

**TENNESSEE DEPARTMENT OF TRANSPORTATION
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: HPP/NH-71(16) : 78008-1244-14 ROUTE: S.R. 71
COUNTY: SEVIER CITY: SEYMOUR
PROJECT PIN NUMBER: 104959.01
PROJECT DESCRIPTION: FROM S.R. 35/S.R. 338 TO MACON LANE.

[1] AVERAGE TRAFFIC DATA.

DIVISION REQUESTING:

MAINTENANCE ☐

S.T.I.D. ☐

PROG. DEVELOPMENT & ADM. ☐

PUBLIC TRANS. & AERO. ☐

YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: 2017

PROJECTED LETTING DATE: _____

PAVEMENT DESIGN ☐

STRUCTURES ☐

SURVEY & ROADWAY DESIGN ☒

TRAFFIC SIGNAL DESIGN ☐

OTHER ☐

TRAFFIC ASSIGNMENT:

[1]

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
35,370	2017	56,590	6,075	10	2037	65-35	1	2	212	286

REQUESTED BY: NAME FREDDY MILLER DATE 3/1/16
DIVISION ROADWAY DESIGN
ADDRESS 1200 J. K. POLK BUILDING
NASHVILLE TN 37243

REVIEWED BY: TONY ARMSTRONG Tony Armstrong DATE 3-3-16
TRANSPORTATION MANAGER 1
SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: MIKE PRESLEY Mike Presley DATE 3-3-16
TRANSPORTATION MANAGER 2
SUITE 1000, JAMES K. POLK BUILDING

COMMENTS:

PLEASE UPDATE TRAFFIC AND ADL's TO 2017-2037.

THIS TRAFFIC IS BASED ON 2015 CYCLE COUNTS AND A PREVIOUS PROJECT DATED 2/18/2011. THE DESIGN YEAR TRAFFIC IS BASED ON GROWTH RATE FROM THE UPDATED KNOXVILLE TPO COMPUTER ASSIGNMENT MODEL. AADT's, DHV's AND ADL's ARE INCLUDED.

DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.

NOTE: FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADT's OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 2/27/14)

**TENNESSEE DEPARTMENT OF TRANSPORTATION
STRATEGIC TRANSPORTATION INVESTMENT DIVISION**

PROJECT NO.: HPP/NH-71(16) : 78008-1244-14

ROUTE NO.: S.R. 71

COUNTY: SEVIER

CITY: SEYMOUR

PROJECT DESCRIPTION: FROM S.R. 35 / S.R. 338 TO MACON LANE.

FAP Urban

Pavement Structural Design

Calculation of Equivalent Daily 18 Kip Single Axle Loads

Type Vehicle		ADT (No. Counted)	Flexible		Rigid	
			18-kip Factor	ADL	18-kip Factor	ADL
Pass. cars and motorcycles (1-2)		30,346	0.001	30	0.001	30
Pick-up, Panel, Van (3)		14,714	0.004	59	0.004	59
Sing. Unit	Buses (4)	28	0.300	8	0.300	8
	2-axle, 6-tire (5)	336	0.260	87	0.260	87
	3-axle or more (6-7)	169	1.000	169	1.500	254
	4-axle (8)	199	0.640	127	0.800	159
Comb.	5-axle or more (9-13)	188	1.200	226	1.900	357
Totals (2027 AADT)		45,980		707		955

Suggested Percentages of Trucks in Design Lane

5,000 or less ADT	95%
5,000 - 10,000 ADT	90%
10,000 - 15,000 ADT	85%
15,000 - 20,000 ADT	80%
20,000 - 30,000 ADT	75%
30,000 - 40,000 ADT	70%
40,000 Plus	60%

No. of Lanes: 5

% Trucks in Design Lane: 60%

ADL in Design Lane:

FLEX:	0.5	X	0.60	X	706.9	=	212
RIGID:	0.5	X	0.60	X	954.9	=	286

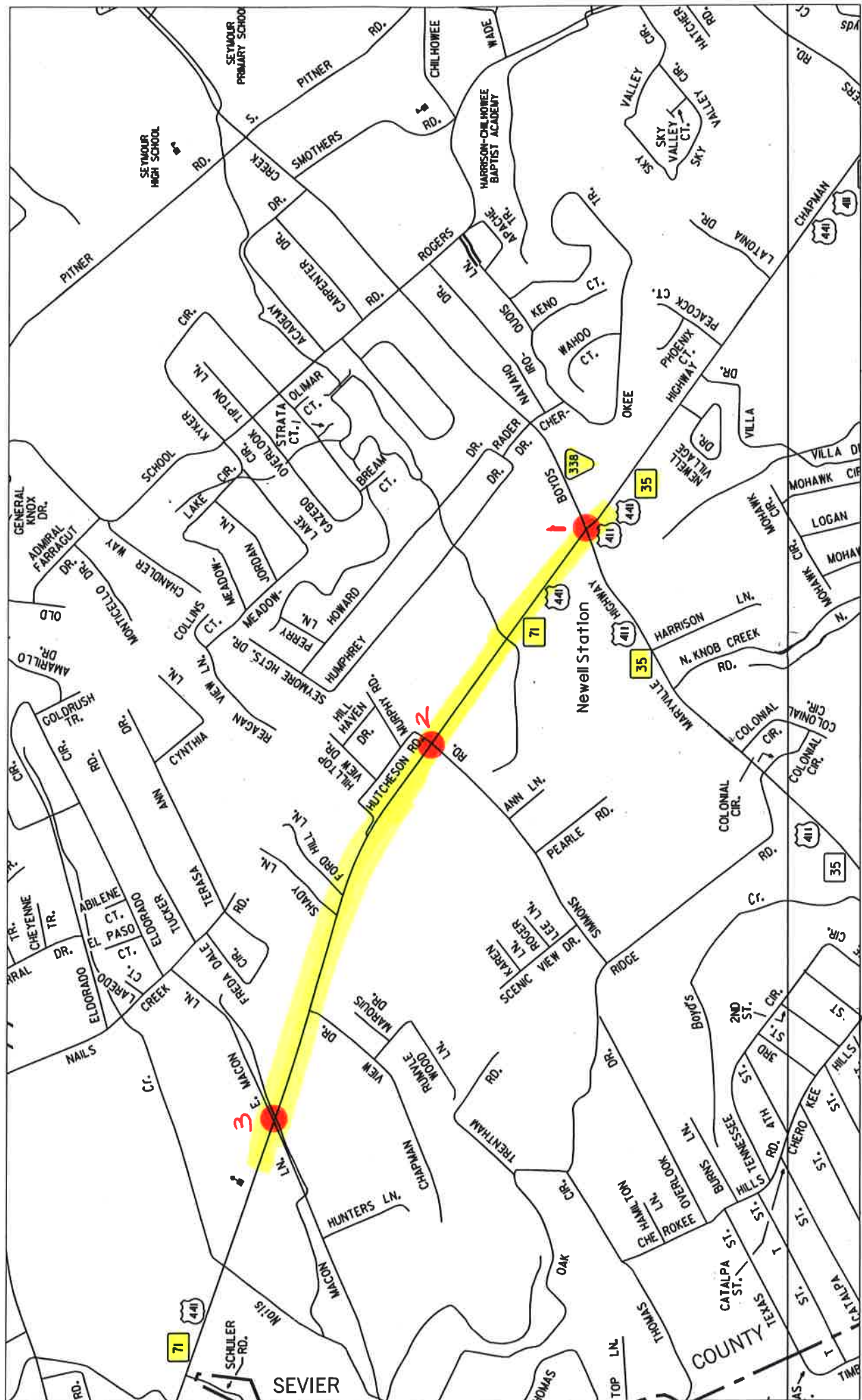
ADL Calculations By: TONY ARMSTRONG

Date: 3/3/2016

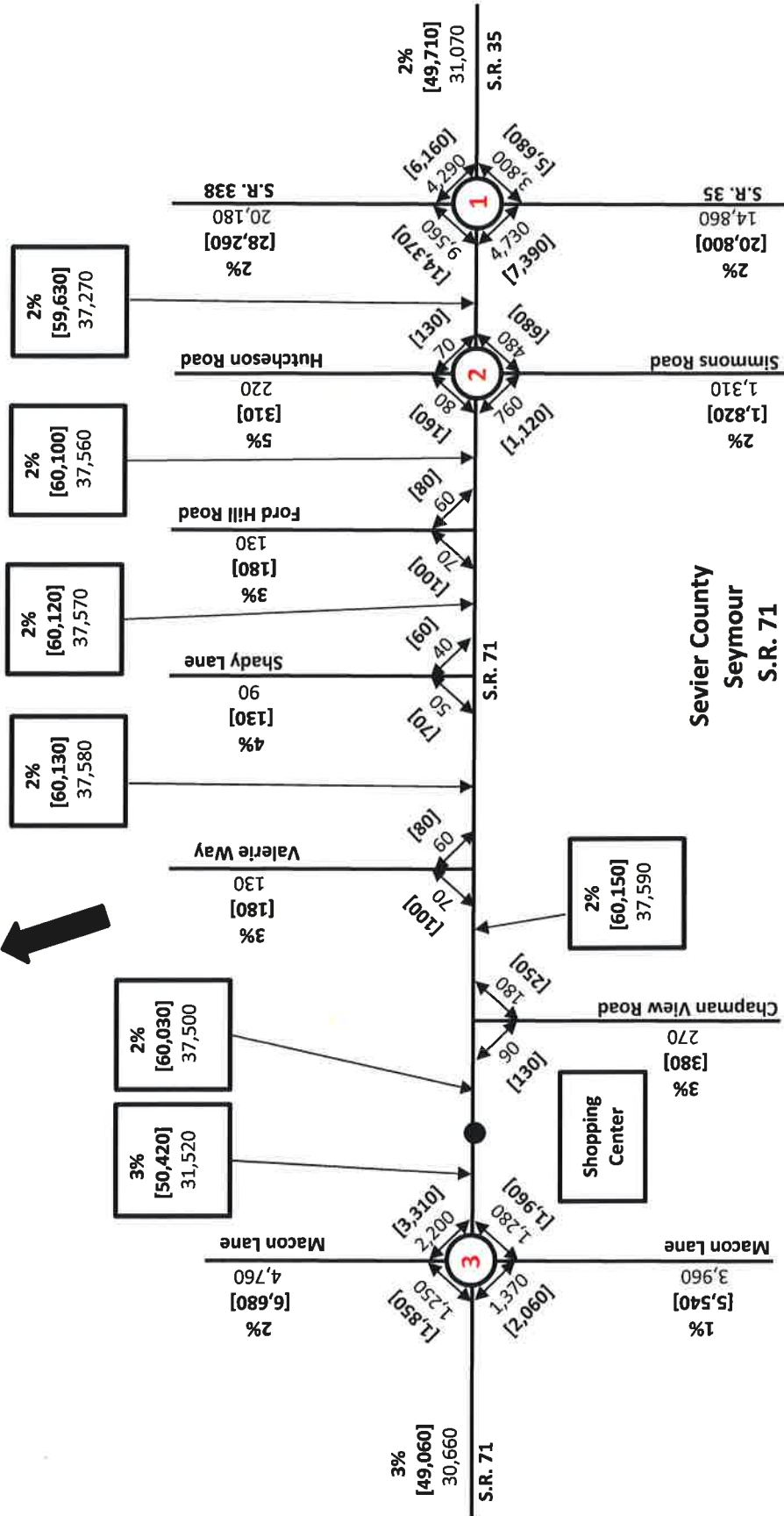
Reviewed By:

Date:

[REV. 7/1/14]

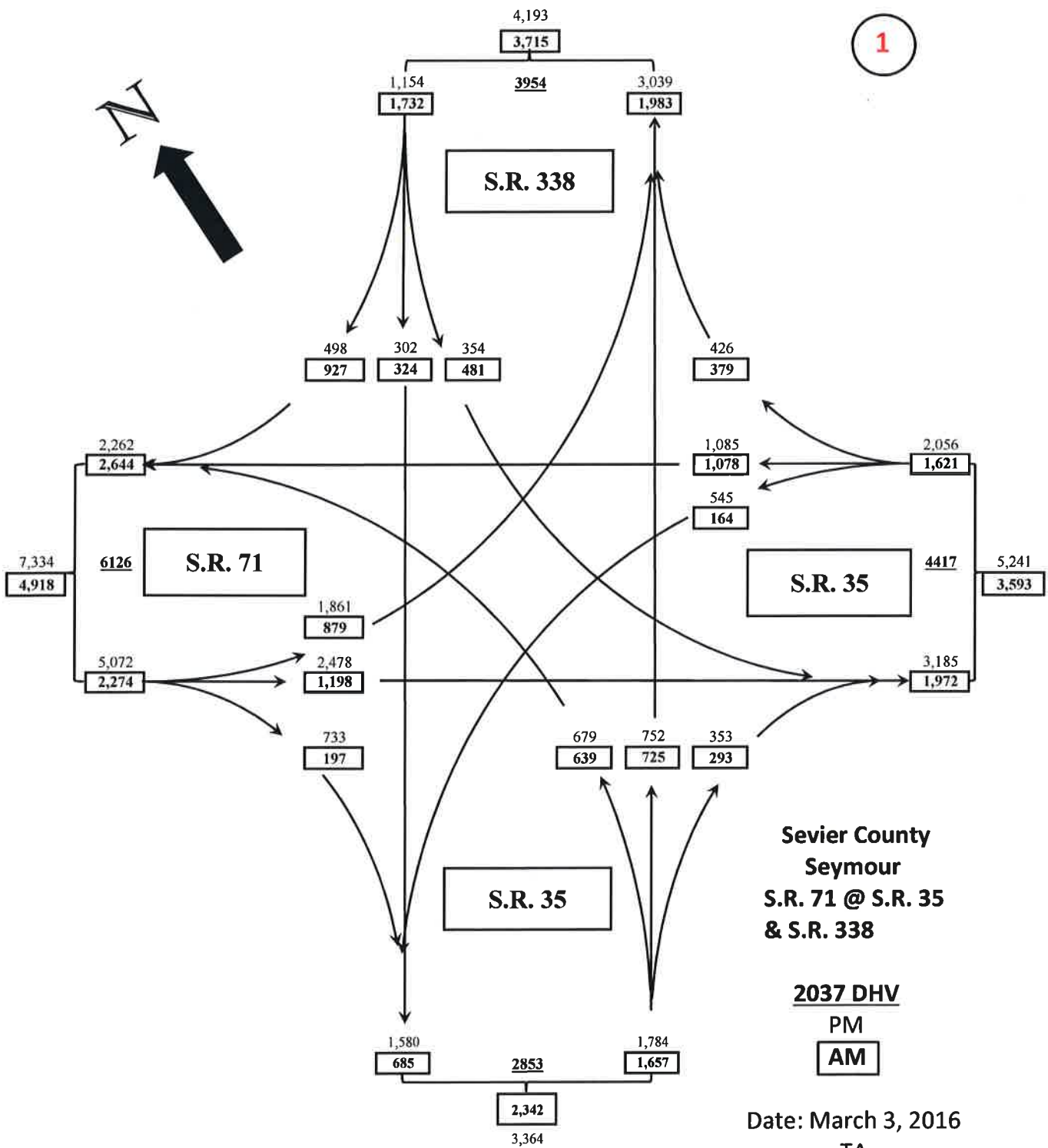


SEVIER COUNTY
SEYMOUR
S.R. 71



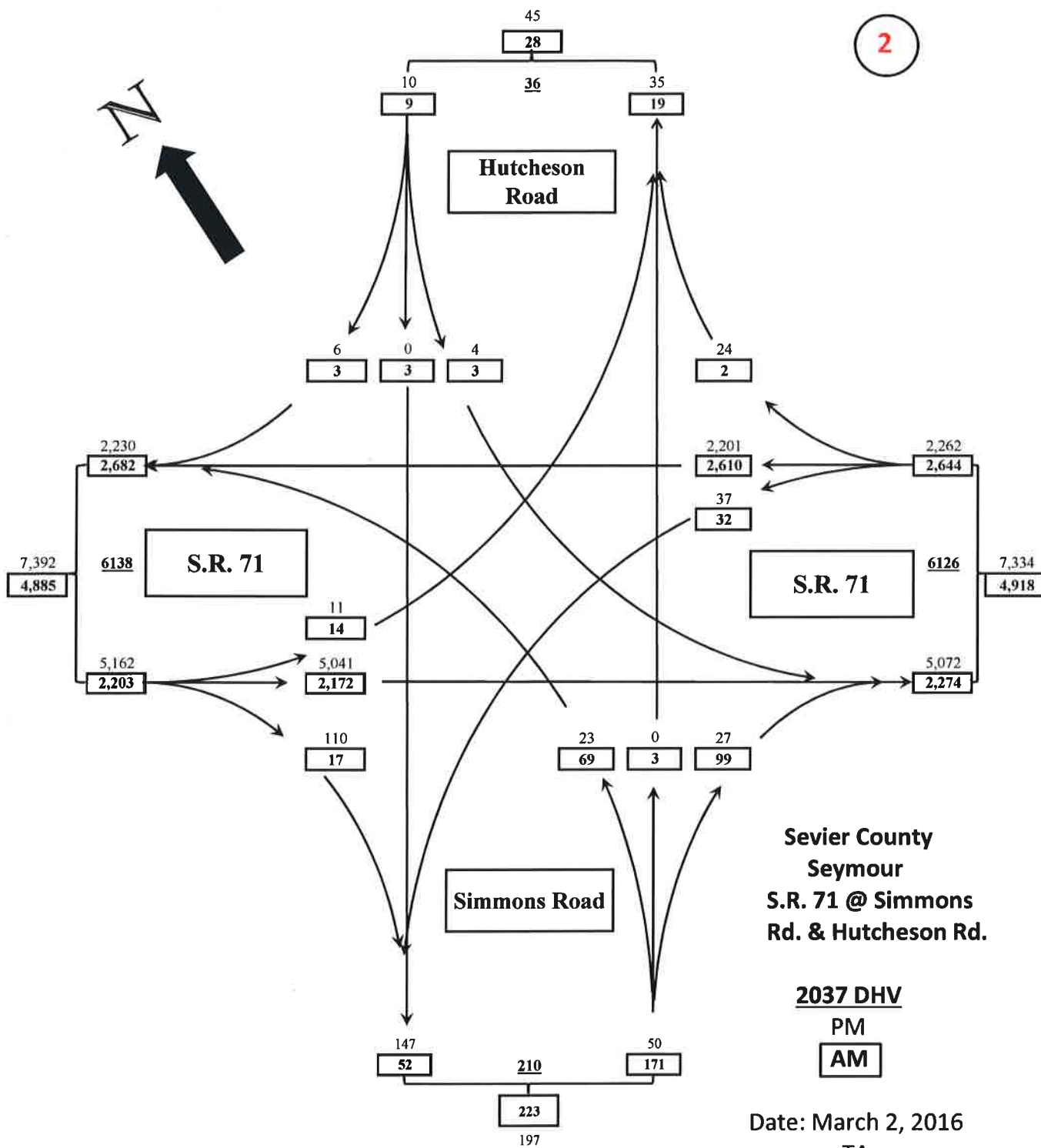
2037 DHV

1



2037 DHV

2



2037 DHV

3

