controlled baseline comparison of Alternatives. Preliminary improvement recommendations are addressed in more detail in Section 6.

5.4.1 Intersection Levels-of-Service

Intersection operations were reviewed according to the LOS methodologies of the *Highway Capacity Manual* (TRB, 2010). The *Highway Capacity Manual* (HCM) is a nationally recognized and locally accepted method of measuring traffic flow and congestion for intersections and driveways. Criteria range from LOS A, indicating free-flow traffic conditions with minimal vehicle delay, to LOS F, indicating congestion with significant vehicle delay.

LOS for a signalized intersection is defined in terms of the average control delay experienced by all vehicles at the intersection, typically over a specified time period such as a peak hour. LOS for a two-way stop controlled intersection is the function of the average control vehicle delay experienced by a particular approach or approach movement over a specified interval such as a peak hour.

Typically, the stopped approach or movement experiencing the worst LOS is reported for the intersection or driveway. Finally, the worse approach or movement for a four-way stop controlled intersection was also reported for this study, similar to that of a two-way stop, to assure a conservative analysis of results (although stop-controlled have historically been reported for all-way stop intersections). Table 5 outlines the LOS criteria for signalized/unsignalized intersections from the *Highway Capacity Manual* with the criteria for the unsignalized intersection being used as the guide in this analysis.

Table 5. Intersection Level of Service Criteria

Level of Service	Signalized: Control Delay (sec/veh)	Unsignalized: Control Delay (sec/veh)
A	≤10	≤10
B	>10 – 20	>10 - 15
C	>20 – 35	>15 - 25
D	>35 – 55	>25 - 35
E	>55 – 80	>35 - 50
F	> 80	>50

Source: Highway Capacity Manual (TRB, 2000)

LOS was determined using Synchro (Trafficware, 2011), which is a software program that analyzes and reports LOS based on HCM methodologies. LOS D is the target threshold in this study for year 2030 traffic operations (i.e., operating at LOS D or better). Given the conservative nature of this report, LOS D assures that traffic operations can be maintained well into the future, and is also an industry standard threshold for signalized and unsignalized intersections.

Traffic operations were then reviewed based on existing counts and PM peak hour forecasts. Intersection LOS were developed for base study intersections (along Salt Creek Highway) assuming existing geometric and traffic control conditions. Any improvements needed to facilitate safe and acceptable movement of traffic is described in Section 3.

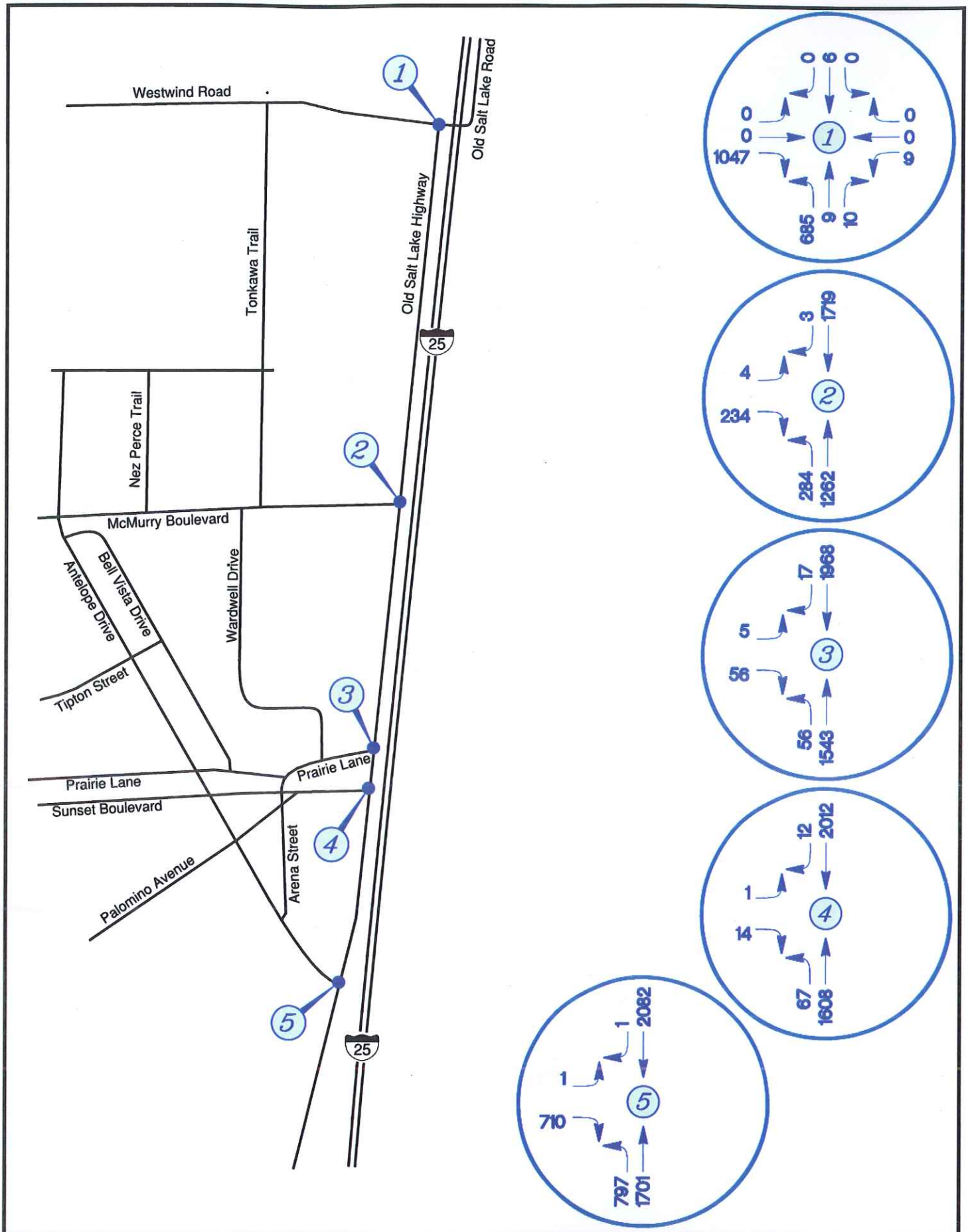
Travel changes are not anticipated with Alternative A as this represents a continued I-25 access scenario for the community. Thus, the impact of Alternative A is only evaluated through LOS of base study intersections within Bar Nunn.

Basic intersection geometrics and traffic control conditions were assumed for Alternative B and C adjacent to Bar Nunn for the purpose of traffic evaluations; involving the new ramp intersections and the new (or modified) intersections of either McMurry Boulevard (Alternative B) or Westwinds Road (Alternative C) with Salt Creek Highway. Existing or basic geometrics and traffic controls were assumed so the merit (benefits or detriments) of each improvement alternative could be evaluated first as a stand-alone project. Roadway and intersection improvements were then assumed in follow up analyses to identify the measures needed to assure the safe and acceptable movement of traffic, beyond interchange alternatives as standalone projects, as identified in Section 6.

A summary of basic geometric assumptions for both Alternative B and Alternative C are as follows:

- Basic diamond interchange configuration assumed for both McMurry Boulevard and Westwinds Road locations,
- Stop controls assumed on the ramp approaches to intersections with McMurry Boulevard and Westwinds Road.
- An all-way stop was assumed between either McMurry Boulevard or Westwinds Road intersections with Salt Creek Highway, depending upon alternative (given change in volume distribution).
- Two lane road assumed for McMurry Boulevard and Westwinds Road under or over I-25.

LOS was developed for study intersections based on the traffic volume and geometric data discussed above. A summary of results is provided on Table 6 for the PM peak hour of the typical weekday. Again, LOS and average vehicle delays are reported for the worse approach or approach movement to each intersection. An average control



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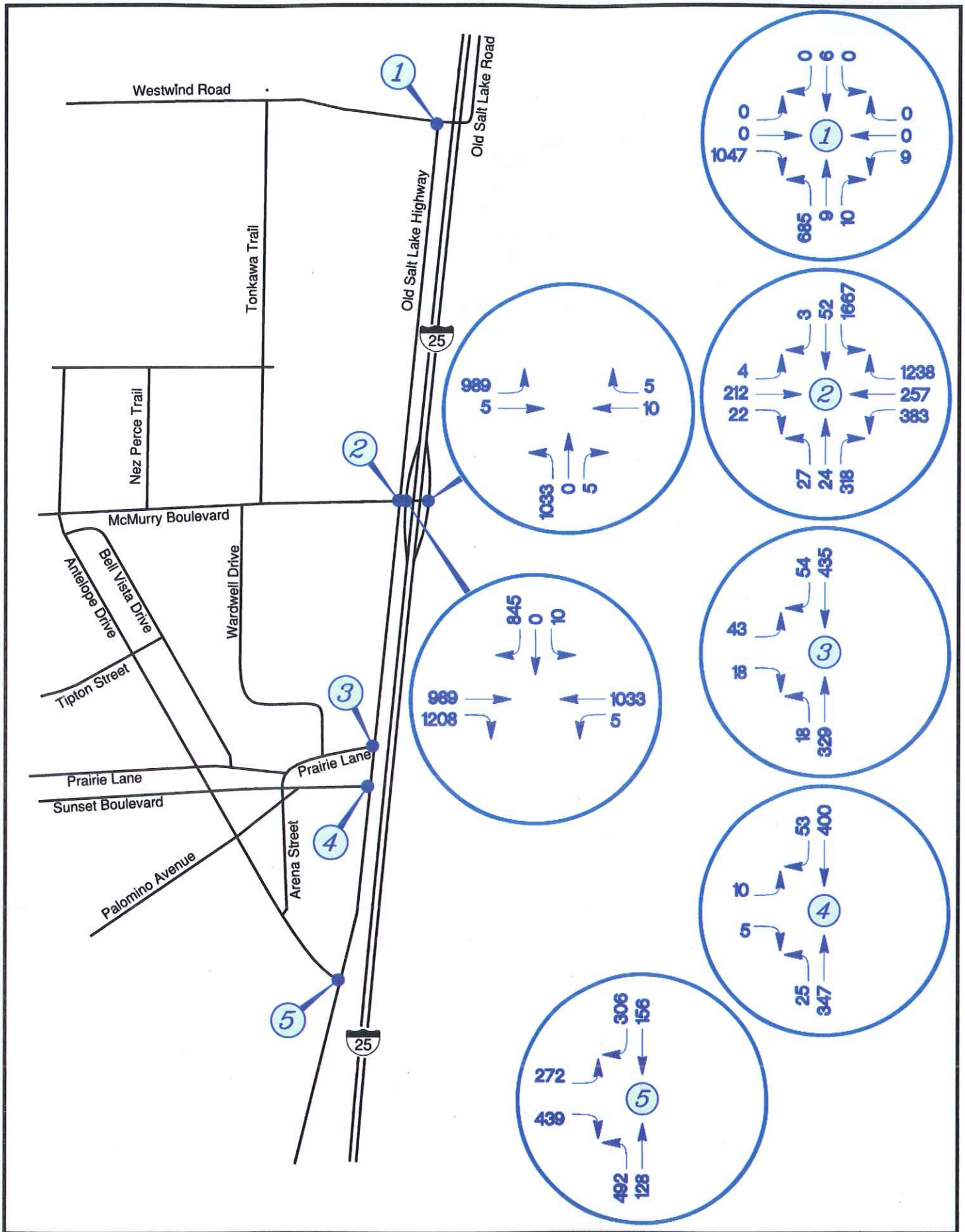

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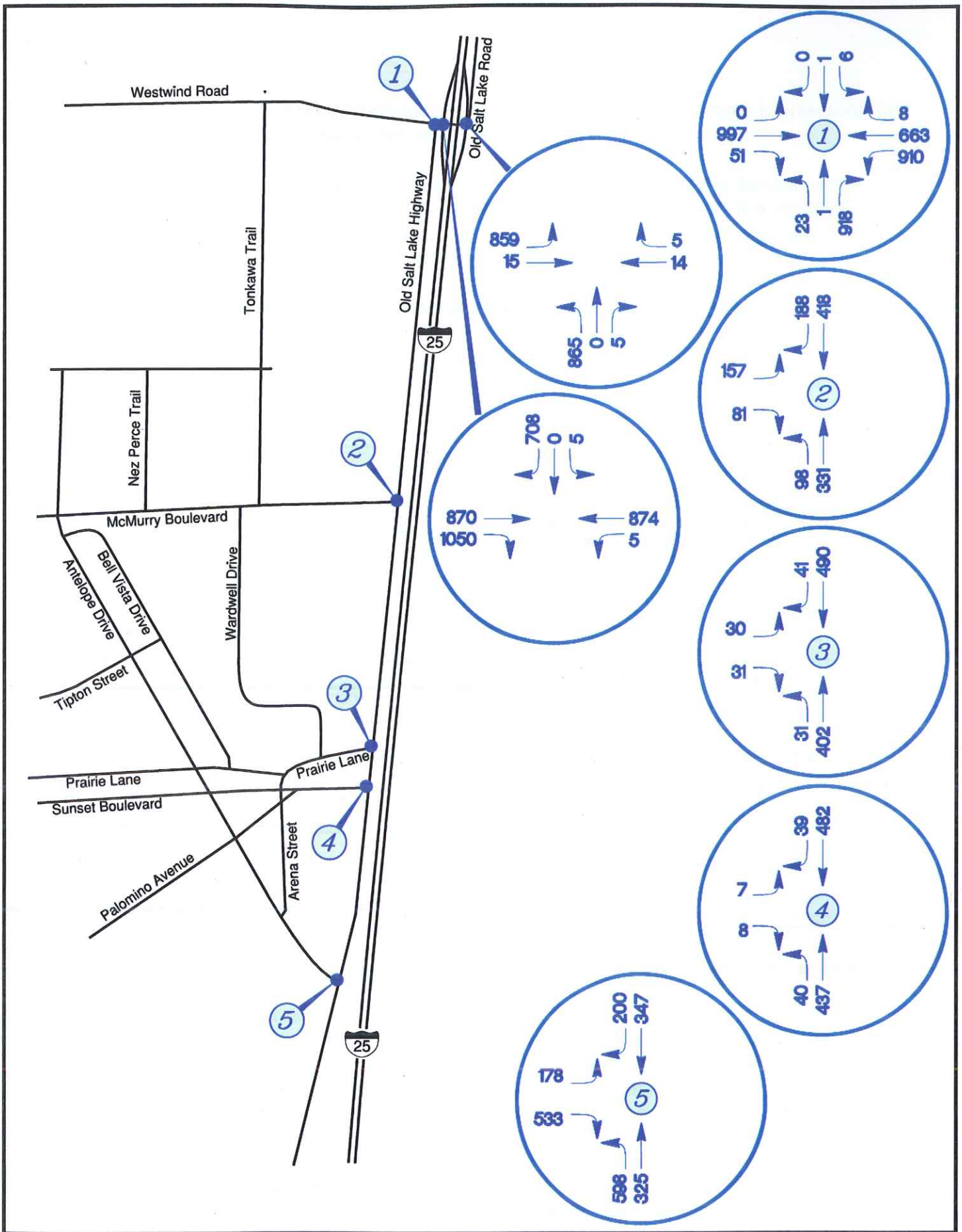

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delay between the five primary study intersections, and neglecting ramp intersections, is provided for the purpose of comparison overall.

As shown on Table 6, all primary study intersections are expected to function within the LOS F range by year 2030 with the development of Town land uses. The introduction of both interchange alternatives improves traffic operations to LOS D or better at the Prairie Lane and Sunset Boulevard intersections with Salt Creek Highway.

Overall, primary unsignalized intersections have an average control delay of 600 seconds. This reduces to 486 seconds with the development of the Alternative B – McMurry Blvd Interchange and 423 seconds with the Alternative C – Westwinds Road Interchange. Thus, Alternative C seems to support the best overall performance, as based on basic geometric and traffic control conditions.

Table 6. Summary LOS – PM Peak Hour

Intersection	Existing		Alternative A		Alternative B		Alternative C	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]
Westwinds Rd/Salt Creek Hwy	A	7.2	F	73.8	F	73.8	F	67.2
McMurry Blvd/Salt Creek Hwy	A	7.5	F	>500	F	74.7	F	253.2
Prairie Ln/Salt Creek Hwy	A	7.5	F	>500	C	17.6	D	25.7
Sunset Blvd/Salt Creek Hwy	A	7.6	F	274.3	C	15.4	C	20.1
Antelope Dr/Salt Creek Hwy	A	7.9	F	>500	F	>500	F	>500
Westwinds Rd /I-25 SB Ramp	--	--	--	--	--	--	F	>500
Westwinds Rd /I-25 NB Ramp	--	--	--	--	--	--	F	>500
McMurry Blvd/I-25 SB Ramp	--	--	--	--	F	>500	--	--
McMurry Blvd/I-25 NB Ramp	--	--	--	--	F	>500	--	--
Average Control Delay – Primary Study Intersections	7 Seconds		600 Seconds		486 Seconds		423 Seconds	

1. LOS = Levels of Service
2. Control Delay (seconds).

5.4.2 Travel Times

A basic evaluation of travel times was developed as a means to compare alternatives; specifically as it pertains to whether or not the provision of an additional interchange would improve emergency response times to Bar Nunn. This analysis compares distance traveled (as presented in feet) versus posted speed (in mph), resulted in travel times presented in minutes. Distances were measured from aerial photography extending from the center of the respective Interchange to the center of the respective intersection being evaluated. The posted speed limit of Salt Creek Highway is 45 mph and of I-25 is 75 mph. For the sake of simplicity, the delays associated with ramp

junctions and intersections were considered to be similar, and were therefore neglected. Thus, presented on Table 7 are roadway travel times only.

The travel time analysis indicates that Prairie Lane, Sunset Boulevard, and Antelope Drive would be best and most quickly accessed via the existing Wardwell Interchange. As this Interchange would still be available, despite new interchange construction, citizens and emergency responders would still likely use this approach. However, there is a benefit to a secondary approach being provided with a new interchange in the event Howard Street were closed.

Table 7. Roadway Travel Time Summaries (Neglect Intersections)

Roadway Location	Alternative A		Alternative B		Alternative C	
	Distance	Time	Distance	Time	Distance	Time
Westwinds Rd /Salt Creek Hwy	**14,655 ft**	**4.16 min**	**14,165 ft**	**3.46 min**	**14,090 ft**	**3.14 min**
- Distance/Time at 40 mph	- 14,655 ft	- 4.16 min	- 5,035 ft	- 1.43 min	- 190 ft	- 0.05min
- Distance/Time at 70 mph	- 0 ft	- 0.00 min	- 9,130 ft	- 2.03 min	- 13,900 ft	- 3.09 min
McMurry Blvd/Salt Creek Hwy	**9,840 ft**	**2.80 min**	**9,320 ft**	**2.08 min**	**9,320 ft**	**4.52 min**
- Distance/Time at 40 mph	- 9,840 ft	- 2.80 min	- 190 ft	- 0.05 min	- 5,025 ft	- 1.43 min
- Distance/Time at 70 mph	- 0 ft	- 0.00 min	- 9,130 ft	- 2.03 min	- 13,900 ft	- 3.09 min
Prairie Ln/Salt Creek Hwy	**6,975 ft**	**1.98 min**	**12,265 ft**	**2.92 min**	**21,775ft**	**5.33 min**
- Distance/Time at 40 mph	- 6,975 ft	- 1.98 min	- 3,135 ft	- 0.89 min	- 7,875 ft	- 2.24 min
- Distance/Time at 70 mph	- 0 ft	- 0.00 min	- 9,130 ft	- 2.03 min	- 13,900 ft	- 3.09 min
Sunset Blvd/Salt Creek Hwy	**6,505 ft**	**1.85 min**	**12,665 ft**	**3.03 min**	**22,250 ft**	**5.46 min**
- Distance/Time at 40 mph	- 6,055 ft	- 1.85 min	- 3,535 ft	- 1.01 min	- 8,350 ft	- 2.37 min
- Distance/Time at 70 mph	- 0 ft	- 0.00 min	- 9,130 ft	- 2.03 min	- 13,900 ft	- 3.09 min
Antelope Dr/Salt Creek Hwy	**4,420 ft**	**1.26 min**	**14,870 ft**	**3.66 min**	**24,385 ft**	**6.07 min**
- Distance/Time at 40 mph	- 4,420 ft	- 1.26 min	- 5,740 ft	- 1.63 min	- 10,485 ft	- 2.98 min
- Distance/Time at 70 mph	- 0 ft	- 0.00 min	- 9,130 ft	- 2.03 min	- 13,900 ft	- 3.09 min

Analyses confirm travel times to the McMurry Boulevard and Westwinds Road areas (and future properties within northern areas of the Town) would be improved with the provision of a new interchange, with the best savings obtained with an adjacent interchange. The analysis shows that over a full minute in travel time savings can be secured within the Westwinds Road area following the construction of Alternative C, versus the existing approach via the Wardwell Interchange. This is a substantial benefit to the area.

It is important to note the development of a new interchange also provides a secondary means of accessing Bar Nunn, which is critical to emergency responders. An additional interchange also provides a means for detouring either Salt Creek Highway or I-25 for emergencies or to facilitate detours associated with new construction or maintenance projects.

5.4.3 Arterial Capacity

Arterial capacity was reviewed according to guidelines provided within the *Quality/Level of Service Handbook* (Florida DOT, 2012). This is a secondary evaluation and measure that should be reviewed in context to intersection LOS to best understand capacity conditions along Salt Creek Highway.

The Handbook (incorporated by reference) defines arterial LOS based on the criteria of roadway cross-sections (i.e. number of through lanes) versus peak hourly or average daily traffic volumes. The guideline used for this project reflects the number of lanes needed to maintain various LOS standards as based on "Peak Hour Two-Way" Volumes for "Rural Undeveloped Areas and Developed Areas Less Than 5,000 Population" Unlike intersection LOS, common industry practice is to maintain LOS C for roadways. As such, the number of lanes needed to maintain LOS C was reviewed as based on forecast traffic volumes. Table 8 provides the volumes thresholds needed to maintain a LOS C standard for different roadway sections, as applicable to this project.

Table 8. Peak Hour Volumes to Maintain LOS C Standard – Areas (Highways Population Less than 5,000)

ADT Volumes per Lanes for:	Two Lanes	Four Lanes	Six Lanes
Highway (Undivided and Uninterrupted)	790	3,630	4,345

Source: *Quality/Levels-of-Service Handbook* (Florida DOT, 2012)

Existing and forecast alternative PM peak hour traffic volumes were then compared with the thresholds identified in Table 8 to help quantify roadway capacity conditions. The comparison was provided for different locations along Salt Creek Highway. Table 9 provides a summary of roadway volumes for the PM peak hour for Salt Creek Highway.

Table 9. Roadway PM Peak Hour Volumes – Salt Creek Highway

ADT Volumes Versus Lanes for:	Existing	Alternative A	Alternative B	Alternative C
South of Westwinds Road	30	1,765	1,765	2,280
Salt Creek Rd to McMurry Blvd	30	2,985	2,985	1,470
McMurry Blvd to Prairie Ln	250	3,535	860	1,210
Prairie Lane to Sunset Blvd	300	3,635	810	1,170
Sunset Blvd to Antelope Dr	340	3,785	860	1,195
South of Antelope Dr	650	5,290	1,215	1,425

Source: *Quality/Levels-of-Service Handbook* (Florida DOT, 2012)

Salt Creek Highway currently supports volumes above the LOS C capacity threshold during the PM peak hour. However, volumes increase well beyond this threshold under all future alternatives. It appears that a four lane section would be needed along

stretches of the Highway to maintain a LOS C standard under Alternative A. However, volumes appear to be reduced along Salt Creek Highway under the other alternatives, requiring more likely, a two to three lane sections. Volumes appear to be more uniform with Alternative C.

5.5 Connectivity Review

Previous studies have touched on standard road classification criteria guidelines for efficient transportation system connectivity (i.e., Arterial, Collector, Local-Through, and Local Street designations). In an ideal situation, a community's transportation network includes a hierarchy of road uses based on traffic volume, design speeds, and regional goals for the roadway. Although this study does not repeat the criteria descriptions, it is generally understood that compliance with traffic planning progression of roadway use should be considered in the comparison between the alternatives.

5.5.1 Alternative A – No-Build

Howard Road between Salt Creek Highway and the Wardwell Interchange currently operates like a collector street. However, access control is non-existent on this roadway resulting in disruption to flow of traffic. West of Salt Creek Highway, Howard Road is unpaved and serves as a local street providing access to adjoining residential and commercial property owners. Any future consideration to enhance/upgrade this interchange and/or future connectivity to the Airport would require significant improvements to the full length of Howard Street. Likewise, access management may be necessary to facilitate efficient operations and safety to motorists.

5.5.2 Alternative B – McMurry Boulevard Interchange

Construction of this interchange will introduce significant additional traffic to McMurry Boulevard west of Salt Creek Highway. McMurry Boulevard currently operates as a local-through street with numerous direct accesses to adjoining properties. Connection of this road to the interstate would alter current traffic patterns and increase the commuter ADT along this local street. Likewise, future connectivity between I-25 and the Airport would introduce higher levels of commercial and pass-through traffic to destinations west of Bar Nunn.

5.5.3 Alternative C - Westwinds Road Interchange

Westwinds Road west of Salt Creek Highway appears to have been built to meet minor arterial or collector street guidelines. The road includes two through lanes and a center turn lane. The properties along Westwinds Road are currently undeveloped. Given the undeveloped environment, there appears to be potential to implement access management along the roadway to facilitate future high traffic demands. At first glance, this roadway appears to be more suitable to increased traffic to and from an interstate connection.

5.6 Traffic Forecast and Analysis Conclusions

- Approximately 2,416 dwelling units and 160 acres of industrial and business area is zoned and being promoted for development within the Town of Bar Nunn, Wyoming. These land uses are projected to generate 7,284 PM peak hour trips, with just over 60 percent of these trips expected to travel Salt Creek Highway for commute purposes. The majority of this commute traffic would travel Salt Creek Highway access the existing Wardwell Interchange, located 1 to 2 miles south of Bar Nunn depending upon where you live in the community, to achieve work and shopping destinations. This traffic is expected to congest this basic diamond interchange, as well as impact operations and safety along the length of Salt Creek Highway, over the next 20 years.

- The impacts of the Alternative A – No Build (Wardwell Interchange) option would not impact travel along Salt Creek Highway as no alternative travel route is provided. Thus the impacts of this alternative were reviewed in context only to the principal study area extending along the Town.

- The intersection levels-of-service analysis indicates all study intersections would function within the LOS F range based on Alternative A – No Build (Wardwell Interchange),

- The construction of either the Alternative B - McMurry Boulevard, or Alternative C - Westwinds Road Interchange would provide an alternative travel route, splitting demands and improving two of five intersections into acceptable traffic ranges.

- Travel times to the McMurry Boulevard and Westwinds Road areas (and future properties within northern areas of the Town) would be improved with the provision of a new interchange.

- A new interchange provides a secondary means of accessing Bar Nunn, which can be important to emergency responders for the Town. An additional interchange also provides a means for detouring either Salt Creek Highway or I-25 for emergencies or for reasons such as construction (roadway improvements, etc.).

- A roadway capacity analysis indicates Salt Creek Highway would need to be developed to a four cross lane section under Alternative A, with the location of the existing interchange at Howard Street only. Volumes are projected to be lower along Salt Creek with Alternative B and C, requiring more likely a two to three lane section depending upon location.

- Traffic volumes appear to be more uniform with Alternative C; likely requiring one consistent cross section. Traffic volumes range more significantly under Alterative B, likely requiring cross section variances along the Highway.

- Of the Alternative, it appears the Alternative C - Westwinds Road Interchange offers slightly better traffic operations, better overall travel time savings to north Bar Nunn,

and has more uniform traffic flows along Salt Creek Highway (promoting the development of a consistent roadway widening).

- Alternative B and Alternative C offer similar improvements. However, a review of average control delay experienced between all unsignalized study intersections indicates drivers experience the least impact with the Alternative C – Westwinds Road Interchange.

As indicated, existing and basic geometrics and traffic controls were used in analysis in order to compare the benefit or impact of alternatives based on their own merit. However, the analysis indicates that further improvements are warranted to promote acceptable traffic operations and adequate levels of capacity and safety for the community. As this traffic analysis supports either of the two new interchange alternatives, a general summary of additional improvements is as follows:

- Salt Creek Highway – Widen highway to three lanes through Bar Nunn (Howard Street to Antelope Drive), considering pedestrian and bicycle needs.
- Develop enhanced traffic controls such as signals or roundabouts at the principal study intersections of Westwinds Road, McMurry Boulevard, and Antelope Drive with Salt Creek Highway (Prairie Lane and Sunset Boulevard do not require enhanced controls with Alternatives B and C).
- Review the need and promote turning lanes, in coordination with traffic controls, at the Westwinds Road, McMurry Boulevard, and Antelope Drive intersections with Salt Creek Highway; and at the intersections of Prairie Lane and Sunset Boulevard with the Highway.

6.0 INTERCHANGE ALTERNATIVE DESIGNS & SCREENING

6.1 Design and Alternative Criteria

Development of the preferred interchange alternative requires attention to several factors. Based on accepted transportation planning criteria coupled with the state and local expectations, we evaluated the alternatives on the following alternative screening factors. These criteria are ranked by their relative level of importance:

1. Meet the project "Purpose and Need",
2. Interstate accessibility to emergency responders,
3. Local transportation mobility,
4. Property and right-of-way impacts,
5. Environmental impacts,
6. Cost effectiveness, and
7. Public buy-in.

All of these parameters were considered in ranking the three alternatives and developing a conclusion on the recommended alternative. These criteria are met with the "preferred" preliminary alternative layout addressed further in this section.

6.2 Design Criteria

Highway design standards used for this study include:

- WYDOT "Design Criteria – Interchanges" 7.05 Road Design memorandum
- American Association of State Highway Officials (AASHTO), A Policy on Geometric Design of Highways and Street, 6th Edition.
- Town of Bar Nunn, Town Code (Updated July 17, 2012 by Ordinance 2012-04), Chapter 6: Design Standards

6.3 Alternative Concept Designs

6.3.1 Alternative A – No Build (Wardwell Interchange)

The existing Wardwell Interchange consists of a tight diamond ramp configuration with stop sign controls at the off-ramp terminals. Attached Figure 2 provides an aerial view of the interchange. The Howard Street (Hwy 254) traffic currently has free movement up to and through the undercrossing structure.

The July 2008 Salt Creek Highway/McMurry Boulevard Corridor Study (referenced herein) concludes several deficiencies associated with the Wardell Interchange, Howard Street, and Salt Creek Highway. These deficiencies are described in detail in Section 5.1.

For the purposes of this study, Alternative A serves as the baseline alternative for comparison with the two interchange alternatives described herein. Note that the projected cost estimate for this alternative only includes minor interchange improvements at the ramp terminals to improve ramp queuing. The cost to improve Howard Street, The intersection with Salt Creek Highway, and widening Salt Creek

Highway are beyond the scope of this study but are anticipated to be in the millions of dollars.

6.3.2 Alternative B – McMurry Boulevard Interchange

6.3.2.1 General

Figure 4 illustrates the interchange configuration adjacent to McMurry Boulevard located at approximate interstate milepost 193.4. The topography around the interchange site is relatively flat; the interstate is at the approximate same elevation as the adjoining topography. The interchange would include a bridge overpass structure with imported fill to build up the ramps and cross road approaches. A tight diamond configuration would be ideal for this location to minimize private property impacts.

6.3.2.2 Utilities and Right of Way Impacts

On the west side of I-25, various overhead and underground utilities were observed including power and buried telephone conduit. It is assumed that these utilities would be relocated with the future interchange project.

Right-of-way acquisition on both sides of the interstate is necessary to facilitate the ramps and realigned Salt Creek Highway. None of the properties impacted by the design are currently developed or include permanent structures. Right-of-way acquisition is assumed to follow standard WYDOT procedures.

6.3.2.3 Horizontal Alignment Criteria

The interchange ramps would be designed to the current WYDOT ramp configuration guidelines. The attached Figure 4 illustrates the application of a freeway merge lane allowing vehicles to accelerate to interstate speeds and merge with traffic.

The realigned Salt Creek Highway should be located the proper distance west of the ramp terminal intersections to avoid traffic queuing conflicts with the southbound ramp terminal. It is assumed that four-way stop controls would be implemented at the McMurry Boulevard / Salt Creek Highway intersection whereas the ramp terminals for both southbound and northbound traffic would have stop control at the off ramps only. To facilitate left turn storage on westbound McMurry Boulevard to southbound Salt Creek Highway, intersection spacing is expected to be approximately 250-feet. Based on WYDOT's Access Control Manual, the minimum spacing should be 660-feet. However, the extent of this spacing from the future ramp terminal to the realigned frontage road would have a significant impact on adjacent developable properties. Implementation of closer spacing of the intersections will require a design exception.

6.3.2.4 Highway Grade Criteria

Application of highway grades, both on the urban system and the interstate ramps is a function of design speed, anticipated vehicle types, and in some cases sight distance. AASHTO applies a general rule that interchange ramp grades of 4-6% can be acceptable for a design speed of 35- to 40-mph. It is anticipated that the interchange would experience a large percentage of truck usage associated with the local commercial and industrial businesses, and future commercial traffic connecting to Highway 26 the Natrona County Airport.

Longer deceleration and acceleration ramp lengths and ramp configurations are applied to the preliminary layouts. Whereas typical ramp lengths of 1000-feet would be sufficient for single passenger vehicles, ramp lengths of 1800-feet are proposed herein to accommodate the heavier truck acceleration / deceleration requirements.

The McMurry Boulevard approach would likely be built at a maximum 4% grade up to the intersection to the realigned Salt Creek Highway. The grade would transition to 2% at Salt Creek Intersection and extend to the ramp terminal. Likewise the grades along Salt Creek Highway would be a maximum of 4% slope transitioning to 2% maximum at the intersection.

Although a detailed design is necessary to establish precise grading limits, it is expected that McMurry Boulevard would meet the existing grade approximately 1000 feet from the interchange. Access to adjoining properties are impacted by this grade differential and access management would dictate the location of the nearest public or private approach along McMurry Boulevard

6.3.2.5 Bridge Design Criteria

The FHWA guidelines require a minimum of 17.0 feet clearance between the interstate surface and low chord of the overpass structure. It can be assumed a minimum two way traffic configuration, paved shoulders and sidewalks would be included in the design. The profile of the structure should be placed high enough to facilitate future widening of the lanes and corresponding lowering of the outside bridge beams.

6.3.3 Alternative C – Westwinds Road Interchange

6.3.3.1 General

Alternative C illustrated in Figure 5 shows a proposed diamond interchange configuration. The existing interstate structure at the Salt Creek Highway undercrossing at interstate milepost 194.3 consists of two three-span flat slab bridge decks.

6.3.3.2 Utilities and Right-of-Way Impacts

Underground telephone utilities were observed on the west side of the interstate between the interstate and Salt Creek Highway. Likewise, overhead power poles are located adjacent to Salt Creek Highway both east and west of the interstate. Construction of interstate ramps and realignment of Salt Creek Highway would likely require the relocation of these buried and overhead utilities.

On the east side of the interstate is the Salt Creek Booster Station owned and operated by the Central Wyoming Regional Water System Joint Powers Board. The booster station serves the Towns of Edgerton and Midwest, Wyoming. Discussions with the water district chief operator indicate that this is a critical water supply facility for the communities and disruption of service is discouraged. As mentioned in the Horizontal Alignment section below, the preliminary design would avoid impacting this booster pump station.

Right-of-way acquisition on both sides of the interstate is necessary to facilitate the ramps and realigned Salt Creek Highway. Other that the booster pump station described above, none of the properties impacted by the design is currently developed or includes permanent structures. Right-of-way acquisition is assumed to follow standard WYDOT procedures.

6.3.3.3 Horizontal Alignment Criteria

The attached Figure 5 illustrates a few of the unique complexities of this site. The presence of the booster lift station on the east side of I-25 requires the northbound off ramp to be shifted east to avoid conflicting with the facility. The on-ramp would likewise need to be shifted east to match up with the off-ramp alignment.

Similar to the design requirements outlined with the McMurry Interchange, the realigned Salt Creek Highway must be separated a sufficient distance from the ramp terminals to develop left turn storage at the Salt Creek Highway intersections. This situation applies to both the west side and east side of the interstate. To facilitate left turn storage on Westwinds Road at the two intersections with realigned Salt Creek Highway, intersection spacing from the ramp terminals is expected to be approximately 250-feet. Based on WYDOT's Access Control Manual, the minimum spacing should be 660-feet. However, the extent of this spacing from the future ramp terminal to the realigned frontage road would have a significant impact on adjacent developable properties. Implementation of a closer spacing of the intersections will require a design exception.

It is assumed that three-way stop controls would be implemented at the Westwinds / Salt Creek intersection west of the interstate. Given the tight corner at the intersection east of the interstate, two-way stop controls for eastbound and northbound traffic should be considered. The ramp terminals for both southbound and northbound traffic would have stop control at the off-ramps only.

6.3.3.4 Highway Grade Criteria

The interstate is approximately 18 feet higher than the pavement surface at the Salt Creek undercrossing. Preliminary topographic mapping indicates that the freeway grade is approximately 4% climbing from south to north. It is expected that future ramp lengths for the northbound on-ramp and southbound off-ramp would need to extend further to the north to compensate for the interstate grade and still provide acceptable ramp grades.

The design of this interchange needs to consider that vehicles entering the interstate are required to climb up to the interstate, verses an elevated interchange wherein vehicles are traveling downhill and achieve freeway speeds quicker. .

6.3.3.5 Bridge Rehabilitation Requirements

Bridge inspection reports for the two interstate bridge structures (north bound and southbound) indicate the structures are in adequate condition but would likely require minor bridge rehabilitation if integrated as in interchange structure. The structures are continuous concrete slabs (flat slab) with three spans. Support columns consist of steel W-sections set on spread footing foundations.

The clearance between the undercrossing surface and bottom of the bridge slabs is 15.2-feet. The AASHTO guidelines recommend minimum 16-feet, 6-inch clear for county roads and non-NHS interchanges. The profile of the road may need to be lowered 1.3-feet to facilitate adequate clearance.

The attached photo shows the bridge structures taken from Salt Creek Highway. The lateral clearance between guardrails is approximately 24 feet. In order to provide any shoulder for pedestrian and/or bike usage, new concrete barrier rails may be set back closer to the columns. Based on the minimal clearance, sidewalks would not be feasible under this structure. In lieu of complete reconstruction of the bridges, retrofitting the road cross section with minimal shoulders should adequately serve the public as an interim measure until such time that pedestrian and cyclist use warrants otherwise.

The configuration of the interchange ramps should adequately provide for potential future reconstruction of the interstate bridges. Specifically, additional lanes or the addition of pedestrian and cyclist facilities would require the bridges be replaced with longer structures and corresponding increased clear width.

6.4 Preliminary Cost Estimates

One of the screening criteria used to evaluate the alternatives is capital cost of the improvements. In Appendix B are planning level construction estimates for each of the Alternatives. The estimate is based on very preliminary assumptions and anticipated design requirements. Likewise right-of-way and utility relocation costs should be considered preliminary. For this estimate a conservative contingency of 30% is applied to the estimates. This contingency covers incidental construction items and is considered commensurate with this level of planning effort.

Following Table 10 is a summary of the approximate preliminary costs of the alternatives:

Table 10. Alternative Preliminary Costs

Alternative	Preliminary Cost
Alternative A - No Build (Minor Improvements to Wardwell Interchange)(1)	$ 981,000
Alternative B – McMurry Boulevard Interchange	$ 5,029,000
Alternative C – Westwinds Road Interchange (Use existing interstate bridges)	$ 2,863.000
Alternative C – Westwinds Road Interchange (Construct new interstate bridges)	$ 5,110,000

(1) This cost only addresses minor interchange improvements and does not reflect improvements to Howard Street, the Howard Street/Salt Creek Road intersection, or reconstruction of Salt Creek Hwy.

Interchange Screening

The following Table 11 was developed as a screening tool to guide the selection of the preferred alternative. For each of the screening criteria, the maximum ranking (i.e., most favorable) is 4 with the minimum 1 for the least favorable. The highest cumulative score is theoretically the best alternative. In accordance with NEPA guidelines, the No-Build Alternative (Alternative A) is considered the baseline for comparison. The screening criterion included in the table is consistent with the Purpose and Need Statement outlined in the Introduction Section 1.0 herein. The screening criterion was expanded to address various other relevant design, socio economic and constructability factors.

Table 11. Alternative Screening			
Screening Criteria Components	**Alternative A No-Build [1]**	**Alternative B McMurry Blvd.**	**Alternative C Westwinds Rd.**
Purpose and Need Criteria: [2]			
Public Safety – Reduced trucks on surface streets	1	3.5	4
Uses existing transportation infrastructure	1	3	3.5
Accommodates future arterial belt loop In Bar Nunn	1	3	4
Reduced travel commute times	1	4	4
East-West Connectivity from I-25 to Casper Airport/East Casper	1	3.5	4
Relieve congestion and improve LOS at Wardwell Interchange	2.5	4	4
Interstate Accessibility:			
Provides access for emergence responders	1	4	4
Transportation Mobility (Forecast Modeling):			
Transportation network LOS improvement	1	2.5	3
Transportation network mobility improvement	1	2.5	3
Least Impacts to existing urban street system	1	3	4
Private Property Impacts:			
Right-of-way Acquisition (Area)	4	3	2.5
Utility Impacts	3.5	2	2
Improved land value [3]	1	4	3
Environmental Impacts:			
General impacts to local environmental resources	4	3	3
Cost Impacts:			
Provides most cost-effective solution	4	2	3
Public Acceptance:			
Favorable public meeting feedback	1	2	4
Cumulative Score	28	49	55

Footnotes:

(1) Baseline for Comparison. Assumes some minor interchange and ramp improvements, plus improvements to Howard Road and intersection with Salt Creek Hwy.

(2) Reference Section 1.3 herein for detailed description of Purpose and Need criteria

(3) Provides for future commercial development near interstate (e.g., hotels, gas stations, local commerce)

In summary, Alternative C appears to be the preferred alternative. The alternative also scores highest in relation to the Purpose and Need criteria.

7.0 ENVIRONMENTAL SCREENING

7.1 Basic Description of the Environmental Setting

This study generally addresses the context and some of the potential impacts associated with the proposed interchange. These will be valuable inputs to the discussion of the effected environment and environmental consequence during the future NEPA analysis. Planning level information and analyses that have been researched for this study include:

- Regional development and projected growth potential – addressed in Section 5 herein,
- Local land use and known development plans – addressed in Section 5 herein,
- Demographic trends and forecasts – addressed in Section 5 herein,
- Environmental scans that identify environmental resources and environmentally sensitive areas – addressed below.

The area around Bar Nunn is generally rolling terrain. Native vegetation consists primarily of rangeland grasses and shrubs. The area immediately around Bar Nunn is devoid of wetlands, creeks or other aquatic environments.

7.2 Environmental Screening and Agency Coordination

A preliminary environmental screening process was undertaken to determine the level of impacts the project could have on the local environment. Resource agency letters were distributed to the following agencies to solicit comments on any known or anticipated environmental issues:

At the request of the Wyoming Department of Transportation (WYDOT), Morrison-Maierle, Inc. (MMI) prepared a letter requesting agency input on any environmental issues that could potentially occur with the Bar Nunn I-25 Interchange project. The following agencies received a letter requesting information:

Agency	Response
• Wyoming Game and Fish	☐
• Wyoming Department of Environmental Quality	☑
• U.S. Army Corps of Engineers	☑
• Natrona County, Department of Roads and Bridges	☐
• City of Bar Nunn	☑
• City of Casper, Public Works	☐
• Wyoming State Historic Preservation Office	☑
• Federal Highway Administration – Wyoming Division	☑
• U.S. Fish and Wildlife Service	☑
• Environmental Protection Agency – Region 8	☐
• Natural Resources Conservation Service – Wyoming, East Area	☑
• Wyoming Department of Transportation, District 2 Headquarters	☐

MMI received responses from seven of the twelve agencies as indicated by a check mark. Agency response letters are included in Appendix C herein. None of the agencies indicated major environmental concerns. SHPO indicated that a Class III cultural resources survey would ultimately be required for the project. U.S. Army Corps of Engineers stated that there could potentially be wetlands and/or waterways within the project area. U.S. Fish and Wildlife Service stated that the project is not likely to affect a threatened or endangered species, but the project should adhere to Migratory Bird Treaty Act. The focus of the FHWA response was on compliance with NEPA requirements and development of the pre-screening findings that can be advanced to the future NEPA documentation.

In summary, there is no indication of any major environmental concerns with the three scenarios presented with the Bar Nunn I-25 Interchange Feasibility Study.

8.0 PUBLIC INVOLVEMENT

8.1 Key Stakeholders

The Consultant and WYDOT prepared a public involvement plan to guide the landowner coordination and public relations process. The public relations program addresses the general public but places special emphasis on agencies and property owners who are directly and indirectly impacted by the proposed corridor (See Table 12):

Table 12. Key Stakeholders

Primary Stakeholders	Secondary (Specialized) Stakeholders
▪ WYDOT (District and Cheyenne) ▪ FHWA ▪ Town of Bar Nunn ▪ Natrona County ▪ Casper MPO ▪ Directly Impacted Property Owners	▪ Emergency Services ▪ School District ▪ Resource Agencies ▪ Utility Companies

Primary stakeholders consist of the sponsoring agencies with jurisdiction or direct interest with the improvements as well as property owners, both private and public whose properties would be impacted by a new interchange. Secondary stakeholders with somewhat lower impacts resulting from the corridor include emergency service providers, utilities, local school district, and various resource agencies. The public relations approach taken with this interchange feasibility study included two key coordination steps. The public relations steps are described as follows:

8.2 Public Meeting Presentation

On August 28, 2012, WYDOT, FHWA and the consultant hosted a public meeting at the Bar Nunn Elementary School auditorium. The meeting was advertised using direct mailers/phone calls and public meeting advertisements. The consultant gave a formal PowerPoint presentation and facilitated questions from the public. The public was encouraged to provide written comments on forms provided at the meeting. The meeting minutes, comment forms, and meeting attendance sheets are attached in Appendix D-1. There was good participation from the 49 in attendance.

8.3 Public Open House Meeting

The final step in the public relations process was an open house meeting held on April 23, 2013. Detailed map displays depicting the final alignment were spread out in the room. Representatives from WYDOT, FHWA, Casper MPO, Natrona County and Bar Nunn provided input to the draft feasibility study. The public was invited to review the display maps and given the opportunity to ask questions related to the selected alignment. meeting attendance lists and comment forms are included in Appendix D-2.

References:

- *FHWA's Interstate System Access Information Guide* http:www.fhwa.dot.gov/design/interstate/pubs/access/index.pdf
- *FHWA's Guidance on Using Corridor and Subarea Planning to Inform NEPA*, April 5, 2011
- *American Association of State Highway Officials* (AASHTO), A Policy on Geometric Design of Highways and Street, 6th Edition.
- *WYDOT "Design Criteria – Interchanges"* 7.05 Road Design memorandum
- *Town of Bar Nunn, Town Code* (Updated July 17, 2012 by Ordinance 2012-04), Chapter 6: Design Standards
- *Connecting Casper, 2030 Long Range Transportation Plan*, Prepared by URS, June 2007
- *Evaluation of Existing Roadway Geometrics of Salt Creek Highway and Preliminary Corridor Analysis of McMurry Boulevard*, Prepared by HKM Engineering / PB Consulting, July 2008
- *Bar Nunn Salt Creek Intersection & Bar Nunn Subarea Planning Traffic Study*, Prepared by DOWL HKM / Jovi Plans, January 2012
- *WYDOT Bridge Inspection Report (Structures AIV & AIU)*, Dated 3/1/12
- *2000 and 2010 US Census Data* for the Town of Bar Nunn
- *Institute of Transportation Engineers, Trip Generation Manual* (8th Edition, 2008)
- *Highway Capacity Manual* (TRB, 2010)
- *Quality/Level of Service Handbook* (Florida DOT, 2012)

Appendices:

A. FHWA Eight Policy Worksheet
B. Preliminary Construction Estimates
C. Environmental Screening Agency Response Letters
B. Public Meetings Materials:
   - B-1 August 2012 Public Meeting (PP Presentation, Sign in, Meeting Minutes and Comment forms)
   - B-2 April 23, 2013 Public Meeting (PP Presentation, Sign in, Meeting Minutes and Comment Forms)

APPENDIX A
FHWA EIGHT POLICY WORKSHEET

Prompt List for Review of Interstate System Access Change Requests

Adequately Addressed?		FHWA Interstate Access Policy Points
Yes	No	
		Policy Point 1: The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a)).
		Policy Point 2: The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a)).
		Policy Point 3: An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).
		Policy Point 4: The proposed access connects to a public road only and will provide for all traffic movements. Less than ``full interchanges'' may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)).
		Policy Point 5: The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93.
		Policy Point 6: In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111).
		Policy Point 7: When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d)).
		Policy Point 8: The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111).

TO BE CONSIDERED BY FHWA

ITEMS BELOW WERE COMPLETED BY CONSULTANT FOR INFO PURPOSES ONLY
ASSUME FHWA WILL PREPARE SEPERATE CHECKLIST

Policy Point 1: "The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the access request clearly describe the need and purpose of the proposal and identify project goals and objectives that are specific and measurable?	
✓			Is the proposal in the best interest of the public, or does it merely serve a narrow interest?	
✓			Is the proposal serving a regional transportation need, or is it merely compensating for deficiencies in the local network of arterials and collectors?	
	✓		In lieu of granting new access, is there any reasonable alternative consisting of improvements to the existing roadway(s) or adjacent access points that could serve the need and purpose?	
✓			Has the evaluation of existing interchanges and the local road network taken into account all proposed improvements currently identified in the State and/or Regional Long Range Plan?	
✓			Will the proposed change in access result in needed upgrades or improvements to the cross road for a significant distance away from the interchange?	

Policy Point 2: "The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Was FHWA actively involved in preliminary studies and decisions? If not, then more detailed information may be required in support of proposed action.	
✓			Did the study area cover sufficient area to allow for an evaluation of all reasonable alternatives?	
✓			Was a No-Build Alternative evaluated?	
✓			Considering the context of the proposal, is this the best location for the proposed new interchange?	
	✓(1)		Were different interchange configurations (Tight diamond, SPDI, Parclo) considered?	AASHTO Greenbook Chapter 10
	✓(2)		Were pedestrians and bicyclists considered in the alternative evaluation?	
	✓(2)		Was there an evaluation of different intersection configurations (stop control, signal, roundabout, free right turns, etc?)	
	✓(2)		Have Transportation Systems Management (i.e. HOV, ITS, Ramp Metering, Transit etc.) options been evaluated as an alternative to a new or modification to an existing interchange?	
	✓(2)		Did the report discuss how TSM alternatives were evaluated and eliminated from consideration?	
	✓(2)		Does the proposal consider any future planned TSM strategies and is the design consistent with the ability to implement the future TSM strategies?	

(1) ONLY TIGHT DIAMONDS CONSIDERED AT THIS PRELIMINARY STAGE. ALT CONFIGURATIONS SHOULD BE ADDRESSED WITH FINAL NEPA STAGE
(2) ADDRESS AT FINAL NEPA STAGE

Policy Point 3: "An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the report demonstrate that a proper traffic operational analysis was conducted? The analysis should include the applicable basic freeway segments, freeway weaving segments, freeway ramp segments, ramp junctions and crossroad intersections related to the proposed access point and at least the two adjacent interchanges.	
	✓(2)		Does the report include a **safety** analysis of the mainline, ramps and intersections of the proposed access point and the nearest adjacent interchange (provided they are near enough that it is reasonable to assume there may be impacts)?	
	✓(2)		Has the design traffic volume been validated?	
	✓(2)		Does the report include verification that the data used in the traffic analysis is consistent with the traffic and air quality models MPOs use to develop their current Transportation Plan (20-year) and Transportation Improvement Program (TIP)?	
✓			Does the report include a design period of 20 years commencing at the time of project approval (PS&E approval)?	
✓			Does the report include quantitative analyses and results to identify operational differences between alternatives that are heavily congested?	
	✓(2)		Has a conceptual signing plan been provided?	
		✓	Is guidance signing (i.e., way-finding or trail blazing signs) clear and simple?	MUTCD Chapter 2E: Guide Signs – Freeways and Expressways
	✓		Do the results of the operational analysis result in a significant adverse impact to existing or future conditions?	
✓			Will the proposed change in access result in needed upgrades or improvements to the cross road for a significant distance away from the interchange? If so, have impacts to the local network been disclosed and fully evaluated?"	(2)
✓			Are the cross roads or adjacent surface level roads and intersections affected by the proposed access point analyzed to the extent (length) where impacts caused or affecting the new proposed access point are disclosed to the appropriate managing jurisdiction?	
	✓(2)		Are pedestrian and/or bicycle facilities included (as appropriate) and do these facilities provide for reasonable accommodation?	

Policy Point 3: "An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the proposed access secure sufficient Limits of Access adjacent to the Interchange ramps?	AASHTO's "A Policy on Design Standards Interstate System, 2005" Pg. 2; NCHRP Synthesis 332
✓			Does the proximity of the nearest crossroad intersections to the ramps contribute to safety or operational problems? Can they be mitigated??	
✓			In addition to HCS, what analysis tools were employed and were they appropriate?	SYNCHRO (LOS) HCM (TRB, 2010)
	✓(2)		Has the proposal distinguished between nominal safety (i.e. adherence to design policies and standards) and substantive safety (actual and expected safety performance)?	
	✓		Will any individual elements within the recommended alternative be degraded operationally as a result of this action? If yes, are reasons provided to accept them?	
	✓(2)		In evaluating whether the proposal has a "significant adverse impact" on safety, has the State Strategic Highway Safety Plan been used as a benchmark?	
✓			Are the proposed interchange design configurations able to satisfactorily accommodate the design year traffic volumes?	
		✓	If the project is to be built in stages, has the traffic operational and safety analyses considered the interim stages of the proposal?	

Policy Point 4: "The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the proposed access connect to a public road?	
✓			Are all traffic movements for full interchange access provided?	
		✓	If not, is the proposed access for special purposes such as transit vehicles, HOVs, and/or a park and ride lot?	
		✓	If a partial interchange is proposed, is there sufficient justification for providing only a partial interchange?	AASHTO Greenbook 2004 Pg. 821-823

Policy Point 4: "The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
		✓	If a partial interchange is proposed; was a full interchange evaluated as an alternative and is there sufficient justification to eliminate or discard it?	
✓			Is sufficient ROW available (or being acquired) to provide a full interchange at a future date (staged construction)?	
✓			Are you comfortable with how the missing movements will be accommodated on the surface streets and adjacent interchanges?	
			Does FHWA support the selection of design controls/criteria and desired operational goals?	(T.B.D.) w/ NEPA
✓			Does the proposed access meet or exceed current design standards for the Interstate System?	AASHTO's Greenbook and A Policy on Design Standards Interstate System, 2005
		✓	If not, have anticipated design exceptions been identified and reviewed (at least conceptually)?	
		✓	If expected design exceptions could have significant operational impacts on the Interstate and/or Crossroad system, are mitigation measures described?	NO DESIGN EXCEPTIONS IDENTIFIED AT THIS EARLY STAGE
✓			Will the length of access control along the crossroad provide for acceptable operations and safety? (100-300' is a minimum. Additional access control is strongly encouraged when needed for safety and operational enhancement)	AASHTO "A Policy on Design Standards Interstate System" 2005
			Does FHWA support selection of opening and design years?	(TBD) w/ NEPA
			Have all design criteria (including but not limited to the following) been adequately addressed?	
✓(3)			a. Sight distance at ramp terminals (Don't overlook signal heads obscured by structures.)	AASHTO Greenbook 2004 Pg. 841
	✓(2)		b. Sufficient storage on ramp to prevent queues from spilling on to the Interstate (based on current and/or future projected traffic demand)	
✓(3)			c. Vertical clearance	AASHTO "A Policy on Design Standards Interstate System" 2005
	✓(2)		d. Pedestrian access through the interchange	AASHTO Greenbook 2004 Pg. 864
	✓(2)		e. Length of accel/decel lanes	AASHTO Greenbook 2004 Pg. 823, 847
	✓(2)		f. Length of tapers	AASHTO Greenbook 2004 Pg. 849
✓			g. Spacing between ramps	Greenbook pg 843 & Ex. 10-68 and operational analysis
✓(3)			h. Lane continuity	AASHTO Greenbook 2004 Pg. 810
✓(3)			i. Lane balance	AASHTO Greenbook 2004 Pg. 810 AASHTO Greenbook 2004 Pg. 807
✓			j. Uniformity in interchange design and operational patterns (i.e. right-side ramps, exit design consistent w/adjacent interchanges)	
	✓(2)		Has each movement of the proposal been "tested" for ease of operation?	AASHTO Greenbook 2004 Pg. 863

(3) PRELIMINARY ANALYSIS ONLY. NEEDS COMPLETE EVALUATION W/ NEPA DESIGN.

Policy Point 5: "The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the IJR discuss or include (as appropriate) other project(s), studies or planned actions that may have an effect on the report analysis results?	
✓			Does the project conform to the local planning, MPO or other related plans?	
			Does the report include an endorsement of land use plans by the appropriate government entity before it is utilized for traffic generation purposes?	TBD
	✓		Is the access request located within a Transportation Management Areas? (TMAs are metropolitan areas of 200,000 or more in population)	http://hepgis.fhwa.dot.gov/hepgis_v2/Urbanboundaries/Map.aspx
	✓		Is the access request located within a non-attainment area for air quality? (requests for access in a non-attainment or maintenance areas for air quality must be a part of a conforming transportation plan)	
	✓		Is the project included in the TIP/STIP and LRTP?	
	✓		Is the access point covered as a part of an Interstate corridor study or plan? *(especially important for areas where the potential exists for construction of future adjacent interchanges)*	

Policy Point 6: "In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer- range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111)."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
	✓		Is it possible that new interchange(s) not addressed in the IJR could be added within an area of influence to the proposed access point? (If so, could the proposal preclude or otherwise be affected by any future access points?)	NOT LIKELY
		✓	Does the IJR report include the traffic volumes generated by any future additional interchanges within a vicinity of influence that are proposed?	
	✓		Does the IJR report fail to include any other proposed interstate access points within a vicinity of influence that are being proposed or are in the current long range construction program?	

Policy Point 7: "When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
✓			Does the access request adequately demonstrate that an appropriate effort of coordination has been made with appropriate proposed developments?	ADEQUATE AT THIS PRE-NEPA STAGE
✓			Are the proposed improvements compatible with the existing street network or are other improvements needed?	
	✓		Are there any pre-condition contingencies required in regards to the timing of other improvements?	
	✓(2)		Have all commitments to improve the local transportation network been included in a TIP/STIP/LRTP prior to the Interstate access approval (final approval of NEPA document)?	
		✓	If pre-condition contingencies are required, are pertinent parties in agreement with these contingencies and is this documented?	
	✓(2)		If the proposed improvements are founded on the need for providing access to new development, are appropriate commitments in place to ensure that the development will likely occur as planned?	
		✓	If project is privately funded, are appropriate measures in place to ensure improvements will be completed if the developer is unable to meet financial obligations?	
		✓	If the purpose and need to accommodate new development/traffic demands aren't fully known, is a worst case scenario used for future traffic?	PRELIMINARY PURPOSE AND NEED IDENTIFIED
			Does the project require financial or infrastructure commitments from other agencies, organizations, or private entities?	UNKNOWN AT THIS STAGE

Policy Point 8: "The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111)."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
	✓		Are there any known social or environmental issues that could affect the proposal?	
			Is the project consistent with the current TIP/STIP and LRTP and/or proposed amendments to the plan?	UNKNOWN AT THIS STAGE
✓			Although NEPA is a separate action, is an environmental overview for the proposed improvements included?	
✓			Is it appropriate to emphasize to the project stakeholders that the access approval will be handled as a two-step process? (i.e. Step 1: Engineering and Operational Acceptability and Step 2: Environmental Approvals)	THIS HAS BEEN CONVEYED.
	✓		Are all funding commitments included in a TIP/STIP/LRTP prior to the Interstate access approval (prior to final approval of the NEPA document)?	TOO EARLY
	✓		Are all commitments included in a TIP/STIP/LRTP prior to the Interstate access approval (prior to final approval of the NEPA document)?	TOO EARLY

APPENDIX B
PRELIMINARY COST ESTIMATES

BAR NUNN I-25 INTERCHANGE FEASIBILITY STUDY 2/5/2013

PRELIMINARY PLANNING LEVEL

ALTERNATIVE A - WARDWELL INTERCHANGE

		Unit	Quantity	Bid Price	Amount
109.08000	MOBILIZATION	LS	1	$50,000	$50,000
201.03200	CLEARING AND GRUBBING	LS	1	$15,000	$15,000
203.02000	BORROW SPECIAL EXCAVATION	CY	10000	$10	$100,000
203.02500	UNCLASSIFIED EXCAVATION	CY	5000	$4	$20,000
301.01085	CRUSHED BASE	CY	5000	$14	$70,000
401.02000	HOT PLANT MIX	TON	6000	$35	$210,000
999.25000	STRUCTURE ITEMS (Bridge)	LS	1	$50,000	$50,000
999.26000	TRAFFIC ITEMS	LS	1	$50,000	$50,000
	Subtotal				$565,000
	MISC. ITEMS / CONTINGENCY @ 30%				$169,500
	Subtotal				$734,500
	PE / CE /ADMIN. @ 20%				$146,900
	RIGHT-OF-WAY (EST)				$50,000
	UTILITY RELOCATION (Estimated)				$50,000
	TOTAL				$981,400

Assumes the following construction:

* Mill and overlay all four ramps
* Add lane to Northbound offramp
* Minor repairs/safety improvements under bridge
* Minor ROW and Utility impacts.

BAR NUNN I-25 INTERCHANGE FEASIBILITY STUDY 2/5/2013
PRELIMINARY PLANNING LEVEL
ALTERNATIVE B - MCMURRY BLVD INTERCHANGE

		Unit	Quantity	Bid Price	Amount
109.08000	MOBILIZATION	LS	1	$200,000	$200,000
201.03200	CLEARING AND GRUBBING	LS	1	$20,000	$20,000
202.03400	REMOVAL OF SURFACING	SY	11000	$3	$33,000
203.02000	BORROW SPECIAL EXCAVATION	CY	100000	$6	$600,000
203.02500	UNCLASSIFIED EXCAVATION	CY	20000	$4	$80,000
301.01085	CRUSHED BASE	CY	19000	$14	$266,000
401.02000	HOT PLANT MIX	TON	7200	$35	$252,000
603.20024	RCP 24 in	FT	500	$50	$25,000
608.10200	SIDEWALK (CONC)	SY	2200	$5	$11,000
609.10400	CURB AND GUTTER TYPE C	FT	4000	$10	$40,000
615.01018	CATTLE GUARD (HEAVY DUTY) 18 ft	EA	4	$5,000	$20,000
999.25000	STRUCTURE ITEMS (Bridge)	LS	1	$1,000,000	$1,000,000
999.26000	TRAFFIC ITEMS	LS	1	$100,000	$100,000
	Subtotal				$2,647,000
	MISC. ITEMS / CONTINGENCY @ 30%				$794,100
	Subtotal				$3,441,100
	PE / CE /ADMIN. @ 20%				$688,220
	RIGHT-OF-WAY (EST)				$700,000
	UTILITY RELOCATION (Estimated)				$200,000
	TOTAL				$5,029,320

BAR NUNN I-25 INTERCHANGE FEASIBILITY STUDY 2/5/2013

PRELIMINARY PLANNING LEVEL

ALTERNATIVE C (full build) - WESTWINDS ROAD INTERCHANGE

		Unit	Quantity	Bid Price	Amount
109.08000	MOBILIZATION	LS	1	$200,000	$200,000
201.03200	CLEARING AND GRUBBING	LS	1	$20,000	$20,000
202.03400	REMOVAL OF SURFACING	SY	15000	$3	$45,000
203.02000	BORROW SPECIAL EXCAVATION	CY	10000	$6	$60,000
203.02500	UNCLASSIFIED EXCAVATION	CY	15000	$4	$60,000
301.01085	CRUSHED BASE	CY	19000	$14	$266,000
401.02000	HOT PLANT MIX	TON	8000	$35	$280,000
603.20024	RCP 24 in	FT	500	$50	$25,000
608.10200	SIDEWALK (CONC)	SY	500	$5	$2,500
609.10400	CURB AND GUTTER TYPE C	FT	2000	$10	$20,000
615.01018	CATTLE GUARD (HEAVY DUTY) 18 ft	EA	4	$5,000	$20,000
999.25000	STRUCTURE ITEMS (Bridge)	LS	1	$1,500,000	$1,500,000
999.26000	TRAFFIC ITEMS	LS	1	$200,000	$200,000
	Subtotal				$2,698,500
	MISC. ITEMS / CONTINGENCY @ 30%				$809,550
	Subtotal				$3,508,050
	PE / CE /ADMIN. @ 20%				$701,610
	RIGHT-OF-WAY (EST)				$700,000
	UTILITY RELOCATION (Estimated)				$200,000
	TOTAL				$5,109,660

BAR NUNN I-25 INTERCHANGE FEASIBILITY STUDY 2/5/2013

PRELIMINARY PLANNING LEVEL

ALTERNATIVE C - WESTWINDS ROAD INTERCHANGE

		Unit	Quantity	Bid Price	Amount
109.08000	MOBILIZATION	LS	1	$200,000	$200,000
201.03200	CLEARING AND GRUBBING	LS	1	$20,000	$20,000
202.03400	REMOVAL OF SURFACING	SY	15000	$3	$45,000
203.02000	BORROW SPECIAL EXCAVATION	CY	10000	$6	$60,000
203.02500	UNCLASSIFIED EXCAVATION	CY	5000	$4	$20,000
301.01085	CRUSHED BASE	CY	19000	$14	$266,000
401.02000	HOT PLANT MIX	TON	8000	$35	$280,000
603.20024	RCP 24 in	FT	500	$50	$25,000
608.10200	SIDEWALK (CONC)	SY	500	$5	$2,500
609.10400	CURB AND GUTTER TYPE C	FT	2000	$10	$20,000
615.01018	CATTLE GUARD (HEAVY DUTY) 18 ft	EA	4	$5,000	$20,000
999.25000	STRUCTURE ITEMS (Bridge)	LS	1	$200,000	$200,000
999.26000	TRAFFIC ITEMS	LS	1	$100,000	$100,000
	Subtotal				$1,258,500
	MISC. ITEMS / CONTINGENCY @ 30%				$377,550
	Subtotal				$1,636,050
	PE / CE /ADMIN. @ 20%				$327,210
	RIGHT-OF-WAY (EST)				$700,000
	UTILITY RELOCATION (Estimated)				$200,000
	TOTAL				$2,863,260

APPENDIX C
ENVIRONMENTAL SCREENING AGENCY RESPONSE LETTERS

MORRISON MAIERLE, INC.

Agency Contact List: Scoping letters
Bar Nunn I-25 Interchange Feasibility Study
8/14/2012

Wyoming Game and Fish
Brian Olsen, Regional Wildlife Supervisor
3030 Energy Lane
Casper, WY 82604

Wyoming DEQ
Solid and Hazardous Waste Division
Bob Breuer
152 North Durbin Street, Suite 100
Casper, WY 82601

US Army Corps of Engineers
Wyoming Regulatory Office
NEED CONTACT
2232 Dell Range Blvd. Suite 210
Cheyenne, WY 82009

Natroma County
Department of Roads and Bridges
Michael Haigler, Road and Bridge Superintendent
P.O. Box 848
Mills, WY 82644

City of Bar Nunn
Clerk and Treasurer – Carol Pendley
4820 Wardwell Industrial Avenue
Bar Nunn, WY 82601

City of Casper
Public Works
Andrew Beamer – City Engineer
200 N. David
Casper, WY 82601

Wyoming State Historic Preservation Office
Mary Hopkins – Historic Preservation Officer
2301 Central Avenue
Barrett Building, Third Floor
Cheyenne, WY 82002

FHWA – Wyoming Division
Joe Dailey, Division Administrator
2617 East Lincoln Way, Suite D
Cheyenne, WY 82001-5671

USFWS – Wyoming
Mark Sattelburg – Field Supervisor
5353 Yellowstone Road, Suite 308A
Cheyenne, WY 82009

EPA –Region 8
Suzanne Bohan – NEPA Program Director
1595 Wynkoop
Denver, CO 80202

Natural Resources Conservation Service
Wyoming – East Area
Tom Watson – Area Conservationist
911 South Wind River Drive
Douglas, WY 82633

Wyoming Department of Transportation
Mark Ayne
District 2 Headquarters
900 Bryan Stock Trail
Casper, WY 82601

Christine Pearcy

From: Bob Breuer <robert.breuer@wyo.gov>
Sent: Friday, September 07, 2012 11:13 AM
To: Christine Pearcy
Cc: Barb Sahl; Carl Anderson
Subject: Bar Nunn/I-25 Interchange Feasibility Study, WYDOT Project HPR3212
Attachments: Bar Nunn WYDOT I-25 Interchange Study Letter 092012.pdf

Dear Ms. Pearcy:

The Wyoming DEQ's Solid and Hazardous Waste Division (SHWD) has received your September 5, 2012 letter (.pdf copy attached) regarding the WYDOT Bar Nunn/I-25 Interchange Feasibility Study and has no significant comments regarding either of the three (3) alternatives under evaluation. The SHWD can sometimes provide comments on such projects if they were on or immediately adjacent to sites we have inspected with observations of solid and/or hazardous waste management concerns. This is not the case after reviewing the project location alternatives. The closest such sites from our records search would include the former site of Hach Chemical and now Energy Labs, Inc.; the former Standard Oil crude oil tank farm; the former Grey Mak pipe yard on the Salt Creek Highway and; the Soda Lake former Standard Oil refinery wastewater impoundments. Although in the general vicinity, none of these sites encompass or are adjacent to project alternatives. The former Hach Chemical and Standard Oil crude tank farm sites are well to the south and/or west. The former Grey Mak pipe yard and Soda Lake impoundments are east of any project alternatives, separated by existing roadways and third party properties. In conclusion, we possess no evidence indicating these sites would impact the interchange alternatives or vice versa.

The only other angle we can think of at present is to include a copy of this email to Barb Sahl of the DEQ's Water Quality Division (WQD). She can probably quickly review the sites on aerial photos in case there are any significant Clean Water Act (CWA) storm water projects in this area that should be considered due to the effects such a project can have on stormwater drainage, etc.

The above information is all we can provide at this time but your representatives are welcome to review Wyoming DEQ files for the project area in either Casper or Cheyenne offices. Please contact me in Casper at 307-473-3450 or Barb Sahl in Cheyenne at 307-777-7570 if you have further questions.

--
Bob Breuer
Manager, Inspection & Compliance (I&C)

U.S. Department of Transportation
Federal Highway Administration

Wyoming Division

2617 E. Lincolnway, Suite D
Cheyenne, WY 82001-5671

October 15, 2012

Christine Pearcy
Environmental Scientist
Morrison Maierle, Inc.
2880 Technology Boulevard West
P.O. Box 1113
Bozeman, MT 59771

SUBJECT: Bar Nunn I-25 Interchange Feasibility Study, WYDOT Project HPR3212

Dear Ms. Pearcy:

We received your letter requesting information in relation to the feasibility study for a new interchange on I-25 in the vicinity of the Town of Bar Nunn, Natrona County. It would be beneficial to have clarification on whether the intent of the study is a planning study, a planning environmental linkage document or an interchange justification report. This will affect our level of involvement and the detail required for the study. Based upon our understanding of the project and discussion at the public workshop, we provide the following comments.

Maintaining the operational integrity and safety of the Interstate System will be our primary concern. Ensuring the National Highway system meets the goals of our transportation system is important as well. It will be important that the study provide a clear purpose and need statement that clearly articulates the transportation need. We had previously recommended the purpose and need to incorporate the following points:

- Provide interstate access for planned commercial and industrial truck traffic
- Reduce commercial truck traffic on local streets
- Support traffic demands of existing and planned residential growth
- Provide for a secondary means of emergency vehicle access to the town of Bar Nunn
- Provide a link to Interstate 25 from the planned arterial transportation network

The primary transportation issue that FHWA is concerned with is how a new interchange might affect the operation of the Interstate. This should be addressed in the Interchange Justification Report when WYDOT requests a new interchange. FHWA's Interstate System Access Informational Guide provides information in what should be addressed in requests for new or modified access to the Interstate System. The Guide provides a series of eight policy requirements that will need to be addressed in the access request, along with supporting analysis to illustrate how those requirements are met. The Interstate System Access Informational Guide can be found at: http://www.fhwa.dot.gov/design/interstate/pubs/access/index.cfm.

The study area of influence for the I-25 corridor should, at a minimum, extend from the US Highway 20/26 interchange to the south to the Ormsby Road interchange to the north. The area of influence along the local roadway network should, at a minimum, include Salt Creek Highway and the intersections with Westwinds Road, McMurry Boulevard, and Wardwell Road.

Bar Nunn is within the northern portion of the Casper MPO urban area, so FHWA would require minimum one mile spacing from any existing interchanges. The Alternative B location at McMurry Boulevard is approximately 1.7 miles north of the existing Wardwell Road interchange. The Alternative C location at the Salt Creek Road Underpass and Westwinds Road is approximately 2.6 miles north of the existing Wardwell Road interchange and 3.3 miles south of the existing Ormsby Road interchange.

Analysis of Alternative A for improvements to the existing Wardwell interchange will also be important. The study will need to demonstrate that improvements to this interchange cannot meet the transportation needs. A No-build alternative will also be important for baseline comparison of the build alternatives.

Consideration will also need to be given to the degree to which a preferred alternative supports the transportation plans of the Casper MPO and is consistent with the land use plans of Bar Nunn. The selected location needs to be coordinated with the planned transportation network for the Bar Nunn/northern Casper area. Final approval cannot be given until the project is adopted in the MPO's long-range transportation plan.

It is also important to note that additional access to I-25 should not be used as a means to address local network limitations for north-south connectivity. I-25 should be for regional/long distance travel. Local traffic needs should be met thorough street network improvements, such as those identified in the Salt Creek Highway/McMurry Boulevard Corridor Study and the MPO's proposed Westside Boulevard Study for Bar Nunn.

Any Federal action, including use of Federal funds or approval for an interchange will require FHWA approval under the National Environmental Policy Act (NEPA). FHWA guidance on linking corridor planning and the NEPA processes should be used in this study. We recommend this planning process be structured to allow the study to be incorporated into NEPA during project development. NEPA documentation will need to include impacts to neighborhoods, public facilities, environmental justice populations, streams and wetlands, threatened and endangered species, any existing hazardous materials sites; historic and archaeological resources; and other Section 4(f) properties.

We are available to assist with any questions you have regarding Federal regulations and requirements.

Sincerely yours,

Jeffrey R. Purdy, AICP, PTP
Planning and Right-of-Way Program Manager

cc:
Mark Wingate, P.E., Systems Planning Engineer, WYDOT

Prompt List for Review of Interstate System Access Change Requests

Adequately Addressed?		FHWA Interstate Access Policy Points
Yes	No	
		Policy Point 1: The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a)).
		Policy Point 2: The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a)).
		Policy Point 3: An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).
		Policy Point 4: The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)).
		Policy Point 5: The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93.
		Policy Point 6: In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111).
		Policy Point 7: When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d)).
		Policy Point 8: The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111).

Policy Point 1: "The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands (23 CFR 625.2(a))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the access request clearly describe the need and purpose of the proposal and identify project goals and objectives that are specific and measurable?	
			Is the proposal in the best interest of the public, or does it merely serve a narrow interest?	
			Is the proposal serving a regional transportation need, or is it merely compensating for deficiencies in the local network of arterials and collectors?	
			In lieu of granting new access, is there any reasonable alternative consisting of improvements to the existing roadway(s) or adjacent access points that could serve the need and purpose?	
			Has the evaluation of existing interchanges and the local road network taken into account all proposed improvements currently identified in the State and/or Regional Long Range Plan?	
			Will the proposed change in access result in needed upgrades or improvements to the cross road for a significant distance away from the interchange?	

Policy Point 2: "The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Was FHWA actively involved in preliminary studies and decisions? If not, then more detailed information may be required in support of proposed action.	
			Did the study area cover sufficient area to allow for an evaluation of all reasonable alternatives?	
			Was a No-Build Alternative evaluated?	
			Considering the context of the proposal, is this the best location for the proposed new interchange?	
			Were different interchange configurations (Tight diamond, SPDI, Parclo) considered?	AASHTO Greenbook Chapter 10
			Were pedestrians and bicyclists considered in the alternative evaluation?	
			Was there an evaluation of different intersection configurations (stop control, signal, roundabout, free right turns, etc?)	
			Have Transportation Systems Management (i.e. HOV, ITS, Ramp Metering, Transit etc.) options been evaluated as an alternative to a new or modification to an existing interchange?	
			Did the report discuss how TSM alternatives were evaluated and eliminated from consideration?	
			Does the proposal consider any future planned TSM strategies and is the design consistent with the ability to implement the future TSM strategies?	

Policy Point 3: "An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the report demonstrate that a proper traffic operational analysis was conducted? The analysis should include the applicable basic freeway segments, freeway weaving segments, freeway ramp segments, ramp junctions and crossroad intersections related to the proposed access point and at least the two adjacent interchanges.	
			Does the report include a **safety** analysis of the mainline, ramps and intersections of the proposed access point and the nearest adjacent interchange (provided they are near enough that it is reasonable to assume there may be impacts)?	
			Has the design traffic volume been validated?	
			Does the report include verification that the data used in the traffic analysis is consistent with the traffic and air quality models MPOs use to develop their current Transportation Plan (20-year) and Transportation Improvement Program (TIP)?	
			Does the report include a design period of 20 years commencing at the time of project approval (PS&E approval)?	
			Does the report include quantitative analyses and results to identify operational differences between alternatives that are heavily congested?	
			Has a conceptual signing plan been provided?	
			Is guidance signing (i.e., way-finding or trail blazing signs) clear and simple?	MUTCD Chapter 2E: Guide Signs – Freeways and Expressways
			Do the results of the operational analysis result in a significant adverse impact to existing or future conditions?	
			Will the proposed change in access result in needed upgrades or improvements to the cross road for a significant distance away from the interchange? If so, have impacts to the local network been disclosed and fully evaluated?"	
			Are the cross roads or adjacent surface level roads and intersections affected by the proposed access point analyzed to the extent (length) where impacts caused or affecting the new proposed access point are disclosed to the appropriate managing jurisdiction?	
			Are pedestrian and/or bicycle facilities included (as appropriate) and do these facilities provide for reasonable accommodation?	

Policy Point 3: "An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the proposed access secure sufficient Limits of Access adjacent to the Interchange ramps?	AASHTO's "A Policy on Design Standards Interstate System, 2005" Pg. 2; NCHRP Synthesis 332
			Does the proximity of the nearest crossroad intersections to the ramps contribute to safety or operational problems? Can they be mitigated??	
			In addition to HCS, what analysis tools were employed and were they appropriate?	
			Has the proposal distinguished between nominal safety (i.e. adherence to design policies and standards) and substantive safety (actual and expected safety performance)?	
			Will any individual elements within the recommended alternative be degraded operationally as a result of this action? If yes, are reasons provided to accept them?	
			In evaluating whether the proposal has a "significant adverse impact" on safety, has the State Strategic Highway Safety Plan been used as a benchmark?	
			Are the proposed interchange design configurations able to satisfactorily accommodate the design year traffic volumes?	
			If the project is to be built in stages, has the traffic operational and safety analyses considered the interim stages of the proposal?	

Policy Point 4: "The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the proposed access connect to a public road?	
			Are all traffic movements for full interchange access provided?	
			If not, is the proposed access for special purposes such as transit vehicles, HOVs, and/or a park and ride lot?	
			If a partial interchange is proposed, is there sufficient justification for providing only a partial interchange?	AASHTO Greenbook 2004 Pg. 821-823

Policy Point 4: "The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			If a partial interchange is proposed; was a full interchange evaluated as an alternative and is there sufficient justification to eliminate or discard it?	
			Is sufficient ROW available (or being acquired) to provide a full interchange at a future date (staged construction)?	
			Are you comfortable with how the missing movements will be accommodated on the surface streets and adjacent interchanges?	
			Does FHWA support the selection of design controls/criteria and desired operational goals?	
			Does the proposed access meet or exceed current design standards for the Interstate System?	AASHTO's Greenbook and A Policy on Design Standards Interstate System, 2005
			If not, have anticipated design exceptions been identified and reviewed (at least conceptually)?	
			If expected design exceptions could have significant operational impacts on the Interstate and/or Crossroad system, are mitigation measures described?	
			Will the length of access control along the crossroad provide for acceptable operations and safety? (100-300' is a minimum. Additional access control is strongly encouraged when needed for safety and operational enhancement)	AASHTO "A Policy on Design Standards Interstate System" 2005
			Does FHWA support selection of opening and design years?	
			Have all design criteria (including but not limited to the following) been adequately addressed?	
			a. Sight distance at ramp terminals (Don't overlook signal heads obscured by structures.)	AASHTO Greenbook 2004 Pg. 841
			b. Sufficient storage on ramp to prevent queues from spilling on to the Interstate (based on current and/or future projected traffic demand)	
			c. Vertical clearance	AASHTO "A Policy on Design Standards Interstate System" 2005
			d. Pedestrian access through the interchange	AASHTO Greenbook 2004 Pg. 864
			e. Length of accel/decel lanes	AASHTO Greenbook 2004 Pg. 823, 847
			f. Length of tapers	AASHTO Greenbook 2004 Pg. 849
			g. Spacing between ramps	Greenbook pg 843 & Ex. 10-68 and operational analysis
			h. Lane continuity	AASHTO Greenbook 2004 Pg. 810
			i. Lane balance	AASHTO Greenbook 2004 Pg. 810 AASHTO Greenbook 2004 Pg. 807
			j. Uniformity in interchange design and operational patterns (i.e. right-side ramps, exit design consistent w/adjacent interchanges)	
			Has each movement of the proposal been "tested" for ease of operation?	AASHTO Greenbook 2004 Pg. 863

Policy Point 5: "The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the IJR discuss or include (as appropriate) other project(s), studies or planned actions that may have an effect on the report analysis results?	
			Does the project conform to the local planning, MPO or other related plans?	
			Does the report include an endorsement of land use plans by the appropriate government entity before it is utilized for traffic generation purposes?	
			Is the access request located within a Transportation Management Areas? (TMAs are metropolitan areas of 200,000 or more in population)	http://hepgis.fhwa.dot.gov/hepgis_v2/Urbanboundaries/Map.aspx
			Is the access request located within a non-attainment area for air quality? (requests for access in a non-attainment or maintenance areas for air quality must be a part of a conforming transportation plan)	
			Is the project included in the TIP/STIP and LRTP?	
			Is the access point covered as a part of an Interstate corridor study or plan? *(especially important for areas where the potential exists for construction of future adjacent interchanges)*	

Policy Point 6: "In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer- range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111)."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Is it possible that new interchange(s) not addressed in the IJR could be added within an area of influence to the proposed access point? (If so, could the proposal preclude or otherwise be affected by any future access points?)	
			Does the IJR report include the traffic volumes generated by any future additional interchanges within a vicinity of influence that are proposed?	
			Does the IJR report fail to include any other proposed interstate access points within a vicinity of influence that are being proposed or are in the current long range construction program?	

Policy Point 7: "When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d))."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Does the access request adequately demonstrate that an appropriate effort of coordination has been made with appropriate proposed developments?	
			Are the proposed improvements compatible with the existing street network or are other improvements needed?	
			Are there any pre-condition contingencies required in regards to the timing of other improvements?	
			Have all commitments to improve the local transportation network been included in a TIP/STIP/LRTP prior to the Interstate access approval (final approval of NEPA document)?	
			If pre-condition contingencies are required, are pertinent parties in agreement with these contingencies and is this documented?	
			If the proposed improvements are founded on the need for providing access to new development, are appropriate commitments in place to ensure that the development will likely occur as planned?	
			If project is privately funded, are appropriate measures in place to ensure improvements will be completed if the developer is unable to meet financial obligations?	
			If the purpose and need to accommodate new development/traffic demands aren't fully known, is a worst case scenario used for future traffic?	
			Does the project require financial or infrastructure commitments from other agencies, organizations, or private entities?	

Policy Point 8: "The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111)."

Addressed Adequately?			Question	Reference Location
Y	N	N/A		
			Are there any known social or environmental issues that could affect the proposal?	
			Is the project consistent with the current TIP/STIP and LRTP and/or proposed amendments to the plan?	
			Although NEPA is a separate action, is an environmental overview for the proposed improvements included?	
			Is it appropriate to emphasize to the project stakeholders that the access approval will be handled as a two-step process? (i.e. Step 1: Engineering and Operational Acceptability and Step 2: Environmental Approvals)	
			Are all funding commitments included in a TIP/STIP/LRTP prior to the Interstate access approval (prior to final approval of the NEPA document)?	
			Are all commitments included in a TIP/STIP/LRTP prior to the Interstate access approval (prior to final approval of the NEPA document)?	

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
100 East B Street, Room 3124
P.O. Box 33124
Casper, Wyoming 82602

September 10, 2012

Morrison Maierle, Inc
Christine Pearcy, Environmental Scientist
2880 Technology Blvd. W.
PO Box 1113
Bozeman, MT 59771

Dear Ms. Pearcy:

The Natural Resources Conservation Service (NRCS) has reviewed the **Bar Nunn/I-25 Interchange Feasibility Study, WyDOT Project** proposal dated September 5, 2012.

The Agriculture and Food Act of 1981, (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549, is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency.

It does not appear there will be any permanent conversion of irrigated agricultural land to non-agricultural use based on the information you provided. As such, we do not believe the work will adversely impact prime farmland.

If you have any questions, or need to discuss this comment, please contact Jenny Castagno at (307) 233-6761.

Sincerely,

ASTRID MARTINEZ
State Conservationist

MORRISON MAIERLE, INC.
An Employee-Owned Company

ENGINEERS
SURVEYORS
PLANNERS
SCIENTISTS

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OFFICE: 406-442-3050 • FAX: 406-442-7862 • www.m-m.net

September 5, 2012

EPA –Region 8
Suzanne Bohan – NEPA Program Director
1595 Wynkoop
Denver, CO 80202

Subject: Request for Information:
Bar Nunn/I-25 Interchange Feasibility Study, WYDOT Project HPR3212

Dear Ms. Bohan:

The Wyoming Department of Transportation has contracted with Morrison-Maierle, Inc (MMI) to prepare a study to determine the feasibility of constructing an interchange on Interstate 25 (I-25) in the Town of Bar Nunn. The study area for this project is located in the Town of Bar Nunn within Natrona County and the Casper Metropolitan Planning Area and includes I-25 from the Wardwell Road Interchange (RM 191.64) to Ormsby Road Interchange (RM 197.52). The limits of the study extends 1/4 mile on either side of the interstate to incorporate the existing local road system and proposed land use plans.

This letter is intended to provide your agency with general background information to perform an initial screening and provide comments on the future project. It is important to note that the City, County and WYDOT are not undertaking NEPA screening or environmental processing at this time. This environmental agency letter is being used to assist in the planning process. There are currently no plans or implementation schedule to construct a new interchange. MMI will analyze the existing roadway network within the study area and make recommendations for the improvement of traffic mobility, connectivity, safety, and accessibility.

Bar Nunn is a small residential community located just north of Casper, Wyoming. Bar Nunn depends solely on the Salt Creek Highway (Wyoming Highway 254) for access and mobility to the south. Salt Creek Highway is tied to I-25 via Howard Street and the Wardell interchange, approximately 3/4 of a mile south of Bar Nunn. As development continues to expand in the area, a new interchange on I-25 near Bar Nunn will be needed to provide an alternate access to I-25. Currently, three locations (alternatives) are being evaluated for the new interchange with I-25. See Figure x for locations.

- Alternative A – Rehabilitate the Wardwell Interchange: Improvements would conceivably include the structural rehabilitation, interchange ramp upgrades and possible improvements to the approach roads to the interchange.

- Alternative B – Build a new Interchange at I-25 and McMurry Blvd.: This alternative would require construction of a new bridge over the interstate, approach fill on both sides of the interstate, new ramps, and utility reconstruction.

- Alternative C – Build new interchange at the existing Salt Creek Rd. Underpass near Westwinds Road: This alternative would utilize the existing underpass structure (I-25 over Salt Creek Road) and the construction of new ramps.

MORRISON MAIERLE, INC.

We are requesting that the US Environmental Protection Agency review the project area in relation to any environmental related issues. Please provide a written response to Christine Pearcy at the address below within 30-days, or sooner, if possible. The response from your agency will be documented and used for references for the future NEPA environmental screening process.

Please use the following contact if you have any questions or if you need additional information:

John Pavsek, P.E.
Project Manager
Morrison-Maierle, Inc.
1 Engineering Place
Helena, MT 59604

Please send your written response to the following address:

Christine Pearcy
Environmental Scientist
Morrison-Maierle, Inc.
2880 Technology Blvd. W.
PO Box 1113
Bozeman, MT 59771

Thank you for your assistance.

Sincerely,
MORRISON-MAIERLE, INC.

_____
Christine Pearcy
Environmental Scientist

Enclosure: Project Investigation Area Map

CC: John Pavsek, P.E., Morrison-Maierle, Inc.
Tim Stark, WYDOT
Mark Wingate, WYDOT

ARTS. PARKS. HISTORY.
Wyoming State Parks & Cultural Resources

State Historic Preservation Office
Barrett Building, 3rd Floor
2301 Central Avenue
Cheyenne, WY 82002
Phone: (307) 777-7697
Fax: (307) 777-6421
http://wyoshpo.state.wy.us

September 20, 2012

Ms Christine Pearcy
Environmental Scientist
Morrison-Maierle, Inc.
2880 Technology Blvd. W.
P.O. Box 1113
Bozeman, MT 59771

RECEIVED SEP 2 4 2012

re: Bar Nunn/I-25 Interchange Feasibility Study, WYDOT Project HPR3212 (SHPO File # 0912LKN013)

Dear Ms Pearcy:

Thank you for notifying the Wyoming State Historic Preservation Office (SHPO) of the above referenced undertaking. We look forward to continued consultation under Section 106 of the National Historic Preservation Act on this project. After looking at the preliminary information, the SHPO recommends that a Class III cultural resources survey be conducted in order to identify any cultural resources present within the Area of Potential Effect (APE).

The Federal Highways Administration (FHWA) is generally the lead federal agency for this type of undertaking, although it may delegate it's authority to WYDOT. We will need to receive directly from FHWA (or WYDOT) determinations of eligibility for any cultural resources found and determinations of effect of this undertaking on any historic properties.

Please refer to SHPO project #0912LKN013 on any future correspondence regarding this undertaking. If you have any questions, please contact me at 307-777-6179.

Sincerely,

Laura Nowlin

Laura Nowlin
Historic Preservation Specialist

Cc: Lee Potter, FHWA
Julie Francis, WYDOT

TOWN OF BAR NUNN

4820 N. WARDWELL
INDUSTRIAL AVENUE
BAR NUNN, WY 82601
(307) 237-7269

September 11, 2012

Christine Pearcy
Environmental Scientist
Morrison-Maierle, Inc.
2880 Technology Blvd. W.
PO Box 1113
Bozeman, MT 59771

Ms. Pearcy
Bar Nunn personnel and consultants are not aware of any environmental related issues in the study location, as stated in your letter dated 09-05-12. If you have further questions please contact the Town.

Sincerely Yours,

Jerry L Petty

Jerry Petty, Mayor, Bar Nunn

RECEIVED SEP 2 0 2012

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
WYOMING REGULATORY OFFICE
2232 DELL RANGE BOULEVARD, SUITE 210
CHEYENNE WY 82009-4942

REPLY TO
ATTENTION OF

September 17, 2012

Wyoming Regulatory Office

Ms. Christine Pearcy
Morrison-Maierle, Inc.
2880 Technology Boulevard West
PO Box 1113
Bozeman, Montana 59771

Dear Ms. Pearcy:

This letter is in response to a request for comment we received on September 10, 2012, from you on behalf of the Wyoming Department of Transportation (WYDOT), concerning the Bar Nunn/I-25 Interchange Feasibility Study (WYDOT Project No. HPR3212). You requested we review the project area in relation to any environmental issues. The project area, which includes a half-mile wide corridor along Interstate 25 from the Wardwell Road Interchange to the Ormsby Road Interchange, begins in NE ¼ SE ¼ Section 20 and ends in NW ¼ WW ¼ Section 9, Township 34 North, Range 79 West, town of Bar Nunn, Natrona County, Wyoming.

The U.S. Army Corps of Engineers regulates the placement of dredged and fill material into waters of the United States under Section 404 of the Clean Water Act (33 U.S.C. 1344). The Corps' regulations are published in the *Code of Federal Regulations* as 33 CFR Parts 320 through 332. Detailed information on Section 404 requirements in Wyoming can be obtained from our website at http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Wyoming.aspx.

I reviewed the information you submitted, National Wetlands Inventory (NWI) maps, and aerial imagery for the project area. Based on this information, it appears that aquatic resources exist within the project area. However, at this time it is unknown if these resources are within the Corps' regulatory jurisdiction. An approved jurisdictional determination (AJD) may be requested to determine if there are aquatic resources subject to regulation within the project area. An on-site wetland and waters delineation is recommended for an AJD and would be required for a Department of the Army permit.

Please be aware that WYDOT is responsible for obtaining authorization from the Corps prior to commencing with any activities that include a discharge of dredged or fill material in jurisdictional wetlands or other waters of the U.S. The type of authorization depends on the extent of impacts to wetlands and other waters of the U.S. Existing general permits known as nationwide permits authorize many activities with minor impacts (less than 0.5 acres) to jurisdictional waters. All of the nationwide permits currently in effect in Wyoming are defined

in the *Federal Register* published on February 21, 2012 (Volume 77, No. 34) and are described on our website.

Thank you for your interest in cooperating with requirements of the U.S. Army Corps of Engineers Regulatory Program. If you have any questions concerning this information, please contact me at (307) 772-2300 and reference file NWO-2012-02250.

Sincerely,

Jesse Fernandes

Jesse Fernandes
Project Manager
Wyoming Regulatory Office

Enclosures

Copies Furnished

Mr. Timothy L. Stark
Wyoming Department of Transportation
5300 Bishop Boulevard
PO Box 1708
Cheyenne, Wyoming 82009-3340

The Omaha District, Regulatory Branch, Wyoming Regulatory Office is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete a Customer Service Survey found on our website at http://per2.nwp.usace.army.mil/survey.html. Paper copies of the survey are also available upon request for those without Internet access.

RECEIVED OCT 0 1 2012

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
5353 Yellowstone Road, Suite 308A
Cheyenne, WY 82009

In Reply Refer To:
06E13000/WY12TA0367

SEP 2 8 2012

Christine Pearcy, Environmental Scientist
Morrison-Maierle, Inc.
P.O. Box 1113
Bozeman, Montana 59771-1113

Dear Ms. Pearcy:

Thank you for your letter of September 5, 2012, received in our office on September 7, regarding the proposed Bar Nunn/I-25 Interchange Feasibility Study, WYDOT Project HPR3212 (Project). According to your letter, the feasibility study for the Project includes three alternatives for access from Bar Nunn to I-25 in Natrona County, Wyoming. Alternative A consists of the rehabilitation of the existing Wardwell Interchange; Alternative B consists of the construction of a new interchange at McMurry Boulevard and I-25 that would also require construction of a new bridge over the interstate; and Alternative C consists of the construction of a new interchange at Salt Creek Road utilizing the existing underpass.

Your letter provided sufficient information for the U.S. Fish and Wildlife Service (Service) to evaluate the effects of this Project to federally listed species. Based on the information provided in your letter, it is unlikely that any of the three alternatives will adversely affect any threatened or endangered species. You may consider this Project, as proposed, to be in compliance with the Endangered Species Act of 1973, as amended (Act), 16 U.S.C. 1531 *et seq.* You requested review of the Project area in relation to any environmental related issues: therefore, the Service is providing guidance under the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703.

Migratory Birds: The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs, except as permitted by regulations, and does not require intent to be proven. Section 703 of the MBTA states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird...." The Bald and Golden Eagle Protection Act (BGEPA) prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

Removal or destruction of such nests, or causing abandonment of a nest, could constitute violation of one or both of the above statutes. Removal of any active migratory bird nest or nest tree is prohibited. For golden eagles, inactive nest permits are limited to activities involving

resource extraction or human health and safety. Mitigation, as determined by the local Service field office, may be required for loss of these nests. No permits will be issued for an active nest of any migratory bird species, unless removal of an active nest is necessary for reasons of human health and safety. Therefore, if nesting migratory birds are present on or near the Project area, timing is a significant consideration and needs to be addressed in Project planning.

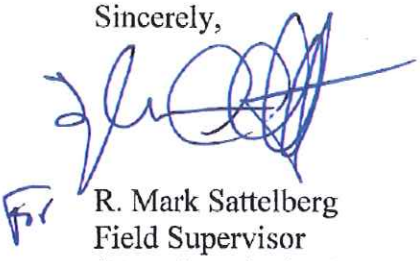
Work that could lead to the take of a migratory bird or eagle, their young, eggs, or nests (e.g., if you are going to erect new roads, or power lines in the vicinity of a nest), should be coordinated with our office before any actions are taken. If nest manipulation is proposed for this Project, the Project proponent should contact the Service's Migratory Bird Office in Denver at 303-236-8171 to see if a permit can be issued for this Project. No nest manipulation is allowed without a permit. If a permit cannot be issued, the Project may need to be modified to ensure take of a migratory bird or eagle, their young, eggs or nest will not occur. Soda Lake, located approximately ½ mile from Alternative A, is an important bird area, and we recommend that any potential impacts to this area be avoided.

IPaC: The Service has transitioned to a new online program to deliver species lists: the Information, Planning, and Conservation (IPaC) system. To obtain a current list of endangered, threatened, proposed, and candidate species and their designated and proposed critical habitat that occur in or may be affected by actions associated with your proposed Project, please visit our website at http://ecos.fws.gov/ipac/. This website will provide you with an immediate response to your species list request. The response will also include information regarding other Service trust authorities.

This Project should be re-analyzed if new information reveals effects of the action that may affect listed species or designated or proposed critical; if the action is subsequently modified in a manner that causes an effect to a listed species or designated or proposed critical habitat that was not considered in this letter; and/or if a new species is listed or critical habitat is designated that may be affected by this Project.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have any questions regarding this letter or your responsibilities under the Act and/or other authorities, please contact Julie Reeves of my office at the letterhead address or phone (307) 772-2374, extension 232.

Sincerely,



For R. Mark Sattelberg
Field Supervisor
Wyoming Field Office

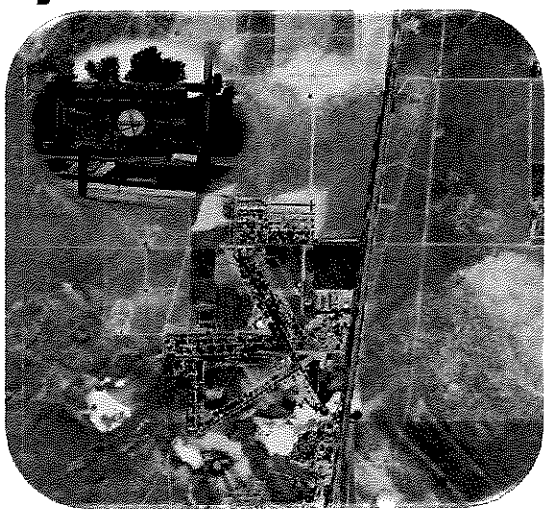
cc: WGFD, Non-game Coordinator, Lander, WY (B. Oakleaf)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (M. Flanderka)

APPENDIX D

D-1 8/28/12 PUBLIC MEETING
D-2 4/23/13 PUBLIC MEETING

Dar Nunn/I-25 Interchange Feasibility Study

OPEN HOUSE
August 28, 2012



MORRISON MAIERLE, INC.
An Employee-Owned Company

AGENDA

Introductions and Housekeeping Items

Project Overview

Scope of this Study

Next Steps

Discussion, Input & Questions

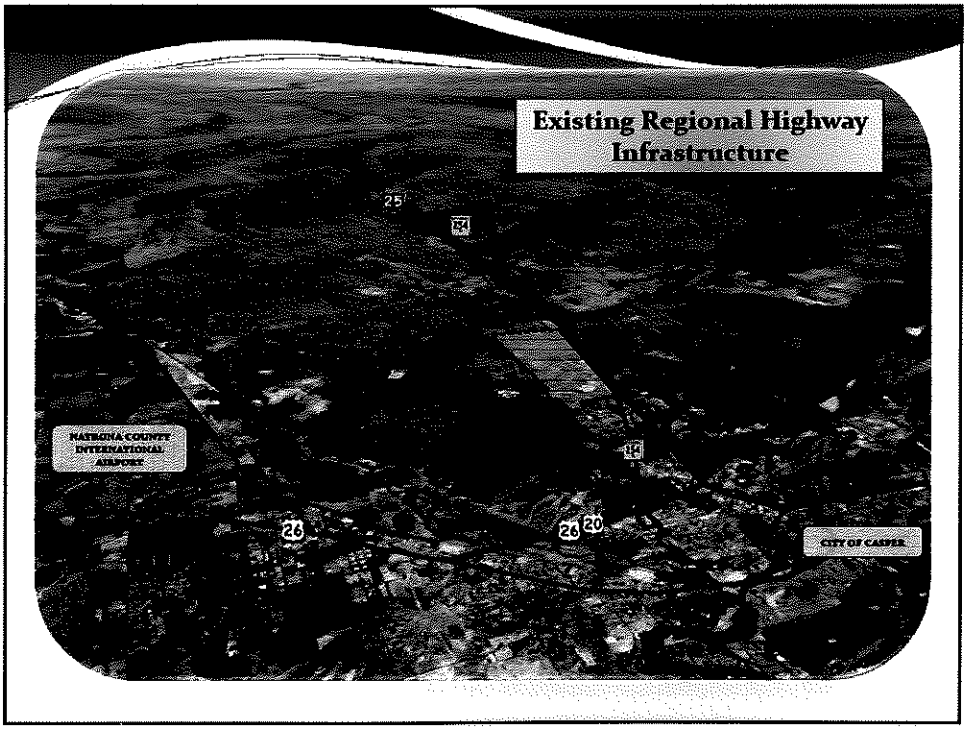
Project Overview

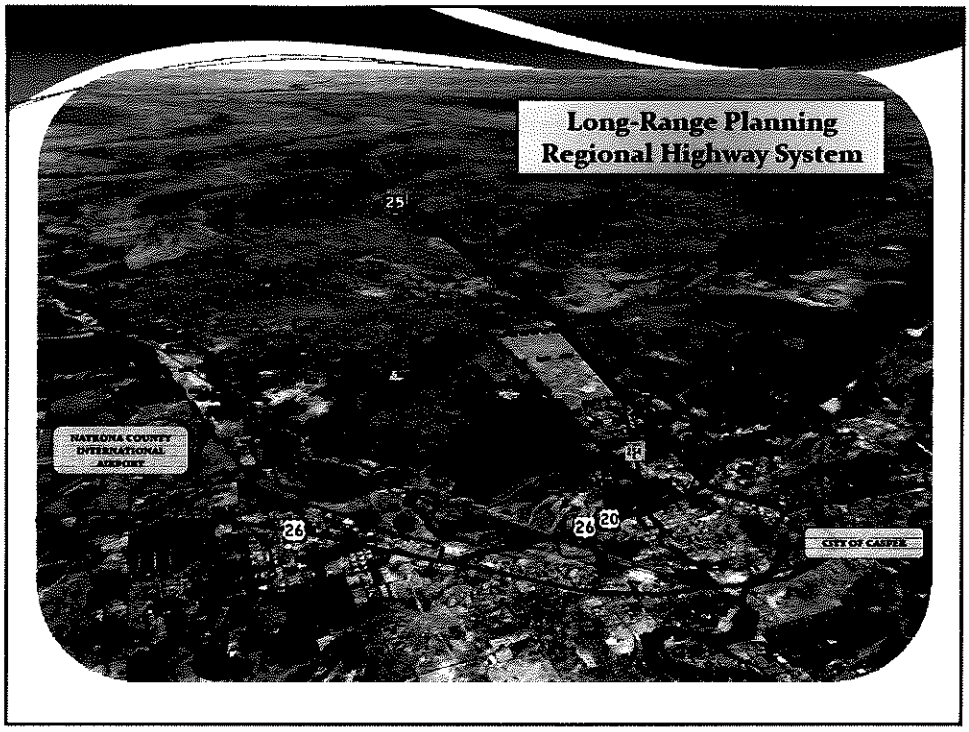
Since 2006, three major studies performed:

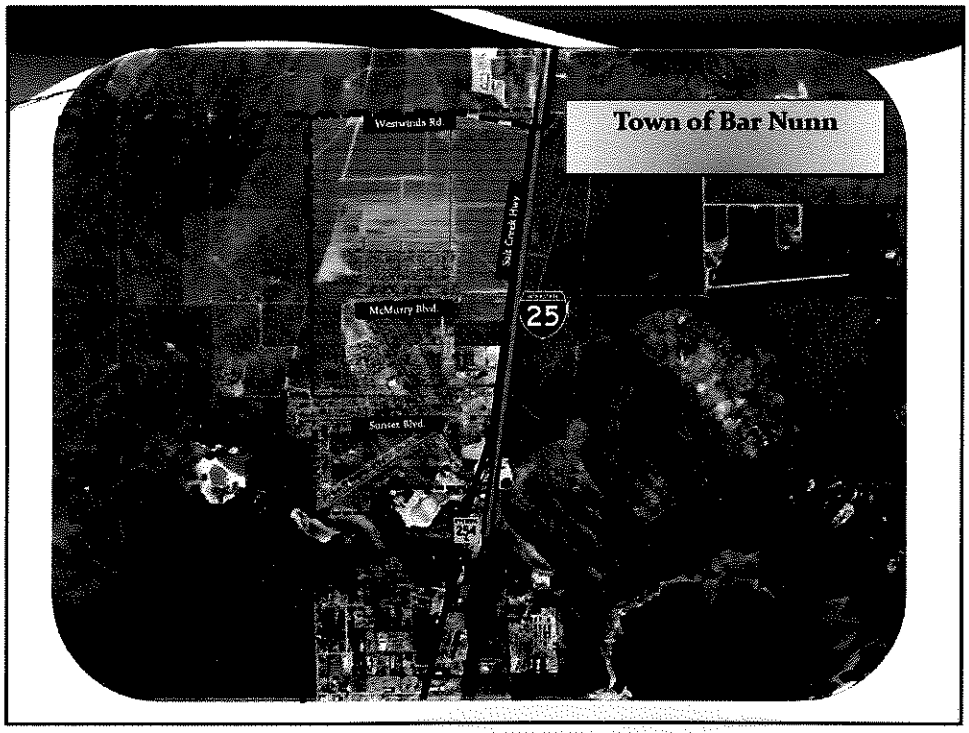
- **2006 – Casper MPO Long Range Transportation Plan**
- **2008 – Casper MPO Evaluation of Salt Creek Highway**
- **2012 – Casper MPO Bar Nunn Subarea Traffic Study**

Area Growth and Transportation Impacts:

- **Area transportation system network**




Long-Range Planning
Regional Highway System
25
NATRONA COUNTY INTERNATIONAL AIRPORT
26
20
CITY OF CASPER


Town of Bar Nunn
Westwinds Rd.
McMurry Blvd.
Sunset Blvd.
25

Project Overview

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- **2006 – Casper MPO Long Range Transportation Plan**
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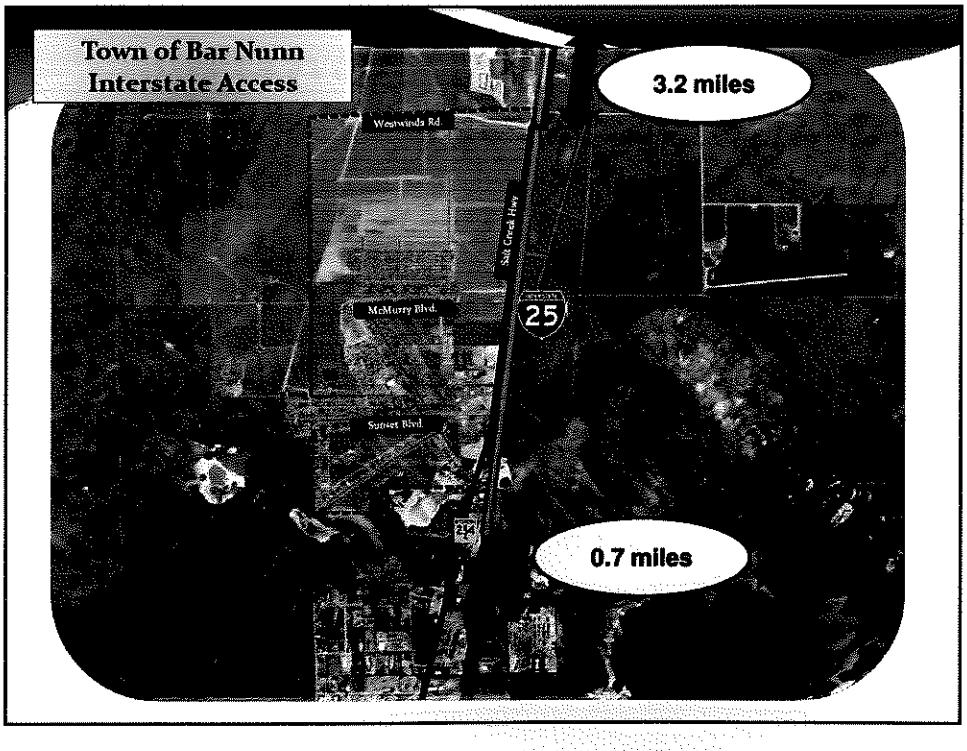
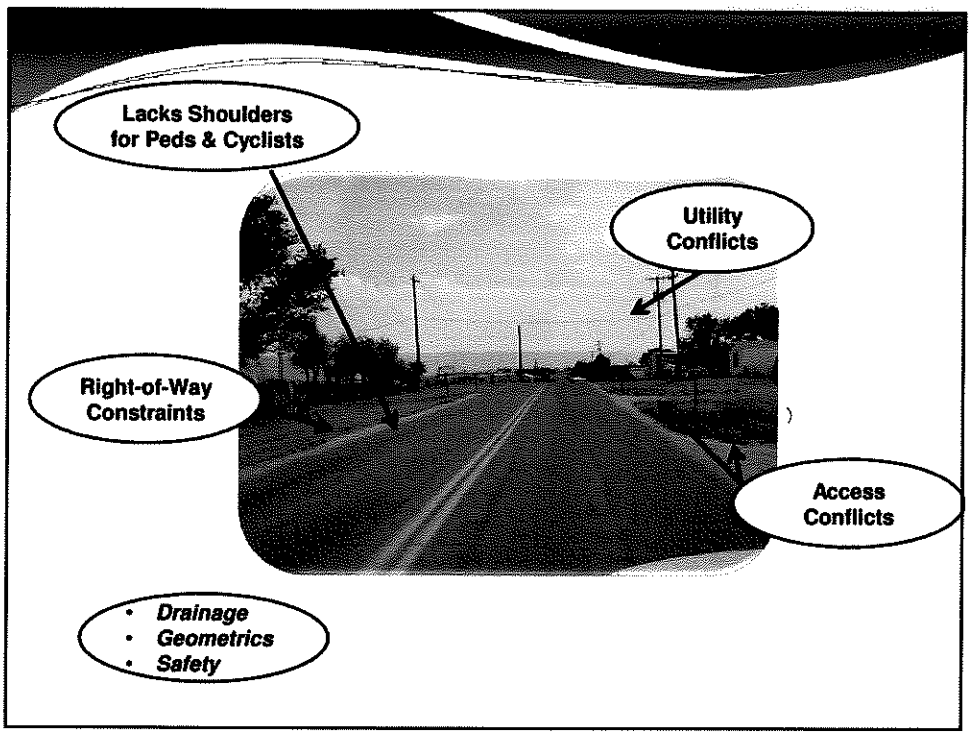
Area Growth and Transportation Impacts:

- **Area transportation system network**
- **Interstate Access restrictions**





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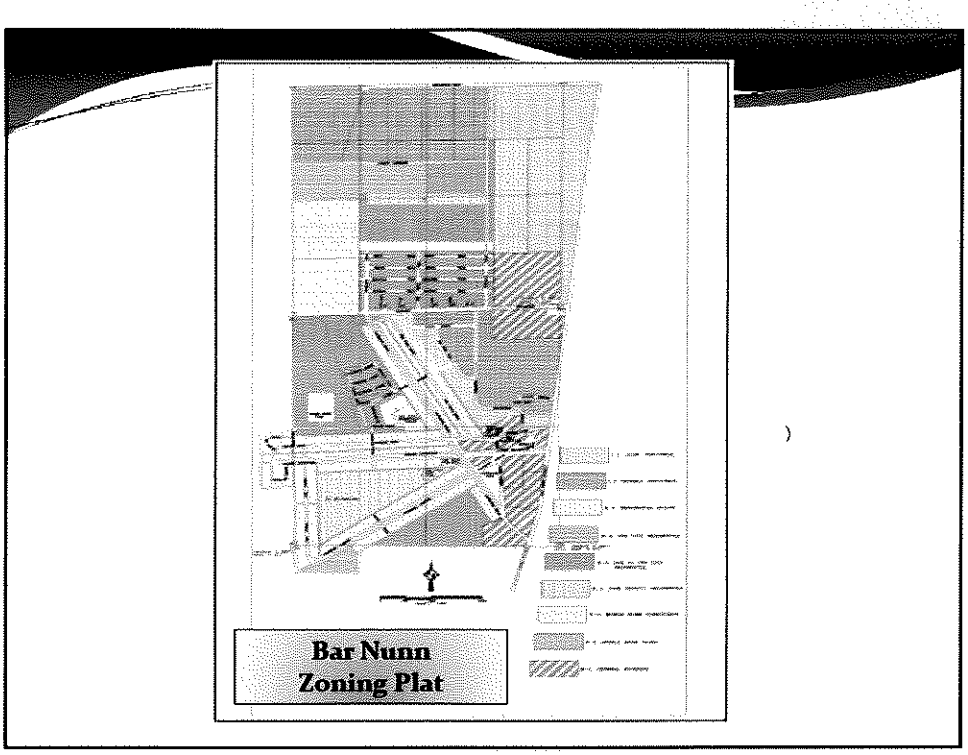
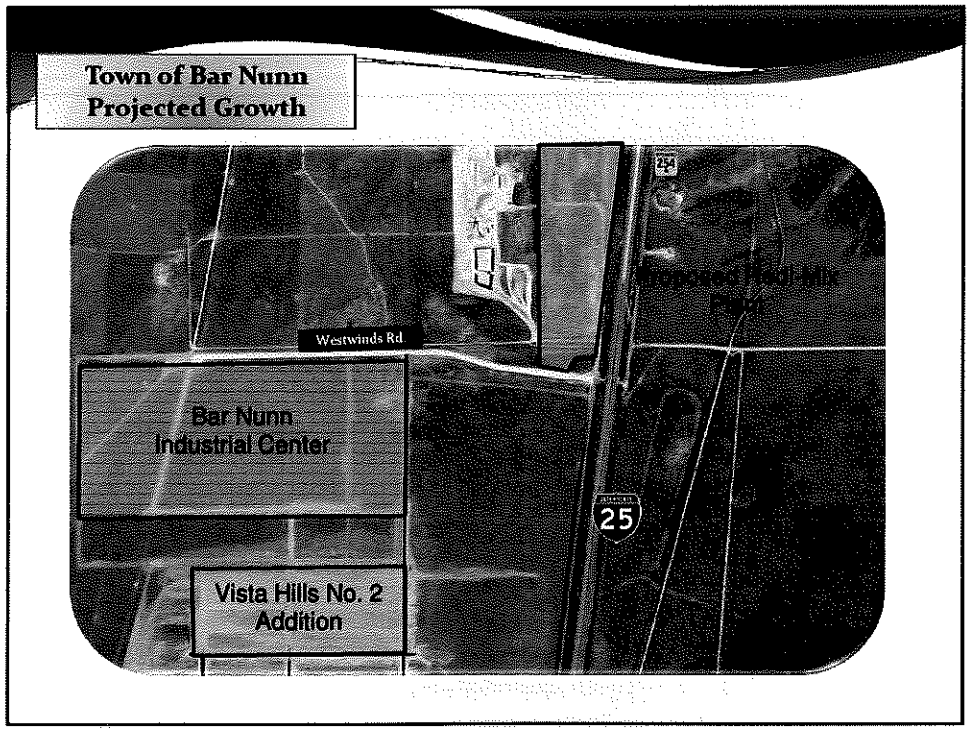
- **2008 – Casper MPO Evaluation of Salt Creek Highway**
- **2012 – Casper MPO Bar Nunn Subarea Traffic Study**

Area Growth and Transportation Impacts:

- **Area transportation system network**
- **Interstate Access restrictions**
- **Town zoning and development**


Bar Nunn
Zoning Plat


Town of Bar Nunn
Projected Growth
Westwinds Rd
Bar Nunn
Industrial Center
Vista Hills No. 2
Addition
25

Interchange Feasibility Study Scope

- **Meet Federal NEPA requirements**
- **Interchange location alternatives**

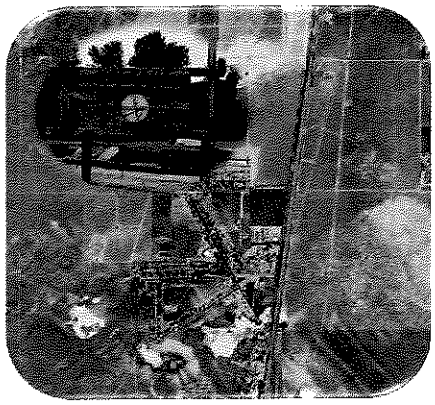
Interchange Feasibility Study Scope

- Meet Federal NEPA requirements
- Interchange location alternatives
- Address geometric constraints
- Transportation system benefits

Next Steps

- Transportation modeling
- Preliminary design of recommended preferred alternative
- Agency review and input/Finalize Study
- As funds available, program final environmental documentation and design

QUESTIONS



WYDOT District 2

Bar Nunn I-25 Interchange Open House

Bar Nunn, Wyoming August 28, 2012

NAME	ADDRESS/CITY
JEFF GOETZ	WYDOT - CASPER
JOHN PAVSEK	MORRISON-MAIERLE, HELENA MT
JEREY L PETTY	TOWN OF BAR NUNN
Carol Pendley	Town of Bar Nunn
Gaby + Becky Walsh	Town of Bar Nunn
Jake & Penny Sawyer	Bar Nunn
DAN HOBBS	BAR NUNN
BILL JOHNSTON	" "
Leah Todd	Casper
BOBBY MARTIN	TOWN OF BAR NUNN
melissa olsen	BAR NUNN
JOHN BLASE	TOWN OF BAR NUNN
Phil Schrayer	"
Jim Nelson	"
GLENN JANUSKA	C/NCIA
Terra + Paul Zowada	Bar Nunn
John + Dixie Bedsaul	Bar Nunn
Sarah Kauffman	Bar Nunn
Sheryl Henderson	Bar Nunn
KEN REED	Rock Springs Wy
Kyle Athey	Bar Nunn
Mark Schoen	Bar Nunn

WYDOT District 2

Bar Nunn I-25 Interchange Open House

Bar Nunn, Wyoming August 28, 2012

NAME	ADDRESS/CITY
MARK WILLIAMS	CASPER
MARY VRION · DAVE RITTER MOTOR POWER	4455 N SALT CRK
Patrick + Dawn Ford	5306 Ute Bar Nunn
Paul Case	19220 Maha Trail
Brandon & Lorraine Goodwin	CASPER
Dustin & Jayme Lien	4755 Antelope
Brenda Sanders	5401 Tonkawa Trl.
Tawna Nunez	" " "
Dorothy Ray	3774 Salt Creek Hwy
Marianne Magee	4755 Bel Vista BN
Raymond Kraft	5135 N Antelope Dr
Jayson Newsome	2055 Sunset Blvd.
Paula Stewart	2200 Palomino Ave
Mike Tygard	1929 Mandan TRAIL
Karen Kraft	5135 Antelope
Robin McAlpin	5314 Tonkawa
Sarah Jarrard	5310 Tonkawa Trail
Kim Kible	2130 Prairie Lane
Randy Dirks	4426 Antelope Dr. Bar Nunn

Matthew H. Mead
Governor

Wyoming
Department of Transportation

"Providing a safe, high quality, and efficient transportation system"

5300 Bishop Boulevard
Cheyenne, Wyoming 82009-3340

John F. Cox
Director

Aug. 21, 2012
Jerry Petty
Mayor, Town of Bar Nunn
4820 Wardwell Industrial Ave.
Bar Nunn, WY 82601

Dear Mr. Petty,

WYDOT would like to invite you to an open house from 5:30 – 7 p.m., Tuesday, Aug. 28 regarding a possible future interchange on Interstate 25 at Bar Nunn.

The open house will be held at the Bar Nunn Elementary School cafeteria, 2050 Siebke Dr., Bar Nunn.

Previous planning studies have identified the potential justification for an interchange between the Wardwell Road interchange and the Ormsby Road interchange. These studies conclude that as growth in the area continues, increased traffic demands on Salt Creek Highway and local roads may cause the region's transportation system to suffer.

WYDOT, along with the Town of Bar Nunn, Casper Metropolitan Planning Organization, Natrona County and the Federal Highway Administration, intends to evaluate specific interchange location alternatives.

Please also invite anyone from your staff whom you feel would benefit from attending this meeting.

If you have any questions, feel free to call me at 473-3303.

Sincerely,

Jeff Goetz
Senior Public Relations Specialist
WYDOT District 2

Matthew H. Mead
Governor

Wyoming
Department of Transportation

"Providing a safe, high quality, and efficient transportation system"

5300 Bishop Boulevard
Cheyenne, Wyoming 82009-3340

John F. Cox
Director

Aug. 21, 2012
Glenn Januska
Airport Manager
Casper/Natrona County International Airport
8500 Airport Parkway
Casper, WY 82604

Dear Mr. Januska,

WYDOT would like to invite you to an open house from 5:30 – 7 p.m., Tuesday, Aug. 28 regarding a possible future interchange on Interstate 25 at Bar Nunn.

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Sincerely,

Jeff Goetz
Senior Public Relations Specialist
WYDOT District 2

Matthew H. Mead
Governor

Wyoming
Department of Transportation

"Providing a safe, high quality, and efficient transportation system"

5300 Bishop Boulevard
Cheyenne, Wyoming 82009-3340

John F. Cox
Director

Aug. 21, 2012
McMurry Ready Mix
5684 Old W. Yellowstone Highway
Casper, WY 82604

Dear Sirs,

WYDOT would like to invite you to an open house from 5:30 – 7 p.m., Tuesday, Aug. 28 regarding a possible future interchange on Interstate 25 at Bar Nunn.

The open house will be held at the Bar Nunn Elementary School cafeteria, 2050 Siebke Dr., Bar Nunn.

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Sincerely,

Jeff Goetz
Senior Public Relations Specialist
WYDOT District 2

Matthew H. Mead
Governor

Wyoming
Department of Transportation

"Providing a safe, high quality, and efficient transportation system"
5300 Bishop Boulevard
Cheyenne, Wyoming 82009-3340

John F. Cox
Director

Aug. 21, 2012
Joel Dvorak
Superintendent
Natrona County School District
970 N. Glenn Rd.
Casper, WY 82601

Dear Dr. Dvorak,

WYDOT would like to invite you to an open house from 5:30 – 7 p.m., Tuesday, Aug. 28 regarding a possible future interchange on Interstate 25 at Bar Nunn.

The open house will be held at the Bar Nunn Elementary School cafeteria, 2050 Siebke Dr., Bar Nunn.

Previous planning studies have identified the potential justification for an interchange between the Wardwell Road interchange and the Ormsby Road interchange. These studies conclude that as growth in the area continues, increased traffic demands on Salt Creek Highway and local roads may cause the region's transportation system to suffer.

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If you have any questions, feel free to call me at 473-3303.

Sincerely,

Jeff Goetz
Senior Public Relations Specialist
WYDOT District 2

Wyoming Department of Transportation District 2
900 Bryan Stock Trail
Casper, WY 82601

NEWS RELEASE

*** FOR IMMEDIATE RELEASE ***

Aug. 23, 2012
1 Page
For more information, contact:
Jeff Goetz
Public Relations Specialist, WYDOT District 2
Phone: 307-473-3303
Email: jeff.goetz@wyo.gov

Public Meeting Set to discuss possible I-25 interchange near Bar Nunn

BAR NUNN - A public open house will be held from 5:30 – 7 p.m., Tuesday, Aug. 28 to provide information about and take comments on a possible future interchange on Interstate 25 at Bar Nunn. The open house will be held at the Bar Nunn Elementary School cafeteria, 2050 Siebke Dr.

Previous planning studies have identified the potential justification for an interchange between the Wardwell Road interchange and the Ormsby Road interchange. These studies conclude that as growth in the area continues, increased traffic demands on Salt Creek Highway and local roads would increase and the region's transportation system may deteriorate.

The intent of this feasibility study is to closely examine the best locations for a possible interchange.

The Wyoming Department of Transportation, in partnership with the Town of Bar Nunn, Casper Metropolitan Planning Organization, Natrona County and the Federal Highway Administration, intends to evaluate specific interchange location alternatives, their geographic and topographic constraints, and future impacts to the region's transportation system.

Representatives with WYDOT and others involved will be on hand to answer questions about this project

- end -

Wyoming

Jeff Goetz <jeff.goetz@wyo.gov>

WYDOT NEWS RELEASE - OPEN HOUSE SET TO DISCUSS POSSIBLE I-25 INTERCHANGE

5 messages

Jeff Goetz <jeff.goetz@wyo.gov> Fri, Aug 24, 2012 at 12:11 PM
To: Casper Journal <editor@casperjournal.com>, Casper Star-Tribune <editors@trib.com>, Daniel Sandoval <d.sandoval.ktwo@gmail.com>, John Ehrhart <jehrhart@kcwy13.com>, K2 Radio <caspernews@townsquaremedia.com>, K2 TV <info@k2tv.com>, Karen Snyder <karenktwonews@gmail.com>, Mount Rushmore Broadcasting <mrbnews@wyoming.com>, "publisher@casperjournal.com" <publisher@casperjournal.com>, Wyoming Public Radio <btwo@uwyo.edu>
Bcc: Ross Doman <ross.doman@dot.state.wy.us>, Ronda Holwell <ronda.holwell@dot.state.wy.us>, renny.mackay@wyo.gov, michelle.dynes@wyo.gov, Doug McGee <doug.mcgee@wyo.gov>, Dave Kingham <dave.kingham@wyo.gov>, Chelsey Lafave <chelsey.lafave@wyo.gov>, Carlie Vanwinkle <carlie.vanwinkle@wyo.gov>, Bruce Burrows <bruce.burrows@wyo.gov>, Cody Beers <cody.beers@wyo.gov>

WYDOT NEWS RELEASE

For Immediate Release

Public Meeting Set to discuss possible I-25 interchange near Bar Nunn

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- end -

--
Jeff Goetz
Public Relations Specialist
Wyoming Department of Transportation, District 2
900 Bryan Stock Trail
Casper, WY 82601
(307) 473-3303
jeff.goetz@wyo.gov

trib.com Wyoming's News Source Star-Tribune

WYDOT plans forum on I-25 interchange at Bar Nunn

AUGUST 26, 2012 1:00 PM • BY THE STAR-TRIBUNE STAFF

The Wyoming Department of Transportation will hold a public open house to provide information about and take comments on a possible future interchange on Interstate 25 at Bar Nunn. The forum will be held from 5:30 to 7 p.m. Tuesday in the Bar Nunn Elementary School cafeteria.

Planning studies have indicated an interchange between the Wardwell Road interchange and the Ormsby Road interchange may be needed as growth in the area places increased traffic demands on Salt Creek Highway and local roads.

WYDOT, in partnership with Bar Nunn, the Casper Metropolitan Planning Organization, Natrona County and the Federal Highway Administration, intends to evaluate specific interchange location alternatives and their potential effects on the region's transportation system.

Representatives with WYDOT and others involved will be on hand to answer questions about the project.

EXIT

Residents press Wyoming Department of Transportation for quicker Bar Nunn interchange solution

Cars head north on Salt Creek Highway in Bar Nunn near Coyote Lane about 5:15 p.m. Wednesday. The Wyoming Department of Transportation is conducting a study on potentially adding an Interstate 25 exit in Bar Nunn to relieve congestion.

3 hours ago • By LEAH TODD Star-Tribune staff writer (0) Comments

WYDOT considers closing Bryan Stock Trail ramp

WYDOT officials will host a public meeting Thursday to discuss its plans to permanently close the eastbound Interstate 25 on-ramp at Bryan Stock Trail in Casper.

The meeting is from 5:30 to 7 p.m. at the WYDOT District 2 office, at 900 Bryan Stock Trail.

WYDOT seeks Bar Nunn comments

Natrona County residents can address written comments on the Bar Nunn interchange project by mail. Send them to Jeff Goetz, 900 Bryan Stock Trail, Casper, WY 82601.

While Bar Nunn residents were eager to discuss alternatives to the town's access to Interstate 25, they were disgruntled to learn a solution is years down the road.

More than 50 people attended a meeting Tuesday night to discuss a feasibility study, commissioned by the Wyoming Department of Transportation, that will evaluate alternatives to the current I-25 interchanges at Wardwell and Ormsby roads.

Lowell Fleenor, a district engineer for WYDOT, said it could be another six years before the project can make its way onto WYDOT's State Transportation Improvement Program for funding.

Repeatedly voicing safety concerns, many Bar Nunn residents were disgruntled at the news that the process would take so long.

"This concern is now," Natrona County resident Dorothy Ray said at the meeting. "And I understand the funding thing, but how do we get this to be a priority? Six years from now doesn't help us now.

"I think everybody in this room is probably hoping this interchange would happen way faster than six years."

The study will analyze three options: reconstructing the current Wardwell Road interchange; building a new interchange at McMurry Boulevard; and reconstructing the existing underpass where Salt Creek Highway crosses under I-25.

"We're at the very, very preliminary stage on this project," Jeff Goetz, a Casper-based WYDOT public relations specialist, told the audience. "In fact, to call it a proposal is a little premature. But we have to start somewhere, and that somewhere is with you guys."

John Pavsek is a transportation engineer from a Montana-based engineering company contracted by WYDOT to carry out the study.

"As the town builds out, you're going to see a lot more truck-type traffic," Pavsek said, referencing traffic increases caused by recent industrial development in Bar Nunn. "Essentially, you're going to see some fairly significant volumes of travel coming in."

Future crowding

And as development continues with no other route to access the town from I-25, Pavsek said, traffic will almost certainly use the narrow, already overcrowded Salt Creek Highway.

Diverting traffic off Salt Creek Highway is a goal shared by WYDOT officials and Bar Nunn residents alike.

"I live on Salt Creek Highway, and sometimes it takes me 10 minutes to get out of my driveway," Ray said.

"I'm fortunate that I have a big enough driveway that I can flip a U-turn in it and be able to face the highway to get on it. My neighbor actually has to back onto Salt Creek. Nobody will let him on the highway. They'll let him sit there all morning long, and he can't even get out of his driveway."

The study will recommend a prime location for a new or improved interchange and will deliver preliminary drawings for the project. It will also be the fourth study done on the area since 2006.

"The big thing is the funding limitations we have right now," Fleenor said. "We have a program [STIP] that's outlined for the next six years. It can change, but then you get into the debate of saying, 'OK we're going to accelerate this one, but what do you bump out?' Here in the last few years, that debate has gotten a lot more intense."

Pavsek estimates the study will be finished by the time his company's contract with WYDOT expires in December. He noted that McMurry Boulevard appeared to him to be the best location at this point in time.

"The step after this [study] is to try to get it on the STIP," Pavsek said. "Work through your local town council, your county commissioners, your [Metropolitan Planning Organization]. Try to get this thing noticed."

Reach county reporter Leah Todd at 307-266-0592 or leah.todd@trib.com. Follow her on Twitter @leahktodd.

Tags Leah Todd, Public Relations Specialist, Transportation Engineer, Bar Nunn Wyoming, Salt Creek, Casper Wyoming

View (0) Comments

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Voters write in two Casper Democrats for Wyoming Legislature; one declines, other mulls race

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Recommendations

Natrona County couple found dead in residence (Casper Star-Tribune - trib.com - Wyoming News)

5 "Hidden" Obamacare Taxes That Will Crush The Middle Class (Money Morning)

Officials: Wanted felon responsible for weekend power outage (Casper Star-Tribune - trib.com - Wyoming News)

Bring actor back to Casper (Casper Star-Tribune - trib.com - Wyoming News)

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BAR NUNN/I-25 INTERCHANGE FEASIBILITY STUDY
Public Meeting #1 – Notes
August 28, 2011, 5:30 pm
Bar Nunn Elementary School

MORRISON MAIERLE, INC.
An Employee-Owned Company

City, County, WYDOT, FHWA, MMI representatives:

John Pavsek – Morrison-Maierle (speaker)
Jeff Goetz, WYDOT
Mark Ayen, WYDOT
Mark Wingate, WYDOT
Lowell Fleenor, WYDOT
Jeff Purdy, FHWA
Jerry Petty, Town Of Bar Nunn
Carol Pendley, Town of Bar Nunn
Bobby Martin, Town of Bar Nunn
John Blase, Town of Bar Nunn
Paula Stewart. Town of Bar Nunn
Robert Hendry, Natrona County

Public Attendance list attached. Total attendance 51.

Jeff Goetz provided introductions and general purpose of the meeting. He requested that the public fill out a comment form provided at this meeting and send it into the State for public records purposes. All meeting comments and these public comment forms will be included in the feasibility report and become public record.

John Pavsek provided a presentation via power point (attached). The meeting was opened up for discussion/questions.

- Several comments from people who voiced their disapproval of upgrading the existing Wardwell Interchange. They would rather see the interchange built in Bar Nunn.
- Residents and users of Salt creek indicated the road is in poor condition, traffic speeds seem excessive, and volumes of trucks and cars are high. Commute time is poor due to traffic jammed up at the Wardwell interchange area.
- How long would it take for the State to design the project? Once the project is funded, the environmental process and design could take three years.
- It was made clear that this project does not have any funding at this time. Before the project can undergo final design and construction, it would need to be placed on the WYDOT STIP.
- One resident asked if the Town had any intention to prohibit growth in the north end of the town until either Salt Creek is improved or an interchange is constructed. The Town does not have any building moratorium in place at this time conditioned to upgrade the transportation system.
- Representatives of the emergency services voiced that response time to the Town is hampered by the lack of a direct interstate access.
- Residents asked if Old Salt Creek Highway could be improved. There are no plans to improve the roadway, either short term or long term plans. It was made clear that improving the roadway does not address the concern for a direct connection to I-25.

Improving Old Salt Creek Hwy would likely be very costly as there would likely be major ROW and utility impacts. Existing accesses to the Hwy would need to be perpetuated.

- One resident preferred to simply upgrade the Wardwell Interchange. It was restated that as the town continues to grow, traffic to and thru the existing interchange would increase and the transportation system levels of service would deteriorate. The town would need a new interchange as a relief valve to distribute traffic to I-25.
- Funding of the project requires prioritizing the project and placing it on the WYDOT STIP. Right now the 5-year STIP does not include an interchange in the town.
- Residents were encouraged to express their desire for the project through their local governing bodies – Town, Casper MPO, and County. The Legislature could assist in getting the project prioritized.
- It was made clear that safety is critical to the programing of these types of project. Right now, there are no clear accident clusters directly or indirectly related to the lack of an interchange, or along Old Salt Creek Highway. However, it is recognized that as the town grows, so will traffic volumes. State and local authorities monitor accidents and will respond as necessary should a pattern develop.
- WYDOT has plans to provide surface improvements at the Wardwell Interchange in 2016. These improvements are strictly maintenance focused and will not add any volume to the facility.

The meeting ended at 7:30 pm. There will be a final Open House once the report is concluded, i.e., prior to December 2012.

Attachments: Power Point Presentation
Attendance List

NOTICE OF PUBLIC OPEN HOUSE

Bar Nunn/I-25 Interchange Feasibility Study

A public open house will be held from 5:30 – 7 p.m., Tuesday, Aug. 28 to provide information about and take comments on a possible future interchange on Interstate 25 at Bar Nunn.

The open house will be held: **5:30 – 7 p.m.**
Tuesday August 28th, 2012
Bar Nunn Elementary School Cafeteria
2050 Siebke Drive, Bar Nunn

The Wyoming Department of Transportation invites residents, local organizations; federal, state, and local agencies, and interested individuals, to attend the meeting and provide comments.

Previous planning studies have identified the potential justification for an interchange between the Wardwell Road interchange and the Ormsby Road interchange. These studies conclude that as growth in the area continues, increased traffic demands on Salt Creek Highway and local roads would increase and the region's transportation system may deteriorate.

The intent of this feasibility study is to closely examine the best locations for a possible interchange.

The Wyoming Department of Transportation, in partnership with the Town of Bar Nunn, Casper Metropolitan Planning Organization, Natrona County and the Federal Highway Administration, intends to evaluate specific interchange location alternatives, their geographic and topographic constraints, and future impacts to the region's transportation system.

How to Comment

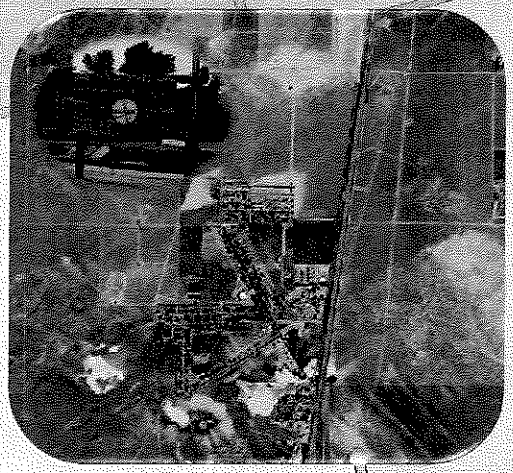
Written comments may be presented during the open house. Written comments on the Bar Nunn I-25 Interchange Feasibility Study may also be addressed to:

Jeff Goetz, Sr. Public Relations Specialist
Wyoming Department of Transportation
900 Bryan Stock Trail
Casper, WY 82601

For further information or to arrange special accommodations for persons with disabilities, contact one of the following WYDOT staff: Jeff Goetz at 307-473-3303 or Mark Ayen at 307-473-3223.

Bar Nunn/I-25 Interchange Feasibility Study

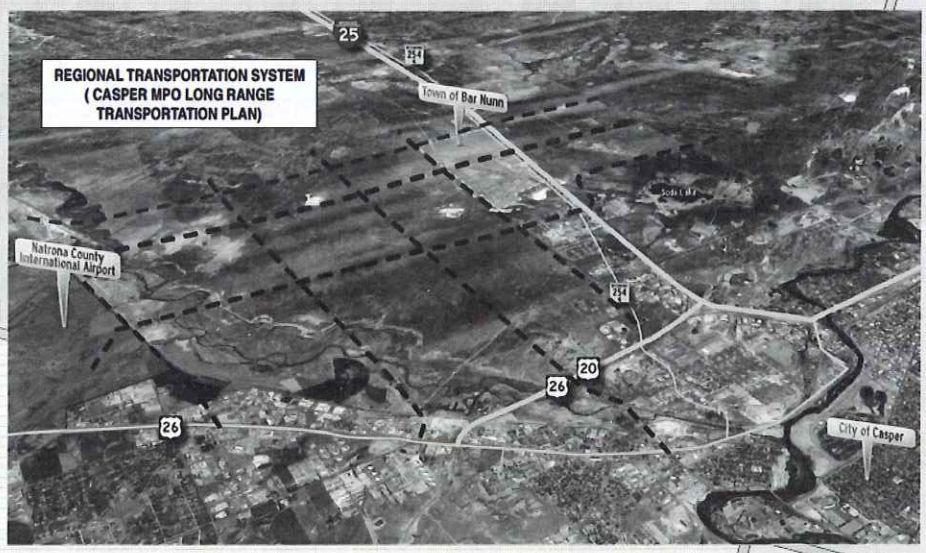
2nd OPEN HOUSE
April 23, 2013



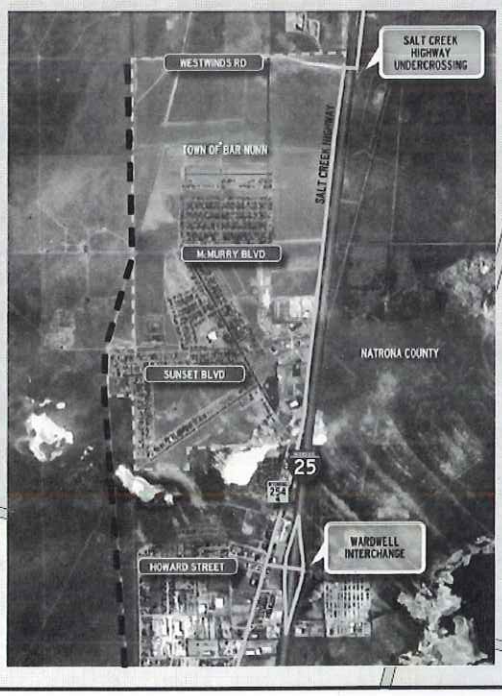
AGENDA

Introductions and Housekeeping Items
Project Overview & Recap 1st Open House
Outline Feasibility Study Tasks
Interchange Alternative Screening
Next Steps
Discussion, Input & Questions

Project Overview



Project Overview



Purpose and Need

The purpose of this project is to provide improved connectivity with Interstate 25 to address the changing transportation needs of the Town of Bar Nunn. This project would address the following six concerns:

1. **Improve vehicle safety by reducing commercial truck and passenger vehicle interface on existing local street system of Bar Nunn;**
2. **Use existing transportation infrastructure and public right of way to the maximum extent possible;**
3. **Accommodate plans for future arterial loop road north and west of Bar Nunn in accordance with the Town and regional planning goals;**
4. **Reduce travel commute times to and from the Town of Bar Nunn and the Greater Casper Metropolitan Area;**
5. **Provide potential east/west connectivity from I-25 in the Casper Metropolitan Planning Area to the Casper Airport; and**
6. **Relieve congestion and improve the level of service of the existing Wardwell Interchange.**

Feasibility Study Goals & Tasks

GOALS:

1. **Provide a conclusive recommendation whether an interchange is warranted or not.**
2. **Screen Alternative Interchange layouts to determine the preferred location**

CONSULTANT TASKS:

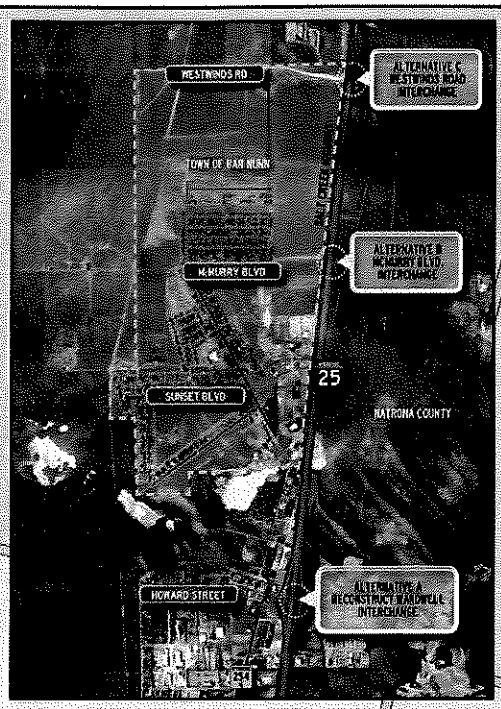
1. **Evaluate historic and projected land use**
2. **Assess regional development and growth potential**
3. **Review the current transportation system, including connection with the Wardwell Interchange,**
4. **Determine if the project meets FHWA Eight Policy Requirements,**
5. **Identify Feasible Interchange Locations, including preliminary layouts,**
6. **Assess impacts of interchange alternatives to the Town's transportation network and mobility,**
7. **Potential Property Impacts**
8. **Constructability and Cost Effectiveness**

Interchange Alternative Screening

Alternative A –
Baseline Option

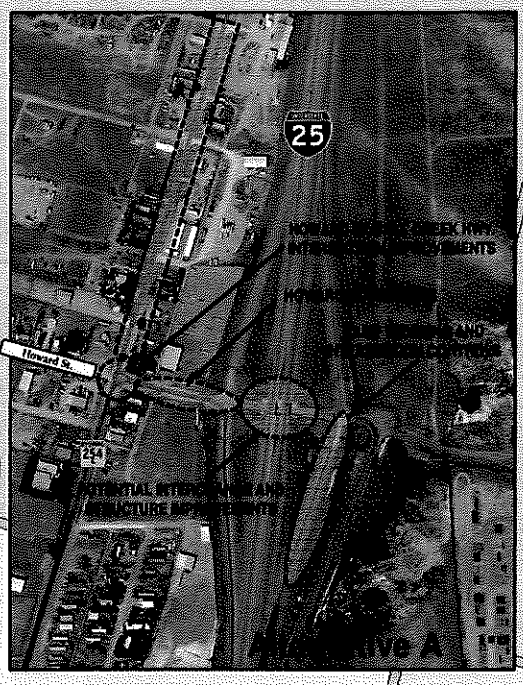
Alternative B –
Central Location

Alternative C –
Northern Location



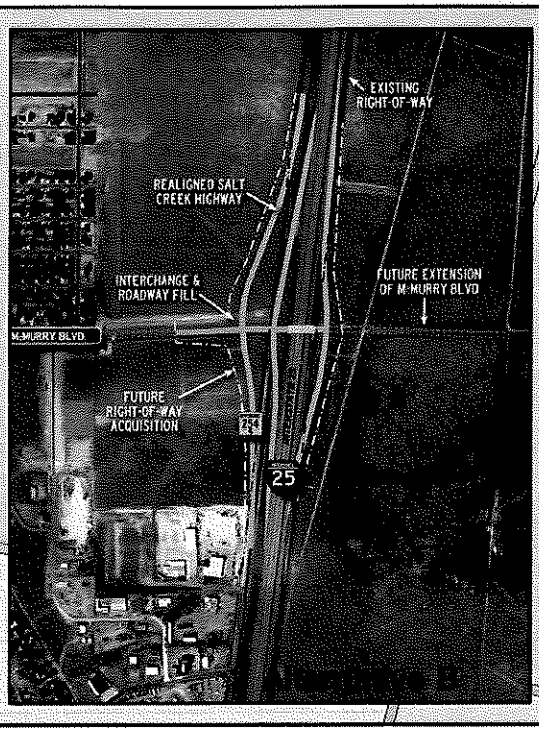
Interchange Alternative Screening

- **Currently serves all Bar Nunn access**
- **Inadequate ramp capacity**
- **Howard Street and intersection improvements required**
- **Salt Creek Hwy is substandard level of service**
- **Restricted emergency service response**



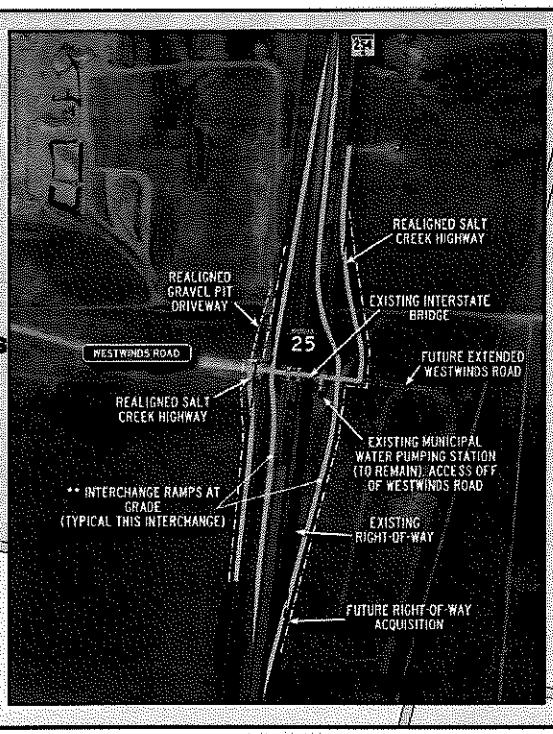
Interchange Alternative Screening

- Bridge over Interstate construction
- Centrally located
- Transportation infrastructure discontinuity
- Most expensive option

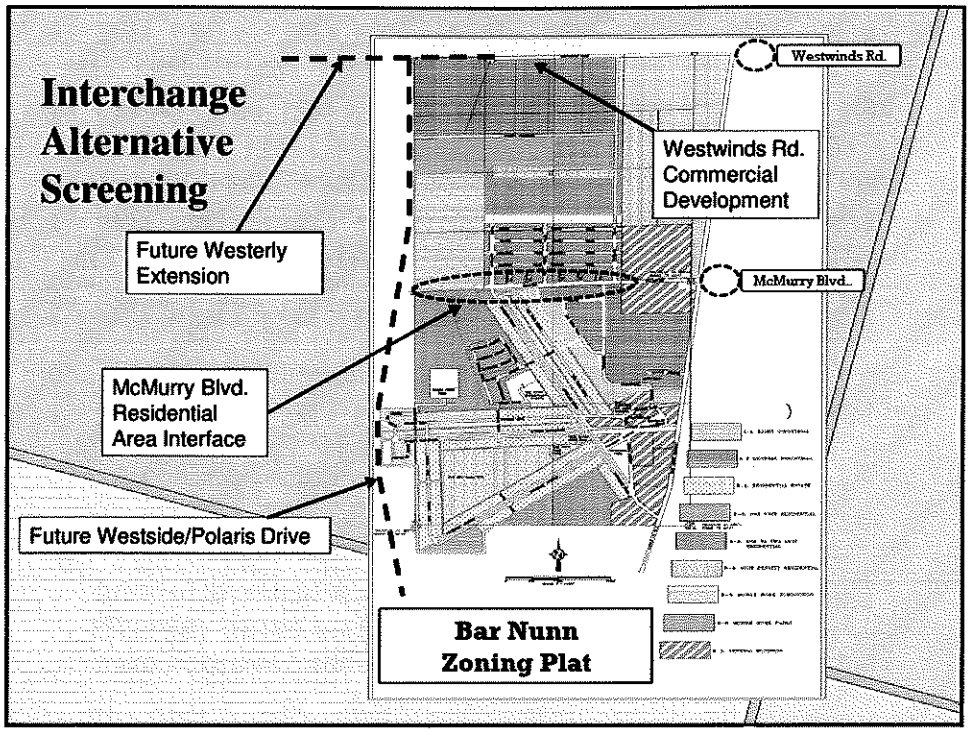


Interchange Alternative Screening

- Utilize existing structure
- Provides direct access to commercial area
- Consistent with County long-range planning goals
- Least costly interchange option
- Future Upgrades may be necessary



Interchange Alternative Screening



Traffic Forecasting

Forecasts were developed based on growth rates provided in the *Casper Area 2030 Long Range Transportation Plan* and land use projections documented in the *Bar Nunn Subarea Traffic Study. Forecasts were then adjusted to reflect new Interchange Alternatives*

- **Growth rates – Three MPO density scenarios**
- **Land Use Trip Generation – Undeveloped Town Area**
- **Adjustments – Adjustments Based on Travel Distance**

Intersection LOS Comparisons

Levels-of-service were reviewed to gauge traffic operations and capacity for intersections along Salt Creek Highway, and for proposed ramp junctions. LOS deficiencies were noted based on forecast traffic volumes, with operational improvement noted for both new Interchange Alternatives.

Arterial Travel Time Reviews

Travel time impacts and benefits were reviewed for each interchange alternative, including the existing interchange alternative. Travel time savings noted with both new Interchange Alternatives.

Arterial LOS Comparisons

Arterial levels-of-service were reviewed for Salt Creek Highway based on forecasts for all three alternatives. LOS were improved with both new interchange Alternatives.

Conclusions of Traffic Analysis

The report traffic analysis provides the following conclusions:

1. 60% of the 7,284 PM peak trips generated by future Bar Nunn land uses will travel Salt Creek Highway to access I-25 (currently via Wardwell I/C).
2. Minimal change in travel is expected with Wardwell Alternative A. Poor intersection and arterial LOS are projected with higher travel times along Salt Creek Highway.
3. Alternative B and C would provide new access to I-25, splitting travel between existing and future interchanges. Both alternatives reduce arterial and intersection LOS issues along Salt Creek Highway. Both alternatives reduce travel times and improve access to Bar Nunn.
4. Traffic volumes will be more consistent along Salt Creek Highway under Alternative C (Westwinds I/C option), which promotes a more uniform cross section along the arterial.
5. Intersection and arterial LOS are slightly improved with less travel time projected with the Alternative C improvement.
6. All alternatives would promote the need for improvements along Salt Creek Highway, and at principal highway intersections.

Interchange Alternative Screening

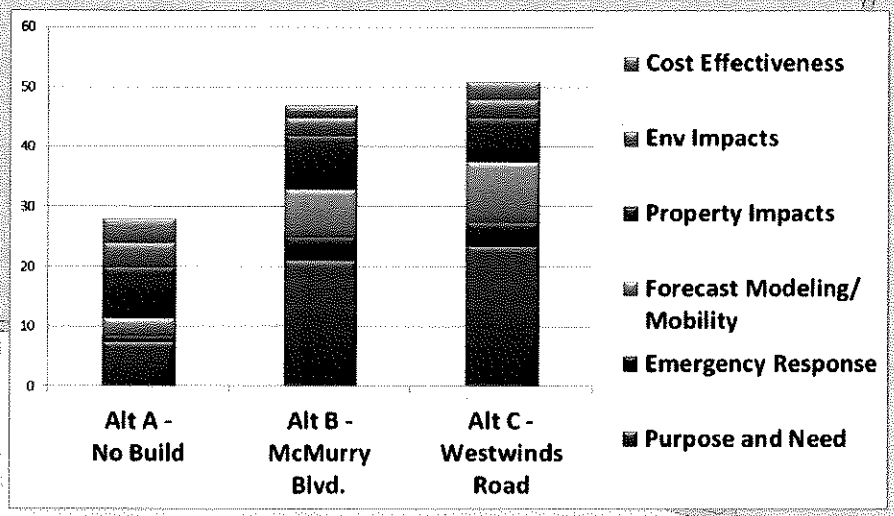
PRELIMINARY COST ESTIMATES:

Alternative A – Baseline Option (Bridge Upgrades, Highway Improvements, Intersection Improvements):
$ 981,000

Alternative B – McMurry Blvd. Interchange (New Interchange, Realign Salt Creek Highway, Utility and R/W Costs):
$ 5,100,000

Alternative C – Westwinds Road (Bridge Upgrades, Interchange Ramps, Utility and R/W Costs):
$ 2,900,000

Interchange Alternative Screening

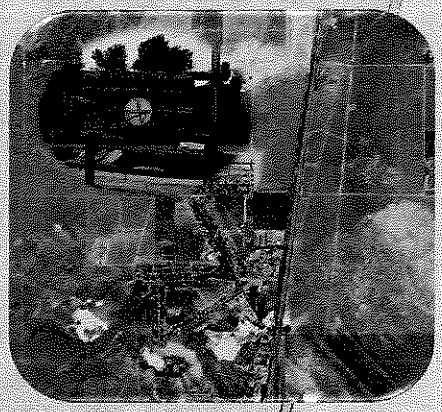


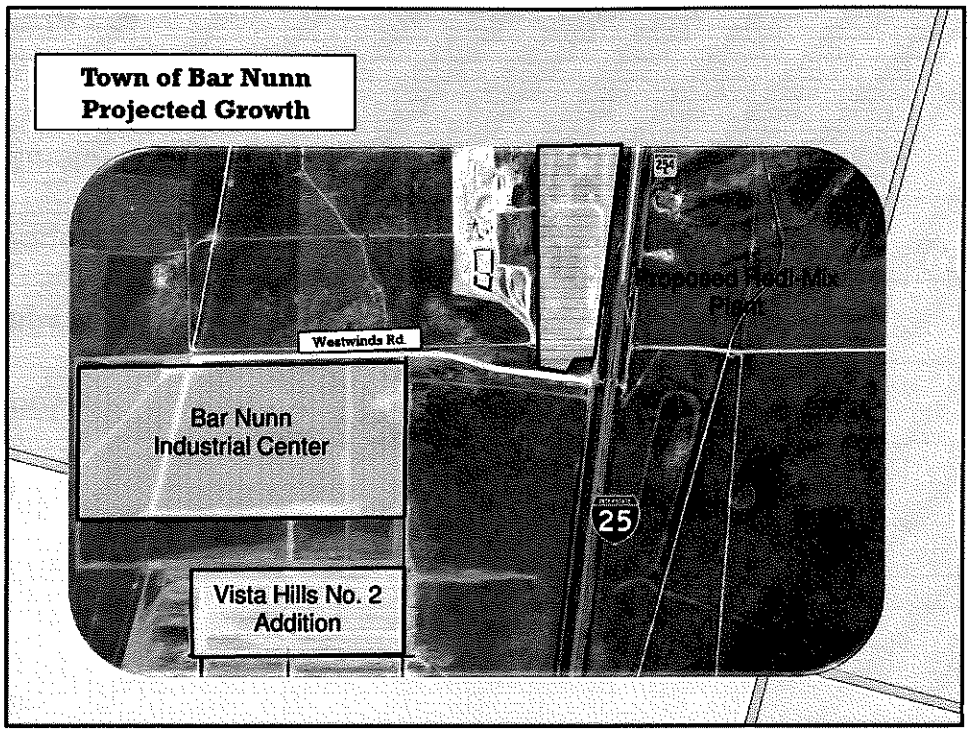
Conclusion: Alternative C

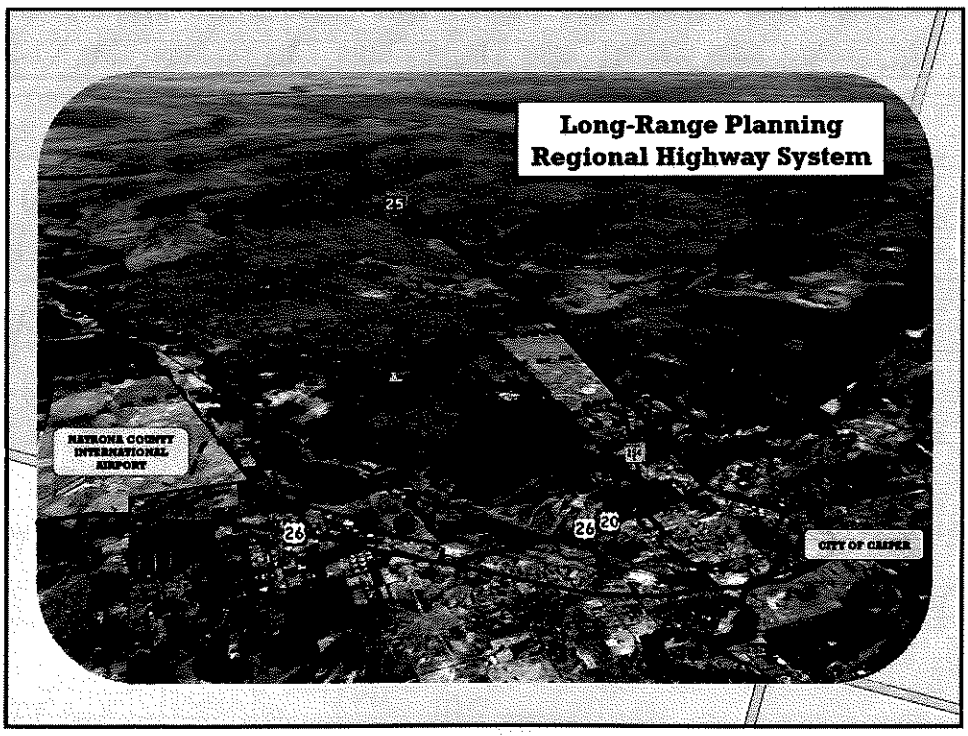
Next Steps

- Finalize Feasibility Report
- Distribute to FHWA & Agencies for Final Approval
- WYDOT initiate "Interstate System Access Change Request" process
- As funds available, program final environmental documentation and design

QUESTIONS




Town of Bar Nunn
Projected Growth
Proposed Redi-Mix
Plant
Westwinds Rd.
Bar Nunn
Industrial Center
25
Vista Hills No. 2
Addition


Long-Range Planning
Regional Highway System
25
NATRONA COUNTY
INTERNATIONAL
AIRPORT
CITY OF CASPER

Bar Nunn/I-25 Interchange Feasibility Study

COMMENTS

April 23, 2013

Contact Name(s) Jared Serres

Property Address 4835 Bel Vista Bar Nunn 82601

Mailing Address Same

Daytime Phone 262-8119

Cell Phone

E-Mail javdp serres@hotmail.com

Comments:

I believe that another I-25 Interchange is a necessity. An Interchange @ west winds Road and current salt creek/I-25 bridge would make the most economical choice. Re Routing Heavy truck traffic from Mc Murray's gravel pit would ease the Wardwell Interchange. Morning commuters may still use the Wardwell Interchange, But on the evening commute more travelers will use the New Exit in my opinion. I see the traffic throughout the day as I work in the area. Sooner the better is my stance. Thank you for looking into it.

Sincerely

Jared Serres

Bar Nunn/I-25 Interchange Feasibility Study

COMMENTS

April 23, 2013

Contact Name(s) Shana Pilny

Property Address 2095 Siebke Dr. Bar Nunn

Mailing Address same

Daytime Phone -

Cell Phone -

E-Mail itzmesdp@gmail.com

Comments:

The Mcmurray proposal makes the most sense. if you put an interchange any more North, you are only solving a future traffic problem and not solving the current traffic problem. The residents of Dwight, Absarokee, etc. are not going to go North out of their way to backtrack and catch the freeway. Thats stupid. Invest in the Mcmurray interchange and reevaluate in 15 years. 2030 is a long ways off.

Bar Nunn/I-25 Interchange Feasibility Study

COMMENTS

April 23, 2013

Contact Name(s) Rob Jongsma / McMurry Ready Mix

Property Address 5684 Yellowstone Hwy

Mailing Address PO Box 2488 Casper WY 82602

Daytime Phone 307-473-9581

Cell Phone 307-267-2628

E-Mail rjongsma@mrmco.net

Comments:

McMurry Ready Mix would like to see a overpass and on and off Ramps at the West Winds Road Interchange. We believe it would make our haul route safer to and from our sand and gravel operation and also help the traveling public with time and congestivity problems.

Bar Nunn/I-25 Interchange Feasibility Study

Open House #2
April 23, 2013

SIGN-IN SHEET

	Name	Address/Organization
1	BILL JOHNSTON	BAR NUNN
2	JERRY L PETTY	BAR/NUNN- MAYOR
3	Paul & Karla Case	1922 Omaha Trail
4	Ray + Karen Kraft	5135 N Antelope
5	JOHN BLASE	2011 Sioux TRL - Councilman
6	Jayson Newsome	2055 Sunset Blvd.
7	Bobby & MONIQUE MARTIN	2022 OMAHA TRAIL
8	VANCE & VALERIE MOCKENSTURM	2110 SIOUX TR. BARNUNN 82601
9	AL DYWARSKI	CASPER KOA.
10	Rob Jongsma	McMurry Ready Mix
11	Becky Walsh	2817 Prairie Ly
12	Lori Kaufman	2122 Sioux Trail
13	Jeff Purdy	FHWA
14	Mike + Stephanie Tygard	1929 MANDAN TRAIL
15	John + Dixie Redscal	1917 Sioux Trail
16	MARK WILLIAMS	CASPER, WY WYDOT
15	Gail Welsch	2117 Omaha
18	JERRY WINGERTER	1427 HORNCHURCH "COUNTY"
19	JEREMY WATTS	2229 OMAHA TRAIL
20	Carol Pendley - Clerk/Treas	Bar Nunn Town Hall.
21	Kimi Kibble Zoning + Planning	2130 Prairie Lane
22	Patrick + Dawn Ford	5306 Ute Circle

Bar Nunn/I-25 Interchange Feasibility Study

Open House #2
April 23, 2013

SIGN-IN SHEET

	Name	Address/Organization
1	Sally Kerpchar	CSPR Area MPO
2	Forrest Chadwick	Nat. Co. Commissioner
3	Lyn & Kathy Kaper	4845 ~~Edgewell~~ Industrial
4	Joe Stephenson	joes@mdmco.net
5	Coby Rideout	Bar Nunn
6	Juan Gonzalez	Lakota Trail/Bar Nunn
7	Shand + Steve Pilny	2095 Sublice Dr.
8	James Walsh	2817 Prairie lane Bar Nunn.
9	Rene Rickabaugh	Bar Nunn School
10	Valerie Kienitz	2110 Sioux Tr.
11	Tony Laird (WYDOT)	5300 Bishop Blvd - Cheyenne
12	leahtodd	CSTribune
13	Jenay Ressler	1280 Icelly Dr.
14	Mark Ayen	WYDOT - Casp
15	Mike Lockhead	The Edgeworth Real Estate Firm
16	Dorothy Ray	3774 Salt Creek Hwy.
15	Wardell / Tekell	2430 Palomino
18	Jared Serres	4835 Bel Vista / Wardwell Water operator
19	Mike Haigler	538 SW Wyo Blvd / Natrona Co Rep
20	Patrick & Dawn Ford	5306 Ute Cr. Bar Nunn 259-8181
21		
22		

Project No. HPR3212

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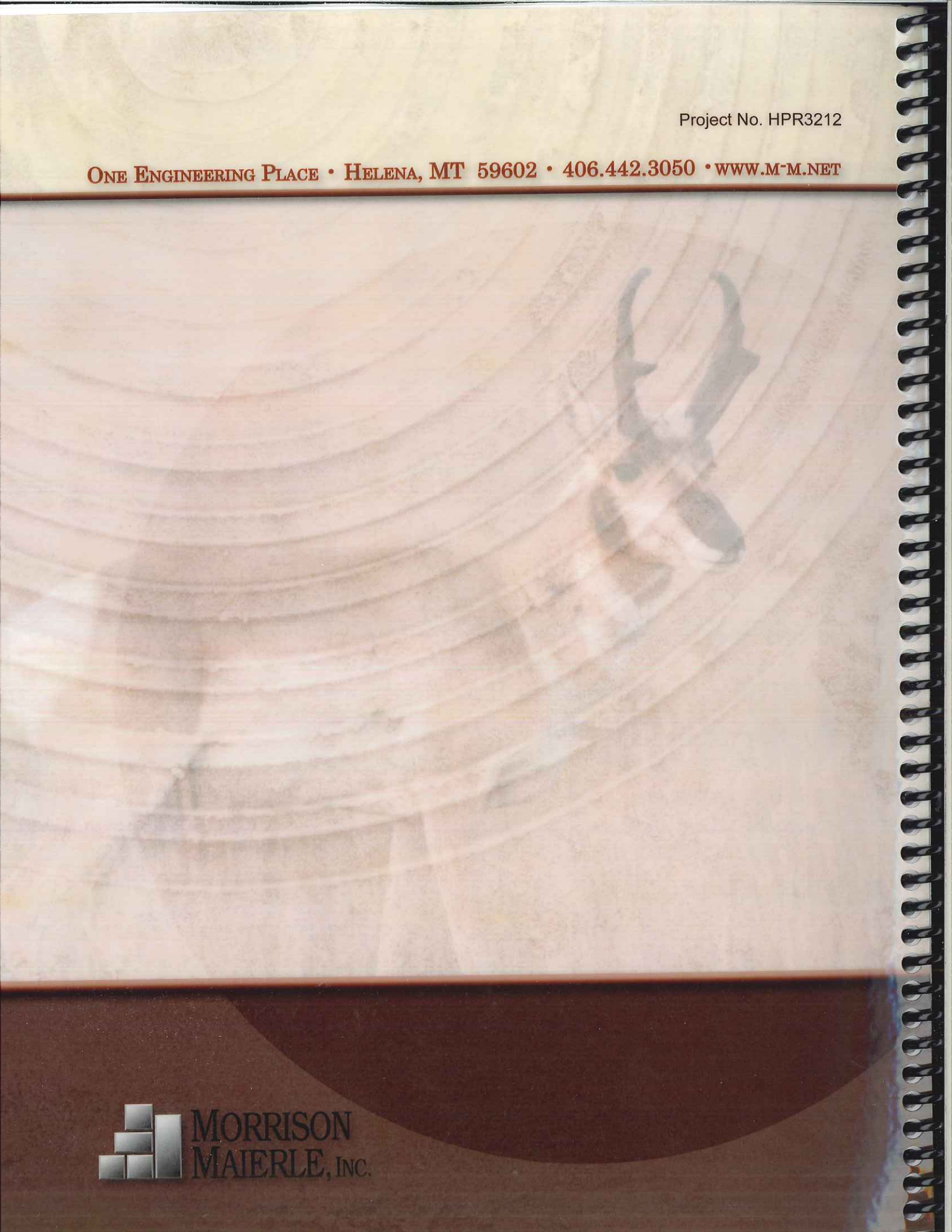

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