

**Project 1120-11-03
WIS 26 – Breezewood Lane
US 41
Winnebago County
Traffic Management Plan**



**June 2007
Updated July 2011 (rev #1)**

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List of Attachments

- Attachment A – US 41 Traffic Study – Winnebago County Base Year 2005 Traffic Volume Network
- Attachment B – US 41 Traffic Study – Winnebago County Year 2035 Traffic Operations Analysis
- Attachment C – US 45 Detour Plan
- Attachment D – WIS 21 Detour Plan
- Attachment E– TRADAS ADT Volumes for July 2006
- Attachment F – WIS 76 Detour Plan
- Attachment G – CTH K Overpass Detour Plan
- Attachment H – Witzel Avenue Overpass Detour Plan
- Attachment I – US 41 SB Exit Ramp to WIS 21 Truck Detour Plan
- Attachment J – US 41 Winnebago County Construction Schedule
- Attachment K – Detail for Construction Access to USH 41

Executive Summary

Enclosed is the Traffic Management Plan (TMP) for the US 41 Winnebago County expansion project. This project is a Type 4 action as determined by Departments *DRAFT* guidelines for *Work Zone Transportation Management Plan* established in October 2006 and as currently published in the Facilities Development Manual (FDM) (updated August 2008). This TMP document lays out the project procedures for handling and managing traffic during the construction phase. It addresses overall work zone impacts, selected work zone management strategies, and incident management techniques expected to be implemented during various construction operations.

Because these type plans are considered “living “documents, a final TMP plan will not be complete until the construction plans approach finalization and then there are reporting activities as to the effectiveness of the TMP plan.

The original TMP was developed in June 2007. This July 2011 revision (rev #1) serves as an update to the TMP based on the completed and ongoing project work in Winnebago County.

Project Description

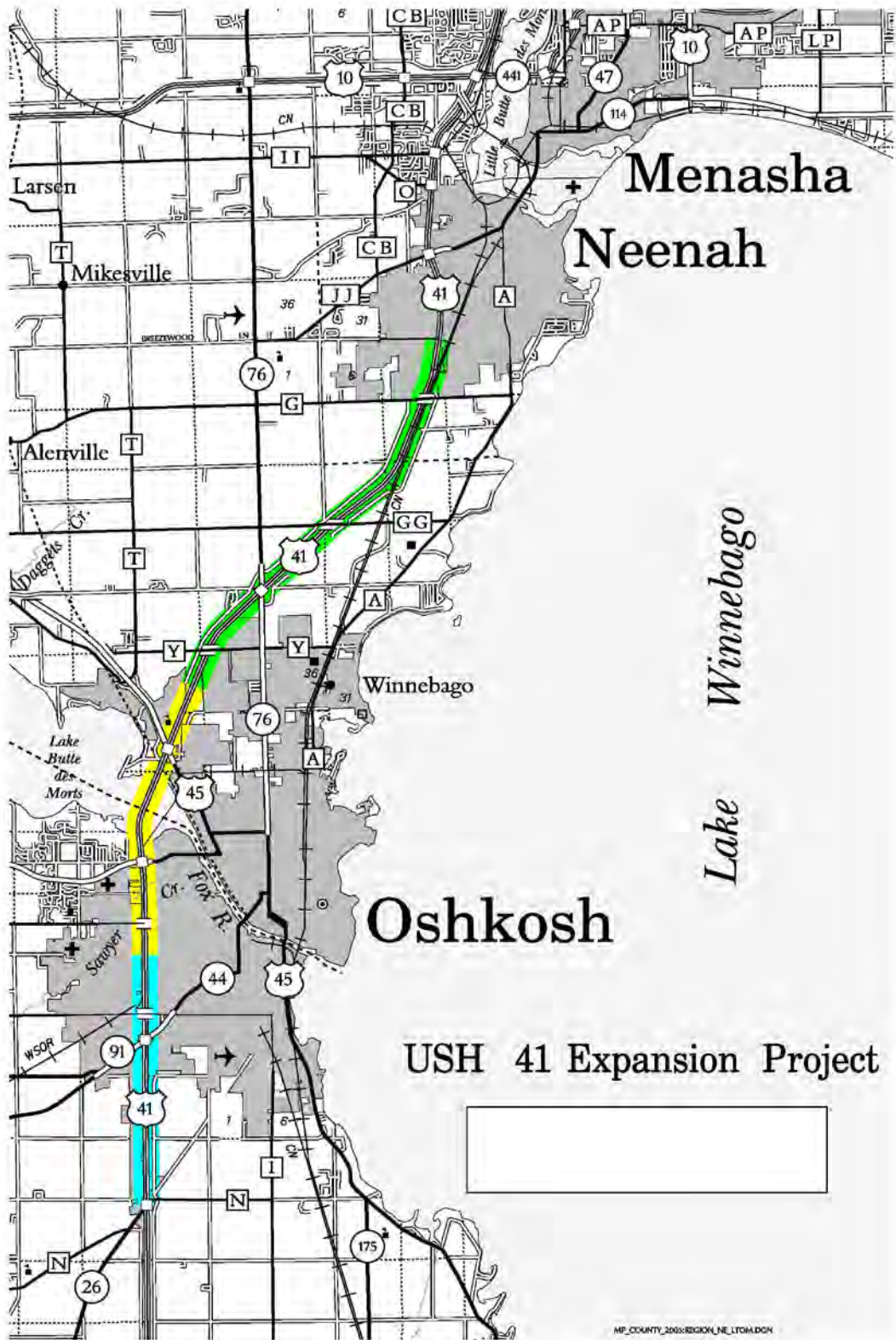
The US 41 project is a 17-mile project that plans to reconstruct US 41 from four to six lanes in Winnebago County (see map on page 6). The project extends ½ mile south of the WIS 26 interchange and extends ½ mile north of the Breezewood Lane interchange. The project includes reconstruction of the 9th Avenue, WIS 21, and US 45 interchanges. Moderate interchange improvements will be completed at WIS 44 and WIS 76 interchanges and minor improvements at WIS 26 interchange. Grade separation structures at 20th Avenue and Witzel Avenue will be replaced to meet vertical clearance requirements. New grade separation structures will be added at Lake Butte des Morts Drive and Fountain/Snell roads to provide local road connections near the US 41/45 interchange. The grade separation structures at County Y and CTH GG will also be replaced and the existing overpass structure at County G will be rehabilitated after the US 41 mainline improvements are completed.

The project is currently scheduled in the majors program to be constructed from 2009 to 2016. The project is funded through the Majors program and the schedule is subject to change based on project estimates and available funding. A current Winnebago County schedule is shown in **Attachment J**. This schedule best takes advantage of funding resources while accommodating alternating interchange closure along US 41. Some of the early projects (2009) were accelerated from the original planned year of 2010 to take advantage of ARRA funding.

The goal of the project is to expand US 41 from 4 to 6 lanes and upgrade the interchanges to handle the projected traffic volumes. Interchanges will be designed with ramp metering calculated into the ramp lengths so meters can be added in the future. The reconstruction of US 41 will provide a much safer facility with better merge/diverge design at the interchanges to handle the future projected traffic.

The proposed construction staging is being determined during the design process. One of the constraints placed on the project is that US 41 remains open to 2 lanes of traffic in each direction during the entire project duration. The reason this constraint has been placed on the project is the hourly volumes for US 41 exceed 1500 vehicles per lane per hour for the entire weekday from 6:00 am to 7:00 pm. Traffic does not reduce down during the daytime that a lane closure can be implemented without causing traffic backups. See **Attachment E** for traffic volumes. Northeast Region has experienced that by witnessing some of the county maintenance activities and the backup they cause. Nighttime lane closures will be allowed at times for structure demolition, girder placement, and traffic switches. This constraint is necessary to handle the volume of traffic using US 41. We plan to construct the project using various stages to maintain traffic on US 41. US 41 is the only major arterial that crosses the Lake Butte des Morts/Fox River system; alternative routes to handle the large traffic volumes are not present. We propose to close various interchanges and grade separation bridges during construction so we can go in, do the work, do it quickly, get it done, and stay out for a long time in the future. We believe this approach gets the construction done quicker and

a better quality product than trying to maintain traffic on cross streets and interchanges extending the work influence for longer periods of time.



Existing and Future Conditions

The Department developed the existing traffic data on US 41 in 2000 and updated it in 2005. The Department spent time collecting data on the mainline, ramps, and side roads so it could be used to study the existing traffic conditions and accurately project the future traffic of the facility. Attached is the technical memo entitled *US 41 Traffic Study – Winnebago County Base Year 2005 Traffic Volume Network* and is attached in **Attachment A**. The 2005 Annual Average Daily Traffic (AADT) Traffic Volumes on US 41 range from 44,800 on the south end of the project to the highest volume of 68,400 between WIS 21 and US 45. US 41 is used as a tourist route for access to northern Wisconsin so Friday pm and Sunday pm peaks are typical throughout the corridor. During peak travel times Friday night, US 41 northbound travelers experience backups from WIS 44 to US 45. The close interchange spacing in this area combined with the large Friday night peak traffic causes US 41 northbound traffic to be stopped or slowed down to less than 25 mph at peak times. Sunday afternoon return trips also causes backup on US 45 near US 41 as well.

Forecasted traffic projections were completed for years 2015 and 2035 in the technical memo entitled *US 41 Traffic Study – Winnebago County Year 2035 Traffic Operations Analysis* and are attached in **Attachment B**. The 2035 Traffic Volumes range from 80,000 to 111,000 within the project limits of WIS 26 to Breezewood Lane with the highest volumes between WIS 21 and US 45. Truck percentages in the corridor are included in **Attachment B** and average around 14%.

In 2000, the Department completed a crash study of the entire corridor. Five years (1994 – 1998) of crash records were reviewed for US 41 between WIS 26 and Breezewood Lane. Several segments have higher crash rates than statewide average but the northbound US 41 at the WIS 21 interchange and southbound US 41 at the US 45 interchange have significantly higher crash rates. Crash rates may be reduced during construction in the WIS 21 Interchange and US 45 Interchange because the construction staging plans will have those interchanges closed during construction and thus reducing the conflict.

Community and business concerns include addressing the congestion and safety of the corridor. Concerns were high regarding the WIS 21 area along with the Lake Butte des Morts crossing. The Lake Butte des Morts crossing does experience snow drifting issues while the lake is frozen and during low wind speeds from the west or northwest. Maintenance crews have to do continuous plowing and salting operations during those periods when drifting occurs.

The WIS 21 corridor has large commercial development along with high residential development to the west of US 41 that experiences traffic congestion during the am and pm peak. The community and business leaders asked the Department to address the congestion issues with the design. WisDOT accelerated the construction of this interchange to one construction season to minimize closures. Construction sequencing is discussed later in this report.

Work Zone Assessment Impacts

The designers have given considerable thought to the constraint of fitting a design that will allow two lanes in each direction be maintained during construction. This can be done throughout most of the corridor without much issue. Temporary bypass lanes will need to be constructed at the WIS 21 and US 45 interchanges to allow the work on US 41 mainline to be completed. Temporary bypass lanes along the east side of US 41 were chosen to allow the contractor the most room in which to work and the access materials. Quarries and borrow pits are available to the west of these interchanges.

Lane closures will be allowed at night for material deliveries or structure demolition. Because the existing traffic volumes are large and do not go below 1500 vehicle per hour per lane during daytime, only night time/off peak closures will be allowed. See **Attachment E**.

The US 45, WIS 21, and WIS 76 interchanges will be closed during construction. Proposed detour routes have been established and are attached in **Attachments C, D and F**. To minimize impacts to the local traffic during the interchange closures, improvements to the local road connections are scheduled prior to the interchange closures including the addition of turn lanes on STH 44, STH 21, and STH 114. The work at the Witzel Avenue Overpass, Lake Butte des Morts Overpass, Fountain/Snell Overpass, Washburn Street, and 9th Avenue Interchange will be done in advance so that when the interchanges are closed, the local traffic has a system that can handle the added capacity. In coordination with the public, the Department committed that no interchange would be fully closed longer than one construction season.

Closures along US 41 will be allowed during off-peak periods for structure demolition and girder placements on select structures along the US 41 Corridor. These closures will be take place in areas where traffic will be able to be routed off and back onto US 41 via interchange ramps adjacent to the structure in order to bypass the work zone. In areas where US 41 traffic is not able to bypass the work zone by using adjacent exit and entrance ramps, a 20-minute rolling closure will be used during off-peak periods or a detour route will be established. The detour routes for the CTH K overpass and Witzel Avenue overpass where traffic cannot be routed off and back on via interchange ramps are shown in **Attachments G and H**. In addition, during a brief period trucks will not be able to maneuver through the southbound US 41 exit ramp to WIS 21 due to construction activities on the ramp. A truck detour shown in **Attachment I** was used to bypass the exit ramp during the widening work.

Pedestrian/bicyclists will be impacted during construction when we close an interchange or overpass. Pedestrians/bicyclists will have to plan alternate routes around the construction.

The NE Region has currently scheduled other WisDOT projects to avoid conflicts while the US 41 project is under construction. Currently, resurfacing projects on WIS 76 are programmed in advanced of US 41 work so that WIS 76 can be used as a relief route. No

work is anticipated to be needed on the detour routes for US 45, WIS 21, and WIS 76 interchange closures. While side roads are under construction, various strategies will be used to get the work completed and maintain traffic on US 41. Strategies being considered are to allow short duration off peak lane closures, long-term shoulder closures, redirecting traffic onto ramps for off peak periods, intermediate completion dates for various aspects of work with potential/disincentive clauses.

NE Region will coordinate schedule with local community leaders, emergency services, schools, and local businesses so they can plan early the construction and necessary changes that impact them.

Selected Work Zone Impact Management Strategies

Numerous work zone traffic control strategies and devices will be considered in the upcoming projects on US 41. Some of the devices presently being considered are changeable message signs, fixed message signs, and variable speed message signs. Several strategies being considered are enhanced enforcement contracts, crash investigation sites, and temporary emergency pullouts.

Early Improvements to Accommodate Future Interchange and Alternating Interchange Closures

A construction staging and packaging schedule was developed to best minimize impact to the traffic along the Winnebago County section of US 41, minimize use of detours, and streamline construction operations.

One strategy was to alternate interchange closures and complete improvements to various interchanges early to accommodate alternating major interchange closures. From 9th Avenue up to Breezewood Lane interchange closure requirements were set as follows:

- 9th Avenue closure – WIS 44 and WIS 21 open
- WIS 21 closure – 9th Ave, Witzel Ave, and US 45 open
- US 45 closure – WIS 21 and WIS 76 open
- WIS 76 closure – US 45 and Breezewood Lane open
- Breezewood Lane closure – WIS 76 open

From south to north, various interchange and local road improvements were also planned to accommodate alternating interchange closures:

- US 41 SB Exit Ramp to WIS 21 (2009) – Project 1120-11-74 – Construct SB ramp widening to WIS 21 in 2009 so improvements are in place during the Witzel Avenue Overpass and 9th Avenue Interchange closures in (2010) and (2011), respectfully.
- WIS 26 (2009) - Project 1120-10-76 – Construct crash investigation sites so they are in place during 9th Avenue interchange closure (2011) and US 41 mainline reconstruction.
- WIS 44 (2009) – Project 1120-10-75 – Construct crash investigation site and turn lanes so improvements are in place during the 9th Avenue interchange closure (2011) and during US 41 mainline reconstruction.

- WIS 114 (2009) – Project 1120-09-73 – Construct turn lanes and signal improvements at WIS 114 to accommodate traffic during closure of the Breezewood Lane interchange (2011).
- WIS 21 (2010) – Project 1120-10-73 – Lengthen existing left turn lane at WIS 21 onto Oakwood Road so improvements are in place during the 9th Avenue interchange closure (2011) and during US 41 mainline reconstruction.
- WIS 76 (2010) – Project 1120-09-75 – Construct ultimate ramp improvements to allow WIS 76 to remain open during closure of the US 45 interchange (2011).

A second strategy was to develop separate TMP contracts to accelerate portions of mainline construction:

- US 41 North (Snell Road to Breezewood Lane) – Project 1120-09-83 – construct widening and bridges along northbound US 41 mainline to accommodate staging and scheduling of the ultimate mainline improvements under Project 1120-09-71.

A third staging strategy was to complete local road improvements prior to adjacent interchange reconstruction and closures to accommodate local traffic circulation around the interchanges and to also allow for acceleration of interchange reconstruction schedules:

- CTH K Overpass (2010) – Project 1120-10-71 – reconstruct overpass to allow for local traffic circulation during 9th Avenue interchange closure (2011).
- Witzel Avenue Overpass (2010) – Project 1120-11-71 – reconstruct overpass and associated local road improvements to allow for local traffic circulation during 9th Avenue (2011) and WIS 21 interchange closures (2012).
- Snell Road Overpass (2010) – Project 1120-11-72 - construct new overpass north of proposed US 45 system interchange to allow for local traffic circulation during the US 45 interchange closure (2011).
- US 41 SB Widening across Lake Butte des Morts and Lake Butte des Morts Drive (2010) – Project 1120-11-74 and US 45/Fernau Avenue/Stillman Drive – construct overpass and local roads in the area of the US 45 interchange to allow for local circulation during closure of the US 45 interchange (2011). Project also include advanced lake fill within Lake Butte Des Morts and advance fill areas and construction of bridges in off-alignment areas within the US 45 interchange. Advance placement of lake fill and construction in off-alignment areas in the US 45 interchange will allow for construction of 1120-11-83 (2011-2012) to be accelerated and will minimize closure time of the US 45 interchange.
- Green Valley Road and Dixie Road (2010) – Project 1120-09-79 – Overlay local roads to accommodate heavy truck traffic from Neenah business areas during closure of the Breezewood Lane interchange (2011).

Innovative Construction Contracting

Unique contracting will be considered for US 41 that can speed up contracting and lessen the impacts to the travelling public. For example, A+B bidding and lane rental contracts will be considered but ultimately were not implemented on the corridor.

The methods used in the US 41 corridor to expedite contracts are Incentive/Disincentive clauses and interim completion dates with liquidated damages. These two methods are used in order to complete projects in a timely manner and to develop staging scenarios which closely tie work between project LETs while accommodating two lanes of traffic on US 41 during peak travel periods.

Almost all projects in the US 41 corridor have interim liquidated damages associated with interim completion dates to meet schedule, critical opening and closure dates, and other schedule requirements which allow the corridor construction to proceed in a timely and orderly manner. The liquidated damages used on the Winnebago County projects ranges from \$150 - \$5,000 and the amount is project dependent. Approval and coordination of the liquidated damage amounts was review and approved by Central Office prior to each PS&E.

Off-peak closures and night work will be implemented to minimize user delay. Interim liquidated damages will be implemented to ensure the contractor re-opens lanes to traffic by the time required. Off-peak closure periods and interim liquidated damages for failing to open lanes to traffic vary based upon project location. The interim liquidated damages for failing to open a lane traffic are shown below. The closure periods are discussed later in this report.

- Local road projects and projects over/under US 41 constructed in 2009/2010 used interim liquidated damages of \$2000 for the initial penalty and an additional \$2000 for each hour or portion thereof after the initial failure to open the lane.
- Projects on mainline US 41 constructed in 2010 and later used interim liquidated damages of \$2000 for the initial penalty and an additional \$2000 for each 15-minute period or portion thereof after the initial failure to open the lane.
- Project 1120-11-73 - US 45, Fernau Avenue, Snell Road, & Stillman Drive used liquidated damages of \$1000 for the initial penalty and an additional \$1000 per hour or portion thereof after the initial failure to open the lane on US 45.
- Project 1120-10-75 - WIS 26 – WIS 21 (WIS 44 Left Turn Lanes) used liquidated damages of \$150 per hour per ramp (US 41 Ramps to WIS 44) for failing to open the ramp to traffic.

Projects (listed from south to north) within the US 41 corridor which used Incentive/Disincentive clauses in addition to the liquidated damages are described below:

- US 41; WIS 26 – WIS 44 – Project 1120-10-80 – Interim completion on US 41 mainline to allow traffic switches to occur with the adjacent Project 1120-10-72 and 1120-10-73.
- US 41; WIS 44 – Witzel Avenue – Project 1120-10-72 and 9th Avenue Interchange – Project 1120-10-73 – Interim completion on US 41 mainline to allow traffic switches to occur with the adjacent Project 1120-10-80.
- Witzel Avenue Interchange. – Project 1120-11-71 – complete work prior to Projects 1120-10-72 and 1120-10-73 to eliminate or minimize overlapping work zones.

- US 41; WIS 21 Interchange & Lake Butte des Morts Crossing – Project 1120-11-75 – interim completion on US 41 mainline to allow traffic switches to occur with the adjacent Project 1120-11-83.
- US 41; US 45 Interchange – Project 1120-11-83 – interim completion on US 41 mainline to allow traffic switches to occur with the adjacent Project 1120-11-75 and Project 1120-09-71.
- WIS 76 interchange - Project 1120-09-75 –complete work prior to Project 1120-09-83 to eliminate overlapping work zones.
- US 41 North TMP/Breezewood Lane interchange – Project 1120-09-83 – interim completion on US 41 mainline widening to allow US 41 mainline ultimate reconstruction work to begin under Project 1120-09-71.
- US 41; US 45 – Breezewood Lane - Project 1120-09-71 – Interim completion on US 41 mainline to allow traffic switches to occur with the adjacent Project 1120-11-83.

Traffic control devices, positive protection devices, off-peak lane closure, night work, and ramp closure

The numerous strategies listed above will be considered in final design. The strategies to be used in construction depend on the type of work, duration of the work, and the impacts to the travelling public. Traffic control devices will be implemented in accordance with MUTCD and WisDOT standards throughout the project.

Off-peak closure periods have been approved by the NER Traffic Section and will be implemented on the specified US 41 Winnebago County projects as shown in **Table 1**.

Table 1: US 41 Corridor Off-Peak Closure Periods		
Project No.	Project Name	Off-Peak Closure Periods
*1120-11-72	Fountain Avenue / Snell Road Overpass	8:00 pm – 5:00 am Sunday night – Friday morning
1120-11-73	US 45, Fernau Ave., Snell Rd, & Stillman Drive	9:00 am – 2:00 pm & 8:00 pm – 5:00 am (US 45)
*1120-11-71	Witzel Ave. Overpass, Washburn St., Koeller St., & Rath Ln.	9:00 pm – 5:00 am Sunday night – Friday morning
*1120-11-74	Lake Butte des Morts Drive Overpass & US 41 Southbound Grading Across Lake Butte des Morts	8:00 pm – 5:00 am Sunday night – Friday morning
*1120-10-71	County K Overpass	9:00 pm – 5:00 am Sunday night – Friday morning
1120-09-75	US 45 – Breezewood Lane (WIS 76 Ramps)	7:00 pm – 6:00 am Sunday night – Friday morning
*1120-09-83	US 45 – Breezewood Lane US 41 Mainline Widening and Breezewood	7:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am

Table 1: US 41 Corridor Off-Peak Closure Periods		
Project No.	Project Name	Off-Peak Closure Periods
	Interchange	Saturday night – Sunday morning
*1120-11-83	WIS 21 – US 45	9:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
1120-10-72	WIS 26 – WIS 21 (9 th Avenue Interchange)	7:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
1120-10-73	WIS 26 – WIS 21 (WIS 44 – Witzel Avenue)	7:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
1120-10-80	WIS 26 – WIS 44	7:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
1120-09-71	US 45 – Breezewood Lane	7:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
*1120-11-75	WIS 21 Interchange & Lake Butte des Morts Crossing	9:00 pm – 5:00 am Sunday night – Friday morning; 10:00 pm – 7:00 am Friday night – Saturday morning and 6:00 pm – 8:00 am Saturday night – Sunday morning
1120-10-75	WIS 26 – WIS 21	One Closure 6:00 pm – 6:00 am One Closure 9:00 am – 3:00 pm

*20-minute rolling closures will be used in off-peak periods on US 41 projects for bridge removals and girder placement for locations where traffic cannot be routed off and back on via interchange ramps.

Failure to open lanes to traffic after the allowed closure periods will result in assessment of interim liquidated damages. These are described in the ***Innovative Construction Contracting*** section of this report.

Traffic Control Meetings and Scheduling

All contracts will require the contractor to submit a detailed proposed 2-week look-ahead traffic closure schedule to the engineer. This will allow active management of closure dates, closure durations, work causing the closure and detours to be used, emergency contacts, and other traffic management information. Traffic management meetings will also be scheduled as required with local agencies, project stakeholders, owner managers, owner engineers, contractors, document control and construction engineering personnel

together to discuss traffic staging, closures and general impacts. Upon obtaining feedback from the meeting changes will be made, as required, to the traffic control plan.

The US 41 corridor team has designated a corridor Traffic Engineer, Brian Chlopek, to oversee all traffic control and traffic management coordination on all US 41 contracts.

Community Involvement

Work zone impacts have and will be addressed through community involvement prior to the project. Impacts and schedules will need to be communicated with the local officials and business leaders prior to the project so that they can plan accordingly. Businesses directly affected by construction will be allowed to provide temporary business signing during construction to help direct customers to their place of business. The temporary signing will follow the NE Region policy that is already in place.

Incident Management

Tow/freeway service patrol

Tow and freeway service patrols will be considered along US 41 corridor during construction activities. As part of a traffic mitigation program called Freeway Service Team (FST), the department has contracted with a private towing vendor to patrol parts of US 41 during peak hours, holidays and special events from 2011 through July 2013. To improve safety and minimize delay, contact 911 immediately for breakdowns or incidents in or near the construction work zone. FST will be dispatched directly to the scene to aid the vehicles that need to be removed.

Deployment of 511

511 has been deployed statewide and has been utilized to inform motorists on construction activities and traffic conditions along the US 41 corridor.

State Traffic Operations Center - STOC

The STOC will be used as the primary contact for any infrastructure repair needs. The STOC will as be utilized to either monitor or operate field devices deployed as part of the major projects.

Law Enforcement

The state patrol and other law enforcement agencies may be used for extra-ordinary enforcement purposes. The level of effort will need to be determined as the design of the project increases. Coordination will be completed with state patrol on a project by project basis.

Coordinate with Media

Coordination with the media will be critical to a successful project. Information such as lane closures times and locations, detour route changes and other planned events that affect traffic will be shared with the media in various methods. The current lane closure form will be utilized as ramp, lane or shoulder closures are needed. A US 41 corridor

website (<http://www.us41wisconsin.gov/>) and social media such as Facebook and Twitter are used to provide traffic and project updates to the media and public.

Local Detour Routes

No local detour routes are planned. While work is taking place on the local routes, local municipalities may incorporate their own detours for those affected routes.

Incident/Crisis Communication Plan

An Incident/Crisis Communication Plan for the US 41 corridor in the Northeast Region has been developed to ensure accurate, consistent and timely communications; eliminate or minimize confusion; and to maintain credible relations with public officials, emergency response providers, the media, the public and all mutually identified stakeholders in the event of an incident or Emergency. The Incident/Crisis Communication Plan was last updated in June 2011 and is currently being maintained by the US 41 Traffic Engineer.

In addition, the Winnebago County Freeway Incident Management team meets once per month to discuss traffic incident response procedures. WisDOT has held crisis management workshops with local emergency response teams. A workshop was held in January 2010 and 2011. During the workshops, the US 41 staff and local response teams reviewed the US 41 corridor by segment in each stage to determine the approach to be taken during an incident. Future workshops will be scheduled as the work zone changes.

Temporary Pullouts for Disabled Vehicles

Temporary pullouts for disabled vehicles have been constructed in the following locations:

- Two temporary pullouts constructed between WIS 21 and US 45 under Project 1120-11-75
- One temporary pullout constructed between WIS 21 and US 45 under Project 1120-11-74
- One temporary pullout constructed between US 45 and WIS 76 under Project 1120-11-83,
- Two temporary pullouts constructed between WIS 76 and Breezewood Lane under Project 1120-09-83 will accommodate disabled vehicles during mainline reconstruction under Project 1120-09-71.

Crash investigation sites will also be constructed on the off-ramps to many of the interchanges.

Temporary Crash Investigation Sites

If any temporary crash investigation sites are constructed they are expected to be located where permanent ones will be placed as part of the projects.

Crash investigation sites constructed early as part of Project 1120-10-76 at WIS 26, Project 1120-10-75 at WIS 44, and as part of the Project 1120-09-75, WIS 76 will allow them to be utilized during construction. Other crash investigation sites will be

constructed as part of the ultimate configuration of the 9th Avenue, WIS 21, US 45, and Breezewood Lane interchanges.

Special Events

Certain special events affect US 41 that need to be considered and addressed through the project final design and special provisions. Green Bay Packer home games, Experimental Aircraft Association (EAA) Fly-in, Rock Fest, and Country USA country music festival are events that need to be addressed in final plans. A corridor-wide specification has been developed to incorporate into all Winnebago County contracts to notify the contractor of the working restrictions for these events. Coordination with law enforcement will occur prior to and during construction periods which overlap with these special events.

Work Zone Safety Management Strategies

Speed Limit Reduction

Regulatory speed limit will be reduced to 55 mph when traffic control requires counter-directional traffic. The regulatory speed limits will also be reduced to 55 mph when workers are present and working adjacent to the through lane of traffic. At all other times the regulatory speed limit will be 65mph. Any hazards throughout the project should be identified with a warning sign with an appropriate advisory speed plaque.

Law Enforcement Mitigation Contract

The state patrol is being used for extra-ordinary enforcement purposes. The state patrol is typically on site to provide additional enforcement for rolling roadblocks, during girder placement, when implementing lane closures and setting barrier wall, and during traffic switches.

Temporary Traffic Signals

Temporary Traffic Signals were considered as a possible measure during design. No temporary signals were required on the corridor.

Crash Cushions, Temporary Concrete Barrier, Warning Lights, Traffic Control Provisions, and Traffic Control Devices

These items will be considered for use in the appropriate place and installation per MUTCD and WisDOT standards. Corridor specifications have been implemented for storing materials and equipment outside of the clear zone areas and for protecting bridge piers or hazards within the clear zone to ensure roadside safety during construction.

Special details and special provisions will be developed based on each individual project location to allow construction traffic to safely exit and enter live traffic. Construction of temporary access may be required in various locations. Access into the work zones from US 41 during peak periods is subject to approval by the engineer and has been accomplished using acceleration entrance lanes (**Attachment K**). Exiting from the work zone onto US 41 will only be allowed using a lane closure and construction traffic must run out of the closed lane. Once construction traffic is within a lane closure, construction

traffic must come to within 10 mph of posted speed before re-entering the live US 41 lane.

Project Onsite Safety Training and Construction Safety Inspector

An Owner Controlled Insurance Plan (OCIP) with a major safety component has been implemented on US 41. All on-site staff, contractors, subcontractors working on the project participate in mandatory safety training and monitoring.

Street Sweeping

Street sweeping with an appropriate level of hours will be used on contracts to keep pavement clear of debris and dirt and maintain roadway safety.

Boat Traffic Control

Traffic control details and appropriate warning devices will be used during the Lake Butte Des Morts lake fill and bridge replacement projects in order to safely maintain boat navigation on Lake Buttes Des Morts. Coordination will occur as required with Wisconsin DNR.

Temporary In-pavement Reflectors and Glare Screens

In-pavement reflectors and temporary glare screens on temporary concrete barrier will be used during stage construction in bypass and crossover areas to aid in keeping traffic in their designated lanes and maintain safety due to headlight glare.

Snowplowing

A corridor wide specification will be developed and placed in contracts to let the contractor know who will be responsible to perform snow removal operations for freeway and local roads that are open to through traffic during construction.

Truck Mounted Attenuators

Truck Mounted Attenuator (TMA) and operator, if required, and the appropriate number of hours will be used on US 41 mainline projects for use during operations which are directly next to live lanes of traffic which have limited mobility, limited ingress/regress, confined space, or as directed by the engineer.

Community Involvement

In March 2004, WisDOT met with City of Oshkosh local officials to investigate if any local arterials needed modifications or upgrades prior to the work on US 41. The local arterials that will be used during US 41 construction are already 4 lane arterials. DOT asked if turn lanes or signal timing adjustments needed to be done. The City did not think any turn lanes adjustments are needed and signal timings could be adjusted at time of construction if necessary.

WisDOT continued to meet with the local officials throughout design through the use of local official meetings and public information meetings approximately every six months. During construction progress meetings are held at the local field office and local officials participate in meetings on an as-needed basis.

Traffic Management Communication Plan

This plan actually starts during the public outreach part of the project, where we meet with local officials, businesses and citizens. We communicate about the project and receive feedback regarding issues, needs and concerns. This information is used in developing the traffic management communication plan.

Communication is targeted locally on commuters, area businesses and safety agencies. Regional and interstate communication focuses on tourists, trucking firms, and businesses.

There are a number of goals to be achieved with this communication. They include communicating the necessity for the work, the benefits once the work is completed, the project schedule, impacts and access plan and how to deal or cope with it.

Project updates and status will be issued frequently – hourly if necessary. Alternate routes will be suggested as appropriate. Safety messages will also be provided, including urging the public to slow down and be patient.

This information will be communicated to a number of venues. Included will be brochures and posters distributed throughout the corridor and both up and down state. Print and electronic media will be brought in as partners in the outreach. WisDOT will also provide updated information through its web site, e-mail, conventional mail, public service announcements, paid advertising (if needed) and public meetings.

The USH 41 corridor will include construction of roundabouts. Throughout design and construction, WisDOT has and will continue to complete outreach with a focus on educating and training the public about navigating through roundabouts. Tools used included rendering of roundabouts, computer simulations, distribution of educational materials, and holding workshops at local service organizations approximately two times per year. The outreach focuses on all modes of transportation including vehicular traffic, truck traffic, pedestrians, and bicyclists.

Motorist Information Strategies (MIS) (traveler)

STOC

The STOC will be used as the primary contact for any infrastructure repair needs. The STOC will be utilized to either monitor or operate field devices, which will be used in part to provide traveler information.

Portable Changeable Message Signs - PCMS

PCMS will be utilized throughout the project. The use will be for incident management, notification of lane, shoulder, and/or ramp closures, for truck traffic entering/exiting the work zone, and other traveler information necessary. A corridor-wide specification has

been implemented to obtain USH 41 Traffic Engineer approval prior to implementing the PCM.

Electronic Message Signs/ Work Zone Traveler Warning & Information Systems (Intelligent Transportation System)

Permanent message boards are planned to be installed as part of the project. These signs could be utilized once installed if construction is ongoing downstream. A Portable Intelligent Transportation System (ITS) was implemented as part of the Winnebago County work in 2010 which makes early use of the corridor ITS during construction. A corridor wide specification is placed in each contract to notify the contractors of the portable ITS on the mainline US 41 projects. Message boards are in place on eastbound STH 26 for traffic destined for northbound USH 41 and on northbound USH 41 south of STH 26. A message board will also be installed for southbound USH 41 just north of STH 76. Temporary cameras (CCTV) have also been installed throughout the corridor to aid with traffic management during construction.

Highway Advisory Radio-HAR

HAR is not expected to be used as part of this project. The need for HAR has been diminished with the development of the 511 traveler information system.

Availability of Detour Routes

There are no readily available detour routes for US 41 along this segment of highway. An emergency detour route can be used, but it will not handle an extended period of high volumes of traffic directed to it.

Availability of Alternate Routes

Two alternate routes around the Lake Butte des Morts are signed. Other alternate routes are identified in the Green Bay/Fox Cities/Oshkosh Alternate Route Plan Guide, but are not signed. County highway departments have equipment available to sign an alternate route due to an incident on the freeway.

Alternate routes will not be signed through the City of Oshkosh but some traffic may choose to find alternate routes on their own in order to avoid the US 41 work zones. WisDOT completed a recent analysis of traffic that is self-diverting from USH 41 during the 2011 construction season. South of the Lake Butte Des Morts Causeway there is about a 38% drop in ADT. North of the Lake Butte Des Morts Causeway there is no diversion occurring with a slight increase in ADT. The City of Oshkosh has not reported any issues on the local or state highway system through the city due to the diversion. See table below:

SNELL ROAD (NORTH OF US 45)					
DATE	NB ADT	SB ADT	TOTAL ADT	NOTES	PERCENT CHANGE IN ADT DURING CONSTRUCTION
3/4/09	24625	24766	49391		
3/2/11	24402	24872	49274	Prior to US 45 closure	0%
5/6/09	26936	26691	53627		
5/11/2011	30460	27147	57607	After US 45 closure	-7%
6/3/09	27190	26832	54022		
6/1/11	28574	27906	56480	After US 45 closure	-5%
9th AVENUE / STH 21					
DATE	NB ADT	SB ADT	TOTAL ADT		
2/18/2009	23096	23067	46164	South of WIS 21	
2/16/2011	23305	21554	44859	North of 9th Ave	3%
5/27/2009	29521	30219	59740	South of WIS 21	
5/25/2011	17056	20177	37233	North of 9th Ave	38%
6/3/09	30506	30536	61042	South of WIS 21	
6/1/11	16677	21132	37809	North of 9th Ave	38%

Lane Closure Planning System

The Department has developed a Lane Closure Planning System on a statewide basis. The Lane Closure Planning System is utilized to track and inform motorists of construction operations so that they can plan ahead to anticipate or avoid delays.

Bicycle & Pedestrian Information

Bicycle and pedestrian information will be disseminated through the local officials and concerned groups as part of the regions public outreach for the projects. Alternate routes or closure of bicycle and pedestrian routes will occur on project by project basis. The Wiouwash Trail through the US 45 interchange will be maintained during construction and will be routed on the Lake Buttes Des Morts Drive overpass to cross US 41.

TMP Monitoring

Traffic Management Plan monitoring will be completed by the US 41 corridor Traffic Engineer, Brian Chlopek, who will oversee all traffic control and traffic management coordination on all US 41 contracts.

This July 2011 update serves as an update to the US 41 corridor TMP in Winnebago County. An Evaluation Report will be developed upon completion of construction to document lessons learned and provide recommendations on how to improve the WisDOT TMP process and/or modify the guidelines. The reports will address the following:

- A statement reflecting the usefulness of the TMP
- Updates necessary to correct oversights in the TMP
- Modifications made to the original plan and their level of success
- Public reaction to the TMP
- The maximum and average delay time encountered (e.g., average queues, slowdowns) during construction, and history of delay (if any) over the duration of the project
- If there were any peak traffic periods exceeding the predicted
- Frequency of legitimate complaints and the nature of those complaints
- Types and numbers of crashes that occurred during construction
- Types and numbers of safety service patrols incidents
- The level of success and performance log for each strategy of the TMP implemented
- Recommended or suggested improvements or changes for similar future projects

Contact Information:

Tom Buchholz, P.E.

Wisconsin Department of Transportation

944 Vanderperren Way

Green Bay, WI 54304

920-492-2227

**ATTACHMENT A – US 41 Traffic Study – Winnebago
County Base Year 2005 Traffic Volume Network**

USH 41 Traffic Study – Winnebago County Base Year 2005 Traffic Volume Network

TO: Tom Buchholz/WisDOT Northeast Region

FROM: Andrea Guptail/CH2M HILL
Brian Roper/ CH2M HILL

CC: Rich Coakley/ CH2M HILL

DATE: June 7, 2006

RE: Project I.D. 1120-11-03
STH 26 – Breezewood Lane

Introduction

This memo summarizes existing traffic volumes within the study area. Figures depicting the traffic volumes are included in Appendices A-C. The study area extends from ½ mile south of the STH 26 interchange to ½ mile north of the Breezewood Lane interchange, a distance of 15 miles. The USH 41 mainline, ramps, and crossroads between STH 26 and Breezewood Lane, are included with the following interchanges:

- STH 26
- STH 44
- 9th Avenue
- STH 21
- USH 45
- STH 76
- Breezewood Lane

In addition, traffic data was collected at the CTH E overpass and along frontage roads near the USH 45 interchange.

Traffic Data Collection

In the fall of 2005, traffic data were collected throughout the study area. Twelve-hour turning movement counts were conducted at thirty-three intersections by staff from TranSmart Technologies, Inc. (TranSmart).

Mainline, ramp, and crossroad data was collected by Traffic Analysis and Design, Inc. (TAD) staff using Peek ADR 1000 automatic traffic recorders and by WisDOT staff at Automatic Traffic Recorder (ATR) stations located on USH 41. TAD's mainline and ramp setups were meant to collect classification counts, while the crossroad locations only collected the total number of vehicles. Most of the mainline locations were recounted in May 2006.

Base Year Network Development

After the traffic data was collected, the individual values were reviewed for reasonableness and consistency. This process included comparison of daily, AM peak hour, and PM peak hour values to the 2004 Wisconsin Highway Traffic Volume Data book and to the 2000 base year network from the previous study. In addition, peak hour volumes from the turning movement counts were compared to the USH 41 ramp counts.

At the USH 41 mainline locations counted by TAD in the fall of 2005, the volumes were significantly lower than counts taken in previous years. Upon further review and discussion, it was determined that the setup used to collect classification data for both lanes simultaneously had unwittingly resulted in significant undercounting. As a result, the ATR data was used with the ramp volumes to synthesize the remaining mainline data. Many of these synthesized values were revised upward slightly after considering the factored recounts collected in May 2006.

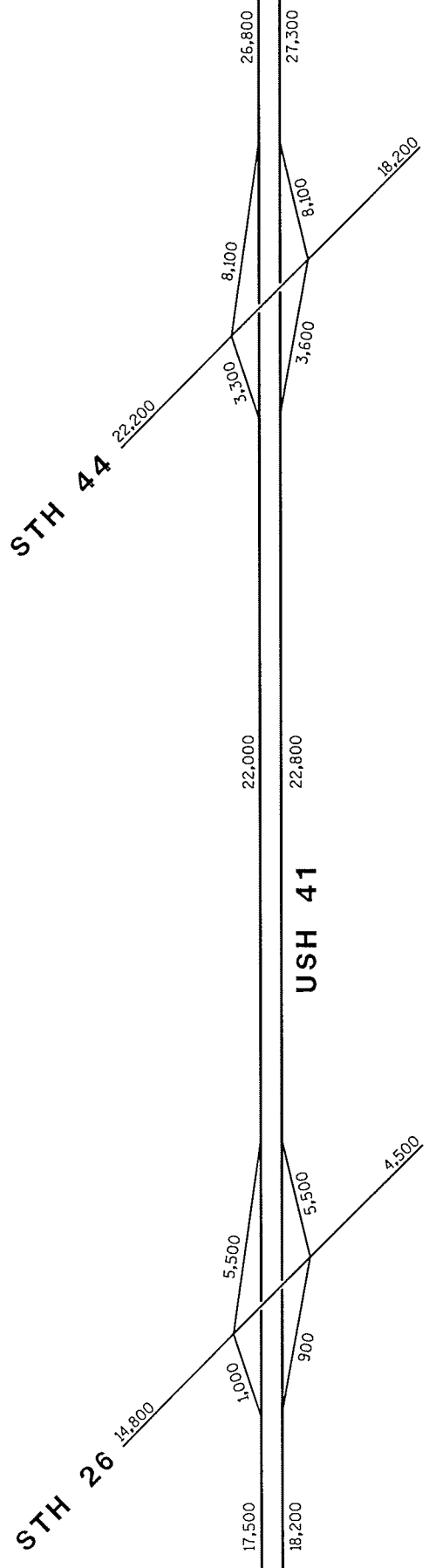
This data was applied to the study network, with adjustments made as necessary to the individual values to achieve balanced traffic. The balanced AADT volumes for the mainline sections and ramps are shown in Appendix A. The AM and PM peak period traffic volumes for the mainline sections and ramps are shown in Appendix B. For the seven interchange crossroads and the two other locations, AM and PM peak period traffic volumes are shown in Appendix C.

Appendix A

Existing AADT Traffic Volumes Summary Figures



NOT TO SCALE



USH 41 Traffic Study
Year 2005 Average Daily Traffic
STH 26 to STH 44
 Winnebago County
 Figure A-1

LEGEND
 000 Balanced Annual Average Weekday Traffic

PREPARED JUNE 2006



USH 41 Traffic Study
Year 2005 Average Daily Traffic
STH 76
Winnebago County
Figure A-3

LEGEND
000 Balanced Annual Average Weekday Traffic

PREPARED JUNE 2006



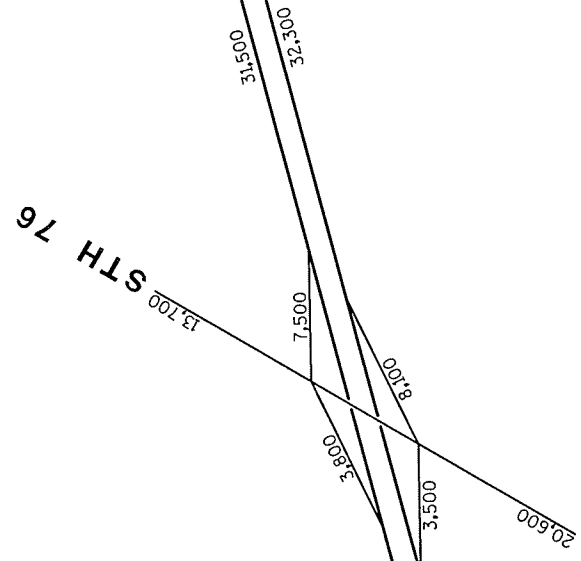
NOT TO SCALE

STH 76

FOUNTAIN AVENUE

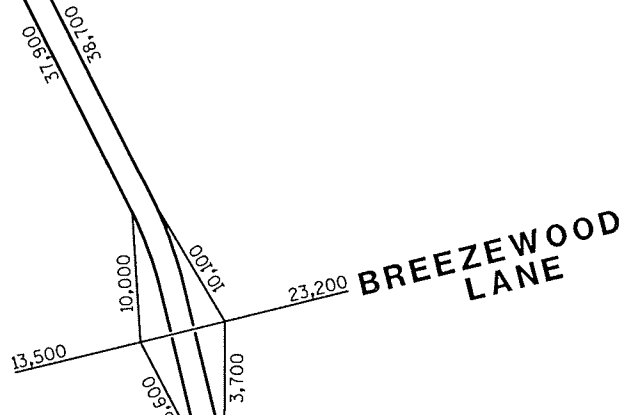
USH 41

SNELL ROAD





NOT TO SCALE



USH 41 Traffic Study
 Year 2005 Average Daily Traffic
 Breezewood Lane
 Winnebago County
 Figure A-4

LEGEND
 000 Balanced Annual Average Weekday Traffic

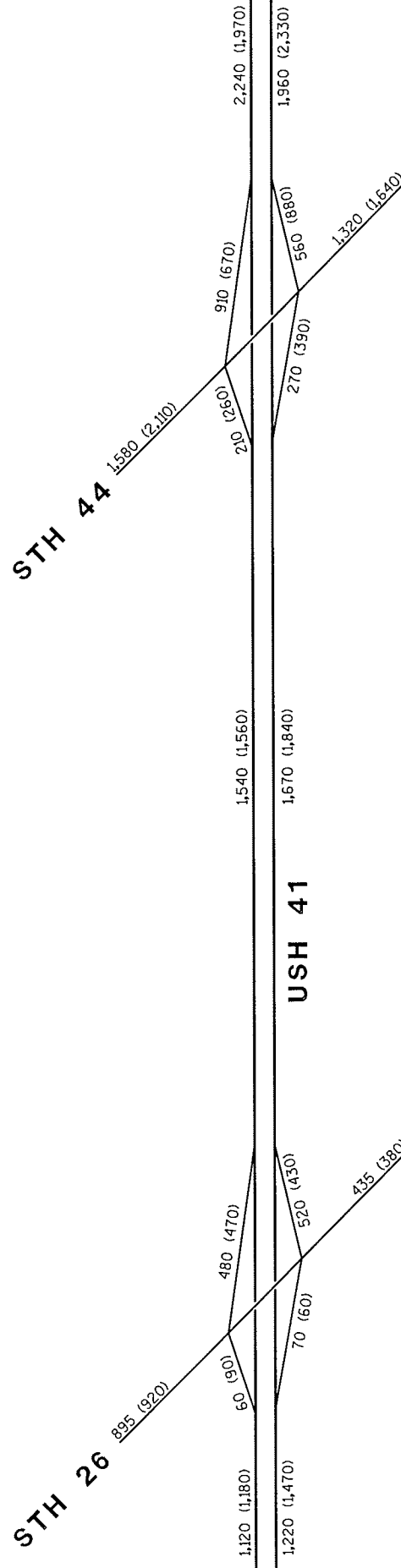
PREPARED JUNE 2006

Appendix B

Existing Mainline and Ramp AM and PM Peak Hour Volumes Summary Figures



NOT TO SCALE



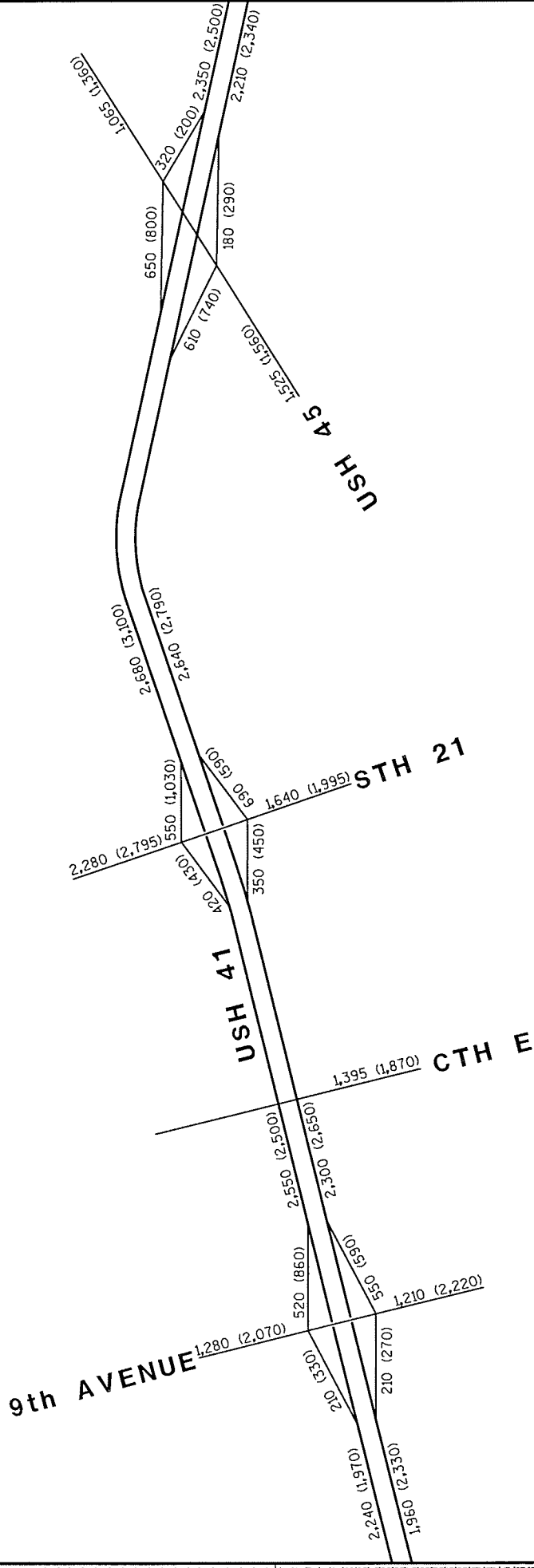
USH 41 Traffic Study
Year 2005 Peak Hour Traffic
STH 26 to STH 44
 Winnebago County
 Figure B-1

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



NOT TO SCALE



USH 41 Traffic Study
Year 2005 Peak Hour Traffic
9th Avenue to USH 45
 Winnebago County
 Figure B-2

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



USH 41 Traffic Study
Year 2005 Peak Hour Traffic
STH 76
 Winnebago County
 Figure B-3



NOT TO SCALE

STH 76

SNELL ROAD

FOUNTAIN AVENUE

USH 41

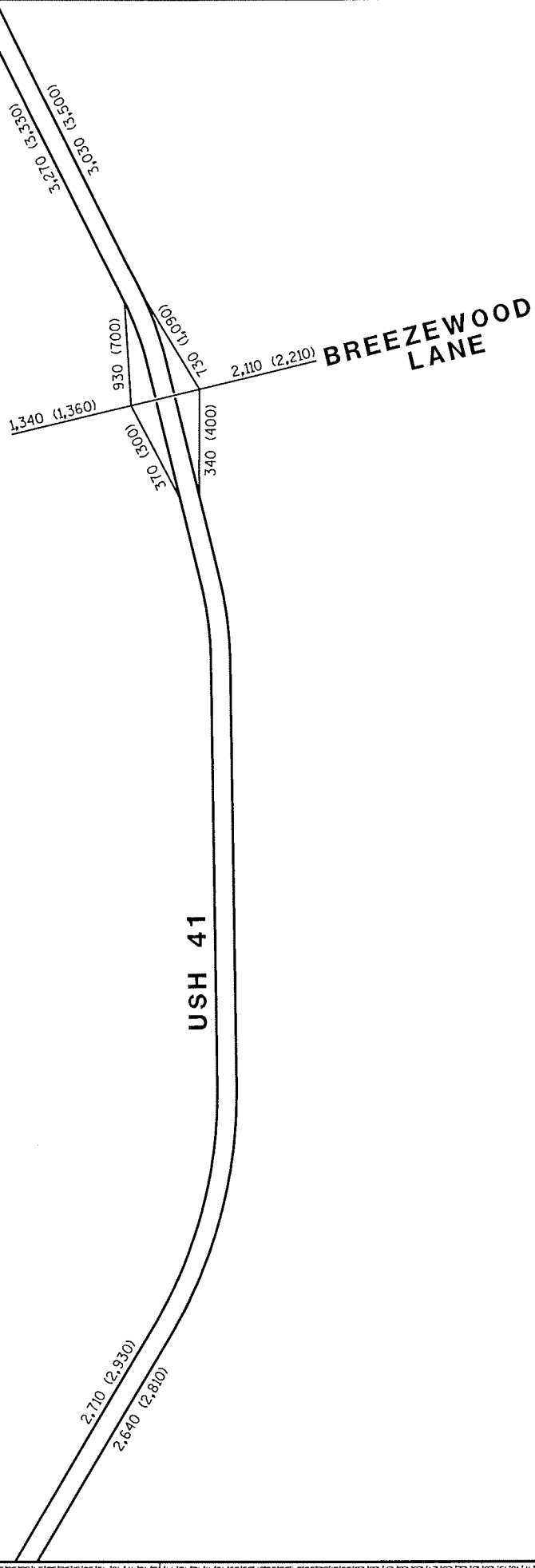
LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



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USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Breezewood Lane
 Winnebago County
 Figure B-4

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

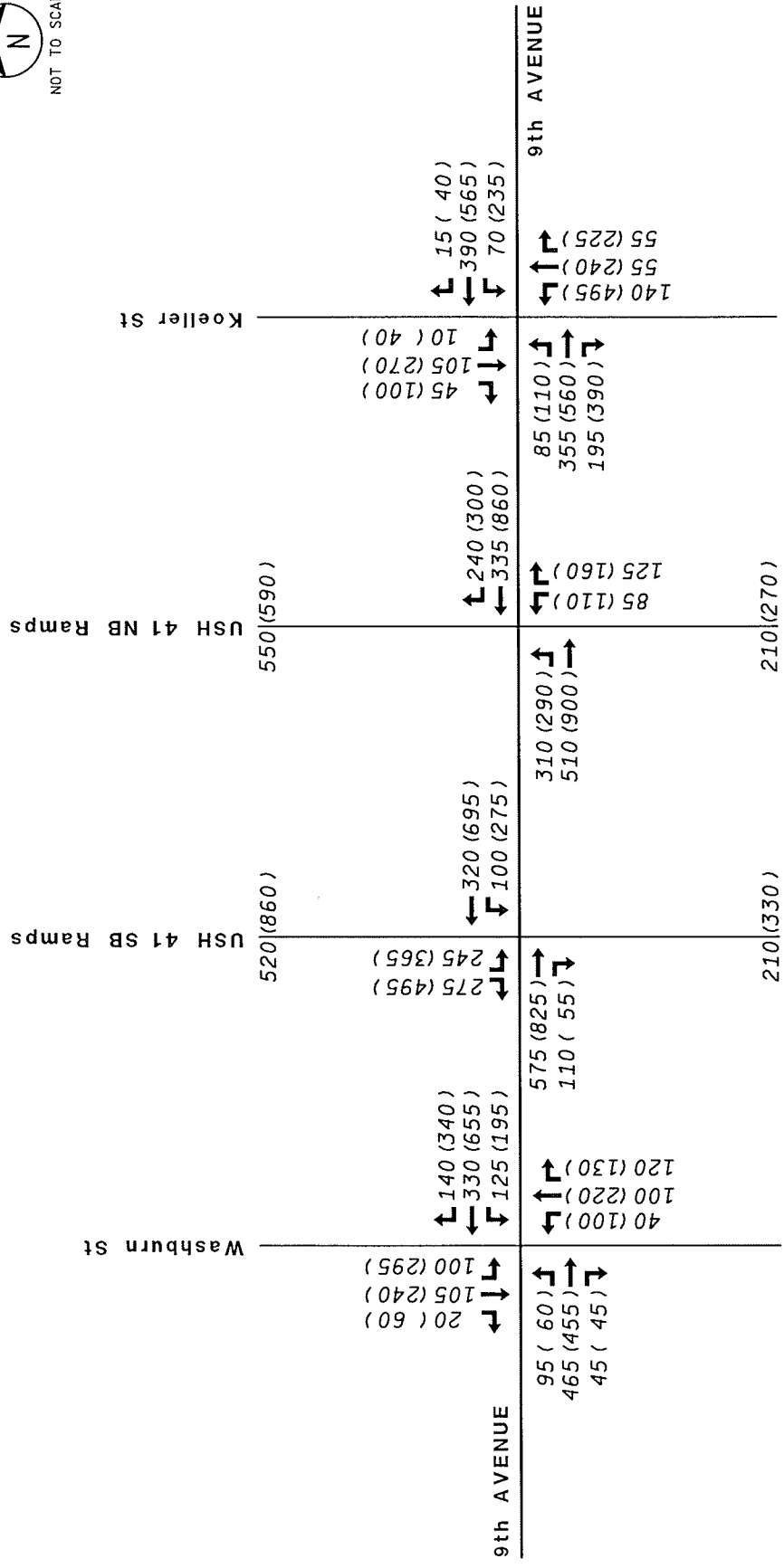
PREPARED JUNE 2006

Appendix C

Existing Intersection AM and PM Peak Hour Volumes Summary Figures



NOT TO SCALE



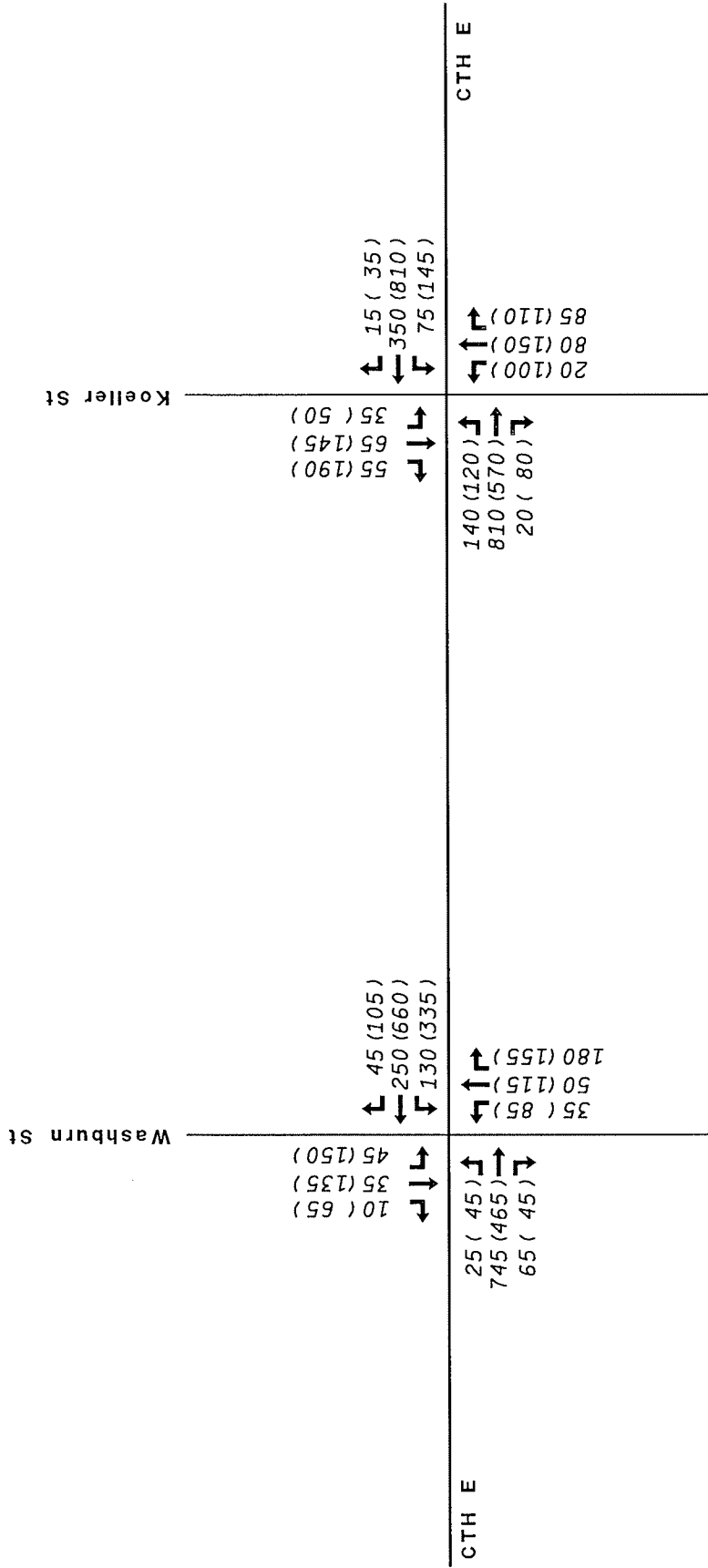
USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Along 9th Avenue
 Winnebago County
 Figure C-3

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



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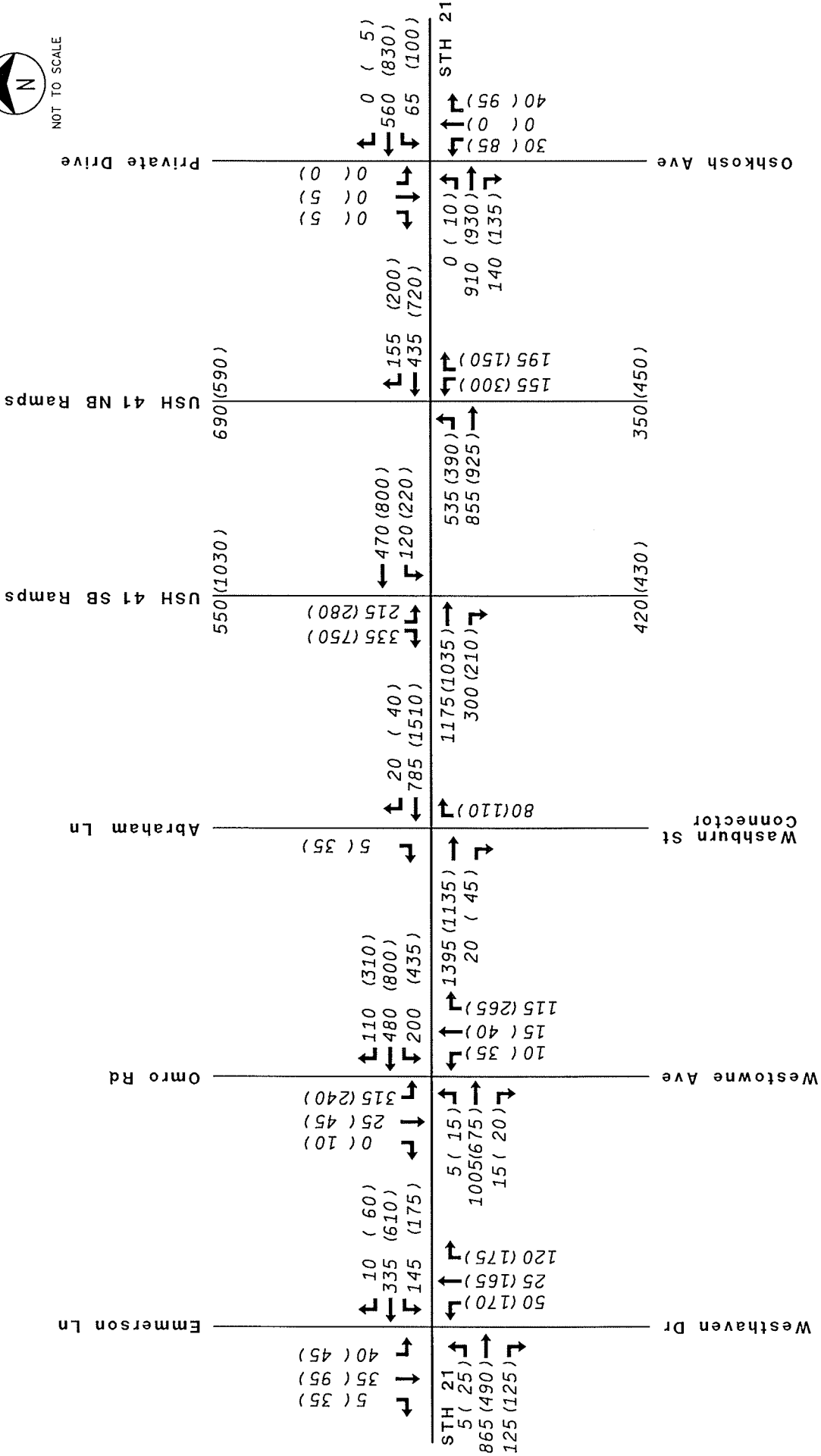
U.S. 41 Traffic Study
Year 2005 Peak Hour Traffic
Along CTH E
 Winnebago County
 Figure C-4

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



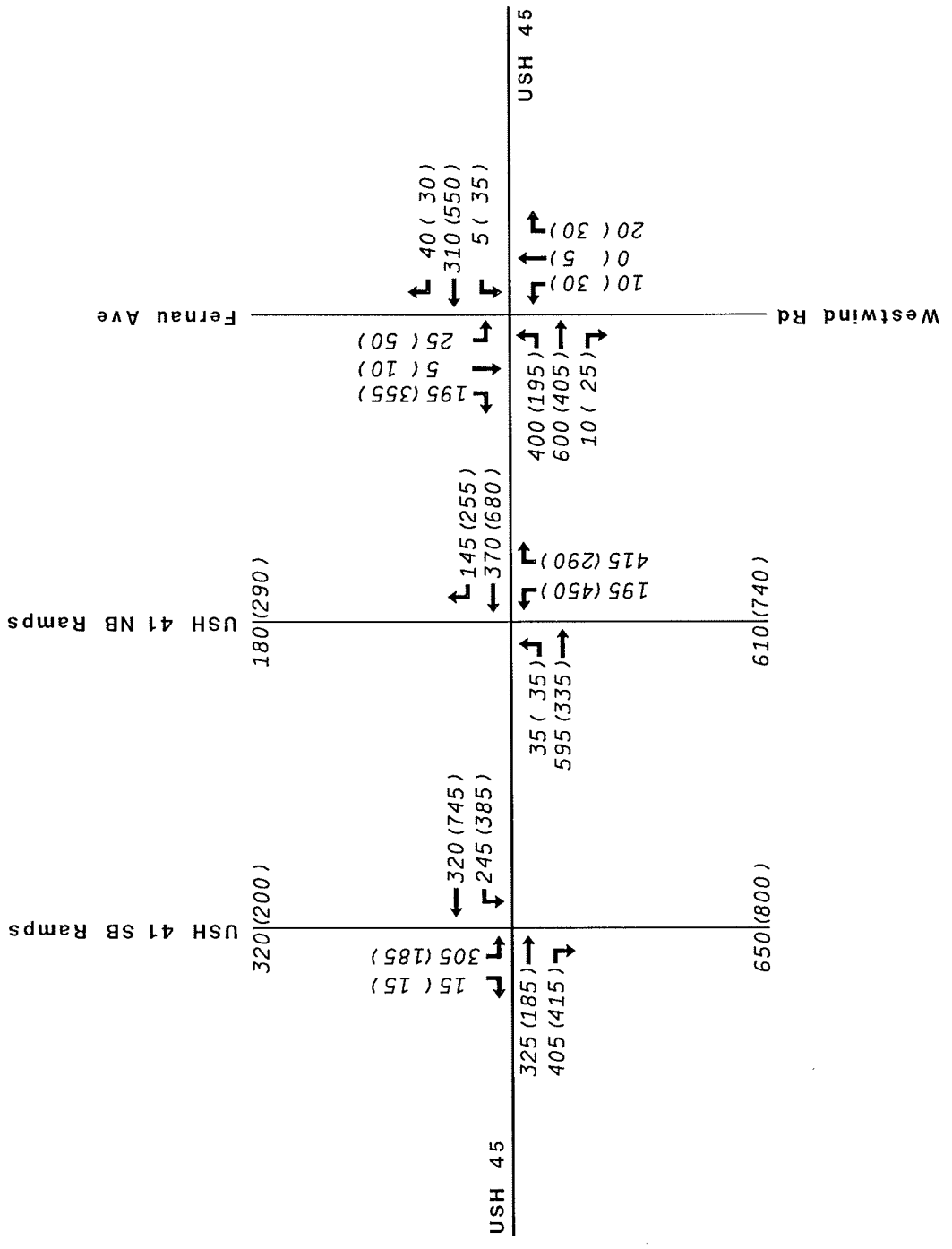
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U.S.H. 41 Traffic Study
Year 2005 Peak Hour Traffic
Along STH 21
Winnebago County
Figure C-5



NOT TO SCALE



USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Along USH 45
 Winnebago County
 Figure C-6

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006



NOT TO SCALE

Green Valley

USH 41 SB

USH 41 NB

10 (10)
0 (0)



0 (0)
0 (0)



Fountain Ave

10 (10)

0 (0)



225 (110)

5 (15)



Finland Street

170 (265)

80 (105)



Snell Road



USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Along Fountain Avenue & Snell Road
Winnebago County
Figure C-7

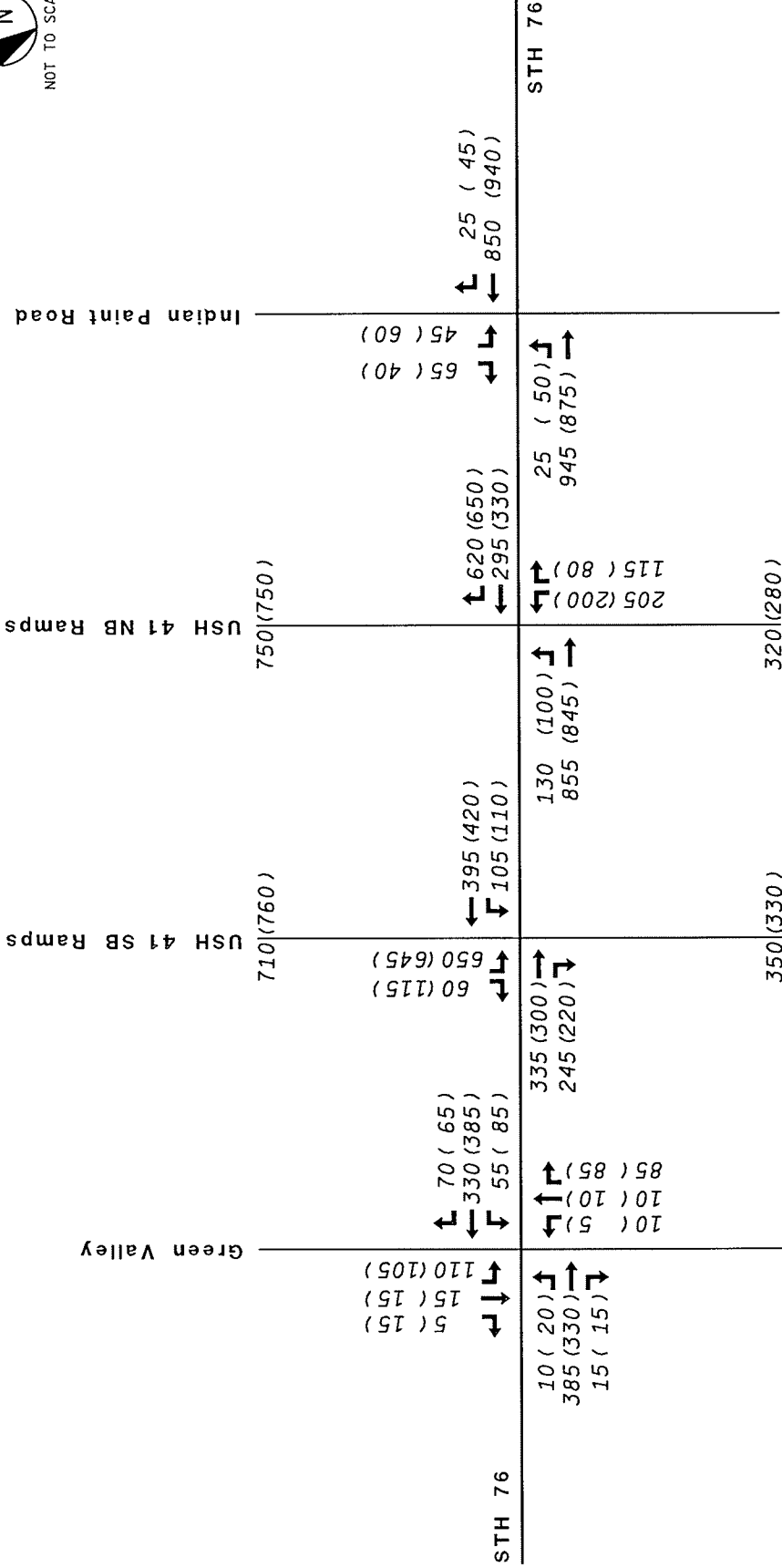
LEGEND
000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006

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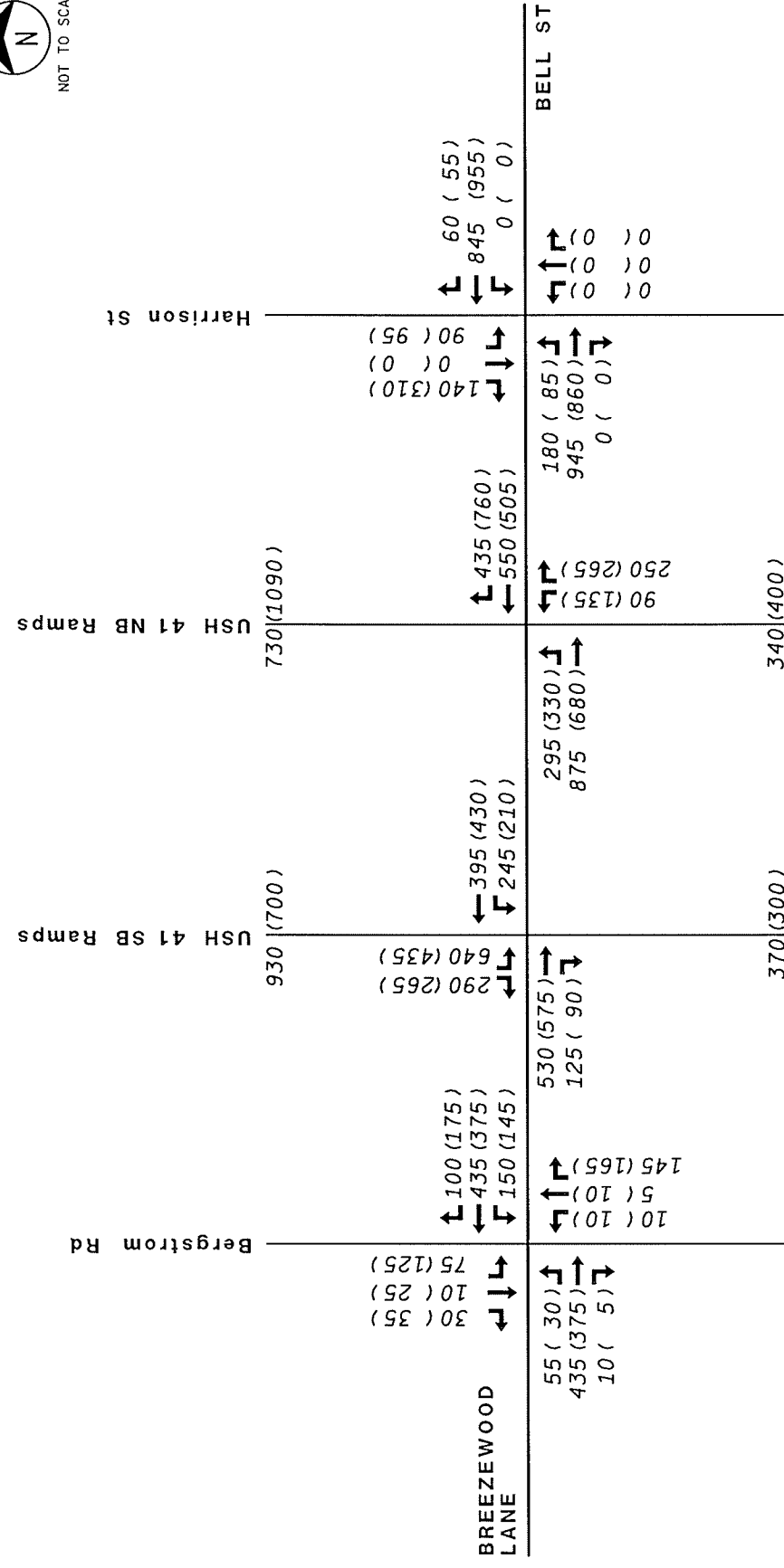
LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)



**USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Along STH 76
Winnebago County
Figure C-8**

PREPARED JUNE 2006



USH 41 Traffic Study
Year 2005 Peak Hour Traffic
Along Breezewood Lane
 Winnebago County
 Figure C-9

LEGEND
 000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JUNE 2006

**ATTACHMENT B – US 41 Traffic Study – Winnebago
County Year 2035 Traffic Operations Analysis**

USH 41 Traffic Study - Winnebago County Forecasted Traffic Volume Network

TO: Tom Buchholz/WisDOT Northeast Region

FROM: Andrea Guptail/ CH2M HILL
Brian Roper/ CH2M HILL

COPIES: David Cipra/WisDOT Traffic Forecasting Section
Walt Raith/East Central Wisconsin Regional Planning Commission
Rich Coakley/ CH2M HILL

DATE: July 14, 2006

RE: Project I.D. 1120-11-03
STH 26 - Breezewood Lane

Introduction

This memo summarizes forecasted traffic volumes within the study area. The USH 41 traffic study corridor extends from ½ mile south of the STH 26 interchange to ½ mile north of the Breezewood Lane interchange, a distance of 15 miles. The study includes freeway, ramp, and crossroad facilities at the following interchanges:

- STH 26
- STH 44
- 9th Avenue
- STH 21
- USH 45
- STH 76
- Breezewood Lane

In addition, forecasted traffic was developed at the CTH E overpass and along the frontage roads near the USH 45 interchange.

Traffic Forecasting Methodology and Assumptions

Existing Traffic Volumes

A common base year 2005 was used to develop forecasts along the USH 41 corridor. Existing peak hour and ADT volumes were obtained from traffic counts of the mainline segments and ramps and from intersection turning movements. These volumes were reviewed, adjusted, balanced, and subsequently established as accepted existing data.

The development of existing data was previously discussed in the *USH 41 Traffic Study - Winnebago County Base Year 2005 Traffic Volume Network* memorandum.

Existing Travel Demand Model

The corridor study limits are within the planning area covered by the East Central Wisconsin Regional Planning Commission (ECWRPC). As the regional Metropolitan Planning Organization (MPO), ECWRPC tracks data, applies travel demand models and coordinates with WisDOT's Traffic Forecasting Section (TFS) to develop forecasted data for the area.

Currently, ECWRPC forecasts traffic to the year 2035 using a recently developed travel demand model which links the Fox Cities and Oshkosh urbanized areas. In contrast, forecasts for the previous corridor study completed in 2002 were to the year 2020 from two separate models.

Future Study Years

While establishing the scope of this project, two study years were designated for traffic projection on the corridor and at the interchanges. Given the estimated timing of construction, traffic forecasts were developed for the years 2015 (Construction Year) and 2035 (Design Year). Year 2015 traffic forecast figures are shown in Appendix B and year 2035 traffic forecast figures are shown in Appendices B and C.

The Year 2035 forecasts are more comprehensive, encompassing AADT and peak period projections for mainline, ramps, and intersections in the corridor. In contrast, only AADT forecasts of the mainline corridor were developed for Year 2015.

Forecast Development

ECWRPC provided two sets of Year 2035 ADT forecasts from the regional travel demand model. One set represented the unadjusted model assignment, while the other set had been adjusted to compensate for the difference between the 2004 ground counts and the base year assignments. Coverage included freeway segments, ramps, and crossroads.

WisDOT's TFS also provided two sets of Year 2035 ADT forecasts for the mainline only. One set of forecasts was based on (but not the same as) the regional travel demand model. The other set had been adjusted to reflect professional judgment. In addition, the Year 2025 ADT and peak period forecasts prepared for the previous USH 41 corridor study were projected forward to Year 2035 to provide another point of comparison.

Year 2035 AADT forecasts for the USH 41 mainline and ramps were selected through a careful review of the various sources described above. The values were adjusted and balanced accordingly throughout the corridor. Year 2035 AADT forecast figures are shown in Appendix B. The Year 2015 AADT mainline forecasts were estimated by interpolating between the Year 2005 Base Network values and Year 2035 forecasts. Year 2015 AADT forecast figures are shown in Appendix A.

Year 2035 peak period forecasts for the USH 41 mainline and ramps were developed by applying the 30-year AADT growth rate to the balanced base year network. The resultant values were then adjusted and balanced accordingly throughout the corridor. Year 2035 peak hour forecast figures are shown in Appendix C.

Along the crossroads, the established Year 2035 ramp forecasts were used in conjunction with anticipated crossroad growth rates to generate peak period turning movement forecasts. The

resultant values were then adjusted and balanced accordingly along each crossroad. Year 2035 peak hour forecast figures are shown in Appendix C.

The forecasts presented in this memo have undergone review by staff from WisDOT TFS and ECWRPC. Both agencies have approved these forecasts for use in future operation analysis and design tasks.

Truck Percentages

Future pavement design calculations will require the estimate of truck percentages by axle classification for the construction and design years. For the USH 41 Traffic Study corridor, these percentages have been developed from existing and project-specific data. The percentages are applicable to both the construction and design year.

The USH 41 mainline truck classifications were based on the information contained in the *2004-Wisconsin Vehicle Classification Data* book. Classification data was available for three segments along USH 41 within the USH 41 Traffic Study Corridor: north of STH 76, south of STH 21, and south of STH 26. For the remaining segments, the truck data was averaged between adjacent count locations. This information is presented in Table 1.

USH 41 ramp and crossroad truck classification data was obtained from traffic counts taken in October and November of 2005. This information is presented in Tables 2 and 3.

Table 1
USH 41 Mainline Traffic Information and Truck Classification

Segment	AADT Volumes/Forecasts			Daily Truck Classification Percentages				
	2005	2015	2035	2D	3SU	2-S1, 2-S2	3-S2 & Above	Double Bottoms
USH 41 - Northbound								
North of Breezewood On	38,700	45,000	57,500	3.6%	1.1%	3.6%	4.2%	0.3%
STH 76 On to Breezewood Off	32,300	38,700	51,500	3.6%	1.1%	3.6%	4.2%	0.3%
USH 45 On to STH 76 Off	27,700	34,300	47,500	3.3%	1.1%	3.6%	5.7%	0.3%
STH 21 On to USH 45 Off	34,600	41,600	55,800	3.3%	1.1%	3.6%	5.7%	0.3%
9 th Avenue On to STH 21 Off	31,200	38,500	52,800	3.0%	1.1%	3.7%	7.3%	0.4%
STH 44 On to 9 th Avenue Off	27,300	34,000	47,300	3.2%	1.0%	4.9%	7.5%	0.6%
STH 26 On to STH 44 Off	22,800	28,800	40,700	3.3%	1.0%	6.2%	7.8%	0.7%
South of STH 26	18,200	23,400	33,700	3.3%	1.0%	6.2%	7.8%	0.7%
USH 41 - Southbound								
North of Breezewood Off	37,900	44,200	56,700	3.6%	1.1%	3.6%	4.2%	0.3%
Breezewood On to STH 76 Off	31,500	37,900	50,600	3.6%	1.1%	3.6%	4.2%	0.3%
STH 76 On to USH 45 Off	27,800	34,200	46,900	3.3%	1.1%	3.6%	5.7%	0.3%
USH 45 On to STH 21 Off	33,800	41,200	56,000	3.3%	1.1%	3.6%	5.7%	0.3%
STH 21 On to 9 th Avenue Off	30,800	38,200	52,700	3.0%	1.1%	3.7%	7.3%	0.4%
9 th Avenue On to STH 44 Off	26,800	33,300	46,200	3.2%	1.0%	4.9%	7.5%	0.6%
STH 44 On to STH 26 Off	22,000	28,100	40,100	3.3%	1.0%	6.2%	7.8%	0.7%
South of STH 26 On	17,500	22,900	33,700	3.3%	1.0%	6.2%	7.8%	0.7%

Table 2
 USH 41 Ramp Traffic Information and Truck Classification

Ramp	AADT Volumes/Forecasts			Daily Truck Classification Percentages					
	2005	2015	2035	2D	3SU	2-S1, 2-S2	3-S2 & Above	Double Bottoms	
USH 41 - Northbound	Breezewood Entrance Ramp	10,100	12,300	16,700	2.3%	1.5%	0.7%	3.5%	0.3%
	Breezewood Exit Ramp	3,700	6,000	10,700	2.4%	1.0%	1.0%	9.3%	0.2%
	STH 76 Entrance Ramp	8,100	9,600	12,500	3.4%	1.5%	0.7%	2.9%	0.2%
	STH 76 Exit Ramp	3,500	5,200	8,500	3.7%	3.1%	1.8%	8.5%	0.6%
	USH 45 Entrance Ramp	2,600	3,200	4,300	3.2%	2.7%	0.9%	2.3%	0.1%
	USH 45 Exit Ramp	9,500	10,500	12,600	6.2%	1.4%	1.5%	8.7%	0.6%
	STH 21 Entrance Ramp	8,400	9,700	12,400	2.7%	5.9%	0.5%	2.9%	0.2%
	STH 21 Exit Ramp	5,000	6,600	9,400	2.7%	2.2%	0.6%	2.2%	0.1%
	9 th Avenue Entrance Ramp	7,300	8,400	10,500	2.9%	3.5%	0.5%	1.3%	0.0%
	9 th Avenue Exit Ramp	3,400	3,900	5,000	2.7%	0.0%	0.5%	1.7%	0.8%
	STH 44 Entrance Ramp	8,100	9,600	12,500	5.0%	0.5%	2.3%	2.0%	0.3%
	STH 44 Exit Ramp	3,600	4,400	5,900	4.0%	0.5%	0.8%	10.3%	0.2%
	STH 26 Entrance Ramp	5,500	8,300	14,000	4.3%	1.4%	2.7%	14.8%	0.3%
STH 26 Exit Ramp	900	2,900	7,000	5.1%	1.3%	2.1%	21.0%	1.2%	
USH 41 - Southbound	Breezewood Exit Ramp	10,000	12,000	15,900	3.2%	2.2%	0.6%	4.8%	1.1%
	Breezewood Entrance Ramp	3,600	5,700	9,800	1.8%	4.6%	0.9%	9.2%	1.3%
	STH 76 Exit Ramp	7,500	9,700	14,000	3.2%	1.4%	0.9%	3.7%	0.1%
	STH 76 Entrance Ramp	3,800	6,000	10,300	3.9%	4.4%	1.4%	9.9%	2.3%
	USH 45 Exit Ramp	2,600	3,100	4,100	3.4%	1.7%	0.9%	5.8%	0.6%
	USH 45 Entrance Ramp	8,600	10,100	13,200	4.6%	1.0%	1.0%	9.6%	1.2%
	STH 21 Exit Ramp	7,800	9,400	13,000	4.5%	1.3%	0.9%	1.4%	0.3%
	STH 21 Entrance Ramp	4,800	6,400	9,700	2.9%	0.1%	0.4%	2.9%	0.3%
	9th Avenue Exit Ramp	7,300	8,900	12,000	3.0%	0.2%	0.5%	0.8%	0.0%
	9th Avenue Entrance Ramp	3,300	4,000	5,500	2.7%	3.8%	0.5%	1.3%	0.0%
	STH 44 Exit Ramp	8,100	9,900	13,500	3.8%	1.4%	0.9%	5.1%	0.5%
	STH 44 Entrance Ramp	3,300	4,700	7,400	3.7%	6.0%	0.7%	8.6%	0.7%
	STH 26 Exit Ramp	5,500	7,900	12,600	3.8%	4.3%	2.0%	15.4%	0.7%
STH 26 Entrance Ramp	1,000	2,700	6,200	2.5%	3.2%	0.8%	24.7%	1.8%	

Table 3
 USH 41 Crossroad Traffic Information

Segment	AADT Volumes/Forecasts	Daily Truck Classification Percentages				
	2035	2D	3SU	2-S1, 2-S2	3-S2 & Above	Double Bottoms
Breezewood Lane	19,000	7.2%	2.3%	0.9%	3.6%	1.6%
Fountain Avenue	10,300	11.4%	6.1%	2.9%	4.3%	0.0%
Snell Road south of Fountain Avenue	12,200	-	-	-	-	-
Snell Road east of Fountain Avenue	8,200	-	-	-	-	-
Lake Butte des Morts Drive at USH 45	5,000	3.3%	4.7%	0.9%	1.6%	0.0%
Koeller Street /Rath Lane	800	-	-	-	-	-
STH 21	41,500	2.3%	4.3%	1.1%	3.8%	1.3%
Washburn Street at STH 21	10,000	-	-	-	-	-
CTH E	22,000	1.6%	1.1%	1.2%	1.7%	0.3%

Appendix A

Year 2015

AADT Traffic Forecasts

Summary Figures



NOT TO SCALE

STH 26
17,100

STH 44
24,600

22,900

2,700

7,900

28,100

4,700

9,900

33,300

23,400

2,900

8,300

USH 41

28,800

4,400

9,600

34,000

5,200

20,200

LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2015 Average Daily Traffic Forecasts
STH 26 to STH 44**

Winnebago County

Figure A-1



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE

9th AVENUE

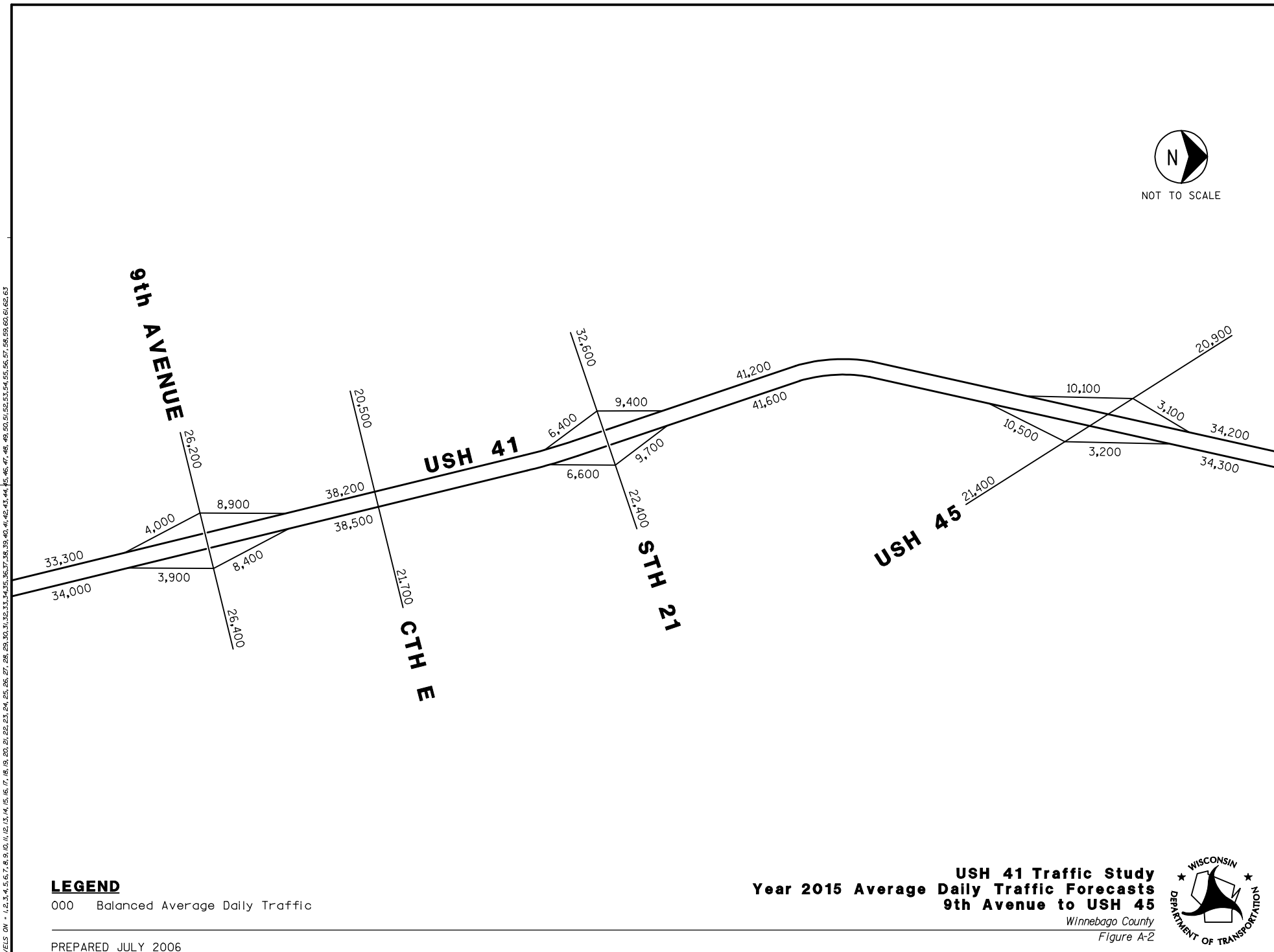
USH 41

USH 45

5TH 21

CTH E

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

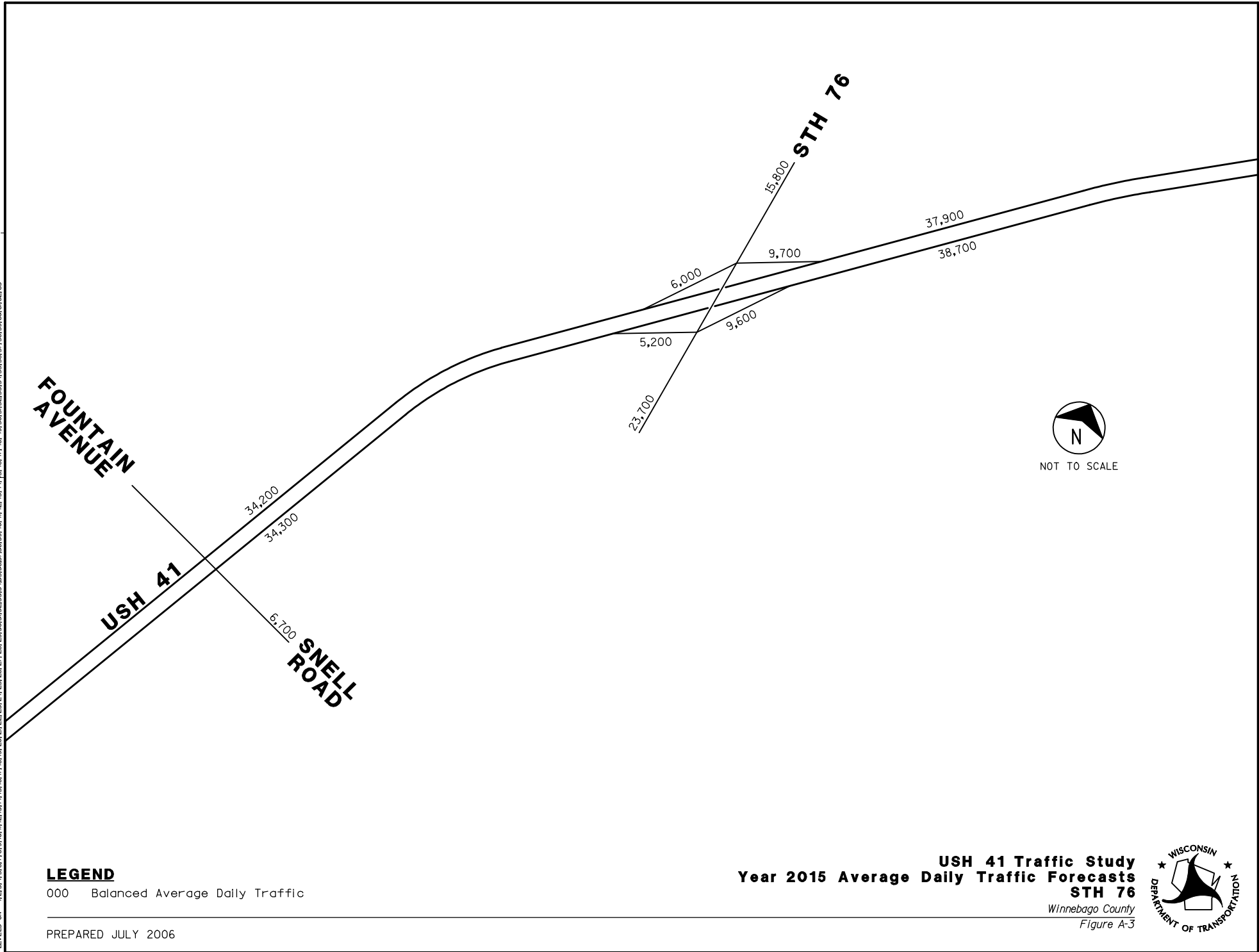
**USH 41 Traffic Study
Year 2015 Average Daily Traffic Forecasts
9th Avenue to USH 45**

Winnebago County

Figure A-2



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE

LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

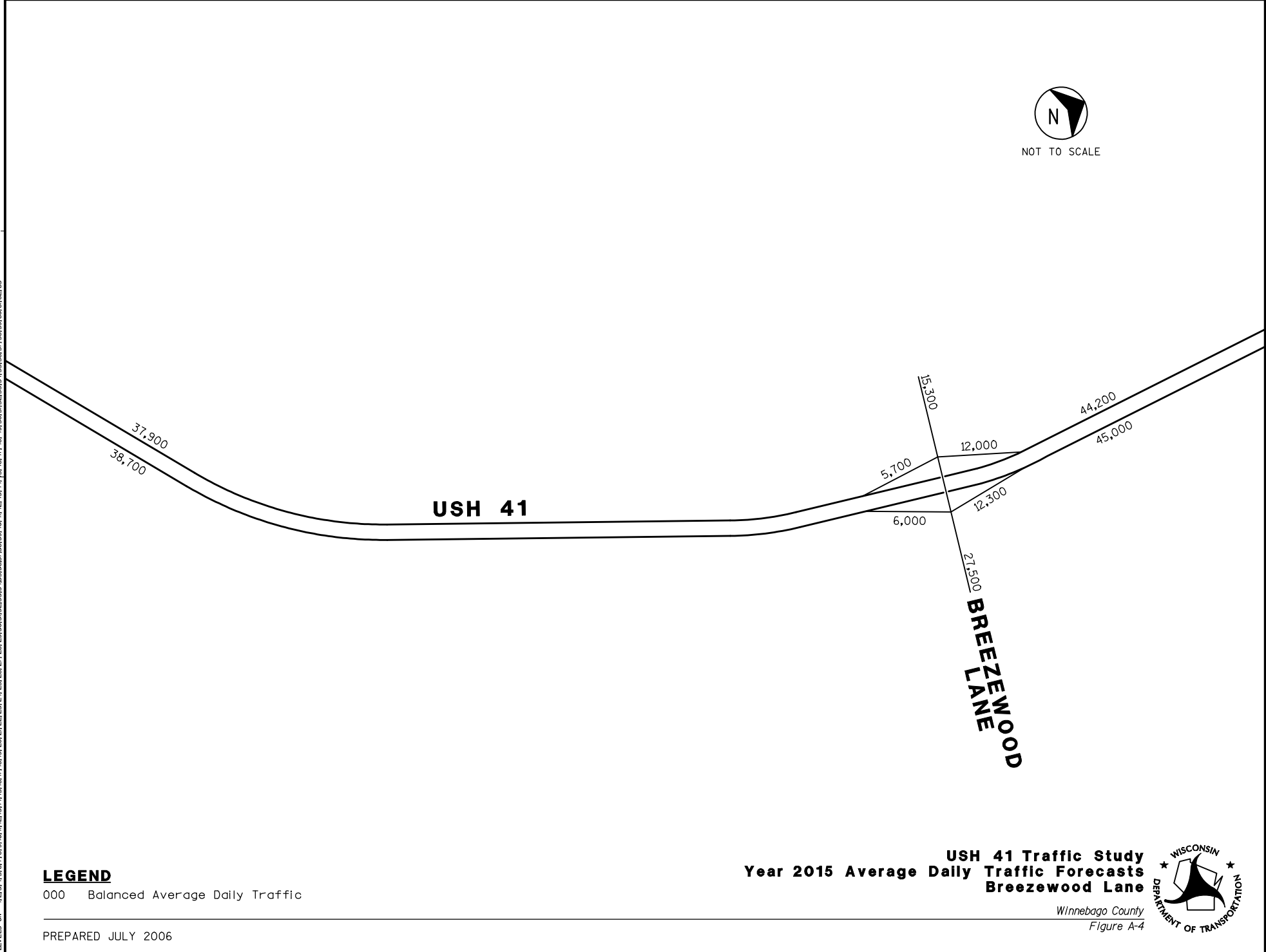
**USH 41 Traffic Study
Year 2015 Average Daily Traffic Forecasts
STH 76**

Winnebago County
Figure A-3





NOT TO SCALE



LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2015 Average Daily Traffic Forecasts
Brezewood Lane**

Winnebago County
Figure A-4



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

Appendix B

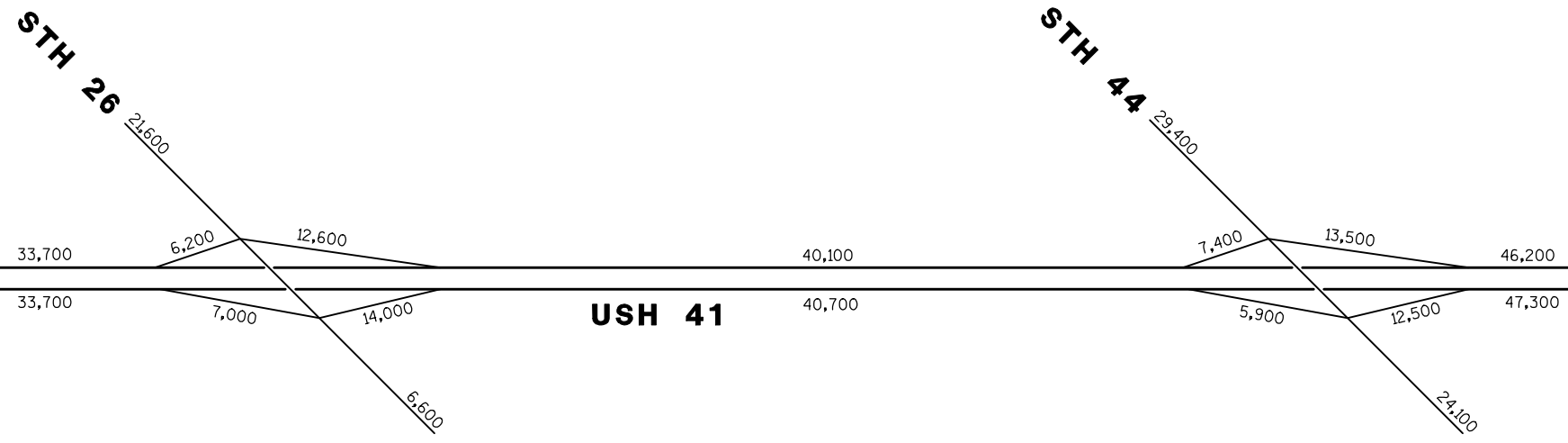
Year 2035

AADT Traffic Forecasts

Summary Figures



NOT TO SCALE



LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Average Daily Traffic Forecasts
STH 26 to STH 44**

Winnebago County

Figure B-1

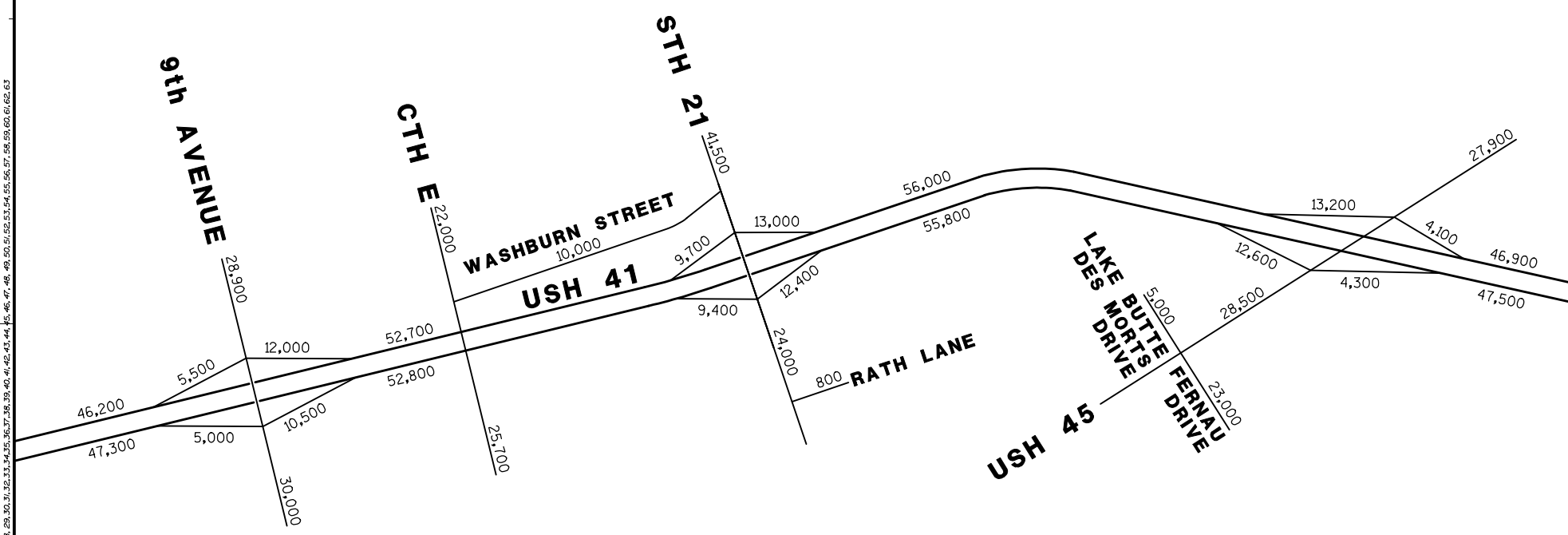


LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LEGEND

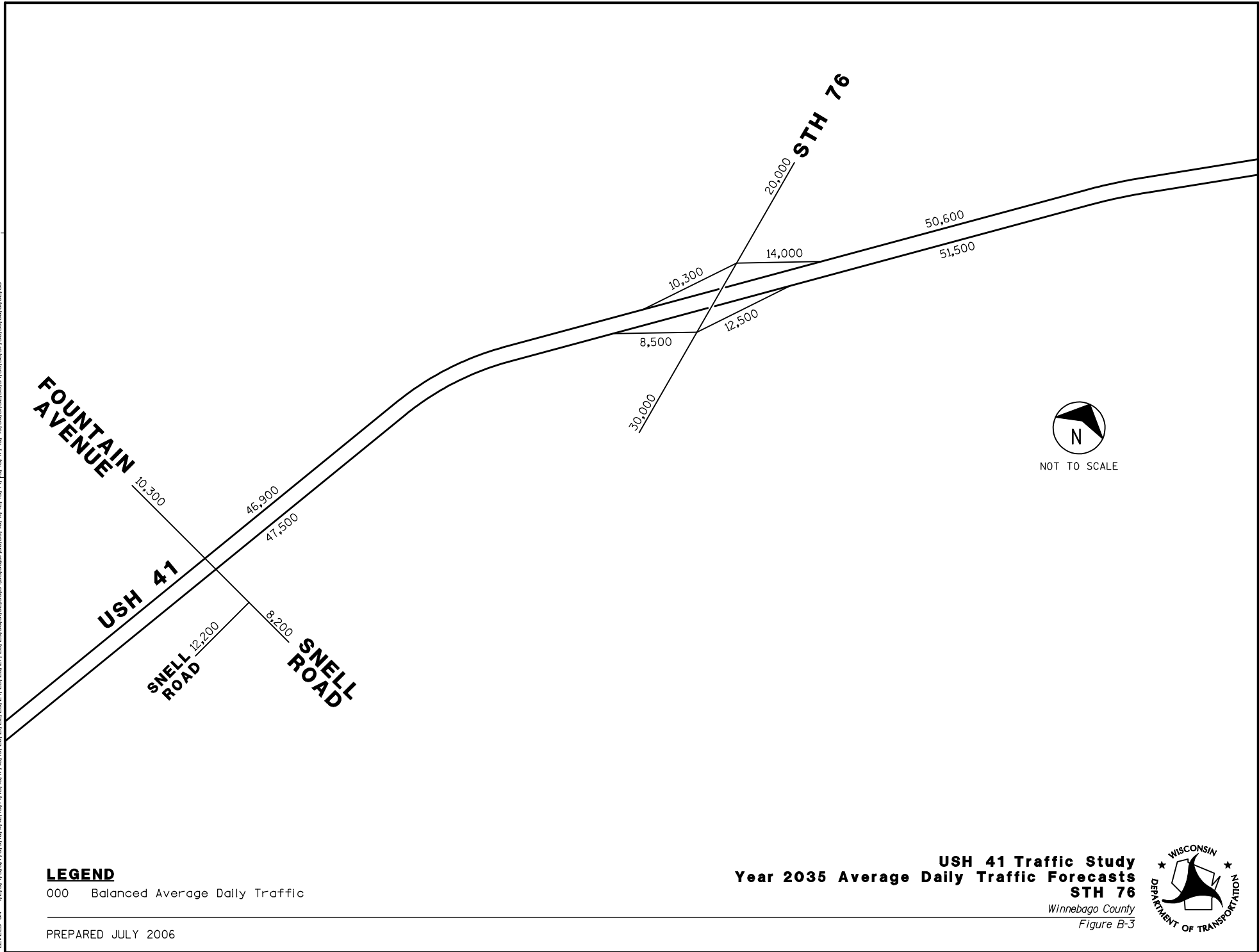
000 Balanced Average Daily Traffic

PREPARED JULY 2006

USH 41 Traffic Study
Year 2035 Average Daily Traffic Forecasts
9th Avenue to USH 45
 Winnebago County
 Figure B-2

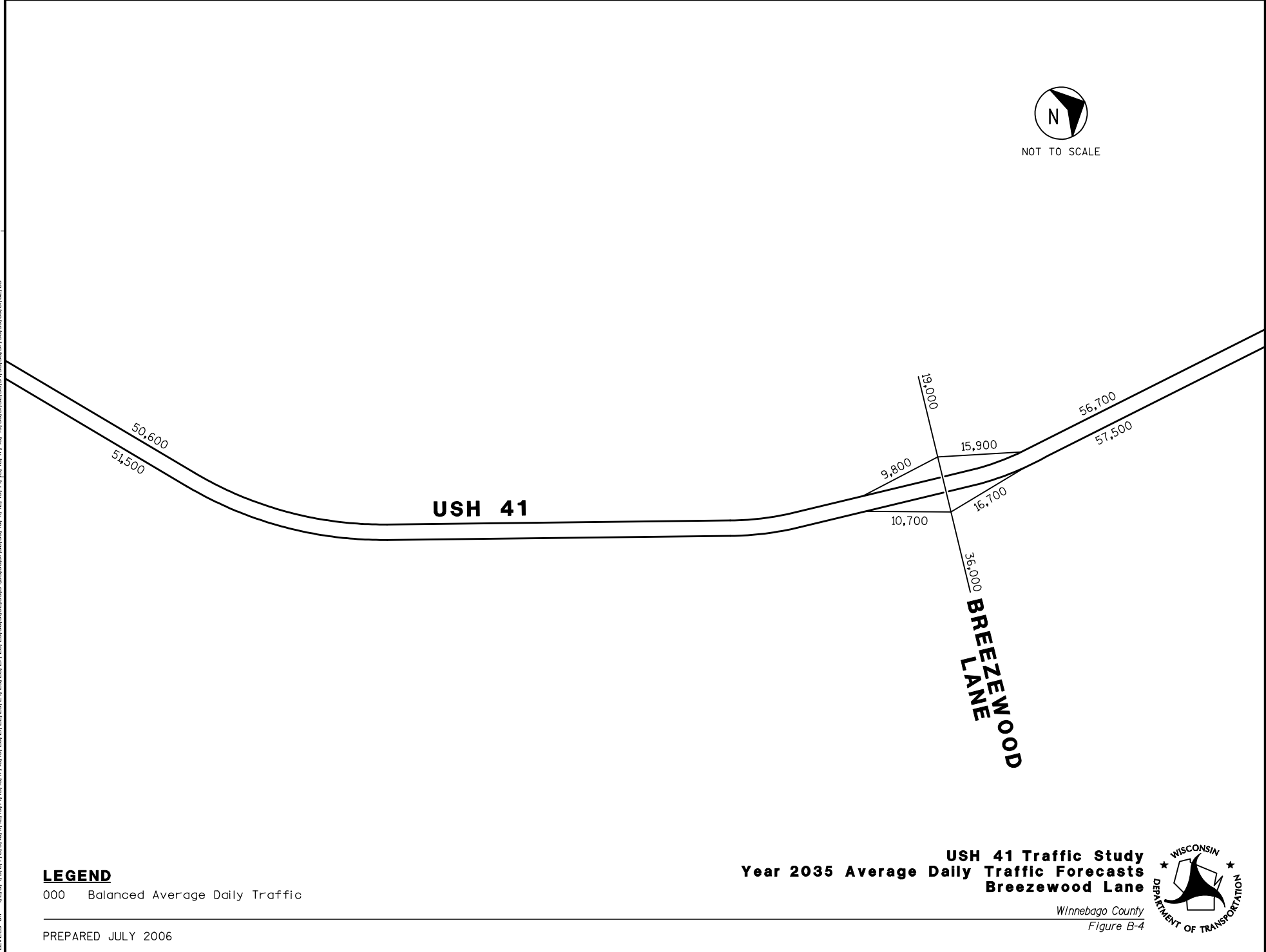


LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63





NOT TO SCALE



USH 41

BREEZEWOOD LANE

LEGEND

000 Balanced Average Daily Traffic

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Average Daily Traffic Forecasts
Breezewood Lane**

Winnebago County
Figure B-4



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

Appendix C

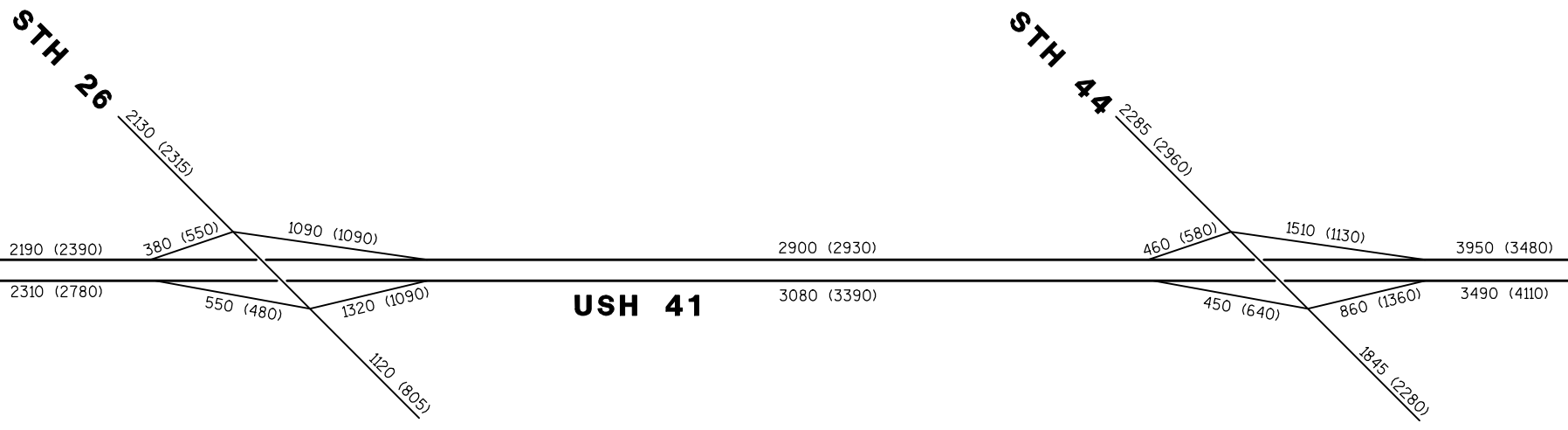
Year 2035

AM and PM Peak Hour Traffic Forecasts

Summary Figures



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
STH 26 to STH 44**

Winnebago County

Figure C-1



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE

9th AVENUE

USH 41

20th STH 21

USH 45

CTH E

3950 (3480)
3490 (4110)

360 (550)
310 (400)

1675 (2575)
850 (1420)

800 (850)
1565 (2815)

4440 (4350)
3980 (4560)

1820 (2440)

840 (870)
660 (850)

3035 (3135)

1040 (870)

920 (1720)

4520 (5200)

4360 (4580)

800 (970)

990 (1230)

310 (480)

510 (310)

1745 (2260)

3870 (4090)

4040 (4280)

LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
9th Avenue to USH 45**

Winnebago County

Figure C-2



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FOUNTAIN AVENUE

USH 41

SNELL ROAD

STH 76

4040 (4280)
3870 (4090)

820 (920)

3120 (3100)
760 (680)

940 (910)

1170 (1160)

1810 (1860)

1340 (1400)

4440 (4770)

4280 (4570)



NOT TO SCALE

LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
STH 76**

Winnebago County
Figure C-3





NOT TO SCALE

**BREEZEWOOD
LANE**

USH 41

4440 (4770)
4280 (4570)

2080 (2175)
1000 (820)

1490 (1110)

4930 (5060)
4530 (5250)

970 (1140)

1220 (1820)
3620 (3863)

LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Breezewood Lane**

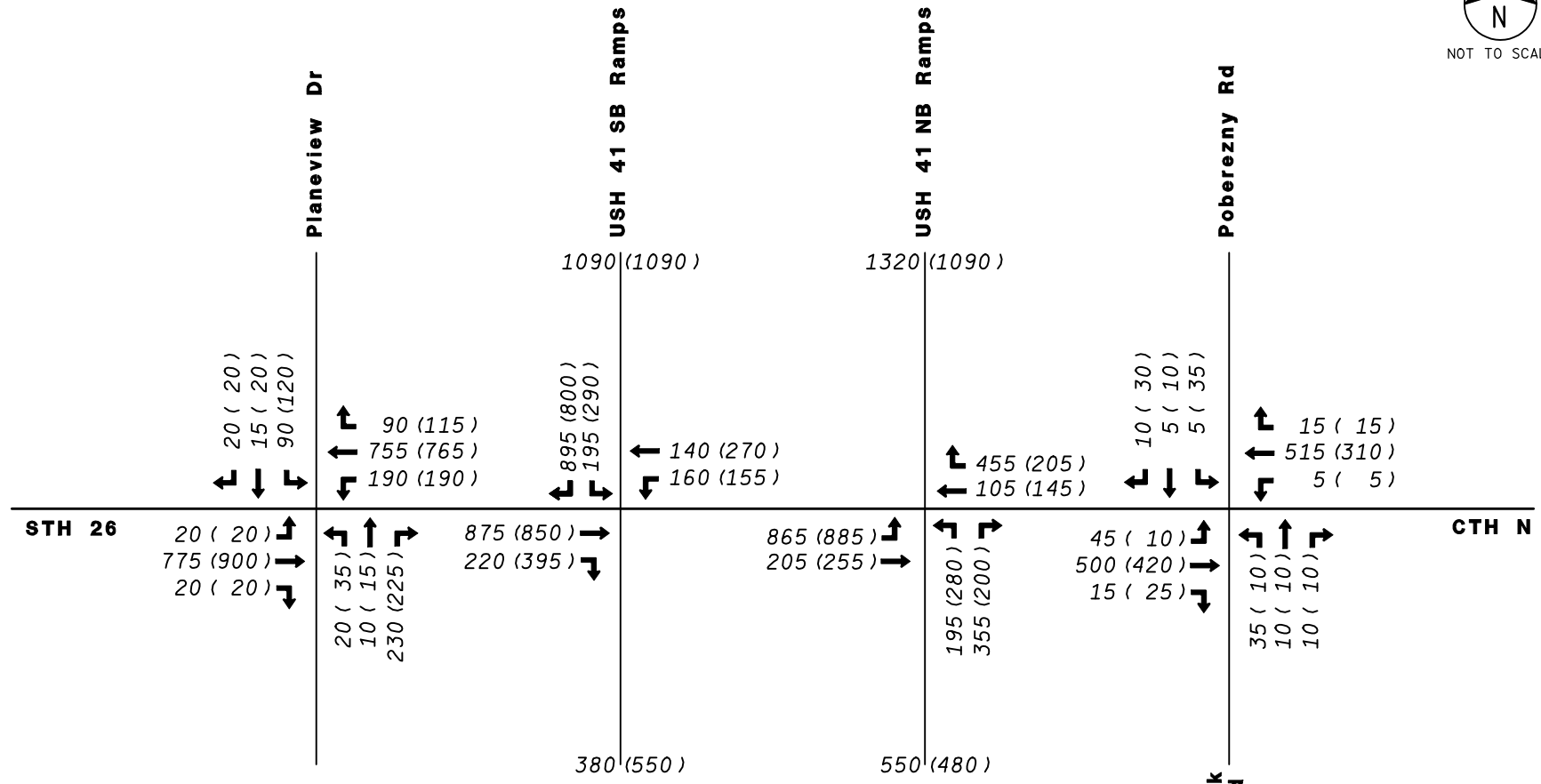
Winnebago County
Figure C-4



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

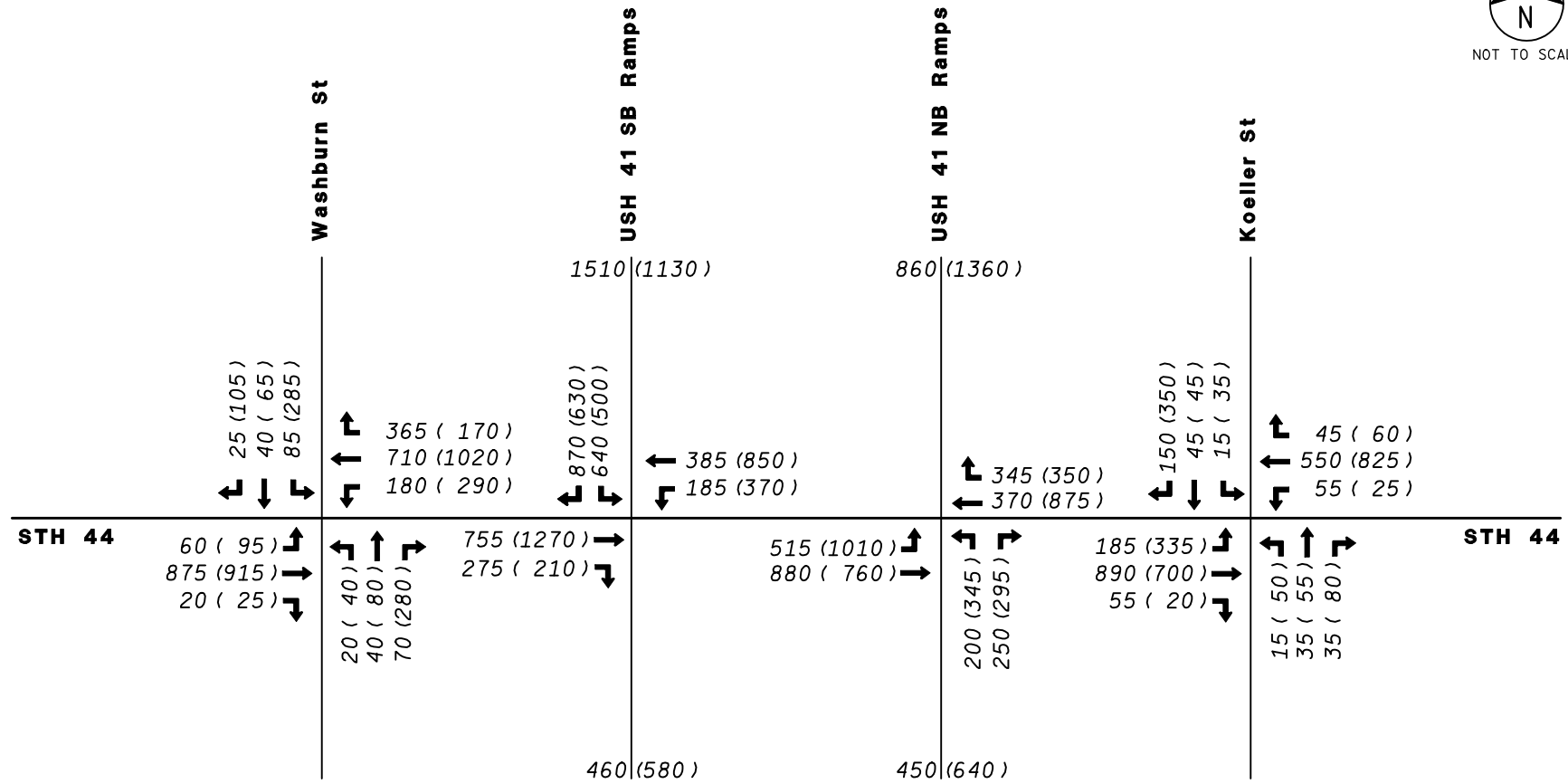
USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along STH 26
 Winnebago County
 Figure C-5



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

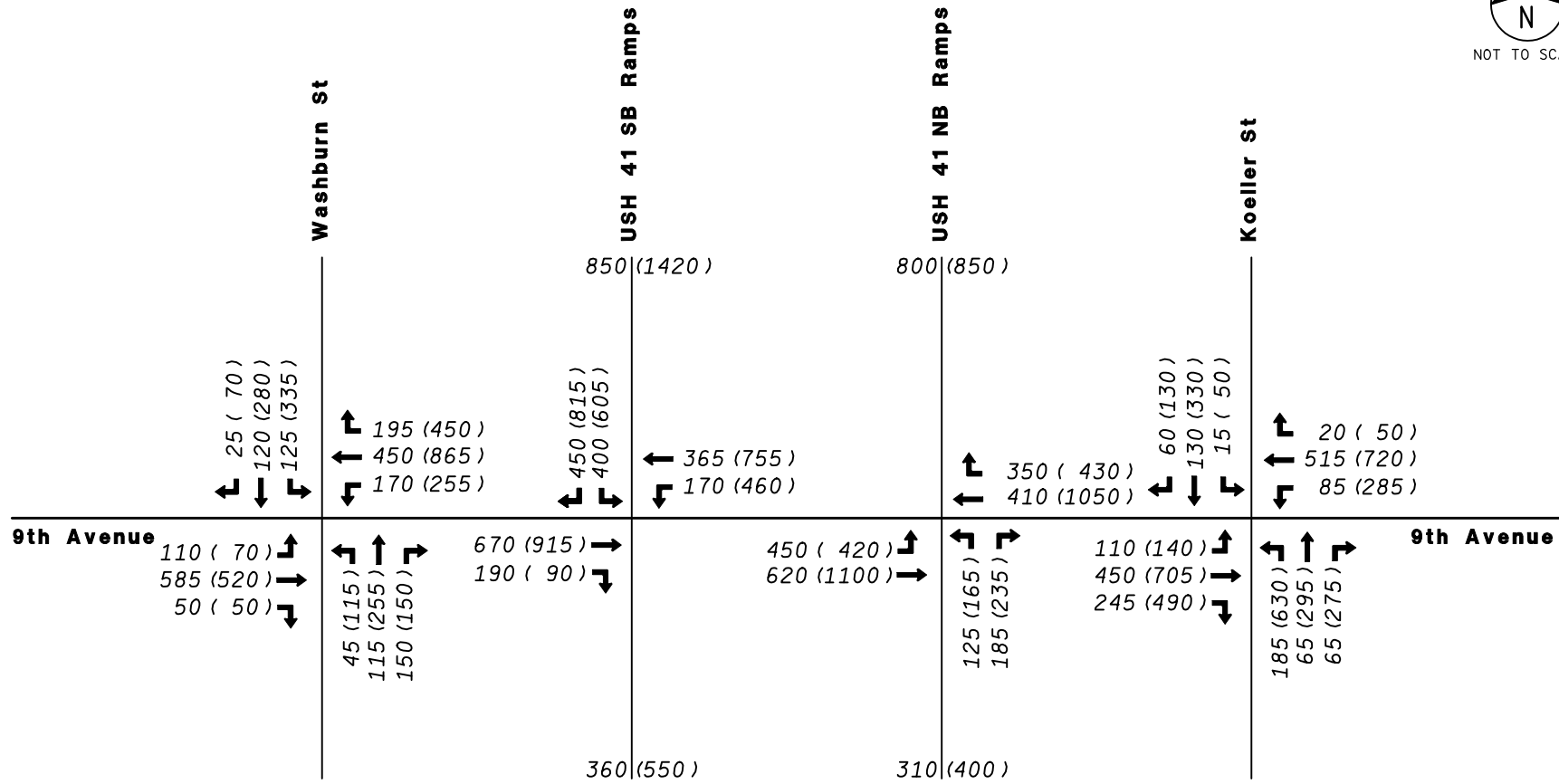
PREPARED JULY 2006

USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along STH 44
 Winnebago County
 Figure C-6



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

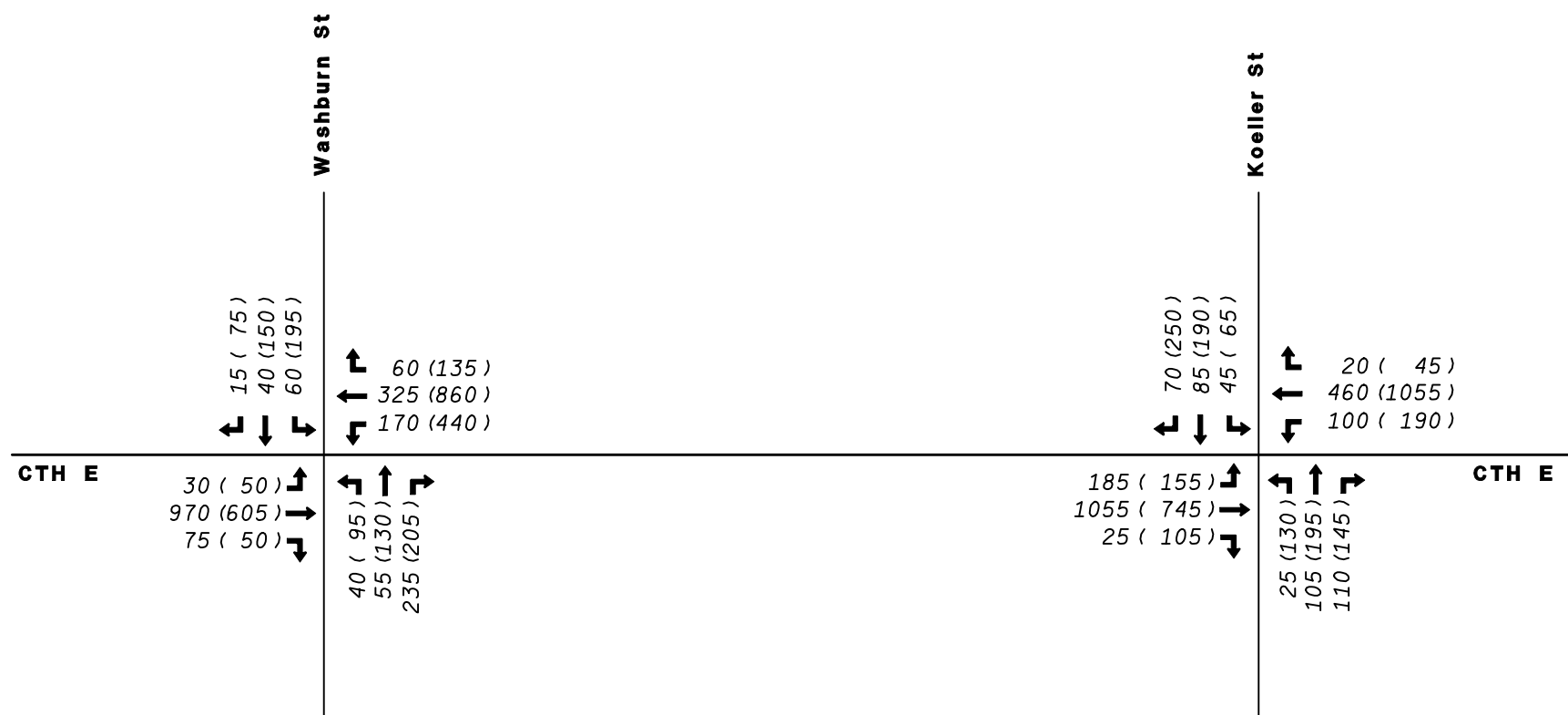
**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along 9th Avenue**

Winnebago County
Figure C-7





NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along CTH E**

Winnebago County

Figure C-8

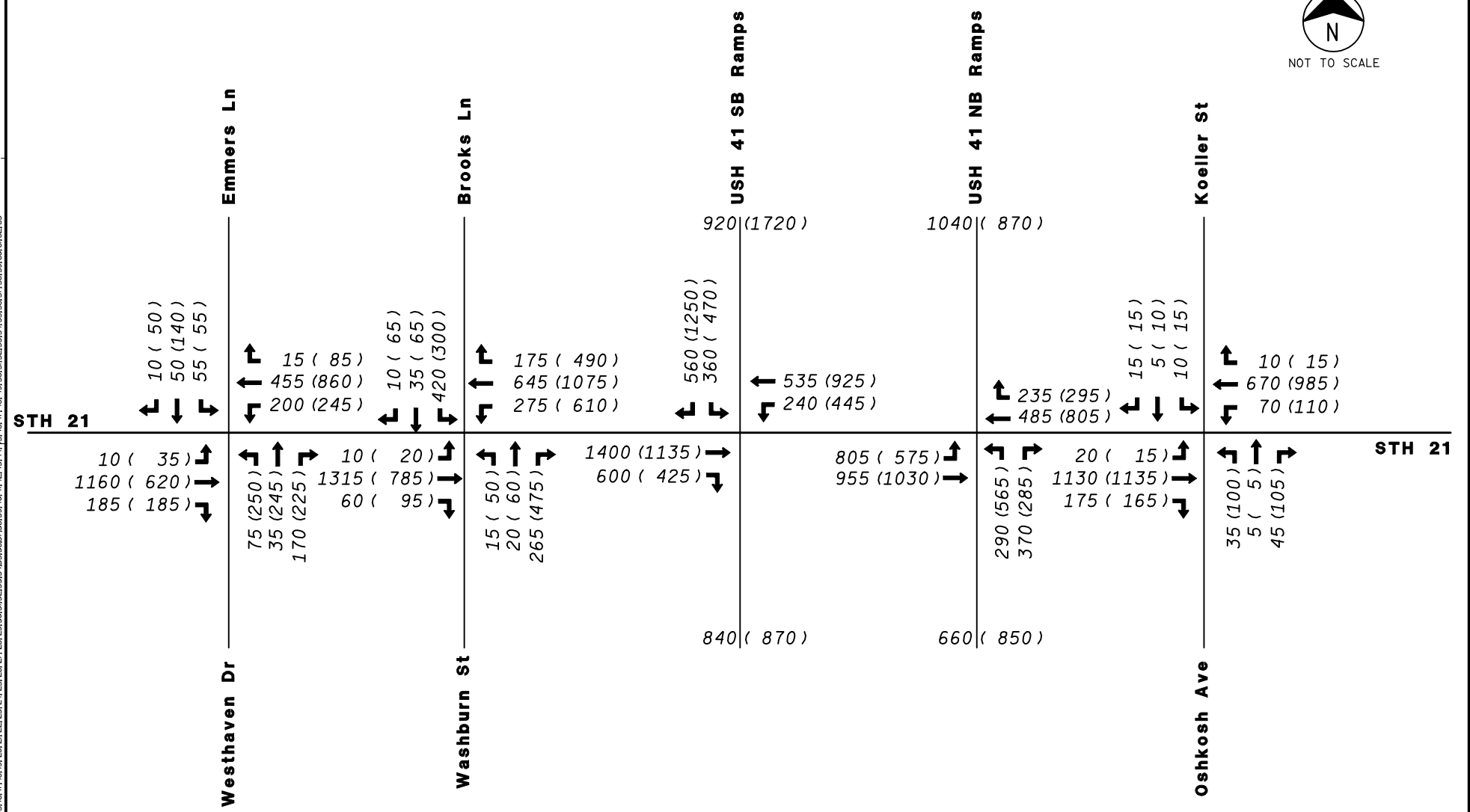


LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

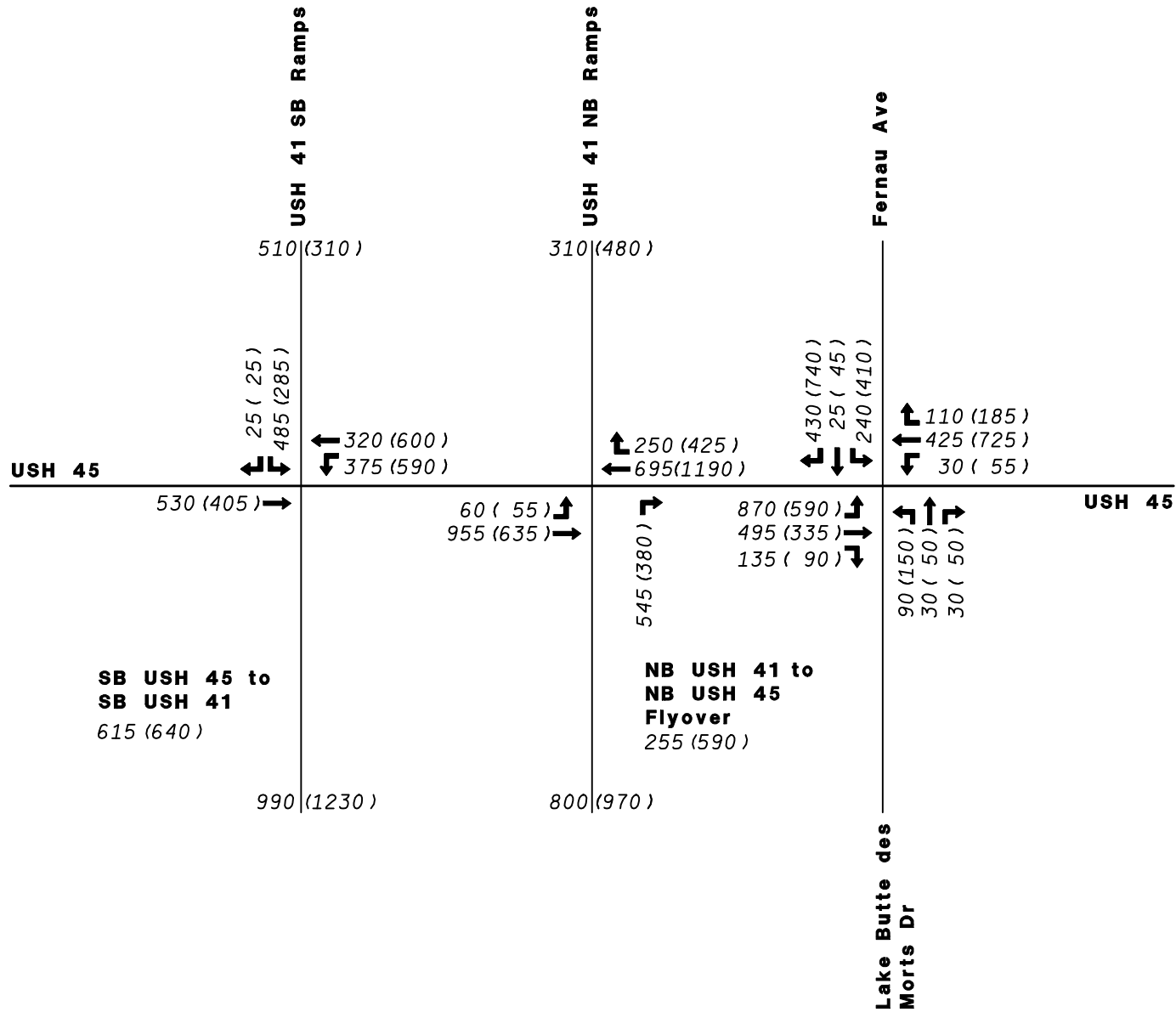
**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along STH 21**

Winnebago County

Figure C-9



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

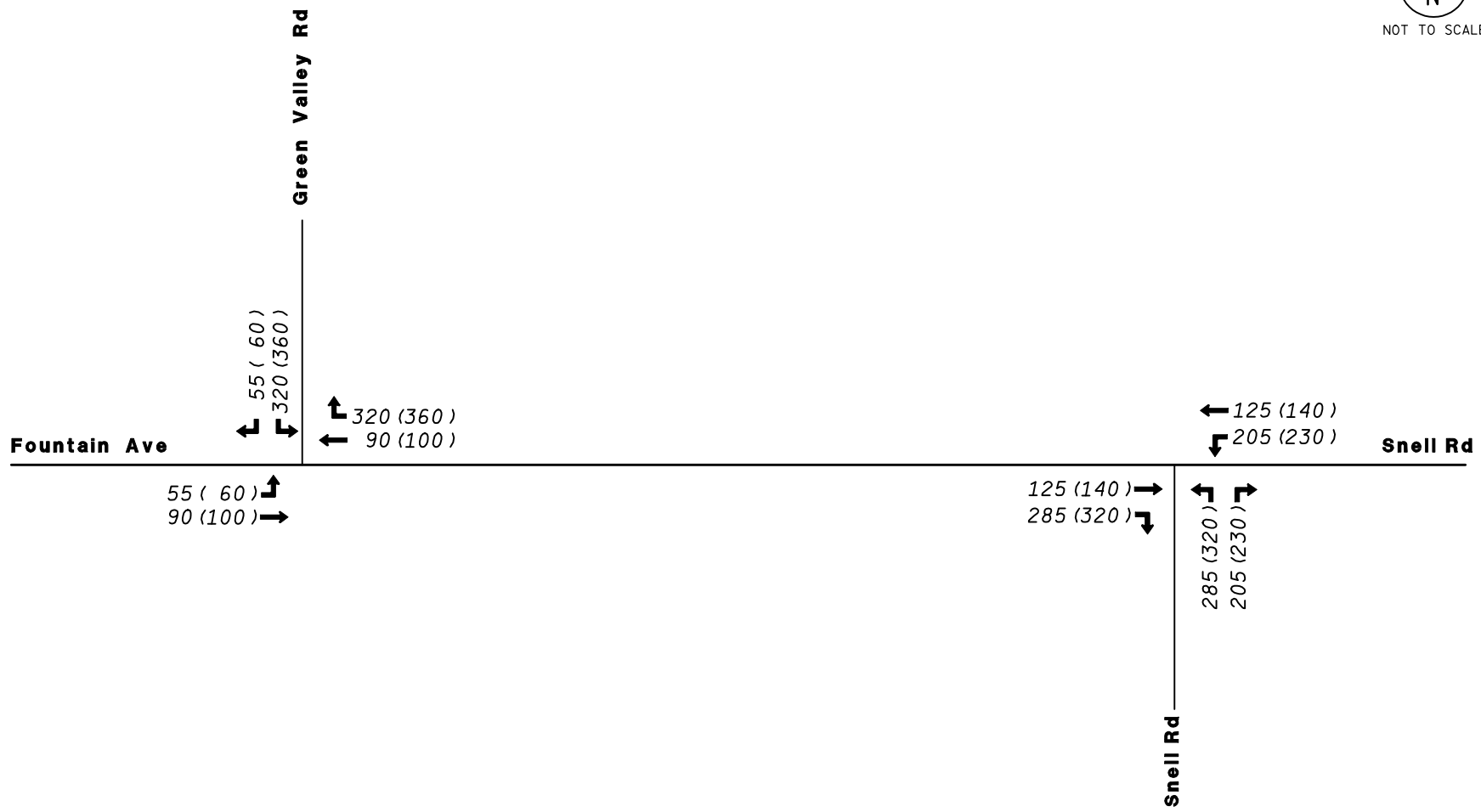
**USH 41 Traffic Study
Year 2035 Peak Hour Traffic
Along USH 45**

Winnebago County
Figure C-10





NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along Fountain Avenue**

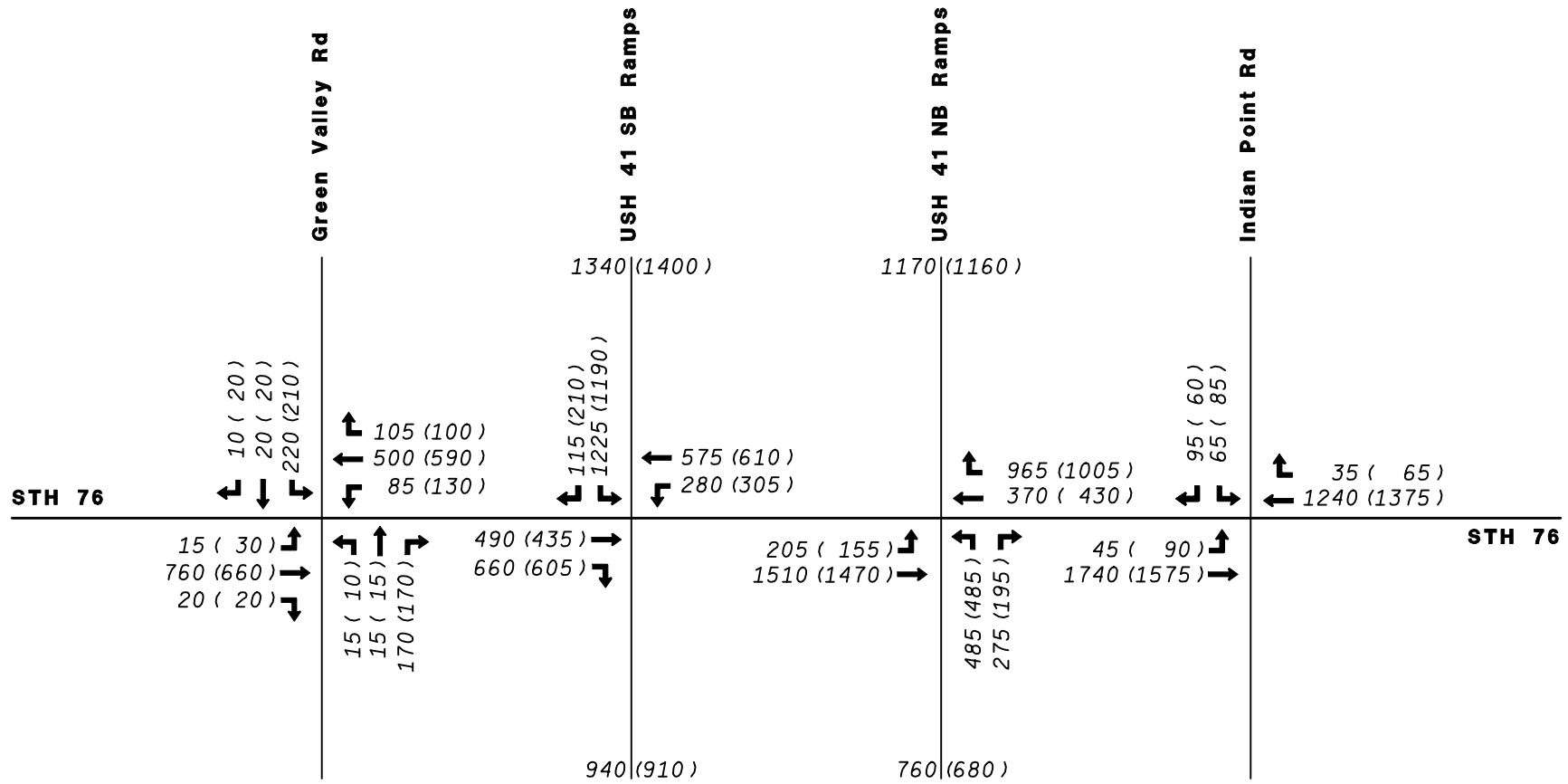
Winnebago County
Figure C-11



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along STH 76**

Winnebago County

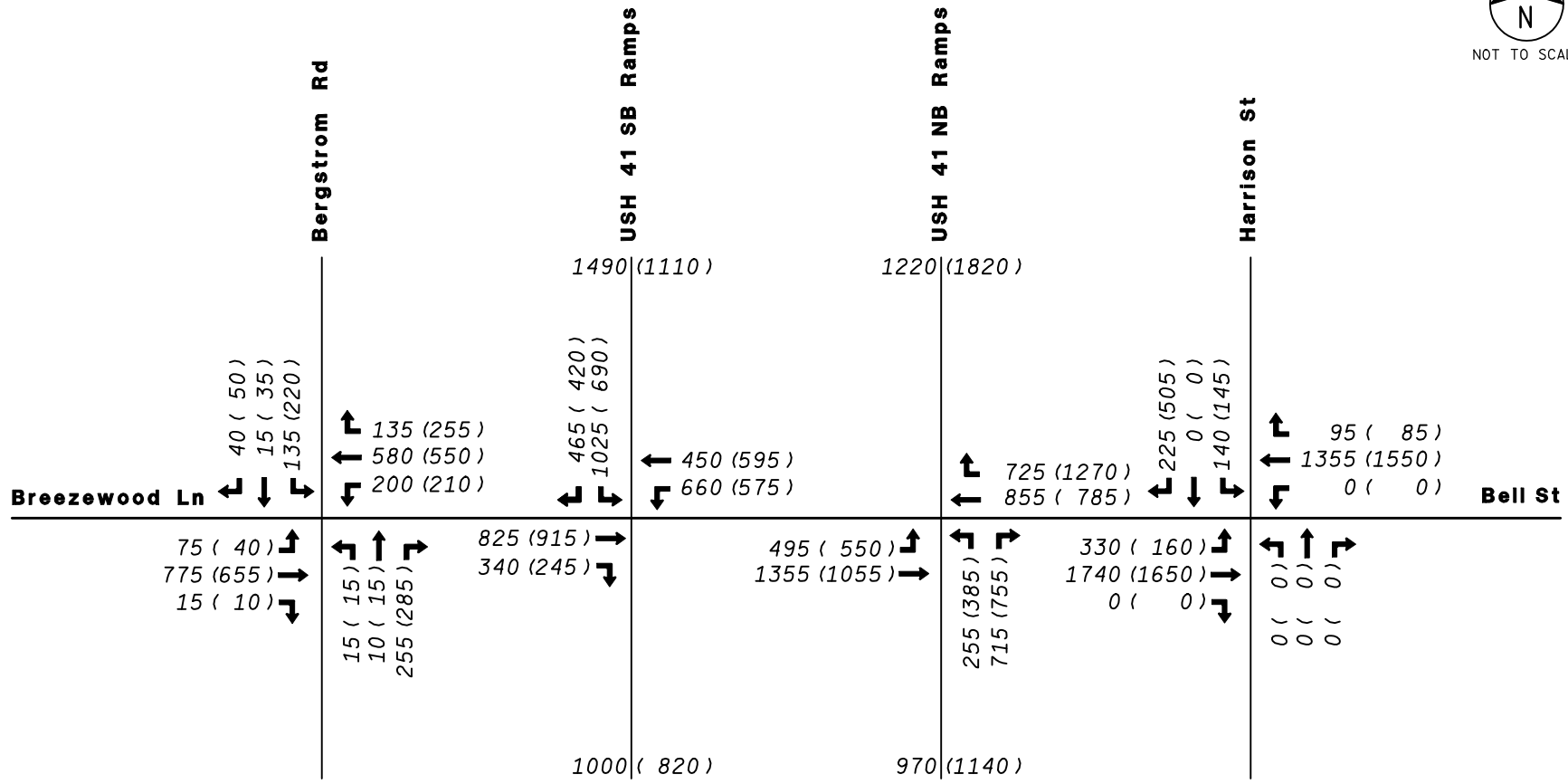
Figure C-12



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



NOT TO SCALE



LEGEND

000 (000) AM Peak Hour Traffic (PM Peak Hour Traffic)

PREPARED JULY 2006

**USH 41 Traffic Study
Year 2035 Peak Hour Traffic Forecasts
Along Breezewood Lane**

Winnebago County

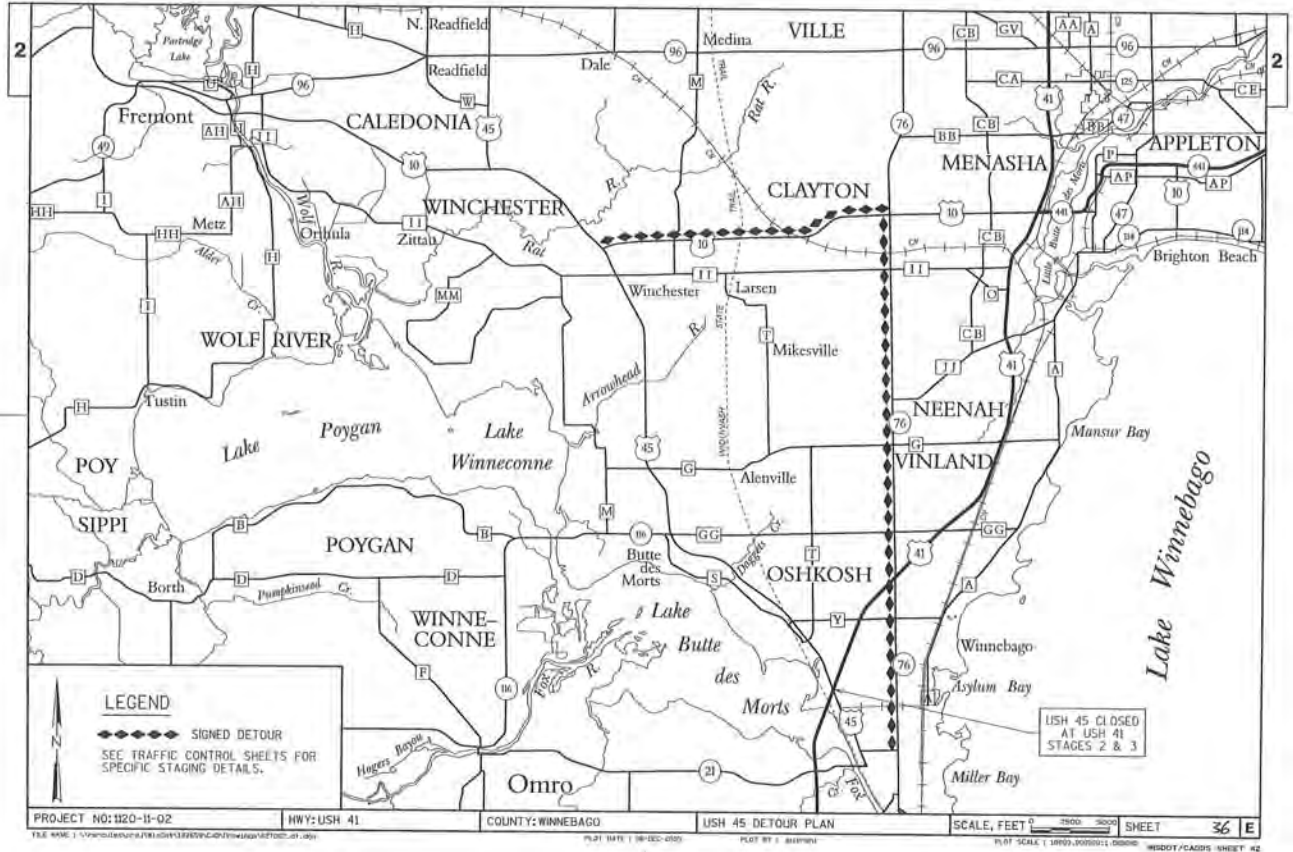
Figure C-13



LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

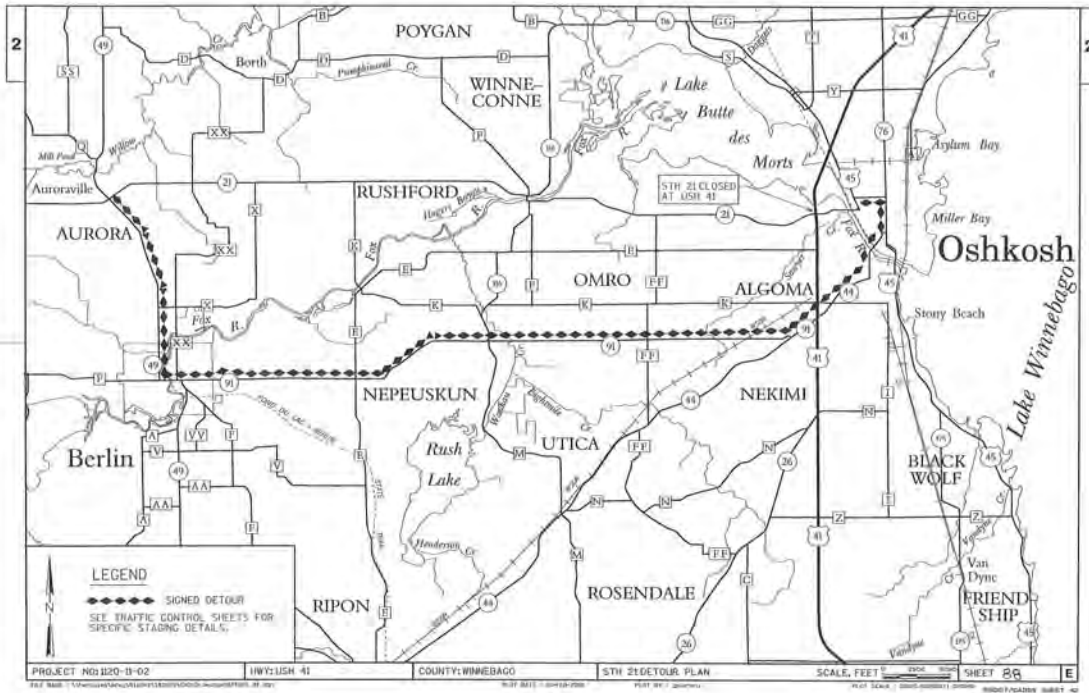
ATTACHMENT C – US 45 Detour Plan

Attachment C



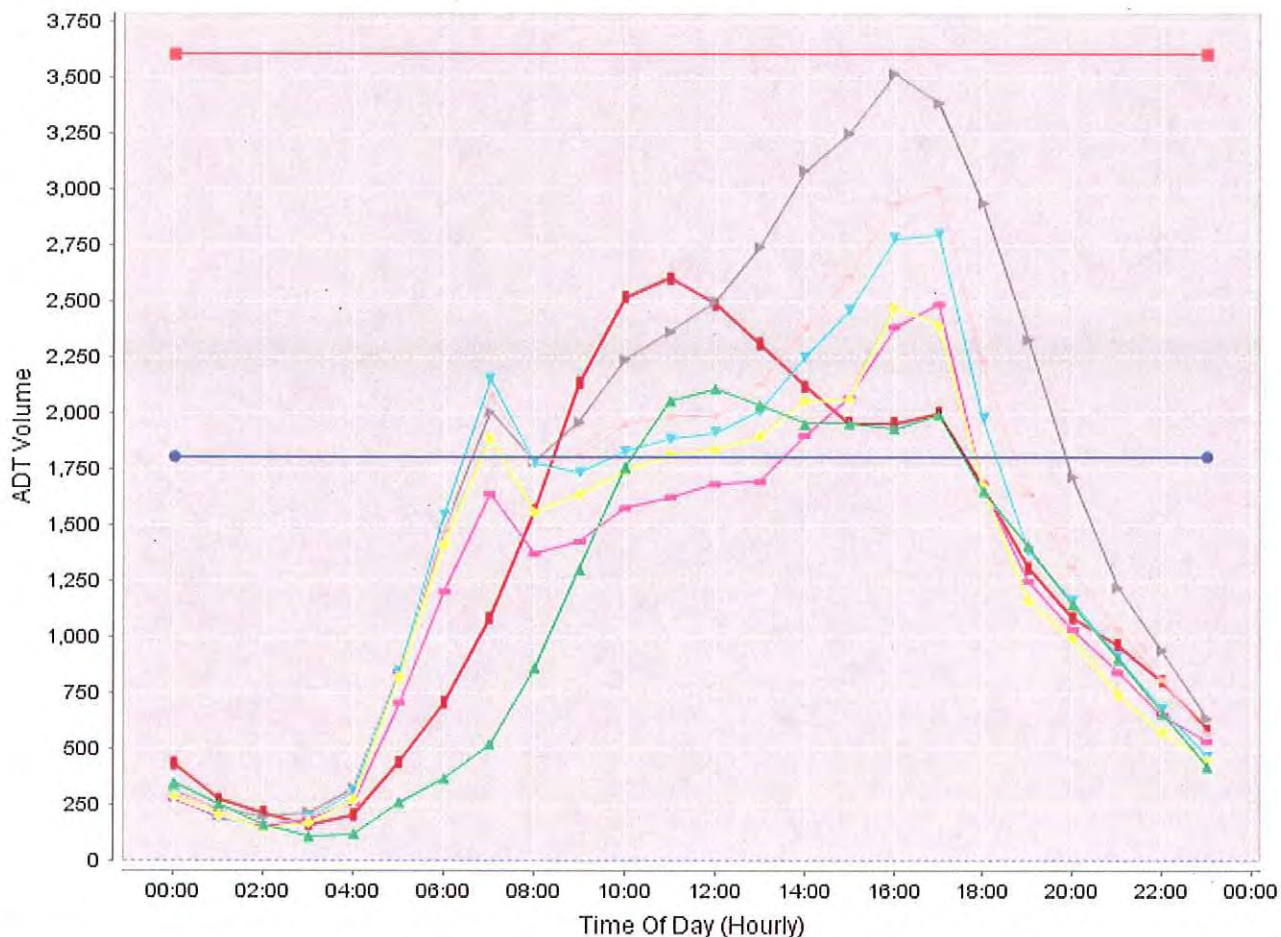
ATTACHMENT D – WIS 21 Detour Plan

Attachment D



ATTACHMENT E – TRADAS ADT Volumes for July 2006

TRADAS ADT Volumes for JUL 2006



■ Capacity Per Lane Value:1800 With 2 Of 2 Lanes Open = 3600 Total Available Capacity
● Capacity Per Lane Value:1800 With 1 Of 2 Lanes Open = 1800 Total Available Capacity
▲ Sunday ▲ Monday ▲ Tuesday ▲ Wednesday ▲ Thursday ▲ Friday ▲ Saturday

Meta Data Section:

County:
WINNEBAGO

TRADAS Site:
(700160) USH 41 SOUTH OF STH 21 OSHKOSH #3

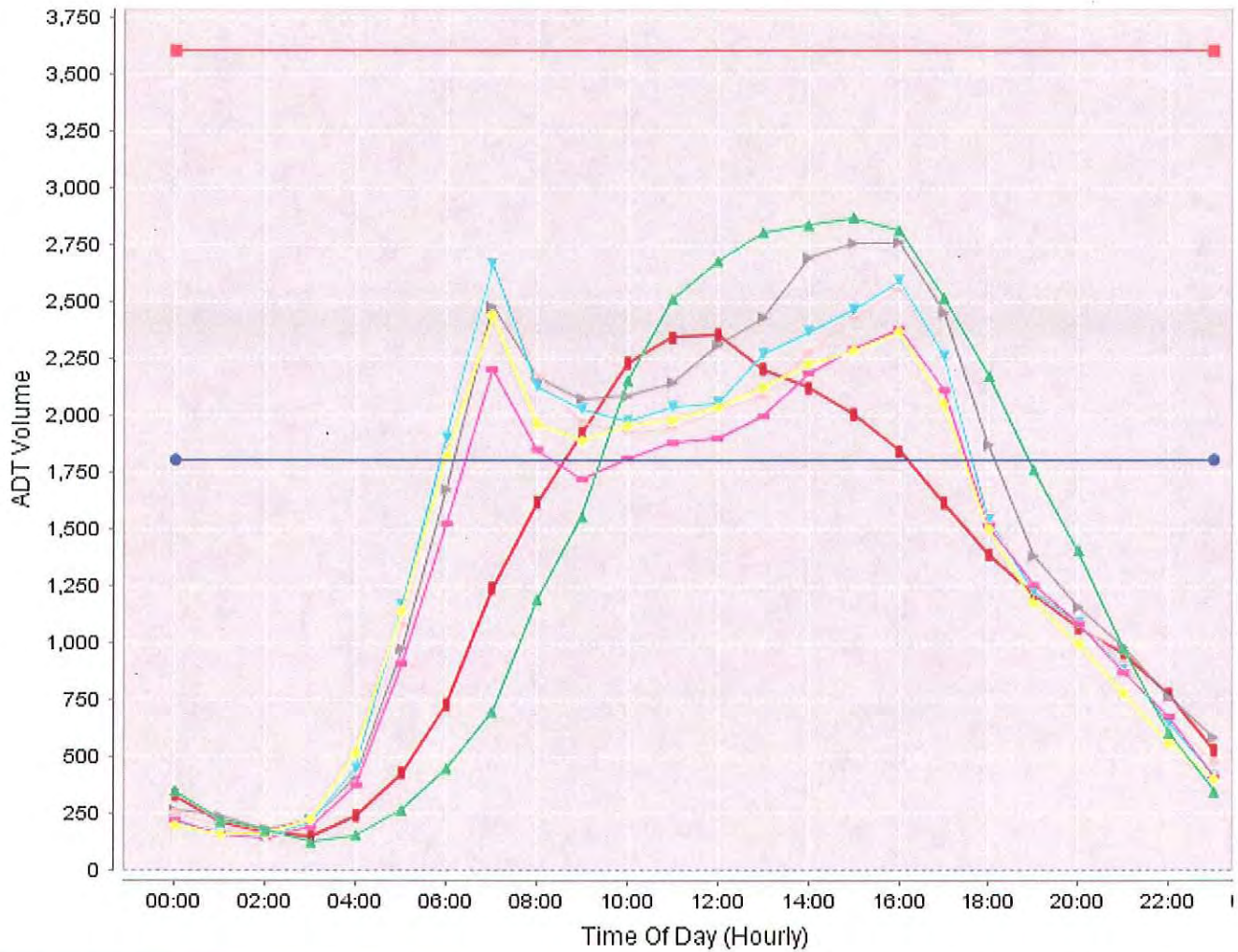
Cardinal Direction:
Positive(+) North/East

Selected Days Of Week:
 Sunday
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday

Number of Lanes in the Positive Direction = 2
 Graph Creation Date/Time: Jun 01, 2007 08:27

Print Close [Zoom In](#) | [Zoom Out](#)

TRADAS ADT Volumes for JUL 2006



■ Capacity Per Lane Value:1800 With 2 Of 2 Lanes Open = 3600 Total Available Capacity
● Capacity Per Lane Value:1800 With 1 Of 2 Lanes Open = 1800 Total Available Capacity
▲ Sunday ▲ Monday ▲ Tuesday ▲ Wednesday ▲ Thursday ▲ Friday ▲ Saturday

Meta Data Section:

County:
WINNEBAGO

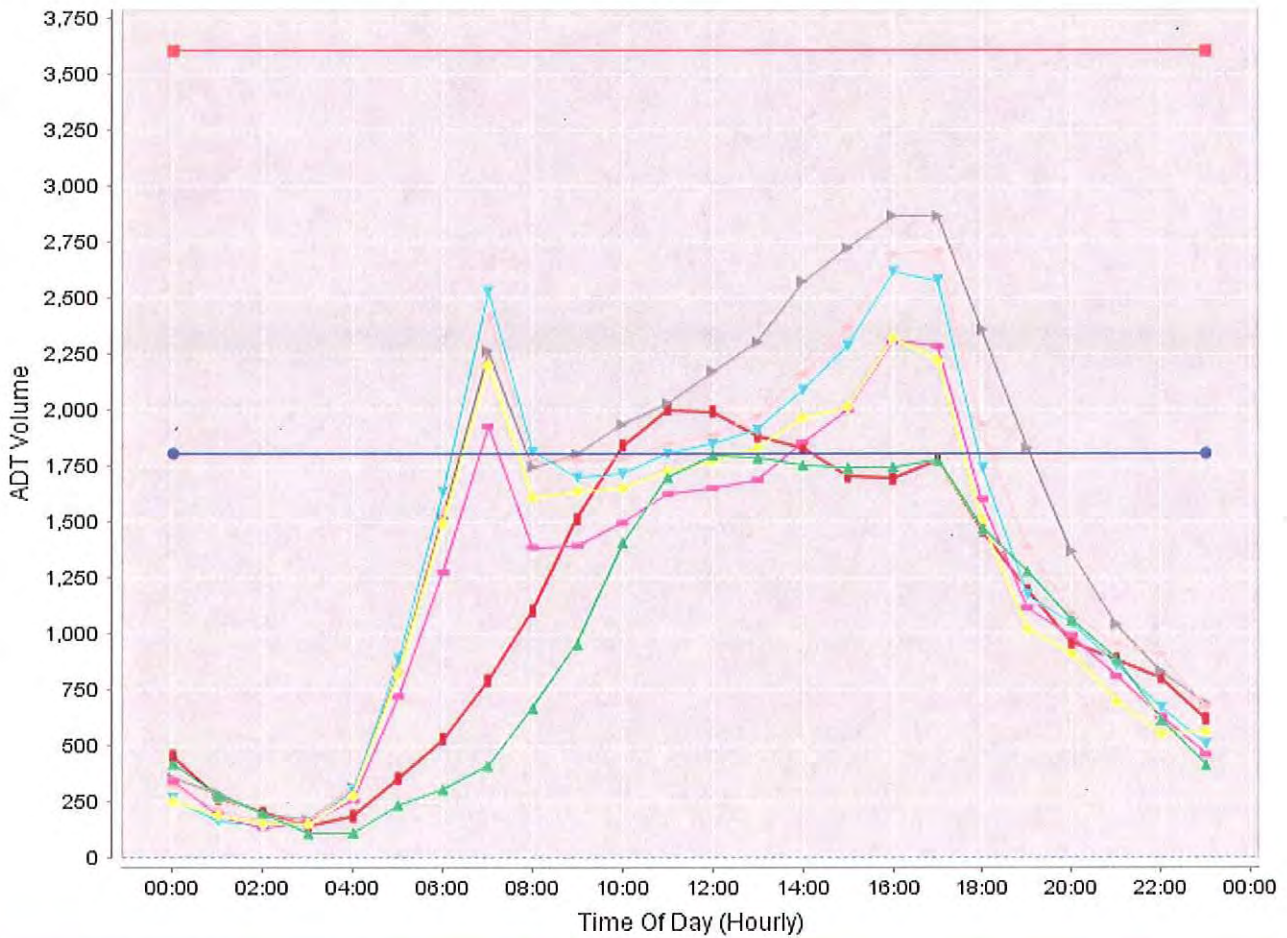
TRADAS Site:
(700160) USH 41 SOUTH OF STH 21 OSHKOSH #3

Cardinal Direction:
Negative(-) South/West

- Selected Days Of Week:
- Sunday
 - Monday
 - Tuesday
 - Wednesday
 - Thursday
 - Friday
 - Saturday

Number of Lanes in the Negative Direction = 2
Graph Creation Date/Time: Jun 01, 2007 08:28

TRADAS ADT Volumes for JUL 2006



■ Capacity Per Lane Value:1800 With 2 Of 2 Lanes Open = 3600 Total Available Capacity
● Capacity Per Lane Value:1800 With 1 Of 2 Lanes Open = 1800 Total Available Capacity
▲ Sunday ▲ Monday ▲ Tuesday ▲ Wednesday ▲ Thursday ▲ Friday ▲ Saturday

Meta Data Section:

County:
WINNEBAGO

TRADAS Site:
(700001) USH 41 NORTH OF STH 76

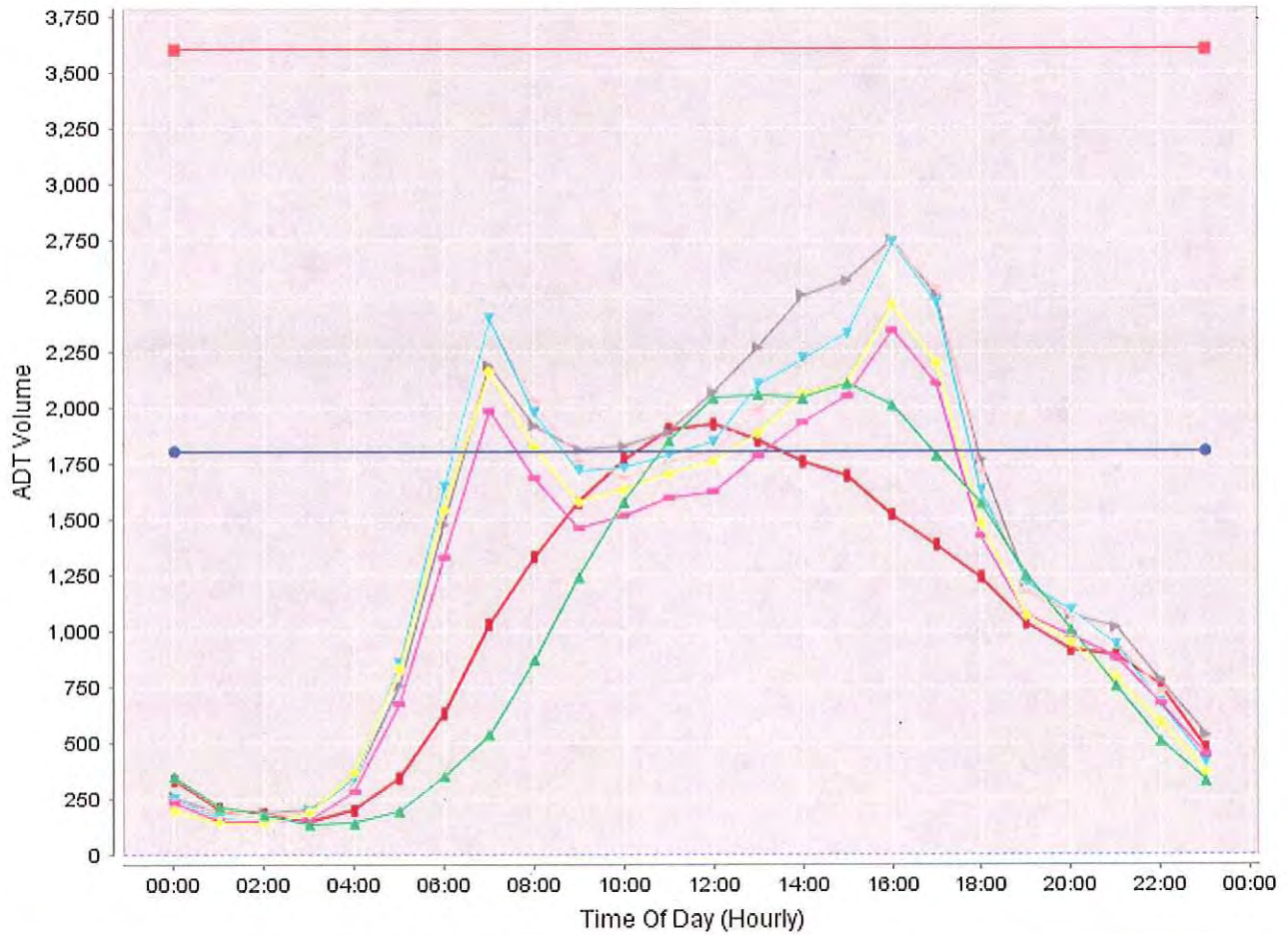
Cardinal Direction:
Positive(+) North/East

Selected Days Of Week:
 Sunday
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday

Number of Lanes in the Positive Direction = 2
 Graph Creation Date/Time: Jun 01, 2007 08:30

Print Close [Zoom In](#) | [Zoom Out](#)

TRADAS ADT Volumes for JUL 2006



<p> ■ Capacity Per Lane Value:1800 With 2 Of 2 Lanes Open = 3600 Total Available Capacity ■ Capacity Per Lane Value:1800 With 1 Of 2 Lanes Open = 1800 Total Available Capacity ▲ Sunday ■ Monday ◆ Tuesday ▲ Wednesday ■ Thursday ▲ Friday ■ Saturday </p>
--

Meta Data Section:

County:
WINNEBAGO

TRADAS Site:
(700001) USH 41 NORTH OF STH 76

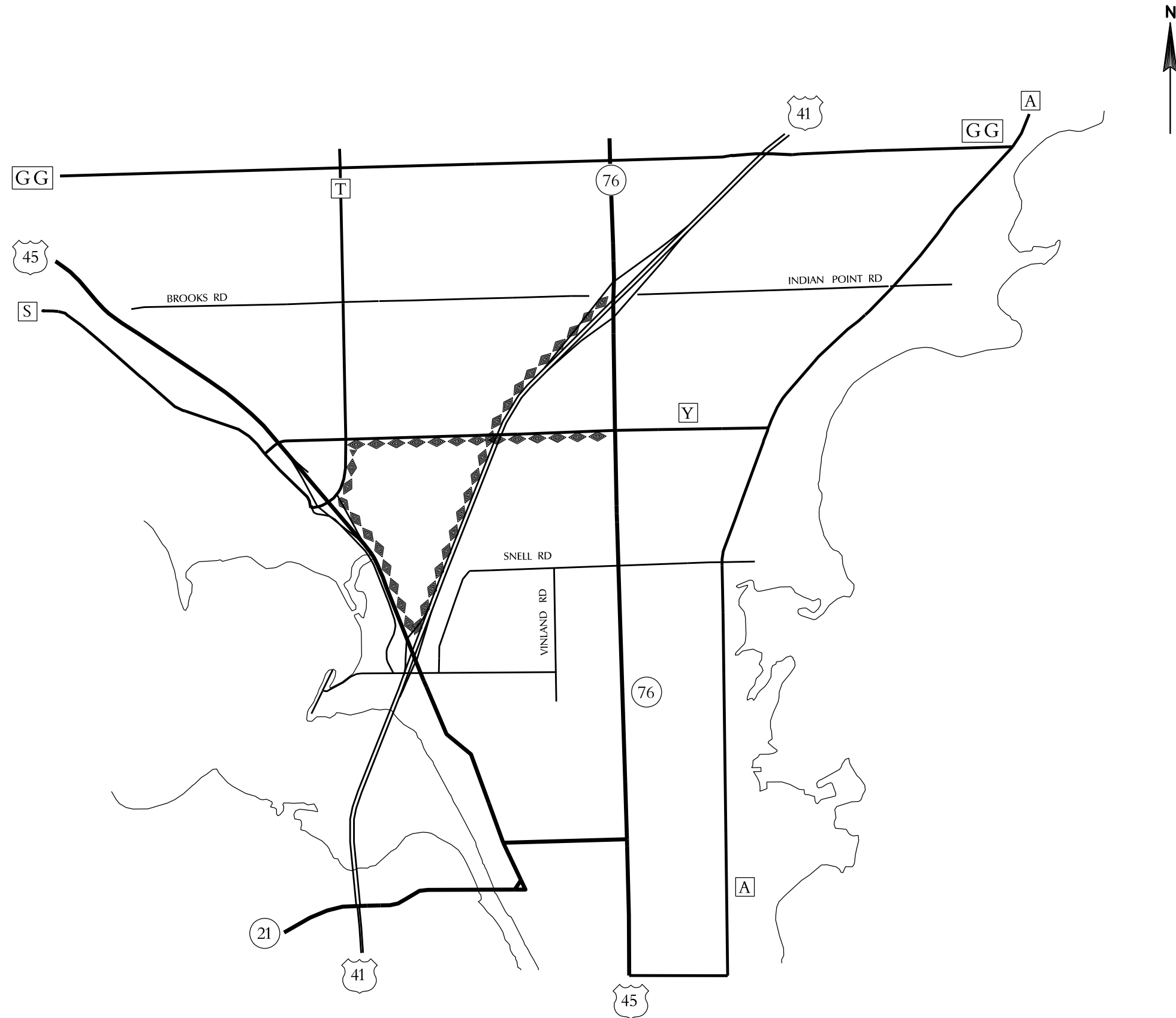
Cardinal Direction:
Negative(-) South/West

- Selected Days Of Week:
- Sunday
 - Monday
 - Tuesday
 - Wednesday
 - Thursday
 - Friday
 - Saturday

Number of Lanes in the Negative Direction = 2
Graph Creation Date/Time: Jun 01, 2007 08:29





Print Close [Zoom In](#) | [Zoom Out](#)

ATTACHMENT F – WIS 76 Detour Plan



ATTACHMENT G – CTH K Overpass Detour Plan

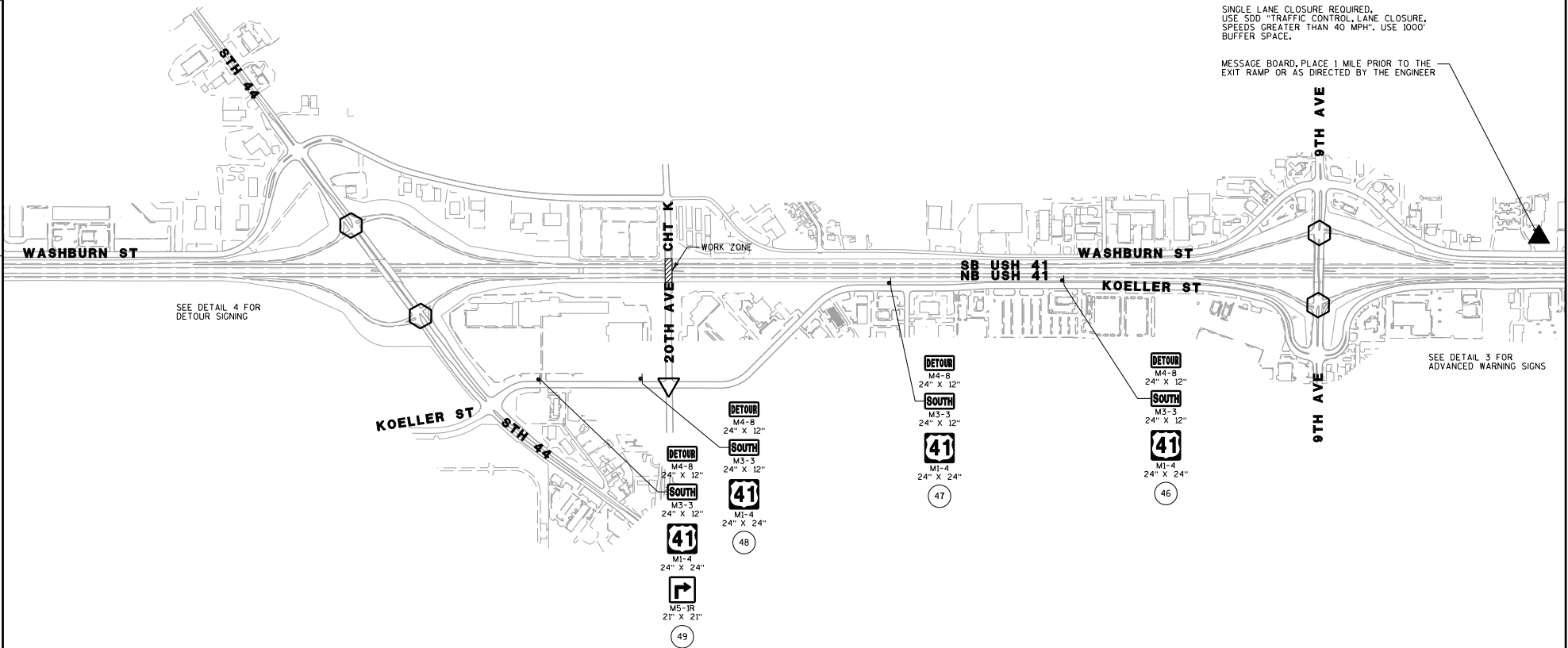
LEGEND

-  INTERSECTION SIGNALS TO BE HAND CONTROLLED (BY OTHERS)
-  INTERSECTION SIGNALS TO BE SET TO FLASH MODE (BY OTHERS - CITY)
-  SIGN NUMBER. REFER TO SEPARATE QUANTITY SHEET
-  POST MOUNTED SIGN



SINGLE LANE CLOSURE REQUIRED. USE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH". USE 1000' BUFFER SPACE.

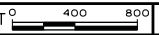
MESSAGE BOARD, PLACE 1 MILE PRIOR TO THE EXIT RAMP OR AS DIRECTED BY THE ENGINEER

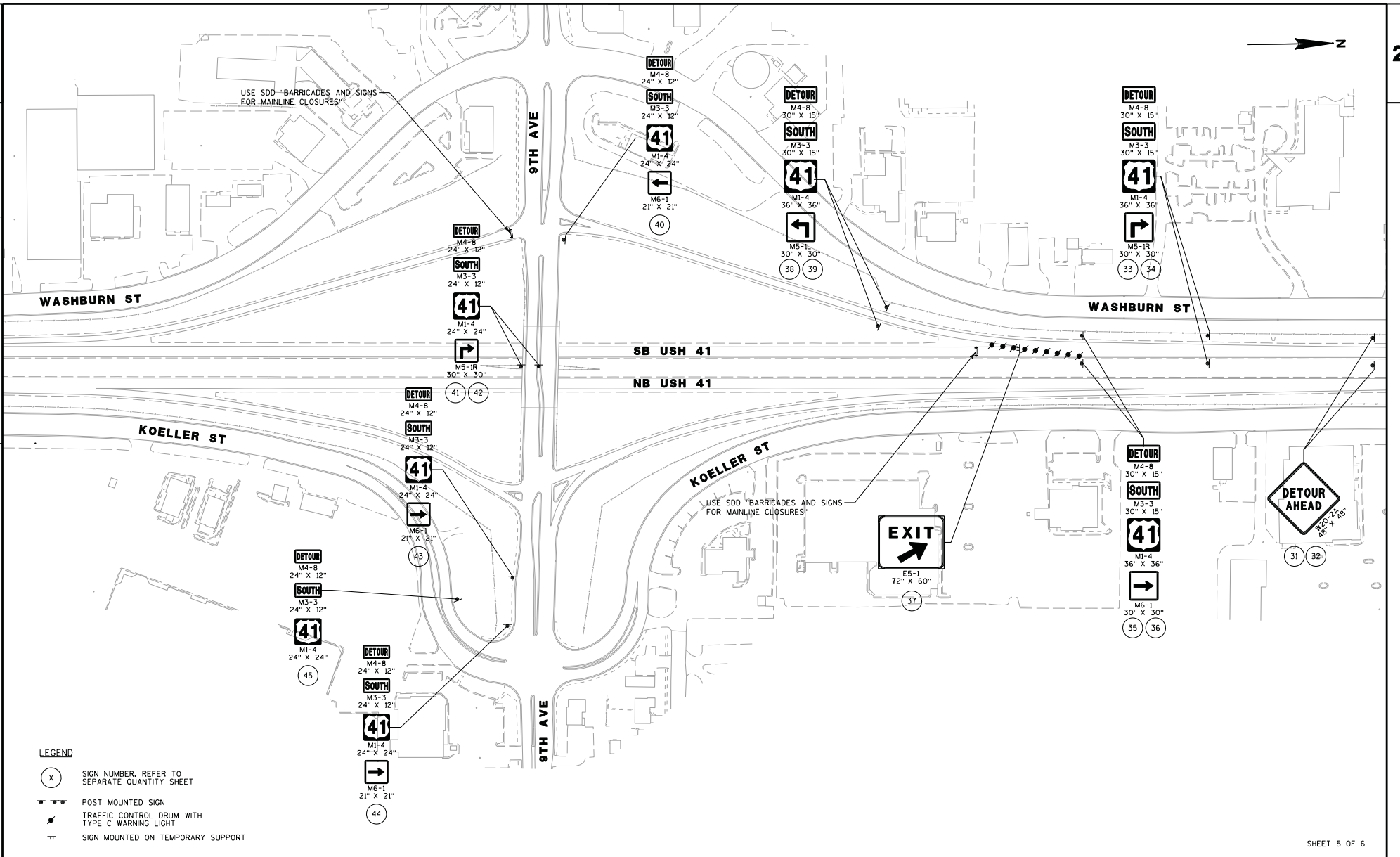


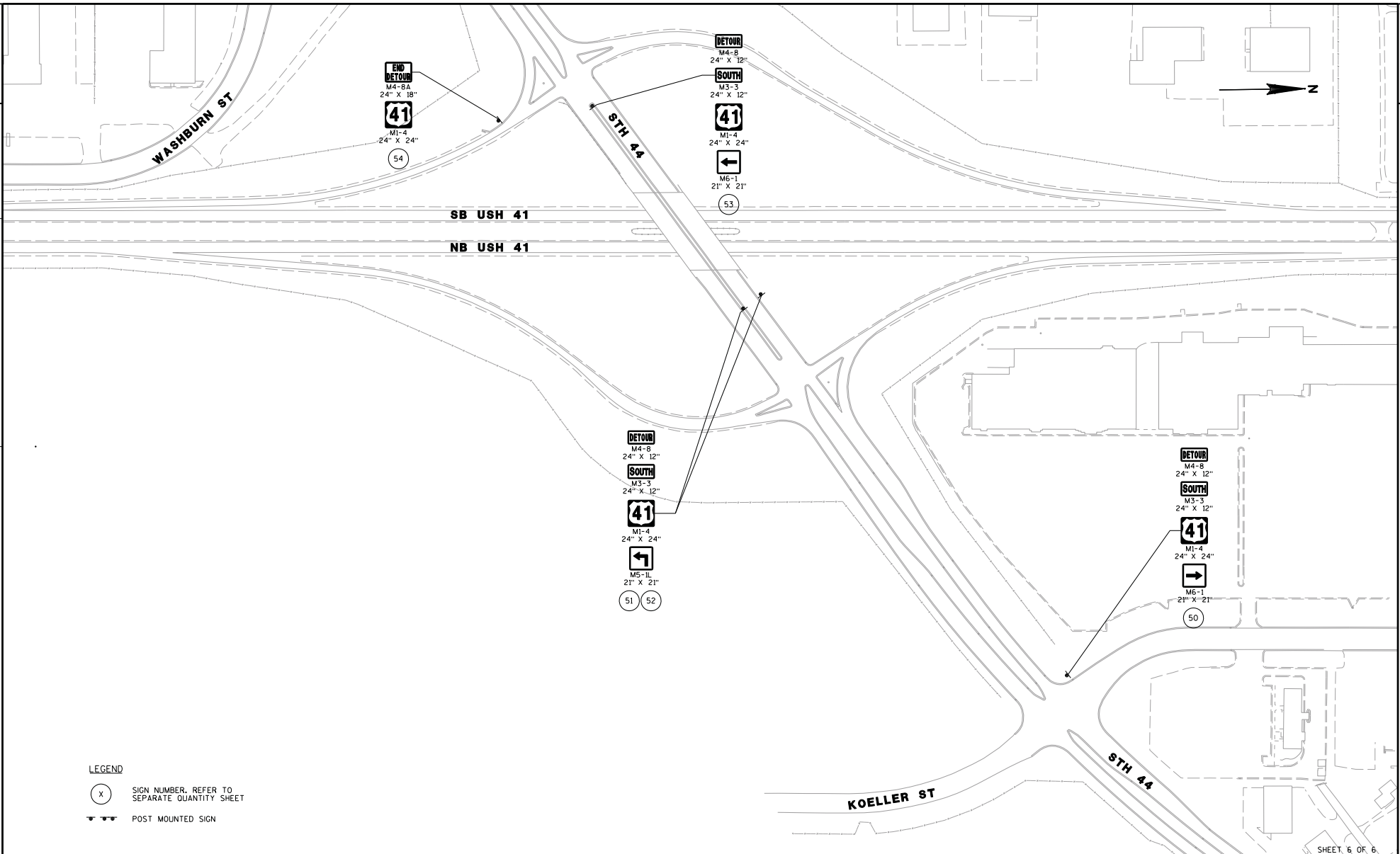
SEE DETAIL 4 FOR DETOUR SIGNING

SEE DETAIL 3 FOR ADVANCED WARNING SIGNS

SHEET 4 OF 6

PROJECT NO: 1120-10-71	HWY: USH 41	COUNTY: WINNEBAGO	DETOUR PLAN - SB USH 41	SCALE, FT 	SHEET 21	E
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





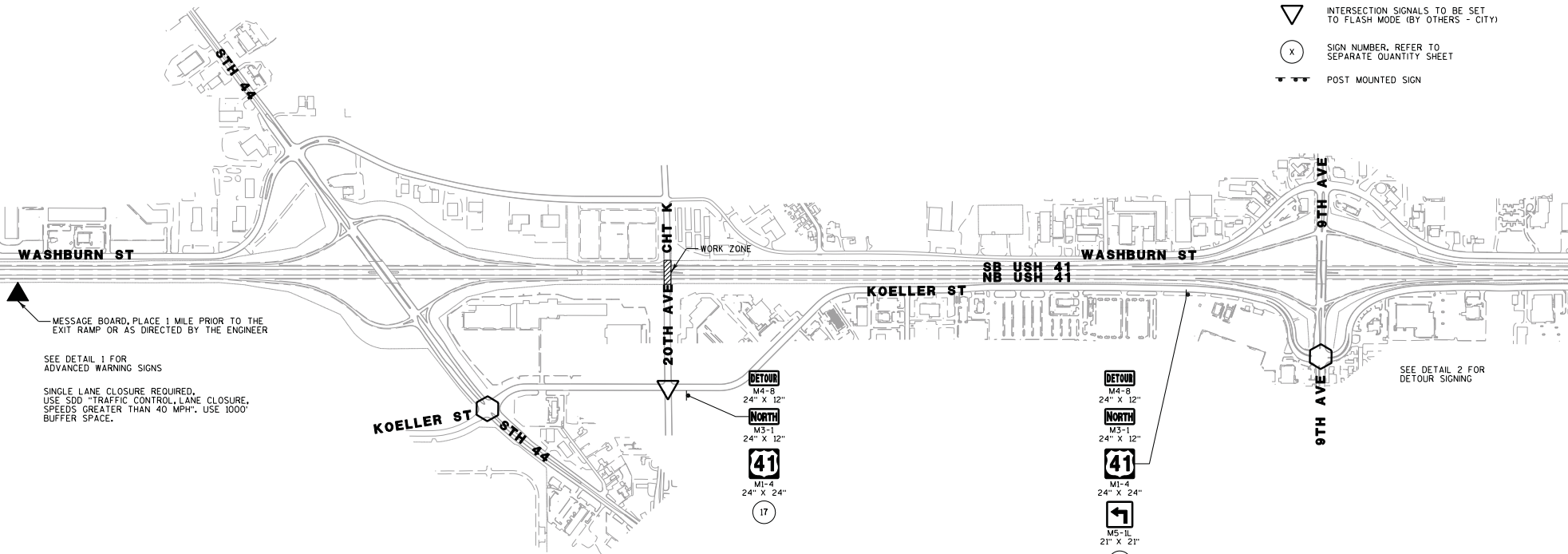
LEGEND

- (X) SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
- POST MOUNTED SIGN



LEGEND

-  INTERSECTION SIGNALS TO BE HAND CONTROLLED (BY OTHERS)
-  INTERSECTION SIGNALS TO BE SET TO FLASH MODE (BY OTHERS - CITY)
-  SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
-  POST MOUNTED SIGN



MESSAGE BOARD, PLACE 1 MILE PRIOR TO THE EXIT RAMP OR AS DIRECTED BY THE ENGINEER

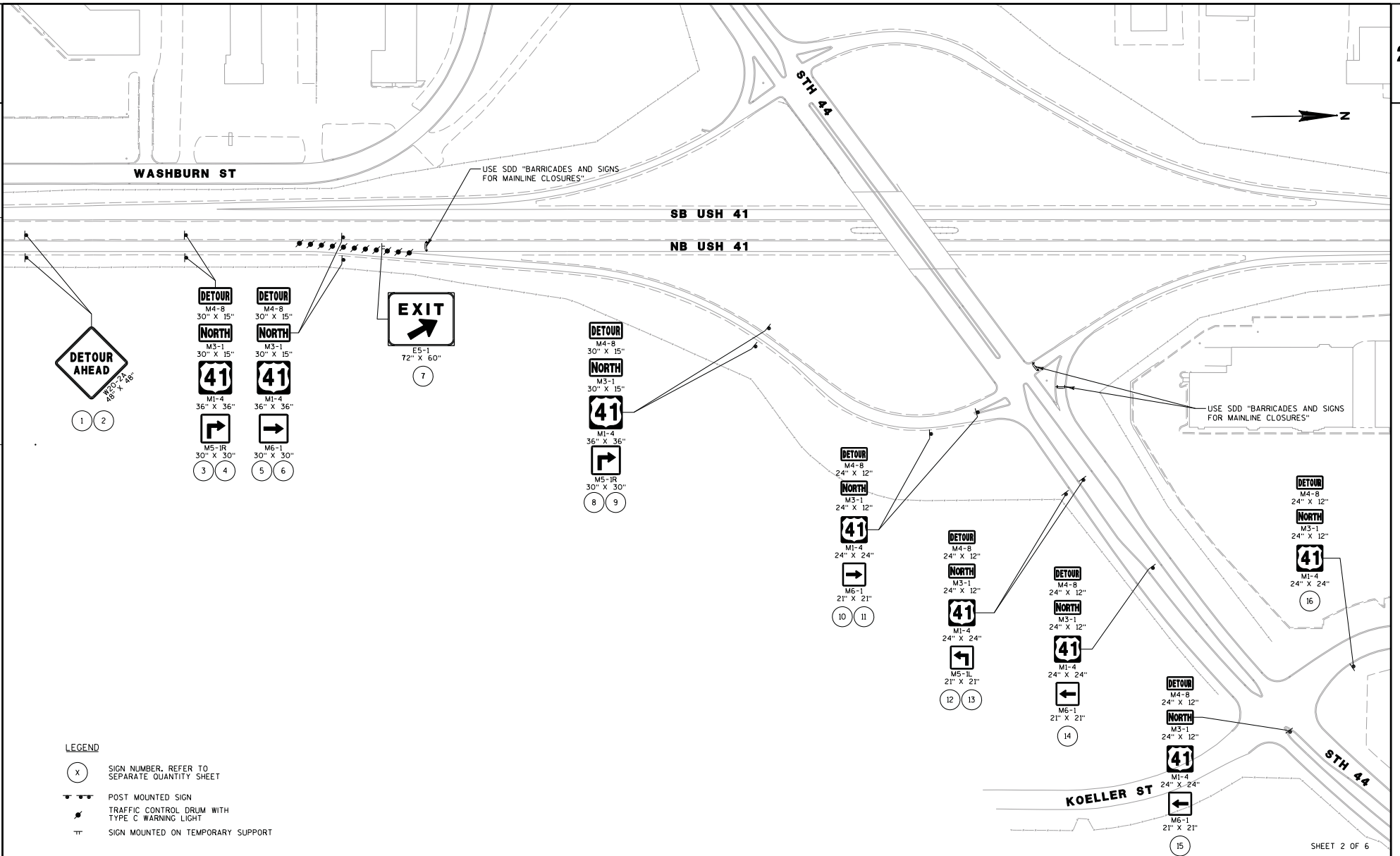
SEE DETAIL 1 FOR ADVANCED WARNING SIGNS

SINGLE LANE CLOSURE REQUIRED. USE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH. USE 1000' BUFFER SPACE.

SEE DETAIL 2 FOR DETOUR SIGNING

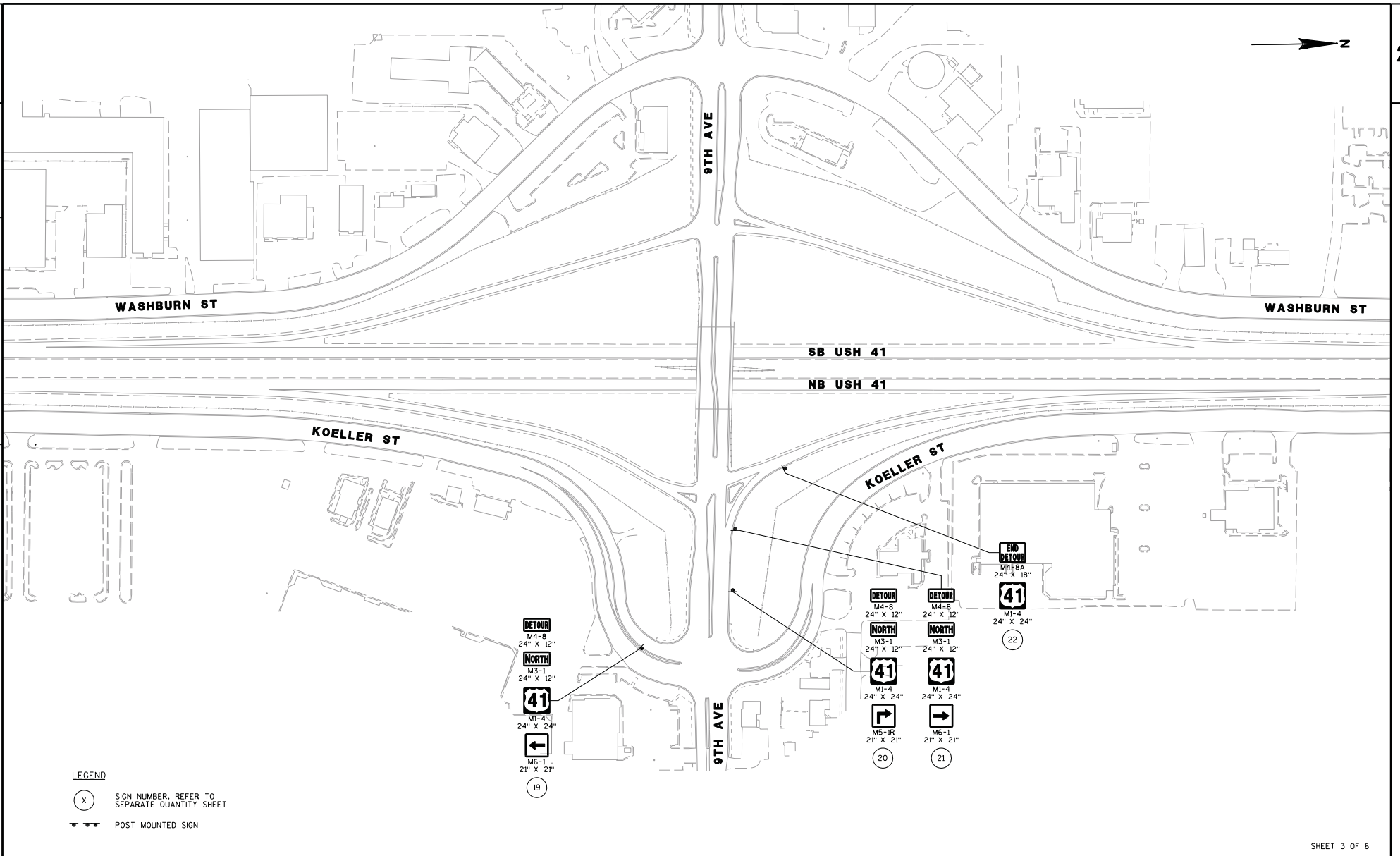
SHEET 1 OF 6

PROJECT NO: 1120-10-71	HWY: USH 41	COUNTY: WINNEBAGO	DETOUR PLAN - NB USH 41	SCALE, FT 	SHEET 24	E
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LEGEND

- (X) SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
- POST MOUNTED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C WARNING LIGHT
- SIGN MOUNTED ON TEMPORARY SUPPORT







LEGEND

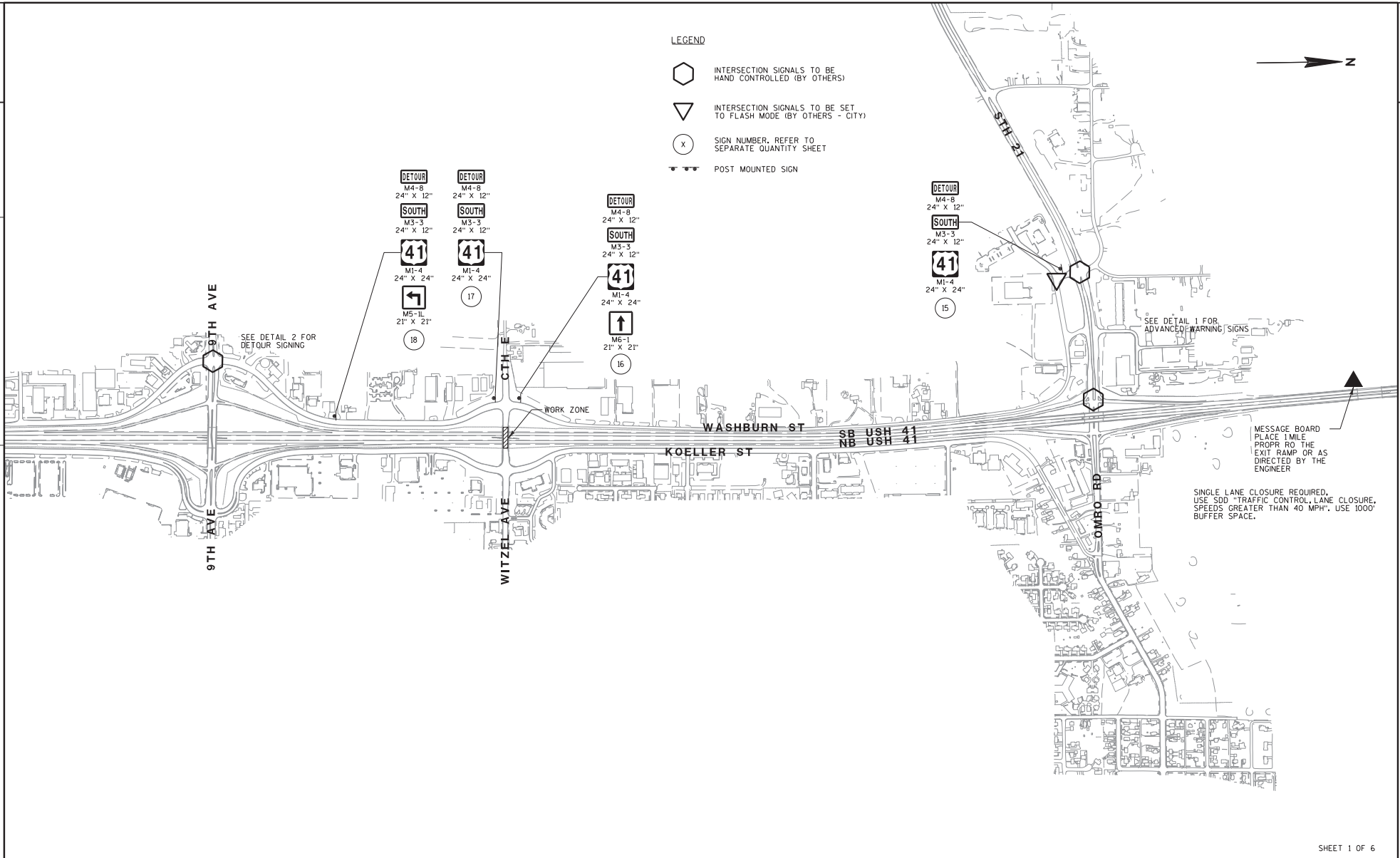
(X) SIGN NUMBER. REFER TO SEPARATE QUANTITY SHEET

POST MOUNTED SIGN

ATTACHMENT H – Witzel Avenue Overpass Detour Plan

LEGEND

-  INTERSECTION SIGNALS TO BE HAND CONTROLLED (BY OTHERS)
-  INTERSECTION SIGNALS TO BE SET TO FLASH MODE (BY OTHERS - CITY)
-  SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
-  POST MOUNTED SIGN




SEE DETAIL 1 FOR ADVANCED WARNING SIGNS

SEE DETAIL 2 FOR DETOUR SIGNING

MESSAGE BOARD PLACE 1 MILE PROPR TO THE EXIT RAMP OR AS DIRECTED BY THE ENGINEER

SINGLE LANE CLOSURE REQUIRED. USE SDD "TRAFFIC CONTROL LANE CLOSURE, SPEEDS GREATER THAN 40 MPH". USE 1000' BUFFER SPACE.

SHEET 1 OF 6

PROJECT NO: 1120-11-71	HWY: USH 41	COUNTY: WINNEBAGO	DETOUR PLAN - SB USH 41
SCALE, FT 		SHEET 119	E



ROAD CLOSED
R11-2
48" X 30"

14

BROOKS LN

ABRAHAM LN

STH 21

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41

M1-4
24" X 24"

M6-1
21" X 21"

12

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41

M1-4
24" X 24"

13

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41

M1-4
24" X 24"

M5-1L
21" X 21"

10 11

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41

M1-4
24" X 24"

M6-1
21" X 21"

9

DETOUR
M4-8
30" X 15"

SOUTH
M3-3
30" X 15"

41

M1-4
36" X 36"

M5-1R
30" X 30"

7 8

DETOUR
M4-8
30" X 15"

SOUTH
M3-3
30" X 15"

41

M1-4
36" X 36"

M6-1
30" X 30"

5 6

DETOUR
M4-8
30" X 15"

SOUTH
M3-3
30" X 15"

41

M1-4
36" X 36"

M5-1R
30" X 30"

3 4

DETOUR AHEAD
R6-2
48" X 48"

1 2

1000'

WASHBURN ST

SB USH 41

NB USH 41

OMRO RD

USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

EXIT
E5-1
72" X 60"

24




1000' BUFFER

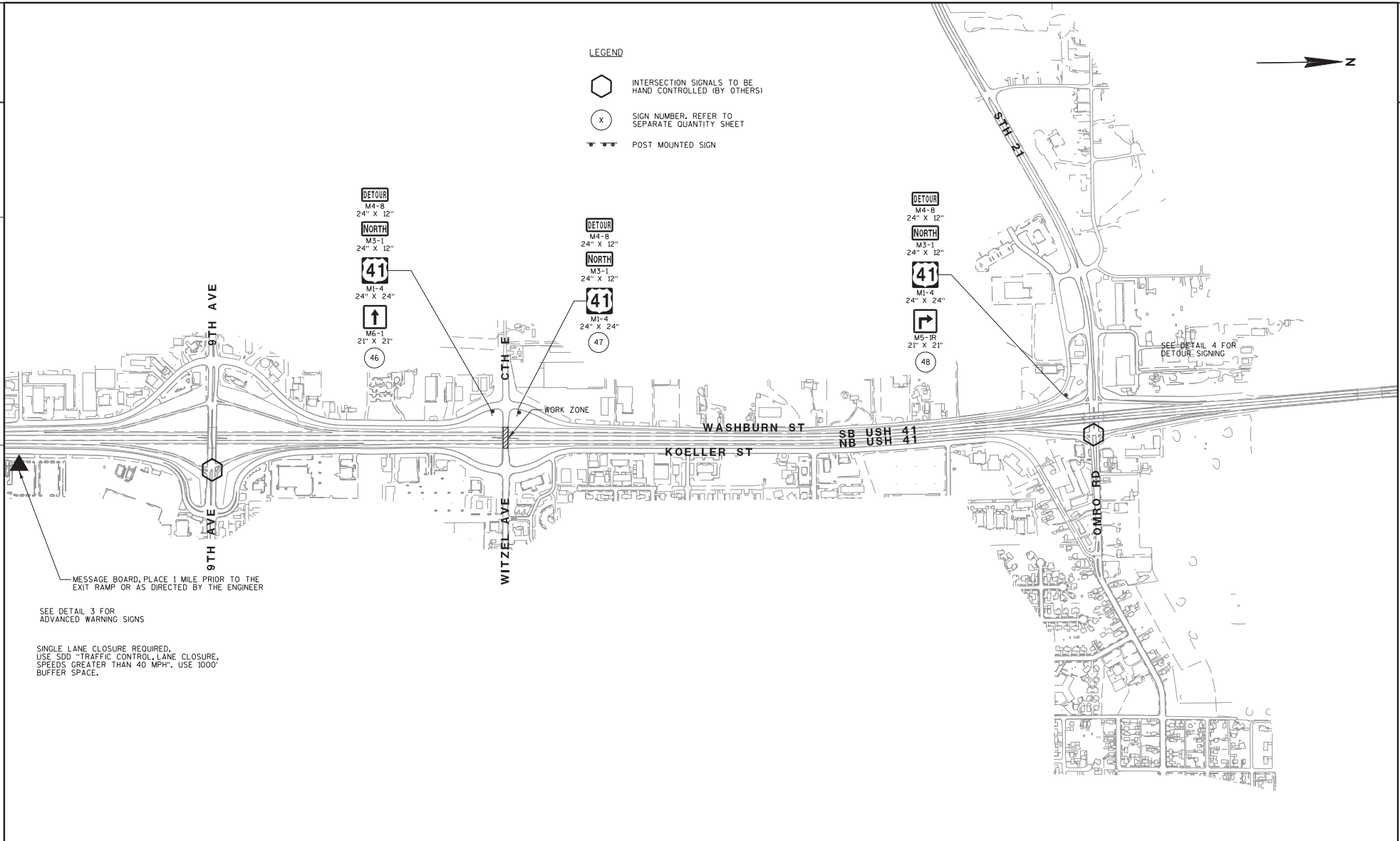
SINGLE LANE CLOSURE REQUIRED. USE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH". USE 1000' BUFFER SPACE.

USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

- LEGEND
- (X) SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
 - POST MOUNTED SIGN
 - TRAFFIC CONTROL DRUM WITH TYPE C WARNING LIGHT
 - SIGN MOUNTED ON TEMPORARY SUPPORT

LEGEND

-  INTERSECTION SIGNALS TO BE HAND CONTROLLED (BY OTHERS)
-  SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
-  POST MOUNTED SIGN

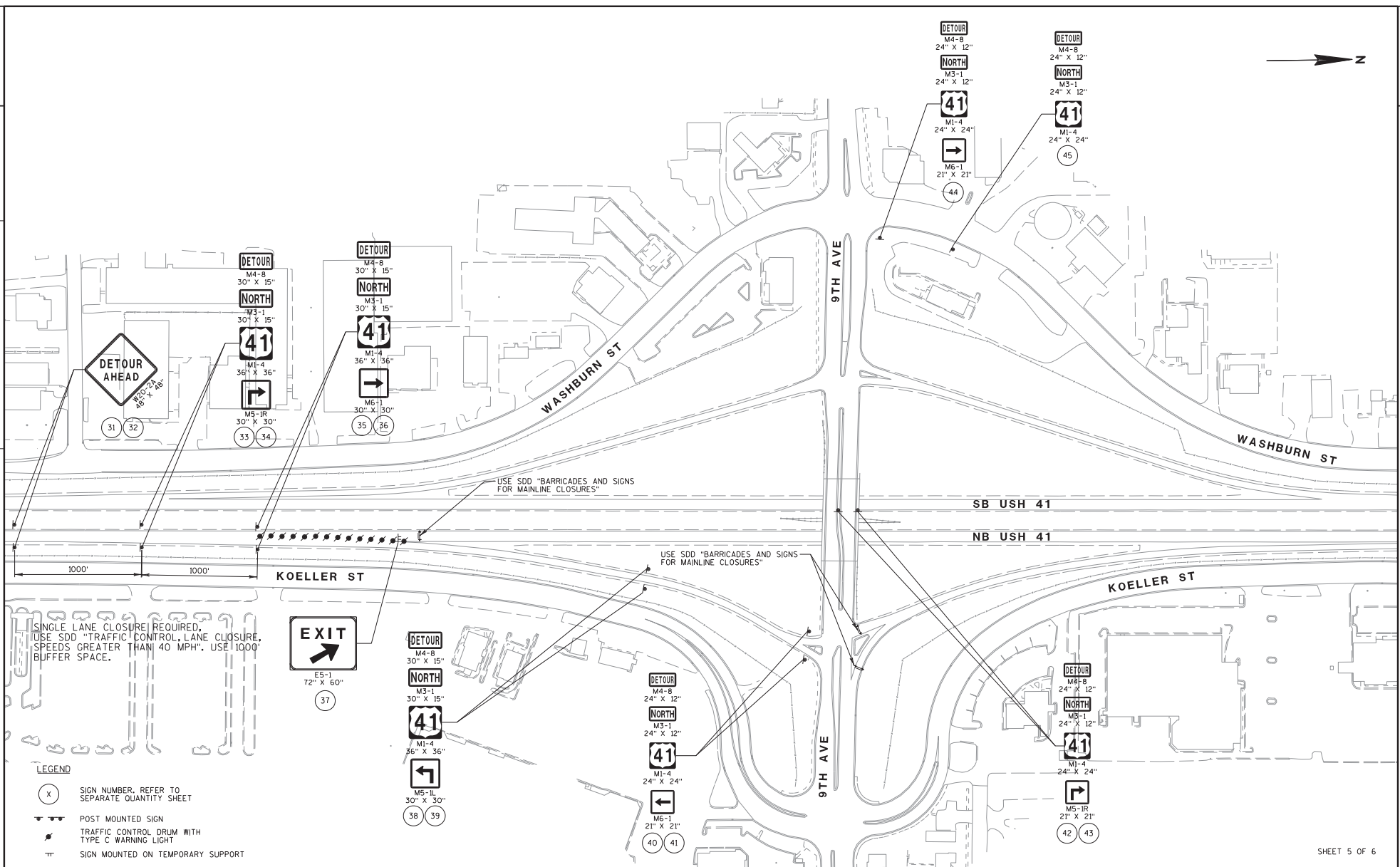


MESSAGE BOARD, PLACE 1 MILE PRIOR TO THE EXIT RAMP OR AS DIRECTED BY THE ENGINEER

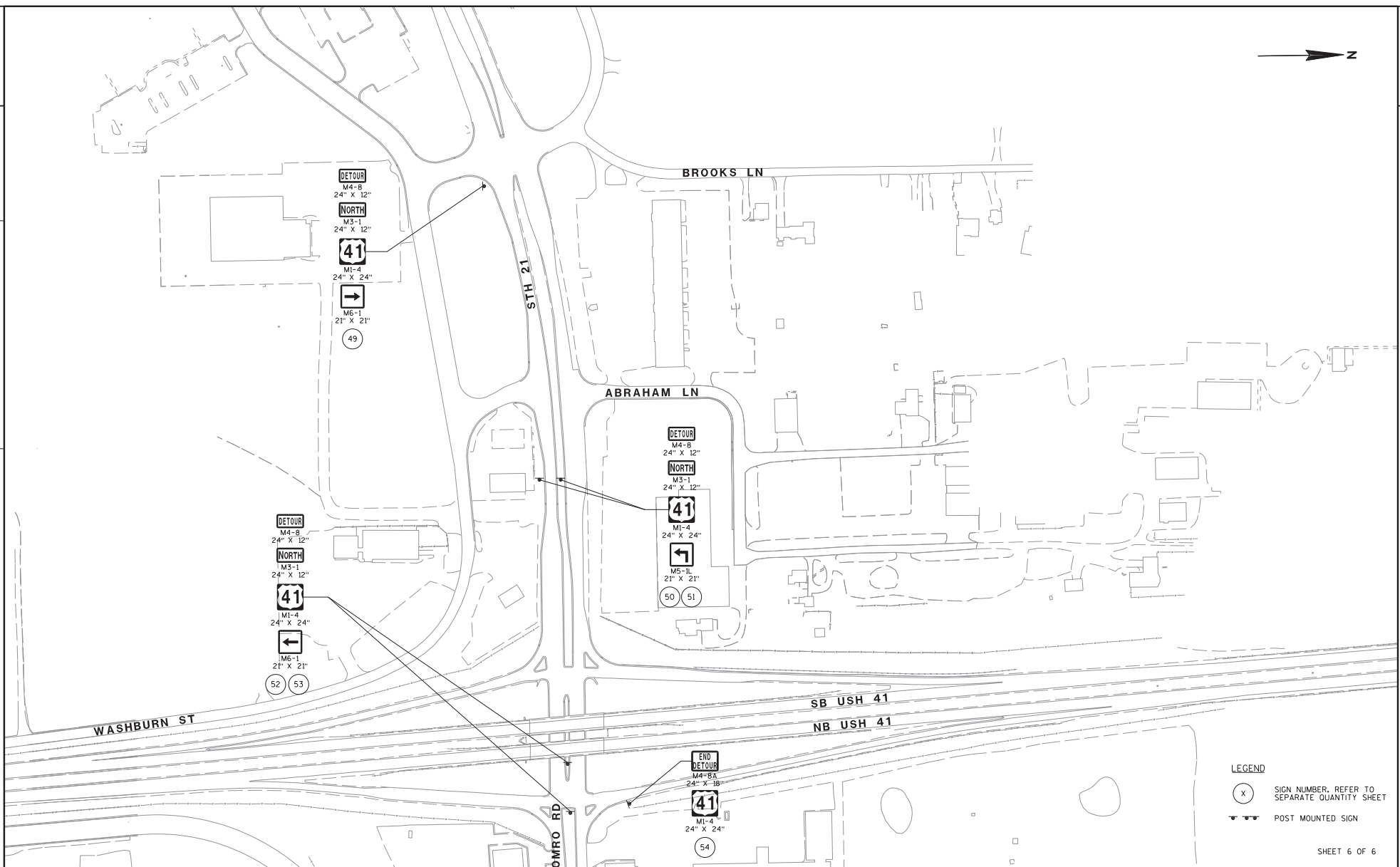
SEE DETAIL 3 FOR ADVANCED WARNING SIGNS

SINGLE LANE CLOSURE REQUIRED. USE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH". USE 1000' BUFFER SPACE.

SEE DETAIL 4 FOR DETOUR SIGNING



PROJECT NO: 1120-11-71	HWY: USH 41	COUNTY: WINNEBAGO	DETOUR PLAN - NB USH 41 DETAIL 3	SCALE, FT	SHEET 123	E
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PROJECT NO: 1120-11-71 HWY: USH 41 COUNTY: WINNEBAGO DETOUR PLAN - NB USH 41 DETAIL 4 SCALE, FT SHEET 124 **E**

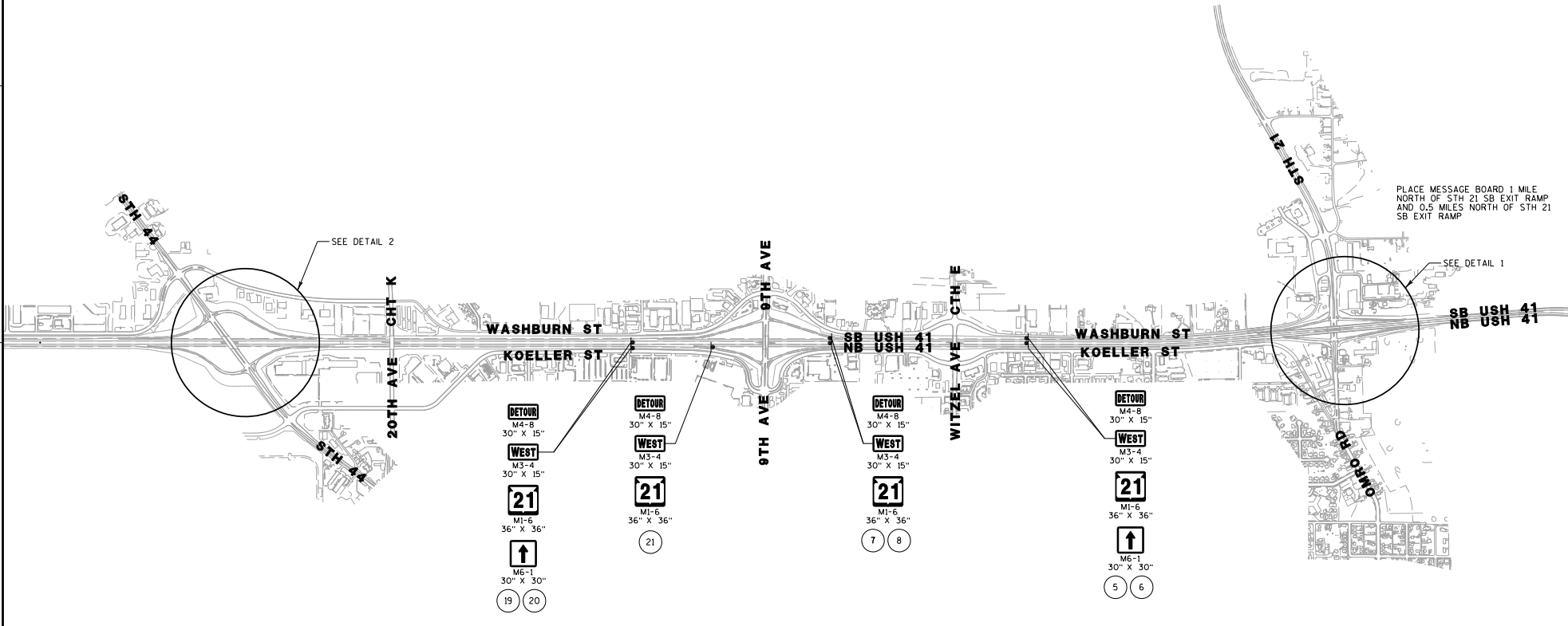
FILE NAME : S:\curproj\winnebco\ush41_Central\FD\oad\Drawings\1171\files_from\WisDOT_Signing\2009-01-21_Detour\027012.dwg PLOT DATE : 1/28/2009 PLOT BY : BLO PLOT NAME : PLOT SCALE : 1:200 WISDOT/CADD SHEET 42

**ATTACHMENT I – US 41 SB Exit Ramp to WIS 21 Truck
Detour Plan**



LEGEND

- (X) SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET
- POST MOUNTED SIGN



PLACE MESSAGE BOARD 1 MILE NORTH OF STH 21 SB EXIT RAMP AND 0.5 MILES NORTH OF STH 21 SB EXIT RAMP

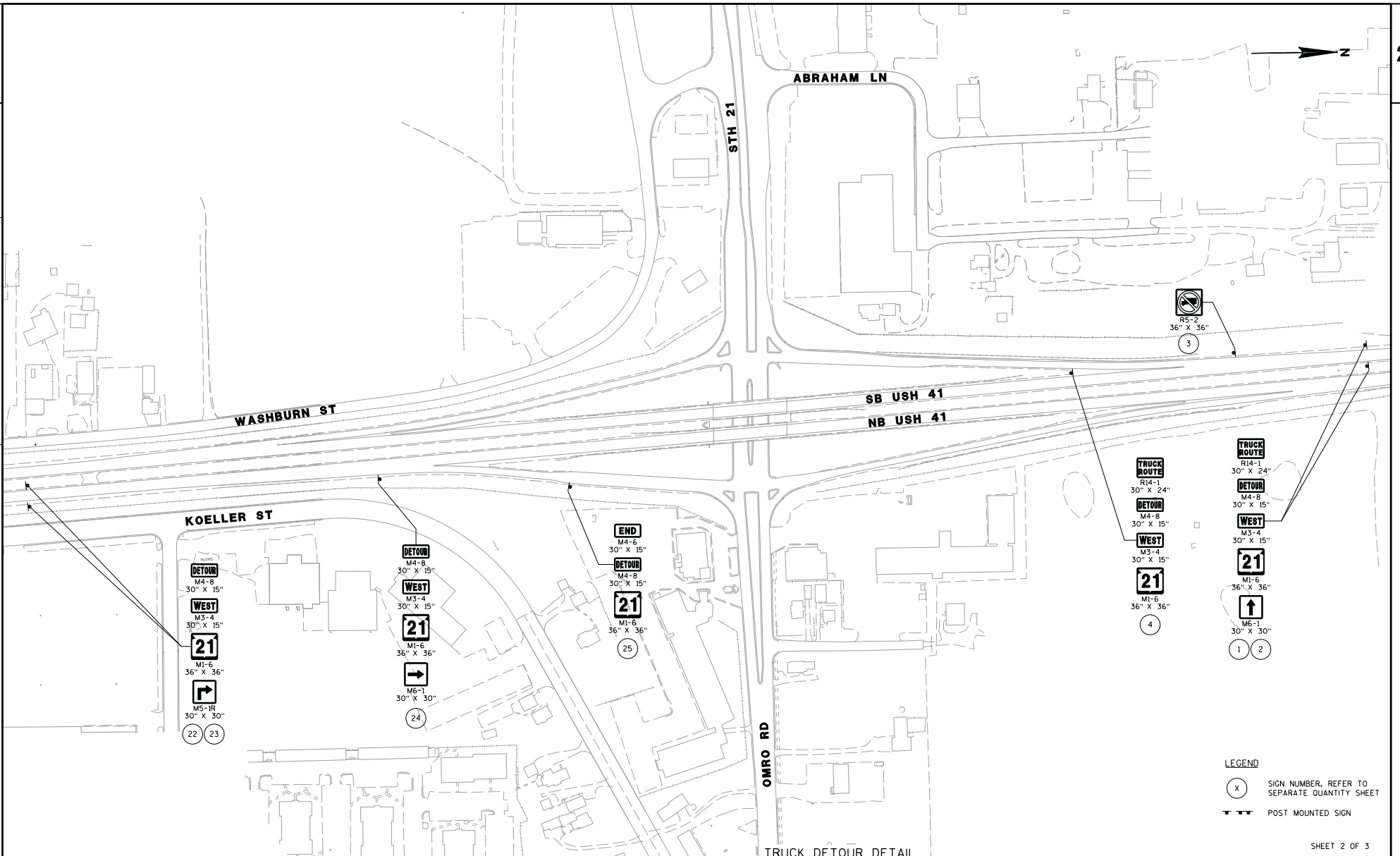
SEE DETAIL 1

SEE DETAIL 2

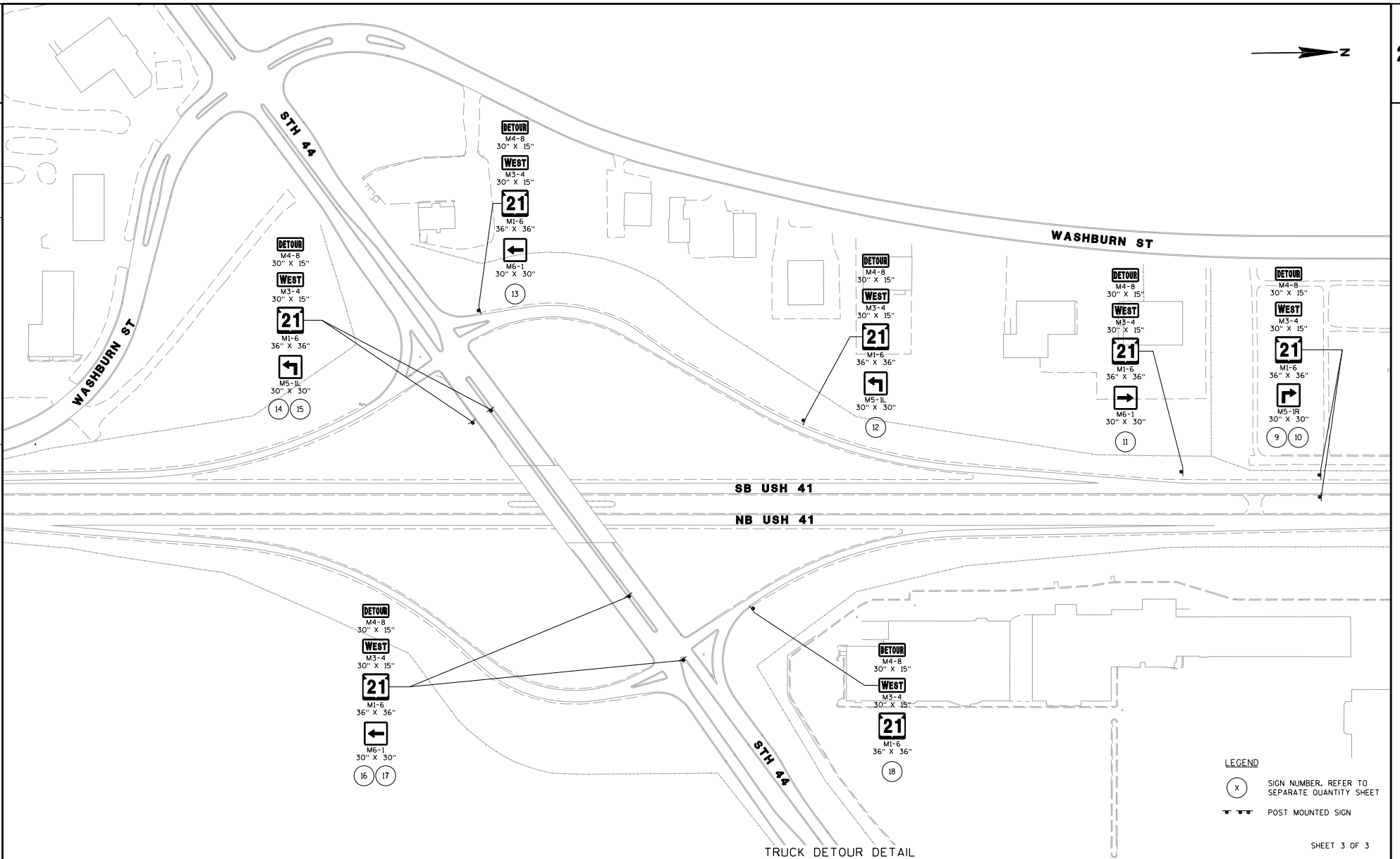
TRUCK DETOUR DETAIL

SHEET 1 OF 3

PROJECT NO: 1120-11-74	HWY: USH 41	COUNTY: WINNEBAGO	DETOUR - STH 21 STAGE 1A	SCALE, FT	SHEET 141	E
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TRUCK DETOUR DETAIL



TRUCK DETOUR DETAIL

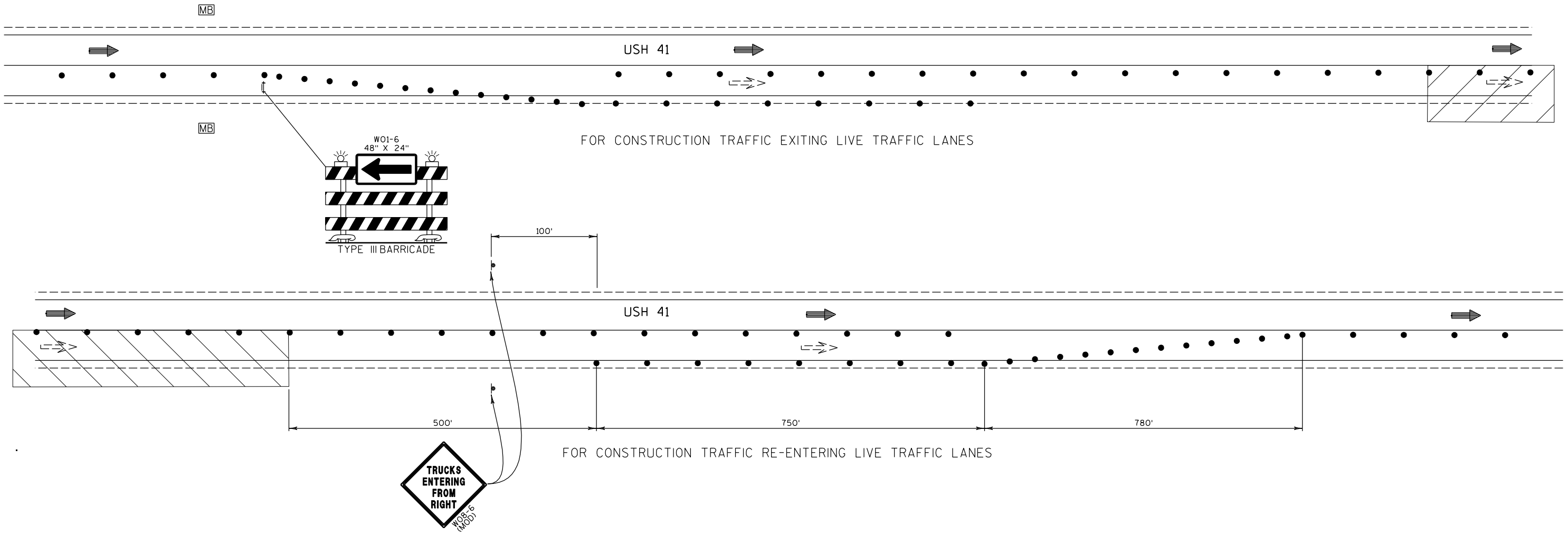
**ATTACHMENT J – US 41 Winnebago County
Construction Schedule**

US41 CORRIDOR PROGRAM
Project Milestone Dates
 Revised 06/09/2011

Contract Let ID	Phase	Project ID	Description	Project Amount	Contract Amount	Draft PS&E or (Shelf Date)	Earliest PS&E	PS&E Final	Earliest Let	Construction LET	Construction Start	Construction Finish	Year						
													2010	2011	2012	2013	2014	2015	2016
Winnebago County																			
		1120-11-72	Fountain Ave/Snell Rd Overpass (ARRA)	\$ 3,900,000		12/3/2008		2/1/2009	5/27/2009	7/20/2009	7/30/2010								
		1120-11-73	Fernau Ave, Snell Rd, & Stillman Dr (ARRA)	\$ 3,221,080		12/1/2008		1/30/2009	5/27/2009	7/27/2009	8/27/2010								
		1120-11-71	Washburn St & Witzel Ave (ARRA)	\$ 8,240,792		12/1/2008		1/30/2009	5/27/2009	8/3/2009	9/2/2010								
		1120-11-74	Lk ButteDesMorts Dr & SB Grading (ARRA)	\$ 15,295,973		12/1/2008		1/30/2009	6/23/2009	8/17/2009	10/29/2010								
		1120-10-71	County K Overhead	\$ 2,226,899		7/30/2009		9/28/2009	12/8/2009	2/22/2010	6/18/2010								
		1120-09-75	STH 76 Ramps	\$ 3,153,472		7/30/2009		9/28/2009	12/8/2009	4/12/2010	6/25/2010								
		1120-11-80	North Washburn Sidewalk	\$ 71,231		6/1/2009		7/31/2009	12/8/2009	8/3/2010	9/2/2010								
		1120-11-81	Witzel Ave RA0 & Street Lighting	\$ 120,828		8/14/2009		10/13/2009	12/8/2009	8/9/2010	9/2/2010								
		1120-09-83	Breezewood Intchg & US 45-Breezewood NB Widening	\$ 27,456,950		12/3/2009		2/9/2010	5/11/2010	6/28/2010	10/7/2011								
		1120-11-83	US 45 Interchange	\$ 30,969,986		12/3/2009		2/1/2010	6/8/2010	8/4/2010	9/7/2012								
		1120-10-72	9th Ave Intchg	\$ 5,477,783	\$ 34,313,313	12/3/2009		2/1/2010	7/28/2010	3/1/2011	11/4/2011								
		1120-10-73	WIS 44 to WIS 21 - US 41 Mainline	\$ 28,610,807		12/3/2009		2/1/2010	7/28/2010	9/3/2010	11/4/2011								
		1120-10-79	WIS 44 B-70-138 Painting	\$ 224,723		12/3/2009		2/1/2010	7/28/2010	9/14/2010	11/4/2011								
		1120-09-79	Green Valley Rd & Dixie Rd	\$ 969,655		12/3/2009		3/1/2010	7/13/2010	8/3/2010	10/14/2010								
		1120-10-80	WIS 26-WIS 44 Mainline	\$ 18,825,692	\$ 18,840,849	3/1/2010		5/20/2010	8/10/2010	9/27/2010	11/4/2011								
		1120-10-78	WIS 26 - B-70-200 Stain	\$ 15,157		3/1/2010		5/20/2010	8/10/2010	9/27/2010	11/4/2011								
		1120-10-81	WIS 26-WIS 44 Fencing	\$ 239,280		5/31/2010		7/30/2010	12/14/2010	1/25/2011	10/14/2011								
		1120-10-82	WIS 26 Interchange Landscaping	\$ 120,000		9/2/2011	11/1/2011	2/1/2012	4/14/2012	7/10/2012	11/15/2012								
		1120-09-71	US 45 - Breezewood Ln Mainline	\$ 45,410,418		5/31/2010		7/30/2010	12/14/2010	1/28/2011	5/24/2013								
		1120-09-72	US 45 - Breezewood Ln Fencing	\$ 441,219		5/31/2010		7/30/2010	12/14/2010	1/25/2011	11/2/2012								
		1120-10-74	WIS 44 to WIS 21 Fencing	\$ 284,745		5/31/2010		7/30/2010	12/14/2010	1/28/2011	10/14/2011								
		1120-10-83	9th Ave Intchg Lighting	\$ 169,949		5/3/2010		8/2/2010	12/14/2010	1/28/2011	7/15/2011								
		1120-11-84	Weigh in Motion	\$ 2,400,000	\$ 54,700,000	9/1/2010	2/1/2011	2/1/2011	5/10/2011	7/12/2011	8/26/2011	8/30/2013							
		1120-11-75	WIS 21 Intchg & Lk Bdm Csway	\$ 52,300,000		9/1/2010	2/1/2011	2/1/2011	5/10/2011	7/12/2011	8/26/2011	8/30/2013							
		1120-11-76	WIS 21 Intchg & Lk Bdm Csway Fencing	\$ 260,000		6/2/2011		8/1/2011	12/13/2011	1/27/2012	11/15/2013								
		1120-11-88	US 45 Interchange Landscaping	\$ 330,000		3/1/2011		11/1/2012	4/9/2013	5/21/2013	11/15/2013								
		1120-10-84	WIS 44 Median Work	\$ 710,000		9/2/2012	11/1/2011	11/1/2012	3/13/2012	3/12/2013	4/23/2013	11/15/2013							
		1120-11-85	Lk ButteDesMorts Causeway Aeration	\$ 800,000		6/2/2012		8/1/2012	1/8/2013	2/19/2013	11/15/2013								
		1120-11-89	LBDM Causeway Landscaping & Trail Enhancements	\$ 1,300,000		6/1/2011		11/1/2012	4/9/2013	5/24/2013	11/1/2013								
		1120-10-70	Salt Storage Facility	\$ 350,000		9/2/2013		11/1/2013	4/8/2014	5/20/2014	11/14/2014								
		1120-09-76	County Y Overpass - B-70-284	\$ 3,400,000		12/3/2012	2/1/2013	2/1/2015	5/14/2013	7/14/2015	8/25/2015	11/15/2016							
		1120-09-77	County GG Overpass - B-70-287	\$ 5,200,000	\$ 7,500,000	12/3/2012	2/1/2013	2/1/2015	5/14/2013	7/14/2015	8/25/2015	11/15/2016							
		1120-09-78	CTH G Overpass B-70-67 Painting	\$ 300,000		12/3/2012	2/1/2013	2/1/2015	5/14/2013	7/14/2015	8/25/2015	11/15/2016							
		1120-09-81	CTH G Overpass B-70-67 Redecking	\$ 2,000,000		12/3/2012	2/1/2013	2/1/2015	5/14/2013	7/14/2015	8/25/2015	11/15/2016							
		1120-10-85	Poberezny Rd	\$ 1		9/2/2012	11/1/2012	2/1/2015	3/12/2013	7/14/2015	8/25/2015	11/15/2015							

□, ▷, △, □ Indicate Tied Lets
 * Items highlighted in yellow indicate changes that have occurred since 05/24/2011.
 * This report is intended for INTERNAL WsDOT USE ONLY as a source of information on the progress and workings of the US 41 Project.

**ATTACHMENT K – Detail for Construction
Access to USH 41**



FOR CONSTRUCTION TRAFFIC EXITING LIVE TRAFFIC LANES

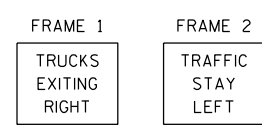
FOR CONSTRUCTION TRAFFIC RE-ENTERING LIVE TRAFFIC LANES

TRAFFIC CONTROL DETAIL FOR CONSTRUCTION ACCESS TO USH 41

NOTE:
SPACING AND LOCATIONS OF DEVICES IN THE FIELD
SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER

SEE OTHER TRAFFIC CONTROL DETAILS AND STANDARD
DETAIL DRAWINGS FOR LANE CLOSURE DETAILS

PORTABLE MESSAGE SIGN MESSAGES SHOULD READ:



LEGEND

- TRAFFIC CONTROL DRUM
- ▬ TRAFFIC CONTROL SIGN
- ➡ USH 41 TRAFFIC
- ↔ CONSTRUCTION TRAFFIC
- ▨ WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

ATTACHMENT K