

W-7-a.

MEMORANDUM

DATE: November 7, 2005

TO: Lane County Board of Commissioners

FROM: Tom Stinchfield, Transportation Planning Engineer

SUBJECT: Supplemental Information for November 9, 2005, Item # 7a, STATUS REPORT/I-5/Willamette Crossing. (Tom Stinchfield, CH2M Hill and ODOT) **(10:00 A.M. TIME CERTAIN)** (30 min.)

Attached are materials supplied by the Oregon Department of Transportation (ODOT) on this item.

1. November 7, 2005 cover memo from Tom Boyatt, ODOT Senior Planner
2. Series of eight aerial photos with single line representation of interchange forms under study.



Oregon

Theodore R. Kulongoski, Governor

Department of Transportation

Area Manager/Project Manager

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November 7, 2005

To: Lane County Board of County Commissioners

From: Tom Boyatt, ODOT Senior Planner

Re: I-5/Franklin Proposed Interchange Update

This agenda item provides the Commission with a project update prior to a series of public open houses in Eugene and Springfield on December 1, 5 and 8, 2005.

Over the past several months the project management team (PMT) has been working with the project consultant to complete a high-level technical scan of eight potential interchange concepts in four discrete categories. The categories are:

- Full Interchange at Franklin
- Partial Interchange at Franklin
- Split Interchange at Franklin and Glenwood
- Reconstructed Glenwood Interchange.

Single-line drawings of the eight concepts explored in these four categories are provided as part of this material. The high-level scan of interchange concepts is presented in four technical memoranda. Copies of these memos are available on request. These Memos are:

- Existing Conditions and Potential Constraints
- Engineering/Environmental and Cost Analysis
- Traffic Forecasts
- Potential Revenue Sources

Technical information that has been gathered and developed as part of this process is summarized as follows.

Study Purpose

- This is a high-level planning study and does not include any engineering design.
- The study helps stakeholders understand the issues related to building a new interchange at Franklin Boulevard.

- Public open houses are scheduled to present results of preliminary analysis and ask stakeholders to indicate whether they think an interchange should be included in local and regional transportation plans.
- Process requests Eugene, Springfield and Lane County elected officials to give a future interchange a preliminary “thumbs up” or “thumbs down”. If “thumbs up”, initiate a process to include an interchange project in regional and local transportation system plans. This process would include a detailed planning study called a Refinement Plan.

Benefits of a new Interchange

A new interchange would support planned land uses in the project area.

- Downtown Eugene and Downtown Springfield: Would provide additional accessibility to both downtowns and enhance the function of Franklin Boulevard as the connection between the two.
- Glenwood Neighborhood: Would provide increased local and regional accessibility and opportunities for employment growth to the Glenwood mixed use redevelopment area.
- Nodal development on Franklin BRT: Would increase the desirability of the nodal development locations planned along the BRT line.
- University of Oregon and Arena: Would provide the most convenient regional freeway access to the University and the proposed multi-purpose arena facility.

Traffic and Circulation Benefits

A new interchange may improve traffic congestion and circulation on area roadways.

- Slightly reduce traffic volumes on Ferry Street bridge
- Shift more regional traffic to highway system
- Allow for modernization of the Glenwood interchange
- Does not increase traffic along Franklin Boulevard
- Reduce out-of-direction travel between I-5 and neighborhoods, institutions, and businesses along Franklin Blvd

Project Issues

Technical issues that may influence the project.

- Does not address anticipated future congestion on Franklin west of I-5
- Increases reliance on highway system for regional trip-making
- Increases traffic volumes on I-5 north of Franklin
- Category 3/4 concepts may require widening of Glenwood to a five-lane roadway
- May increase traffic volumes on north-south streets between Agate and Walnut
- May require closure of existing neighborhood connection onto northbound I-5 off-ramp at Franklin

Features of the natural and built environment that could present cost and constructability issues include:

- Topography
- Utilities
- Railroad

- Existing buildings and neighborhoods
- Willamette River and associated natural resources
- Complex intersection with multiple bridges

Identified policy issues.

- FHWA (Federal Highway Administration) “8 Point Guidelines” for additional access to the interstate system
- OHP (Oregon Highway Plan) Policy 1G Major Improvements
- Interchange concepts do not appear to identify or solve a transportation problem (purpose and need)
- Opportunity costs to existing transportation problems in the metro area and Lane County

Identified stakeholder issues.

- Increased congestion on Franklin Boulevard, Ferry Street
- Neighborhood traffic and access
- Land use and property value impacts
- Park and river impacts
- Access for new development
- Aesthetics
- Bicycle and pedestrian facilities
- Development of Glenwood
- University of Oregon arena events traffic
- Be clear about project objective (purpose and need)
- Would this project divert funds from other projects
- Compliance with federal and state policies (e.g., interchange spacing, consistency of land uses with interchange capacity preservation, maximizing use of existing facilities)

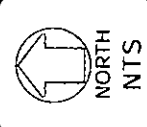
Summary of Estimated Costs

Cost ranges were developed using concept sketches without any detailed engineering work. Cost data is preliminary and is intended to show the relative differences in cost between the categories rather than convey definitive value.

- | | |
|---|----------------|
| • Full Interchange at Franklin: | \$80m - \$120m |
| • Partial Interchange at Franklin: | \$75m - \$110m |
| • Split Interchange at Franklin and Glenwood: | \$75m - \$110m |
| • Reconstructed Glenwood Interchange: | \$35m - \$50m |

Data Gaps

Limitations of this preliminary concept-level exercise are significant. Detailed survey mapping of the built and natural environment, operational traffic analysis at effected intersections, impacts of future widening of I-5, and preliminary engineering design are all needed to better understand potential constraints, impacts and costs of a potential interchange project. The facility refinement planning process would be the next step to develop this information to a level sufficient to include a project in local and regional transportation system plans.



DIAGRAMS ARE FOR DISCUSSION
PURPOSES ONLY
SUBJECT TO CHANGE

RAMP BRIDGES
IN RIVER

RAMP GRADES
RAILROAD CLEARANCE

COMPLEX BRIDGE &
INTERSECTION

REMOVE FREE
FLOW RAMP

POSSIBLE "BOULEVARD"
TREATMENTS

POSSIBLE LOCAL
CONNECTION?

INITIAL CONCEPTS
CATEGORY 1 - FULL INTERCHANGE
DIAMOND 1
9/05





DIAGRAMS ARE FOR DISCUSSION
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RAMP BRIDGES
IN RIVER

RAMP GRADES
RAILROAD CLEARANCE

GLENWOOD INTERCHANGE
INFLUENCE AREA

COMPLEX BRIDGE &
INTERSECTION

MAINTAIN HIGHWAY
99 RAMPS

LOCAL CONNECTION
SEVERED

INITIAL CONCEPTS
CATEGORY 1 - FULL INTERCHANGE
DIAMOND 2
9/05



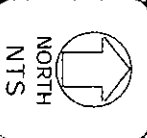


INITIAL CONCEPTS
CATEGORY 2 - PARTIAL INTERCHANGE
PARTIAL DIAMOND

9/05

DIAGRAMS ARE FOR DISCUSSION
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COMPLEX BRIDGE & INTERSECTION

RAMP BRIDGES IN RIVER

AVOID RAIL ROAD

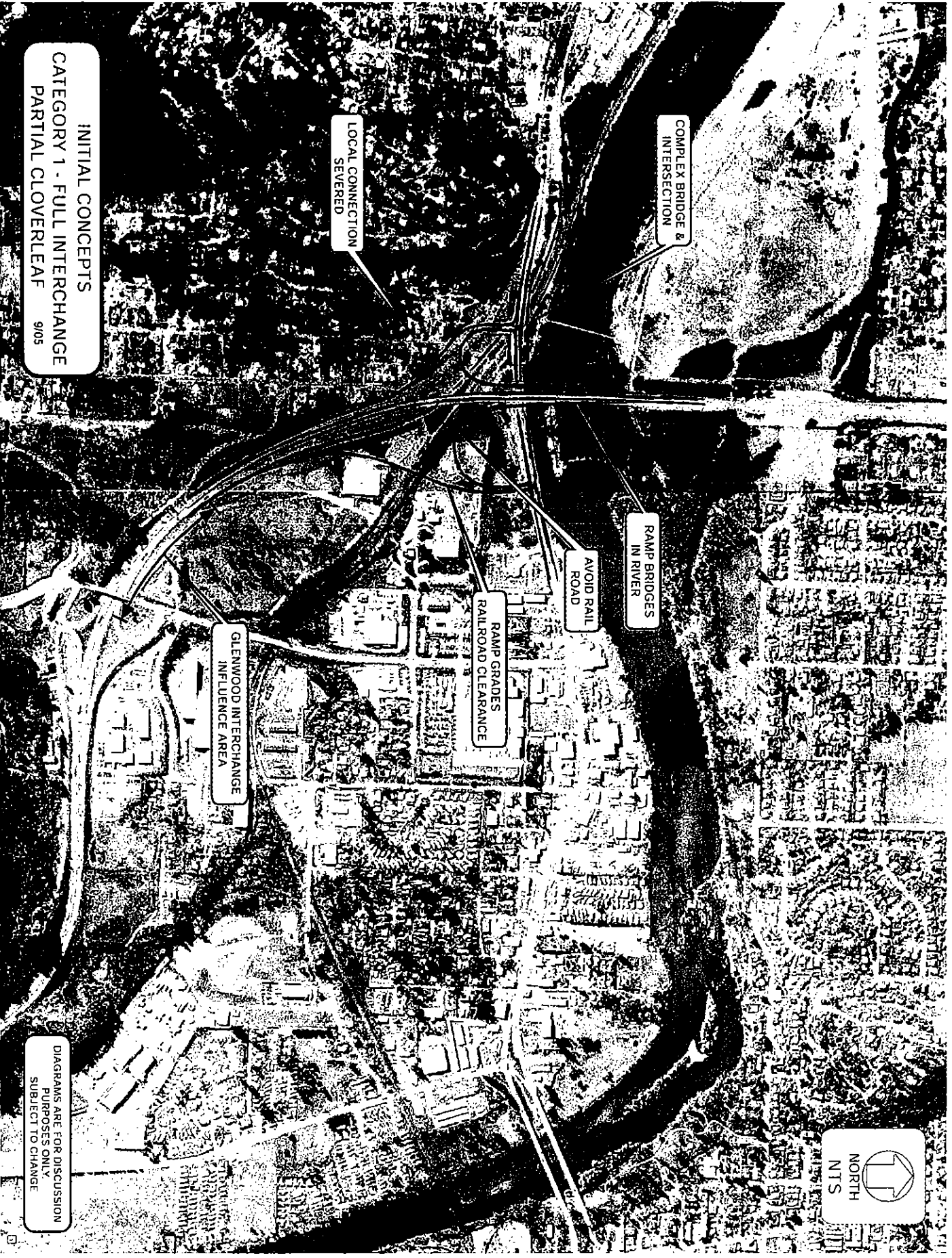
RAMP GRADES RAIL ROAD CLEARANCE

LOCAL CONNECTION SEVERED

GLENWOOD INTERCHANGE INFLUENCE AREA

INITIAL CONCEPTS
CATEGORY 1 - FULL INTERCHANGE
PARTIAL CLOVERLEAF 9/05

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COMPLEX BRIDGE &
INTERSECTION

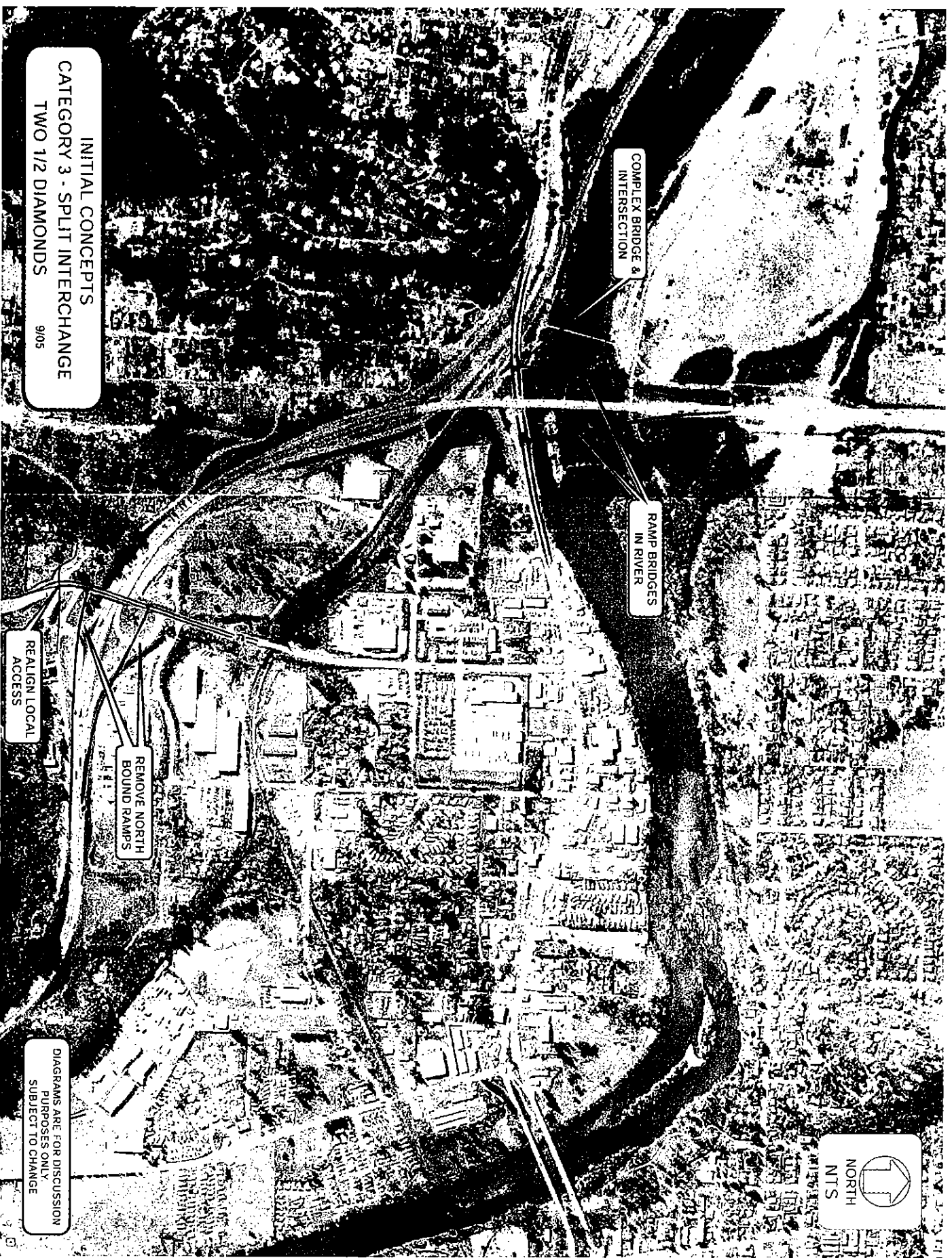
RAMP BRIDGES
IN RIVER

REMOVE NORTH
BOUND RAMP

REALIGN LOCAL
ACCESS

DIAGRAMS ARE FOR DISCUSSION
PURPOSES ONLY
SUBJECT TO CHANGE

INITIAL CONCEPTS
CATEGORY 3 - SPLIT INTERCHANGE
TWO 1/2 DIAMONDS
9/05





COMPLEX BRIDGE &
INTERSECTION

REPLACE SB HWY
99 RAMP

LOCAL CONNECTION
SEVERED

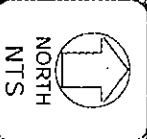
AVOID RAIL
ROAD

GLENWOOD INTERCHANGE
INFLUENCE AREA

INITIAL CONCEPTS
CATEGORY 2 - PARTIAL INTERCHANGE
PARTIAL CLOVERLEAF 9/05

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SUBJECT TO CHANGE





INITIAL CONCEPTS
CATEGORY 4 - GLENWOOD INTERCHANGE
DIAMOND

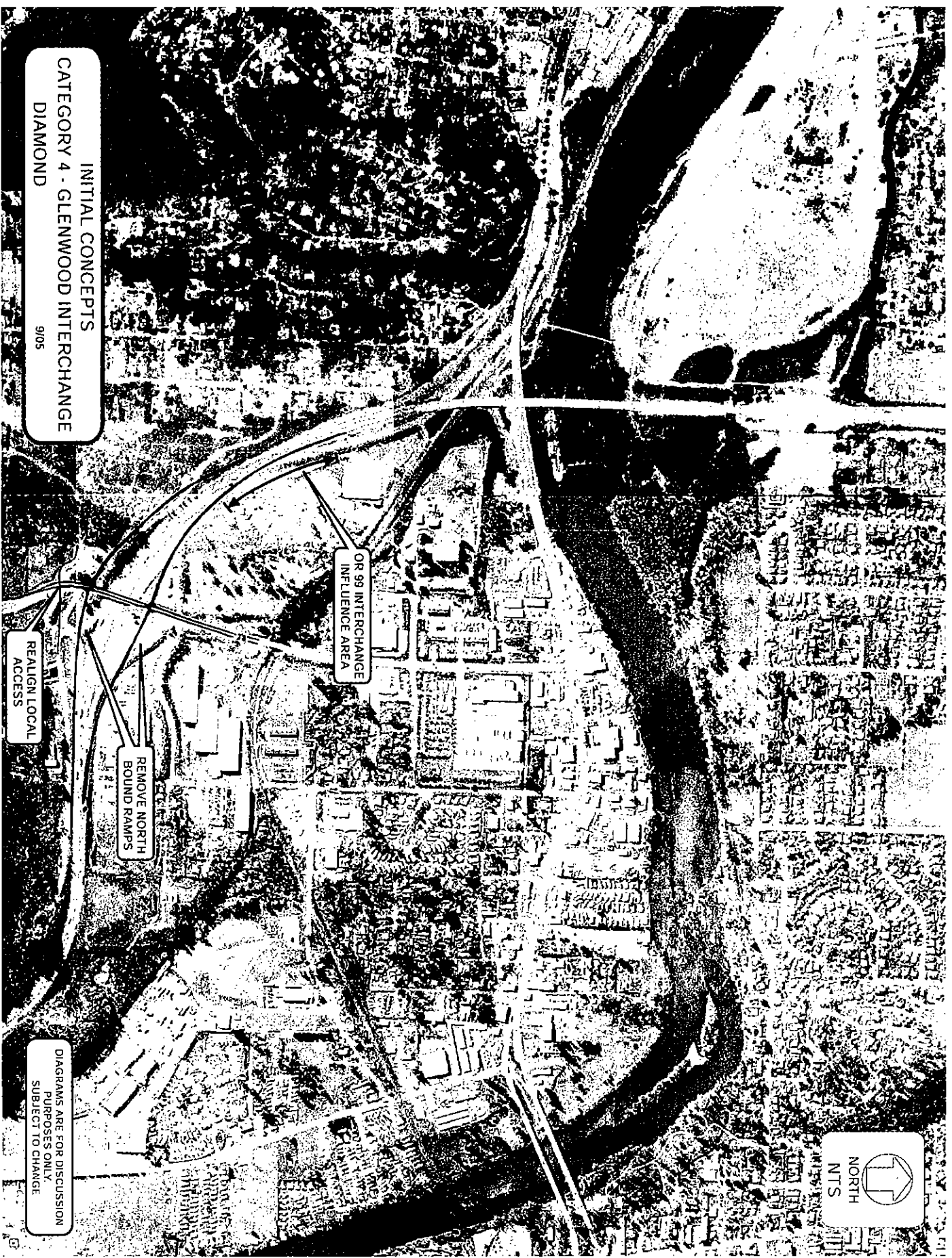
9/05

OR 59 INTERCHANGE
INFLUENCE AREA

REMOVE NORTH
BOUND RAMP

REALIGN LOCAL
ACCESS

DIAGRAMS ARE FOR DISCUSSION
PURPOSES ONLY.
SUBJECT TO CHANGE





COMPLEX BRIDGE &
INTERSECTION

RAMP BRIDGES
IN RIVER

RAMP BRAIDS OR
COLLECTOR DISTRIBUTOR
ROADS

REMOVE NORTH
BOUND RAMP

REALIGN LOCAL
ACCESS

DIAGRAMS ARE FOR DISCUSSION
PURPOSES ONLY
SUBJECT TO CHANGE

INITIAL CONCEPTS
CATEGORY 3 - SPLIT INTERCHANGE
CONNECTED DIAMONDS 9/05

