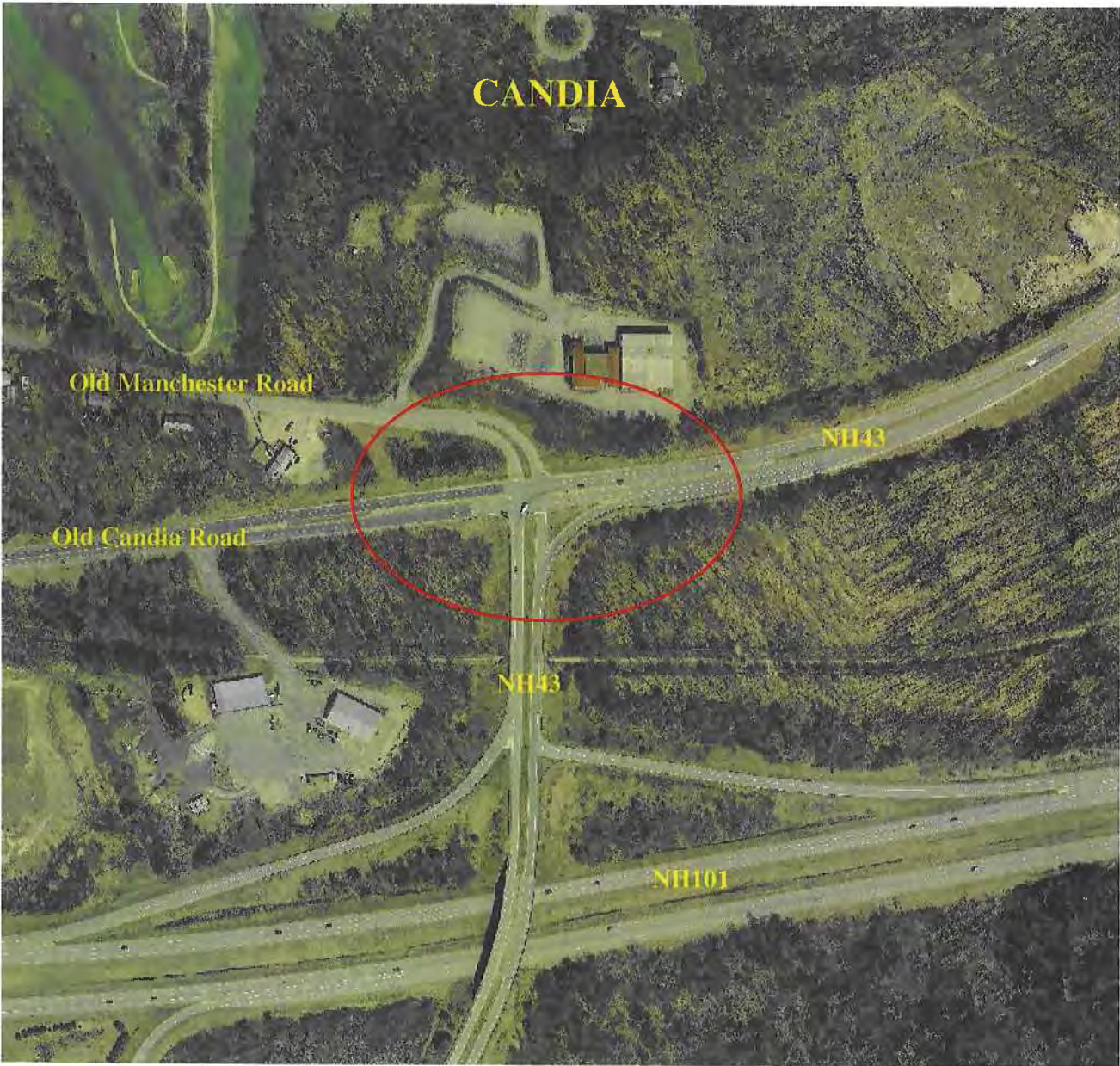


Road Safety Audit Report
Candia, New Hampshire
Intersection
NH43/Old Candia Road/Old Manchester Road



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ROAD SAFETY AUDIT REPORT

Candia, New Hampshire

PROJECT: Existing Intersection

DATE OF REVIEW: May 23, 2010

LOCATION OF REVIEW: NH43/Old Candia Road/Old Manchester Road - Town of Candia

ATTENDED BY:

DEPARTMENT OF TRANSPORTATION

Dave Rodrigue Charles Dylun Mike Dugas Stuart Thompson

TOWN OF CANDIA

Richard Snow Mike McGillan

SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION

Julie Chen

FHWA

Martin Calawa

SUBJECT: Formal RSA to evaluate safety concerns at the intersection of NH43/Old Candia Road

As a result of safety concerns at the intersection of NH43 and Old Candia Road, the Town of Candia and the Southern NH Planning Commission requested a formal Road Safety Audit be performed to identify safety issues and recommend safety solutions. The SNHPC collected traffic counts and provided a crash history referencing the most recent three years of crashes. This request was submitted as a special project under the Highway Safety Improvement Program.

A pre-audit meeting was held on the morning of May 23, 2010 at the Candia Town Hall. At this meeting representation from the town cited issues and observations regarding safety concerns as follows:

- Confusion by motorists about right of way at intersection
- Crashes involving left turning traffic
- Left turning vehicles hitting guardrail
- Speed zone at Irving station

Submitted by:

G. Stuart Thompson, PE
Highway Safety Engineer

Road Safety Audit

NH43/Old Candia Road, Town of Candia, NH

Date: May 23, 2010

RSA Team and Participants:

Dave Rodrigue- Maintenance, NHDOT
Charles Dylun - Maintenance, NHDOT
Julie Chen – Transportation Planner/Engineer, SNHPC
Marty Calawa – Highway Safety, FHWA
Stuart Thompson – Highway Safety, NHDOT
Mike Dugas - Design, NHDOT
Richard Snow – Town Selectman
Mike McGillen – Police Chief

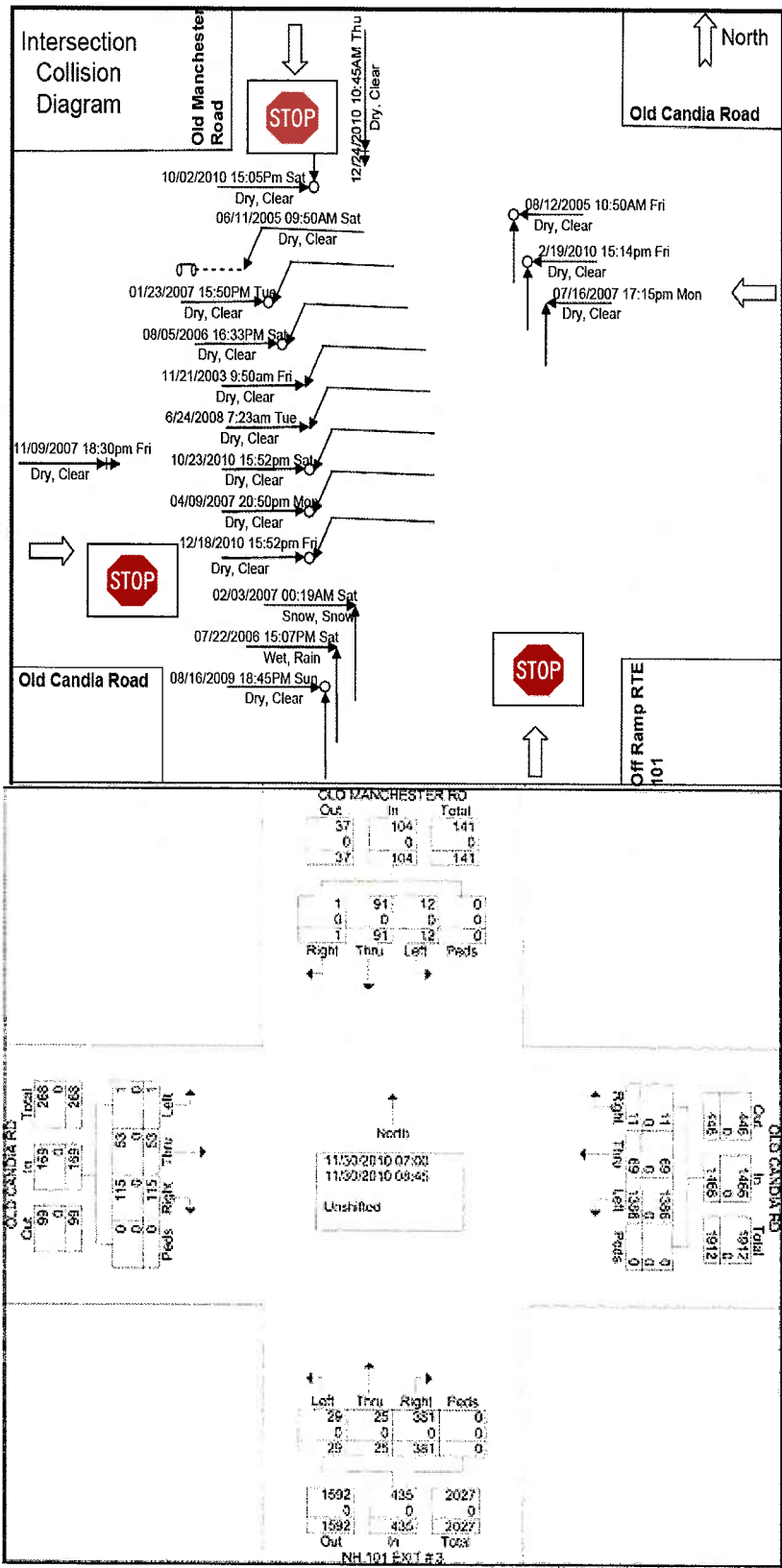
Project Characteristics:

Audit Type: Existing Road
Units of Measure: US
Adjacent Land Use: Rural
Design Speed (US): 35 mph
Opposite Flow Separation: Undivided
Service Function (Rural): Rural Major Collector
Terrain: Flat
Climatic Conditions - Temperature: Cold Winter (freezing, icing possible)
Climatic Conditions - Snow: Snow in winter

Background:

NH43 is a two lane rural major collector with a posted speed of 35 mph, 12-foot travel lanes, 10-foot shoulders, and an AADT of 8800. NH43 begins at NH101 exit 3 and extends north intersecting Old Candia Road and Old Manchester Road 1,000' north of NH101. The town maintains Old Manchester Road and the State maintains NH43 and Old Candia Road. Approaches to the intersection do not have sidewalks and there is no evidence of pedestrian traffic. The intersection of NH43, Old Candia Road, and Old Manchester Road is under three-way stop control with NH43 westbound as a free movement.

The Southern NH Planning Commission completed traffic counts and a crash study of the intersection. The major conflict is between EB through traffic on Old Candia Road and WB left turning traffic on NH43. The ratio of left turns to through traffic is 1386/53 at a.m. peak. Eight of the 16 crashes occurring at this intersection involved left turn and through traffic. Three of the remaining eight crashes involved EB traffic on Old Candia Road and WB through traffic from NH43 to Old Manchester Street. Eastbound through traffic on Old Candia Road commonly fails to yield the right of way to the WB left turning traffic on NH43.



Crash Diagram and Turning Movement Counts – Most crashes involved EB through and WB left turning vehicles. The ratio of EB vehicles turning left to WB through traffic is 1386/53.

LOCATION:

Issue 2: Eastbound traffic approaching the intersection fails to yield to westbound traffic turning left to access NH101.

Suggestions:

Short Term

- Install signing package including stop ahead and warning sign indicating that "Oncoming Traffic Does Not Stop" on Old Candia Road EB (add panel beneath stop signs on left and right sides of road)
 - Lead – Traffic/District
- Targeted enforcement of speed/failure to yield incidences
 - Lead - Town

Medium Term:

- Retire EB right turn lane on Old Candia Road
 - Lead – Design/District



Location: South West corner of intersection

Issue: The town reported that in some instances WB vehicles turning left to access NH101 were striking the guardrail

Suggestions:

Short Term

- Speeding Enforcement
 - Lead - Town
- Evaluate cross level though turn
 - Lead – Highway Design

Location: NH43 at Irving Station

Issue: The town reported vehicles exceeding the speed limit in the area of the Irving Station

Suggestions:

Short Term

- Speeding Enforcement – Use of Speed Trailer
 - Lead - Town
- Evaluate Speed Limit – Adjust speed limit as appropriate
 - Lead -District

Audit Response:

The objective of responding to the audit report is for the owner (local or state) to document their response to the findings of the audit report. The response should outline what actions the owner (local or state) will take related to each safety concern listed in the report. The owner may either:

- Agree with the suggestion described by the audit team and commit to its implementation, outlining a schedule for the completion of the suggestion.
- Disagree with the suggestion described by the audit team and commit to an alternative, outlining a schedule for the completion of the alternative. In doing so, the owner should provide a valid reason as to why they choose not to adopt the audit team's suggestion.
- Choose not to implement certain improvements at all due to constraints or disagreement regarding the safety issue, believing that there is no increased risk associated with the concern raised by the audit team. In doing so, the owner should document the reasoning behind their decision.

Protection of Data from Discovery & Admission into Evidence

Section 148(g)(4) stipulates that data compiled or collected for the preparation of the HSIP Report "...shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in an action for damages arising from any occurrence at a location identified or addressed in such reports..." This information is also protected by 23 USC 409 (discovery and admission as evidence of certain reports and surveys).