

Requested by: Planning Commission

Meeting Date: July 10, 2006

Adopted: July 10, 2006

Vote: Cox, Ewing, Menard & O'Neil in favor; Metiva and Straub opposed

**WASILLA CITY COUNCIL
RESOLUTION SERIAL NO. 06-40**

**A RESOLUTION OF THE WASILLA CITY COUNCIL SELECTING A PREFERRED
ALTERNATIVE FOR MAIN STREET TRAFFIC IMPROVEMENT.**

WHEREAS, in 2004, the Alaska Department of Transportation and Public Facilities (ADOT&PF) contracted a consultant to update an earlier version of the Wasilla Main Street Traffic Improvement study; and

WHEREAS, the four following alternatives were selected for study to help determine Main Street improvements needed to accommodate traffic on Main Street in twenty years:

Alternative A: A 3-lane Main Street;

Alternative B: A 5-lane Main Street;

Alternative C: Two-way Main Street and Knik Street with a bridge extending Knik Street over the Parks Highway and the railroad; and

Alternative D: A one-way couplet (Main Street and Yenlo/Talkeetna Street); and

WHEREAS, the study has considered the anticipated increases in roadway and railroad traffic, anticipated regional and local road system improvements and other traffic modes; and

WHEREAS, during the preparation of the Main Street Traffic Improvement study ADOT&PF has consulted with the public, the City of Wasilla, the Alaska Railroad, the U.S. Post Office, and adjacent owners; and

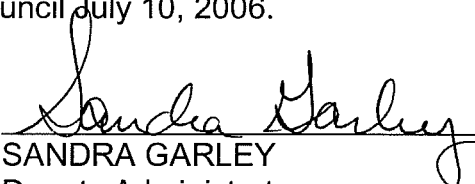
WHEREAS, the ADOT&PF gave the Planning Commission a formal presentation on the information in the final draft of study on May 9, 2006; and

WHEREAS, several members of the Commission participated in the June 14, 2006 ADOT &PF Open House on the Main Street Traffic Improvement study; and

WHEREAS, following a public hearing on June 27, 2006, the Planning Commission voted 5 -1 to approve WPC Resolution 06-17 recommending Alternative D, the Main Street/Yenlo couplet to the City Council as the alternative which best serves the public.

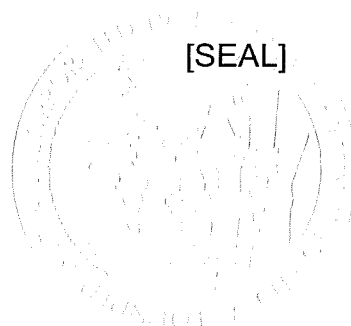
NOW THEREFORE BE IT RESOLVED that the Wasilla City Council, following a public hearing and considering the Planning Commission's recommendation, requests that the Alaska Department of Transportation and Public Facilities move forward on preliminary design of the Main Street/Yenlo couplet.

ADOPTED by the Wasilla City Council July 10, 2006.


SANDRA GARLEY
Deputy Administrator

ATTEST:


KRISTIE L. SMITHERS, MMC
City Clerk



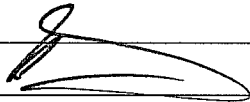
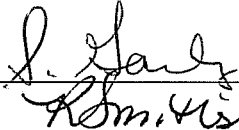
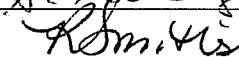


**CITY OF WASILLA
LEGISLATION STAFF REPORT**

RE: Resolution 06-40: A Resolution of the Wasilla City Council Selecting a Preferred Alternative for Main Street Traffic Improvement.

Agenda of: July 10, 2006
Originator: Community and Economic Development

Date: June 29, 2006

Route to:	Department	Signature/Date
	Police Youth Court, Dispatch, Code Compliance	
	Culture and Recreational Services Library, Museum, Sports Complex	
X	Public Works & Recreation Facility Maintenance	 6/29/06
	Finance, Risk Management & MIS Purchasing	
X	Deputy Administrator Planning, Economic development, Human Resources	
X	City Clerk	

REVIEWED BY MAYOR DIANNE M. KELLER: 

FISCAL IMPACT: yes no Funds Available yes no

Account name/number:

Attachments: Planning Commission Resolution 06-17
 Main Street Traffic Study Update

SUMMARY STATEMENT:

Wasilla-Fishhook Road and Main Street preliminary studies began in 1983. In 1986, during the public comment period of this study a five-lane Main Street alternate was proposed. In 1992, a Knik/Main St. Couplet proposed and in 1993, the Knik/Main St. Couplet selected as the preferred alternative in the Environmental Assessment.

In 2001, the City of Wasilla raised concerns about impacts that the preferred alternative might have on the City. In response to this concern, the Alaska Department of Transportation and Public Facilities (ADOT&PF) prepared a traffic study. The outcome of the 2001 study was a City resolution supporting a 3-lane wide Main Street as an interim measure while additional study continued. The current Main Street Traffic improvement study intended to complete the effort.

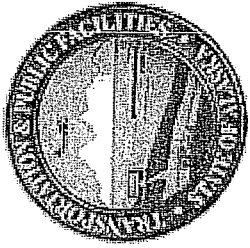
Representatives of the Alaska Department of Public Facilities and their consultants from the engineering firm Tryck Nyman Hayes, Inc. have held several meetings in Wasilla to give the public an opportunity to review and comment on the proposed alternatives:

- Presentation to the Wasilla Planning Commission on September 8, 2004, second presentation to the Planning Commission on May 10, 2005,
- Presentation to the Chamber of Commerce August 30, 2005,
- Presentation to ARRC and Wasilla April 19, 2006,
- Presentation to the Planning Commission May 9, 2006,
- Open House in the Council Chambers for the public on June 14, 2006, and
- Public hearing before the Planning Commission on June 27, 2006.

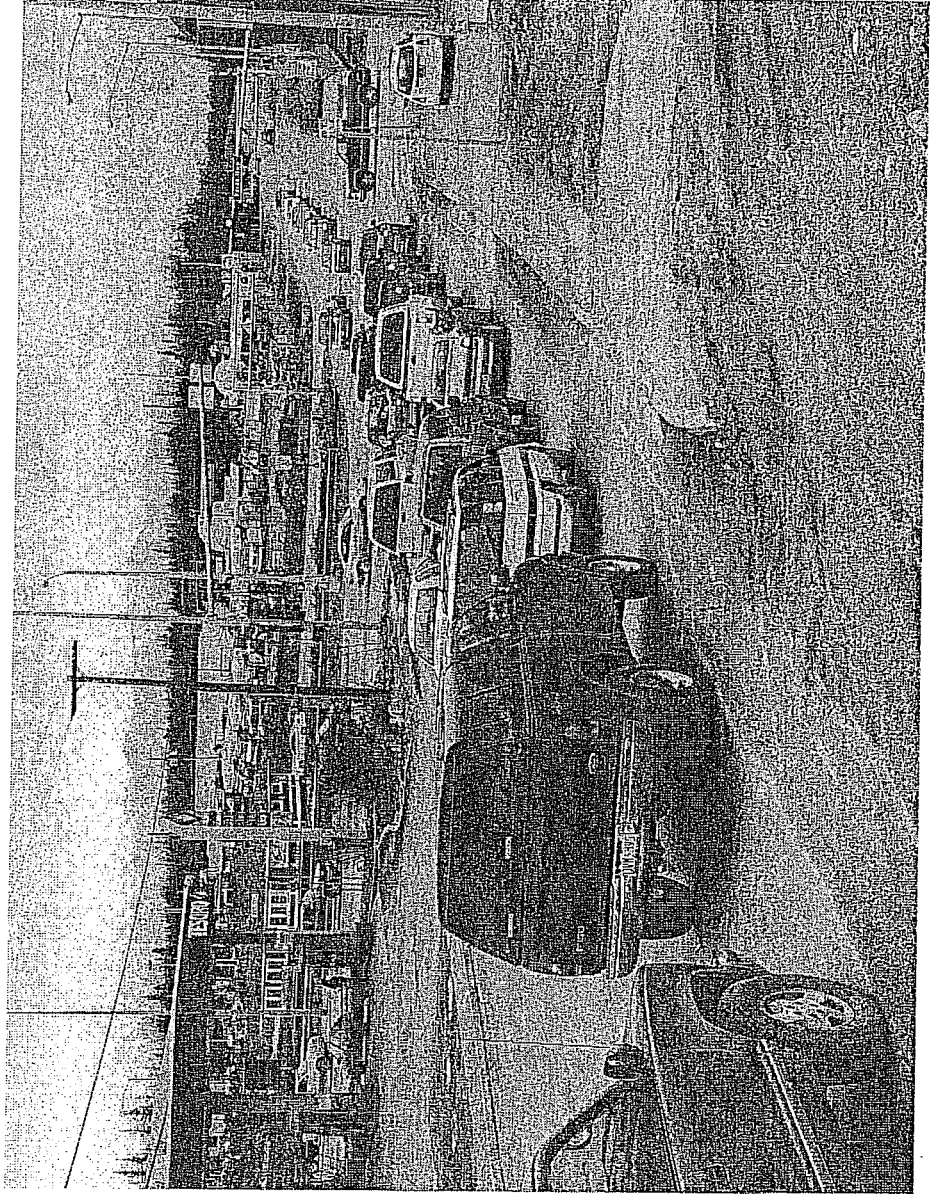
Following their June 27 public hearing, the Wasilla Planning Commission voted 5 – 1 to recommend the one way couplet of Main Street and Yenlo/Talkeetna to the City Council.

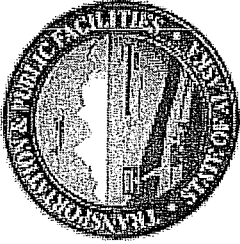
RECOMMENDATION

The staff respectfully recommends adoption of Resolution 06-40 selecting a preferred alternative for Main Street traffic improvements and that the Alaska Department of Transportation and Public Facilities be informed of the City's preference.



Main Street Traffic Study Update May 9, 2006 Status Report to City of Wasilla Planning Commission





Project Team

Brad Sworts, ADOT&PF Mat-Su Area Planner

Tom Young, P.E., ADOT&PF Central Region Project Manager

Scott Thomas, P.E., ADOT&PF Central Region Traffic Engineer

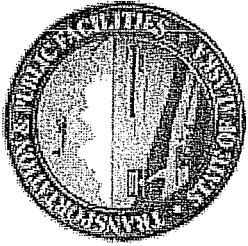
Arnold Harder, P.E., Consultant Project Manager, TNH

Randy Kinney, P.E. PTOE, Traffic Engineer, Kinney Engineering

Chad Harings, P.E. Traffic Engineer, Kinney Engineering

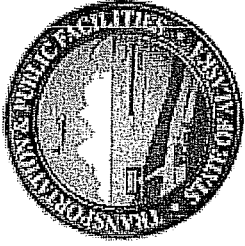
Karyn Wise, P.E., Traffic Engineer, Northland Systems
Engineering

Peter Crews, P.E., Design Engineer, TNH



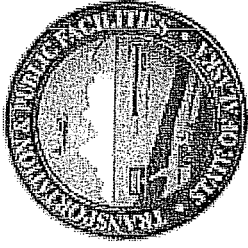
Presentation Outline

- Introduction
- Current Conditions
- Forecasts and Traffic Models
- Alternatives
- Study Findings & Alternatives Comparison
- Summary



Area Projects

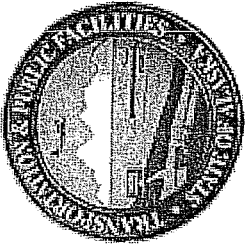
- Parks Highway, Crusey to Lucas Streets
- Crusey Street
- Multimodal Corridor Study
- None of these will resolve Main Street congestion.



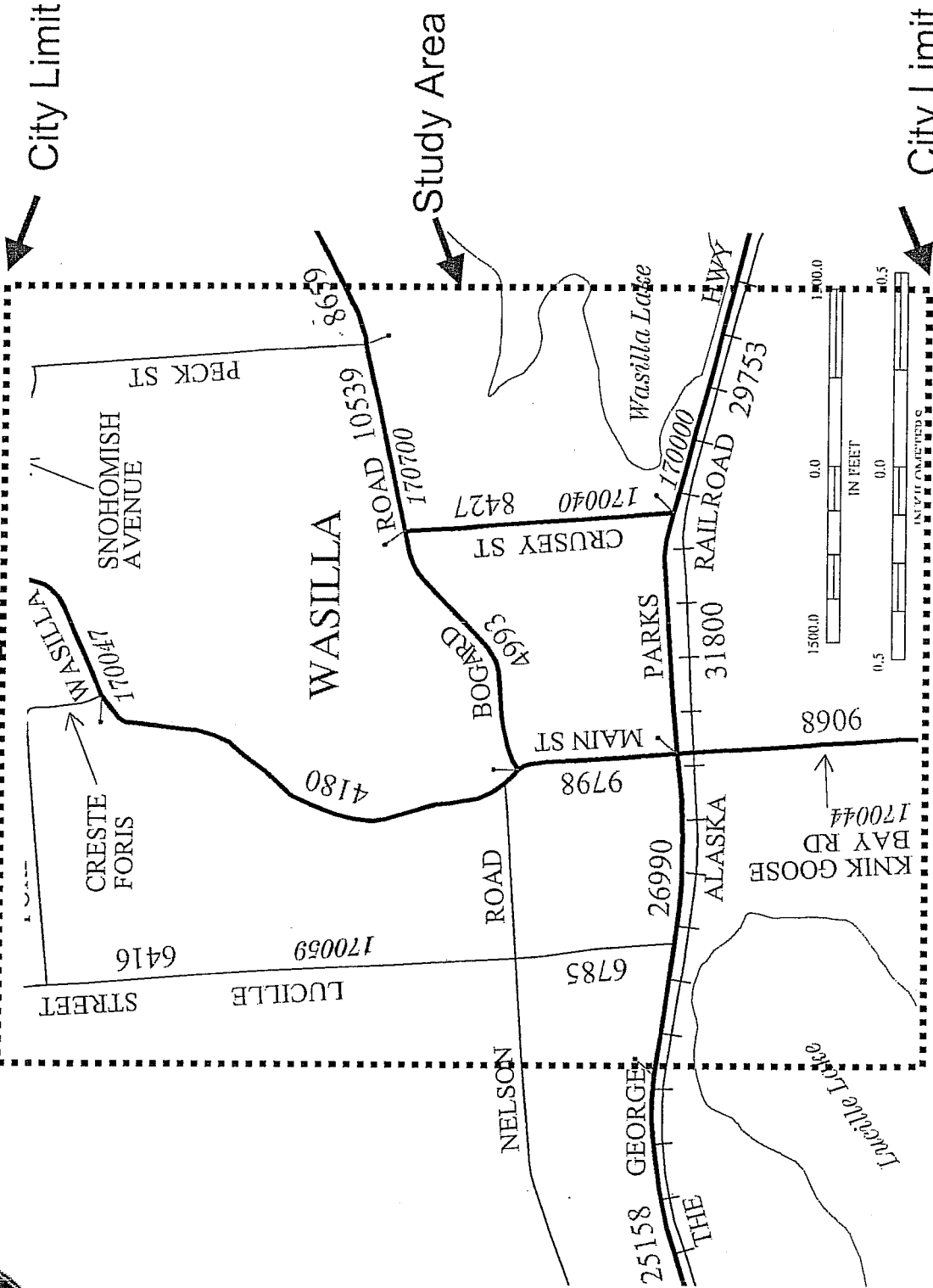
Purpose of the Main St. Traffic Study

Determine what Main Street / Wasilla core area improvements are needed.

- Retain a “viable” downtown by increasing capacity.
- Accounting for two possible modes of failure.
 - Roadway traffic
 - Railroad traffic.
- Avoid overbuilding by accounting for anticipated system improvements.
 - Alternative Parks Hwy and Alaska Railroad corridor.
 - Anticipated 20-year regional roadway system improvements.
- Pedestrian facilities needed and included in Alternatives.

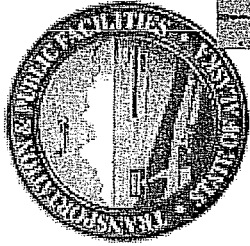


Study Area / 2003 ADT

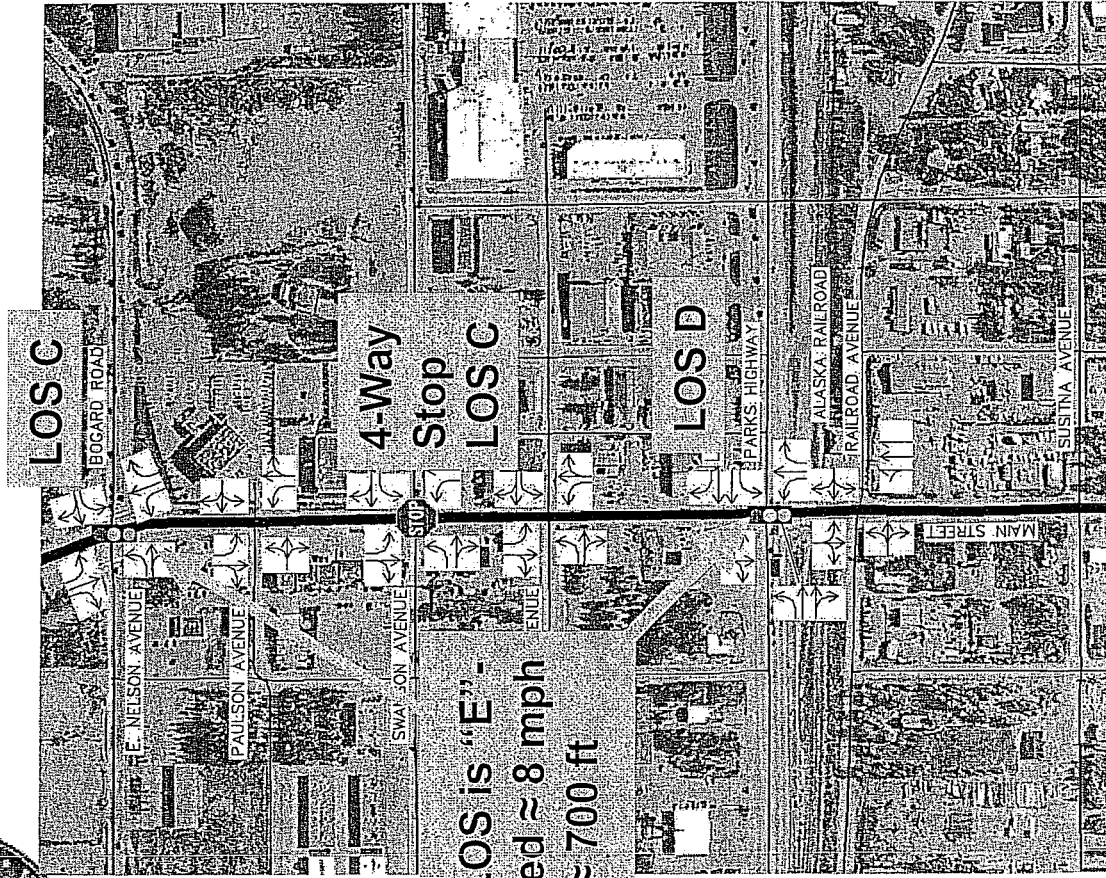


Main Street Traffic Study

5/9/2006

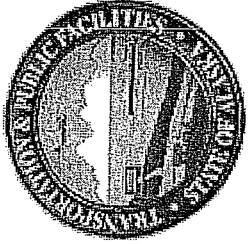


Main St. Current Year Levels of Service



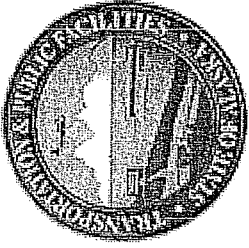
Levels of service (LOS) are currently controlled by roadway traffic, not railroad traffic.

However, average intersection LOS under represents some movements.



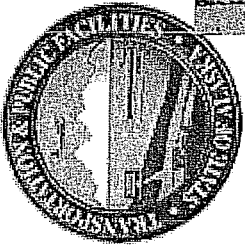
Safety

- Railroad → 2002 Accident Prediction Value = 0.3586, no crossing changes required (well under 1.98 threshold requiring grade separation)
- Street System → Accident rates are significantly higher than average rates at similar intersections for:
 - Parks Highway / Main Street
 - Swanson / Main St.

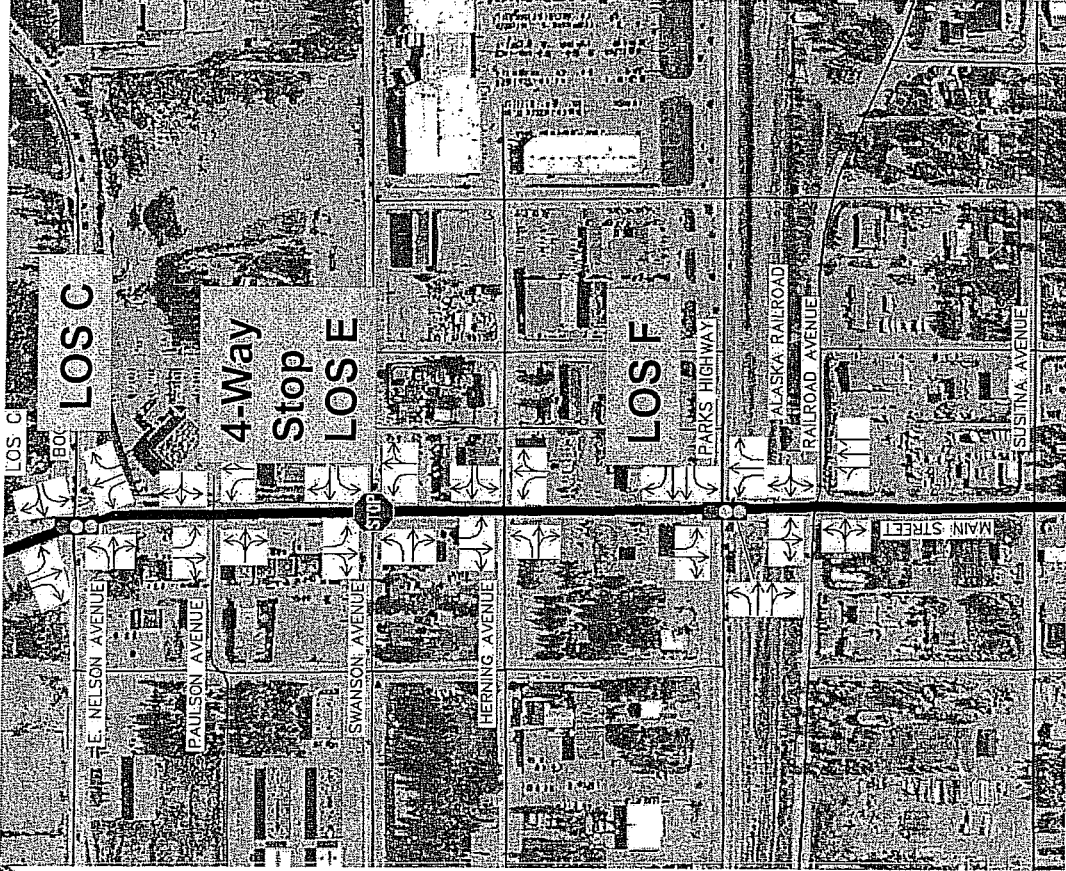


Twenty-year Traffic Forecast

- 20-year study area model.
 - 2005 draft QRS II Borough model used as input at perimeter of study area.
 - Demand within model based on
 - existing land use
 - anticipated future land use consistent with the zoning
 - and special traffic generators
 - future railroad traffic provided by the Alaska Railroad.



Main St. 2025 Levels of Service



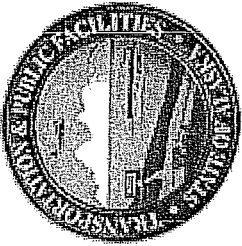
- Based on Current Parks Highway Alignment.
- With Parks Highway Alternative Corridor, LOS will be similar to 2005 conditions.



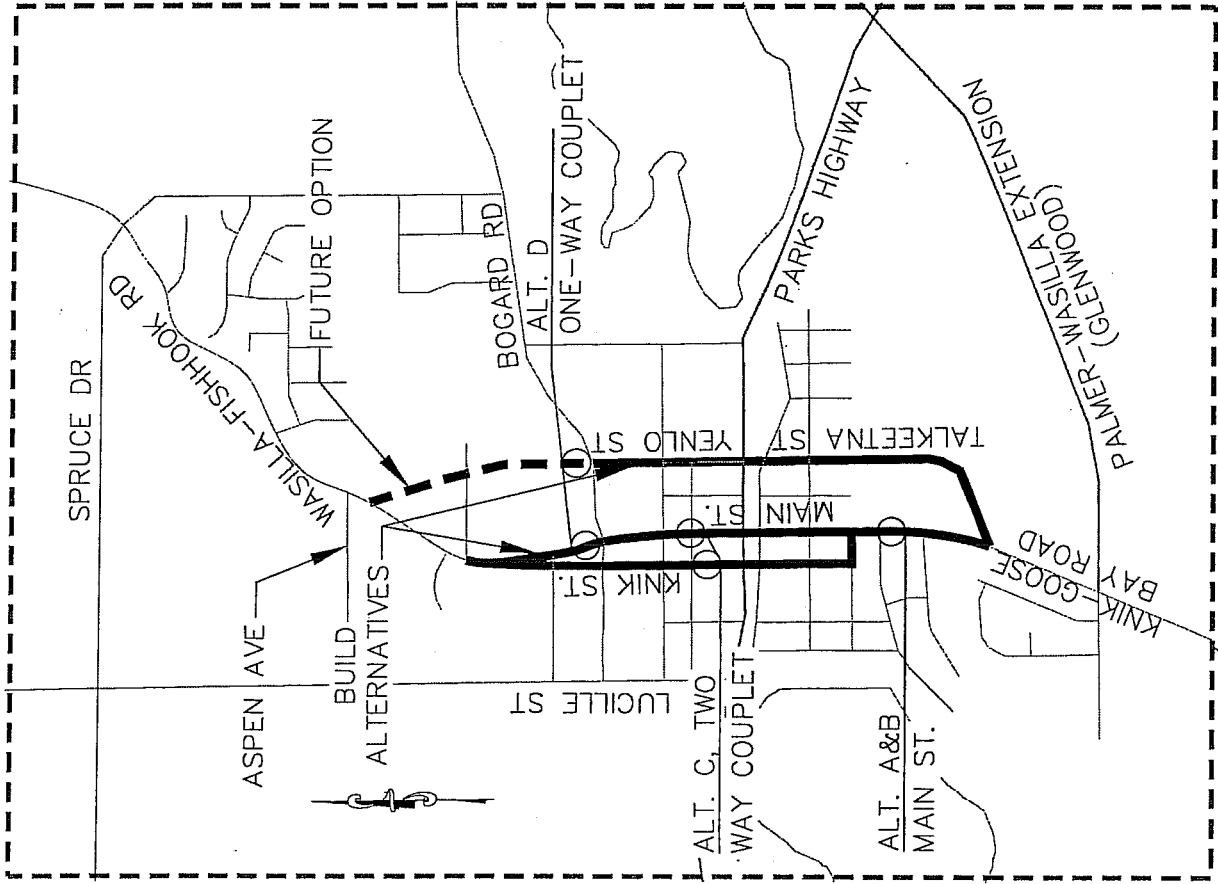
An Alt. Corridor and Crusey St. Extension Will not Provide the Necessary Capacity

Screenline 1 North of Parks Hwy	No Crusey Ext. No alternative corridor			With Crusey Ext. With alternative corridor		
	2025 Adjusted ADT No Main Street Improvements	2025 Capacity No Main Street Improvements	2025 V/C Without Main St Improvement	2025 Adjusted ADT No Main Street Improvements	2025 Capacity No Main Street Improvements	2025 V/C Without Main St Improvement
Church Rd	5,700	18,600	0.42	5,500	18,600	0.40
Lucille St	16,800	27,200	0.62	16,500	27,200	0.61
Main St	13,600	13,600		13,500	13,600	0.99
Crusey St	15,700	25,840	0.61	15,800	27,200	0.58
Palmer Wasilla Hwy	27,400	37,400	0.73	27,000	37,400	0.72
Hermon Rd	4,800	18,600	0.35	4,600	13,600	0.34
Totals	84,000			82,900		
Screenline 2 South of Parks Hwy						
Church/Mack	5,100	13,600	0.38	4,100	13,600	0.30
KGB	19,700	13,600	#VALUE!	9,800	13,600	0.42
Crusey St		0	#VALUE!	11,400	27,200	0.38
Palmer Wasilla Hwy	22,000	37,400	0.59	14,300	37,400	0.38
Hermon Rd	600	13,600	0.04	4,200	13,600	0.31
Parks Hwy Alt Corridor	0		#VALUE!	29,252	37,400	0.41
Totals	47,400			73,052		

- Data Source: 2006 Borough LRTP.
- Screenlines taken in urbanized areas close to Parks Hwy.
- Desirable V/C < 0.85



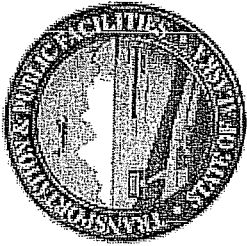
Alternatives



MAIN STREET STUDY AREA

Main Street Traffic Study

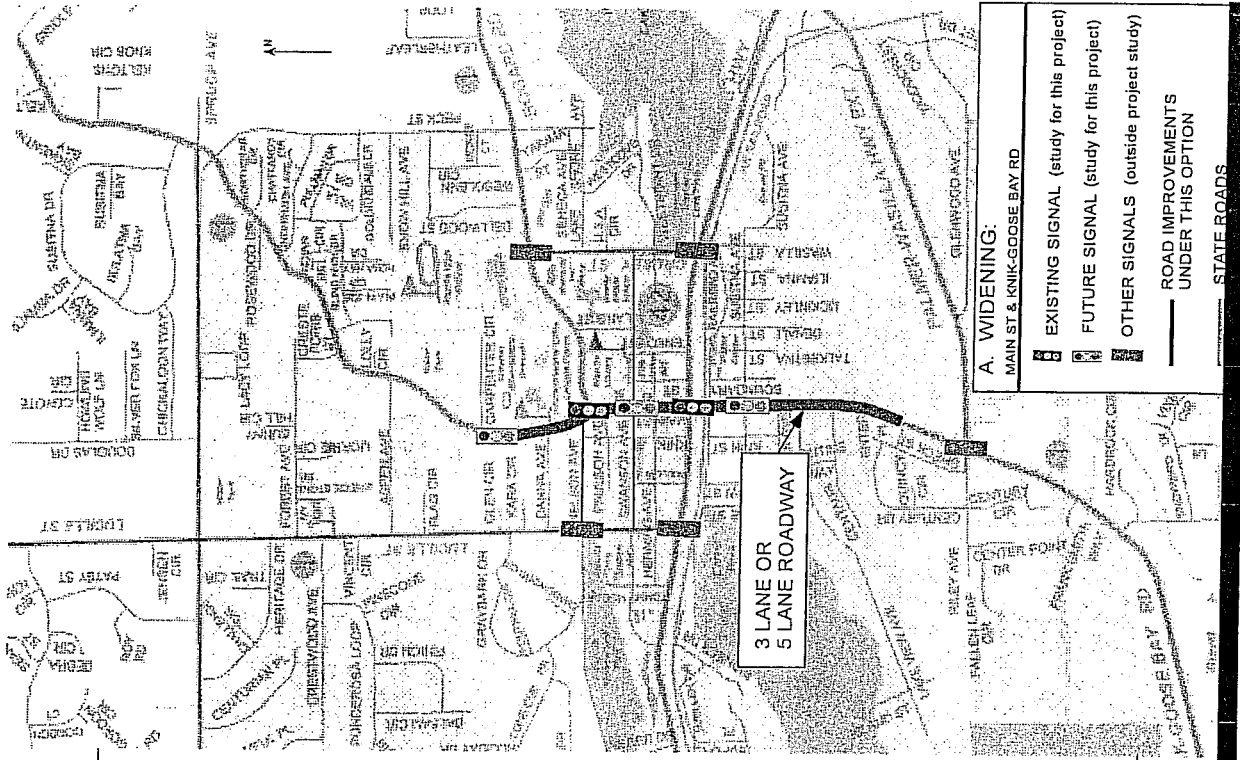
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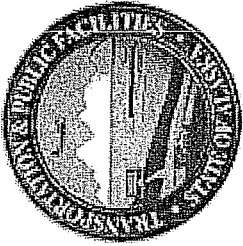


Main St.
Traffic Study
11/12/03

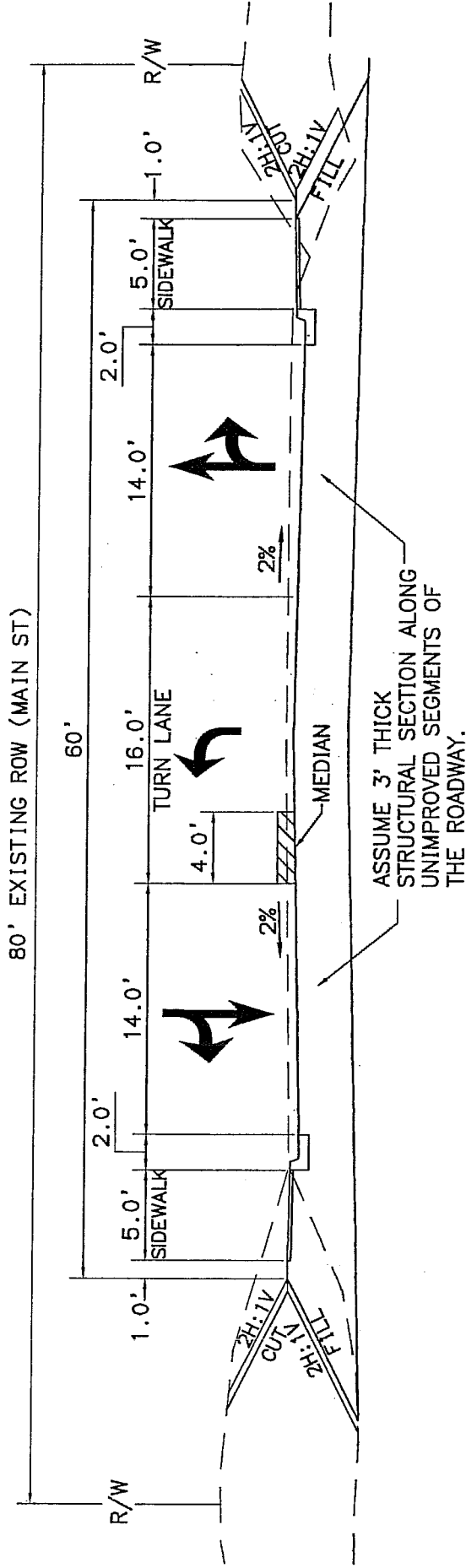
CITY OF WASILLA, ALASKA

Alternative A- Main St. Rehab. & Alternative B - 5 Lane Main St.

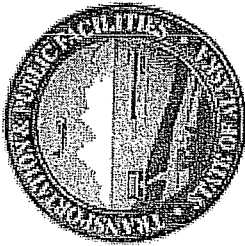




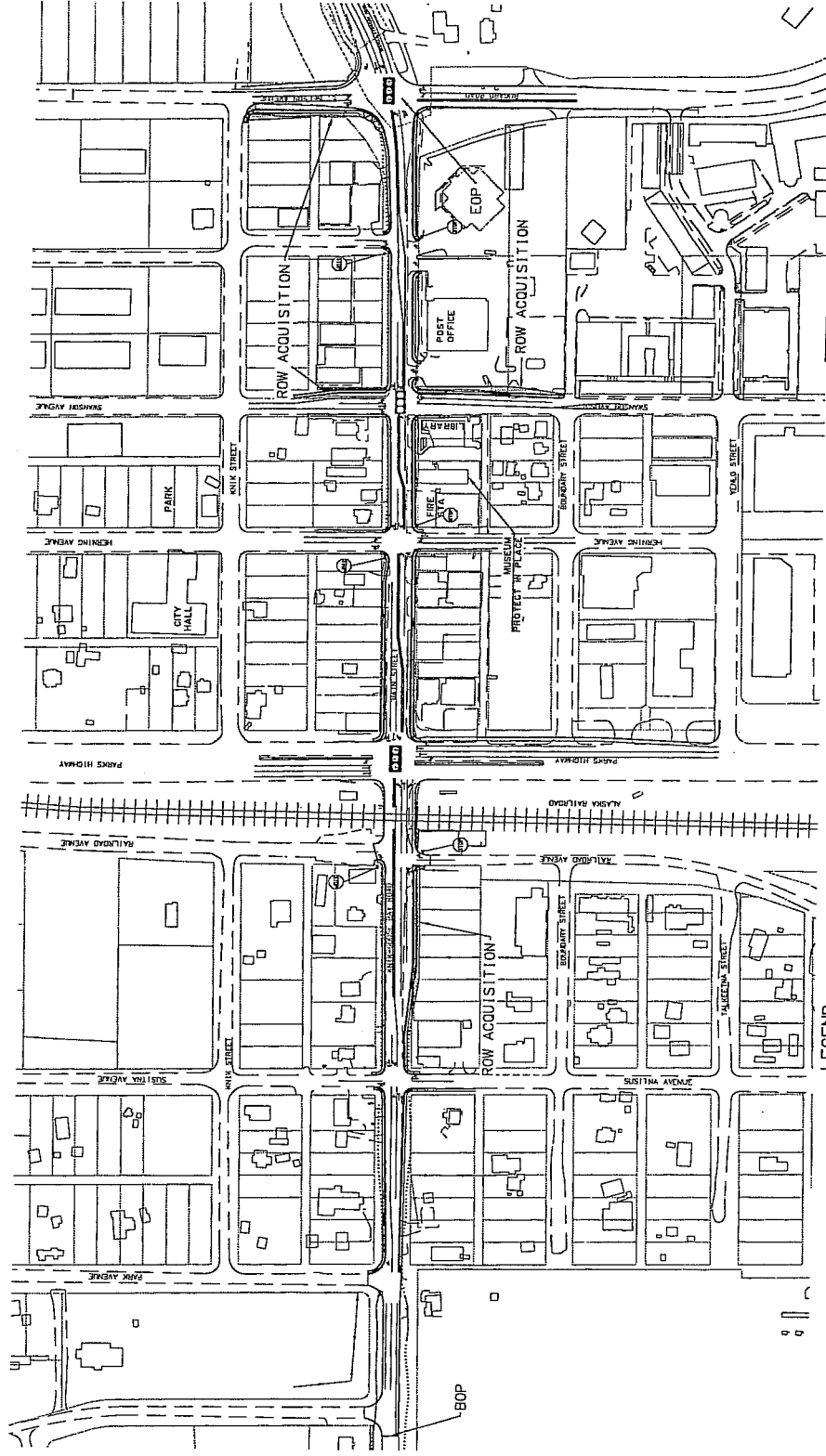
Alternative A, 3-lane Main St. Typical Section



ALTERNATIVE A: MAIN ST./KNIK-GOOSE BAY RD. 3-LANE REHABILITATION

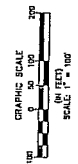
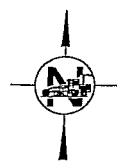


3-Lane Main St. - Alternative A, Plan View



LEGEND

- REQUIRED ROW ACQUISITION
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- RAISED MEDIAN

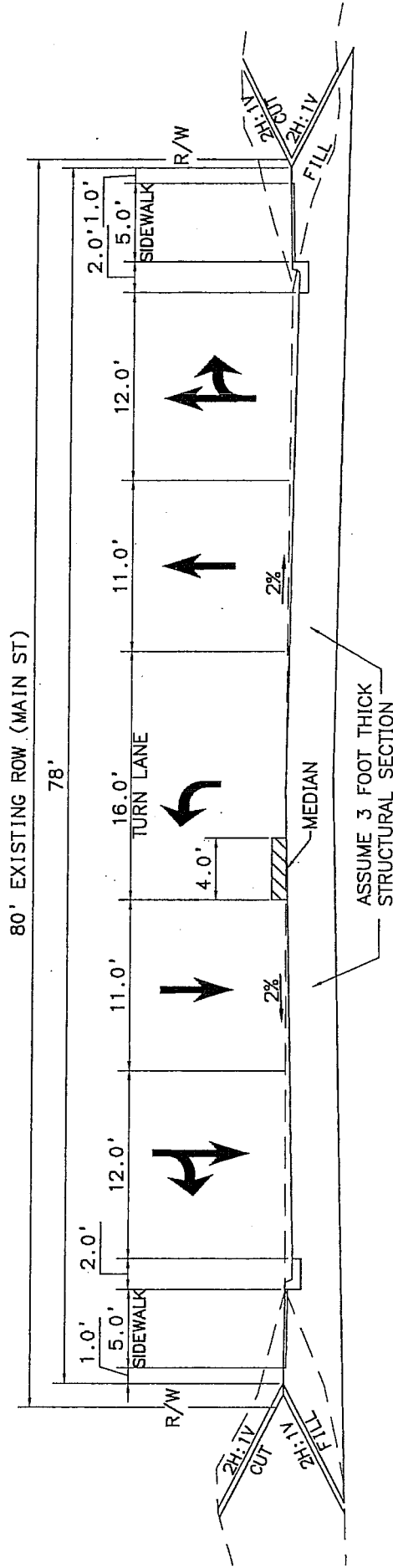


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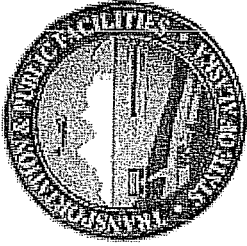
Main Street Traffic Study



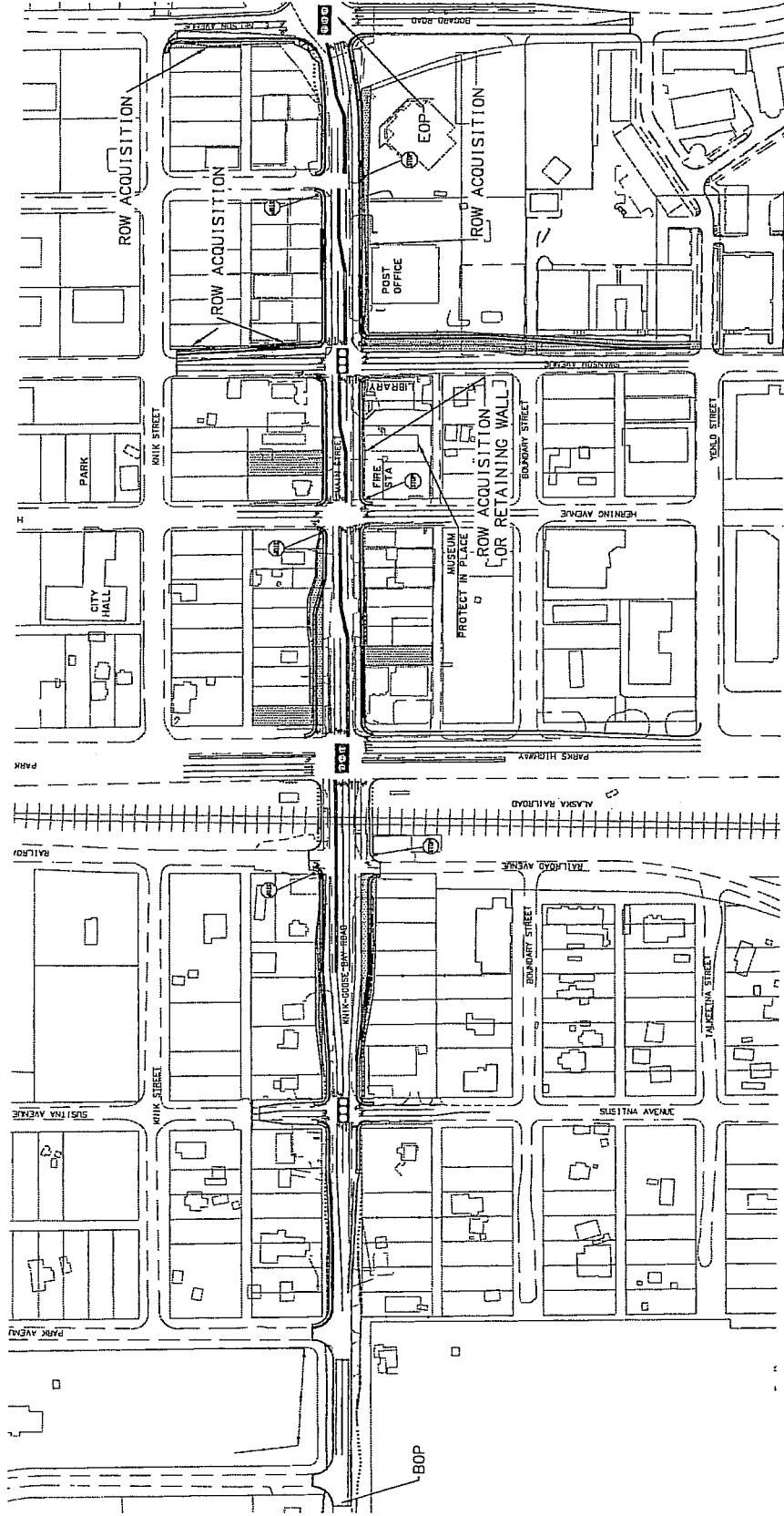
Alternative B, 5-Lane Main St Typical Section



ALTERNATIVE B: 5-LANE MAIN ST./KNIK-GOOSE BAY RD.

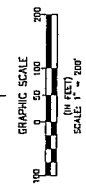


Alternative B, 5-Lane Main Street Plan View



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 - a. REDUCE MAIN ST. APPROACHES TO PARKS HIGHWAY LANES NORTH & SOUTH.
 - b. REDUCE SWANSON AVE APPROACHES BY 1 LANE NORTH & SOUTH.

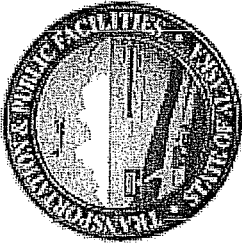


LEGEND

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- PROPOSED TRAFFIC SIGNAL
- RAISED MEDIAN

5/9/2006

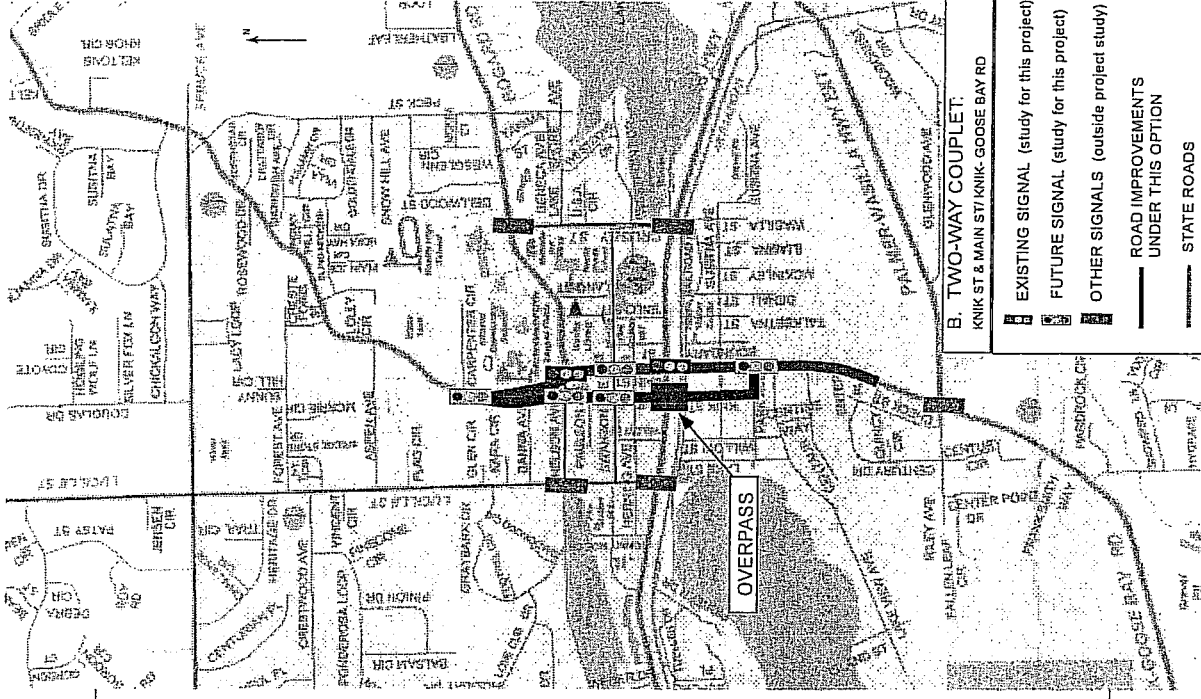
Main Street Traffic Study

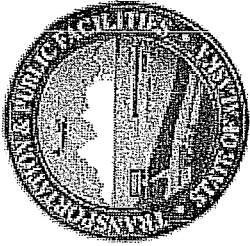


Main St
Traffic Study
11/12/03

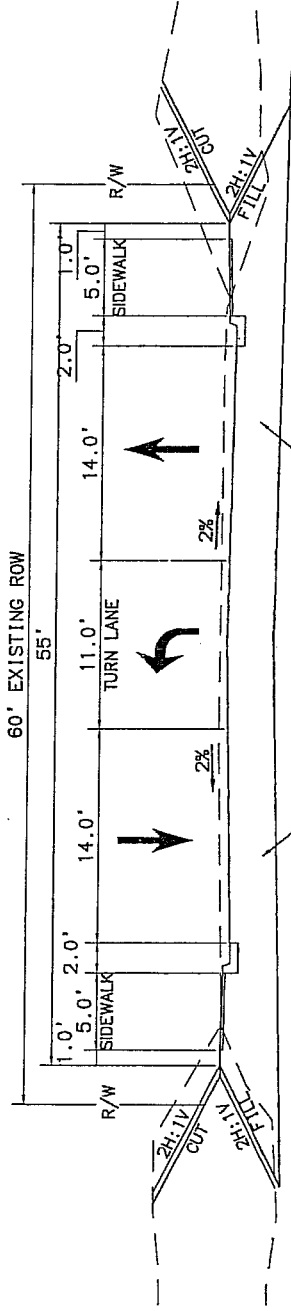
CITY OF WASILLA, ALASKA

Alternative C- Knik / Main St. Couplet



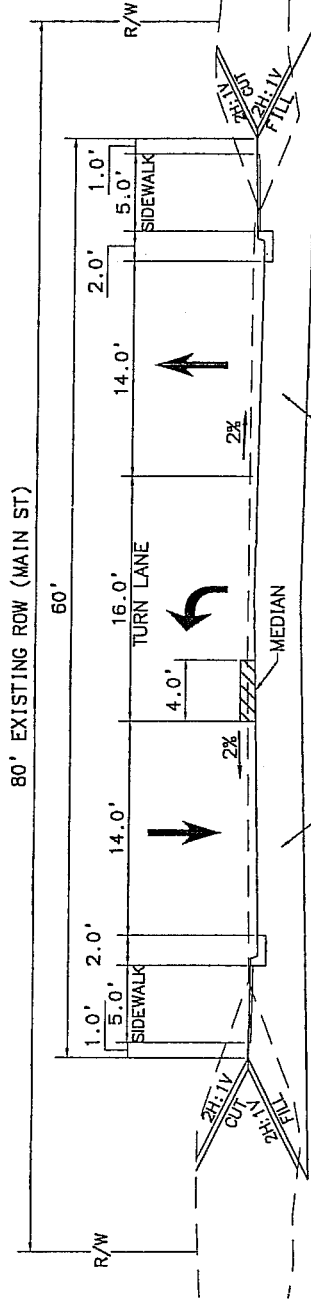


Alternative C, Knik / Main St. Couplet Typical Section



ASSUME 3" THICK STRUCTURAL SECTION ALONG UNIMPROVED SEGMENTS OF THE ROADWAY.

KNIK ST.

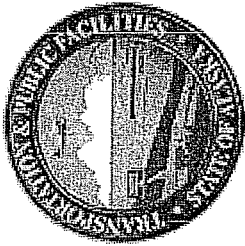


ASSUME 3" THICK STRUCTURAL SECTION ALONG UNIMPROVED SEGMENTS OF THE ROADWAY.

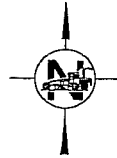
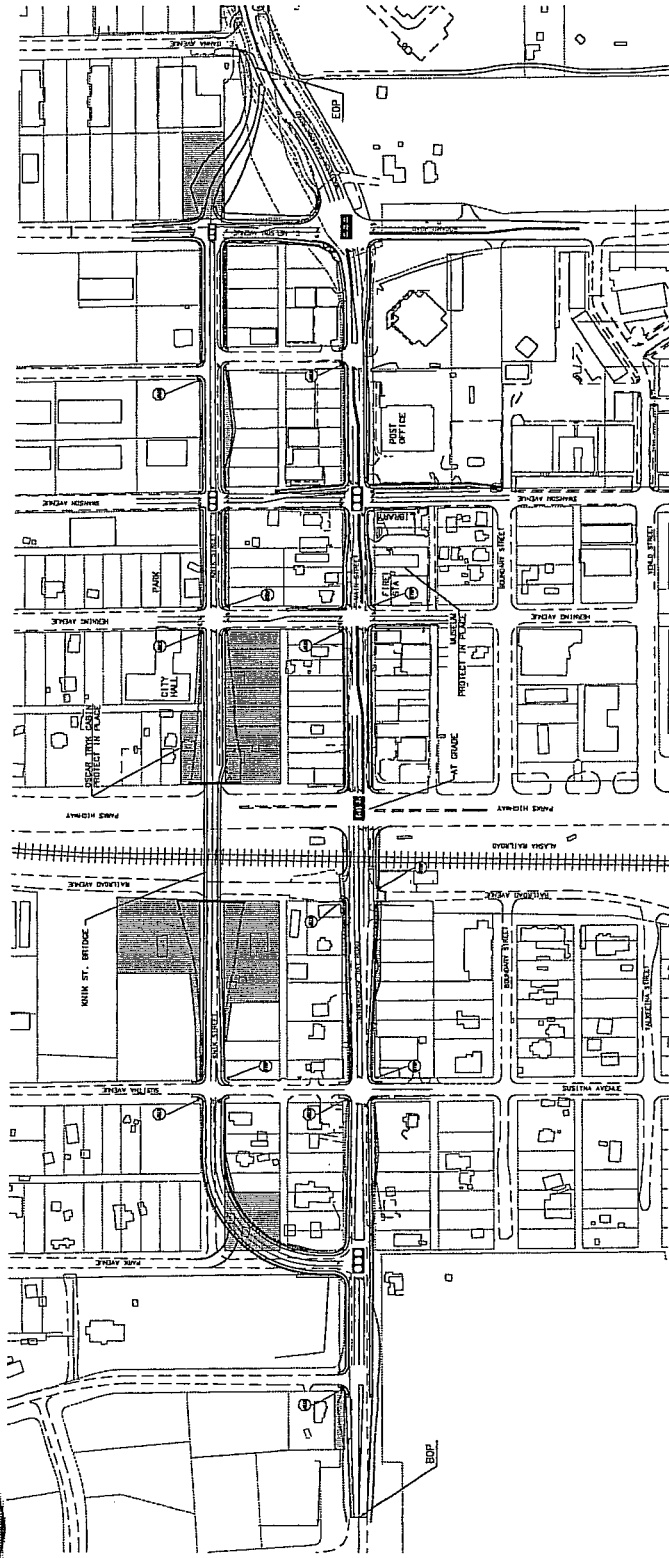
MAIN ST./KNIK-GOOSE BAY RD.

ALTERNATIVE C: KNIK / MAIN ST. COUPLET





Main Street Traffic Study

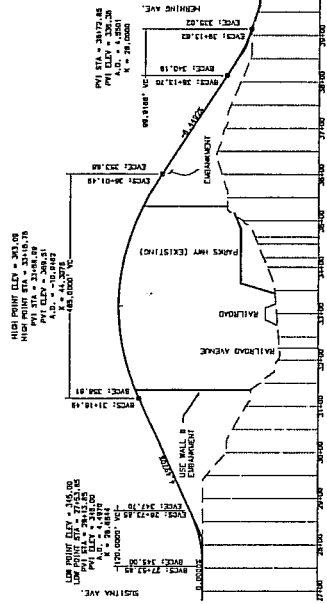


Alternative C, Knik St. / Main St. Couplet Plan View



LEGEND

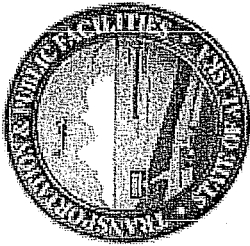
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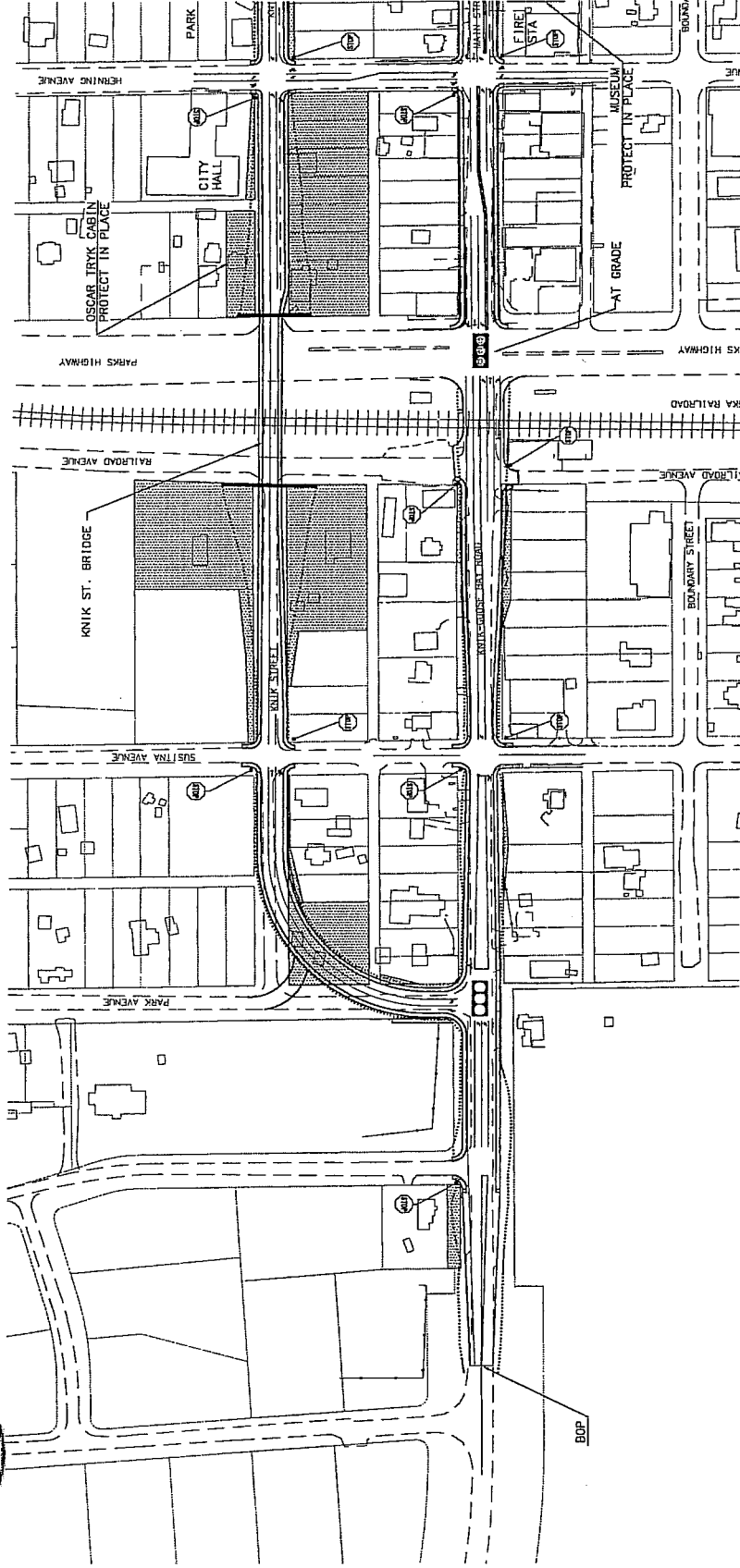
KNIK ST. BRIDGE

Main Street Traffic Study

5/9/2006







Alternative C, Knik St. / Main St. Couplet Plan View

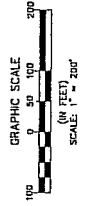


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 - a. REDUCE KNIK-GOOSE BAY NORTH BOUND APPROACH TO PARK AVENUE BY ONE LANE.
 - b. REDUCE SWANSON AVENUE WEST BOUND APPROACH TO MAIN ST. BY ONE LANE.

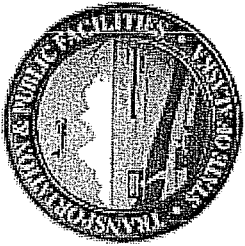
LEGEND

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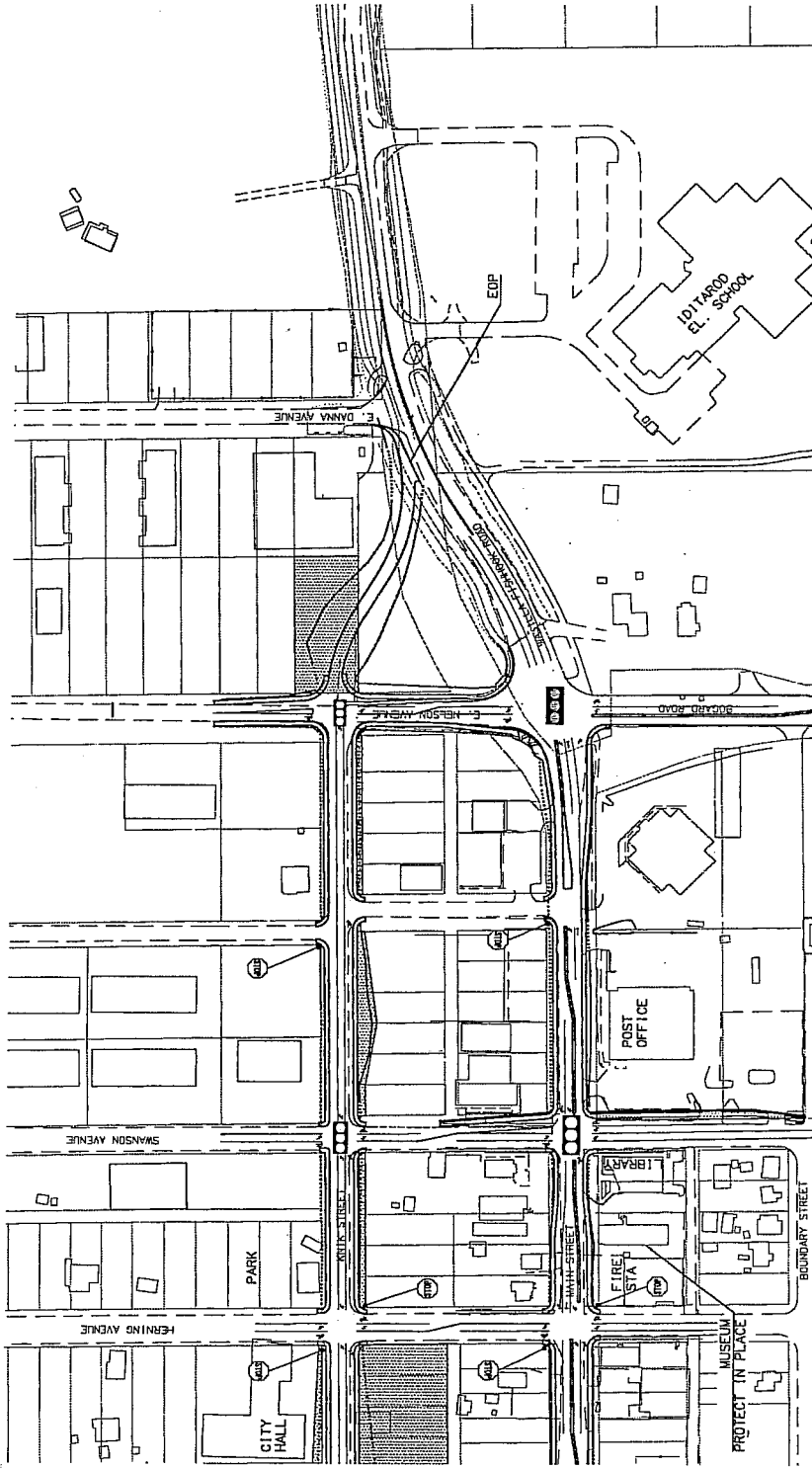


5/9/2006

Main Street Traffic Study







Alternative C, Knik St. / Main St. Couplet Plan View



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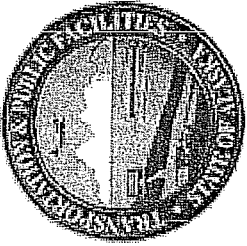
LEGEND

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5/9/2006

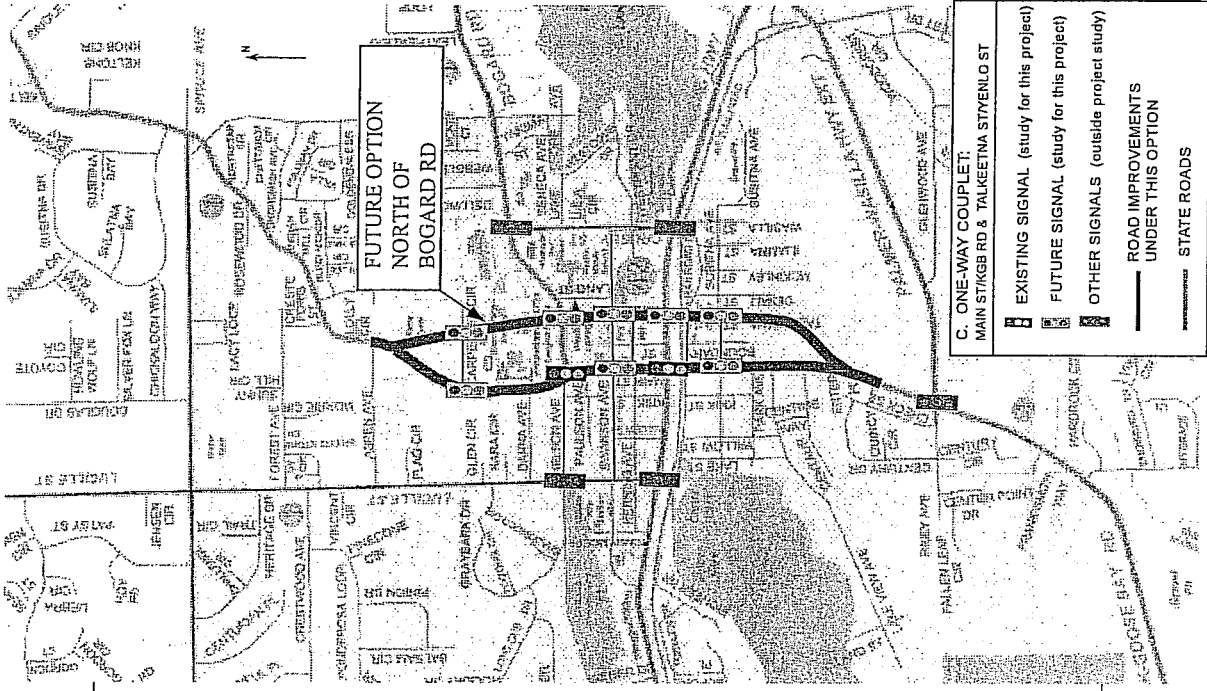
Main Street Traffic Study



Alternative D- Yenlo/ Talkleetna Main St. Couplet

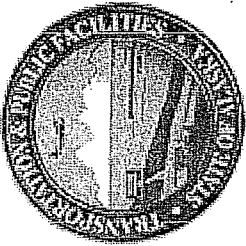
Main St
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CITY OF WASILLA, ALASKA

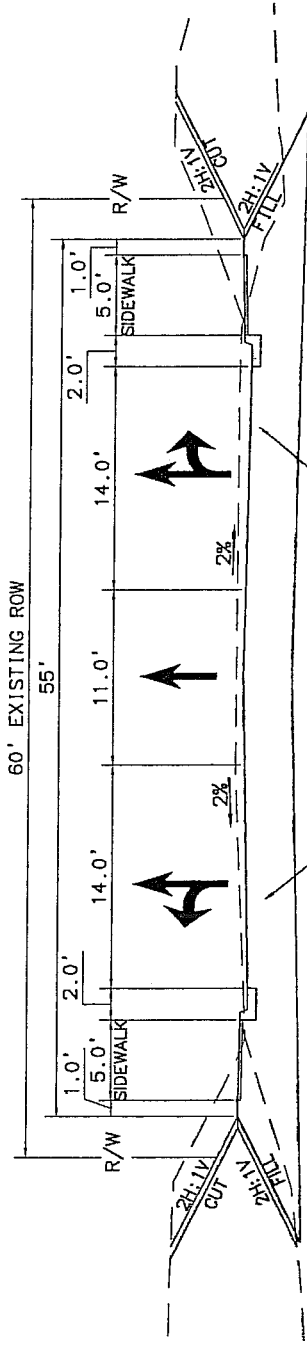


**C. ONE-WAY COUPLET:
MAIN ST/KGB RD & TALKLEETNA ST/YENLO ST**

- EXISTING SIGNAL (study for this project)
- FUTURE SIGNAL (study for this project)
- OTHER SIGNALS (outside project study)
- ROAD IMPROVEMENTS UNDER THIS OPTION
- STATE ROADS

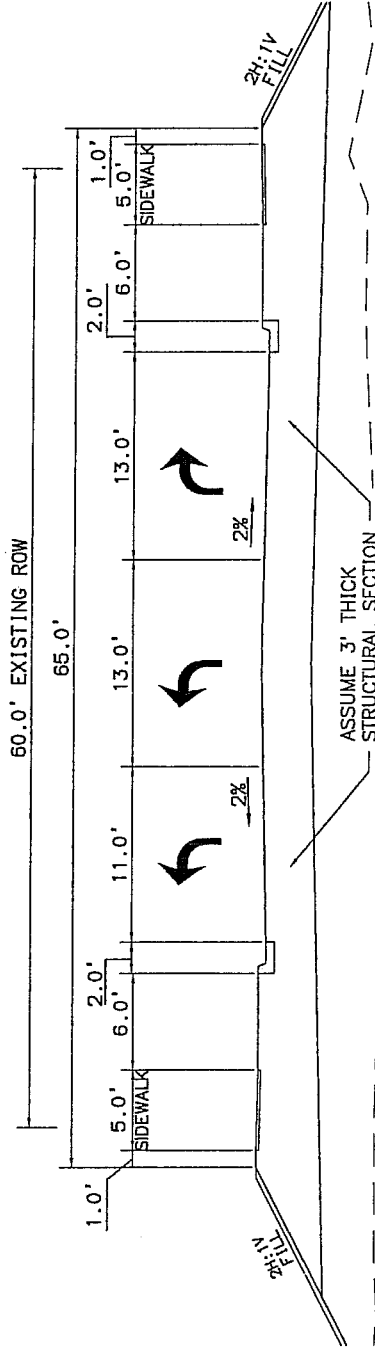


Alternative D- Yenlo/ Talkeetna- Main St. Couplet Typical Sections



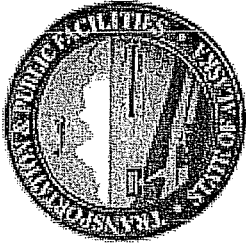
ASSUME 3' THICK STRUCTURAL SECTION ALONG UNIMPROVED SEGMENTS OF THE ROADWAY.

TALKEETNA ST. AND YENLO ST. TO SWANSON AVE.

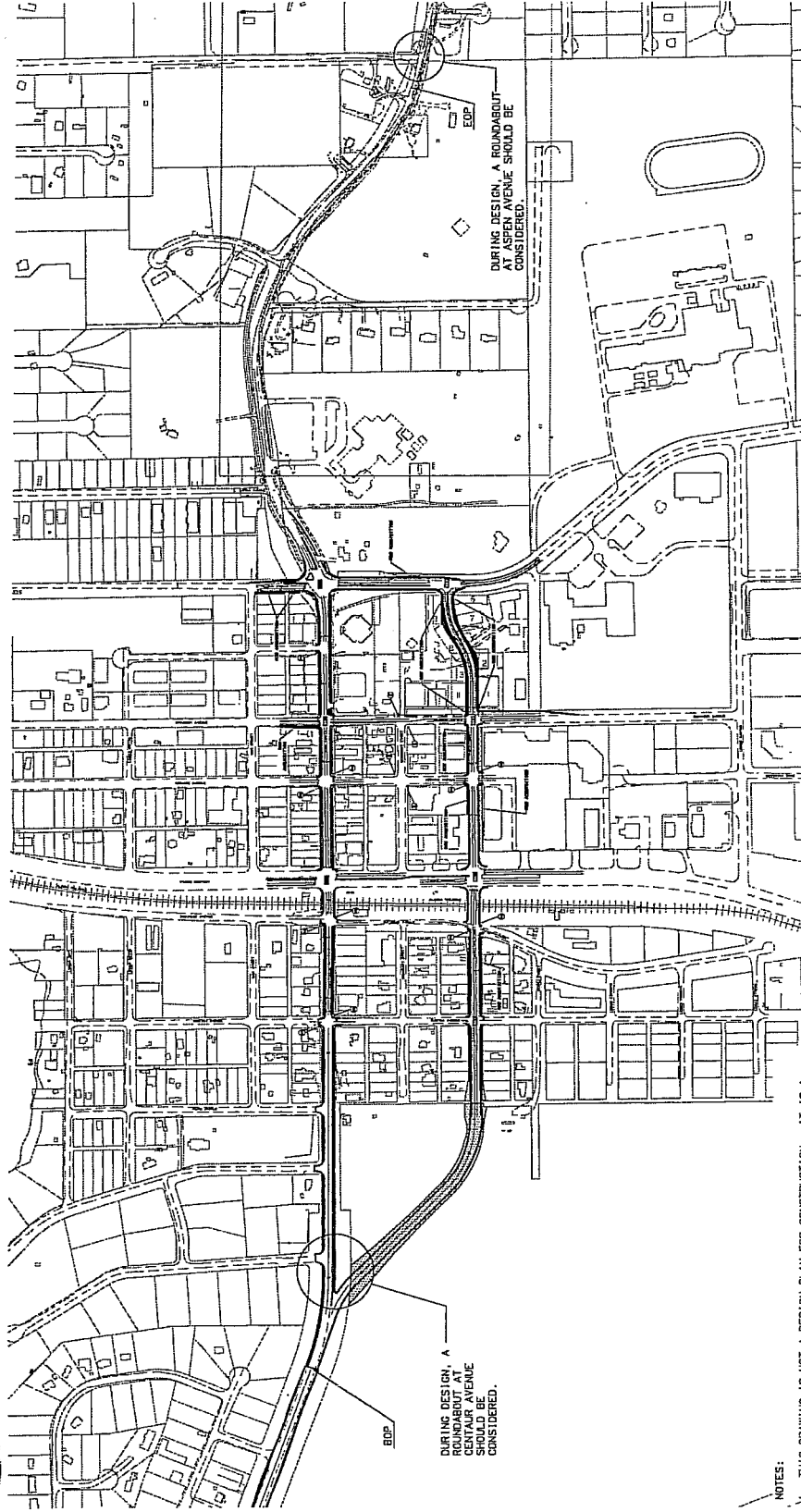


ASSUME 3' THICK STRUCTURAL SECTION

YENLO STREET, FROM SWANSON AVE. TO BOGARD RD.

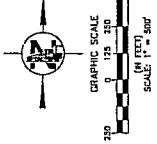


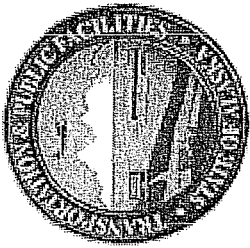
Alternative D, Yenlo/Talkeetna - Main Couplet - Plan View



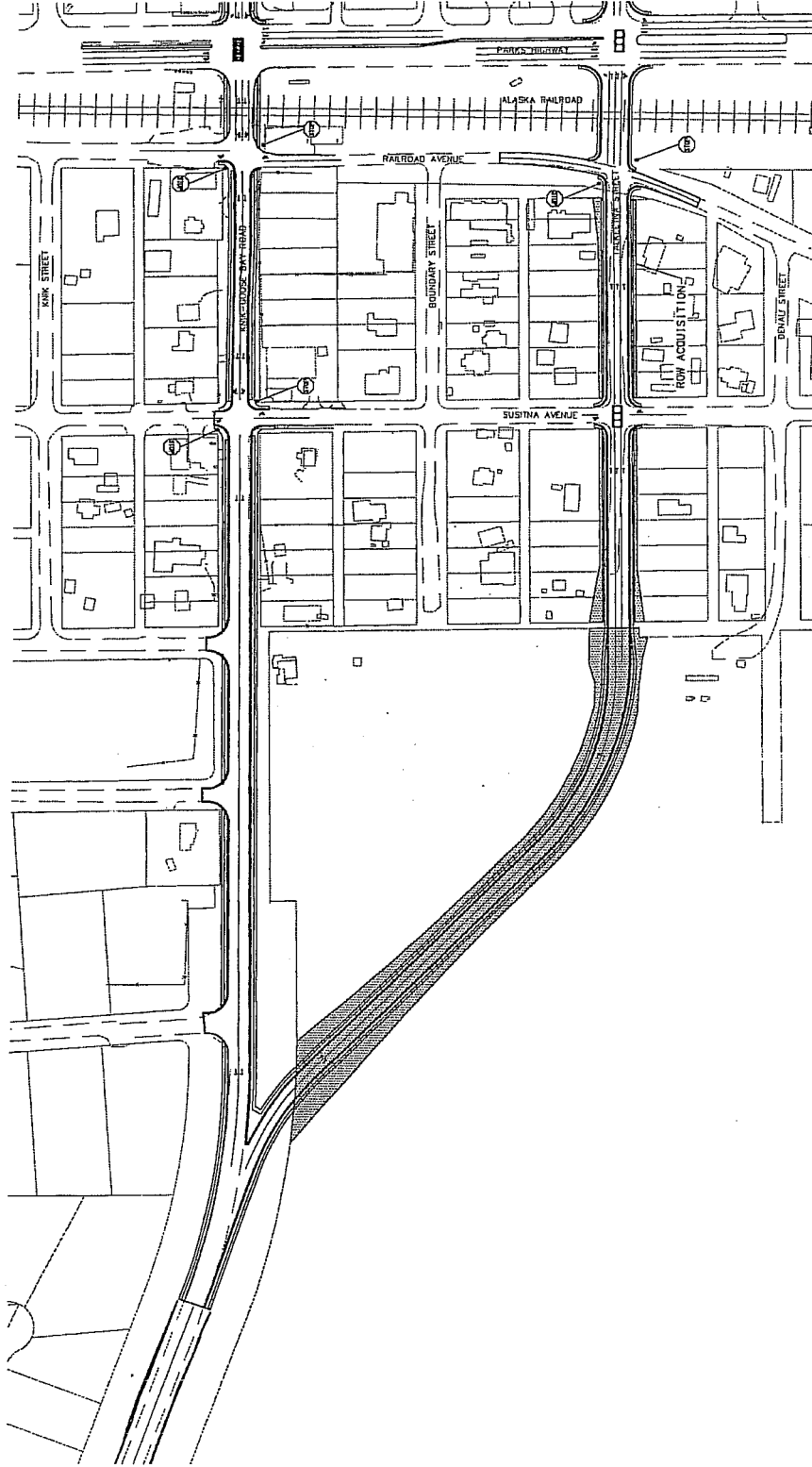
NOTES:

1. THIS DRAWING IS NOT A DESIGN PLAN FOR CONSTRUCTION. IT IS A CONCEPT BASED ON THE INFORMATION AS OF MARCH 2006.
2. IF A PARKS HIGHWAY/ARBC ALTERNATIVE CORRIDOR WERE INCLUDED, THE FOLLOWING CHANGES WOULD RESULT.
 - a. REDUCE YENLO / TALKKEETNA & MAIN ST. BY ONE LANE, FULL LENGTH.
 - b. REDUCE SWANSON WEST BOUND APPROACH TO YENLO ST. BY ONE LANE.
 - c. REDUCE SWANSON EAST BOUND APPROACH TO MAIN ST. BY ONE LANE.
3. IF YENLO ST. IS NOT EXTENDED NORTH OF BOCARD ST., THEN ADD WEST ALTERNATIVE ROW FROM YENLO TO MAIN ST. ON BOCARD RD. LANE TRAPS AND SIGHT DISTANCE ARE NOT DESTROYED.



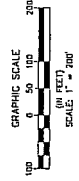


Alternative D, Yenlo/Talkeetna - Main Couplet - South of Parks Hwy.







NOTES:

1. THIS DRAWING IS NOT A DESIGN PLAN FOR CONSTRUCTION. IT IS A CONCEPT BASED ON INFORMATION AS OF MARCH 2006.
2. IF A PARKS HIGHWAY/ARRC ALTERNATIVE CORRIDOR WERE INCLUDED, THE FOLLOWING CHANGES WOULD RESULT.
 - a. REDUCE YENLO / TALKEETNA & MAIN ST. BY ONE LANE, FULL LENGTH.
 - b. REDUCE SWANSON WEST BOUND APPROACH TO YENLO ST. BY ONE LANE.
 - c. REDUCE SWANSON EAST BOUND APPROACH TO MAIN ST. BY ONE LANE.
3. IF YENLO ST. IS NOT EXTENDED NORTH OF BOGARD ST., THEN ADD WEST BOUND RIGHT TURN LANE FROM YENLO TO MAIN ST. ON BOGARD RD. LANE TRAPS AND SIGHT DISTANCE ARE NOT DESTROYABLE.

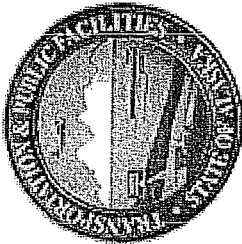


LEGEND

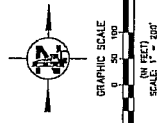
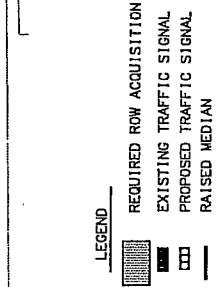
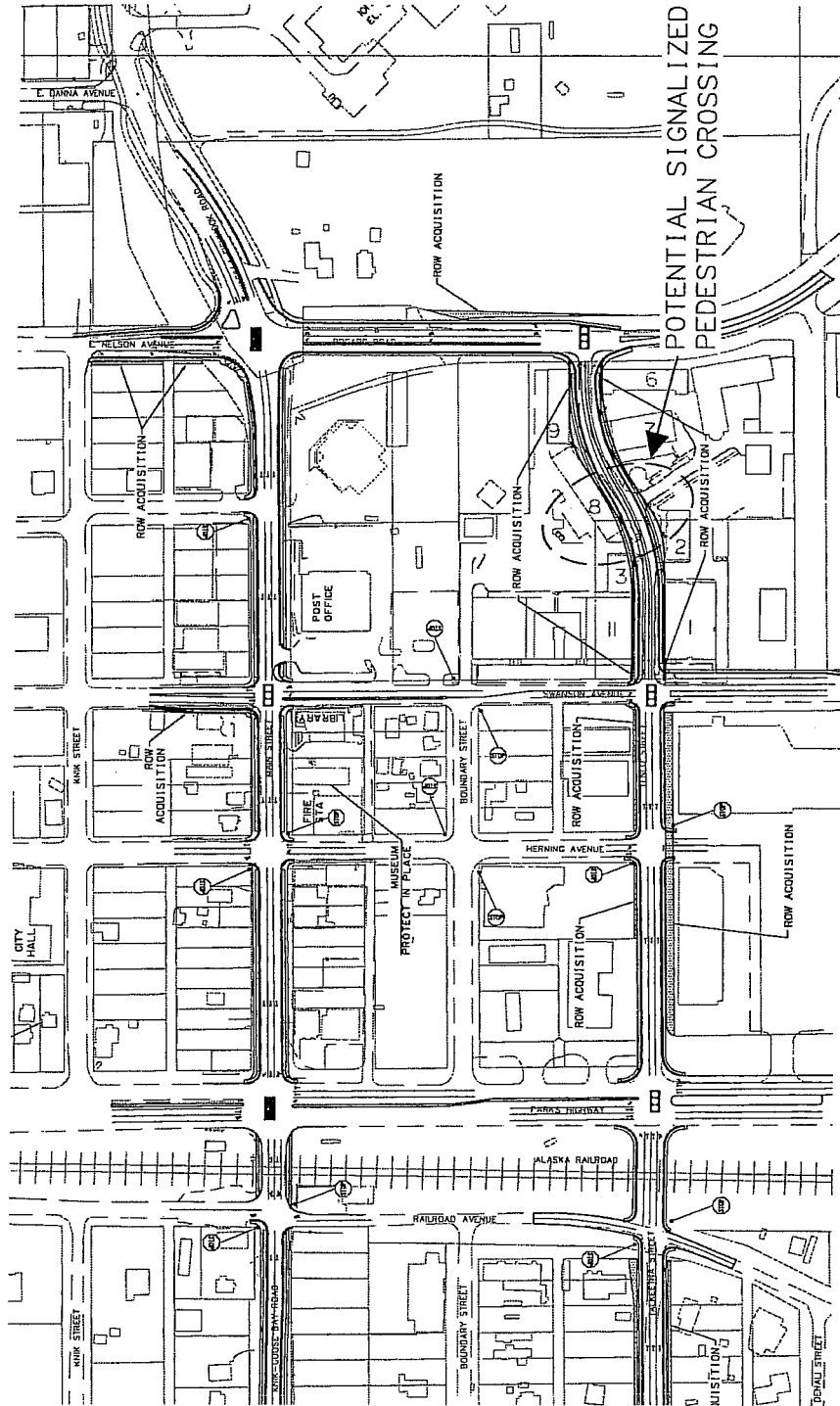
-  REQUIRED ROW ACQUISITION
-  EXISTING TRAFFIC SIGNAL
-  PROPOSED TRAFFIC SIGNAL
-  RAISED MEDIAN

5/9/2006

Main Street Traffic Study



Alternative D, Yenlo/Talkeetna - Main Couplet - North of Parks Hwy.



- NOTES:
1. THIS DRAWING IS NOT A DESIGN PLAN FOR CONSTRUCTION. IT IS A CONCEPT BASED ON INFORMATION AS OF MARCH 2006.
 2. IF A PARKS HIGHWAY/ARRC ALTERNATIVE CORRIDOR WERE INCLUDED, THE FOLLOWING CHANGES WOULD RESULT.
 - a. REDUCE YENLO / TALKEETNA & MAIN ST. BY ONE LANE. FULL LENGTH.
 - b. REDUCE SWANSON WEST BOUND APPROACH TO MAIN ST. BY ONE LANE.
 - c. REDUCE SWANSON EAST BOUND APPROACH TO MAIN ST. BY ONE LANE.
 3. IF YENLO ST. IS NOT EXTENDED NORTH OF BORGARD ST., THEN ADD WEST BOUND APPROACH TO MAIN ST. ON BORGARD RD. LANE TRAPS AND SIGHT DISTANCE ARE NOT DETERMINABLE.

5/9/2006

Main Street Traffic Study



Current Traffic Study Findings

- Alternative A (3-lane Main St.) will not provide an intersection LOS D, (minimum desired level of service) under any future scenario. **Alternative A is therefore dropped from further consideration.**
- Alternative B (5-lane Main St.) will provide LOS D only if an Alternative Corridor is constructed for the Parks Highway and Railroad. By the time an Alternative Corridor is constructed, it is likely that Alternative B will have already failed; consequently **Alternative B is also dropped from further consideration.**

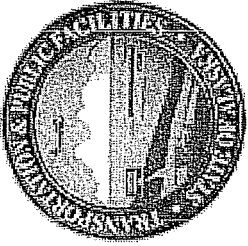


Compare Alternatives

C (Main / Knik Two-Way Couplet) and
D (Yenlo/Talketna-Main St. Two-Way Couplet)

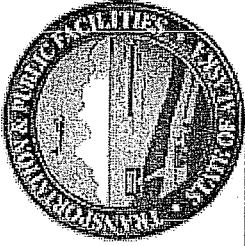
Criteria Best Performing Alternative

Level of Service:	Tie
Business Access:	Alternative D
Ped. / Bike Access & Safety:	Tie
RR Crossing	Alternative D (positive gating)
ROW Impact	Alternative D
Maintenance	Alternative D
Cost	Tie



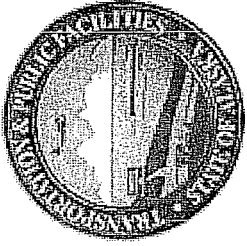
Other Considerations

- In 10 to 20 years, Railroad traffic will create unacceptable delays to the roadway traffic. Grade separation or an alternative corridor will be necessary to provide an acceptable level of service to the roadway traffic.
- An alternative corridor will increase service by one level. This future scenario will likely take at least 10 –20 years to construct.
- Alternative C, Knik St. overpass is not compatible with a future Rail over Road grade separation.
- Alternative D, Yenlo/Talkeetna-Main St. One-Way Couplet works under a Rail over Road or Road over Rail grade separation scenario.



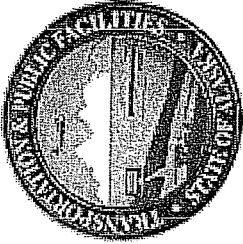
Cost (in \$millions)

Alternative	Basic	Added Cost to Upgrade to Road over Rail	Added Cost to Upgrade to Rail over Road
Alternative C Knik/Main	\$13.8	\$14.3	Not Possible
Alternative D Yenlo/Main	\$11.5	\$20.7	\$24.8

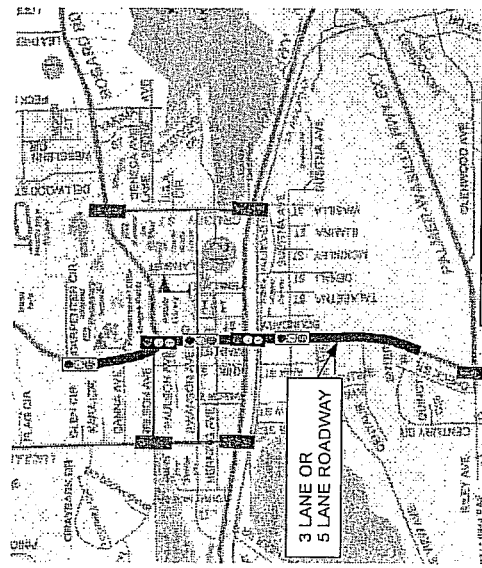


Presentation Summary

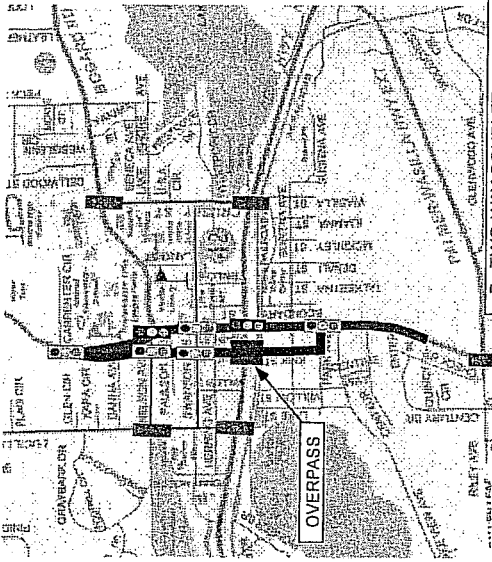
- Current Conditions
- Forecasts and Traffic Models
- Alternatives
- Study Findings & Alternatives Comparison



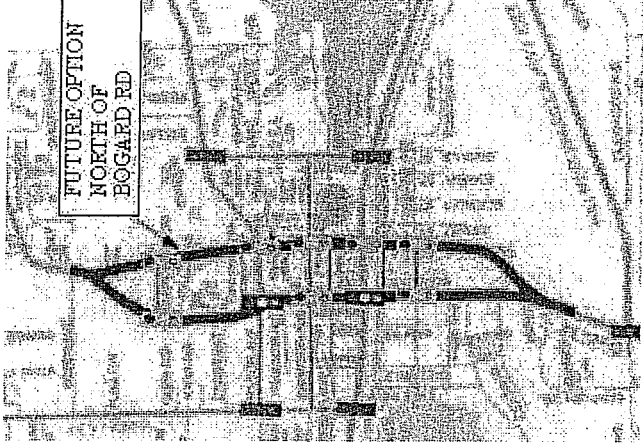
Alternative Preferences?



A & B, Existing
Two-Way Main St.



Alt. C, Main St. /
Knik St. Two-
Way Couplet



Alt. D, Yenlo /
Talkeetna-Main
St. One-Way
Couplet