Traffic Noise Technical Report

I-35 Capital Express North Project

Travis and Williamson Counties, Texas
Austin District
CSJs: 0015-10-062 & 0015-13-389

December 2020

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT

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1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) Austin District proposes improvements to Interstate 35 (I-35) from State Highway 45 North (SH 45N) in Williamson County to US Highway 290 East (US 290E) in Travis County. The proposed improvements would add one non-tolled managed lane in each direction, reconstruct intersections and bridges to increase bridge clearances and east/west mobility, and improve bicycle and pedestrian accommodations along I-35 frontage roads and at east/west crossings. The project length is approximately 11.5 miles.

2.0 TRAFFIC NOISE ANALYSIS

This analysis was accomplished in accordance with TxDOT's (Federal Highway Administration [FHWA] approved) *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (2011).

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)."

Also, because traffic sound levels are never constant due to the changing number, type and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis process includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC), shown in **Table 1**, for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur.

Table 1: FHWA Noise Abatement Criteria (NAC)

Activity Category	FHWA dB(A) Leq	Activity Description
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential
C	67 (exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.
Source: *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT 2011)		

A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion - the predicted noise level at the receiver approaches, equals, or exceeds the NAC. "Approach" is defined as one dB(A) below the NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion - the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. "Substantially exceeds" is defined as more than 10 dB(A). For example: a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type, and speed of vehicles; highway alignment and

grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Table 2 and **Appendix B** shows the traffic data utilized in the I-35 Capital Express North traffic noise models. The vehicle breakdown percentages for each corresponding section of the project (shown in **Table 2**) were gathered from the data tables supplied by the TxDOT Transportation Planning & Programming (TPP) Division. As these data tables include the years of 2030 and 2050, a traffic line diagram was generated for the detailed traffic input with traffic volumes for the existing and design years of 2018 and 2038, respectively.

Table 2: Traffic Noise Analysis Parameters

Section/Type	Limits	Speed Limit	Design Hour Volume (K-Factor)	Average Annual Daily Traffic		Vehicle Distribution (%) DHV		
				2030	2050	Light Duty	Medium Duty	Heavy Duty
Main Lanes: Section 2	S of William Cannon to N of Rundberg	60 – 70 mph	5.9	245,200	305,900	96.0	1.1	2.9
Main Lanes: Section 3	N of Rundberg to N of Howard*	70 mph	7.1	209,150	274,500	95.7	1.0	3.3
Frontage Roads: Section 7	S of US 290 Ramps to N of US 290 Ramps	55 mph	7.1	59,050	71,850	97.5	1.7	0.8
Frontage Roads: Section 8	N of US 290 Ramps to N of US 183 Ramps	55 mph	7.1	80,850	91,450	97.8	1.4	0.8
Frontage Roads: Section 9	N of US 183 Ramps to S of Howard Ramps	55 mph	7.1	95,250	124,650	98.0	1.4	0.6
Frontage Roads: Section 10	S of Howard Ramps to N of Howard*	55 mph	7.1	84,000	110,150	97.8	1.4	0.8

Notes: The supplied traffic data includes the entire I-35 Capital Express corridor; however, the above table only includes those sections that are within the I-35 Capital Express North project.
*Assumes the extension to the north end of the project.

Existing and predicted traffic noise levels were modeled at receiver locations (see **Table 3** and **Appendix A**) that represent the land use activity areas adjacent to the project area that might be impacted by traffic noise and might potentially benefit from feasible and reasonable noise abatement. Receivers were placed closest to the ROW for locations having more than one area of frequent human activity. NAC category receivers based on interior noise levels were placed in a location closest to the proposed ROW, while still within the structural footprint.

Table 3: Traffic Noise Levels [dB(A) Leq]

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R1	Hotel	E	72	62	63	+1	N
R2	College	C	67	64	65	+1	N
R3	Restaurant	E	72	67	72	+5	Y
R5	Apartment	B	67	65	68	+3	Y
R6	Restaurant	E	72	71	77	+6	Y
R7	Restaurant	E	72	73	77	+4	Y
R8	Place of Worship	D	52	37	40	+3	N
R9	Apartment	B	67	68	71	+3	Y
R10	Restaurant	E	72	62	65	+3	N
R11	Hotel	E	72	69	71	+2	Y
R12	Cemetery	C	67	58	63	+5	N
R13	Medical Facility	D	52	33	37	+4	N
R14	School	C	67	65	68	+3	Y
R15	Apartment	B	67	69	75	+6	Y
R16	Apartment	B	67	72	75	+3	Y
R17	Apartment	B	67	73	75	+2	Y
R18	School	D	52	31	33	+2	N
R19	Restaurant	E	72	67	69	+2	N
R20	Place of Worship	D	52	29	32	+3	N
R21	Place of Worship	D	52	35	38	+3	N
R22	Cemetery	C	67	71	73	+2	Y
R23	Restaurant	E	72	71	74	+3	Y
R24	School	C	67	59	60	+1	N
R25	Restaurant	E	72	75	77	+2	Y
R26	Memorial	C	67	77	78	+1	Y
R27	Restaurant	E	72	65	69	+4	N

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R28	Restaurant	E	72	68	70	+2	N
R29	Hotel	E	72	62	67	+5	N
R30	Non-profit Institutional Structure	C	67	61	67	+6	Y
R31	Medical Facility	D	52	32	35	+3	N
R32	Restaurant	E	72	67	73	+6	Y
R33	Restaurant	E	72	67	72	+5	Y
R34	Hotel	E	72	67	69	+2	N
R35	Hotel	E	72	67	68	+1	N
R36	Hotel	E	72	67	68	+1	N
R37	Apartment	B	67	71	73	+2	Y
R38	Public Institutional Structure	C	67	75	76	+1	Y
R39	Non-profit Institutional Structure	D	52	31	34	+3	N
R40	Single Family Residential	B	67	71	72	+1	Y
R41	Place of Worship	D	52	38	39	+1	N
R42	Single Family Residential	B	67	73	74	+1	Y
R43	Single Family Residential	B	67	75	76	+1	Y
R44	Single Family Residential	B	67	70	72	+2	Y
R45	Single Family Residential	B	67	76	78	+2	Y
R46	Single Family Residential	B	67	72	76	+4	Y
R47	Single Family Residential	B	67	72	72	0	Y
R48	Apartment	B	67	71	76	+5	Y
R49	Hotel	E	72	74	75	+1	Y
R50	Place of Worship	D	52	32	35	+3	N
R51	Medical Facility	C	67	75	76	+1	Y
R52	Place of Worship	D	52	40	42	+2	N
R53	School	D	52	31	33	+2	N
R54	Hotel	E	72	69	70	+1	N
R55	Restaurant	E	72	71	72	+1	Y

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R56	Hotel	E	72	69	71	+2	Y
R57	Place of Worship	D	52	50	51	+1	Y
R58	Public Institutional Structure	D	52	38	39	+1	N
R59	Apartment	B	67	73	75	+2	Y
R60	Apartment	B	67	73	75	+2	Y
R61	Funeral Home	D	52	39	42	+3	N
R62	Hotel	E	72	73	76	+3	Y
R63	Public Institutional Structure	D	52	37	40	+3	N
R64	Medical Facility	D	52	39	42	+3	N
R65	Medical Facility	D	52	49	51	+2	Y
R66	Day Care	C	67	67	70	+3	Y
R67	Apartment	B	67	75	79	+4	Y
R68	Hotel	E	72	71	73	+2	Y
R69	Hotel	E	72	72	74	+2	Y
R70	Hotel	E	72	66	68	+2	N
R71	Hotel	E	72	71	73	+2	Y
R72	Hotel	E	72	69	72	+3	Y
R73	Apartment	B	67	74	79	+5	Y
R74	Public Institutional Structure	C	67	71	72	+1	Y
R75	Funeral Home	D	52	35	36	+1	N
R76	Hotel	E	72	67	69	+2	N
R77	Place of Worship	C	67	65	67	+2	Y
R78	Hotel	E	72	65	67	+2	N
R79	Restaurant	E	72	69	70	+1	N
R80	Single Family Residential	B	67	72	74	+2	Y
R81	Hotel	E	72	68	71	+3	Y
R82	Hotel	E	72	64	65	+1	N
R83	Hotel	E	72	63	63	0	N
R84	Hotel	E	72	69	71	+2	Y
R85	Restaurant	E	72	69	70	+1	N
R86	Restaurant	E	72	71	73	+2	Y
R87	Hotel	E	72	71	72	+1	Y

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R88	Restaurant	E	72	70	70	0	N
R89	Hotel	E	72	69	69	0	N
R90	Restaurant	E	72	72	71	-1	Y

Note: Per TxDOT's 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise*, an interior noise reduction factor of 25 dB(A) was applied to receivers R57 and R65, and an interior noise reduction factor of 35 dB(A) was applied to all other NAC category "D" receivers.

3.0 NOISE ABATEMENT MEASURES

As indicated in **Table 3**, the proposed project would result in a traffic noise impact; therefore, the following noise abatement measures were considered: traffic management, alteration of horizontal and/or vertical alignments, acquisition of undeveloped property to act as a buffer zone, and the construction of noise barriers.

Before any abatement measure can be proposed for incorporation into the proposed project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50% of impacted, first row receivers by at least five dB(A); and to be "reasonable," it must not exceed the cost-effectiveness criterion of $25,000 for each receiver that would benefit by a reduction of at least five dB(A) and the abatement measure must be able to reduce the noise level for at least one impacted, first row receiver by at least seven dB(A).

Traffic management - Control devices could be used to reduce the speed of the traffic; however, the minor benefit of one dB(A) per five mph reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.

Alteration of horizontal and/or vertical alignments - Any alteration of the existing alignment would displace existing businesses and residences, require additional ROW and not be cost effective/reasonable.

Buffer zone - The acquisition of undeveloped property to act as a buffer zone is designed to avoid rather than abate traffic noise impacts and, therefore, is not feasible.

Noise barriers - This is the most commonly used noise abatement measure. Noise barriers were evaluated for each of the impacted receiver locations.

A noise barrier would not be feasible and reasonable for the following impacted receivers and, therefore, is not proposed for incorporation into the proposed project:

Residences

R40, R44, R47, and R80: These receivers represent exterior areas at single, isolated residences located throughout the I-35 corridor. For each of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at these locations is not proposed for incorporation into the project.

R5 and R9: These receivers represent exterior areas (i.e., pools or balconies) at various apartment complexes located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R37: This receiver represents exterior balconies at an apartment complex located along the I-35 corridor. For this receiver, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

R16: This receiver represents an exterior apartment balcony. For this receiver, a noise barrier 20 feet in height would achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would not reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

Hotels/Motels

R11, R49, R56, R62, R68-R69, R71-R72, R81, R84, and R87: These receivers represent exterior areas (i.e., pools or seating areas) at various hotels and motels located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Restaurants/Businesses

R3, R6, R23, R25, R32, R55, R86, and R90: These receivers represent exterior dining areas at various restaurants and food trucks located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R7: This receiver represents an outdoor seating area at a restaurant. A noise barrier 12 feet in height would achieve the minimum feasible reduction of five dB(A) and reduce the noise level by at least seven dB(A); however, the cost of the barrier would exceed the reasonableness criteria of $25,000 per benefitted receiver. Therefore, a barrier at this location is not proposed for incorporation into the project.

R33: This receiver represents an exterior dining area at a restaurant located along the I-35 corridor. For this receiver, a noise barrier 20 feet in height would achieve the minimum feasible reduction of five dB(A); however, the barrier would not reduce the noise level by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

Churches

R57 and R77: These receivers represent interior (R57) and exterior (R77 - playground) areas at two churches located throughout the I-35 corridor. For both of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Schools

R14 and R66: These receivers represent a basketball court at Renaissance Academy (R14), and a playground area at Cedars International Academy (R66). For these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Public Institutional Structures

R26: This receiver represents a seating area at a police memorial located on the west side of I-35 in front of the Walmart parking lot. A noise barrier 20 feet in height would achieve the minimum feasible

reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would not reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

R30 and R74: These receivers represent an outdoor seating area at the Boy Scouts of America facility (R30) and an outdoor seating area at the TxDOT Austin District campus (R74). For these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R38: This receiver represents a volleyball court at the Texas Commission on Environmental Quality campus. A noise barrier 10 feet in height would achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Based on the size of the average residential lot size of 0.30 acre in the corridor, it was determined that the equivalent number of receivers for the impacted exterior activity area is 1 receiver; thus, the feasible noise barrier of 388 feet in length and 10 feet in height would exceed the reasonableness criteria of $25,000 per benefitted receiver. Therefore, a barrier at this location is not proposed for incorporation into the project.

Medical Facilities

R51: This receiver represents an outdoor seating area at Everose Healthcare. A barrier could not be feasibly constructed at this location due to location of the driveway access. Therefore, a barrier at this location is not proposed for incorporation into the project.

R65: This receiver represents an interior location at The Source medical facility. A noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at the representative receiver or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at this location is not proposed for incorporation into the project.

Cemetery (R22): This receiver represents the centroid of the Memorial Hill Cemetery property. A noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at this receiver or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at this location is not proposed for incorporation into the project.

Noise barriers would be feasible and reasonable for the following impacted receivers and, therefore are proposed for incorporation into the proposed project (see **Table 4**):

Lantower Ambrosio Apartment Complex (R15): This receiver represents the Lantower Ambrosio Apartment complex located on the east side of I-35 south of Wells Branch Parkway. The representative receiver was placed on the outdoor porch of a first-row apartment building and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 510 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for 10 of the 15 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $146,880 and a total of 18 receivers were benefitted, at a cost of $8,160 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

The Vineyard Apartment Complex (R17): This receiver represents the Vineyard Apartment Complex on the east side of I-35 north of The Lakes Boulevard. The representative receiver was placed on the outdoor porch of a first-row apartment building and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 478 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for 12 of the 18 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $137,664 and a total of 21 receivers were benefitted, at a cost of $6,555 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

North Oaks Neighborhood (R42 – R43, and R45 - R46): These receivers represent the North Oaks residential neighborhood on the east side of I-35 north of Braker Lane. The representative receivers were placed in residential backyards, and additional first and second-row receivers were included in the barrier analysis. Based on preliminary calculations, a segmented barrier 2,837 feet in length and 16 feet tall would reduce noise levels by at least five dB(A) for 25 of the 31 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $817,056 and a total of 37 receivers were benefitted, at a cost of $22,082 per benefitted receiver. However, a segmented barrier 2,837 feet in length and 20 feet tall would reduce noise levels by at least five dB(A) for 25 of the 31 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of this barrier is $1,021,320 and a total of 42 receivers were benefitted, at a cost of $24,317 per benefitted receiver. Because a 20-foot wall would benefit more receivers, it is proposed for incorporation into the project at this location.

Cricket Hollow Apartment Complex (R48): This receiver represents the Cricket Hollow Apartment complex located on the east side of I-35 north of Plaza Drive. The representative receiver was placed on the porch of a 1st floor unit and additional receivers were placed on other 1st and 2nd story balconies

for purposes of the barrier analysis. Based on preliminary calculations, a barrier 205 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for seven of the eight impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $59,040 and a total of ten receivers were benefitted, at a cost of $5,904 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Starburst and Orbit Apartment Complexes (R59 and R60): These receivers represent the adjacent Starburst Apartment complex and Orbit Apartment complex located on the west side of I-35 south of Rundberg Lane. The representative receivers were placed on the outdoor porch of the first-row apartment buildings and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analyses. Though these apartments are on separate parcels, they were analyzed both together and separately for noise abatement. Because a wall would not be feasible for R59 in a standalone analysis, a combined barrier analysis is proposed for maximum abatement. Based on preliminary calculations, a segmented barrier totaling 912 feet in length and 20 feet in height would reduce noise levels by at least five dB(A) for 31 of the 52 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $328,320 and a total of 59 receivers were benefitted, at a cost of $5,565 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Woodland Heights Apartment Complex (R67): This receiver represents the Woodland Heights Apartment complex located on the west side of I-35 north of Powell Lane. The representative receiver was placed on the porch of a 1st floor unit and additional receivers were placed on other 1st and 2nd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 453 feet in length and 14 feet in height would reduce noise levels by at least five dB(A) for 23 of the 38 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $114,156 and a total of 23 receivers were benefitted, at a cost of $4,963 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Towne Oaks 1 Apartment Complex (R73): This receiver represents the Towne Oaks 1 Apartment complex located on the west side of I-35 north of US 183. The representative receiver was placed at the community pool and additional receivers were placed on other 1st story porches for purposes of the barrier analysis. Based on preliminary calculations, a segmented barrier totaling 257 feet in length and 10 feet in height would reduce noise levels by at least five dB(A) for two of the three impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $46,260 and a total of two receivers were benefitted, at a cost of $23,130

per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Table 4: Noise Barrier Proposal (preliminary)

Traffic Noise Barrier	Representative Receiver(s)	Total # Benefitted Receivers	Height (feet)	Length (feet)	Total Cost	Cost per Benefitted Receiver
Lantower Ambrosio Apartment Complex	R15	18	16	510	$146,880	$8,160
The Vineyard Apartment Complex	R17	21	16	478	$137,664	$6,555
North Oaks Neighborhood	R42-43, R45-R46	42	20	2,837	$1,021,320	$24,317
Cricket Hollow Apartment Complex	R48	10	16	205	$59,040	$5,904
Starburst and Orbit Apartment Complexes	R59, R60	59	20	912	$328,320	$5,565
Woodland Heights Apartment Complex	R67	23	14	453	$114,156	$4,963
Towne Oaks 1 Apartment Complex	R73	2	10	257	$46,260	$23,130

Any subsequent project design changes may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barriers would not be made until completion of the project design, utility evaluation and polling of adjacent property owners. **Appendix A** depicts the representative noise receivers, as well as the proposed noise barriers that would benefit impacted receivers.

4.0 NOISE PLANNING

To avoid noise impacts that may result from future development of properties adjacent to the proposed project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2038) noise impact contours (see **Table 5**).

Table 5: Traffic Noise Contours [dB(A) Leq]

Location	Distance from ROW	
	NAC Category B & C 66 dB(A)	NAC Category E 71 dB(A)
I-35 (east side) – 280 feet south of Picadilly Dr	>440 feet*	240 feet
I-35 (west side) – 275 feet north of Fleischer Dr	>180 feet*	180 feet
I-35 (east side) – 900 feet south of Ridge Blvd	540 feet	260 feet
I-35 (east side) – 135 feet south of Bowery Trl	>300 feet	220 feet
I-35 (east side) – 200 feet south of Ruby Dr	>200 feet*	120 feet
I-35 (west side) – 135 feet south of Starburst Apts	>300 feet	120 feet
I-35 (east side) – 65 feet south of Hermitage Dr	>220 feet*	160 feet
**Beyond the extent of the undeveloped parcel boundary*		

5.0 CONCLUSION

Based on this modeled noise analysis, there are 51 projected noise impacts at representative receivers within the corridor. Barrier analyses were conducted, and results indicated that a barrier would be feasible and reasonable for eleven of the impacted representative receivers.

Noise associated with the construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

A copy of this traffic noise analysis would be made available to local officials. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the proposed project.

APPENDIX A

REPRESENTATIVE NOISE RECEIVERS EXHIBIT

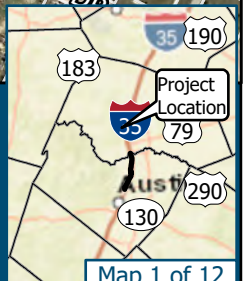
Representative Noise Receivers

I-35 Capital Express North Project

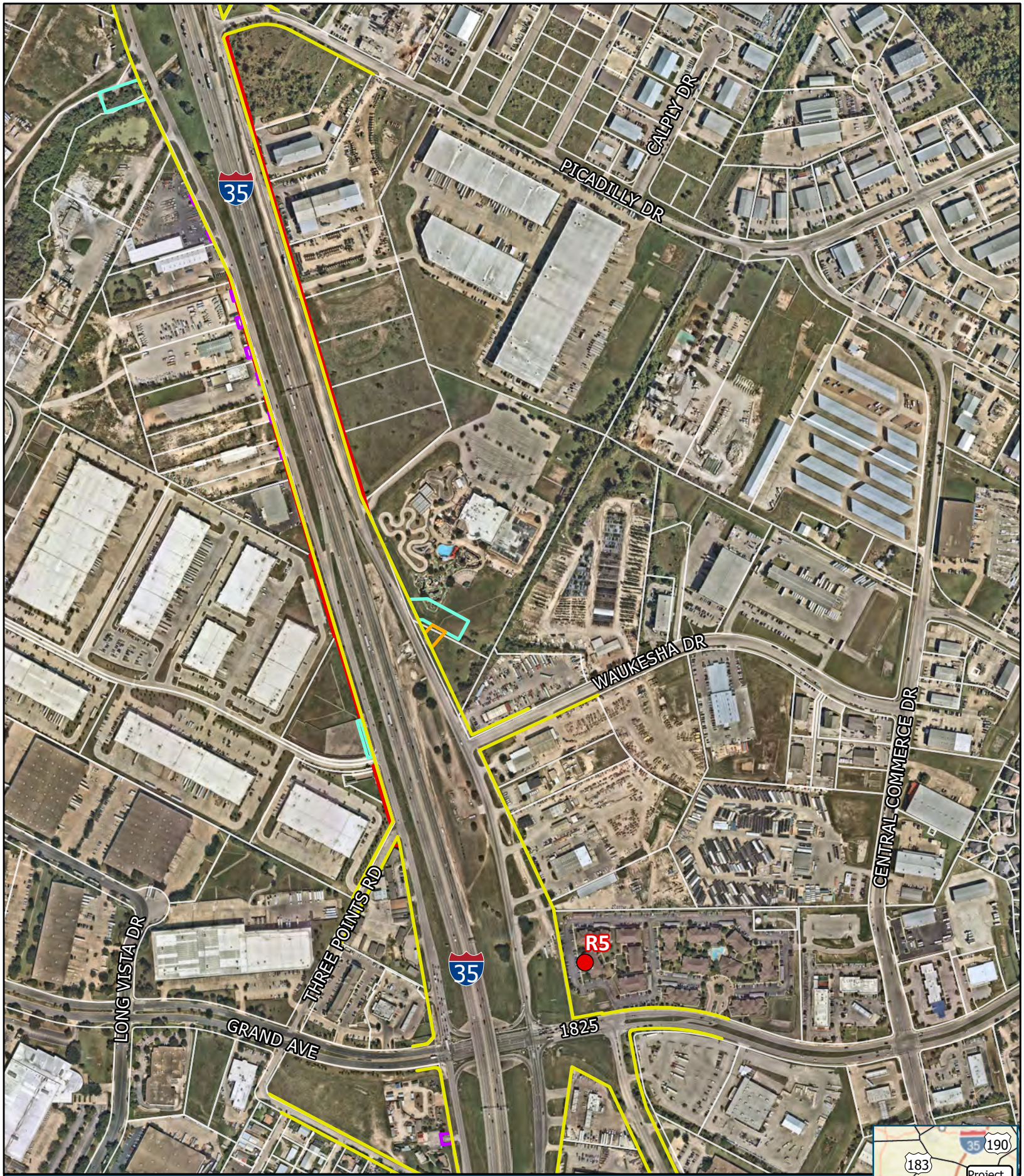
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Source: Nearmap, 2020



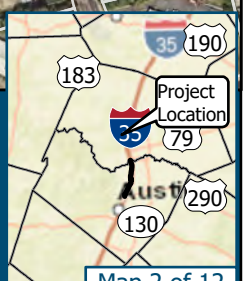
Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 2 of 12

Source: Nearmap, 2020

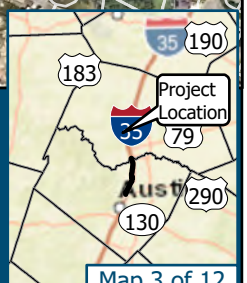
Representative Noise Receivers

I-35 Capital Express North Project

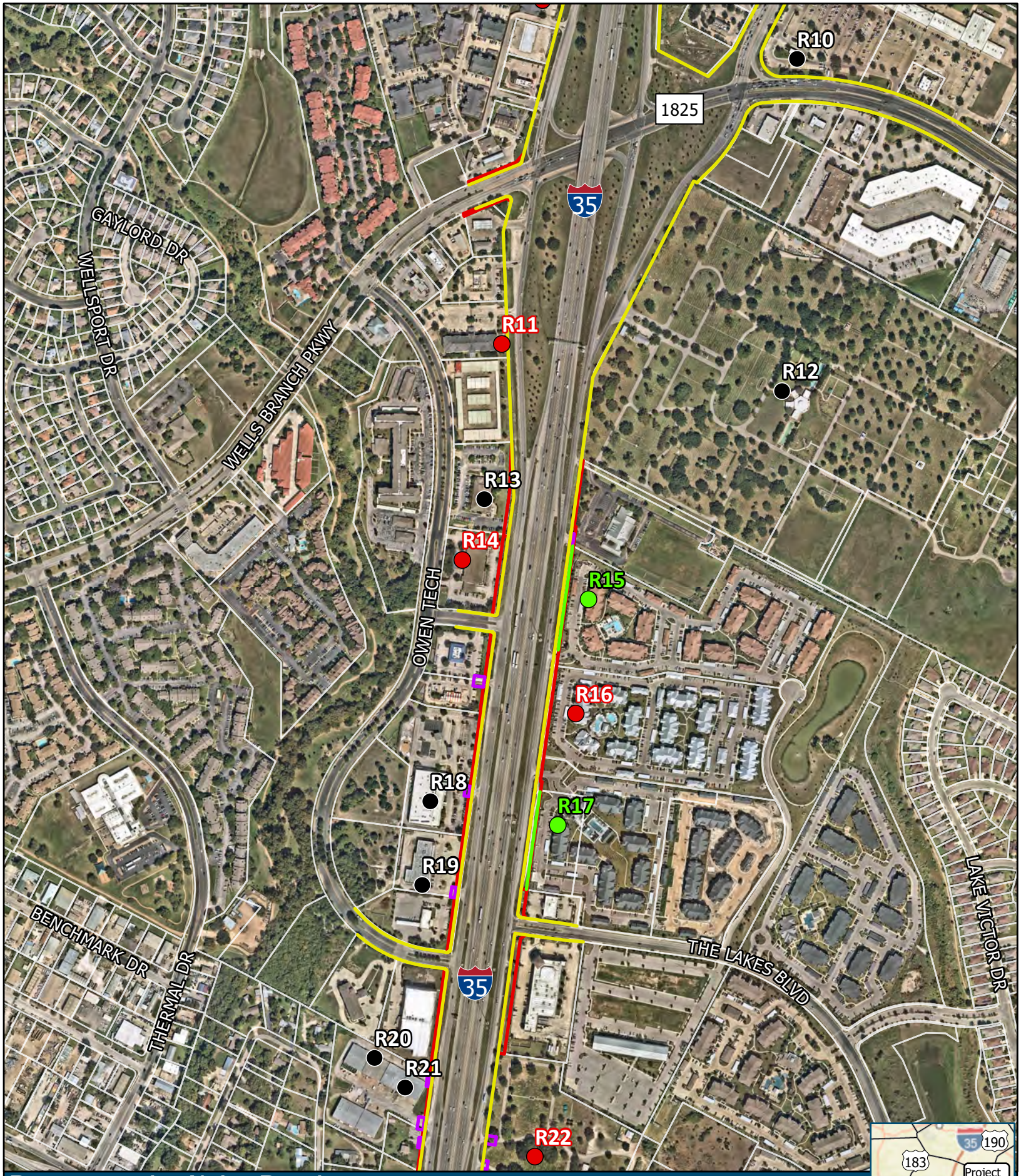
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Source: Nearmap, 2020



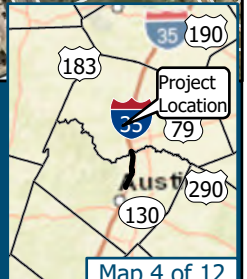
Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

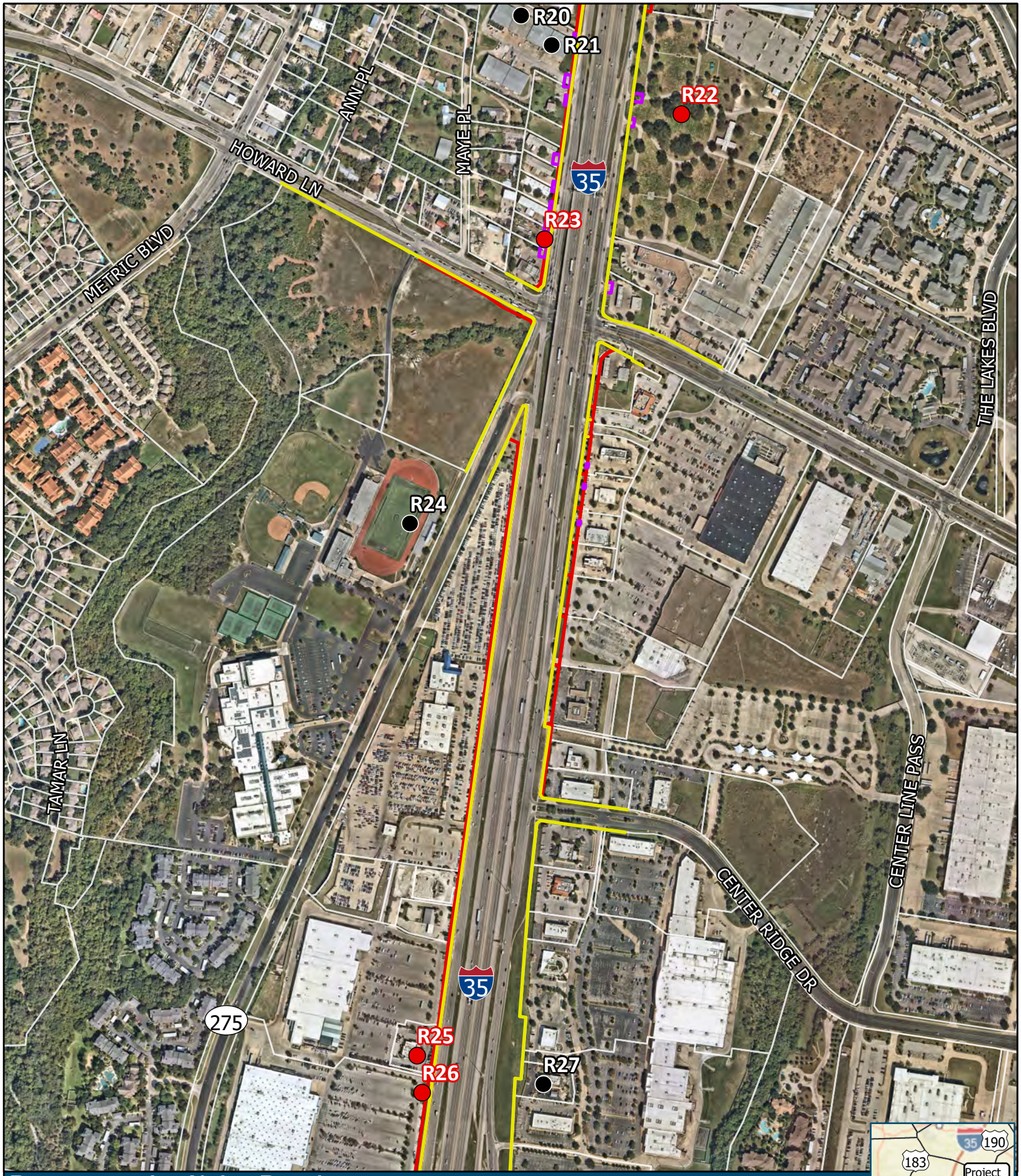
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 4 of 12

Source: Nearmap, 2020



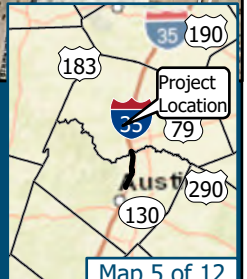
Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

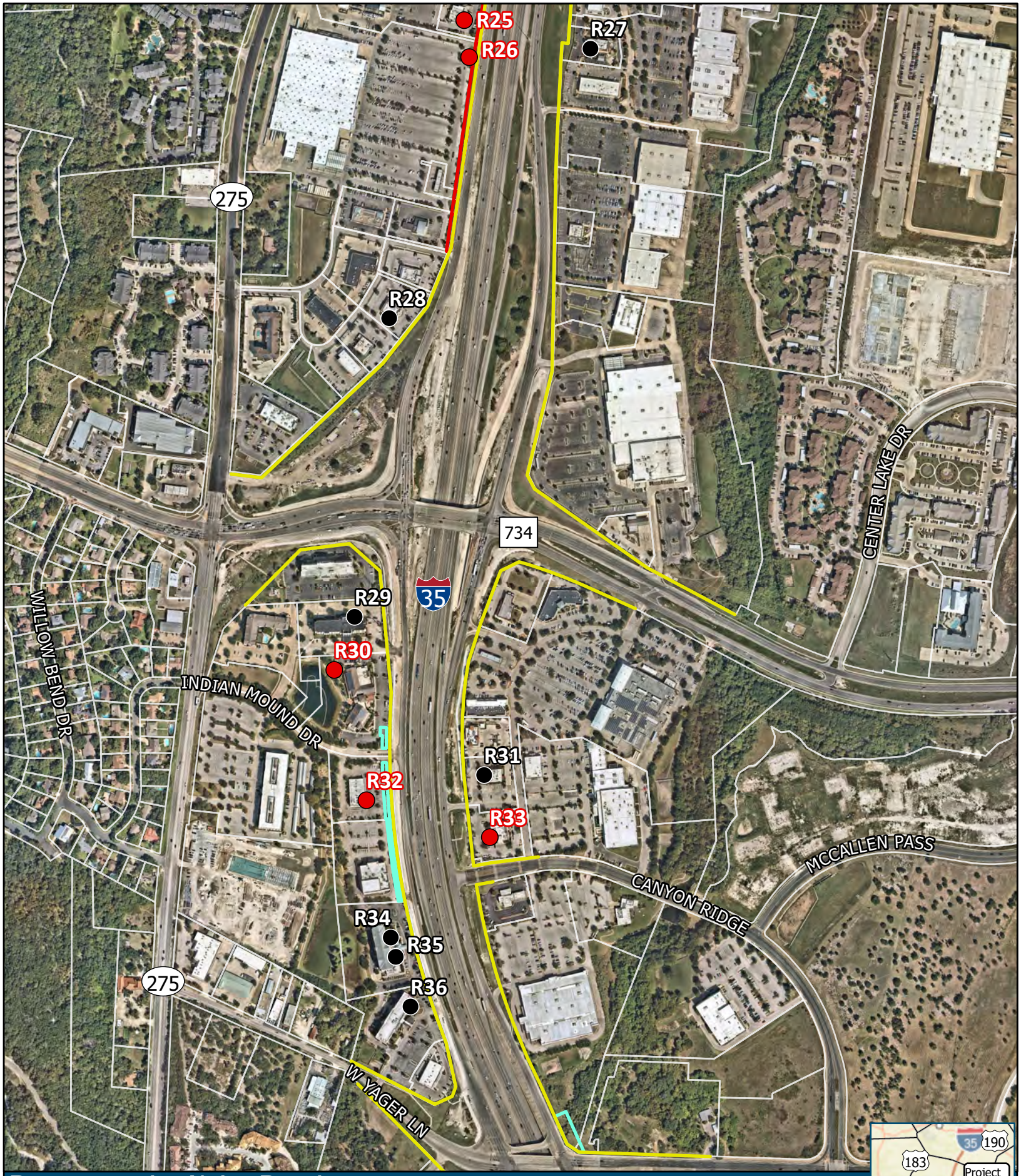
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 5 of 12

Source: Nearmap, 2020



Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
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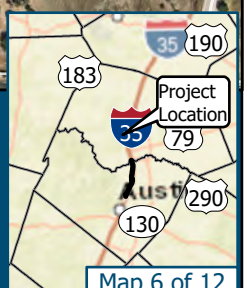
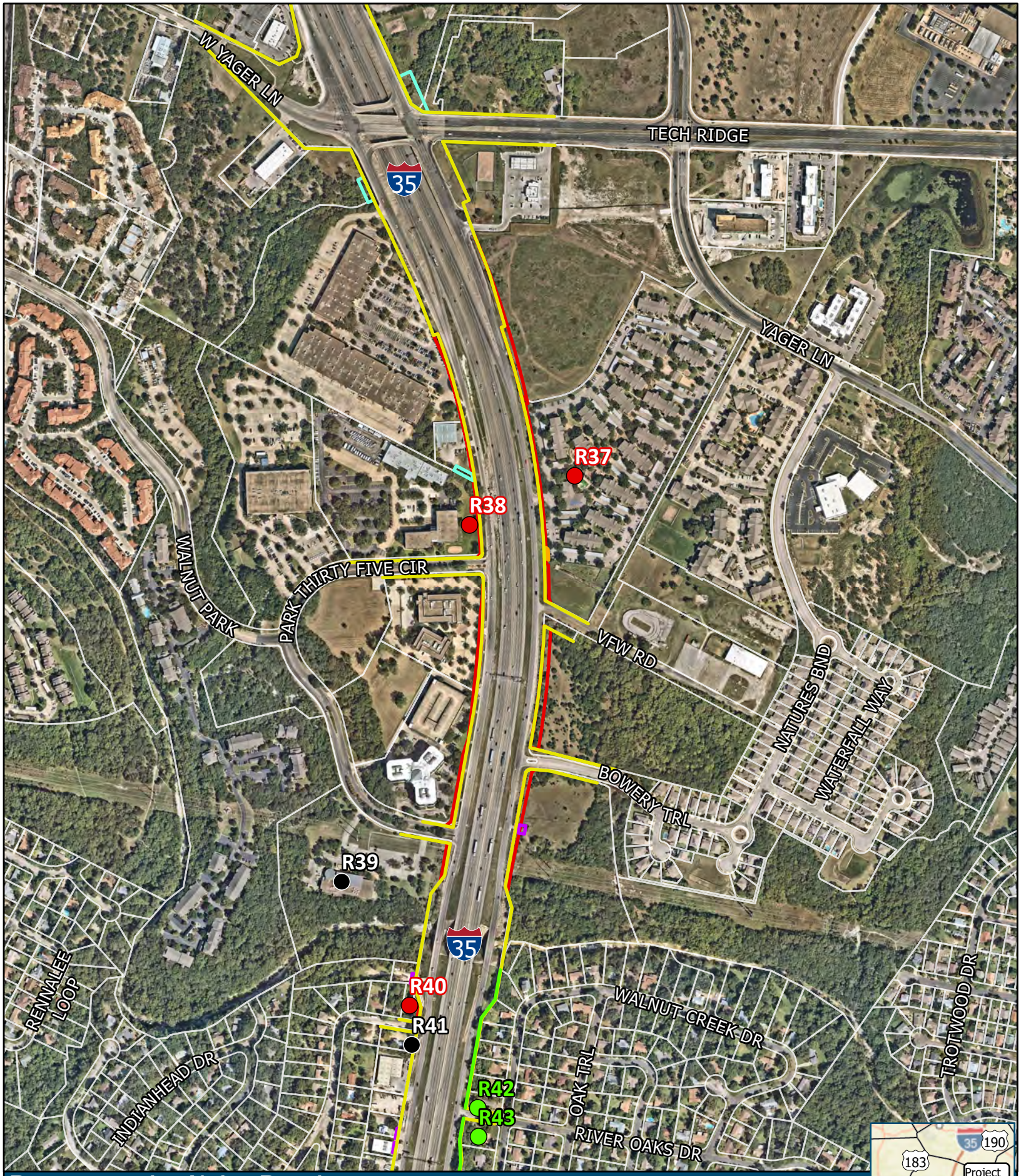
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Source: Nearmap, 2020



Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
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- Non-Impacted Receiver
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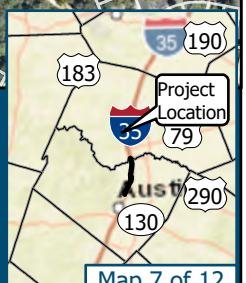
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Source: Nearmap, 2020

Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
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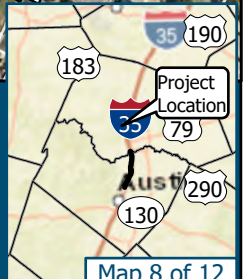
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 8 of 12

Source: Nearmap, 2020

Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
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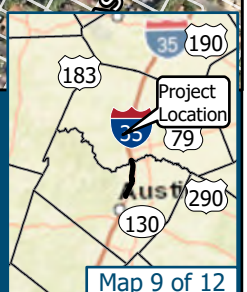
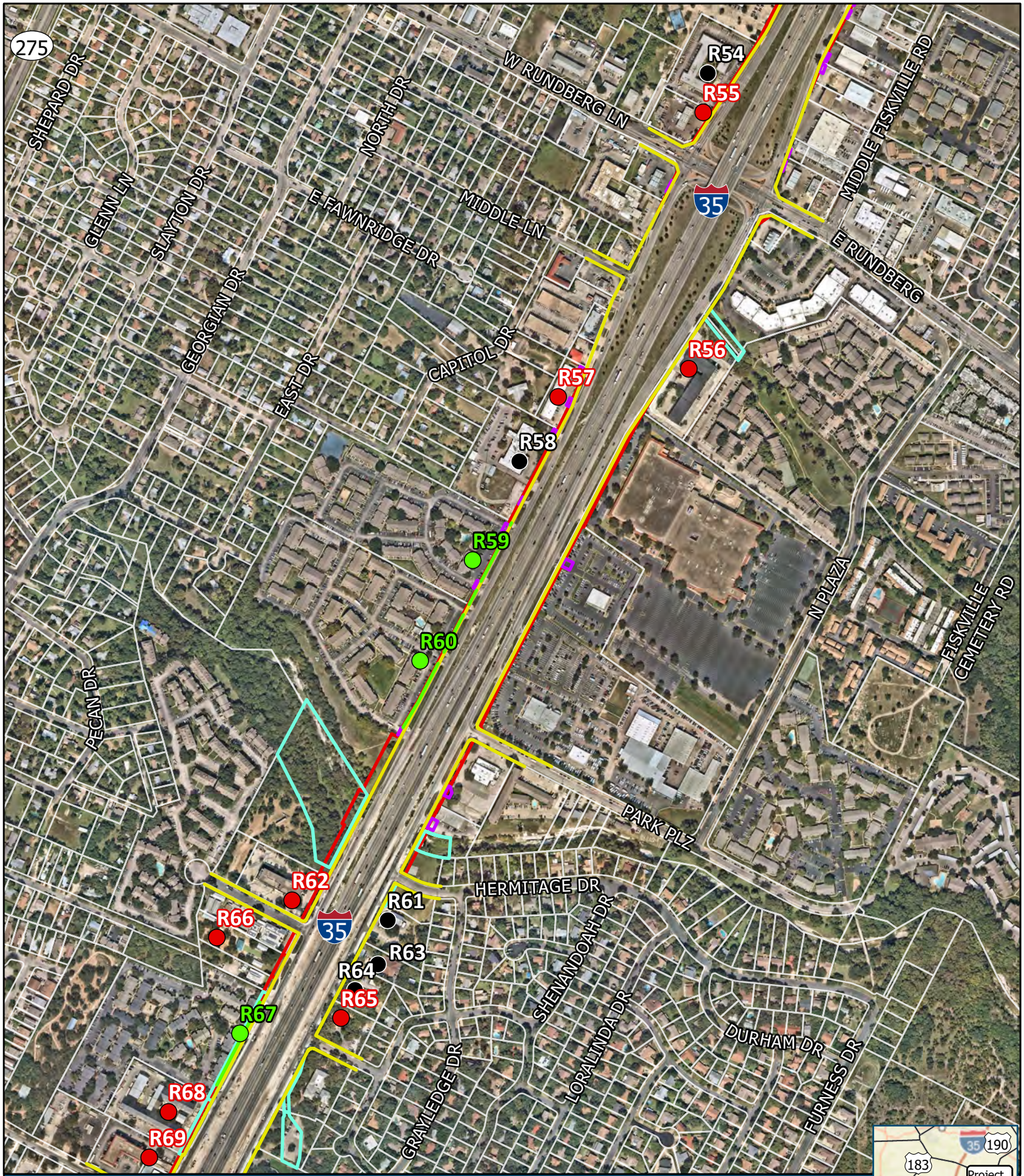
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 9 of 12

Source: Nearmap, 2020



Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

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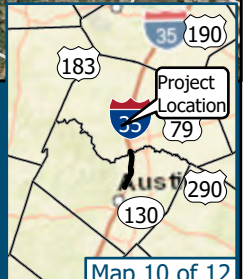
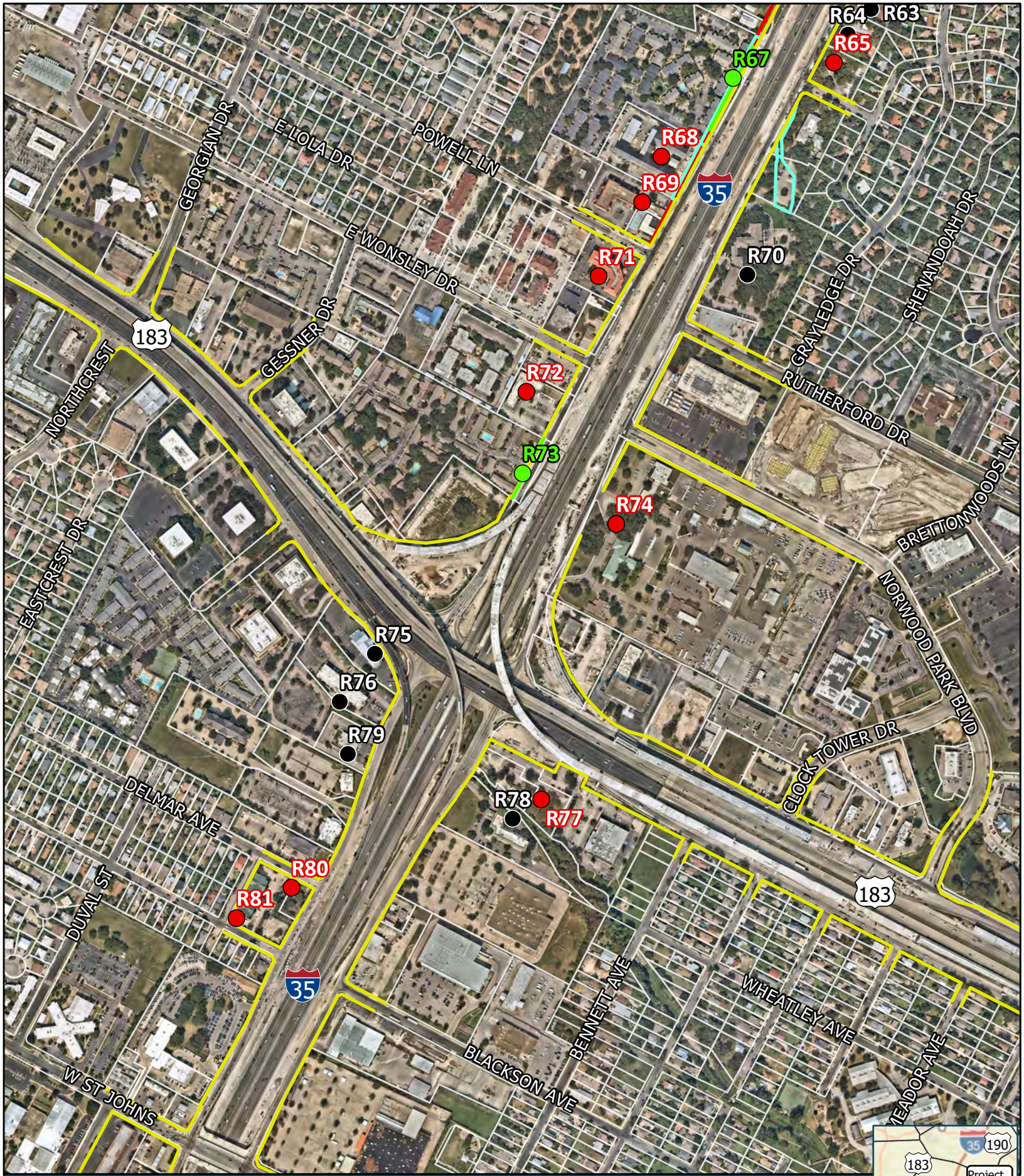
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Source: Nearmap, 2020



Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

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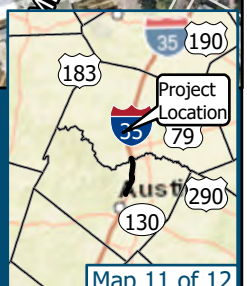
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 11 of 12

Source: Nearmap, 2020

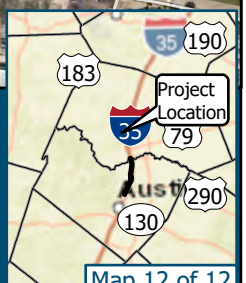
Representative Noise Receivers

I-35 Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary
- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area

Feet
0 250 500



Map 12 of 12

Source: Nearmap, 2020

APPENDIX B

TRAFFIC DATA MEMO

TPP TRAFFIC DATA TABLES

FOR VEHICLE BREAKDOWN PERCENTAGES

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes)												
Section 1												
Mainlanes Cutline Section 1	181,550	238,300	51 - 49	7.0	10.3	4.6	0	0	0	3	0	8"
Travis County												

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	89.7	95.4
Medium Duty	1.8	0.8
Heavy Duty	8.5	3.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes)												
Section 1												
Mainlanes Cutline Section 1	181,550	262,450	51 - 49	7.0	10.3	4.6	0	0	0	3	0	8"
Travis County												

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 2 Mainlanes Cutline Section 2 Travis County	245,200	305,900	51 - 49	5.9	8.9	4.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	91.1	96.0
Medium Duty	2.5	1.1
Heavy Duty	6.4	2.9

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 2 Mainlanes Cutline Section 2 Travis County	245,200	336,300	51 - 49	5.9	8.9	4.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 3 Mainlanes Cutline Section 3 Travis County	209,150	274,500	55 - 45	7.1	9.6	4.3	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	90.4	95.7
Medium Duty	2.2	1.0
Heavy Duty	7.4	3.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 3 Mainlanes Cutline Section 3 Travis County	209,150	302,200	55 - 45	7.1	9.6	4.3	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 1 Frontage Road Cutline Section 1 Travis County	9,300	12,200	51 - 49	7.0	4.1	3.1	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	95.9	96.9
Medium Duty	3.6	2.7
Heavy Duty	0.5	0.4

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 1 Frontage Road Cutline Section 1 Travis County	9,300	13,400	51 - 49	7.0	4.1	3.1	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 2 Frontage Road Cutline Section 2 Travis County	48,800	63,950	51 - 49	7.0	3.2	2.4	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.8	97.6
Medium Duty	2.8	2.1
Heavy Duty	0.4	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 2 Frontage Road Cutline Section 2 Travis County	48,800	70,450	51 - 49	7.0	3.2	2.4	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 3 Frontage Road Cutline Section 3 Travis County	78,900	103,550	51 - 49	7.0	2.6	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.4	98.0
Medium Duty	2.3	1.7
Heavy Duty	0.3	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 3 Frontage Road Cutline Section 3 Travis County	78,900	113,900	51 - 49	7.0	2.6	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 4 Frontage Road Cutline Section 4 Travis County	71,050	89,450	51 - 49	7.0	2.7	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.3	98.0
Medium Duty	2.4	1.8
Heavy Duty	0.3	0.2

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 4 Frontage Road Cutline Section 4 Travis County	71,050	98,350	51 - 49	7.0	2.7	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 5 Frontage Road Cutline Section 5 Travis County	48,400	60,200	51 - 49	5.9	3.2	2.4	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.8	97.6
Medium Duty	2.8	2.1
Heavy Duty	0.4	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 5 Frontage Road Cutline Section 5 Travis County	48,400	66,250	51 - 49	5.9	3.2	2.4	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 6 Frontage Road Cutline Section 6 Travis County	84,400	104,500	51 - 49	5.9	2.6	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.4	98.0
Medium Duty	2.3	1.7
Heavy Duty	0.3	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 6 Frontage Road Cutline Section 6 Travis County	84,400	112,550	51 - 49	5.9	2.6	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 7 Frontage Road Cutline Section 7 Travis County	59,050	71,850	55 - 45	7.1	3.3	2.5	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.7	97.5
Medium Duty	2.2	1.7
Heavy Duty	1.1	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 7 Frontage Road Cutline Section 7 Travis County	59,050	79,400	55 - 45	7.1	3.3	2.5	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 8 Frontage Road Cutline Section 8 Travis County	80,850	91,450	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.1	97.8
Medium Duty	1.9	1.4
Heavy Duty	1.0	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 8 Frontage Road Cutline Section 8 Travis County	80,850	100,000	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 9 Frontage Road Cutline Section 9 Travis County	95,250	124,650	55 - 45	7.1	2.7	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.3	98.0
Medium Duty	1.8	1.4
Heavy Duty	0.9	0.6

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 9 Frontage Road Cutline Section 9 Travis County	95,250	137,150	55 - 45	7.1	2.7	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

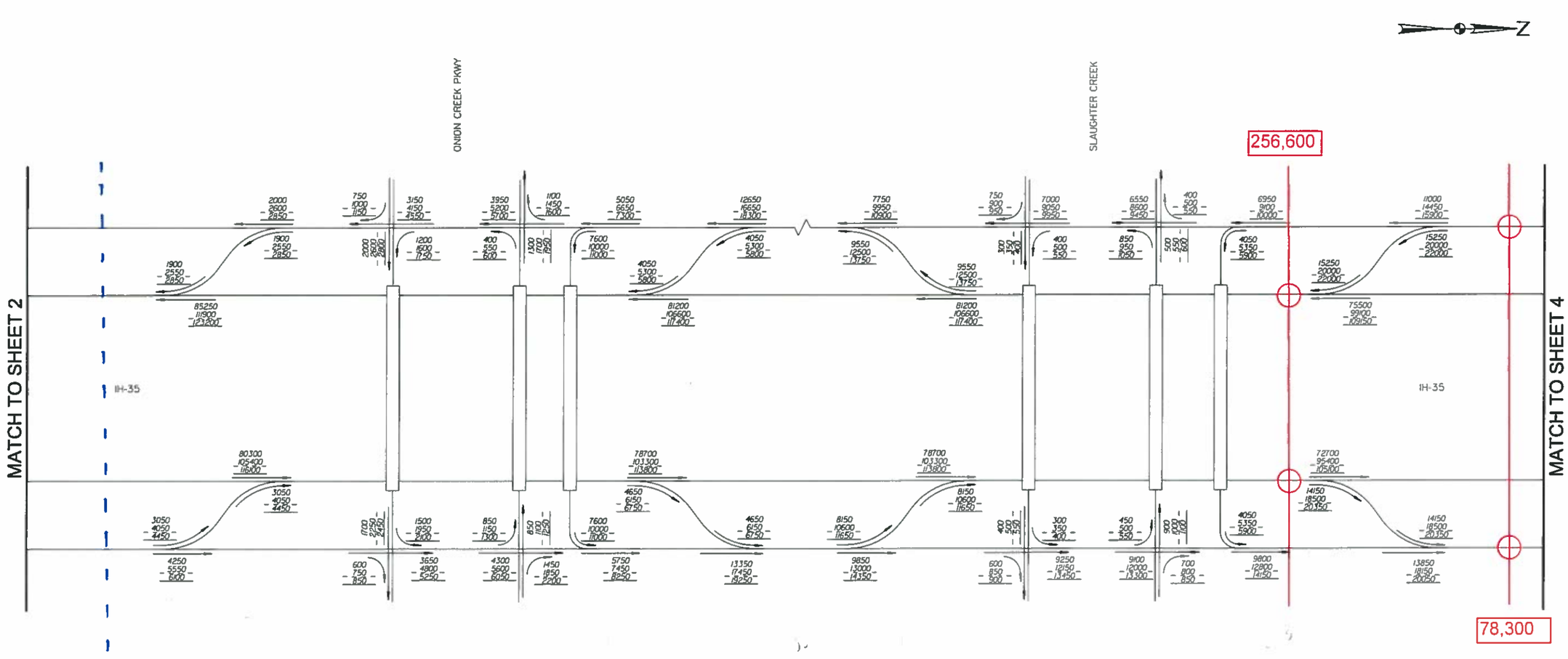
Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads)												
Section 10												
Frontage Road Cutline Section 10	84,000	110,150	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"
Travis County												

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.1	97.8
Medium Duty	1.9	1.4
Heavy Duty	1.0	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads)												
Section 10												
Frontage Road Cutline Section 10	84,000	121,250	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"
Travis County												

NO-BUILD CONFIGURATION



Frontage RD
outline
Section 1

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE Transportation Group

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 3 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	3

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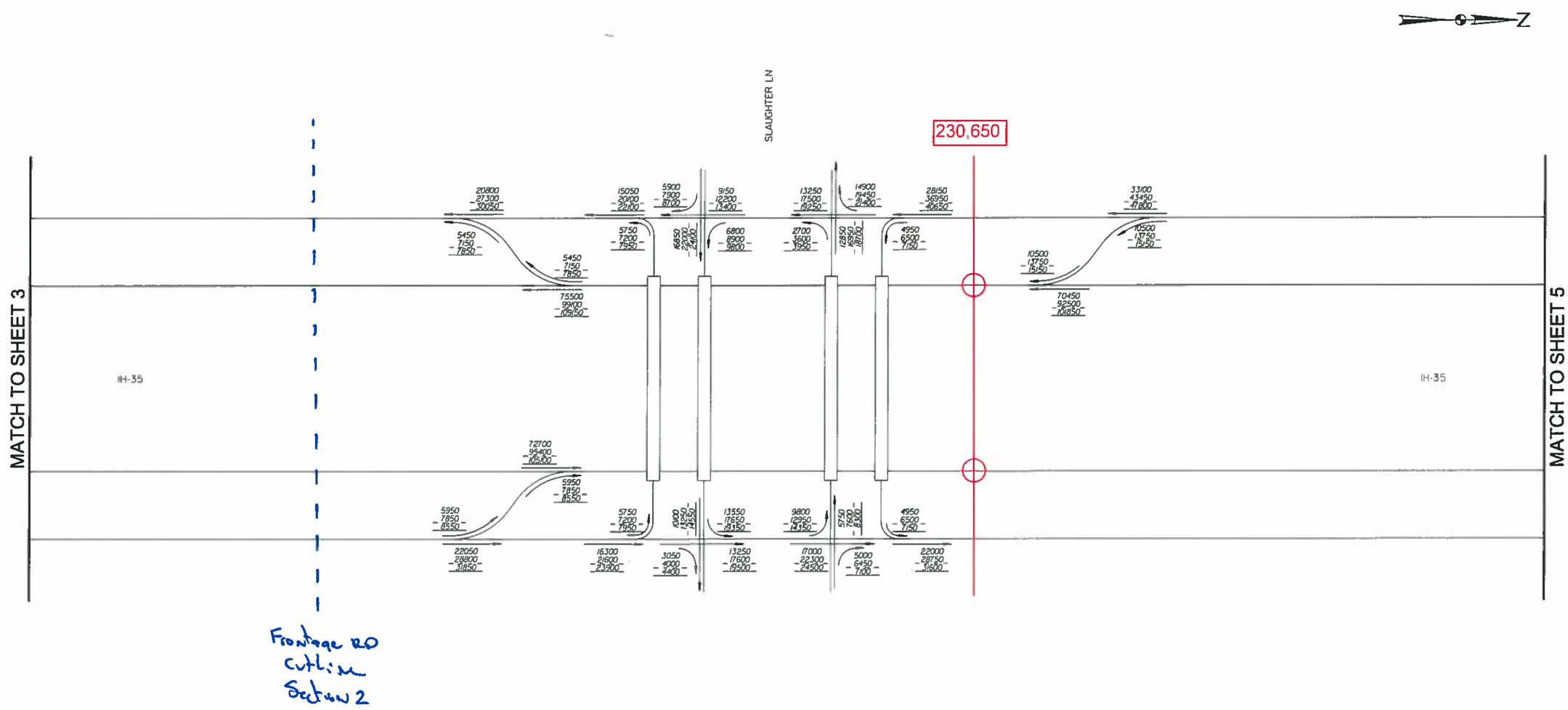
SECTION BREAKLINES

TO ACCOMPANY TPP TRAFFIC DATA TABLES

NO-BUILD CONFIGURATION



NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 4 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		

STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	4

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NO-BUILD CONFIGURATION

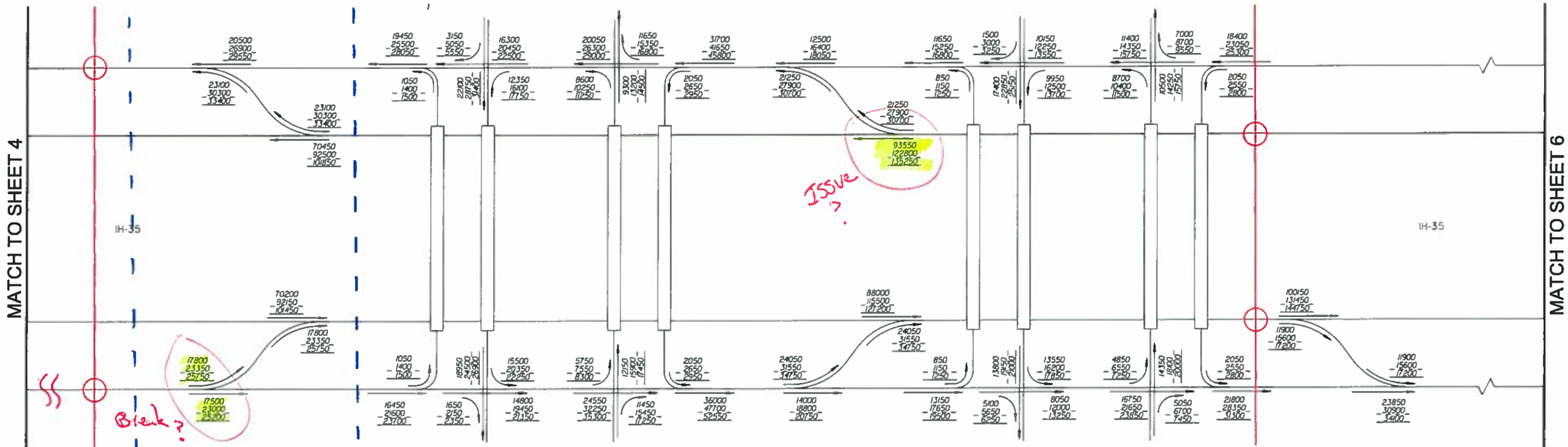
ML
Existing
Section 1

N

WILLIAM CANNON DR

STASSNEY LN

?
190,050



Block ?

113,900

Frontage Rd Outline
Section 3

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

ISSUE ?

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 5 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 5

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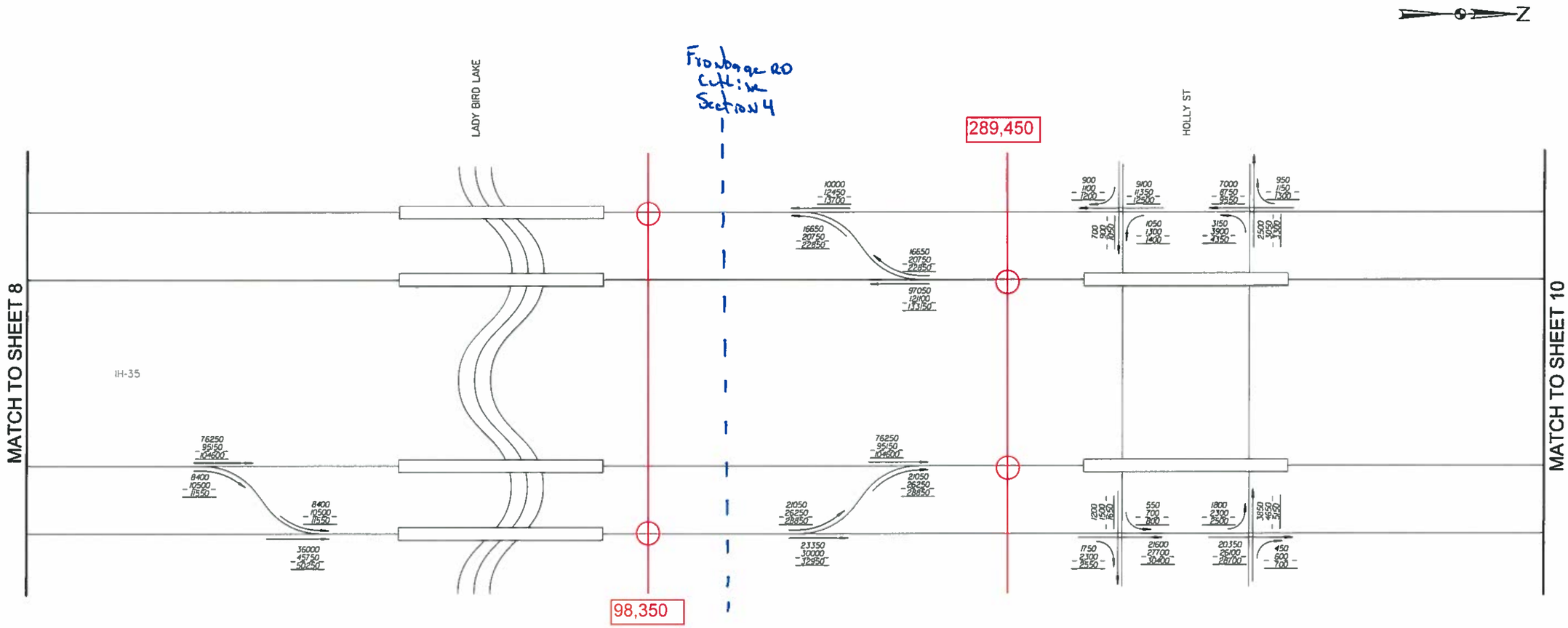
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 9 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 9

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NO-BUILD CONFIGURATION

30 > 20 growth Factor.

Frontage ao
within
Section 5

N

DEAN KEETON ST

32ND ST

MATCH TO SHEET 13

MATCH TO SHEET 15

IH-35 UD

IH-35 LD

IH-35 LD

IH-35 UD

IH-35 UD

IH-35 LD

IH-35 LD

IH-35 UD

12700 15850 17450

8750 10950 12000

58750 73300 80650

8750 10950 12000

5/500 64250 70650

1600 1950 2150

19850 24850 27100

400 5250 5850

200 2350 2600

19850 24850 27100

3050 3650 4250

1750 2150 2300

17750 22100 24300

5150 6400 7050

5/50 6400 7050

5/500 64250 70650

59250 73900 81250

11000 13750 15400

59550 74300 81650

4300 5450 5950

1950 2400 2600

18450 23000 25150

11000 13750 15400

20400 25350 27900

22750 28400 31250

4300 5400 5900

7050 8700 9550

14500 17950 19800

62,600

32ND ST

ML
within
Section 2

NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT

1000 - 2050 ADT

1000 - 2060 ADT

LD - LOWER DECK

UD - UPPER DECK

TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS

NO-BUILD CONFIGURATION

24 HOUR VOLUMES

(SHEET 14 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 14

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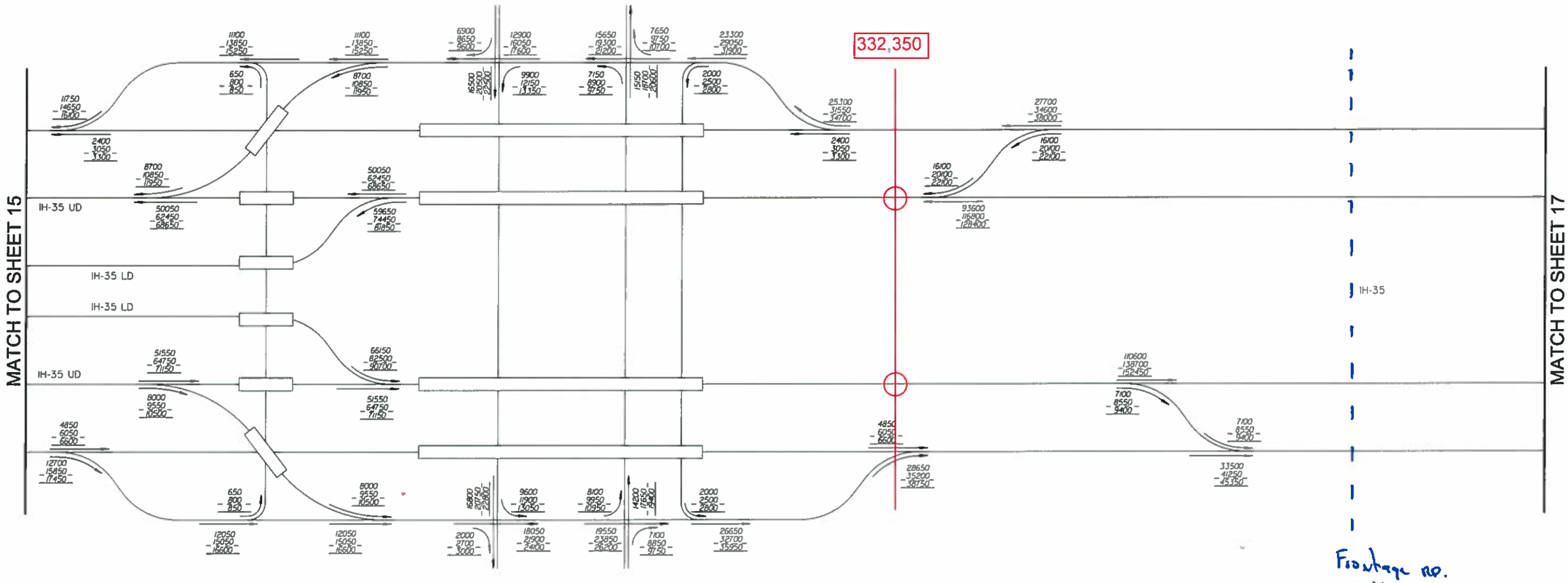
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 16 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 16

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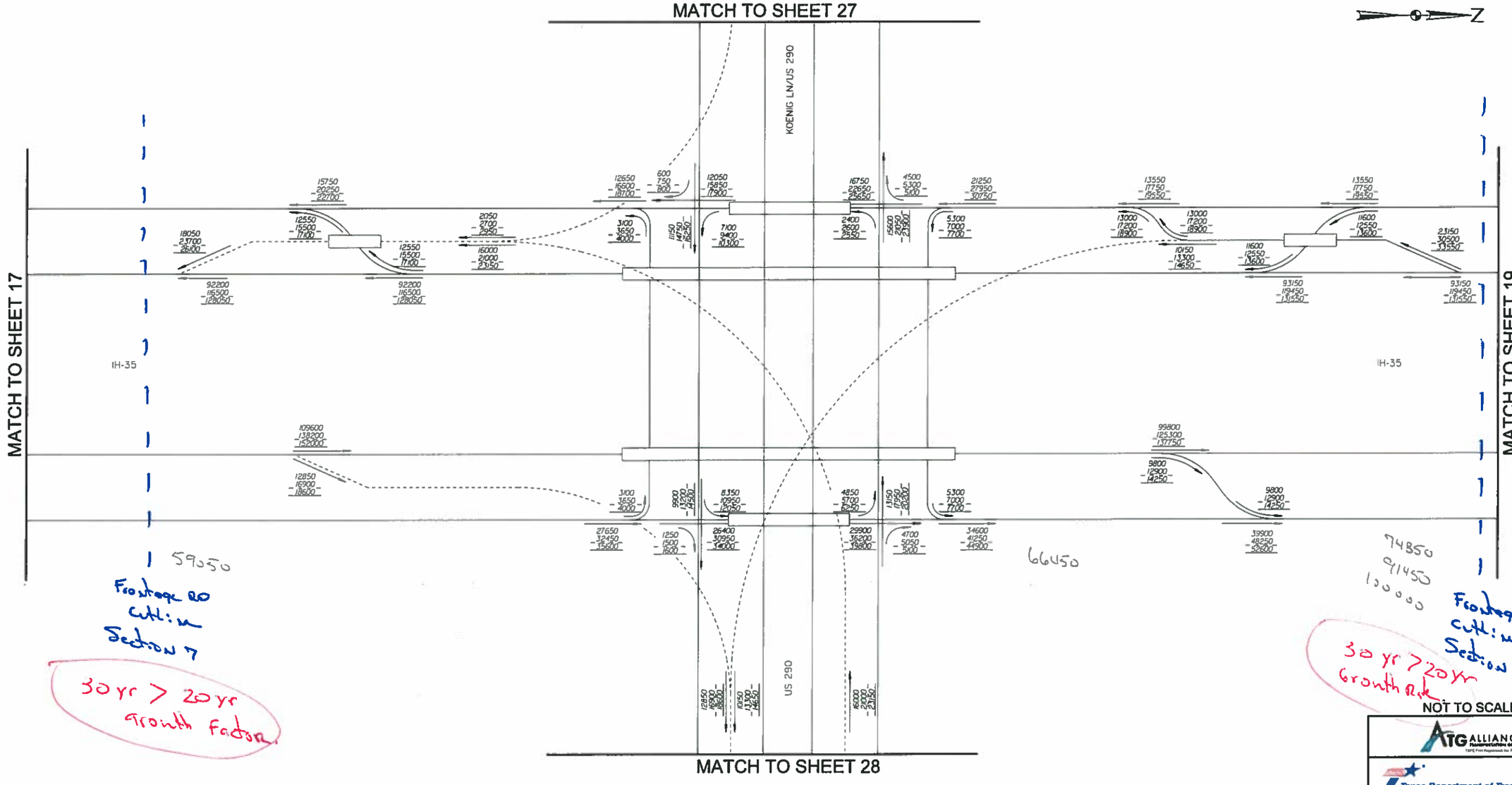
NO-BUILD CONFIGURATION



59050

Frontage RD cutline Section 7

30 yr > 20 yr growth factor

66450

74850
91450
100000

Frontage RD cutline Section 8

30 yr > 20 yr growth rate

NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 18 OF 28)

SCALE: N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 18

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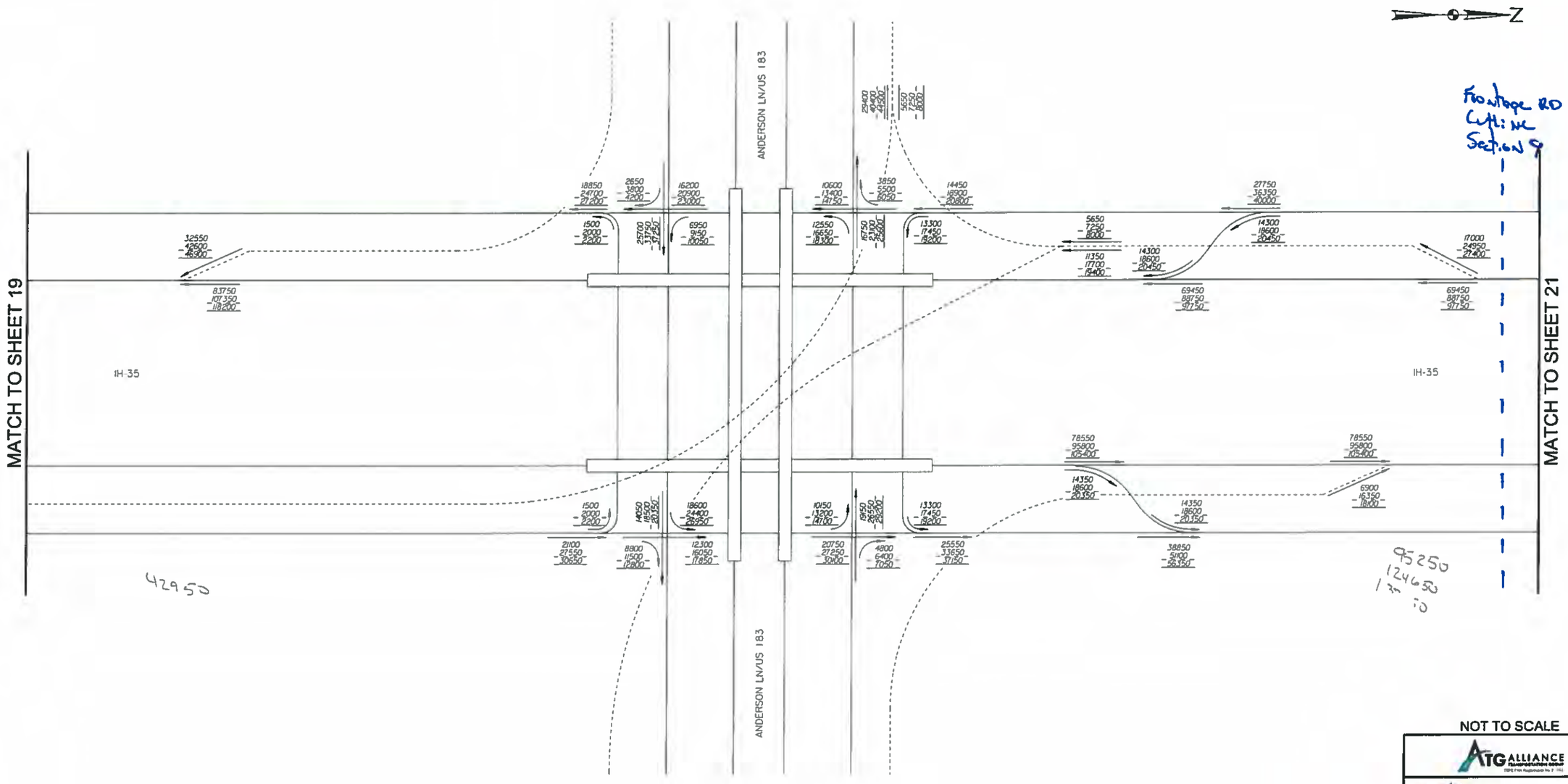
NO-BUILD CONFIGURATION



NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 20 OF 28)

SCALE: N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 20

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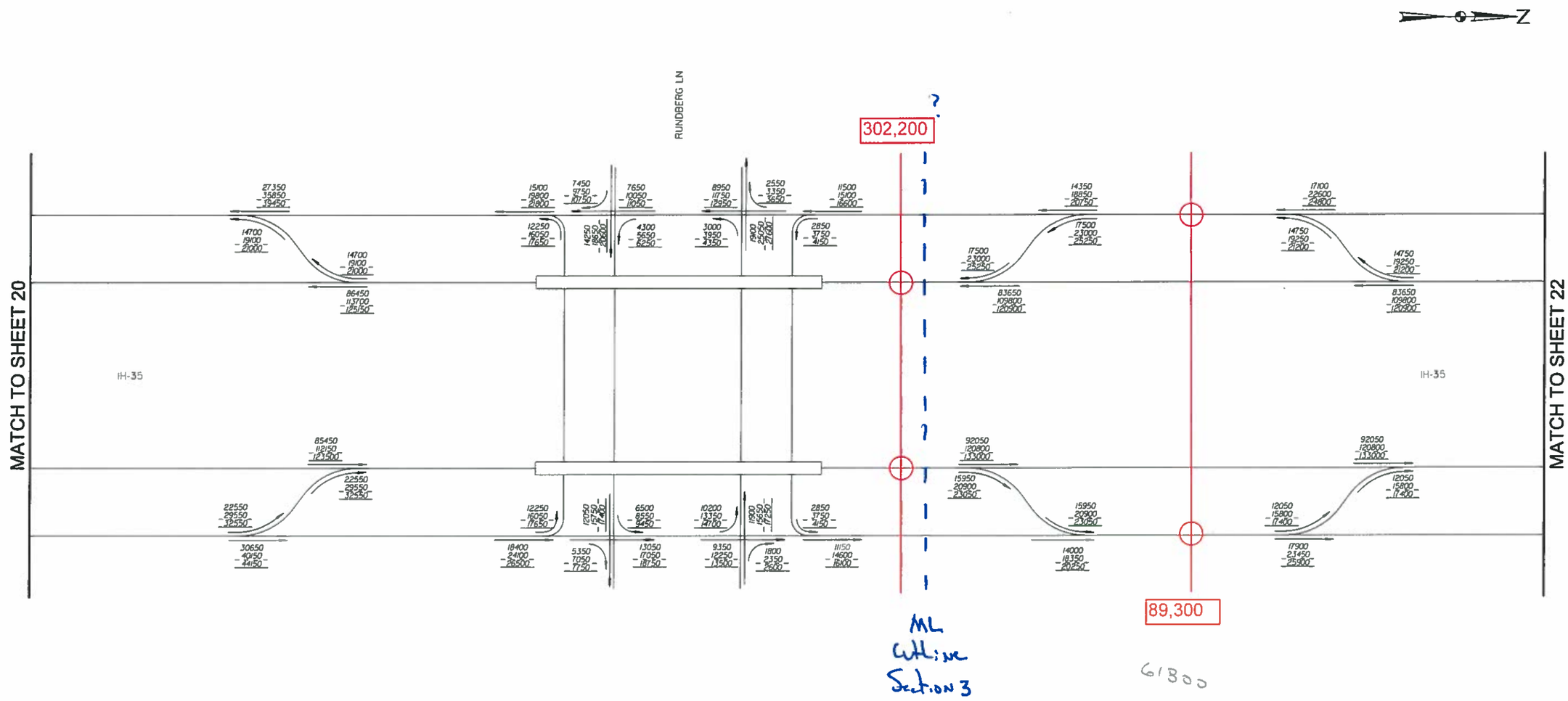
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 21 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	21

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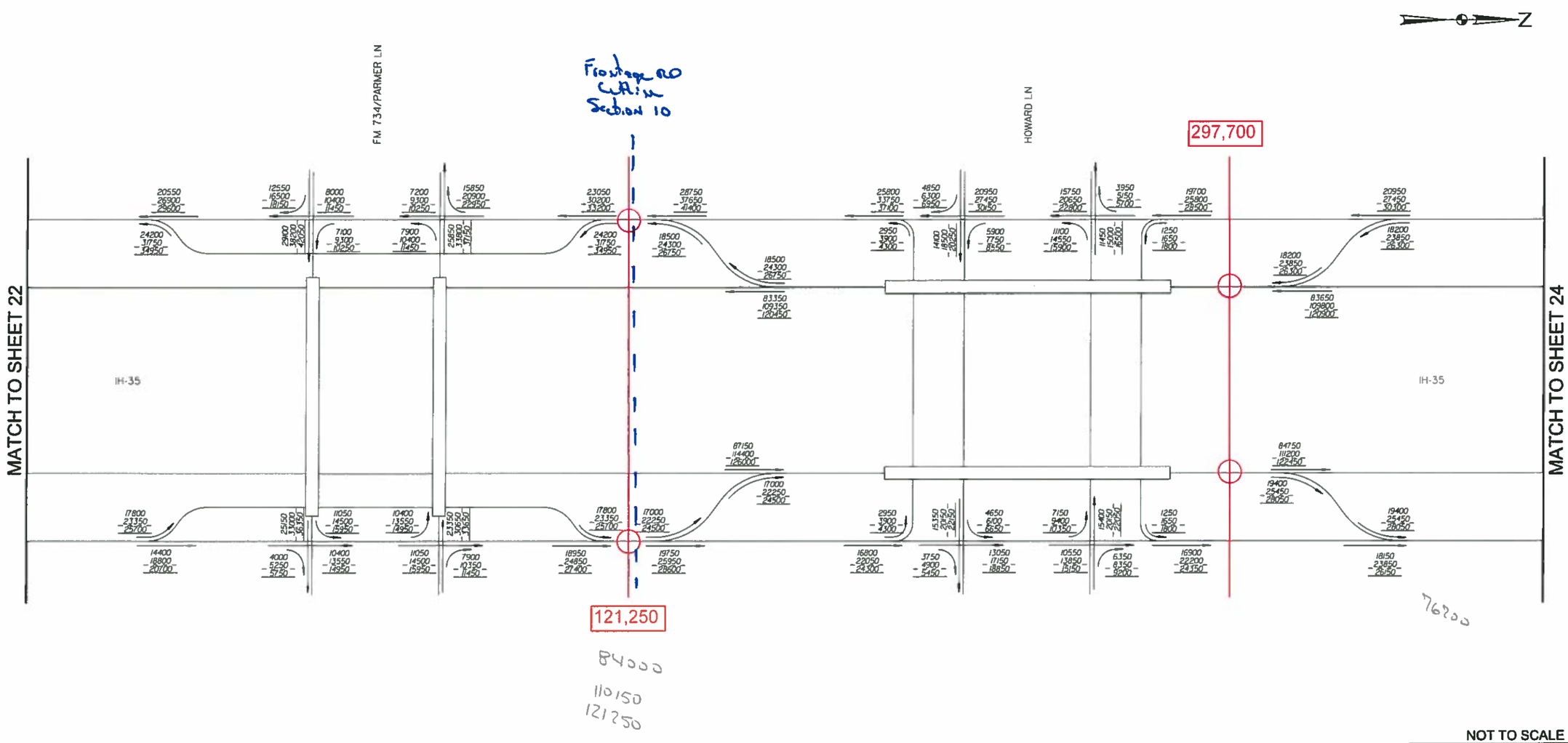
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 23 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 23

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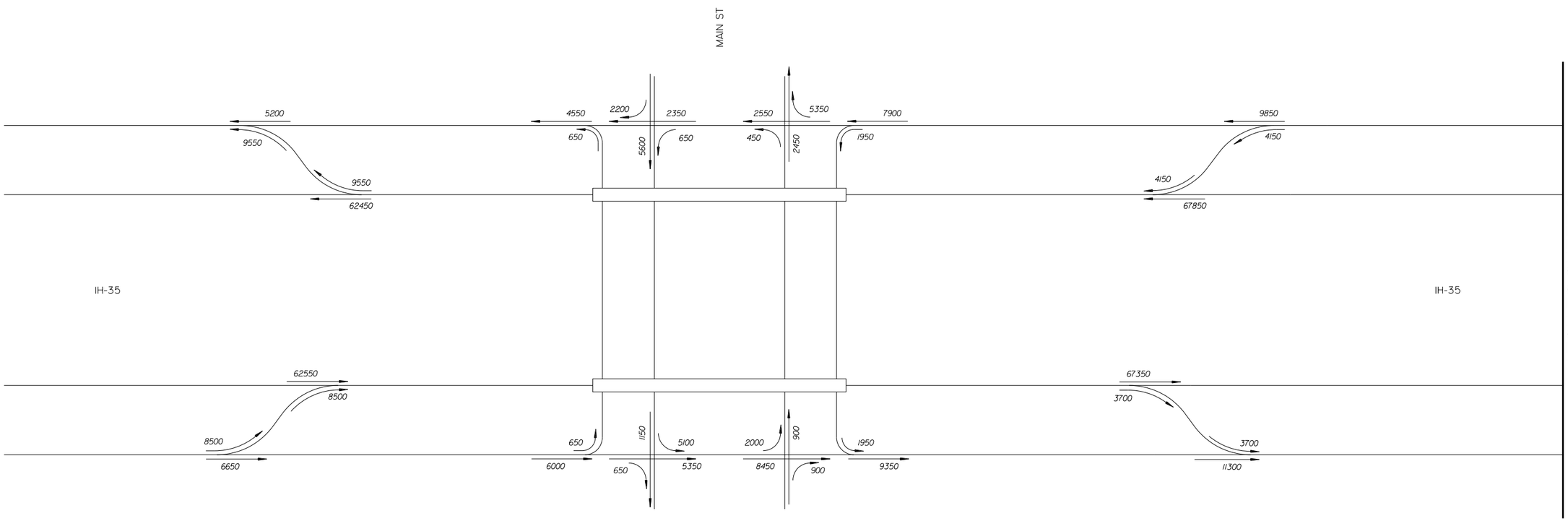
EXISTING (2018) TRAFFIC LINE DIAGRAM

FOR DETAILED TRAFFIC INPUT

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 1 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	HAYS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	1

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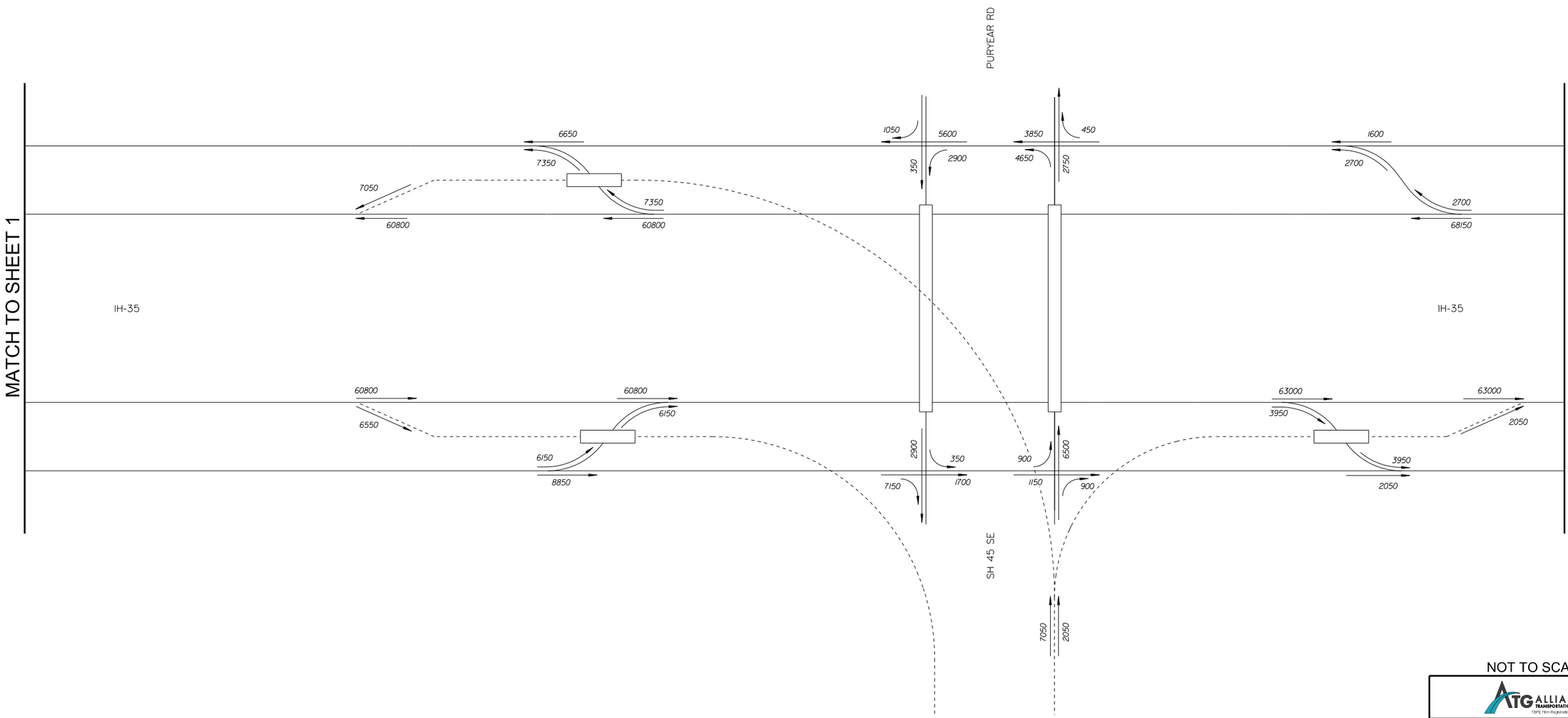
2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 2 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	2

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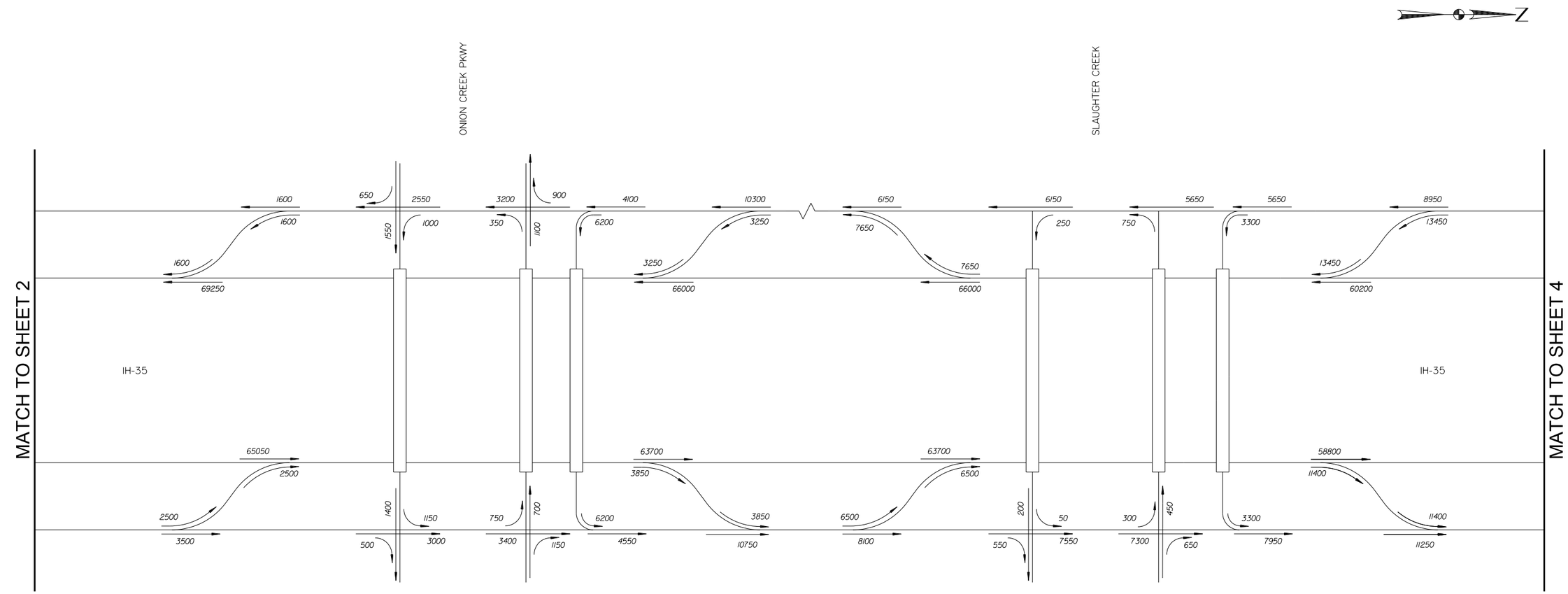
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

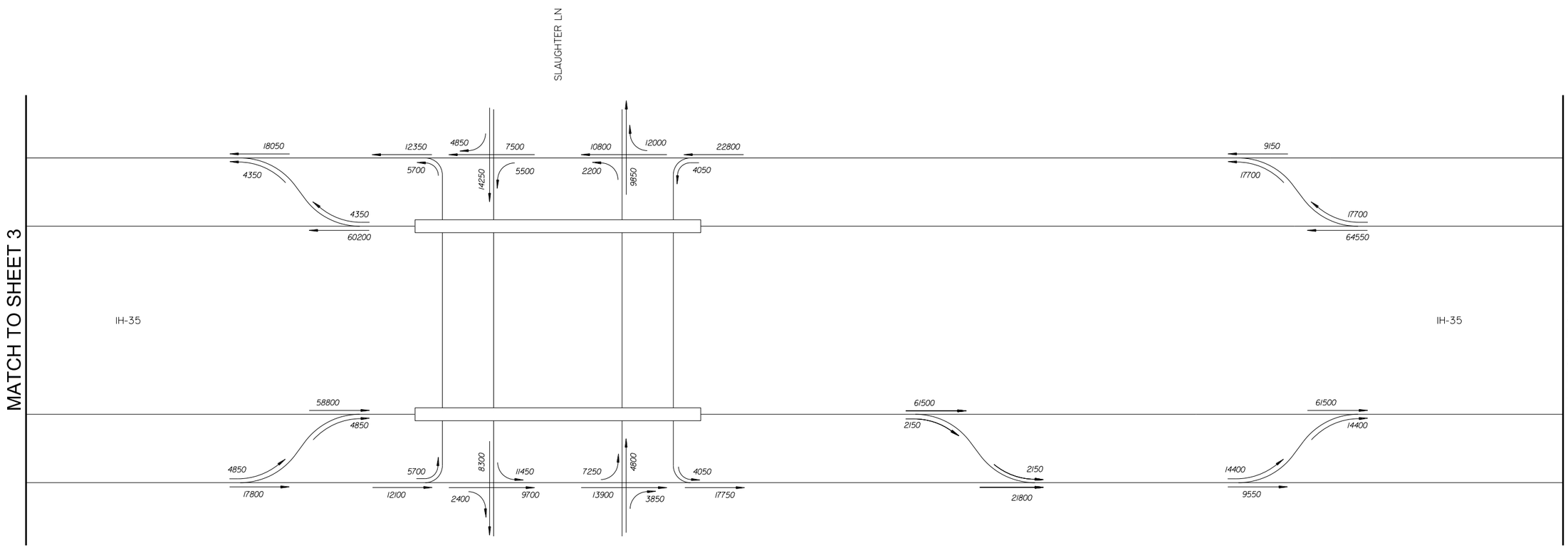
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 3 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	3

1/25/2019 10:28:32 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 4 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	4

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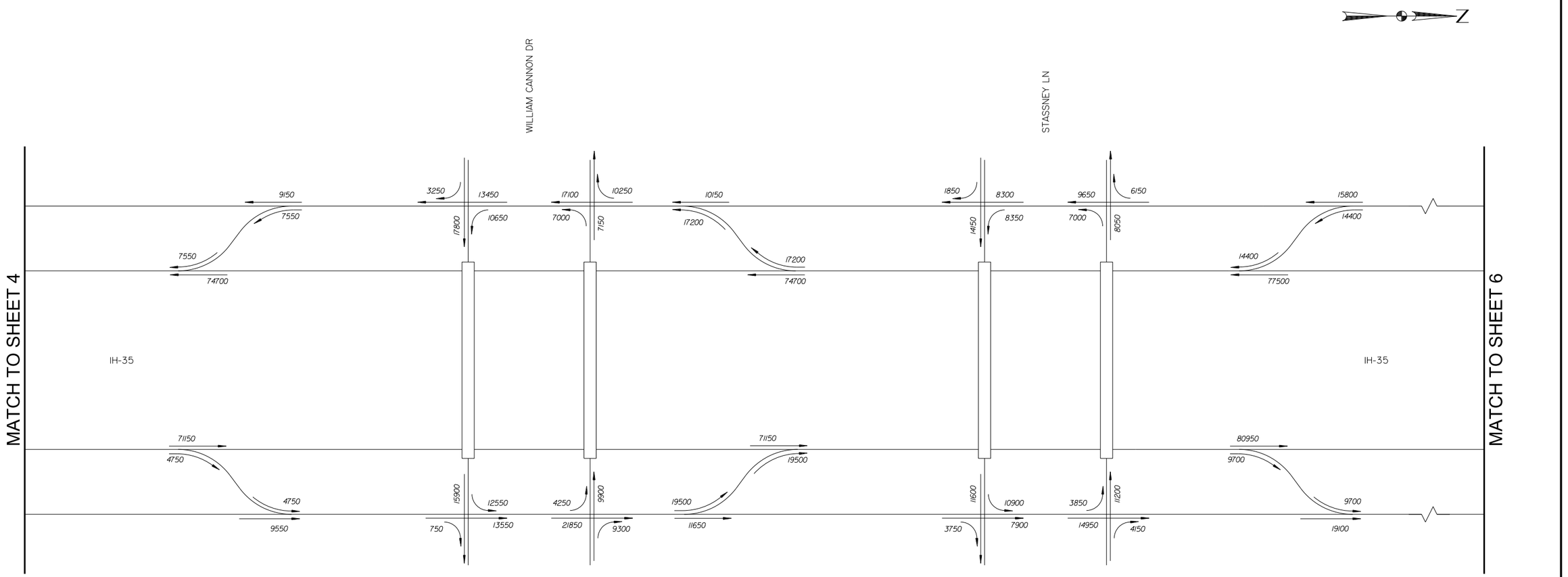
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 5 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	5

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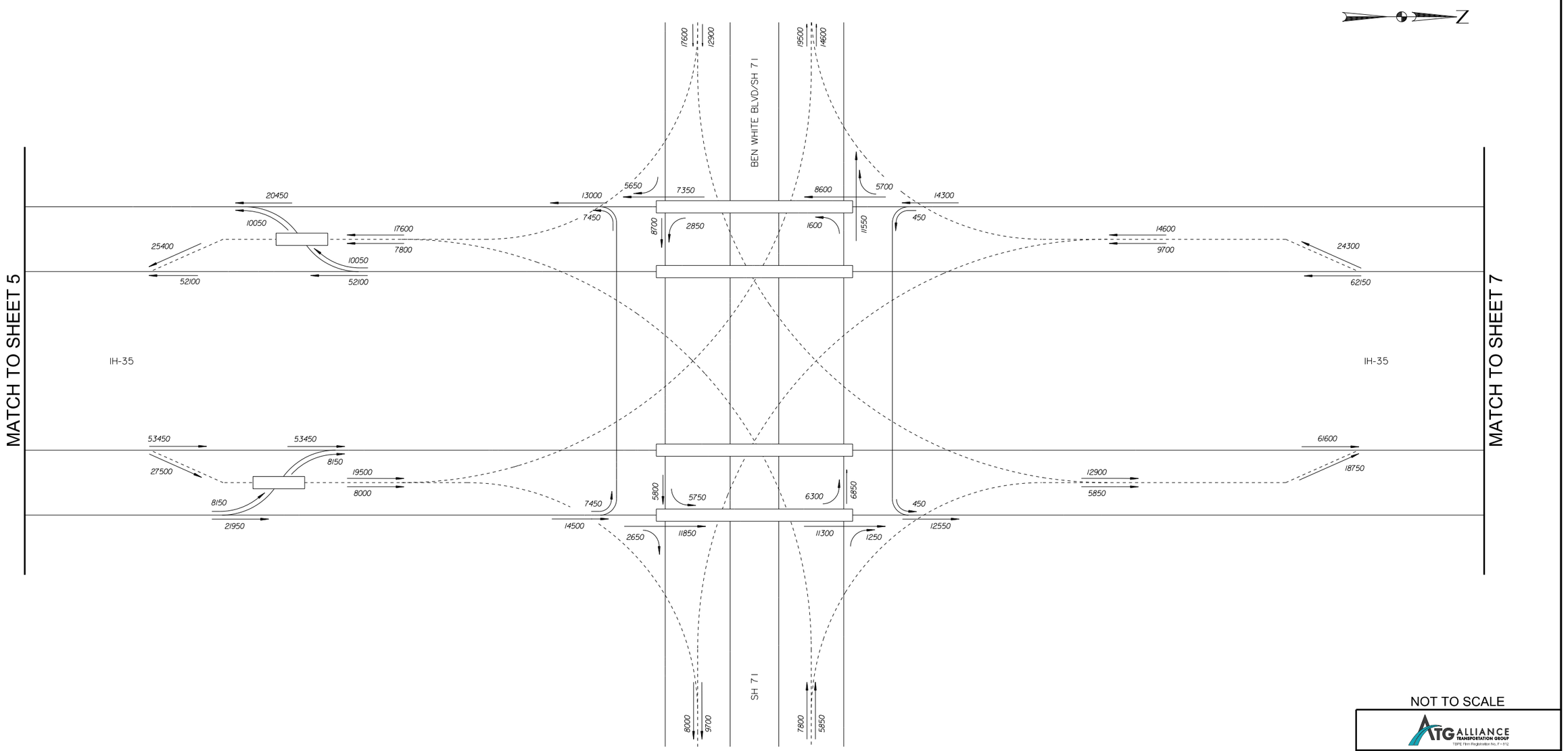
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

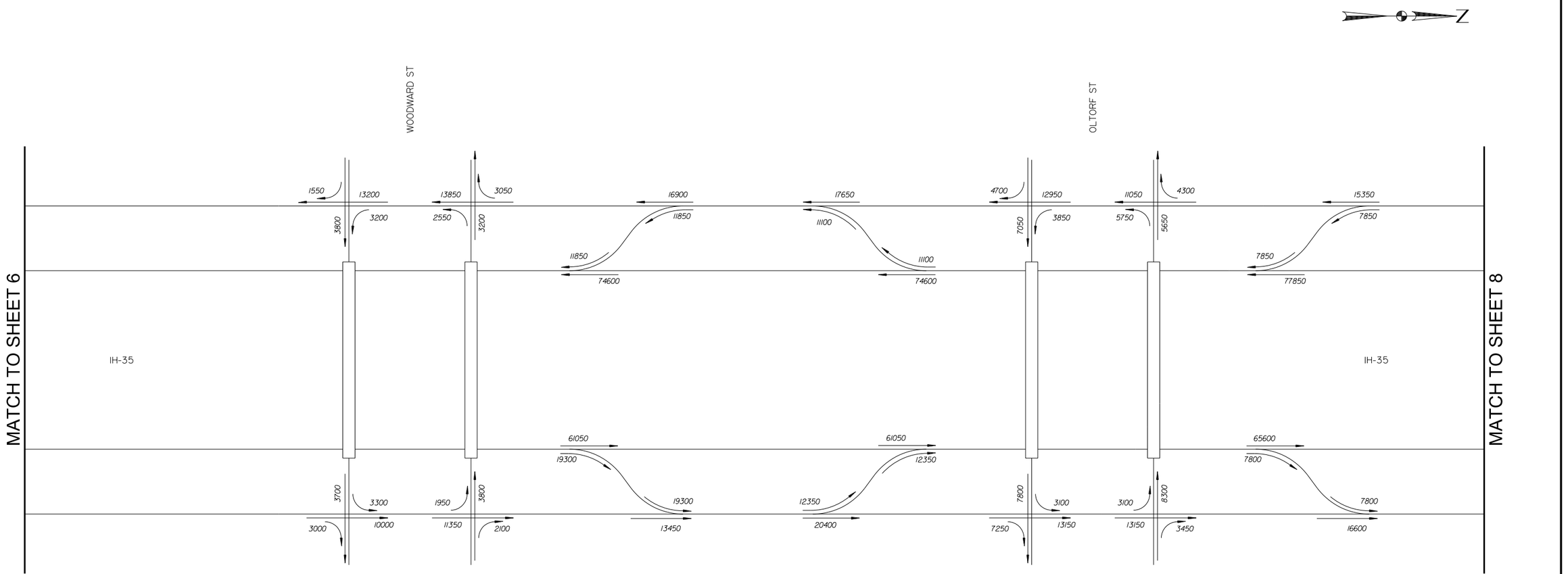
Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 6 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 6

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 7 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	7

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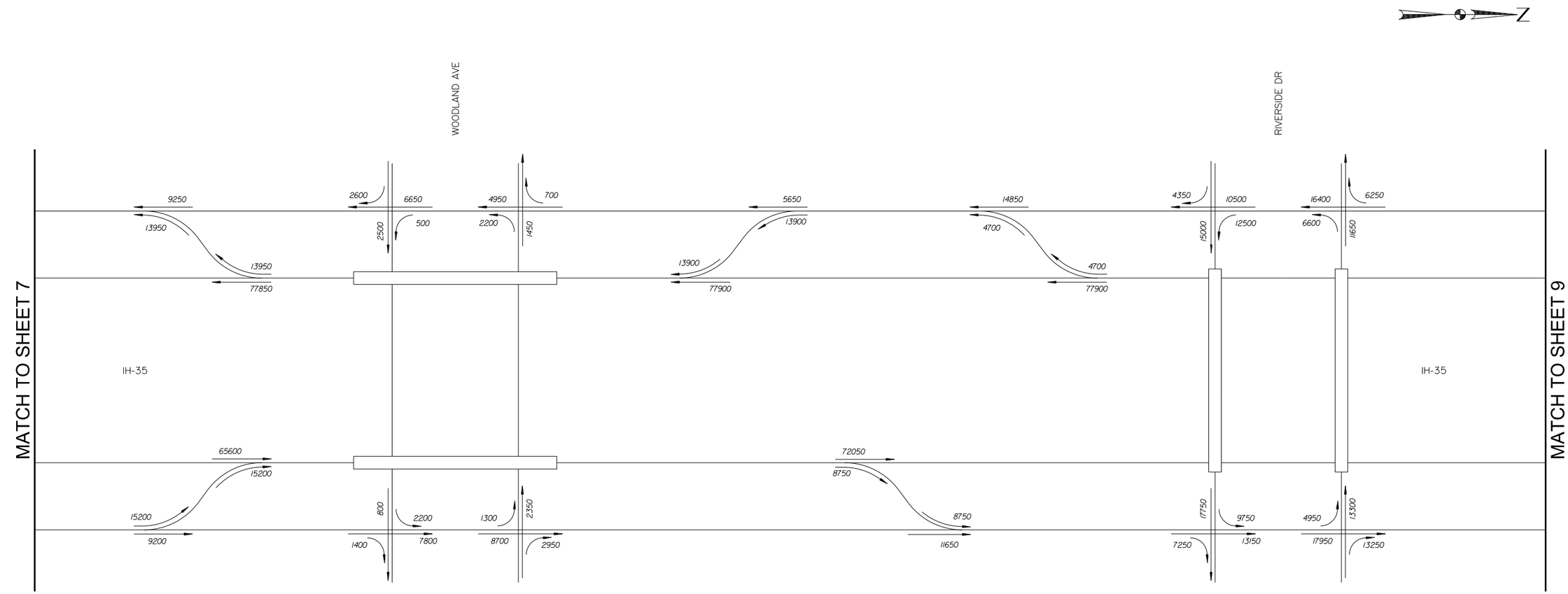
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 8 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	8

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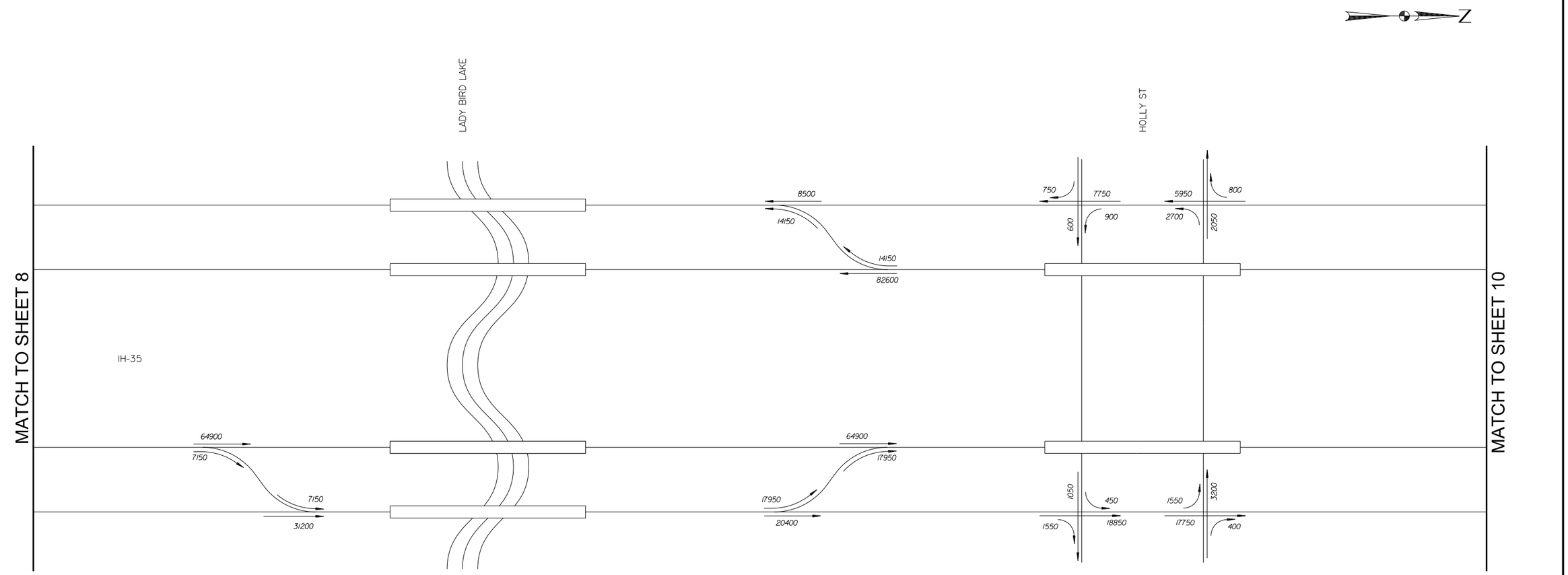
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 9 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	9

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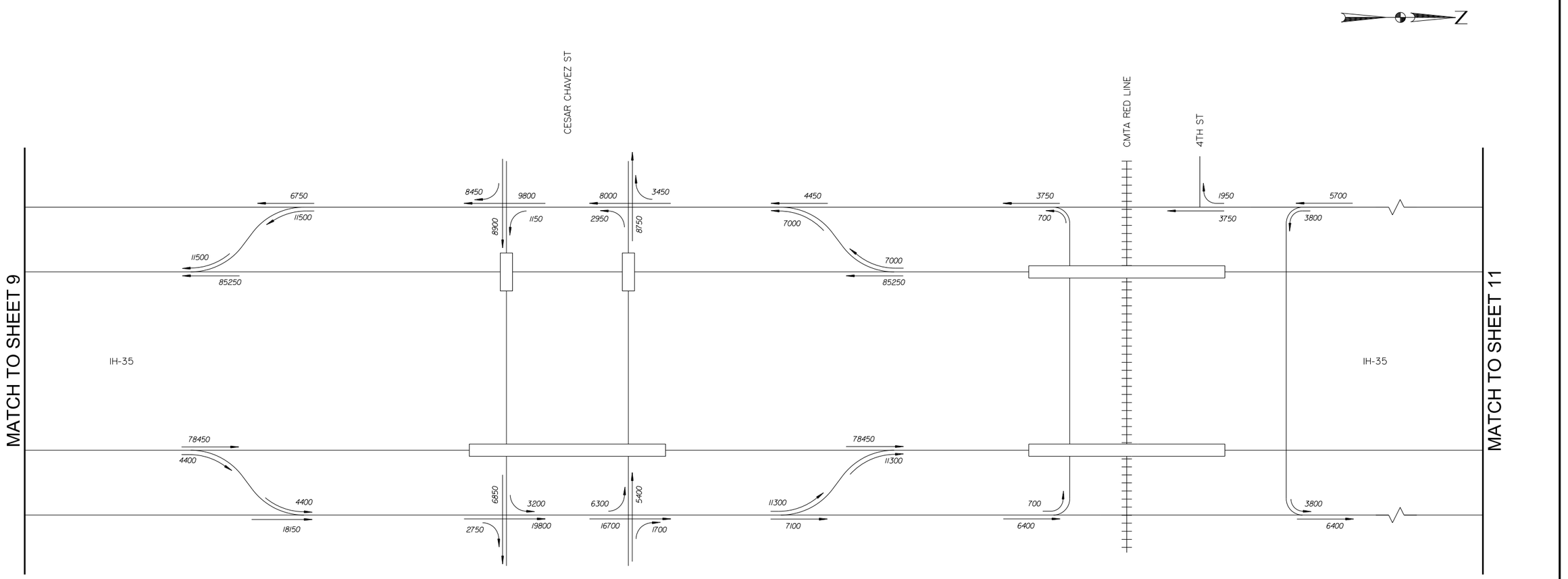
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

Texas Department of Transportation

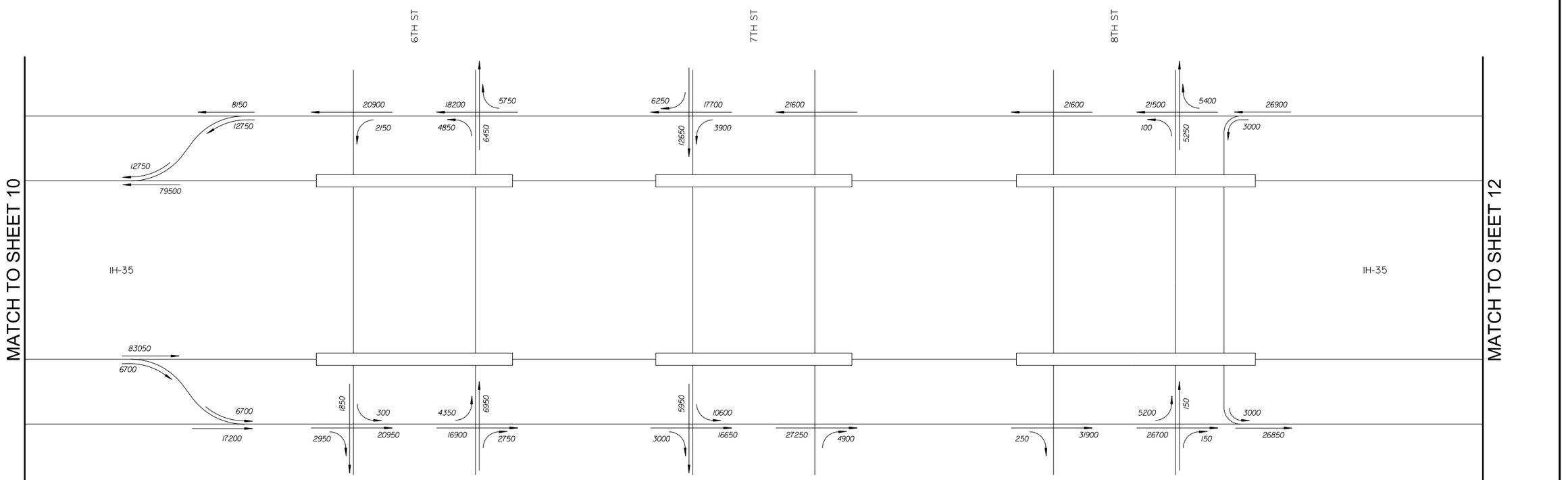
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 10 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 10

1/25/2019 10:28:34 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

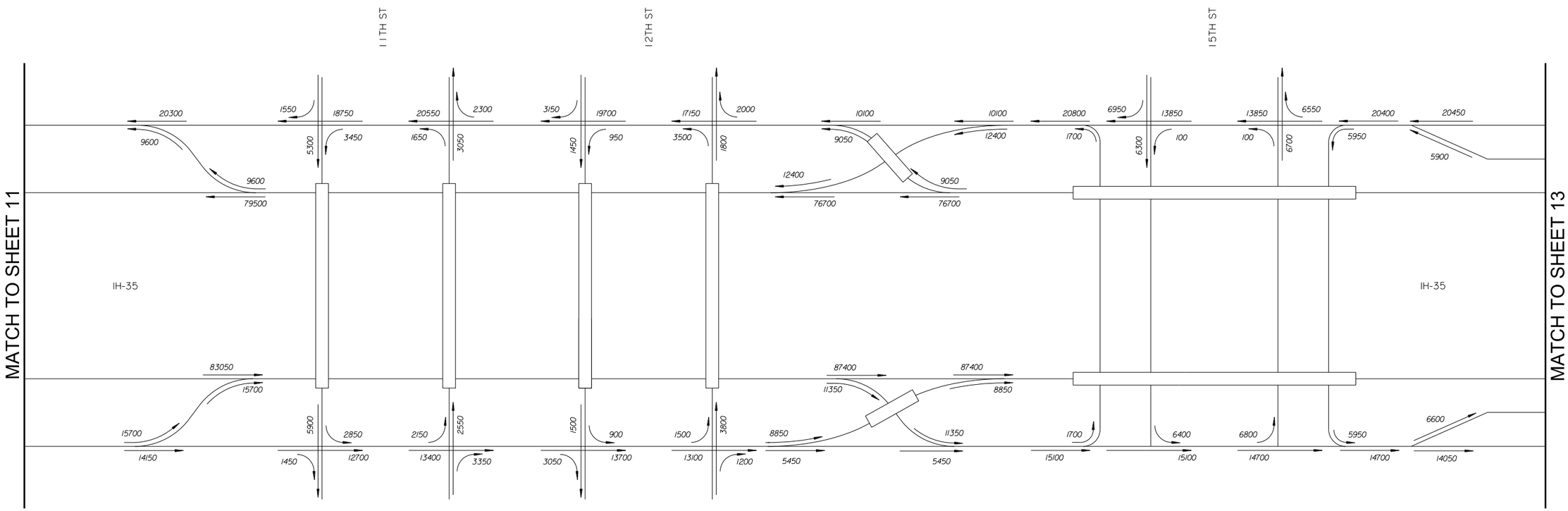
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 11 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 11

1/25/2019 10:28:35 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

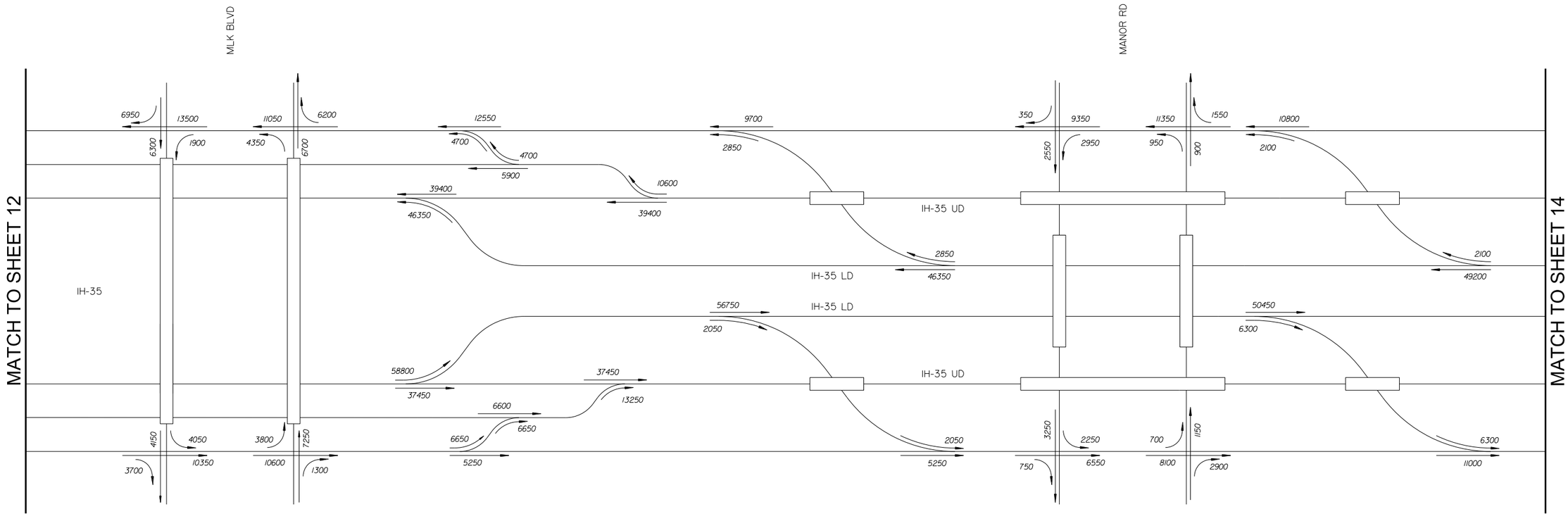
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 12 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 12

1/25/2019 10:28:35 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 13 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	13

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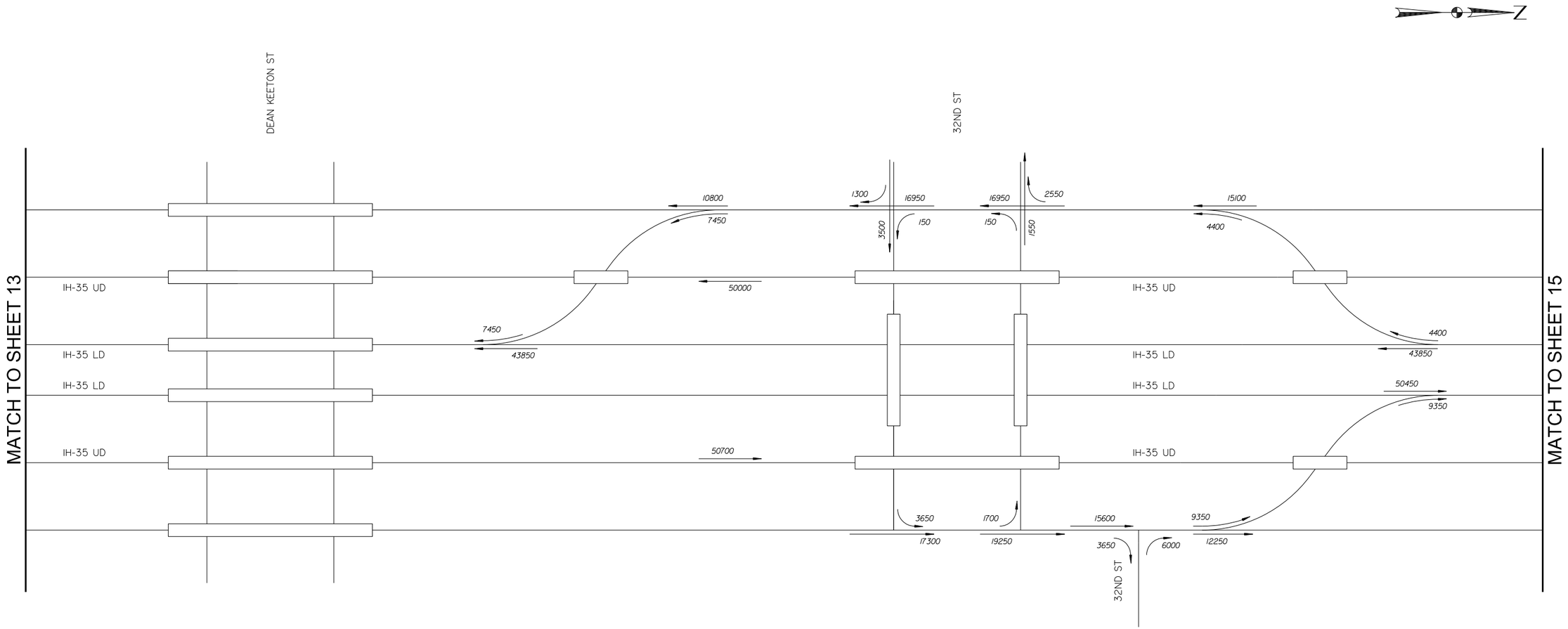
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

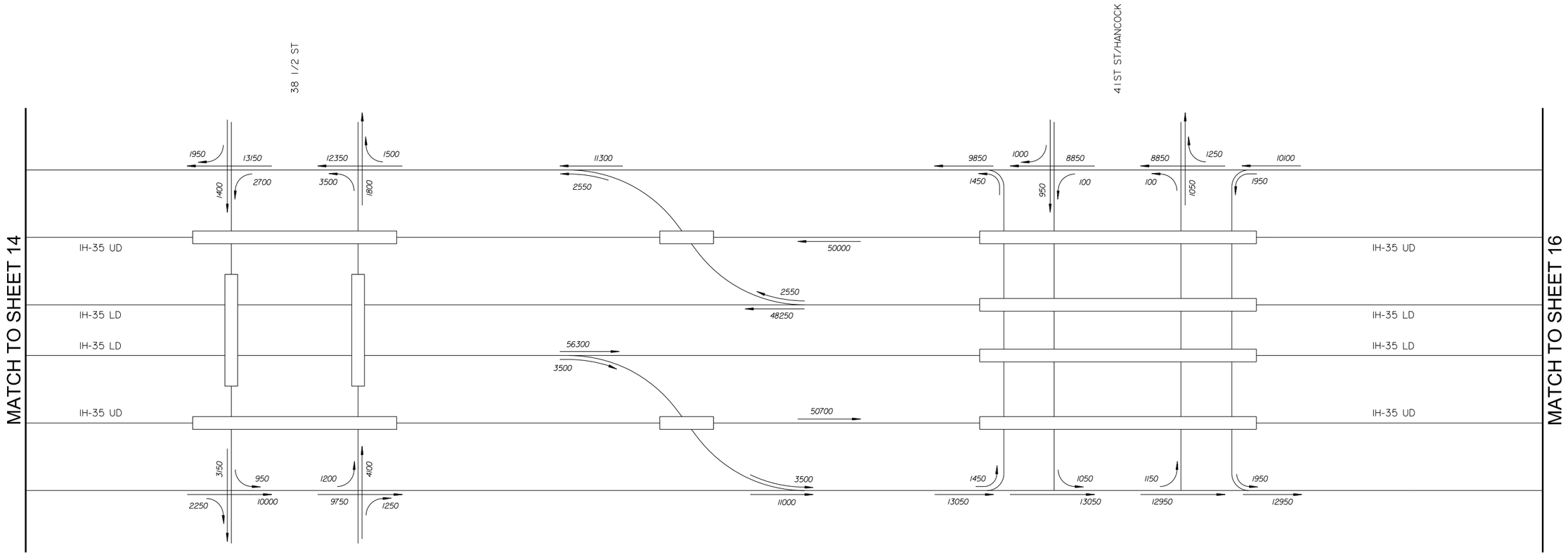
ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-812

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 14 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 14

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

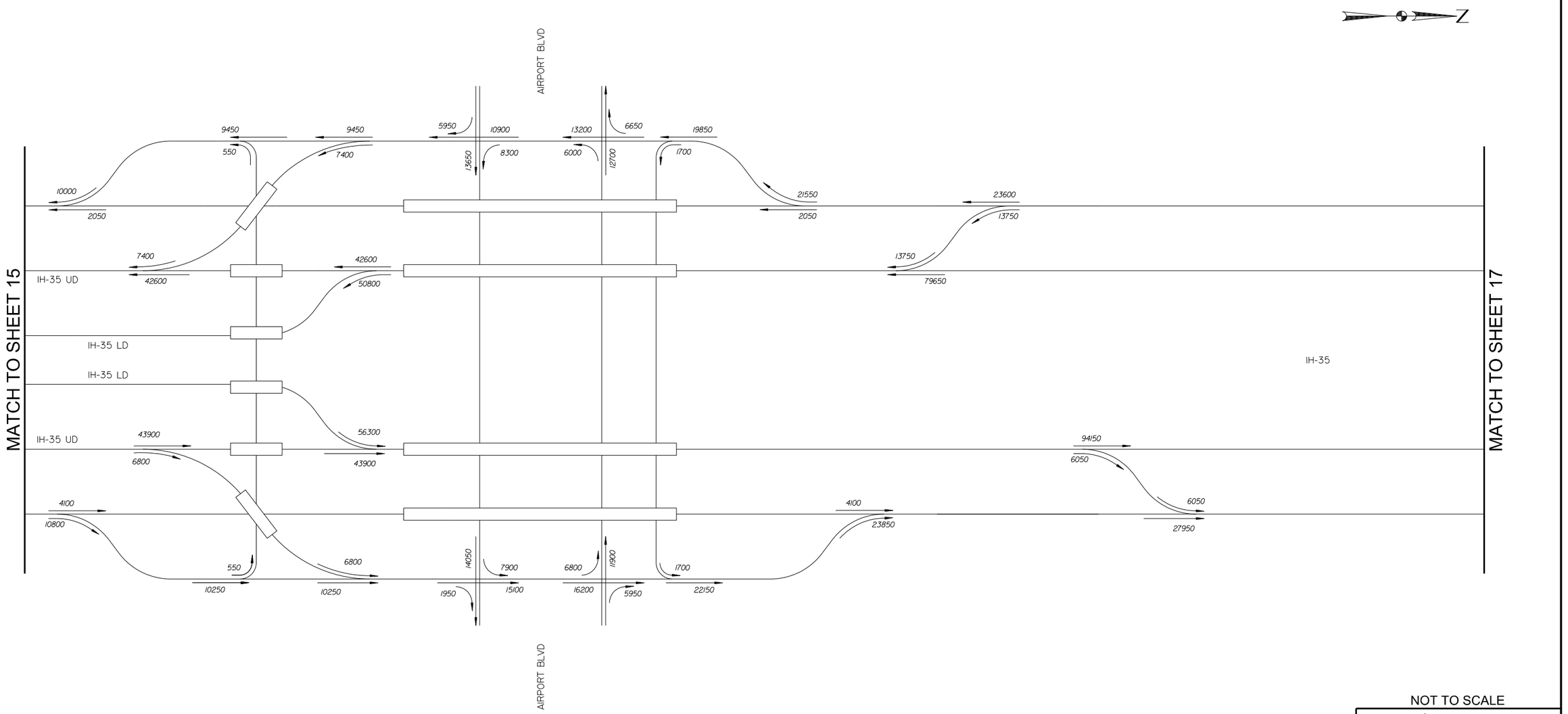
ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 15 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 15

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

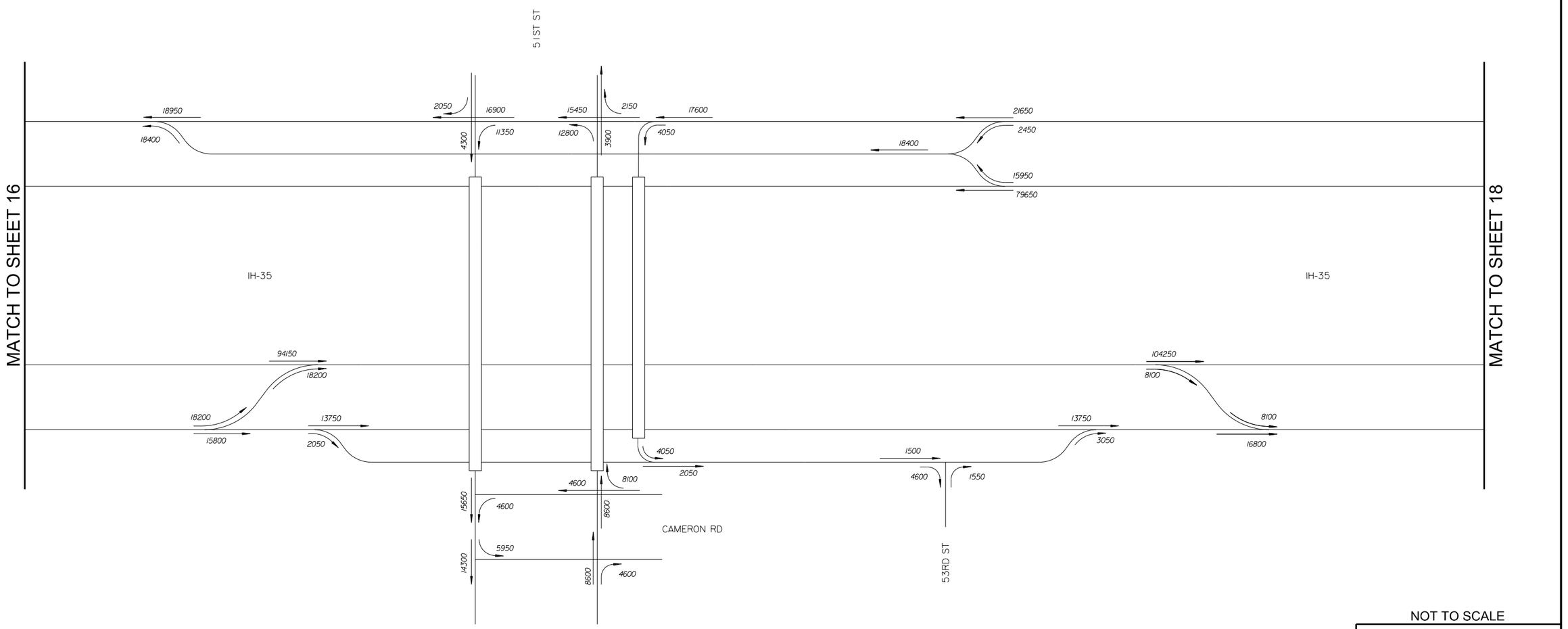
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 16 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 16

1/25/2019 10:28:36 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

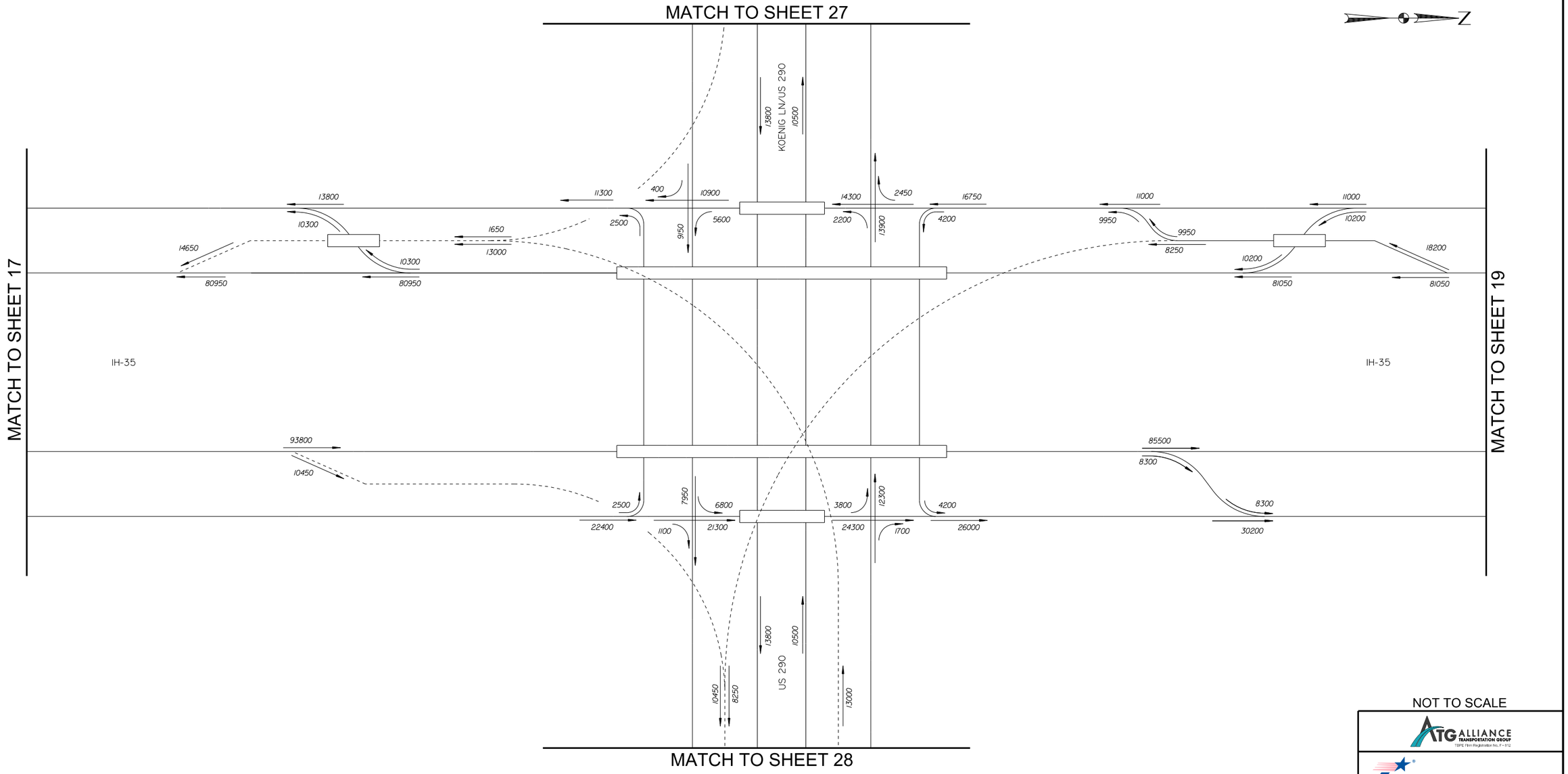
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 17 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 17

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

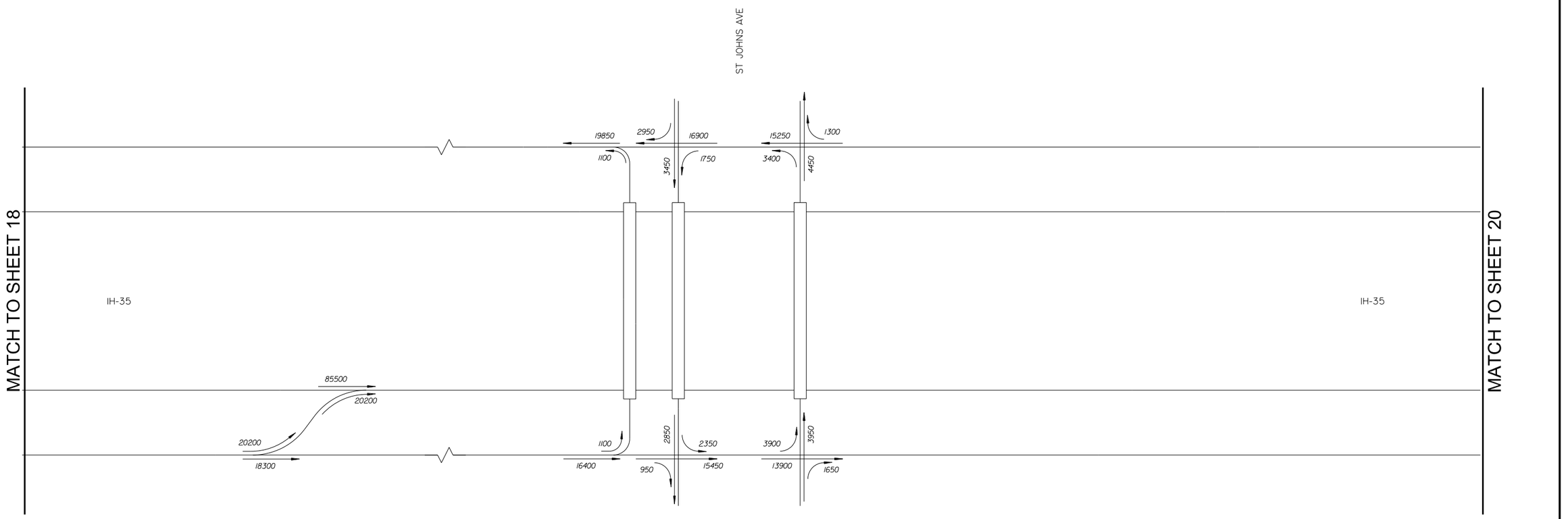
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 18 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 18

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

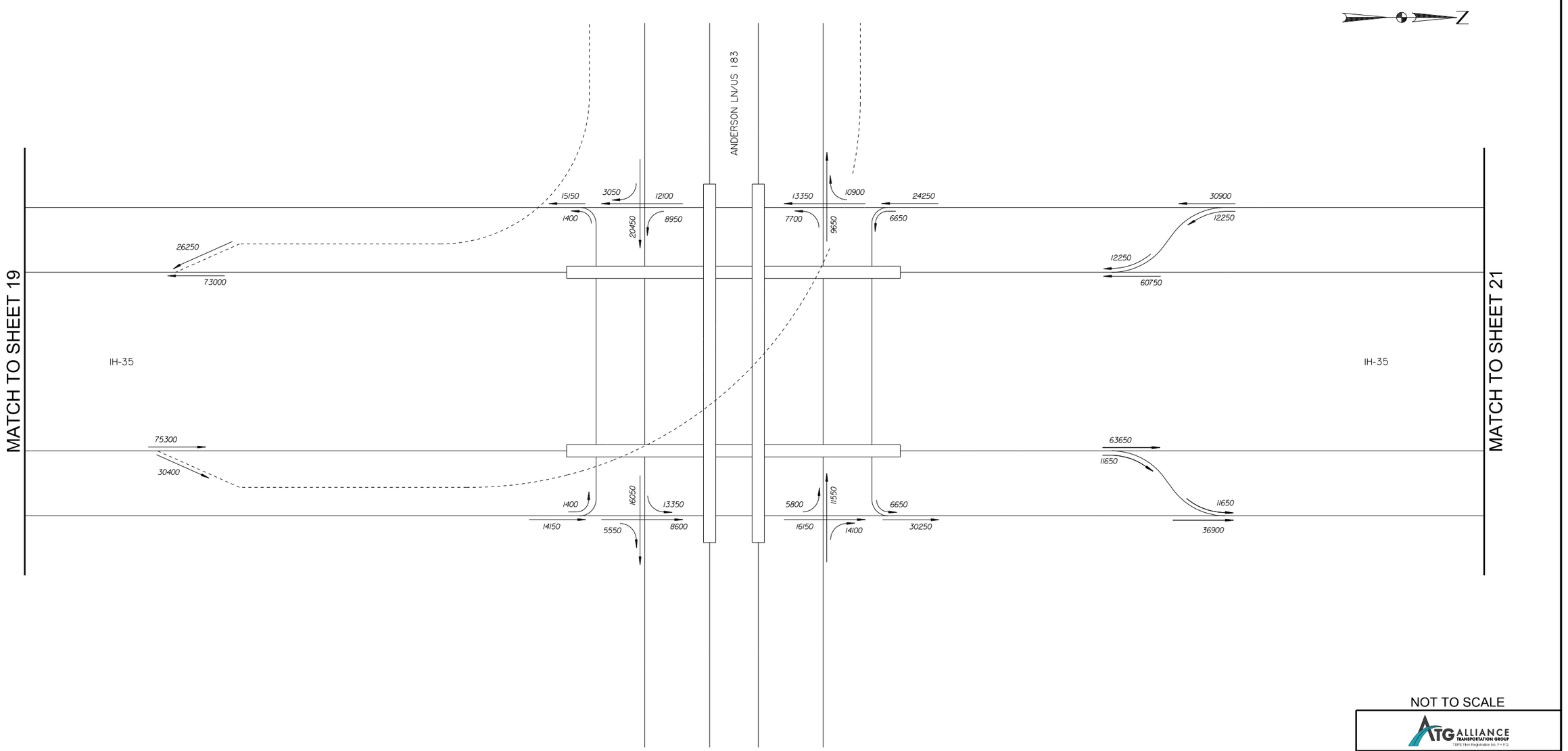
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 19 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	19

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 512

Texas Department of Transportation

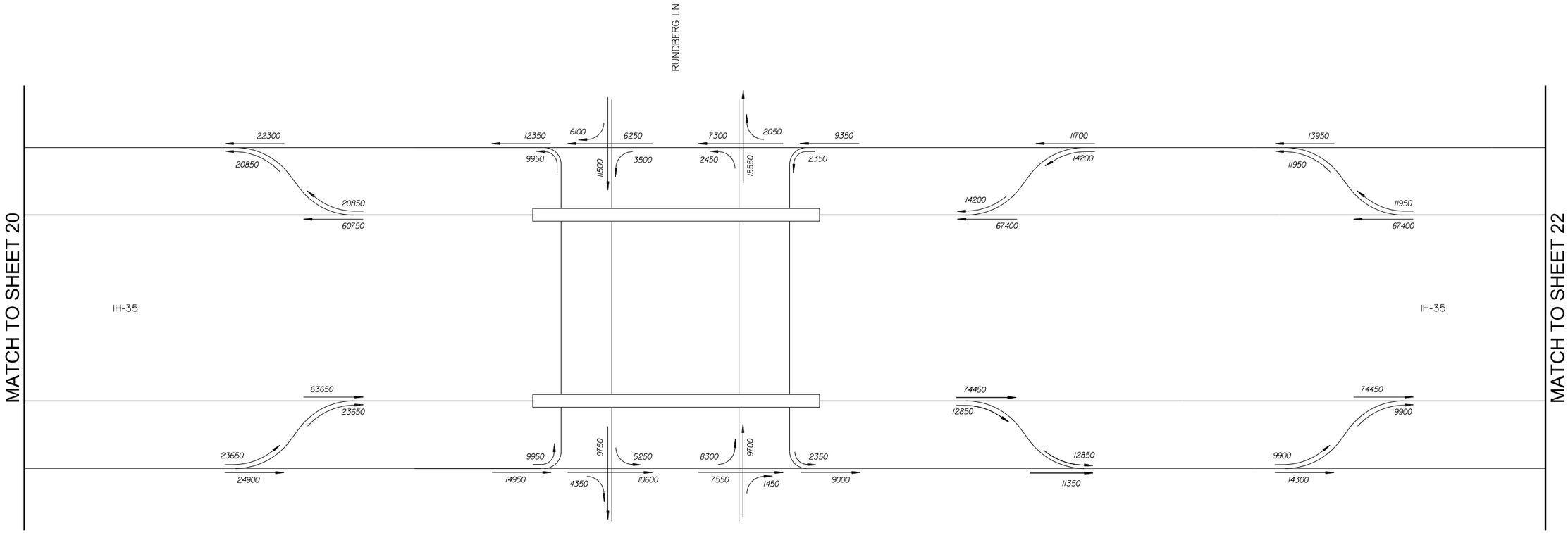
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 20 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 20

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

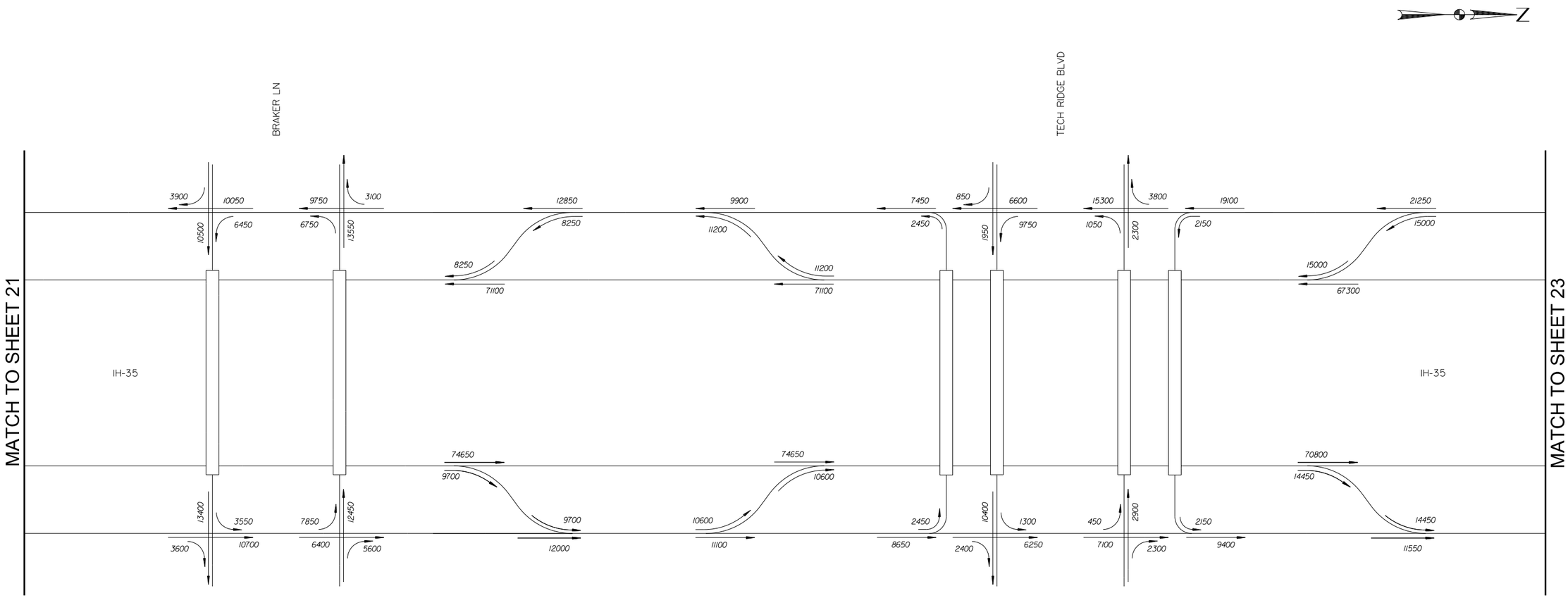
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 21 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 21

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

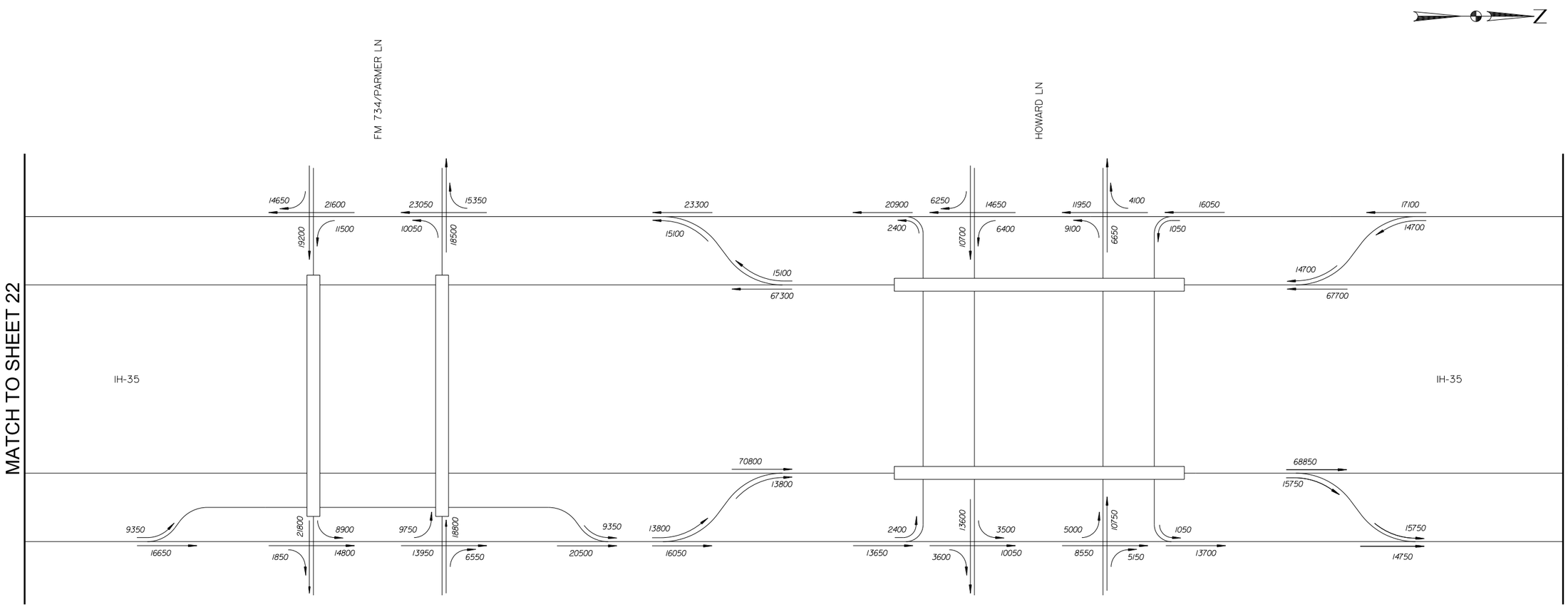
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 22 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	22

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

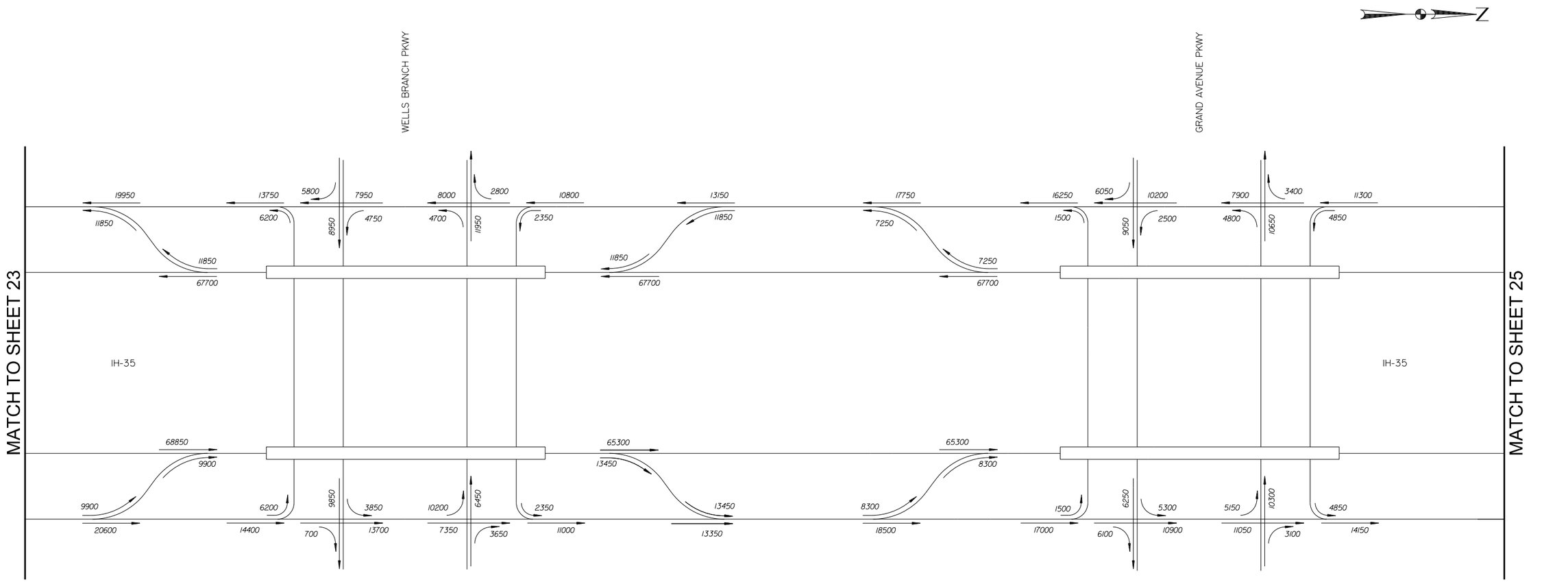
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 23 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 23

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

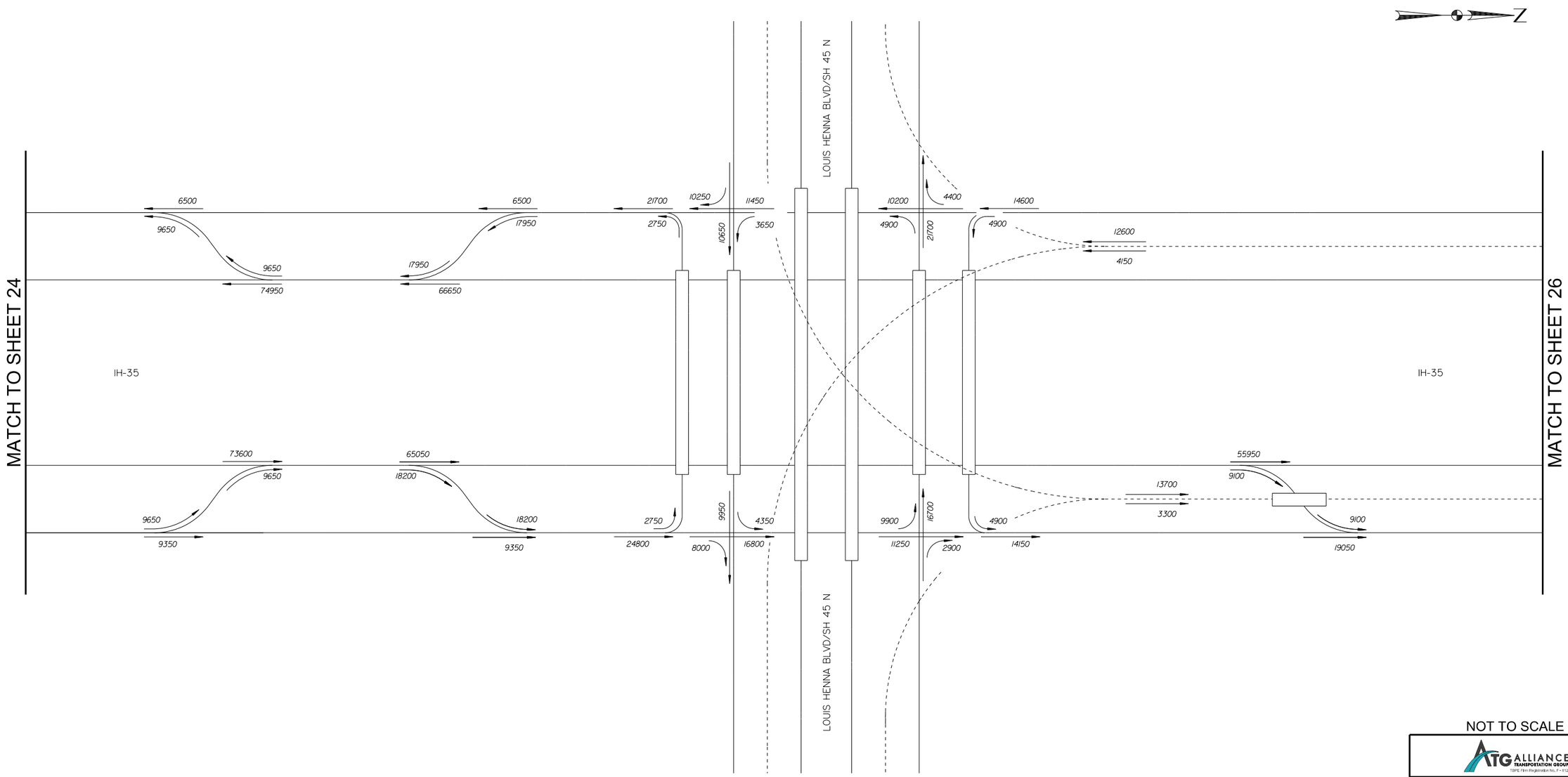
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 24 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 24

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

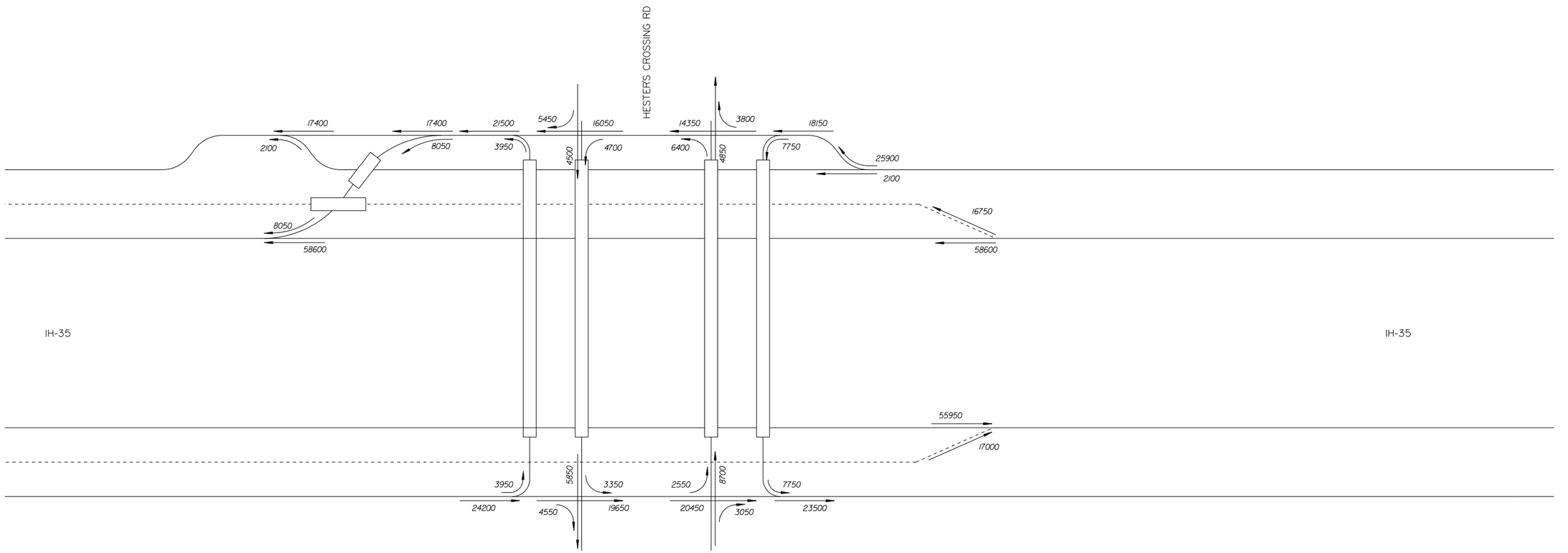
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 25 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 25

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

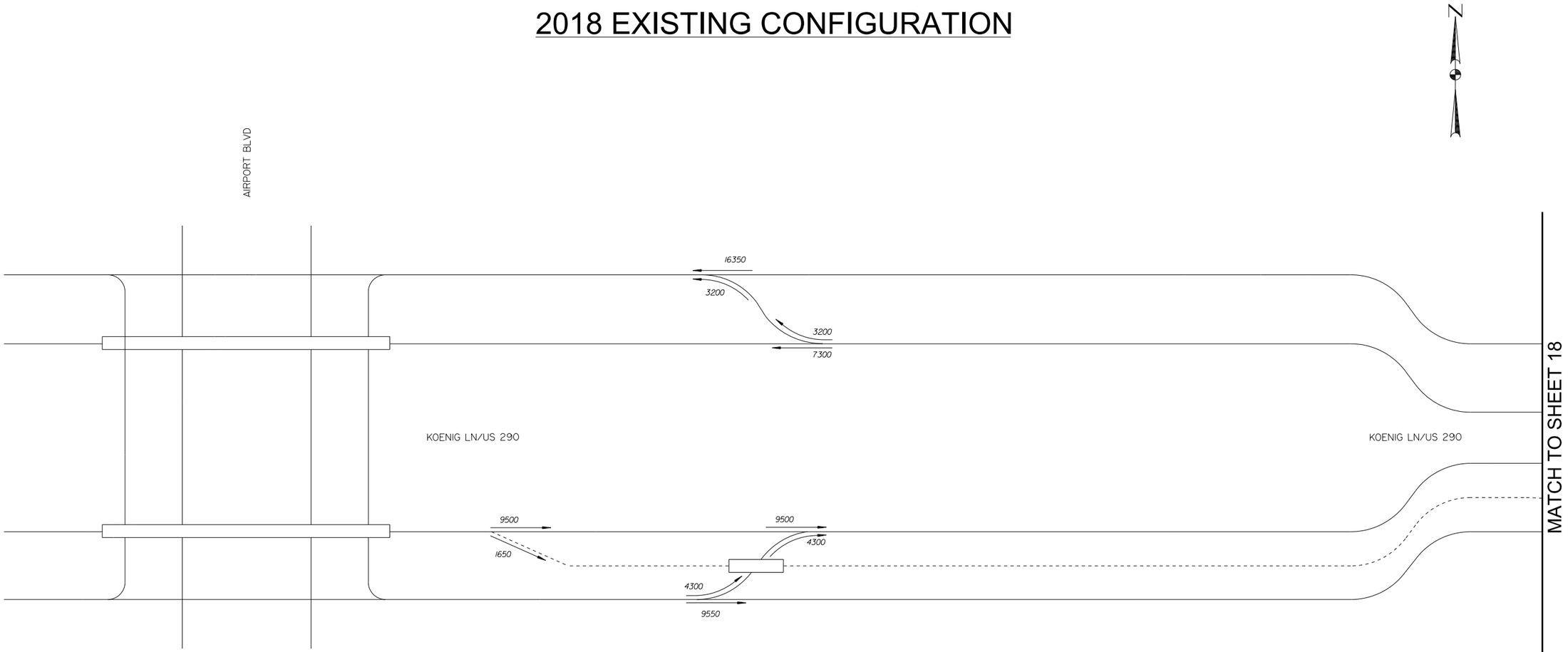
Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 26 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	WILLIAMSON
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 26

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-932

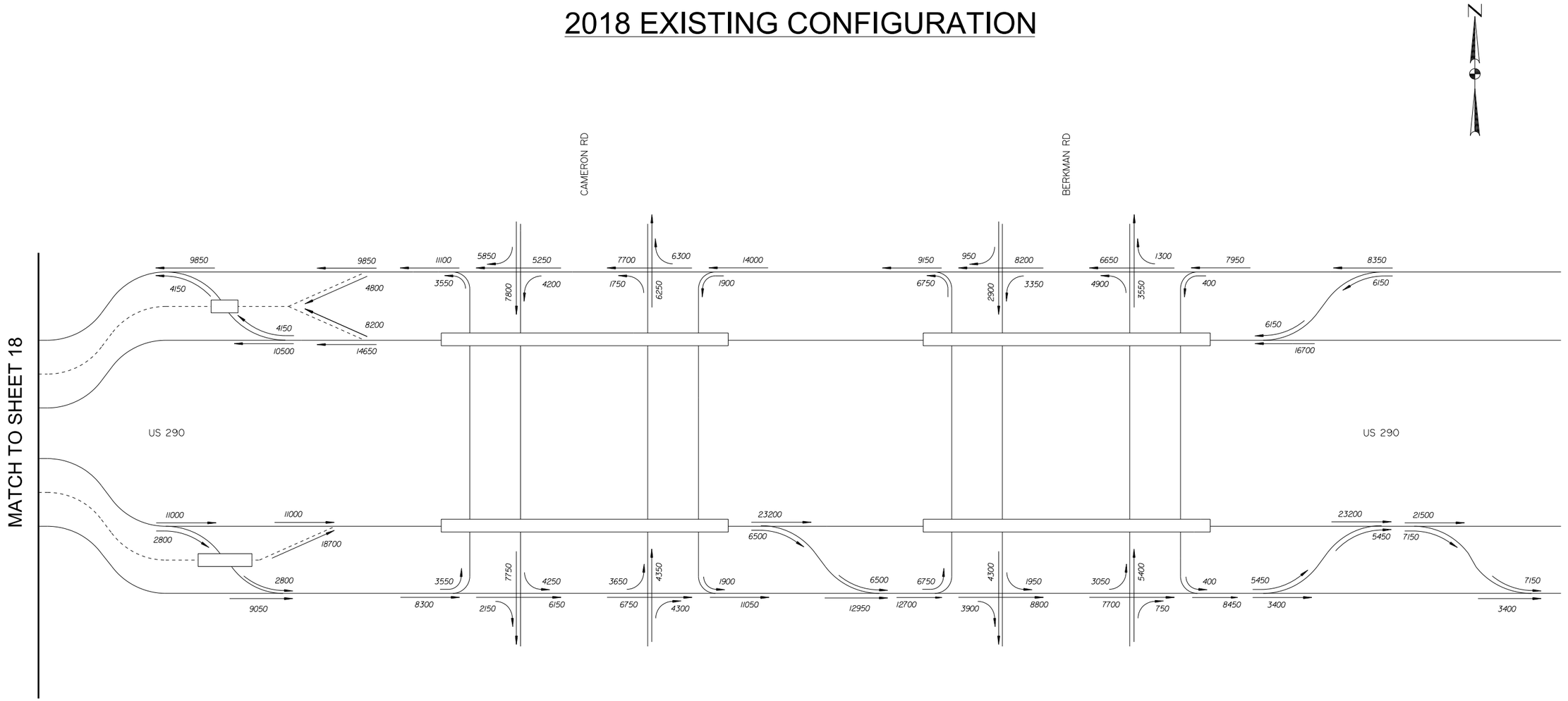
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 27 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	27

1/25/2019 10:28:39 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 512

Texas Department of Transportation

CAPITAL EXPRESS

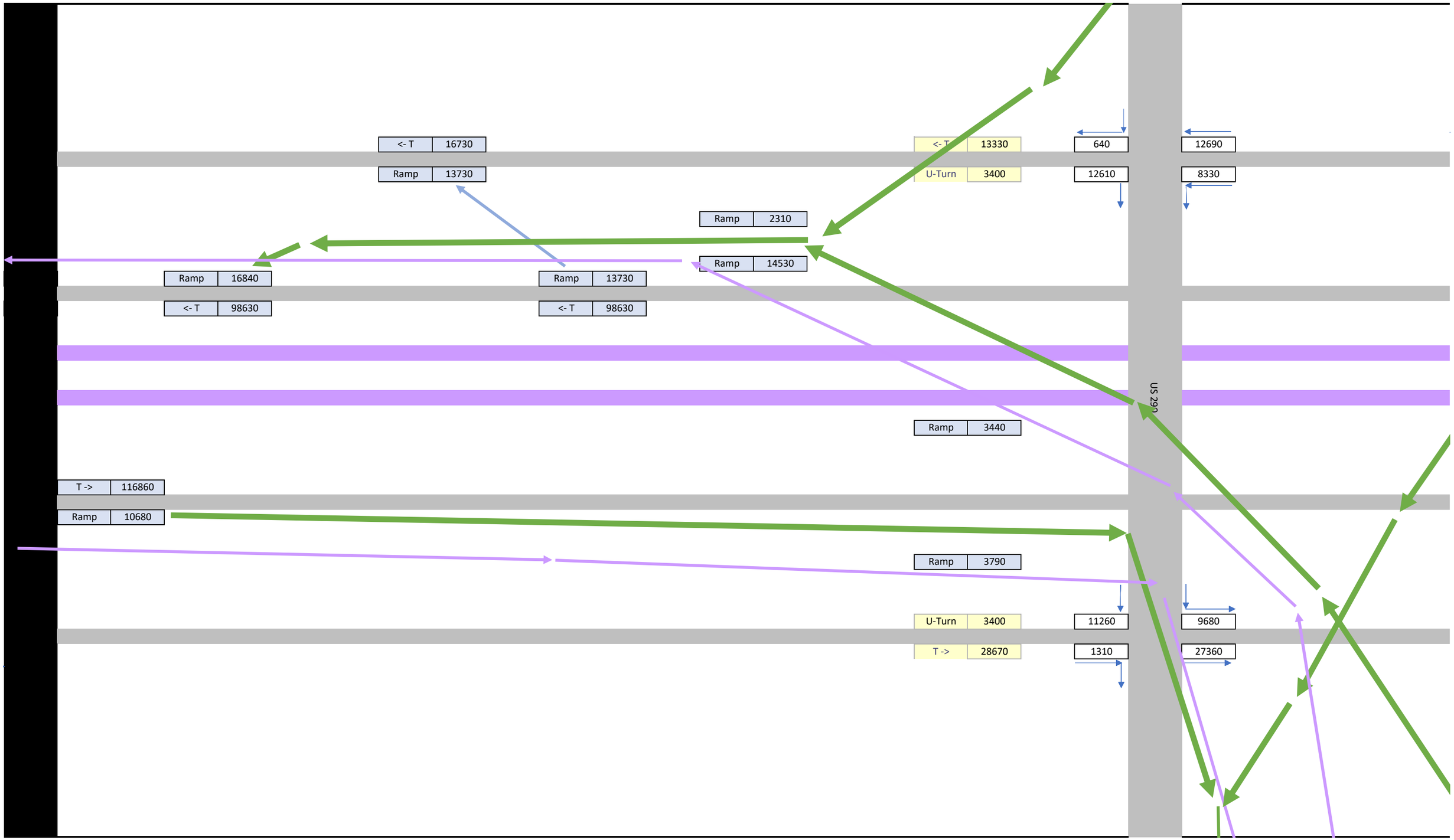
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 28 OF 28)

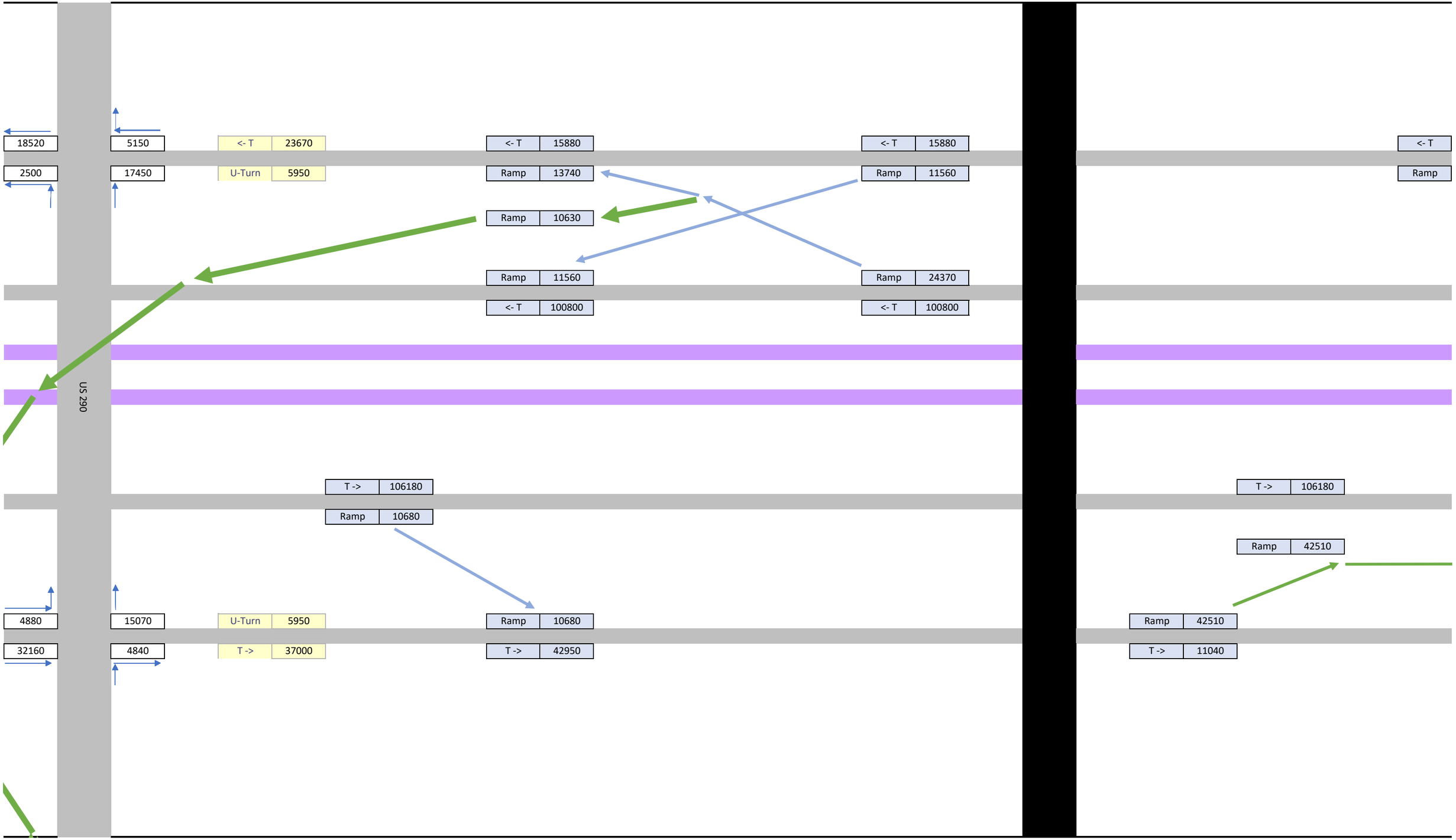
SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 28

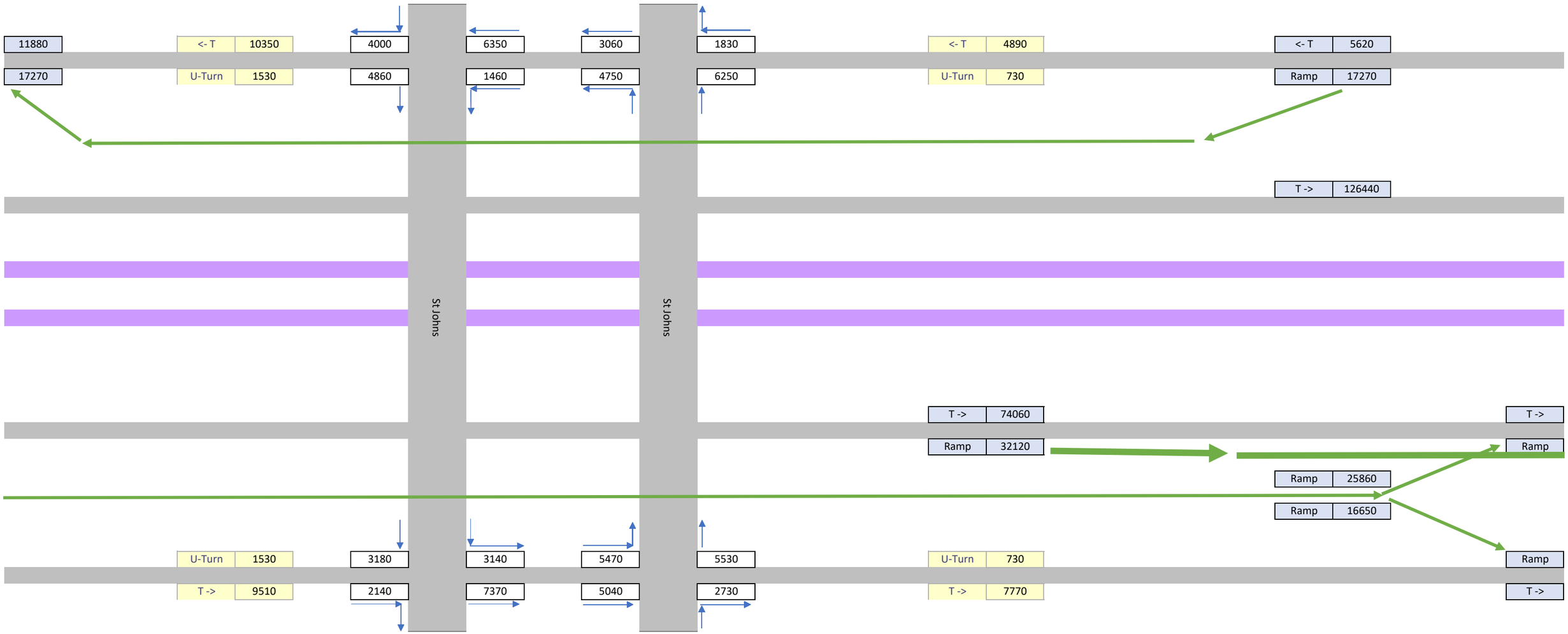
1/25/2019 10:28:39 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

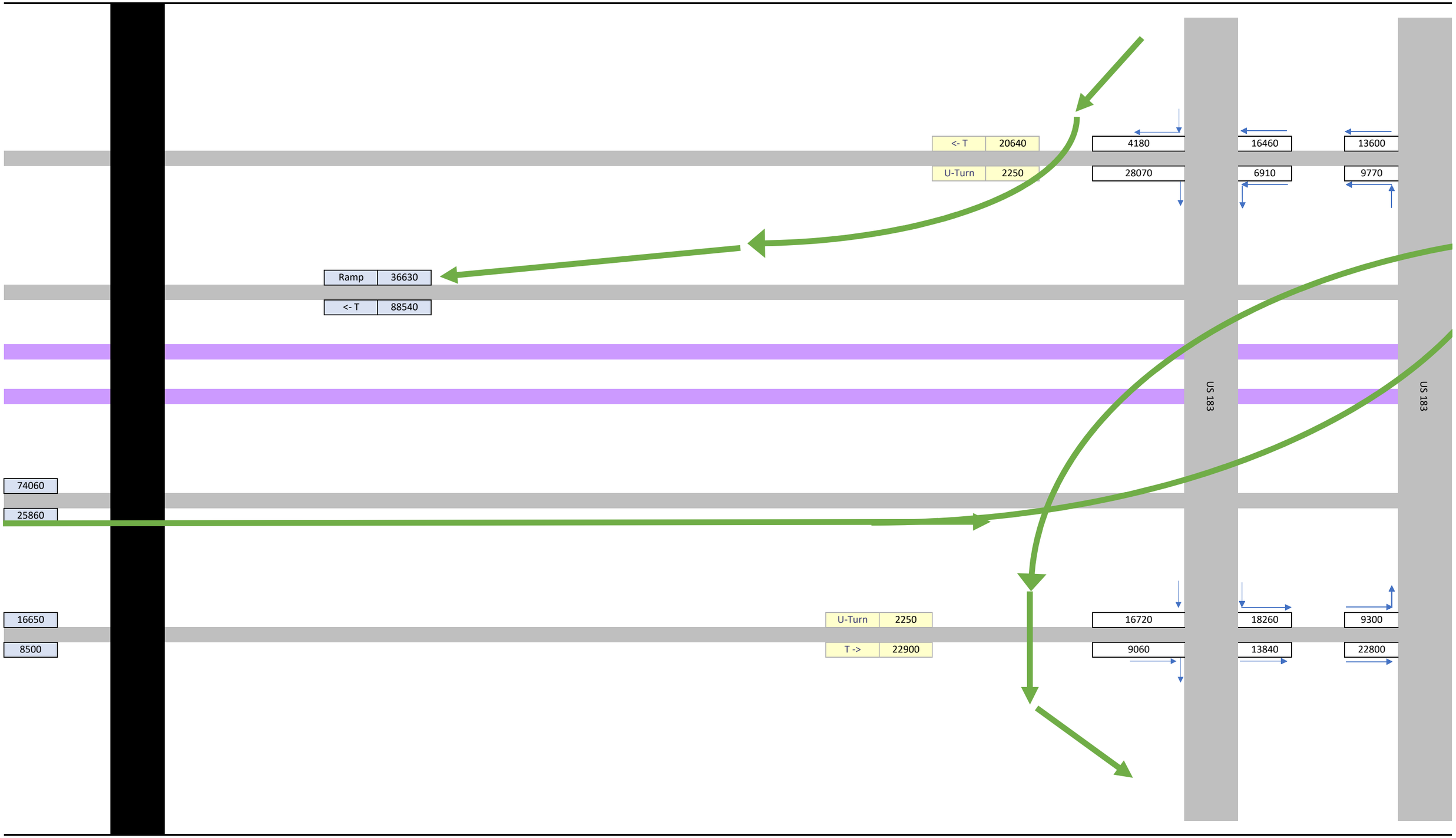
PROPOSED (2038) TRAFFIC LINE DIAGRAM

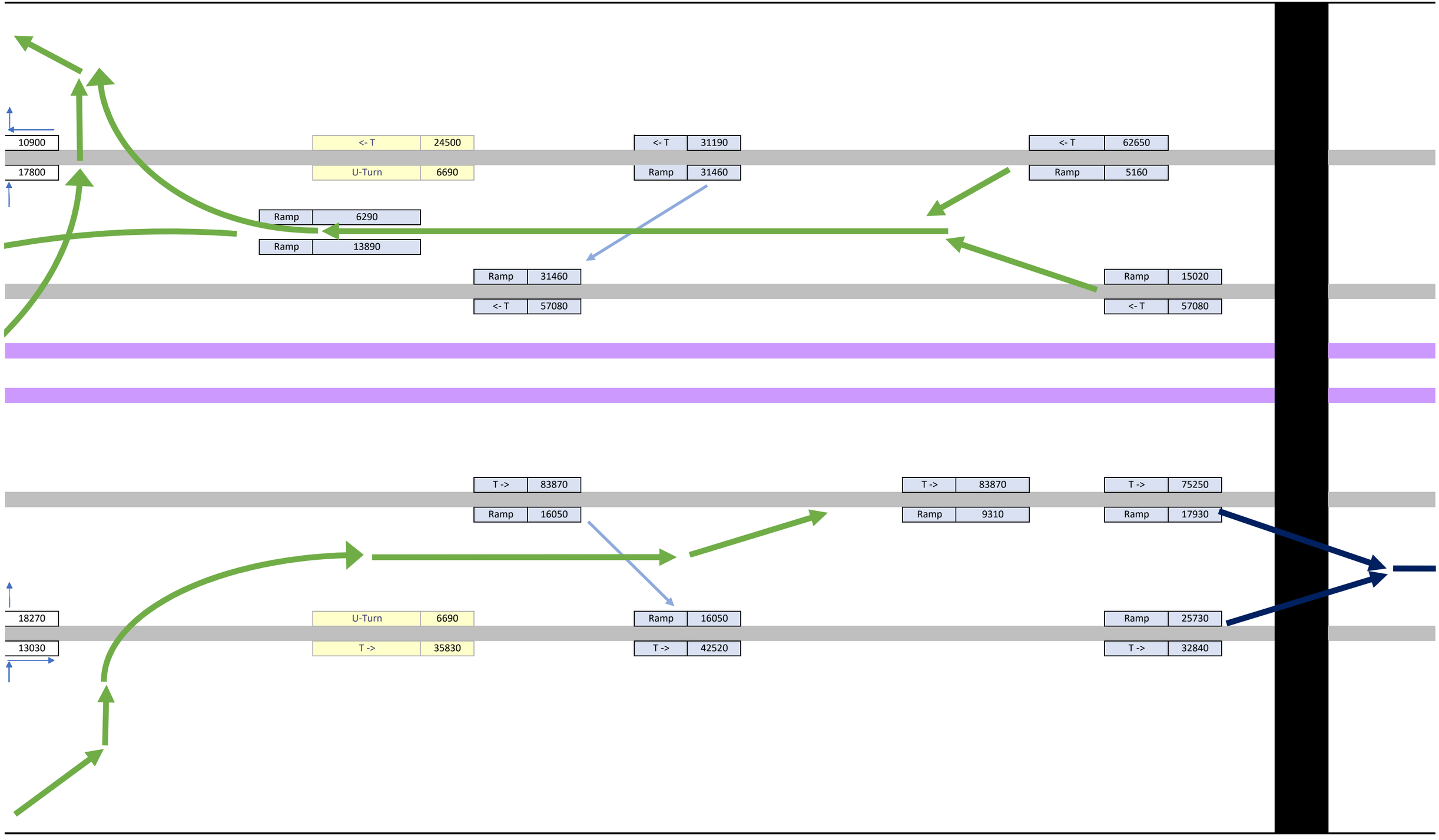
FOR DETAILED TRAFFIC INPUT

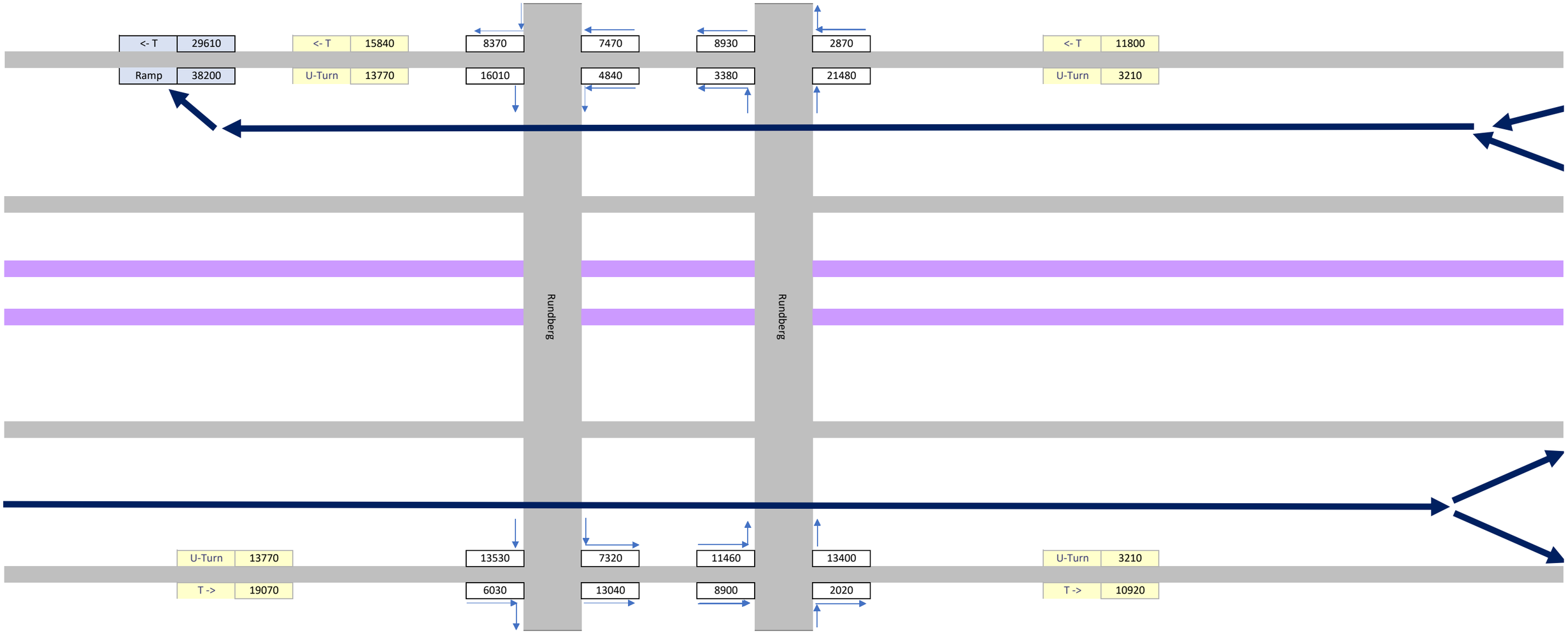

<- T 16730
Ramp 13730
<- T 13330
U-Turn 3400
640
12690
12610
8330
Ramp 2310
Ramp 14530
Ramp 16840
<- T 98630
Ramp 13730
<- T 98630
US 29
Ramp 3440
T -> 116860
Ramp 10680
Ramp 3790
U-Turn 3400
11260
9680
T -> 28670
1310
27360

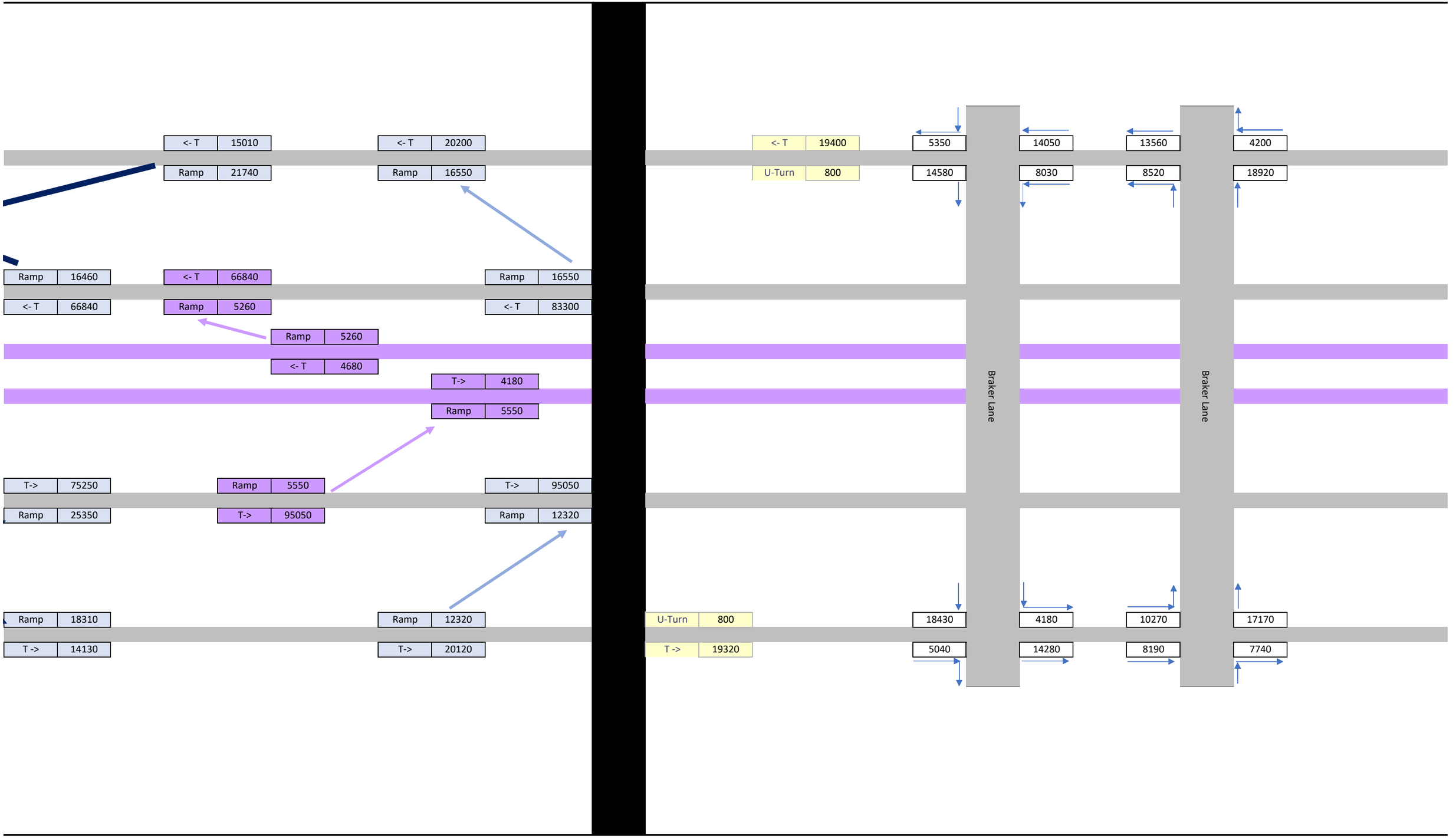

18520
2500
5150
17450
<- T
23670
U-Turn
5950
<- T
15880
Ramp
13740
Ramp
10630
Ramp
11560
<- T
100800
<- T
15880
Ramp
11560
Ramp
24370
<- T
100800
<- T
Ramp
US 290
T ->
106180
Ramp
10680
T ->
106180
Ramp
42510
4880
32160
15070
4840
U-Turn
5950
T ->
37000
Ramp
10680
T ->
42950
Ramp
42510
T ->
11040

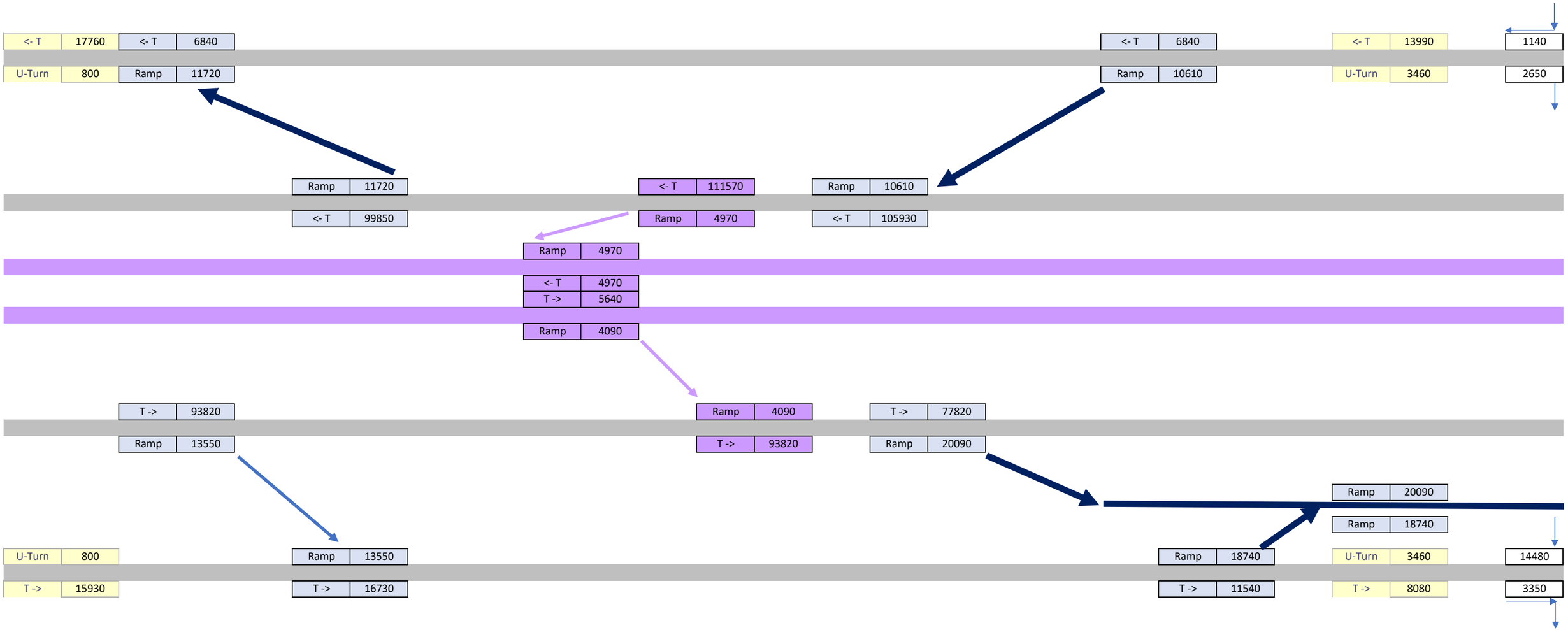

11880
17270
<- T
10350
U-Turn
1530
4000
4860
6350
1460
3060
4750
1830
6250
<- T
4890
U-Turn
730
<- T
5620
Ramp
17270
T ->
126440
St Johns
St Johns
T ->
74060
Ramp
32120
T ->
Ramp
Ramp
25860
Ramp
16650
Ramp
U-Turn
1530
T ->
9510
3180
2140
3140
7370
5470
5040
5530
2730
U-Turn
730
T ->
7770
T ->
Ramp

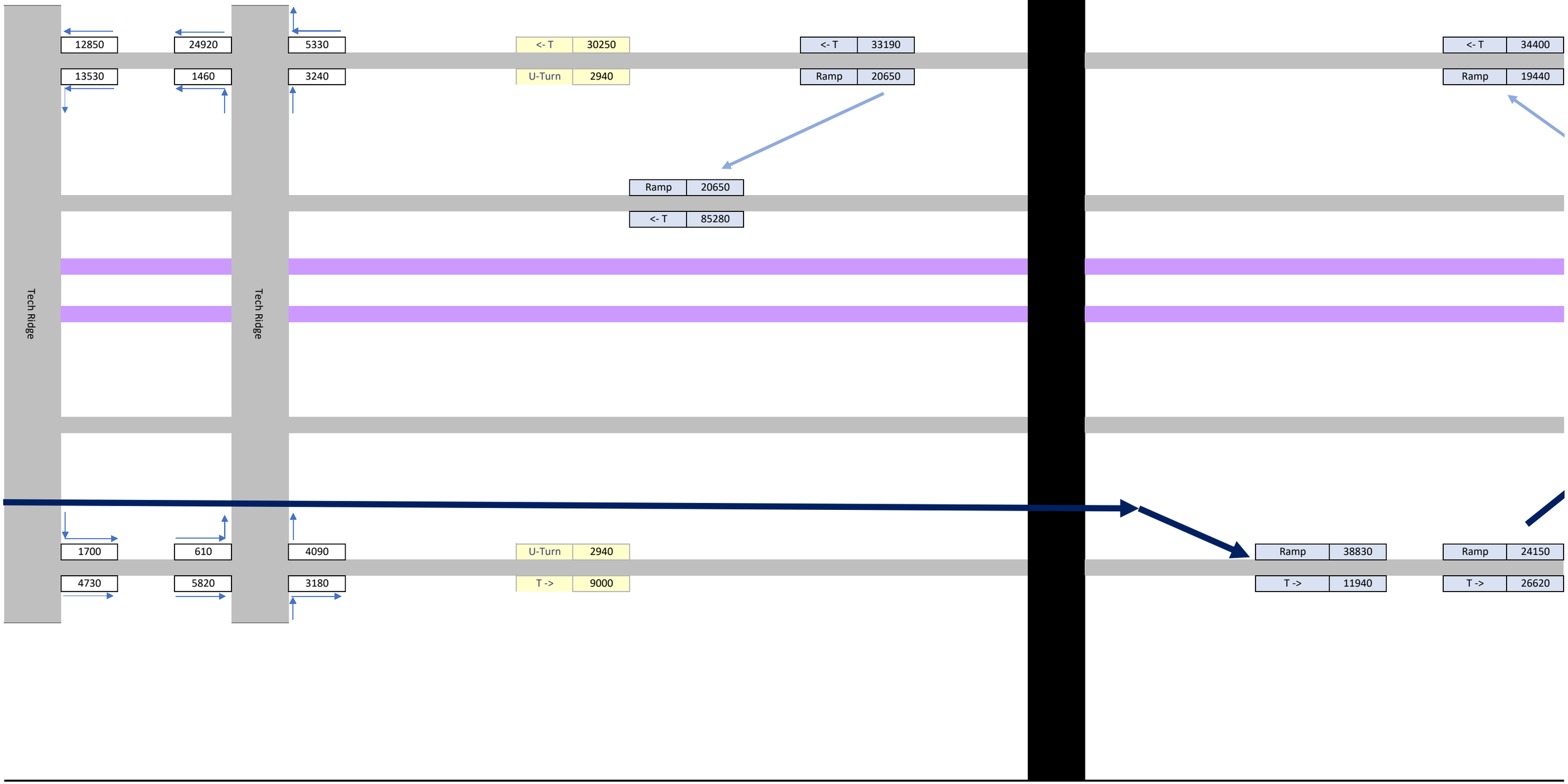

<- T
20640
U-Turn
2250
4180
28070
16460
6910
13600
9770
Ramp
36630
<- T
88540
US 183
US 183
74060
25860
16650
8500
U-Turn
2250
T ->
22900
16720
9060
18260
13840
9300
22800

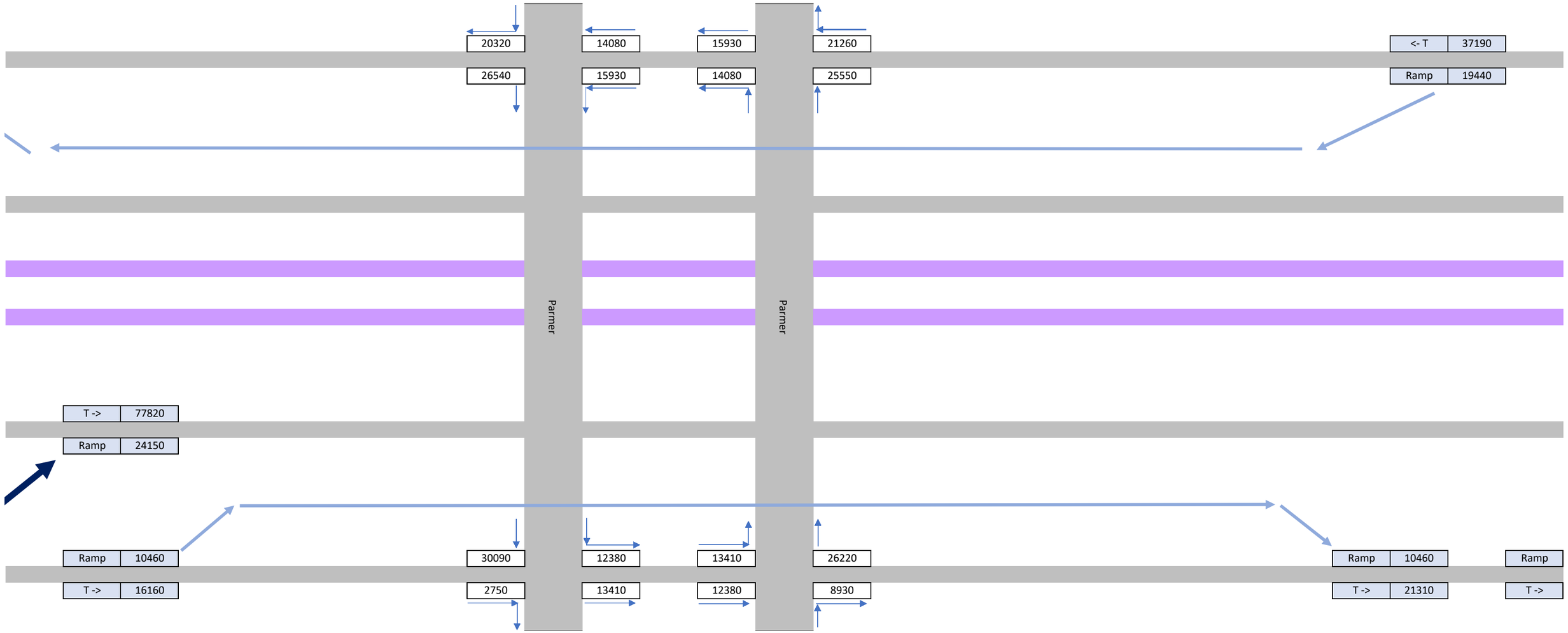

10900
17800
<- T
24500
U-Turn
6690
<- T
31190
Ramp
31460
<- T
62650
Ramp
5160
Ramp
6290
Ramp
13890
Ramp
31460
<- T
57080
Ramp
15020
<- T
57080
T ->
83870
Ramp
16050
T ->
83870
Ramp
9310
T ->
75250
Ramp
17930
18270
13030
U-Turn
6690
T ->
35830
Ramp
16050
T ->
42520
Ramp
25730
T ->
32840

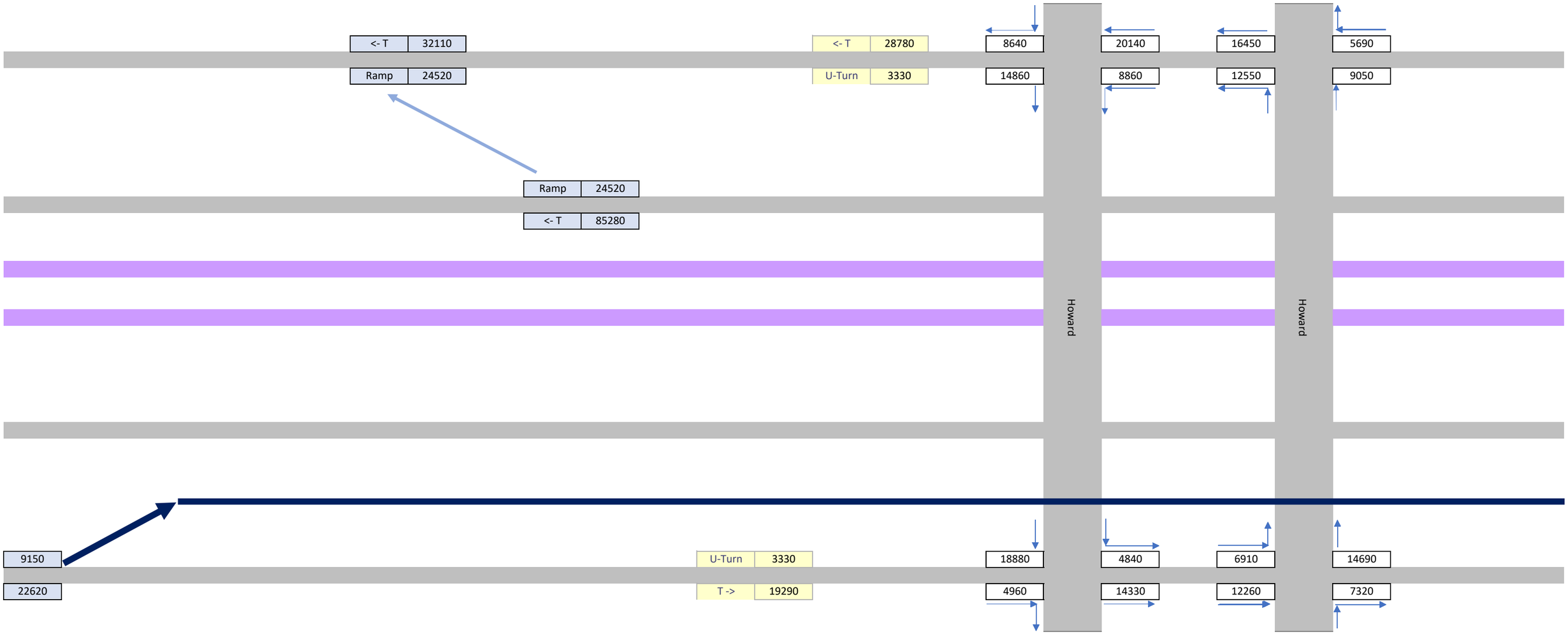

<- T
29610
Ramp
38200
<- T
15840
U-Turn
13770
8370
16010
7470
4840
8930
3380
2870
21480
<- T
11800
U-Turn
3210
Rundberg
Rundberg
U-Turn
13770
T ->
19070
13530
6030
7320
13040
11460
8900
13400
2020
U-Turn
3210
T ->
10920

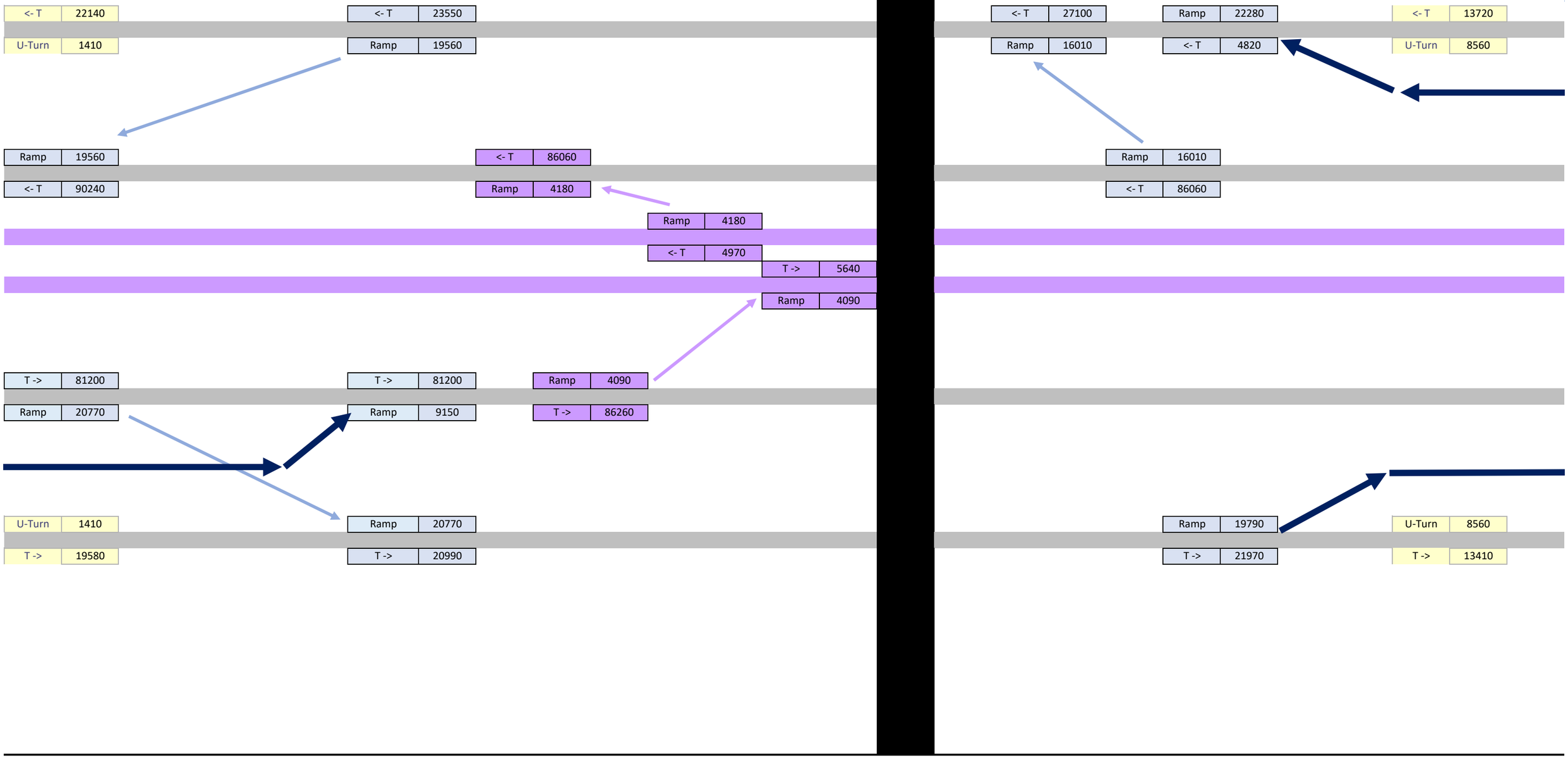

<- T 15010
Ramp 21740
<- T 20200
Ramp 16550
Ramp 16460
<- T 66840
<- T 66840
Ramp 5260
Ramp 16550
<- T 83300
Ramp 5260
<- T 4680
T-> 4180
Ramp 5550
T-> 75250
Ramp 25350
Ramp 5550
T-> 95050
T-> 95050
Ramp 12320
Ramp 18310
T -> 14130
Ramp 12320
T-> 20120
<- T 19400
U-Turn 800
U-Turn 800
T -> 19320
5350
14580
14050
8030
13560
8520
4200
18920
18430
5040
4180
14280
10270
8190
17170
7740
Braker Lane
Braker Lane

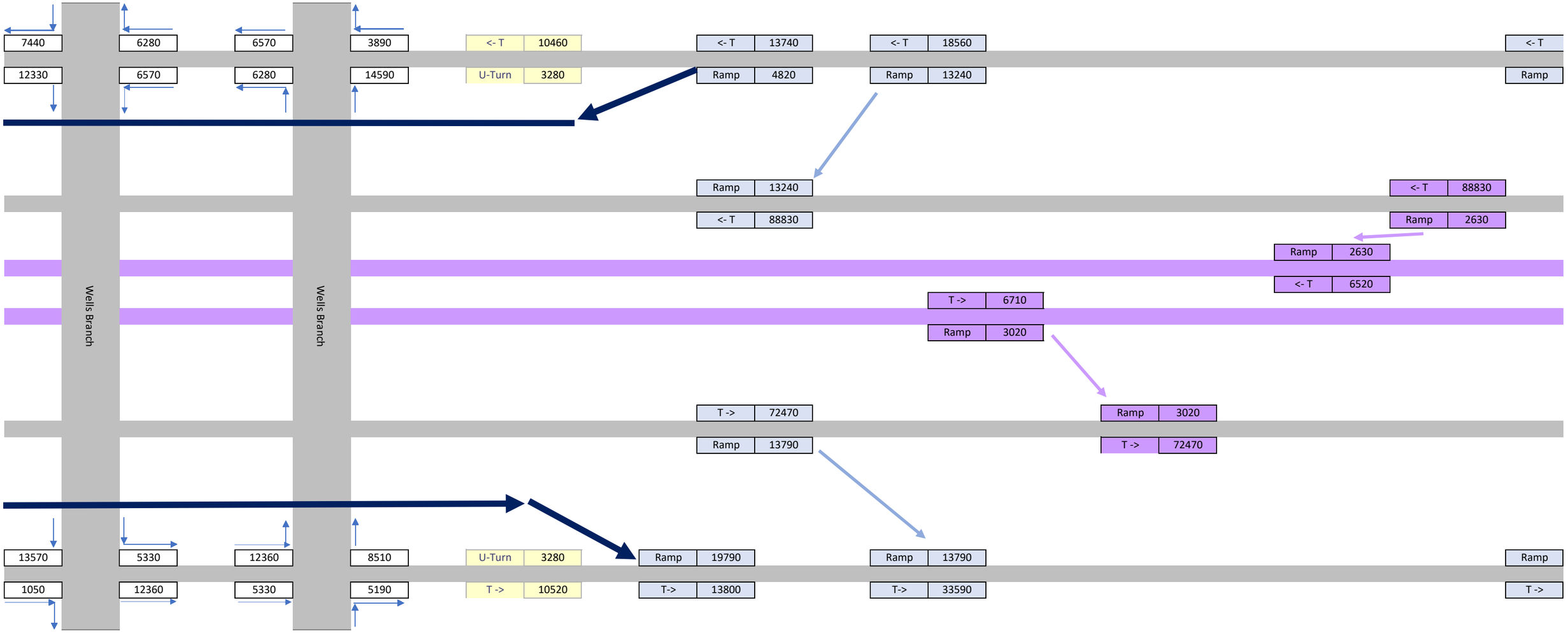

<- T 17760
<- T 6840
U-Turn 800
Ramp 11720
<- T 6840
Ramp 10610
<- T 13990
U-Turn 3460
1140
2650
Ramp 11720
<- T 99850
<- T 111570
Ramp 4970
Ramp 10610
<- T 105930
Ramp 4970
<- T 4970
T -> 5640
Ramp 4090
Ramp 4090
T -> 93820
Ramp 4090
T -> 93820
Ramp 13550
T -> 77820
Ramp 20090
Ramp 20090
Ramp 18740
U-Turn 800
T -> 15930
Ramp 13550
T -> 16730
Ramp 18740
T -> 11540
U-Turn 3460
T -> 8080
14480
3350

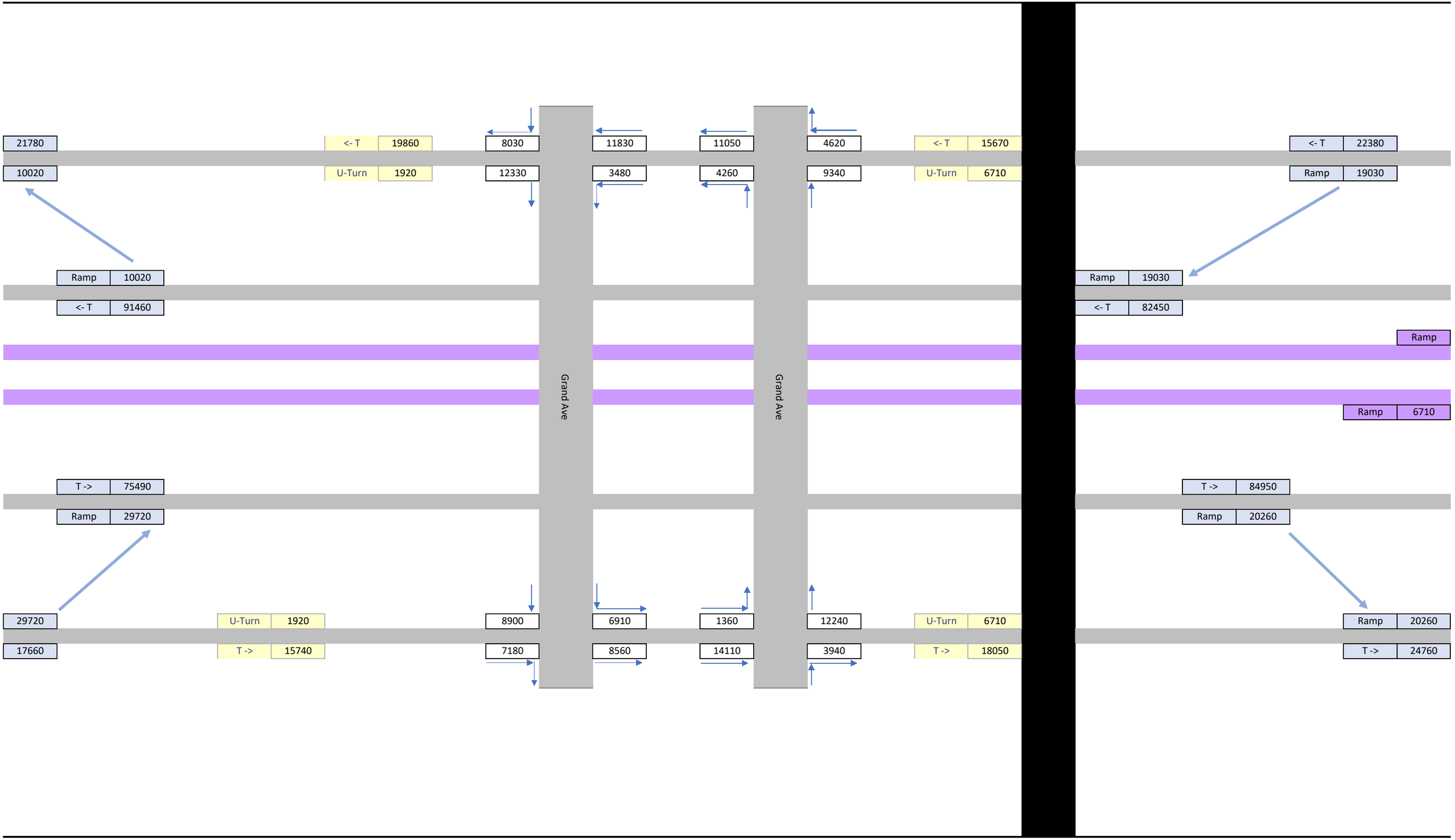

Tech Ridge
Tech Ridge
12850
24920
5330
<- T
30250
<- T
33190
<- T
34400
13530
1460
3240
U-Turn
2940
Ramp
20650
Ramp
19440
Ramp
20650
<- T
85280
1700
610
4090
U-Turn
2940
Ramp
38830
Ramp
24150
4730
5820
3180
T ->
9000
T ->
11940
T ->
26620

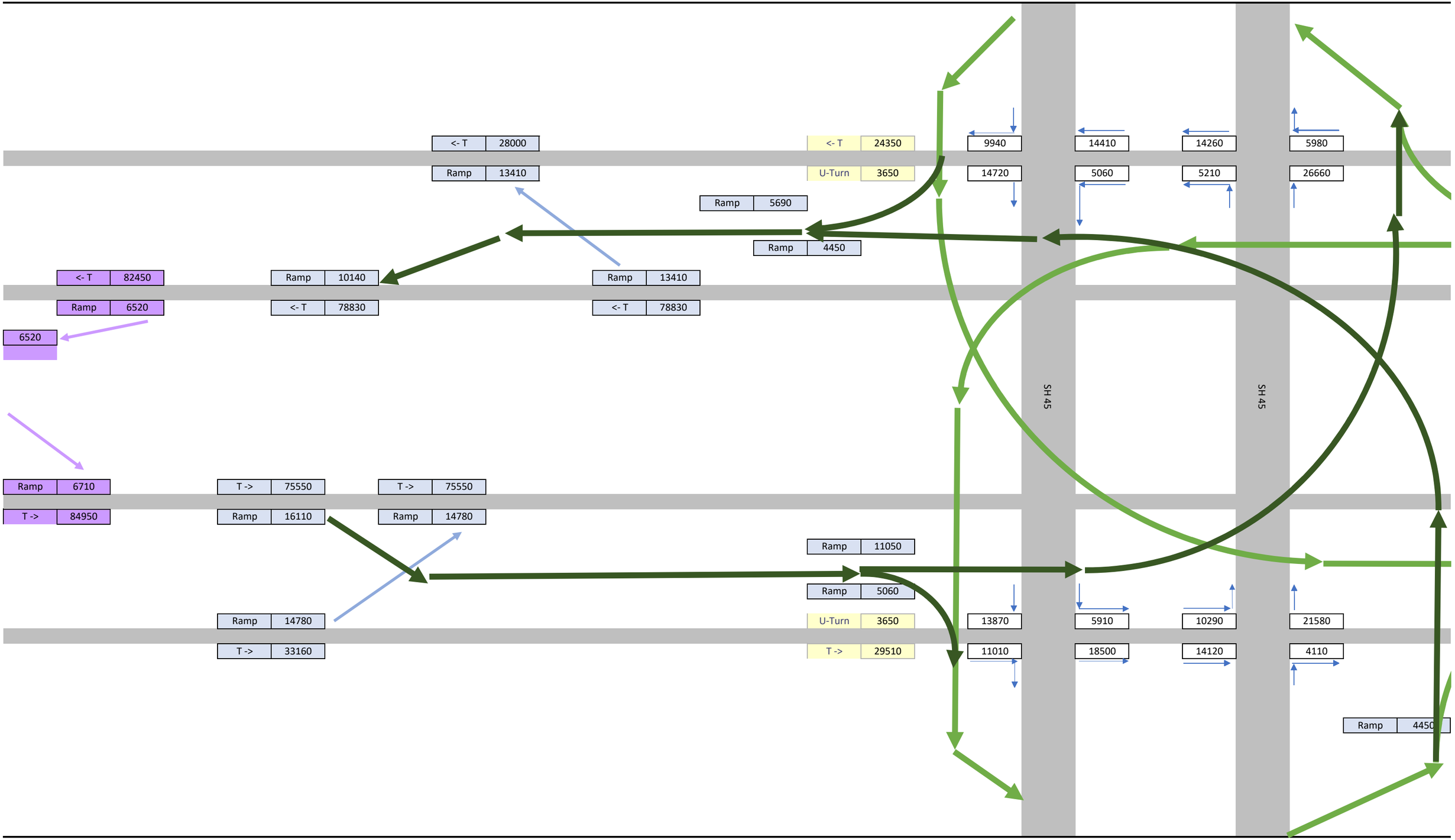

20320
14080
15930
21260
<- T
37190
26540
15930
14080
25550
Ramp
19440
Parmer
Parmer
T ->
77820
Ramp
24150
Ramp
10460
30090
12380
13410
26220
Ramp
10460
Ramp
T ->
16160
2750
13410
12380
8930
T ->
21310
T ->

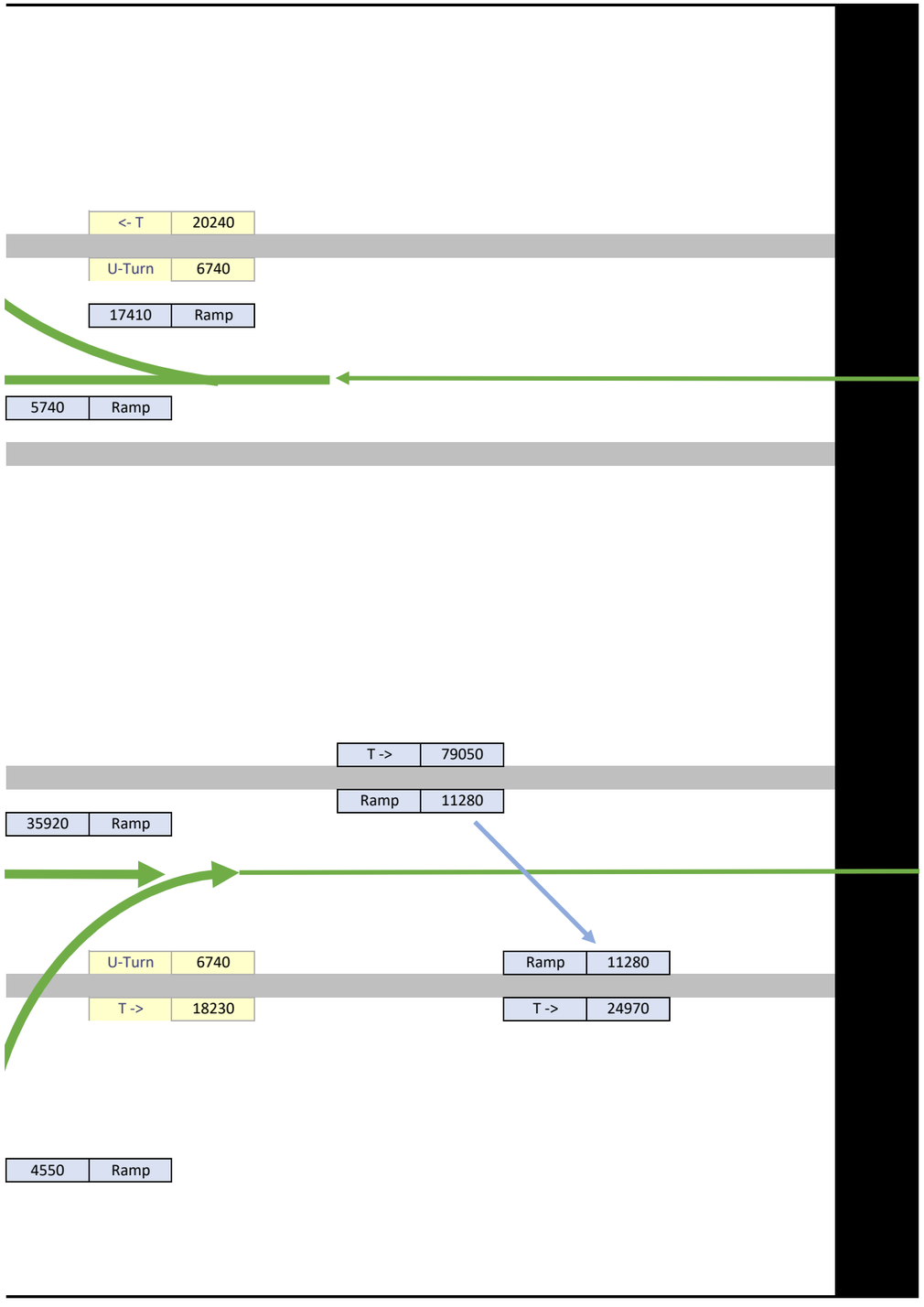

<- T
32110
Ramp
24520
<- T
28780
U-Turn
3330
8640
20140
16450
5690
14860
8860
12550
9050
Howard
Howard
Ramp
24520
<- T
85280
9150
22620
U-Turn
3330
T ->
19290
18880
4960
4840
14330
6910
12260
14690
7320


<- T 22140
U-Turn 1410
<- T 23550
Ramp 19560
Ramp 19560
<- T 90240
<- T 86060
Ramp 4180
Ramp 4180
<- T 4970
T -> 5640
Ramp 4090
T -> 81200
Ramp 20770
T -> 81200
Ramp 9150
Ramp 4090
T -> 86260
U-Turn 1410
T -> 19580
Ramp 20770
T -> 20990
<- T 27100
Ramp 16010
Ramp 22280
<- T 4820
<- T 13720
U-Turn 8560
Ramp 16010
<- T 86060
Ramp 19790
T -> 21970
U-Turn 8560
T -> 13410


7440
6280
6570
3890
<- T
10460
12330
6570
6280
14590
U-Turn
3280
<- T
13740
<- T
18560
<- T
Ramp
4820
Ramp
13240
Ramp
Ramp
13240
<- T
88830
<- T
88830
Ramp
2630
Ramp
2630
<- T
6520
T ->
6710
Ramp
3020
Ramp
3020
T ->
72470
T ->
72470
Ramp
13790
13570
5330
12360
8510
U-Turn
3280
Ramp
19790
Ramp
13790
Ramp
1050
12360
5330
5190
T ->
10520
T->
13800
T->
33590
T ->
Wells Branch
Wells Branch


21780
10020
<- T 19860
U-Turn 1920
8030
12330
11830
3480
11050
4260
4620
9340
<- T 15670
U-Turn 6710
<- T 22380
Ramp 19030
Ramp 10020
<- T 91460
Grand Ave
Grand Ave
Ramp 19030
<- T 82450
Ramp
Ramp 6710
T -> 75490
Ramp 29720
T -> 84950
Ramp 20260
29720
17660
U-Turn 1920
T -> 15740
8900
7180
6910
8560
1360
14110
12240
3940
U-Turn 6710
T -> 18050
Ramp 20260
T -> 24760


SH 45
SH 45
<- T 28000
Ramp 13410
<- T 24350
U-Turn 3650
9940
14720
14410
5060
14260
5210
5980
26660
Ramp 5690
Ramp 4450
<- T 82450
Ramp 6520
6520
Ramp 10140
<- T 78830
Ramp 13410
<- T 78830
Ramp 6710
T -> 84950
T -> 75550
Ramp 16110
T -> 75550
Ramp 14780
Ramp 14780
T -> 33160
Ramp 11050
Ramp 5060
U-Turn 3650
T -> 29510
13870
11010
5910
18500
10290
14120
21580
4110
Ramp 4450


<- T
20240
U-Turn
6740
17410
Ramp
5740
Ramp
T ->
79050
Ramp
11280
35920
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U-Turn
6740
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18230
Ramp
11280
T ->
24970
4550
Ramp

Updates since the May 2021 Public Hearing.

Traffic Noise Technical Report

I-35 Capital Express North Project

Travis and Williamson Counties, Texas
Austin District
CSJs: 0015-10-062 & 0015-13-389

June 2021

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT

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1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) Austin District proposes improvements to Interstate 35 (I-35) from State Highway 45 North (SH 45N) in Williamson County to US Highway 290 East (US 290E) in Travis County. The proposed improvements would add one non-tolled managed lane in each direction, reconstruct intersections and bridges to increase bridge clearances and east/west mobility, and improve bicycle and pedestrian accommodations along I-35 frontage roads and at east/west crossings. The project length is approximately 11.5 miles.

2.0 TRAFFIC NOISE ANALYSIS

This analysis was accomplished in accordance with TxDOT's (Federal Highway Administration [FHWA] approved) *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (2011).

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dB(A)."

Also, because traffic sound levels are never constant due to the changing number, type and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "Leq."

The traffic noise analysis process includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the following Noise Abatement Criteria (NAC), shown in **Table 1**, for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur.

Table 1: FHWA Noise Abatement Criteria (NAC)

Activity Category	FHWA dB(A) Leq	Activity Description
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential
C	67 (exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	–	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	–	Undeveloped lands that are not permitted.

Source: *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT 2011)

A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion - the predicted noise level at the receiver approaches, equals, or exceeds the NAC. "Approach" is defined as one dB(A) below the NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion - the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. "Substantially exceeds" is defined as more than 10 dB(A). For example: a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type, and speed of vehicles; highway alignment and

grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Table 2 and **Appendix B** shows the traffic data utilized in the I-35 Capital Express North traffic noise models. The vehicle breakdown percentages for each corresponding section of the project (shown in **Table 2**) were gathered from the data tables supplied by the TxDOT Transportation Planning & Programming (TPP) Division. As these data tables include the years of 2030 and 2050, a traffic line diagram was generated for the detailed traffic input with traffic volumes for the existing and design years of 2018 and 2038, respectively.

Table 2: Traffic Noise Analysis Parameters

Section/Type	Limits	Speed Limit	Design Hour Volume (K-Factor)	Average Annual Daily Traffic		Vehicle Distribution (%) DHV		
				2030	2050	Light Duty	Medium Duty	Heavy Duty
Main Lanes: Section 2	S of William Cannon to N of Rundberg	60 – 70 mph	5.9	245,200	305,900	96.0	1.1	2.9
Main Lanes: Section 3	N of Rundberg to N of Howard*	70 mph	7.1	209,150	274,500	95.7	1.0	3.3
Frontage Roads: Section 7	S of US 290 Ramps to N of US 290 Ramps	55 mph	7.1	59,050	71,850	97.5	1.7	0.8
Frontage Roads: Section 8	N of US 290 Ramps to N of US 183 Ramps	55 mph	7.1	80,850	91,450	97.8	1.4	0.8
Frontage Roads: Section 9	N of US 183 Ramps to S of Howard Ramps	55 mph	7.1	95,250	124,650	98.0	1.4	0.6
Frontage Roads: Section 10	S of Howard Ramps to N of Howard*	55 mph	7.1	84,000	110,150	97.8	1.4	0.8

Notes: The supplied traffic data includes the entire I-35 Capital Express corridor; however, the above table only includes those sections that are within the I-35 Capital Express North project.
*Assumes the extension to the north end of the project.

Existing and predicted traffic noise levels were modeled at receiver locations (see **Table 3** and **Appendix A**) that represent the land use activity areas adjacent to the project area that might be impacted by traffic noise and might potentially benefit from feasible and reasonable noise abatement. Receivers were placed closest to the ROW for locations having more than one area of frequent human activity. NAC category receivers based on interior noise levels were placed in a location closest to the proposed ROW, while still within the structural footprint.

Table 3: Traffic Noise Levels [dB(A) Leq]

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R1	Hotel	E	72	62	63	+1	N
R2	College	C	67	64	65	+1	N
R3	Restaurant	E	72	67	72	+5	Y
R5	Apartment	B	67	65	68	+3	Y
R6	Restaurant	E	72	71	77	+6	Y
R7	Restaurant	E	72	73	77	+4	Y
R8	Place of Worship	D	52	37	40	+3	N
R9	Apartment	B	67	68	71	+3	Y
R10	Restaurant	E	72	62	65	+3	N
R11	Hotel	E	72	69	71	+2	Y
R12	Cemetery	C	67	58	63	+5	N
R13	Medical Facility	D	52	33	37	+4	N
R14	School	C	67	65	68	+3	Y
R15	Apartment	B	67	69	75	+6	Y
R16	Apartment	B	67	72	75	+3	Y
R17	Apartment	B	67	73	75	+2	Y
R18	School	D	52	31	33	+2	N
R19	Restaurant	E	72	67	69	+2	N
R20	Place of Worship	D	52	29	32	+3	N
R21	Place of Worship	D	52	35	38	+3	N
R22	Cemetery	C	67	71	73	+2	Y
R23	Restaurant	E	72	71	74	+3	Y
R24	School	C	67	59	60	+1	N
R25	Restaurant	E	72	75	77	+2	Y
R26	Memorial	C	67	77	78	+1	Y
R27	Restaurant	E	72	65	69	+4	N

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R28	Restaurant	E	72	68	70	+2	N
R29	Hotel	E	72	62	67	+5	N
R30	Non-profit Institutional Structure	C	67	61	67	+6	Y
R31	Medical Facility	D	52	32	35	+3	N
R32	Restaurant	E	72	67	73	+6	Y
R33	Restaurant	E	72	67	72	+5	Y
R34	Hotel	E	72	67	69	+2	N
R35	Hotel	E	72	67	68	+1	N
R36	Hotel	E	72	67	68	+1	N
R37	Apartment	B	67	71	73	+2	Y
R38	Public Institutional Structure	C	67	75	76	+1	Y
R39	Non-profit Institutional Structure	D	52	31	34	+3	N
R40	Single Family Residential	B	67	71	72	+1	Y
R41	Place of Worship	D	52	38	39	+1	N
R42	Single Family Residential	B	67	73	74	+1	Y
R43	Single Family Residential	B	67	75	76	+1	Y
R44	Single Family Residential	B	67	70	72	+2	Y
R45	Single Family Residential	B	67	76	78	+2	Y
R46	Single Family Residential	B	67	72	76	+4	Y
R47	Single Family Residential	B	67	72	72	0	Y
R48	Apartment	B	67	71	76	+5	Y
R49	Hotel	E	72	74	75	+1	Y
R50	Place of Worship	D	52	32	35	+3	N
R51	Medical Facility	C	67	75	76	+1	Y
R52	Place of Worship	D	52	40	42	+2	N
R53	School	D	52	31	33	+2	N
R54	Hotel	E	72	69	70	+1	N
R55	Restaurant	E	72	71	72	+1	Y

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R56	Hotel	E	72	69	71	+2	Y
R57	Place of Worship	D	52	50	51	+1	Y
R58	Public Institutional Structure	D	52	38	39	+1	N
R59	Apartment	B	67	73	75	+2	Y
R60	Apartment	B	67	73	75	+2	Y
R61	Funeral Home	D	52	39	42	+3	N
R62	Hotel	E	72	73	76	+3	Y
R63	Public Institutional Structure	D	52	37	40	+3	N
R64	Medical Facility	D	52	39	42	+3	N
R65	Medical Facility	D	52	49	51	+2	Y
R66	Day Care	C	67	67	70	+3	Y
R67	Apartment	B	67	75	79	+4	Y
R68	Hotel	E	72	71	73	+2	Y
R69	Hotel	E	72	72	74	+2	Y
R70	Hotel	E	72	66	68	+2	N
R71	Hotel	E	72	71	73	+2	Y
R72	Hotel	E	72	69	72	+3	Y
R73	Apartment	B	67	74	79	+5	Y
R74	Public Institutional Structure	C	67	71	72	+1	Y
R75	Funeral Home	D	52	35	36	+1	N
R76	Hotel	E	72	67	69	+2	N
R77	Place of Worship	C	67	65	67	+2	Y
R78	Hotel	E	72	65	67	+2	N
R79	Restaurant	E	72	69	70	+1	N
R80	Single Family Residential	B	67	72	74	+2	Y
R81	Hotel	E	72	68	71	+3	Y
R82	Hotel	E	72	64	65	+1	N
R83	Hotel	E	72	63	63	0	N
R84	Hotel	E	72	69	71	+2	Y
R85	Restaurant	E	72	69	70	+1	N
R86	Restaurant	E	72	71	73	+2	Y
R87	Hotel	E	72	71	72	+1	Y

Receiver ID	Land Use	NAC Category	NAC Level	Predicted Traffic Noise Level [dB(A) Leq]			Noise Impact
				Existing (2018)	Predicted (2038)	Change (+/-)	
R88	Restaurant	E	72	70	70	0	N
R89	Hotel	E	72	69	69	0	N
R90	Restaurant	E	72	72	71	-1	Y
R91*	Apartment	B	67	72	75	+3	Y

Note: Per TxDOT's 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise*, an interior noise reduction factor of 25 dB(A) was applied to receivers R57 and R65, and an interior noise reduction factor of 35 dB(A) was applied to all other NAC category "D" receivers.

*R91 represents a new apartment development, Embrey Apartments. Future unit and porch locations were determined through development plans, which can be found in **Appendix C**

3.0 NOISE ABATEMENT MEASURES

As indicated in **Table 3**, the proposed project would result in a traffic noise impact; therefore, the following noise abatement measures were considered: traffic management, alteration of horizontal and/or vertical alignments, acquisition of undeveloped property to act as a buffer zone, and the construction of noise barriers.

Before any abatement measure can be proposed for incorporation into the proposed project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50% of impacted, first row receivers by at least five dB(A); and to be "reasonable," it must not exceed the cost-effectiveness criterion of $25,000 for each receiver that would benefit by a reduction of at least five dB(A) and the abatement measure must be able to reduce the noise level for at least one impacted, first row receiver by at least seven dB(A).

Traffic management - Control devices could be used to reduce the speed of the traffic; however, the minor benefit of one dB(A) per five mph reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.

Alteration of horizontal and/or vertical alignments - Any alteration of the existing alignment would displace existing businesses and residences, require additional ROW and not be cost effective/reasonable.

Buffer zone - The acquisition of undeveloped property to act as a buffer zone is designed to avoid rather than abate traffic noise impacts and, therefore, is not feasible.

Noise barriers - This is the most commonly used noise abatement measure. Noise barriers were evaluated for each of the impacted receiver locations.

A noise barrier would not be feasible and reasonable for the following impacted receivers and, therefore, is not proposed for incorporation into the proposed project:

Residences

R40, R44, R47, and R80: These receivers represent exterior areas at single, isolated residences located throughout the I-35 corridor. For each of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at these locations is not proposed for incorporation into the project.

R5 and R9: These receivers represent exterior areas (i.e., pools or balconies) at various apartment complexes located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R37: This receiver represents exterior balconies at an apartment complex located along the I-35 corridor. For this receiver, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

R16: This receiver represents an exterior apartment balcony. For this receiver, a noise barrier 20 feet in height would achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would not reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

Hotels/Motels

R11, R49, R56, R62, R68-R69, R71-R72, R81, R84, and R87: These receivers represent exterior areas (i.e., pools or seating areas) at various hotels and motels located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level

at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Restaurants/Businesses

R3, R6, R23, R25, R32, R55, R86, and R90: These receivers represent exterior dining areas at various restaurants and food trucks located throughout the I-35 corridor. For all of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R7: This receiver represents an outdoor seating area at a restaurant. A noise barrier 12 feet in height would achieve the minimum feasible reduction of five dB(A) and reduce the noise level by at least seven dB(A); however, the cost of the barrier would exceed the reasonableness criteria of $25,000 per benefitted receiver. Therefore, a barrier at this location is not proposed for incorporation into the project.

R33: This receiver represents an exterior dining area at a restaurant located along the I-35 corridor. For this receiver, a noise barrier 20 feet in height would achieve the minimum feasible reduction of five dB(A); however, the barrier would not reduce the noise level by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

Churches

R57 and R77: These receivers represent interior (R57) and exterior (R77 - playground) areas at two churches located throughout the I-35 corridor. For both of these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Schools

R14 and R66: These receivers represent a basketball court at Renaissance Academy (R14), and a playground area at Cedars International Academy (R66). For these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

Public Institutional Structures

R26: This receiver represents a seating area at a police memorial located on the west side of I-35 in front of the Walmart parking lot. A noise barrier 20 feet in height would achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers; however, the barrier would not reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at this location is not proposed for incorporation into the project.

R30 and R74: These receivers represent an outdoor seating area at the Boy Scouts of America facility (R30) and an outdoor seating area at the TxDOT Austin District campus (R74). For these receivers, a noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Therefore, a barrier at these locations is not proposed for incorporation into the project.

R38: This receiver represents a volleyball court at the Texas Commission on Environmental Quality campus. A noise barrier 10 feet in height would achieve the minimum feasible reduction of five dB(A) at greater than 50% of impacted, first row receivers and reduce the noise level at one or more receivers by at least seven dB(A). Based on the size of the average residential lot size of 0.30 acre in the corridor, it was determined that the equivalent number of receivers for the impacted exterior activity area is 1 receiver; thus, the feasible noise barrier of 388 feet in length and 10 feet in height would exceed the reasonableness criteria of $25,000 per benefitted receiver. Therefore, a barrier at this location is not proposed for incorporation into the project.

Medical Facilities

R51: This receiver represents an outdoor seating area at Everose Healthcare. A barrier could not be feasibly constructed at this location due to location of the driveway access. Therefore, a barrier at this location is not proposed for incorporation into the project.

R65: This receiver represents an interior location at The Source medical facility. A noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at the representative receiver or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at this location is not proposed for incorporation into the project.

Cemetery (R22): This receiver represents the centroid of the Memorial Hill Cemetery property. A noise barrier 20 feet in height would not achieve the minimum feasible reduction of five dB(A) at this receiver or achieve the noise reduction design goal of at least seven dB(A) at one or more receivers. Therefore, a barrier at this location is not proposed for incorporation into the project.

Noise barriers would be feasible and reasonable for the following impacted receivers and, therefore are proposed for incorporation into the proposed project (see **Table 4**):

Lantower Ambrosio Apartment Complex (R15): This receiver represents the Lantower Ambrosio Apartment complex located on the east side of I-35 south of Wells Branch Parkway. The representative receiver was placed on the outdoor porch of a first-row apartment building and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 510 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for 10 of the 15 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $146,880 and a total of 18 receivers were benefitted, at a cost of $8,160 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

The Vineyard Apartment Complex (R17): This receiver represents the Vineyard Apartment Complex on the east side of I-35 north of The Lakes Boulevard. The representative receiver was placed on the outdoor porch of a first-row apartment building and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 478 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for 12 of the 18 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $137,664 and a total of 21 receivers were benefitted, at a cost of $6,555 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

North Oaks Neighborhood (R42 – R43, and R45 - R46): These receivers represent the North Oaks residential neighborhood on the east side of I-35 north of Braker Lane. The representative receivers were placed in residential backyards, and additional first and second-row receivers were included in the barrier analysis. Based on preliminary calculations, a segmented barrier 2,837 feet in length and 16 feet tall would reduce noise levels by at least five dB(A) for 25 of the 31 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $817,056 and a total of 37 receivers were benefitted, at a cost of $22,082 per benefitted receiver. However, a segmented barrier 2,837 feet in length and 20 feet tall would reduce noise levels by at least five dB(A) for 25 of the 31 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of this barrier is $1,021,320 and a total of 42 receivers were benefitted, at a cost of $24,317 per benefitted receiver. Because a 20-foot wall would benefit more receivers, it is proposed for incorporation into the project at this location.

Cricket Hollow Apartment Complex (R48): This receiver represents the Cricket Hollow Apartment complex located on the east side of I-35 north of Plaza Drive. The representative receiver was placed on the porch of a 1st floor unit and additional receivers were placed on other 1st and 2nd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 205 feet in length and 16 feet in height would reduce noise levels by at least five dB(A) for seven of the eight impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $59,040 and a total of ten receivers were benefitted, at a cost of $5,904 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Starburst and Orbit Apartment Complexes (R59 and R60): These receivers represent the adjacent Starburst Apartment complex and Orbit Apartment complex located on the west side of I-35 south of Rundberg Lane. The representative receivers were placed on the outdoor porch of the first-row apartment buildings and additional receivers were placed on other 1st, 2nd, and 3rd story balconies for purposes of the barrier analyses. Though these apartments are on separate parcels, they were analyzed both together and separately for noise abatement. Because a wall would not be feasible for R59 in a standalone analysis, a combined barrier analysis is proposed for maximum abatement. Based on preliminary calculations, a segmented barrier totaling 912 feet in length and 20 feet in height would reduce noise levels by at least five dB(A) for 31 of the 52 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $328,320 and a total of 59 receivers were benefitted, at a cost of $5,565 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Woodland Heights Apartment Complex (R67): This receiver represents the Woodland Heights Apartment complex located on the west side of I-35 north of Powell Lane. The representative receiver was placed on the porch of a 1st floor unit and additional receivers were placed on other 1st and 2nd story balconies for purposes of the barrier analysis. Based on preliminary calculations, a barrier 453 feet in length and 14 feet in height would reduce noise levels by at least five dB(A) for 23 of the 38 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $114,156 and a total of 23 receivers were benefitted, at a cost of $4,963 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Towne Oaks 1 Apartment Complex (R73): This receiver represents the Towne Oaks 1 Apartment complex located on the west side of I-35 north of US 183. The representative receiver was placed at the community pool and additional receivers were placed on other 1st story porches for purposes of the barrier analysis. Based on preliminary calculations, a segmented barrier totaling 257 feet in length

and 10 feet in height would reduce noise levels by at least five dB(A) for two of the three impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $46,260 and a total of two receivers were benefitted, at a cost of $23,130 per benefitted receiver. Therefore, a barrier at this location is proposed for incorporation into the project.

Embrey Apartment Complex (R91): This receiver represents the Embrey Apartment complex currently being constructed on the east side of I-35 south of Tech Ridge Boulevard. The representative receiver was placed at the platted location of a first floor unit porch and additional receivers were placed on other first, second, third, and fourth story balconies for purposes of the barrier analysis. Based on preliminary calculations, a segmented barrier totaling 1,206 feet in length and 20 feet in height would reduce noise levels by at least five dB(A) at 31 of the 60 impacted, first-row receivers and reduce the noise level at one or more receivers by at least seven dB(A). The total cost of the barrier is $434,160 and a total of 31 receivers were benefitted, at a cost of $14,005 per benefitted receiver.

Table 4: Noise Barrier Proposal (preliminary)

Traffic Noise Barrier	Representative Receiver(s)	Total # Benefitted Receivers	Height (feet)	Length (feet)	Total Cost	Cost per Benefitted Receiver
Lantower Ambrosio Apartment Complex	R15	18	16	510	$146,880	$8,160
The Vineyard Apartment Complex	R17	21	16	478	$137,664	$6,555
North Oaks Neighborhood	R42-43, R45-R46	42	20	2,837	$1,021,320	$24,317
Cricket Hollow Apartment Complex	R48	10	16	205	$59,040	$5,904
Starburst and Orbit Apartment Complexes	R59, R60	59	20	912	$328,320	$5,565
Woodland Heights Apartment Complex	R67	23	14	453	$114,156	$4,963
Towne Oaks 1 Apartment Complex	R73	2	10	257	$46,260	$23,130
Embrey Apartment Complex	R91	31	20	1,206	$434,160	$14,005

Any subsequent project design changes may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barriers would not be made until completion of the project design, utility evaluation and polling of adjacent property owners. **Appendix A** depicts the representative noise receivers, as well as the proposed noise barriers that would benefit impacted receivers.

4.0 NOISE PLANNING

To avoid noise impacts that may result from future development of properties adjacent to the proposed project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following predicted (2038) noise impact contours (see **Table 5**).

Table 5: Traffic Noise Contours [dB(A) Leq]

Location	Distance from ROW	
	NAC Category B & C 66 dB(A)	NAC Category E 71 dB(A)
I-35 (east side) – 280 feet south of Picadilly Dr	>440 feet*	240 feet
I-35 (west side) – 275 feet north of Fleischer Dr	>180 feet*	180 feet
I-35 (east side) – 900 feet south of Ridge Blvd	540 feet	260 feet
I-35 (east side) – 135 feet south of Bowery Trl	>300 feet	220 feet
I-35 (east side) – 200 feet south of Ruby Dr	>200 feet*	120 feet
I-35 (west side) – 135 feet south of Starburst Apts	>300 feet	120 feet
I-35 (east side) – 65 feet south of Hermitage Dr	>220 feet*	160 feet
**Beyond the extent of the undeveloped parcel boundary*		

5.0 CONCLUSION

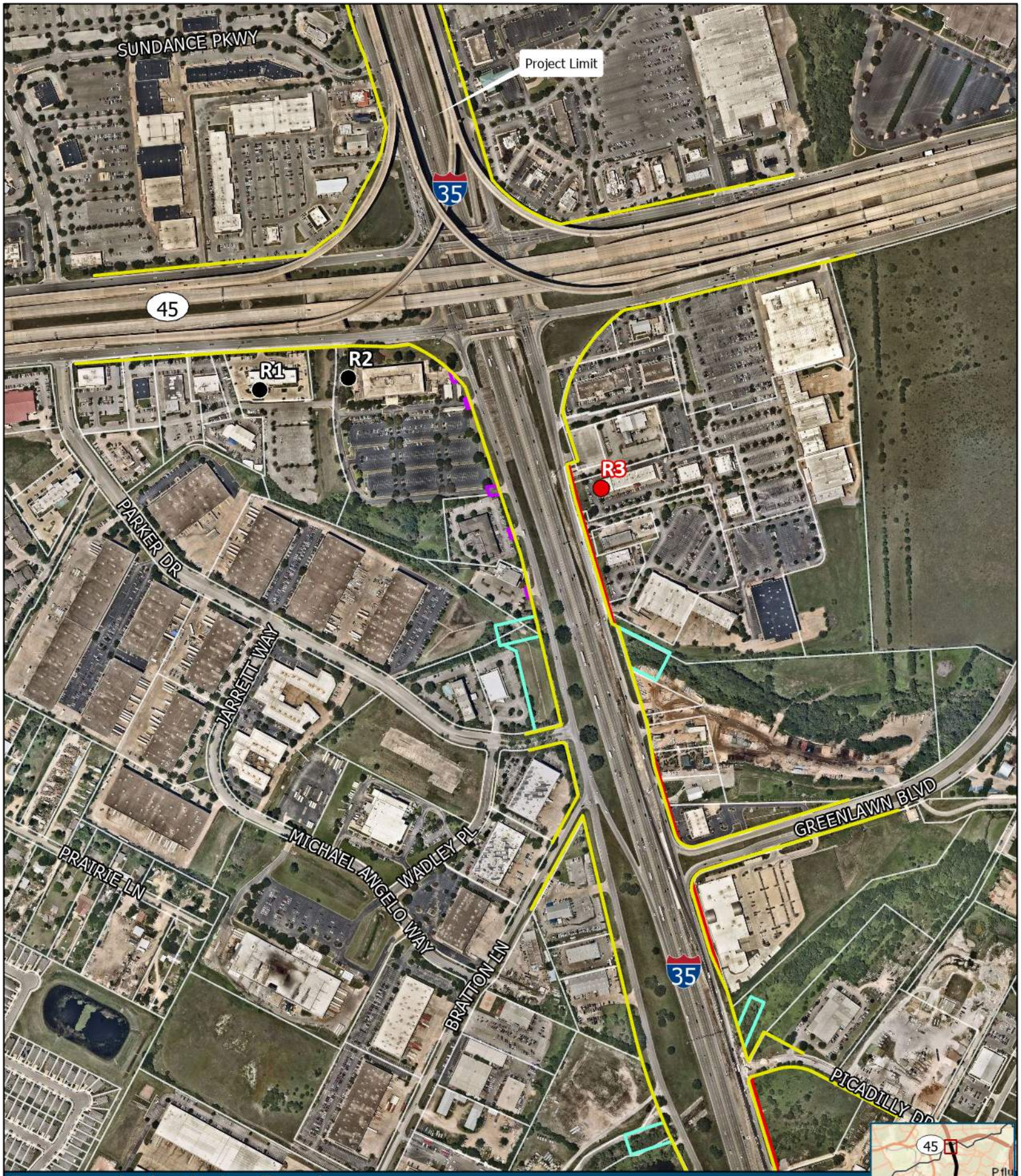
Based on this modeled noise analysis, there are 52 projected noise impacts at representative receivers within the corridor. Barrier analyses were conducted, and results indicated that a barrier would be feasible and reasonable for 12 of the impacted representative receivers.

Noise associated with the construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

A copy of this traffic noise analysis would be made available to local officials. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the proposed project.

APPENDIX A

REPRESENTATIVE NOISE RECEIVERS EXHIBIT



Representative Noise Receivers

Capital Express North Project

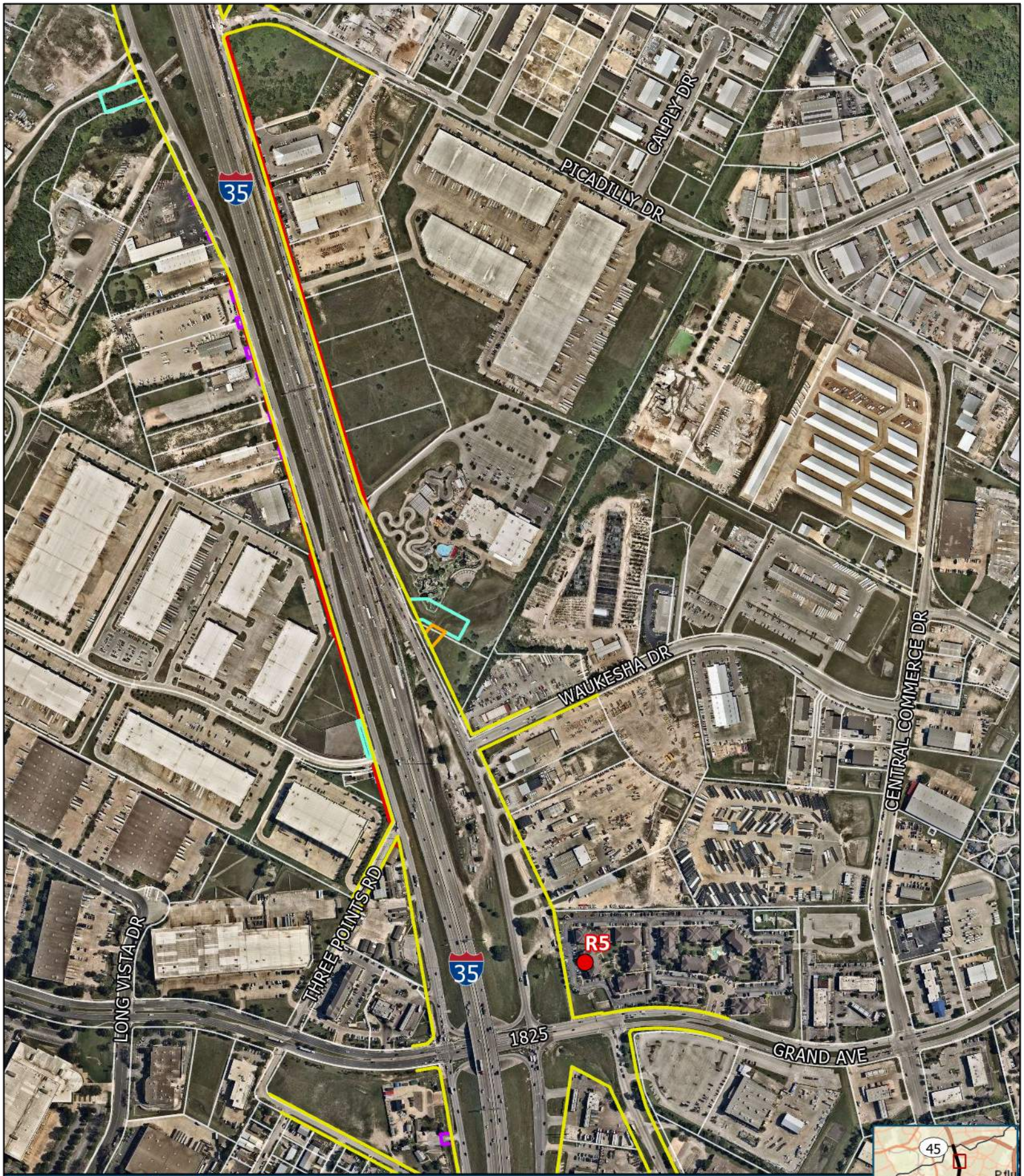
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 1 of 12

Source: Nearmap 2020



Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 2 of 12

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

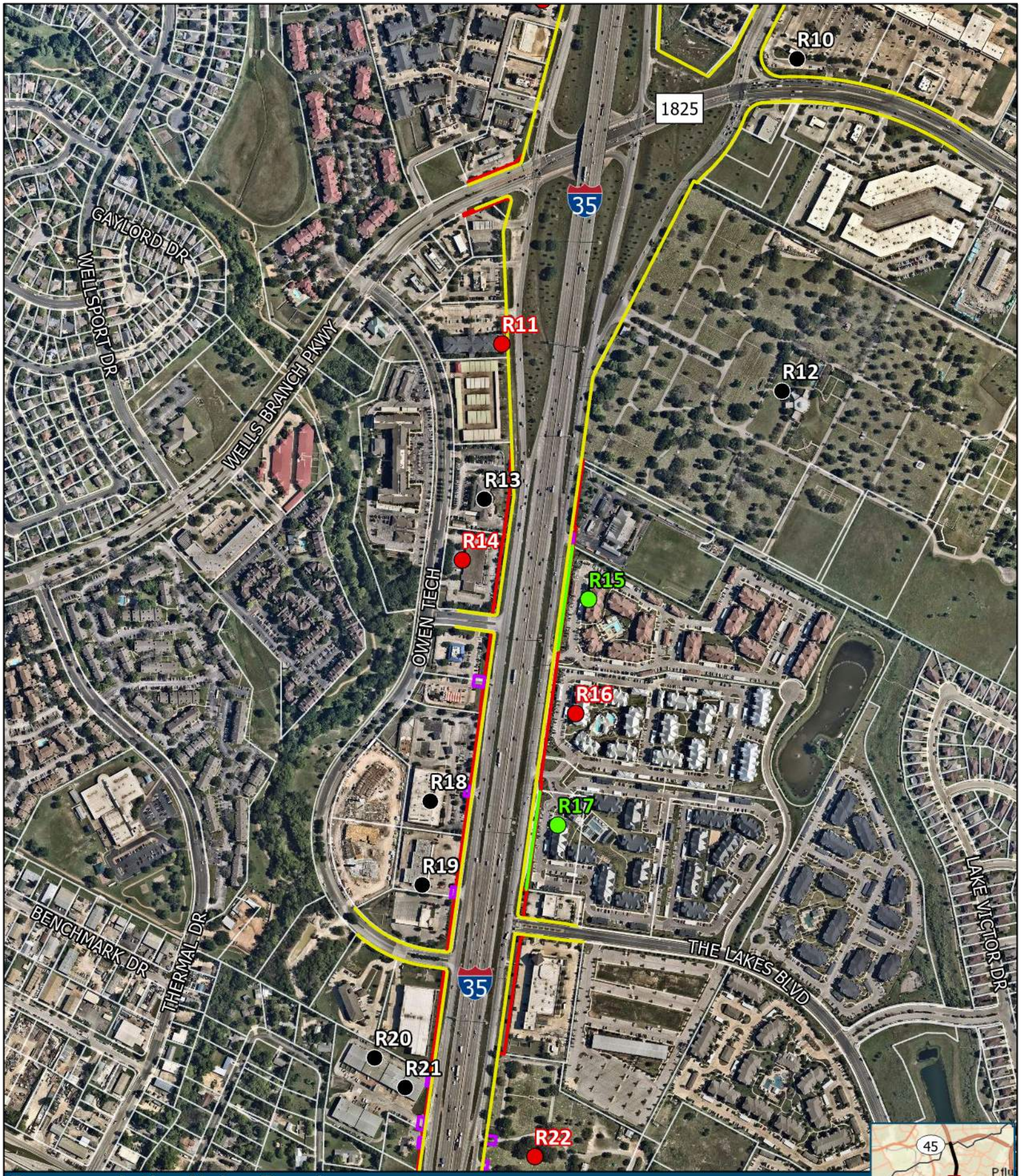
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 3 of 12

Source: Nearmap 2020



Representative Noise Receivers

Capital Express North Project

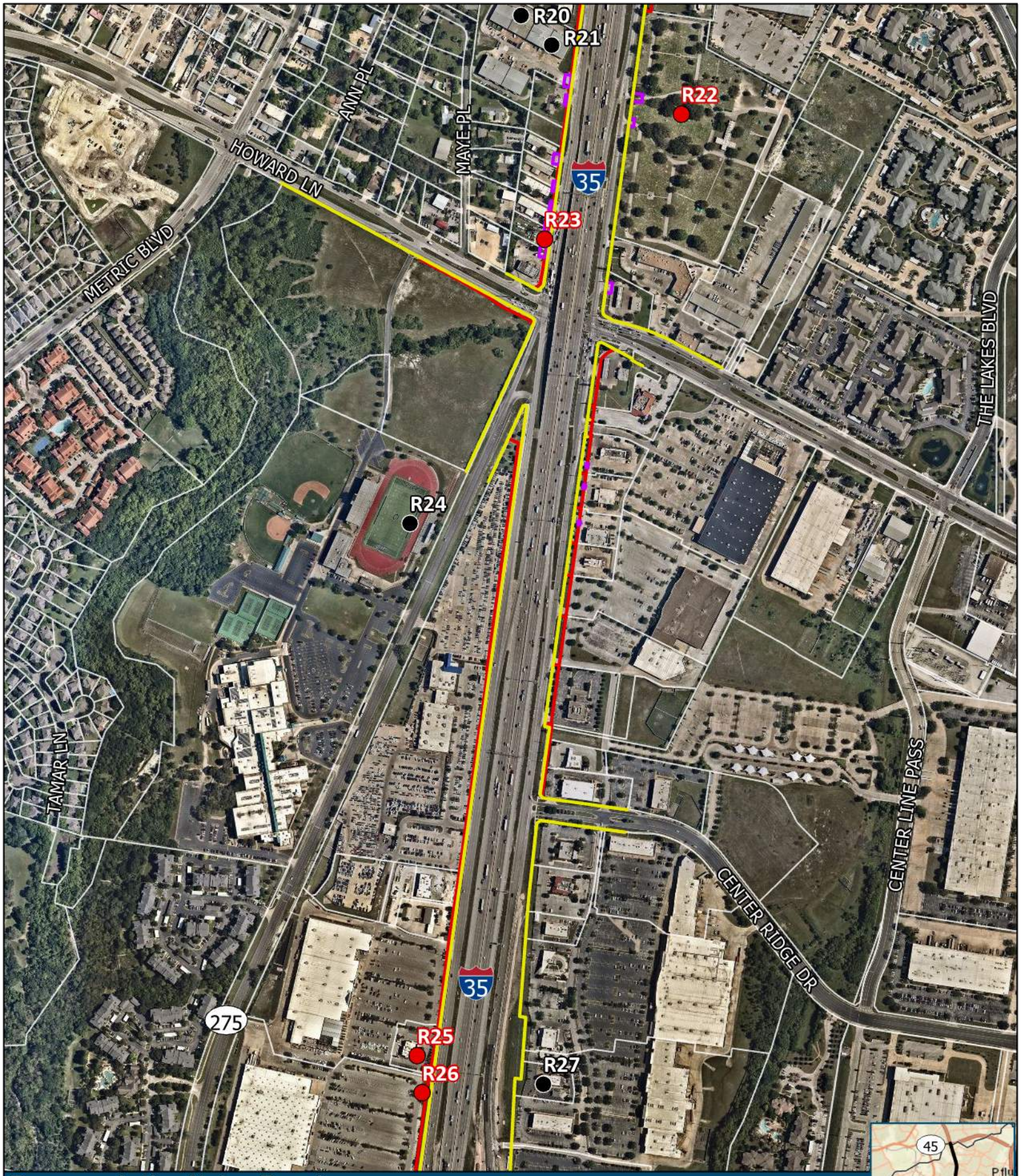
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 4 of 12

Source: Nearmap 2020



Representative Noise Receivers

Capital Express North Project

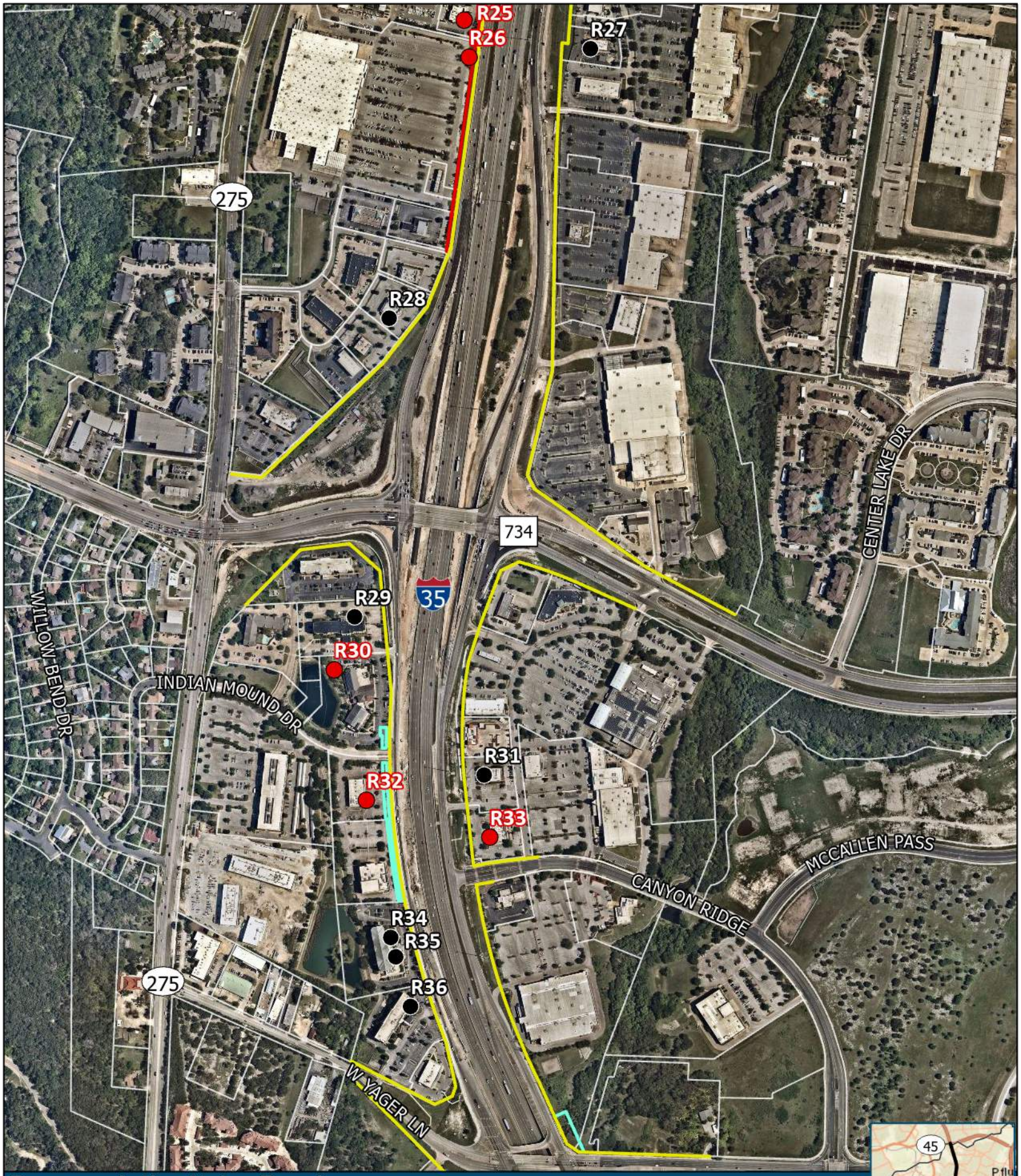
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 5 of 12

Source: Nearmap 2020



Representative Noise Receivers

Capital Express North Project

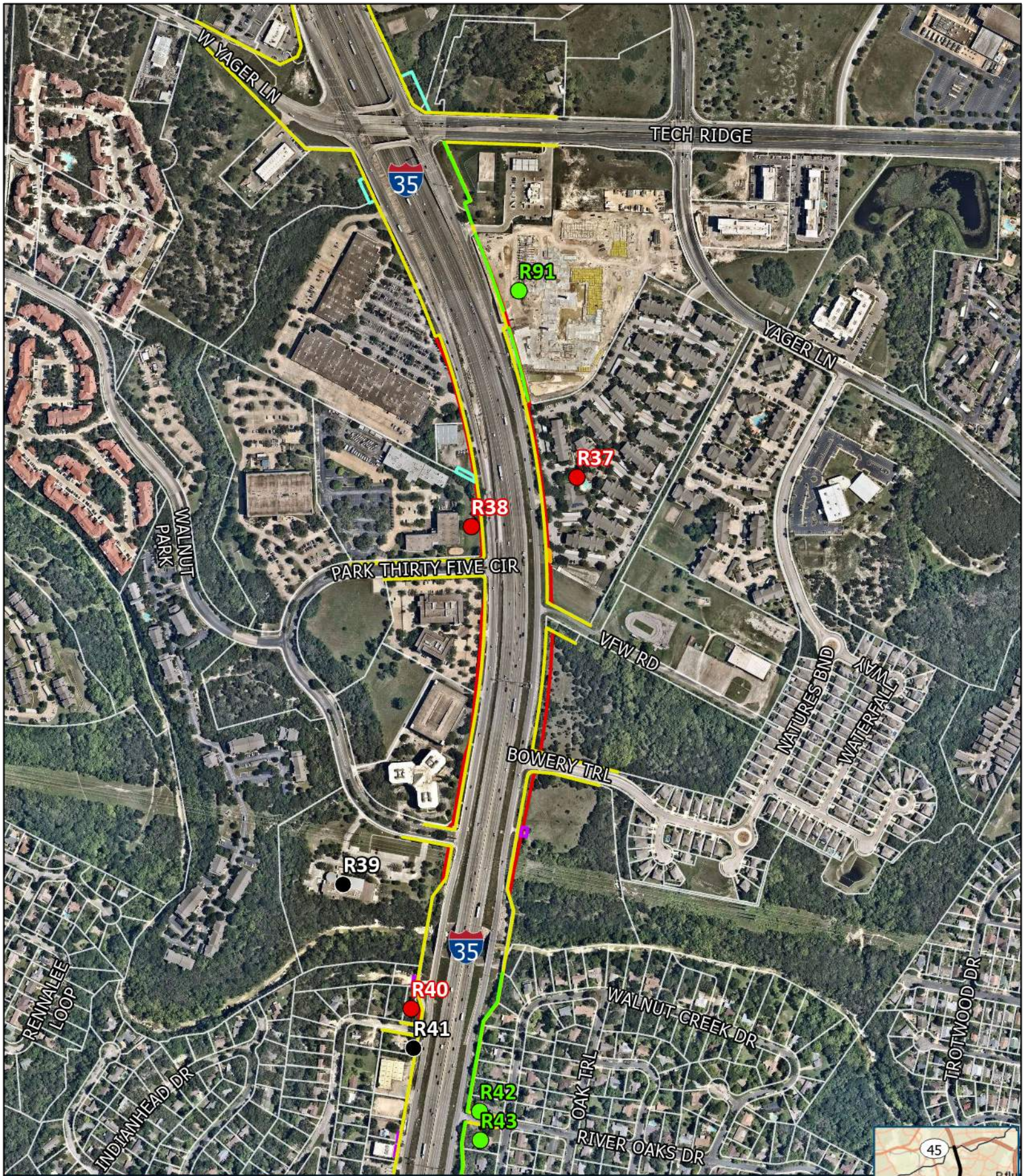
From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 6 of 12

Source: Nearmap 2020



Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 7 of 12

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 8 of 12

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 9 of 12

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 11 of 12

Source: Nearmap 2020

Representative Noise Receivers

Capital Express North Project

From SH 45N to US 290E
Travis & Williamson County, TX
CSJ: 0015-10-062 & 0015-13-389

- Existing ROW
- Proposed ROW
- Existing Drainage Easement
- Proposed Drainage Easement
- Driveway License Area
- Benefitted Receiver
- Impacted Receiver
- Non-Impacted Receiver
- Proposed Noise Barrier
- Parcel Boundary

Feet
0 250 500

Map 12 of 12

Source: Nearmap 2020

APPENDIX B

TRAFFIC DATA MEMO

TPP TRAFFIC DATA TABLES

FOR VEHICLE BREAKDOWN PERCENTAGES

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes)												
Section 1												
Mainlanes Cutline Section 1	181,550	238,300	51 - 49	7.0	10.3	4.6	0	0	0	3	0	8"
Travis County												

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	89.7	95.4
Medium Duty	1.8	0.8
Heavy Duty	8.5	3.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes)												
Section 1												
Mainlanes Cutline Section 1	181,550	262,450	51 - 49	7.0	10.3	4.6	0	0	0	3	0	8"
Travis County												

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 2 Mainlanes Cutline Section 2 Travis County	245,200	305,900	51 - 49	5.9	8.9	4.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	91.1	96.0
Medium Duty	2.5	1.1
Heavy Duty	6.4	2.9

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 2 Mainlanes Cutline Section 2 Travis County	245,200	336,300	51 - 49	5.9	8.9	4.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 3 Mainlanes Cutline Section 3 Travis County	209,150	274,500	55 - 45	7.1	9.6	4.3	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	90.4	95.7
Medium Duty	2.2	1.0
Heavy Duty	7.4	3.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Mainlanes) Section 3 Mainlanes Cutline Section 3 Travis County	209,150	302,200	55 - 45	7.1	9.6	4.3	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 1 Frontage Road Cutline Section 1 Travis County	9,300	12,200	51 - 49	7.0	4.1	3.1	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	95.9	96.9
Medium Duty	3.6	2.7
Heavy Duty	0.5	0.4

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 1 Frontage Road Cutline Section 1 Travis County	9,300	13,400	51 - 49	7.0	4.1	3.1	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 2 Frontage Road Cutline Section 2 Travis County	48,800	63,950	51 - 49	7.0	3.2	2.4	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.8	97.6
Medium Duty	2.8	2.1
Heavy Duty	0.4	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 2 Frontage Road Cutline Section 2 Travis County	48,800	70,450	51 - 49	7.0	3.2	2.4	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 3 Frontage Road Cutline Section 3 Travis County	78,900	103,550	51 - 49	7.0	2.6	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.4	98.0
Medium Duty	2.3	1.7
Heavy Duty	0.3	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 3 Frontage Road Cutline Section 3 Travis County	78,900	113,900	51 - 49	7.0	2.6	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 4 Frontage Road Cutline Section 4 Travis County	71,050	89,450	51 - 49	7.0	2.7	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.3	98.0
Medium Duty	2.4	1.8
Heavy Duty	0.3	0.2

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 4 Frontage Road Cutline Section 4 Travis County	71,050	98,350	51 - 49	7.0	2.7	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 5 Frontage Road Cutline Section 5 Travis County	48,400	60,200	51 - 49	5.9	3.2	2.4	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.8	97.6
Medium Duty	2.8	2.1
Heavy Duty	0.4	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 5 Frontage Road Cutline Section 5 Travis County	48,400	66,250	51 - 49	5.9	3.2	2.4	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 6 Frontage Road Cutline Section 6 Travis County	84,400	104,500	51 - 49	5.9	2.6	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.4	98.0
Medium Duty	2.3	1.7
Heavy Duty	0.3	0.3

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 6 Frontage Road Cutline Section 6 Travis County	84,400	112,550	51 - 49	5.9	2.6	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 7 Frontage Road Cutline Section 7 Travis County	59,050	71,850	55 - 45	7.1	3.3	2.5	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	96.7	97.5
Medium Duty	2.2	1.7
Heavy Duty	1.1	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 7 Frontage Road Cutline Section 7 Travis County	59,050	79,400	55 - 45	7.1	3.3	2.5	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 8 Frontage Road Cutline Section 8 Travis County	80,850	91,450	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.1	97.8
Medium Duty	1.9	1.4
Heavy Duty	1.0	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 8 Frontage Road Cutline Section 8 Travis County	80,850	100,000	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 9 Frontage Road Cutline Section 9 Travis County	95,250	124,650	55 - 45	7.1	2.7	2.0	0	0	0	3	0	8"

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.3	98.0
Medium Duty	1.8	1.4
Heavy Duty	0.9	0.6

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads) Section 9 Frontage Road Cutline Section 9 Travis County	95,250	137,150	55 - 45	7.1	2.7	2.0	0	0	0	3	0	8"

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Austin District

August 22, 2019

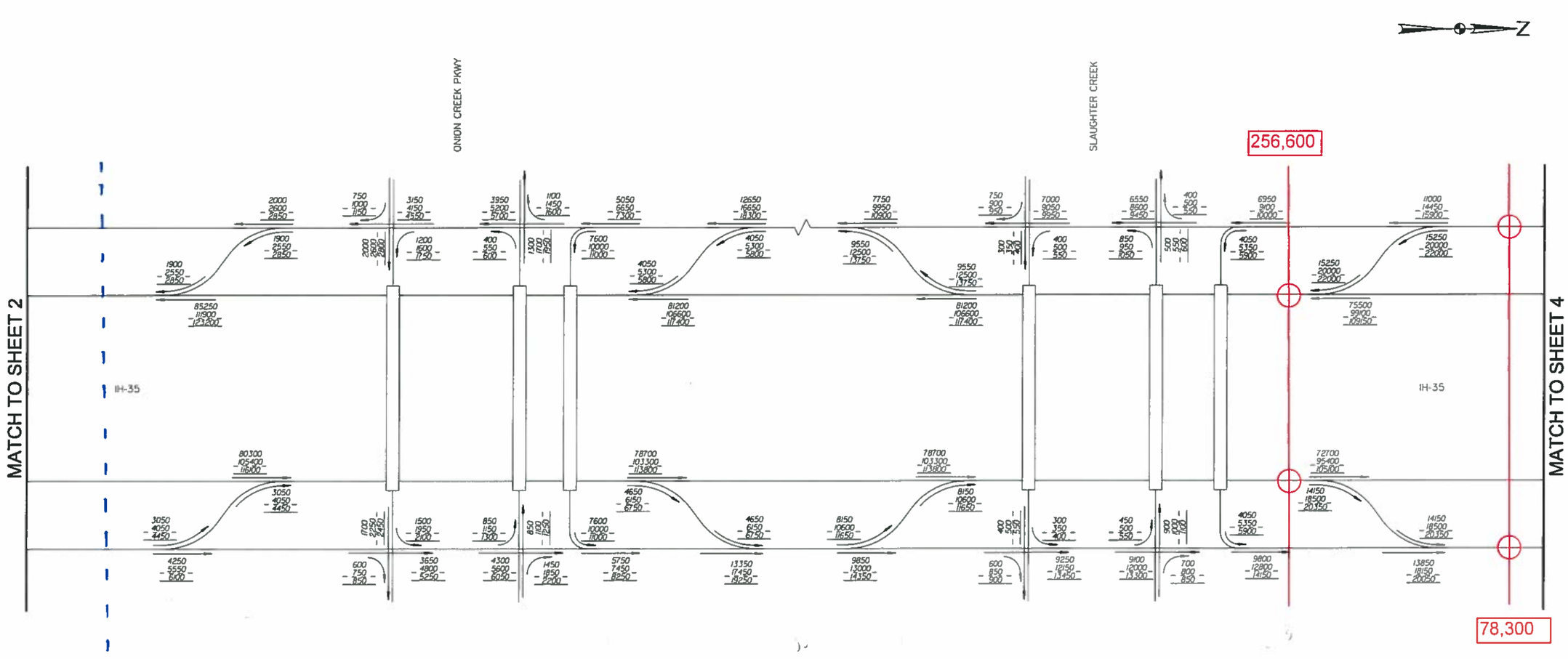
Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2050	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2030 to 2050) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads)												
Section 10												
Frontage Road Cutline Section 10	84,000	110,150	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"
Travis County												

Data for Use in Air & Noise Analysis

Vehicle Class	Base Year % of ADT	Base Year % of DHV
Light Duty	97.1	97.8
Medium Duty	1.9	1.4
Heavy Duty	1.0	0.8

Description of Location	Average Daily Traffic 2030	Average Daily Traffic 2060	Base Year Dir Dist %	Base Year K Factor	Base Year Percent Trucks ADT	Base Year Percent Trucks DHV	ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2030 to 2060) Flexible Pavement	S N	Rigid Pavement	SLAB
I-35 (Frontage Roads)												
Section 10												
Frontage Road Cutline Section 10	84,000	121,250	55 - 45	7.1	2.9	2.2	0	0	0	3	0	8"
Travis County												

NO-BUILD CONFIGURATION



Frontage RD
outline
Section 1

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE Transportation Group

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 3 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	3

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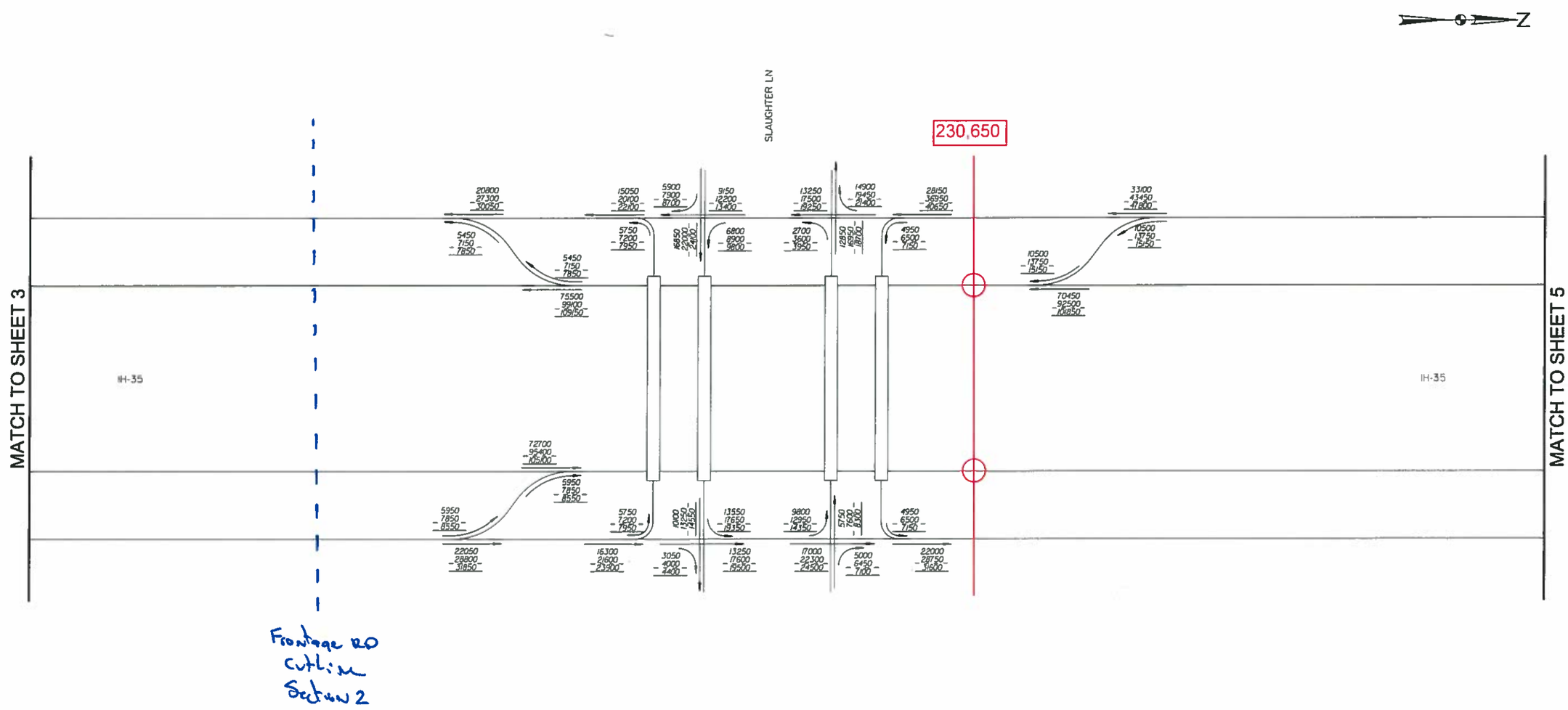
SECTION BREAKLINES

TO ACCOMPANY TPP TRAFFIC DATA TABLES

NO-BUILD CONFIGURATION



NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 4 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		

STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	4

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NO-BUILD CONFIGURATION

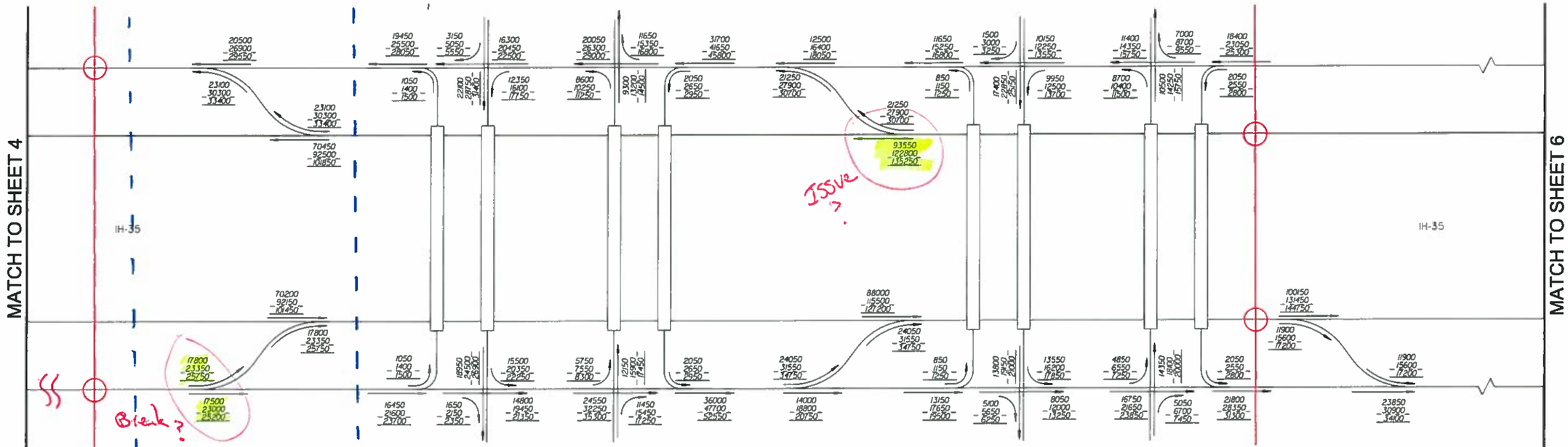
ML
Existing
Section 1

N

WILLIAM CANNON DR

STASSNEY LN

?
190,050



Block ?

113,900

Frontage Rd Outline
Section 3

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

ISSUE ?

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 5 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 5

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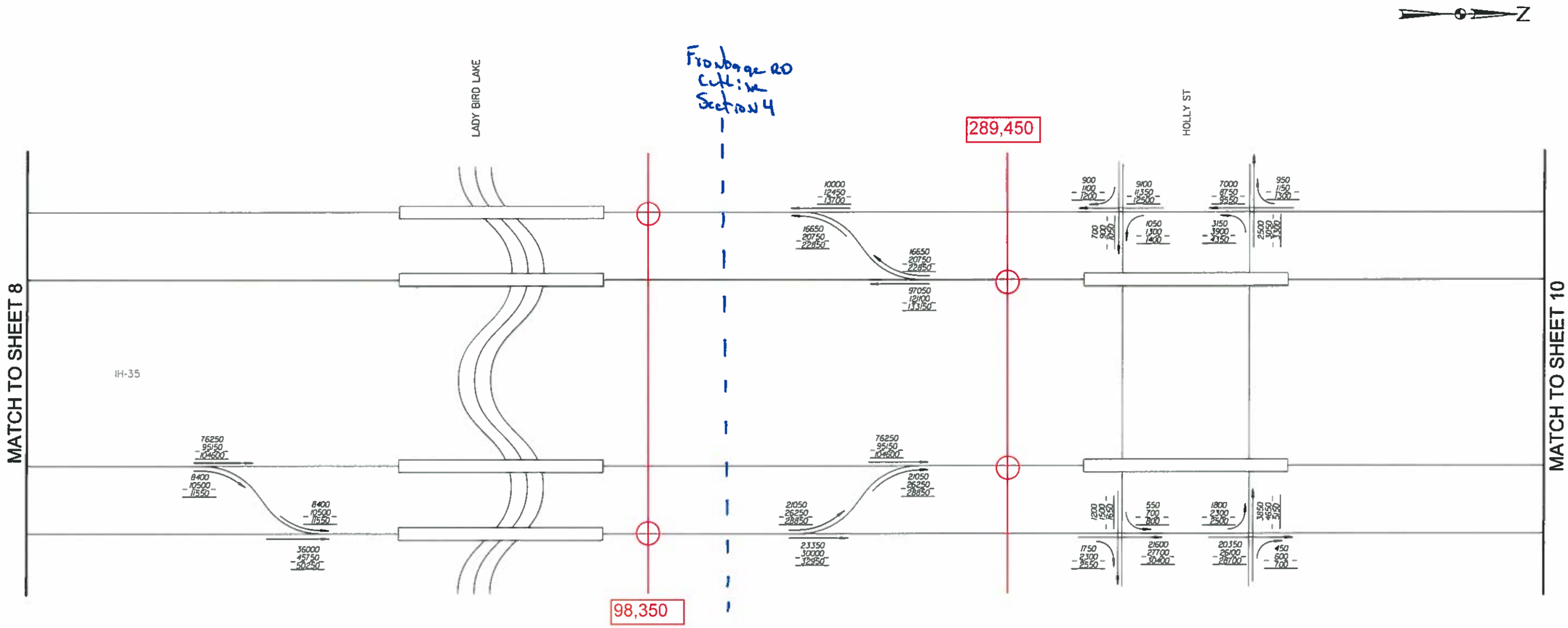
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 9 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 9

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NO-BUILD CONFIGURATION

30 > 20 growth Factor.

Frontage ao
within
Section 5

N

DEAN KEETON ST

32ND ST

MATCH TO SHEET 13

MATCH TO SHEET 15

IH-35 UD

IH-35 LD

IH-35 LD

IH-35 UD

IH-35 UD

IH-35 LD

IH-35 LD

IH-35 UD

12700 15850 17450

8750 10950 12000

58750 73300 80650

8750 10950 12000

5/500 64250 70650

1600 1950 2150

19850 24850 27100

400 5250 5850

200 2350 2600

19850 24850 27100

3050 3650 4250

1750 2150 2300

17750 22100 24300

5150 6400 7050

5/50 6400 7050

5/500 64250 70650

59250 73900 81250

11000 13750 15400

59550 74300 81650

4300 5450 5950

1950 2400 2600

18450 23000 25150

11000 13750 15400

20400 25350 27900

22750 28400 31250

4300 5400 5900

7050 8700 9550

14500 17950 19800

62,600

32ND ST

ML
within
Section 2

NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT

1000 - 2050 ADT

1000 - 2060 ADT

LD - LOWER DECK

UD - UPPER DECK

TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS

NO-BUILD CONFIGURATION

24 HOUR VOLUMES

(SHEET 14 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 14

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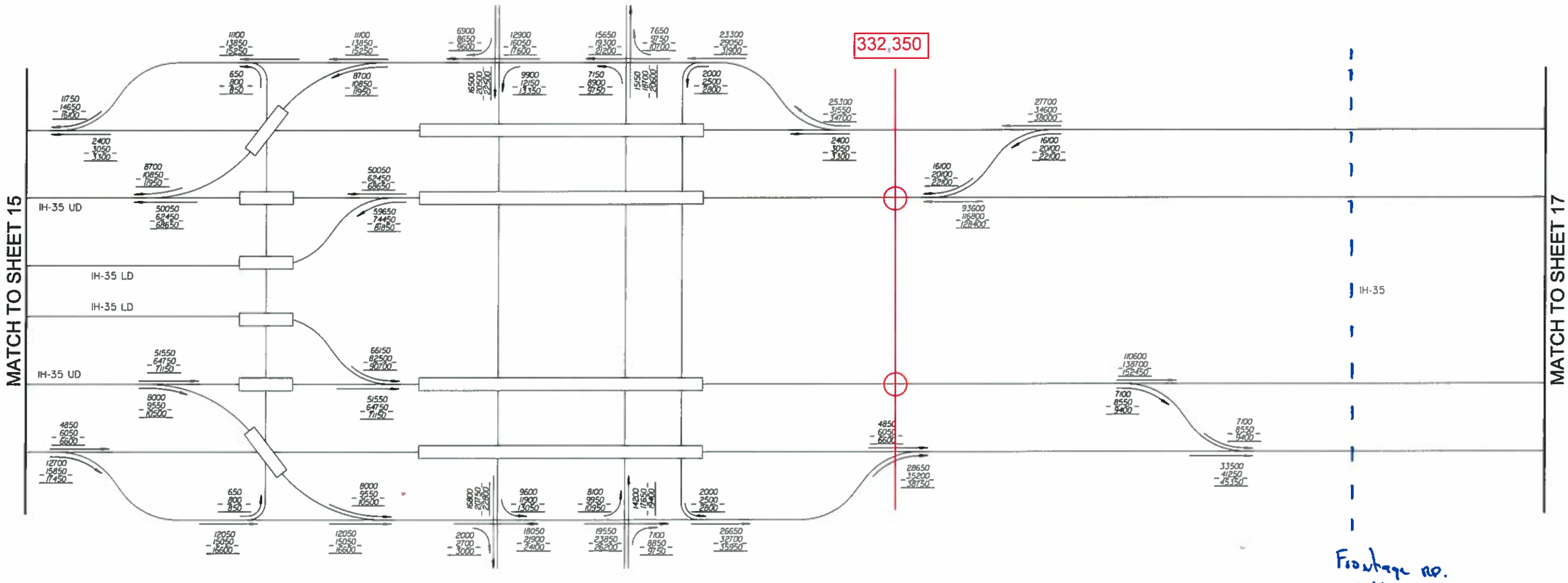
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 16 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 16

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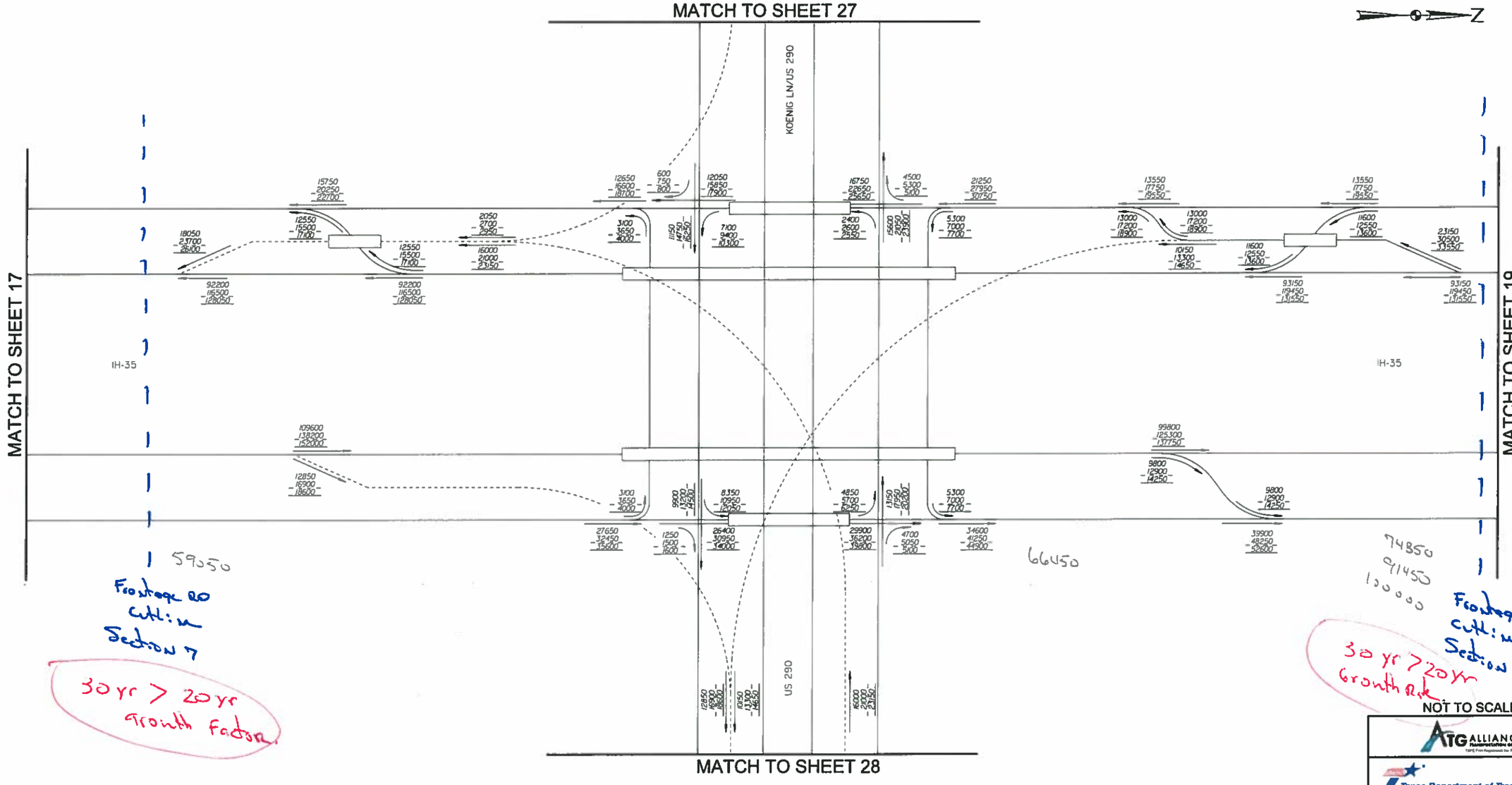
NO-BUILD CONFIGURATION



59050

Frontage RD cutline Section 7

30 yr > 20 yr growth factor

66450

74850
91450
100000

Frontage RD cutline Section 8

30 yr > 20 yr growth rate

NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 18 OF 28)

SCALE: N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 18

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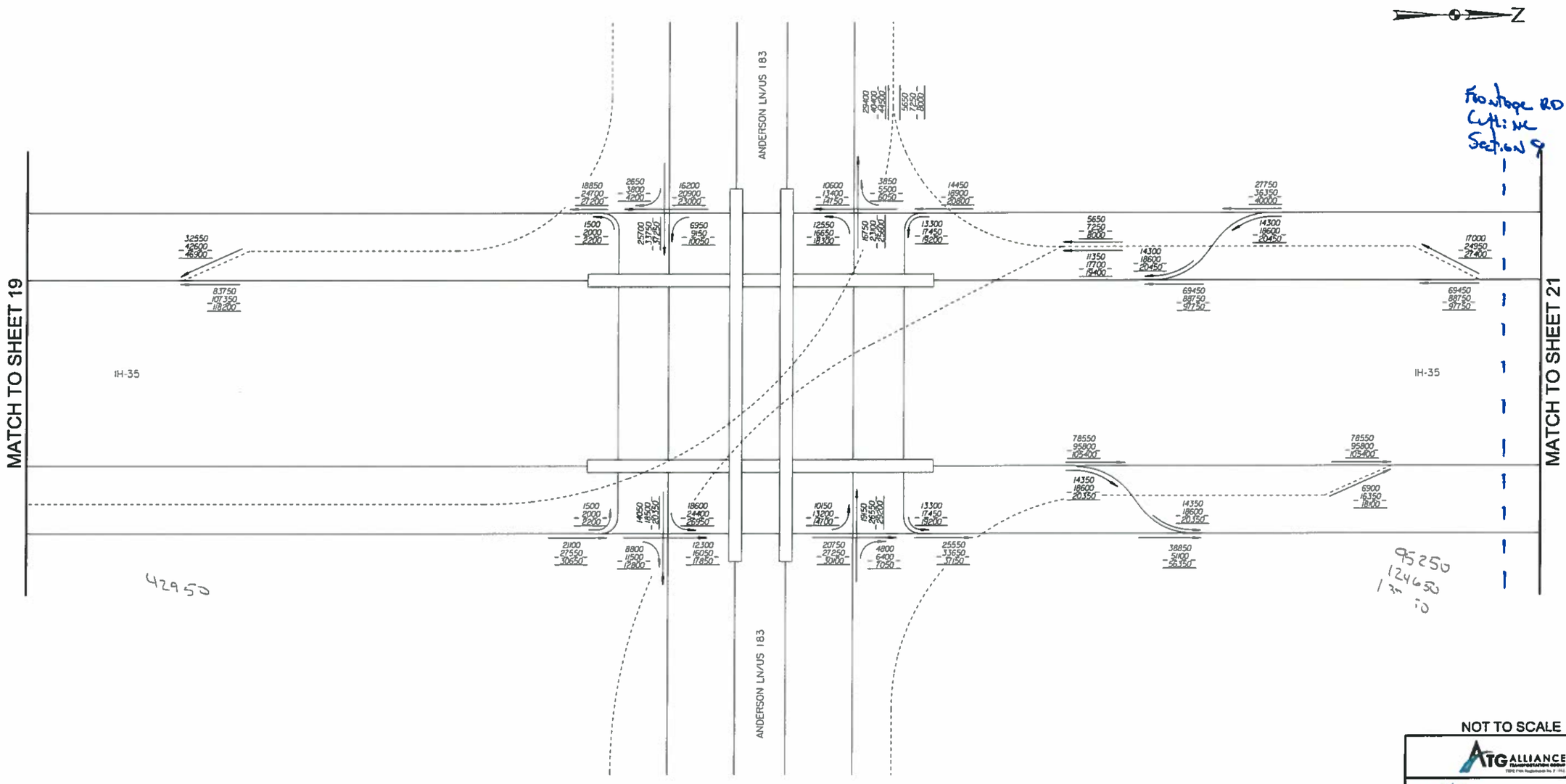
NO-BUILD CONFIGURATION



NOT TO SCALE

2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP

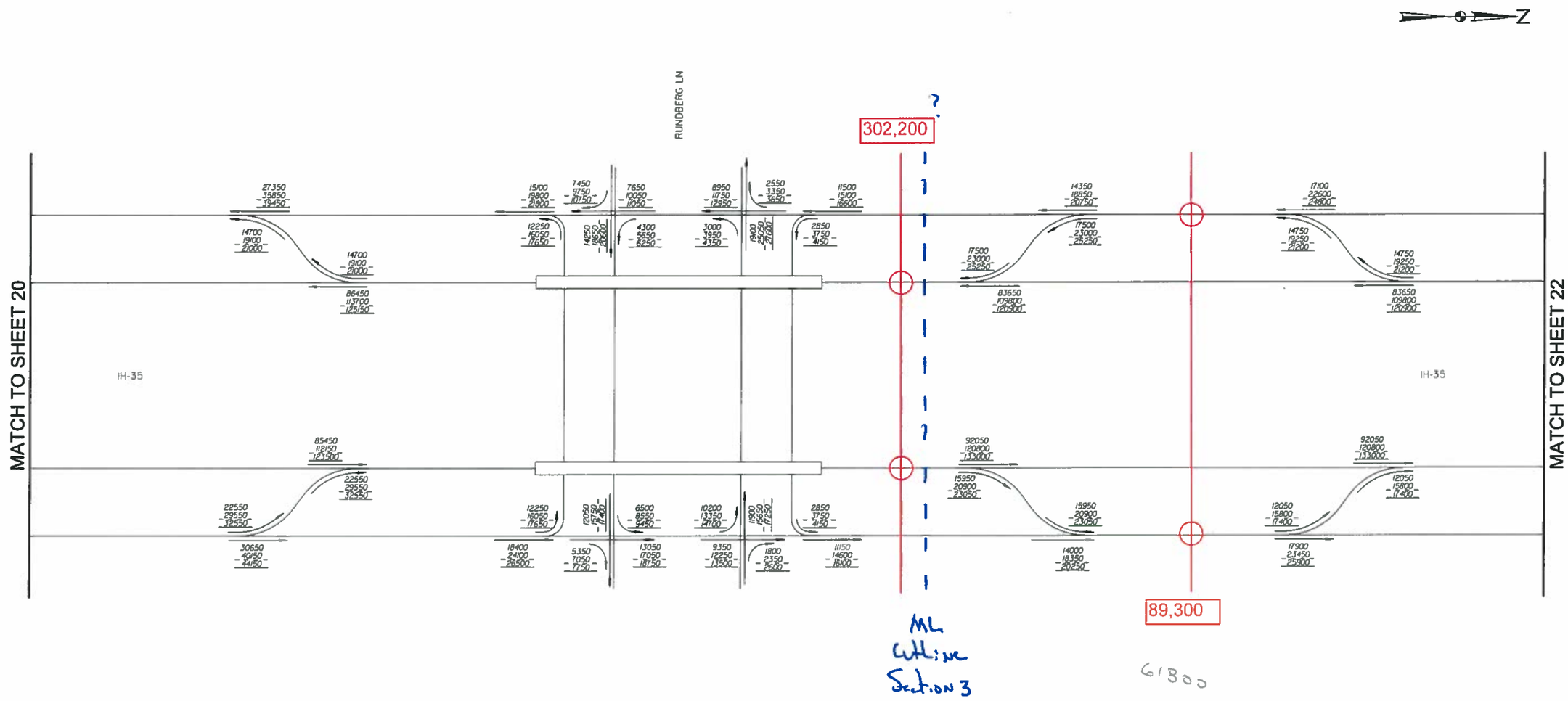
Texas Department of Transportation

CAPITAL EXPRESS

NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 20 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 20

NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 21 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	21

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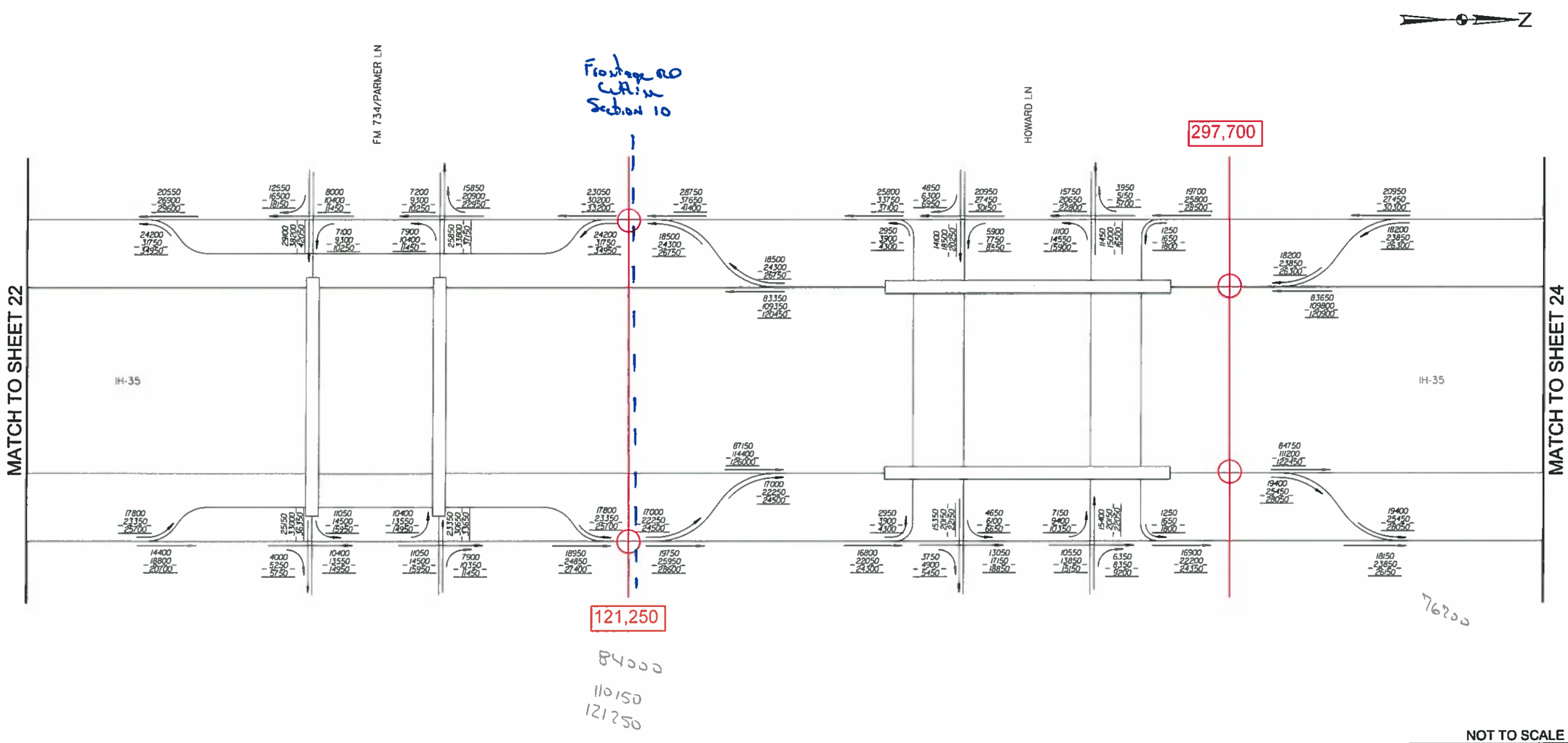
NO-BUILD CONFIGURATION



2030, 2050, 2060 FORECASTED NO-BUILD AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG CORRIDOR I-35 FROM MAIN ST TO HESTER'S CROSSING ROAD AND US 290 FROM AIRPORT BLVD TO US 183

DRAFT

LEGEND

1000 - 2030 ADT
1000 - 2050 ADT
1000 - 2060 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE

Texas Department of Transportation

CAPITAL EXPRESS
NO-BUILD CONFIGURATION
24 HOUR VOLUMES
(SHEET 23 OF 28)

SCALE: N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 23

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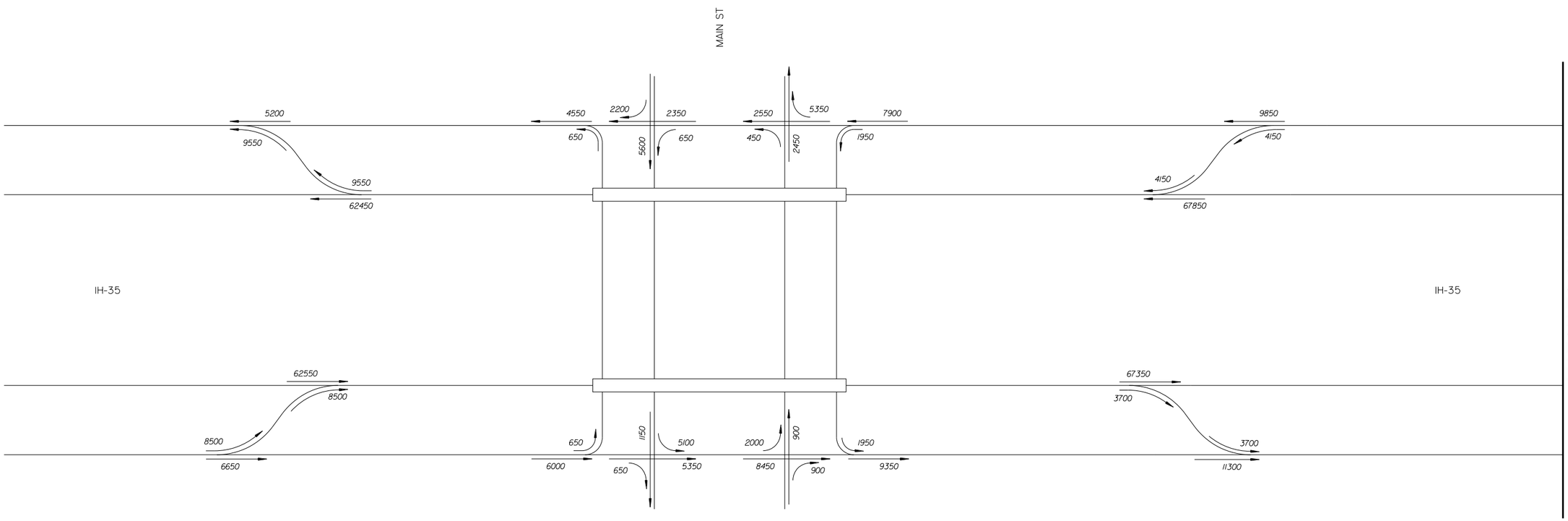
EXISTING (2018) TRAFFIC LINE DIAGRAM

FOR DETAILED TRAFFIC INPUT

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 1 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	HAYS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	1

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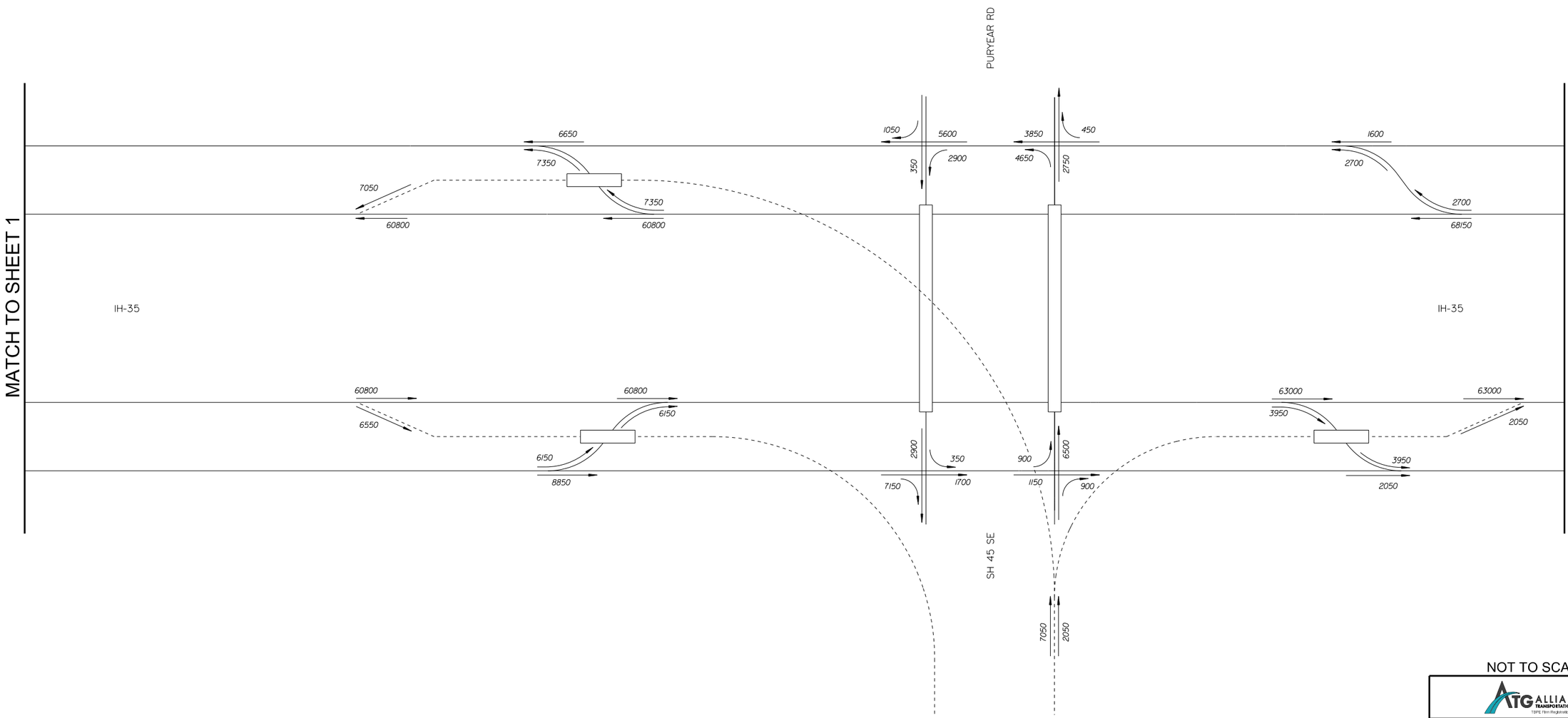
2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 2 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	2

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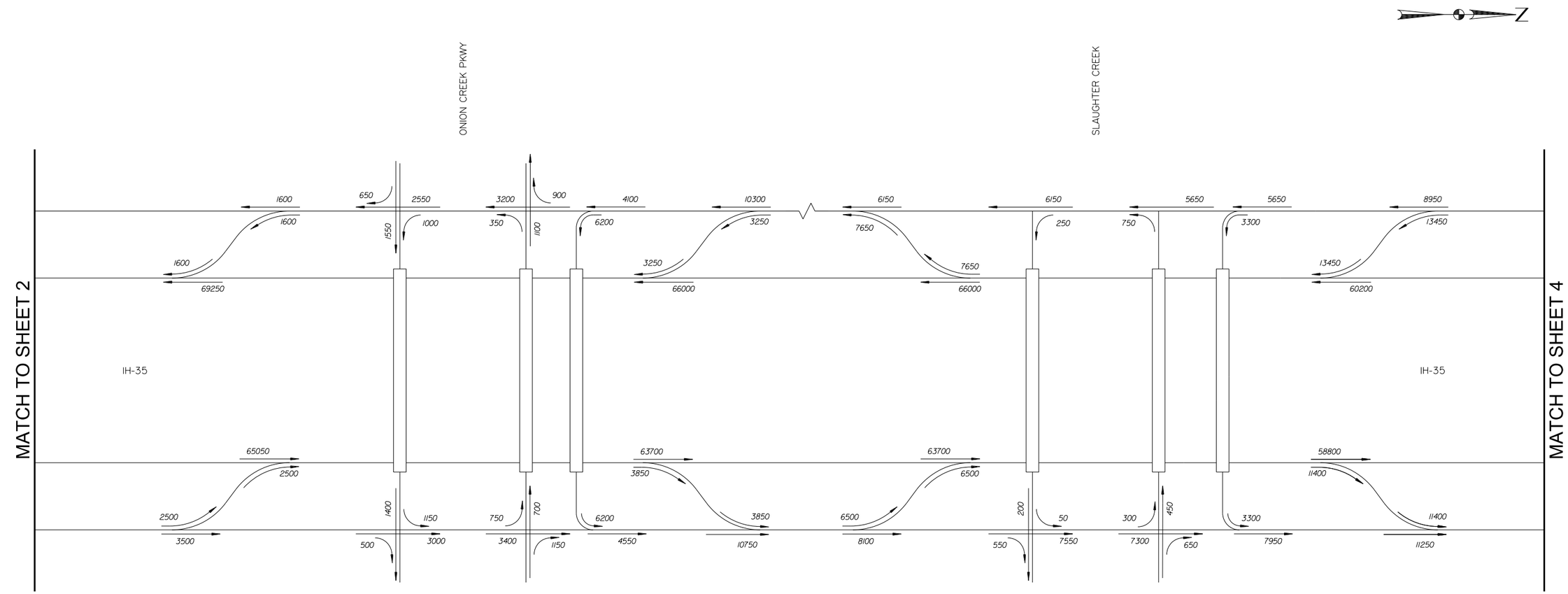
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 3 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	3

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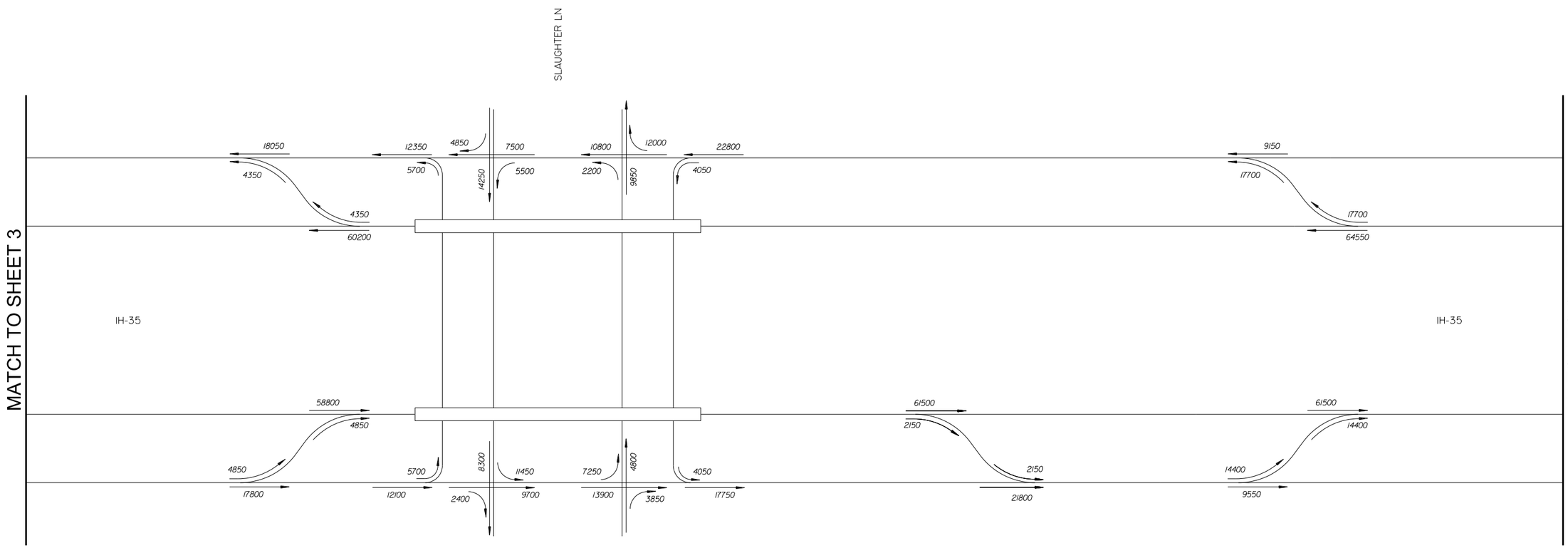
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 4 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	4

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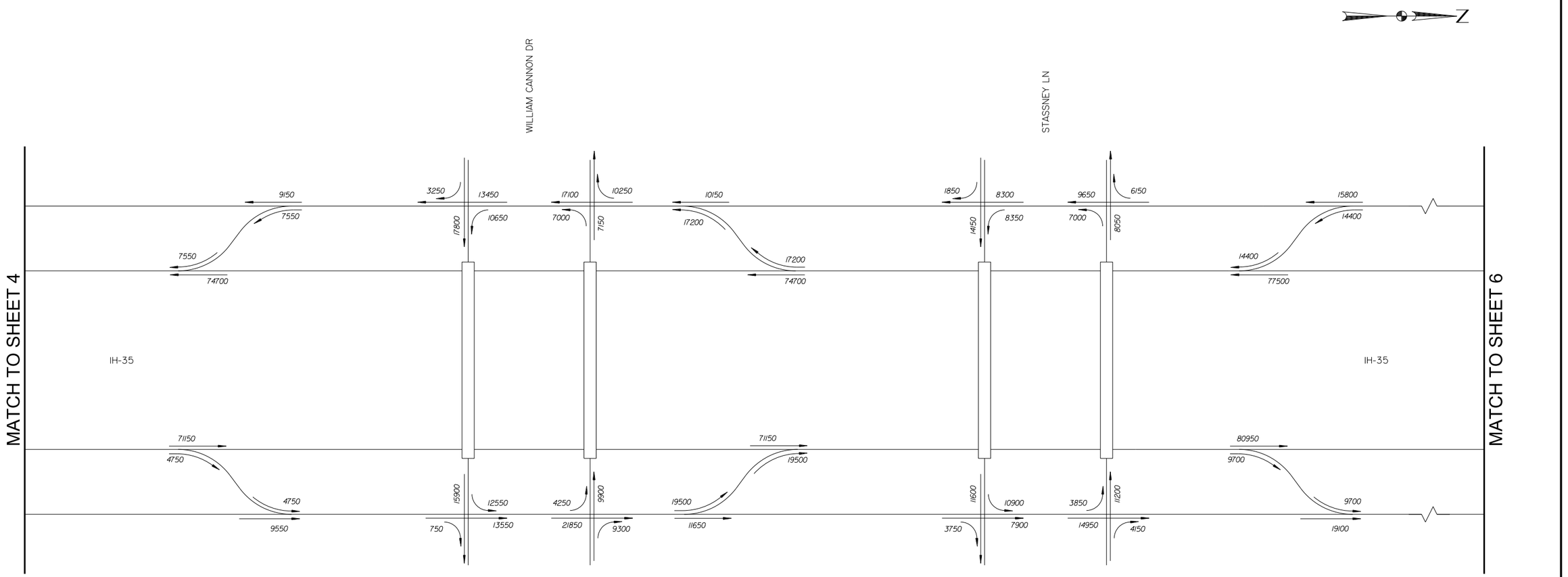
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 5 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	5

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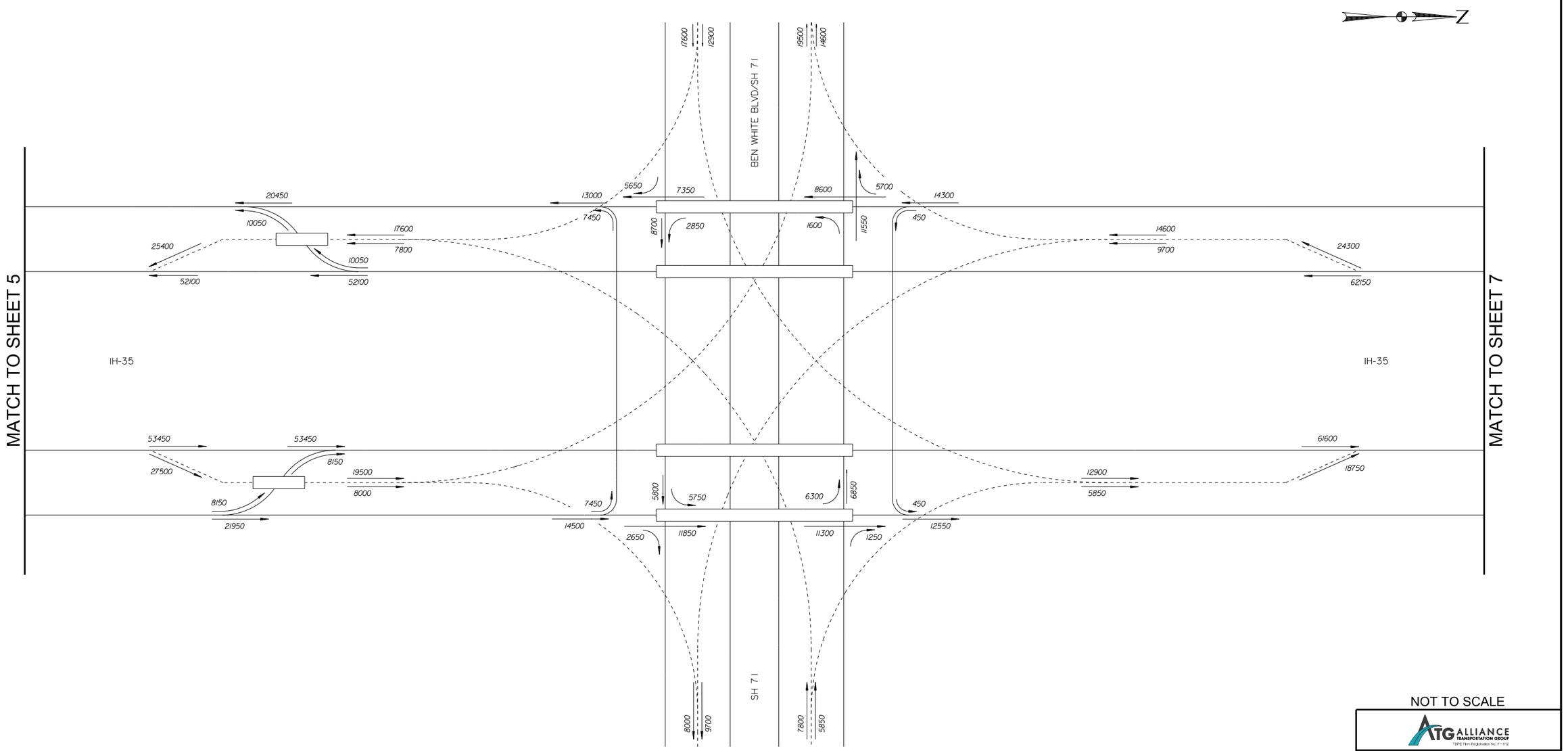
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

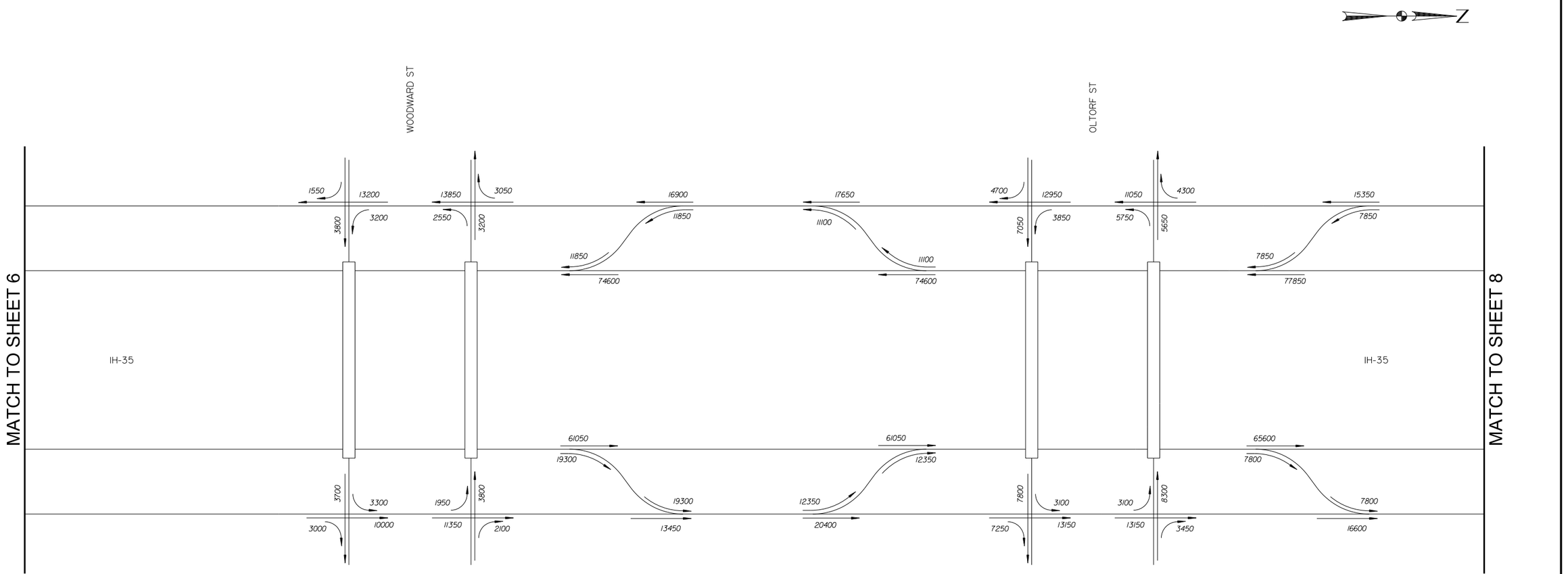
Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 6 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 6

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

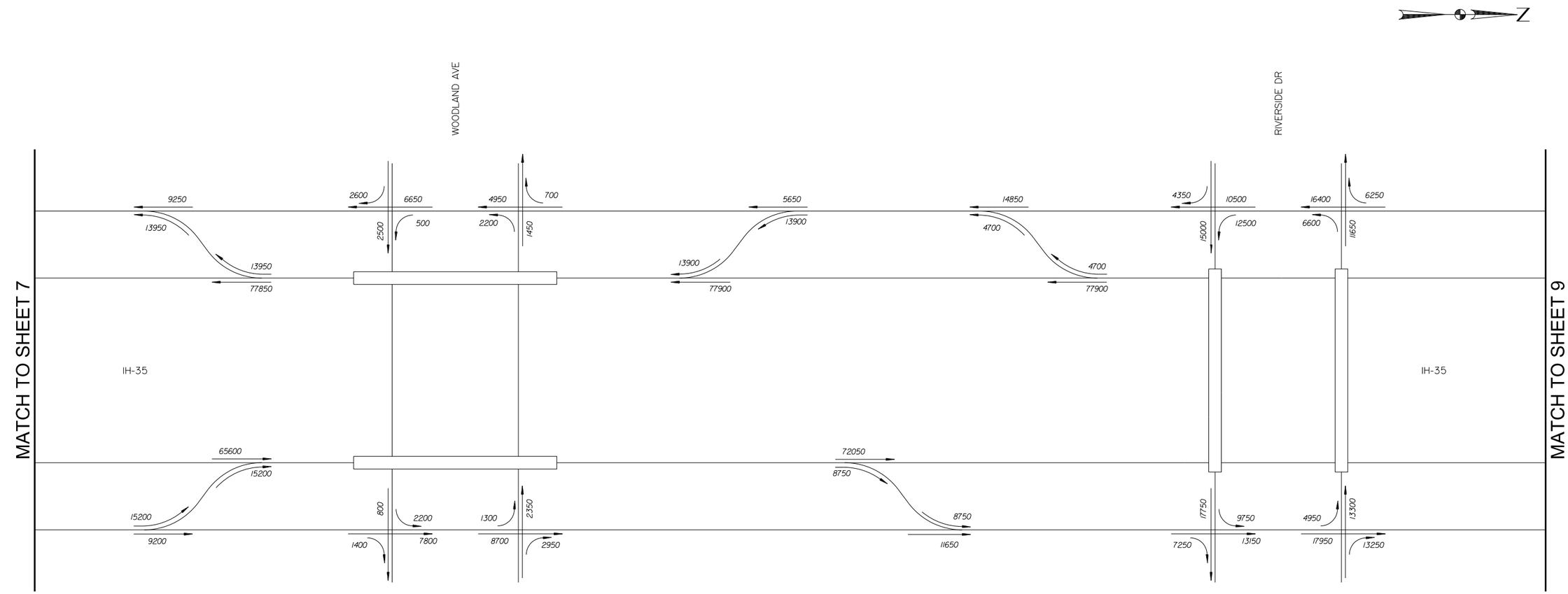
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 7 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	7

1/25/2019 10:28:33 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 8 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	8

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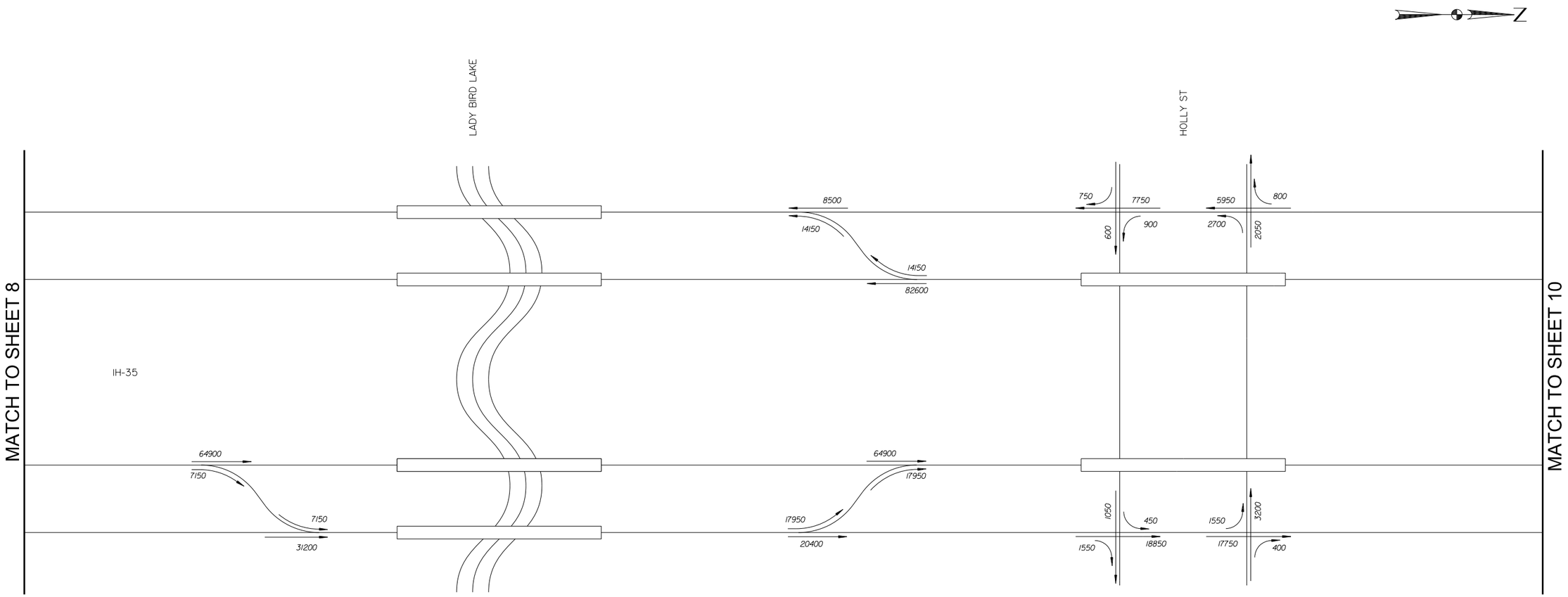
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

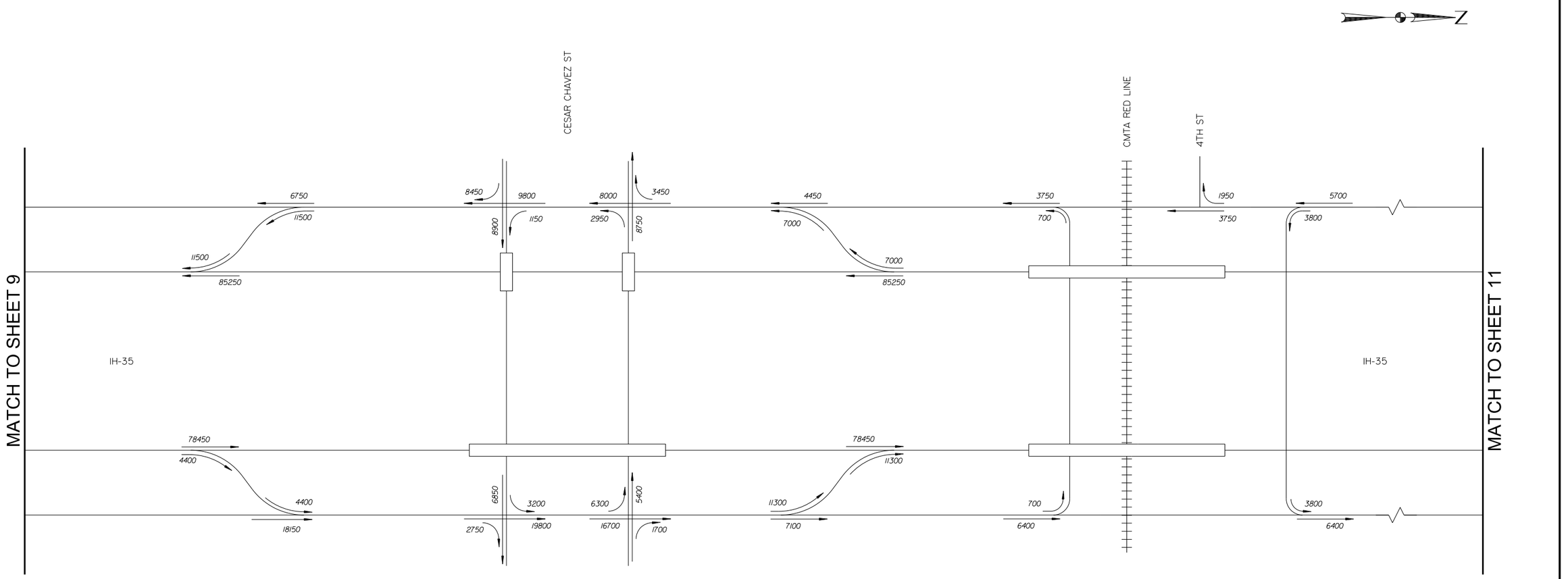
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 9 OF 28)

SCALE : N.T.S.		PROJECT NO.		
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	9

1/25/2019 10:28:34 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

Texas Department of Transportation

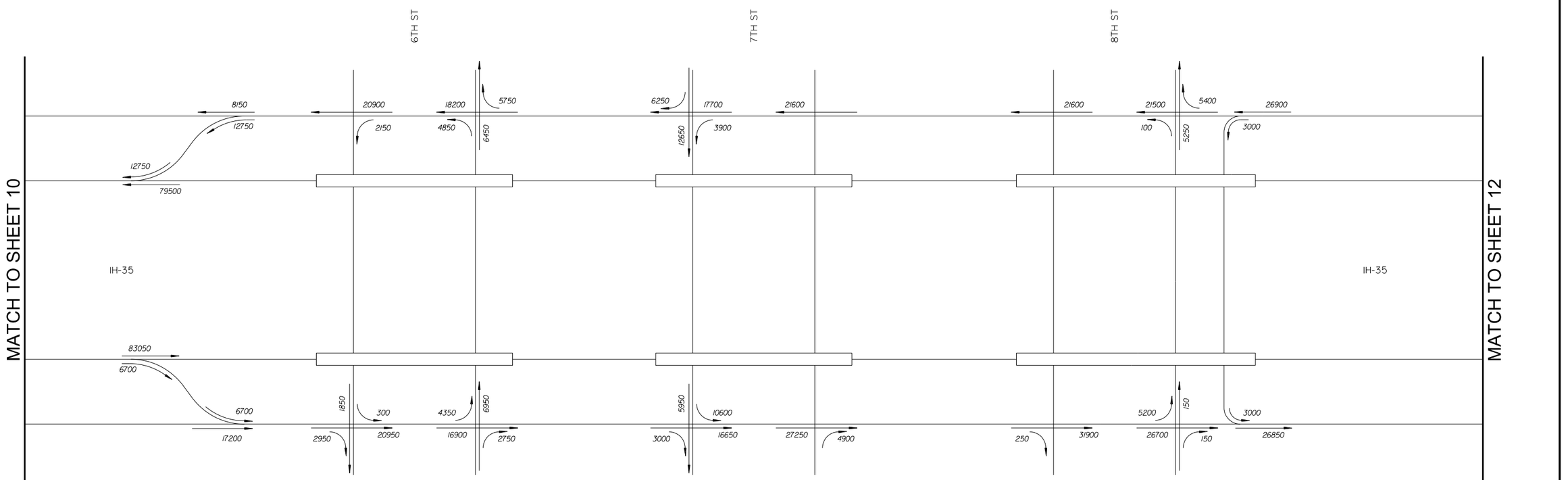
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 10 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 10

1/25/2019 10:28:34 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

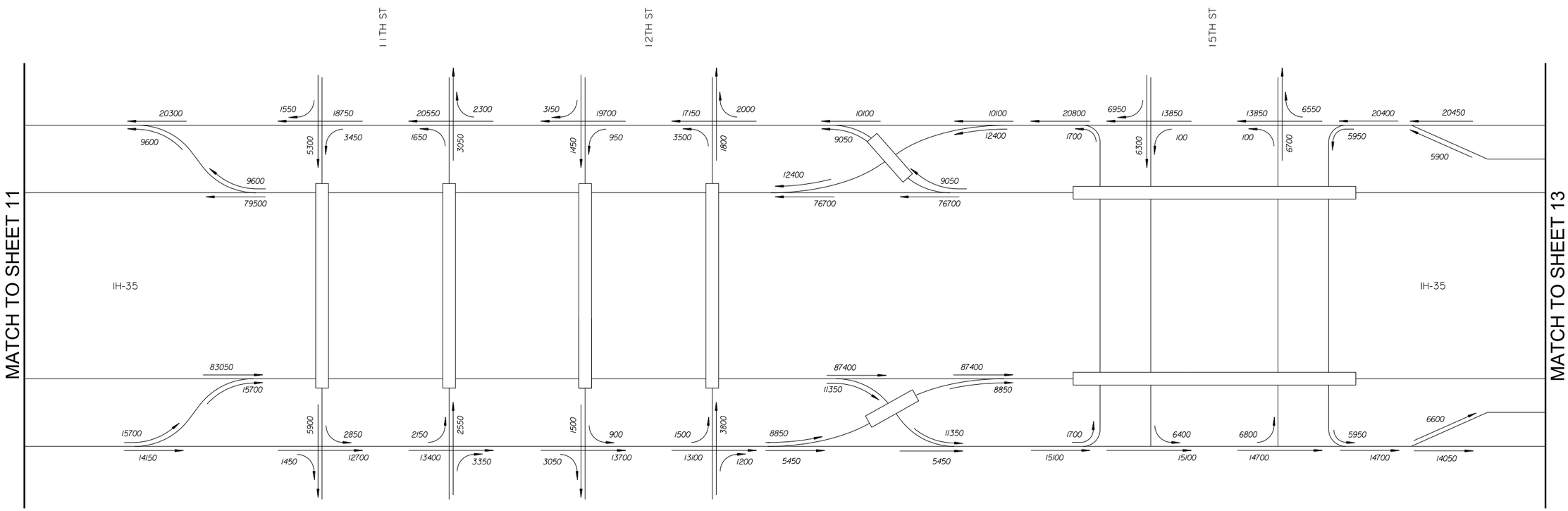
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 11 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 11

1/25/2019 10:28:35 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

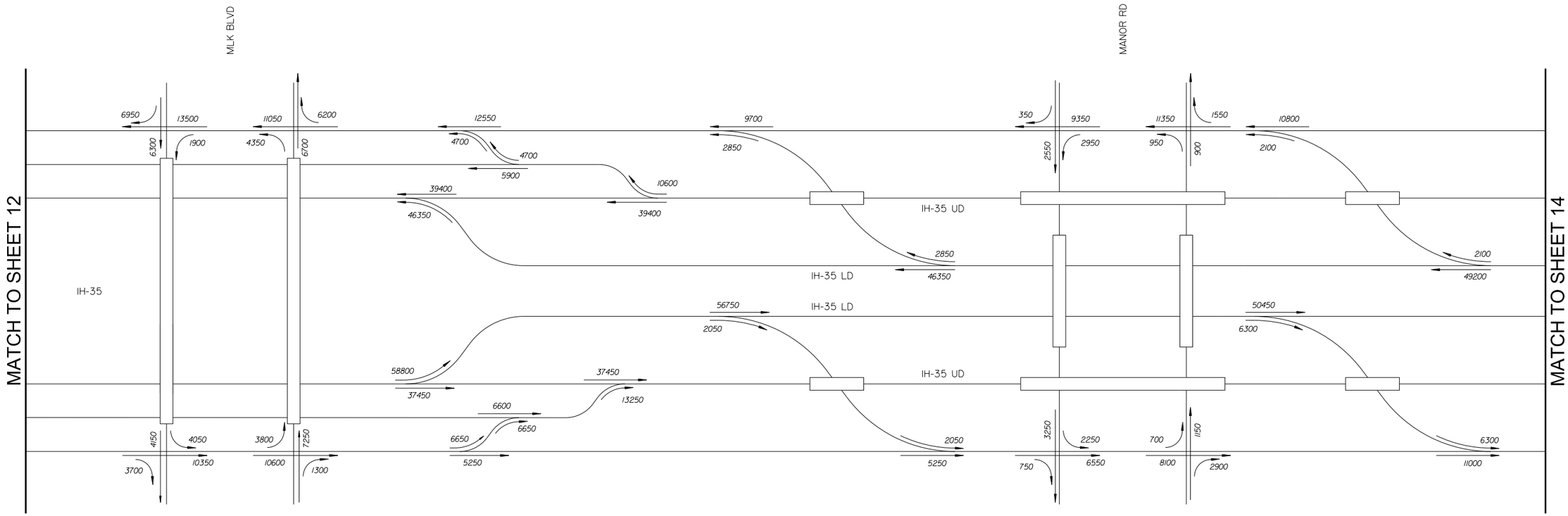
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 12 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 12

1/25/2019 10:28:35 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 13 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	13

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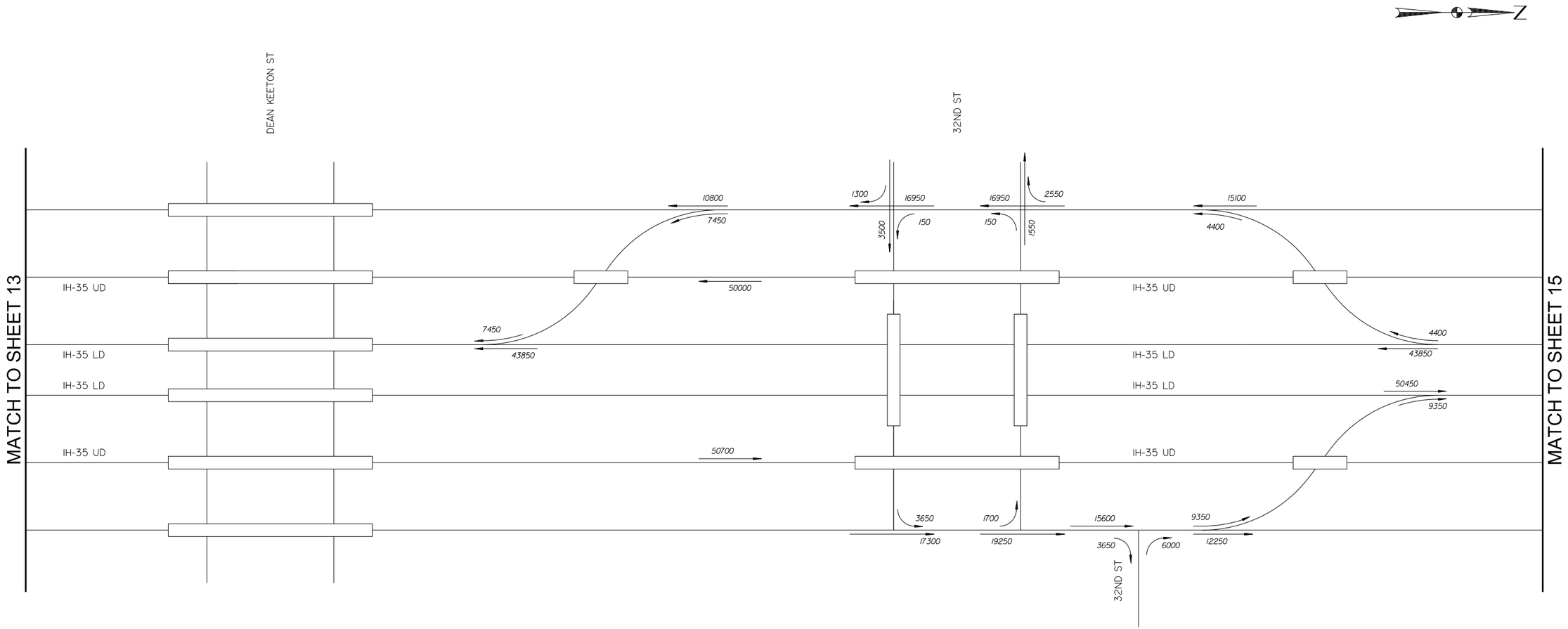
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

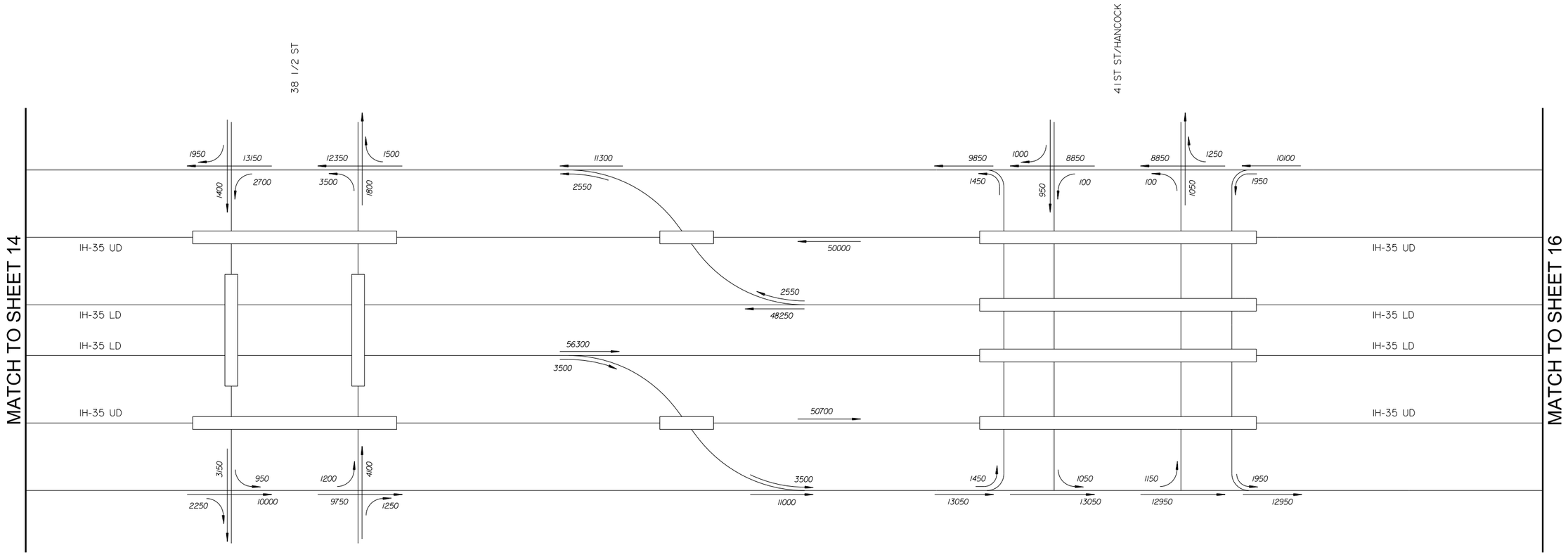
ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-812

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 14 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 14

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

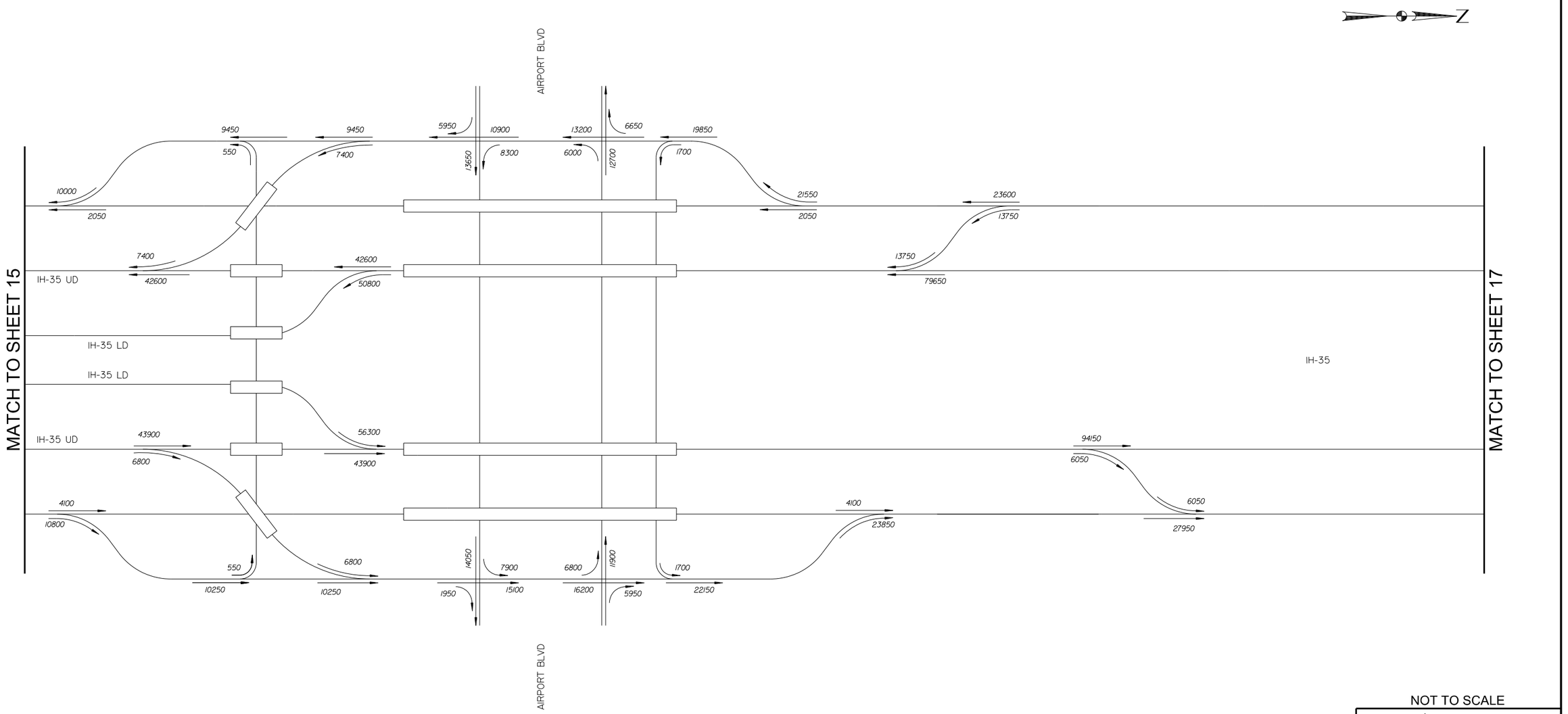
ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 15 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 15

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

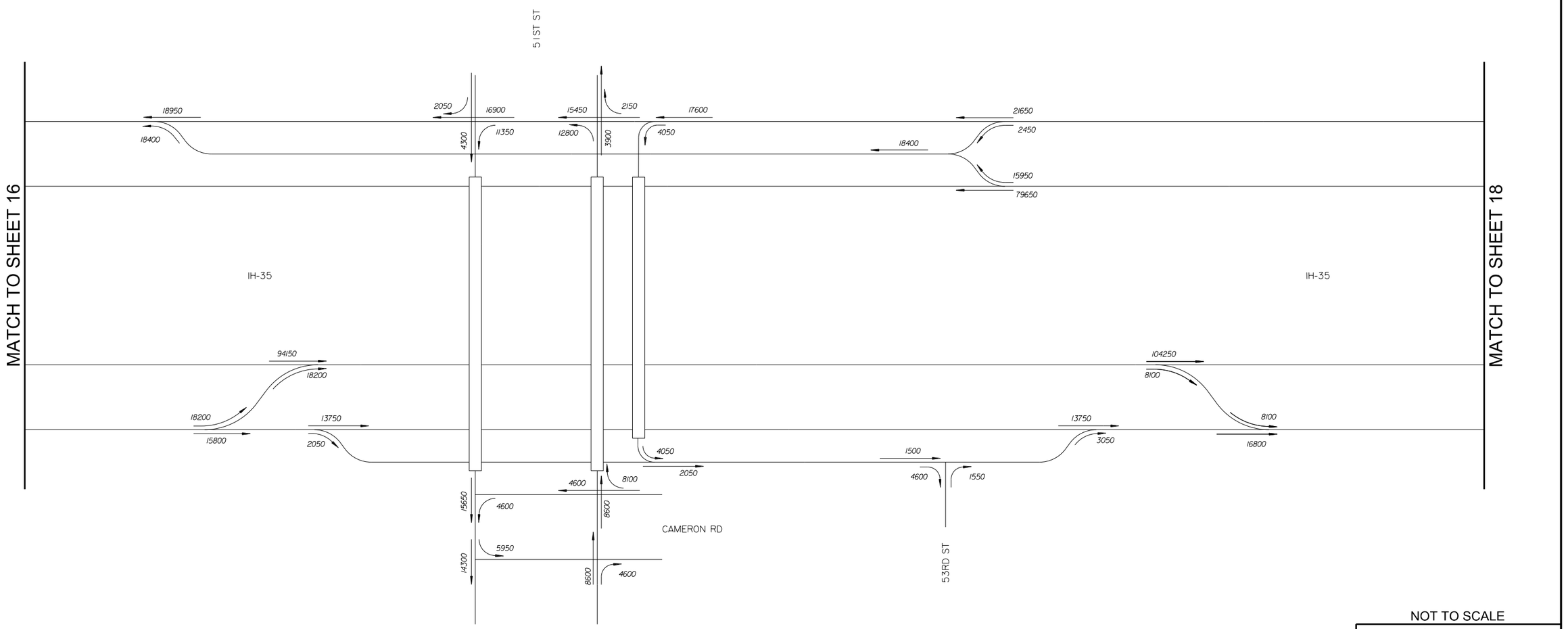
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 16 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 16

1/25/2019 10:28:36 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

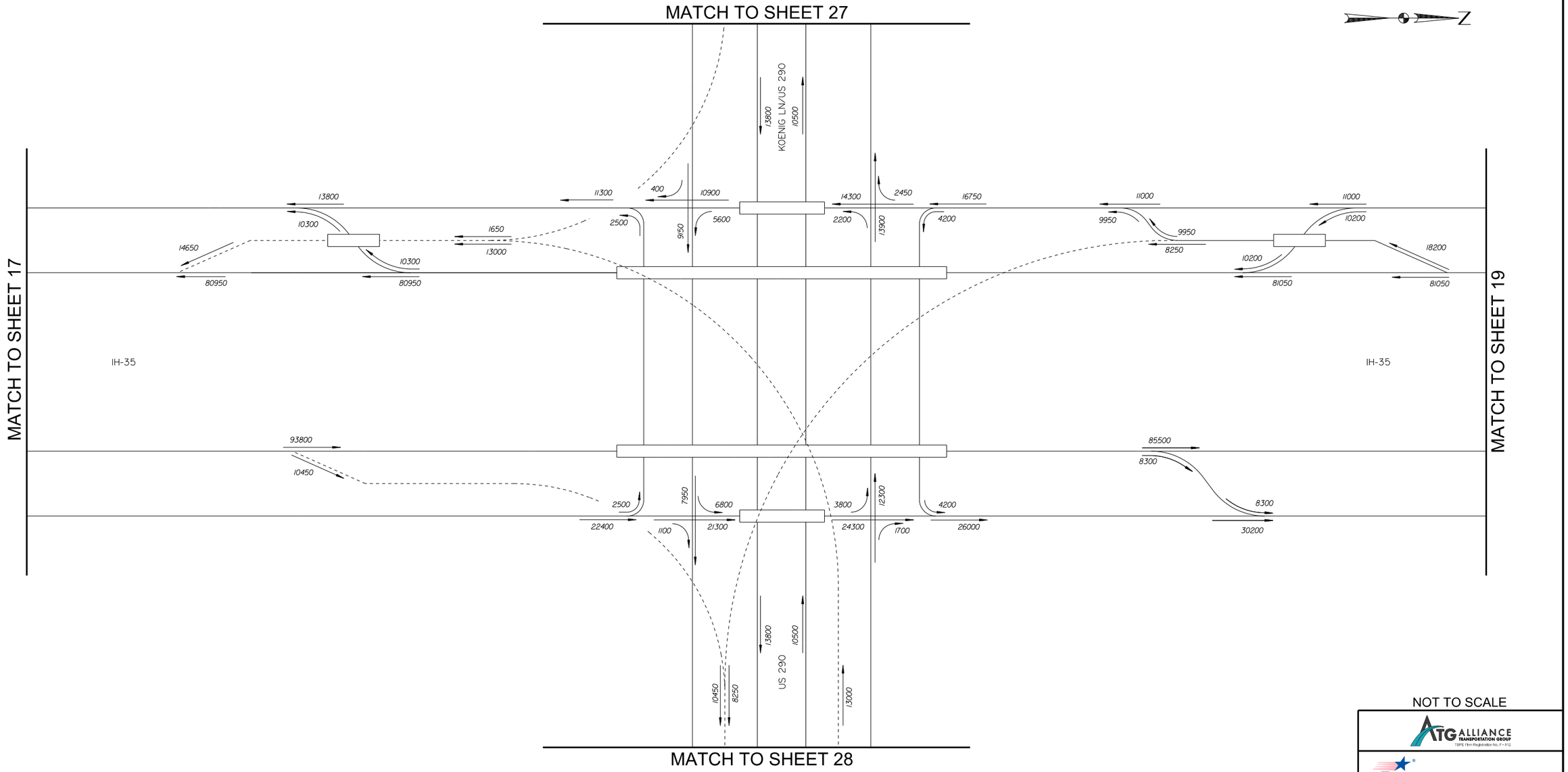
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 17 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 17

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

Texas Department of Transportation

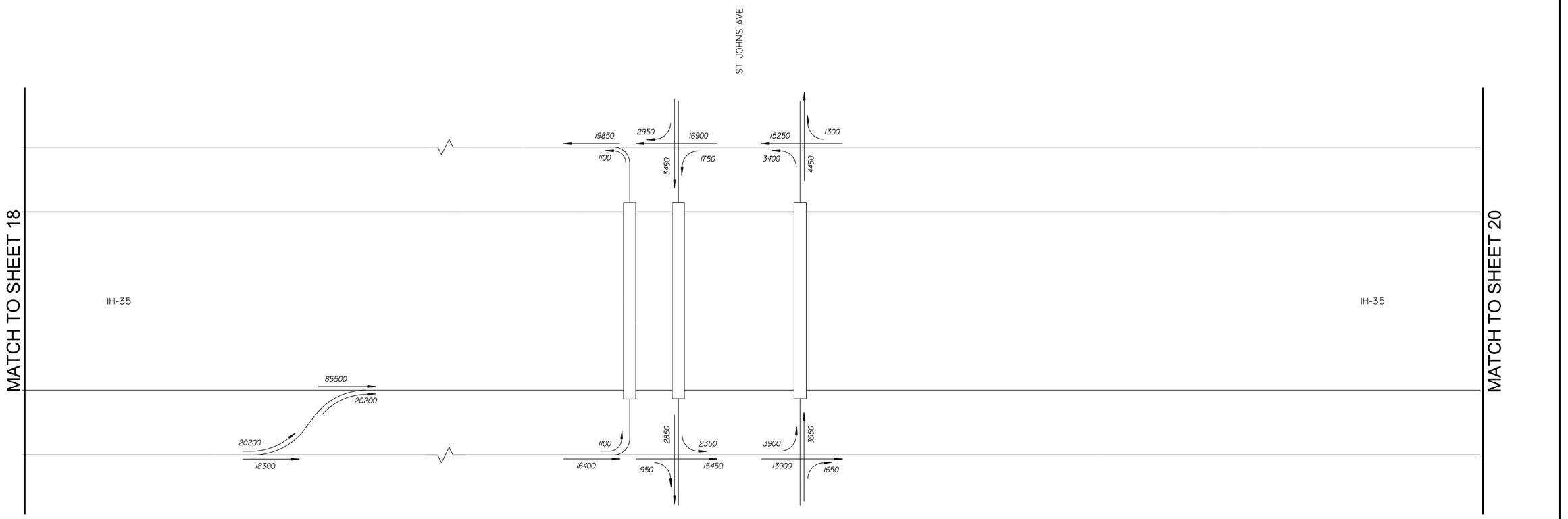
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 18 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 18

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

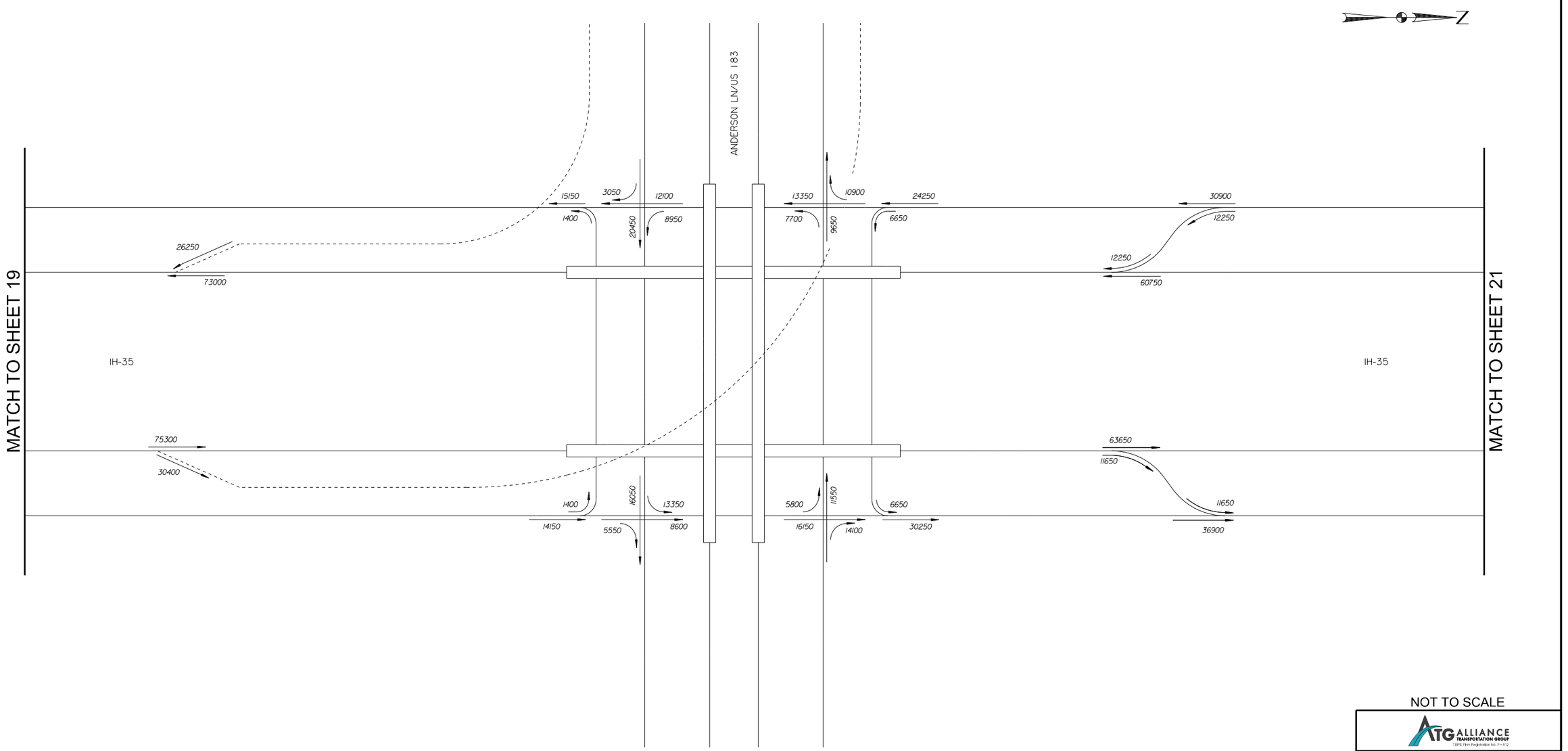
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 19 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	19

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



NOT TO SCALE

2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 512

Texas Department of Transportation

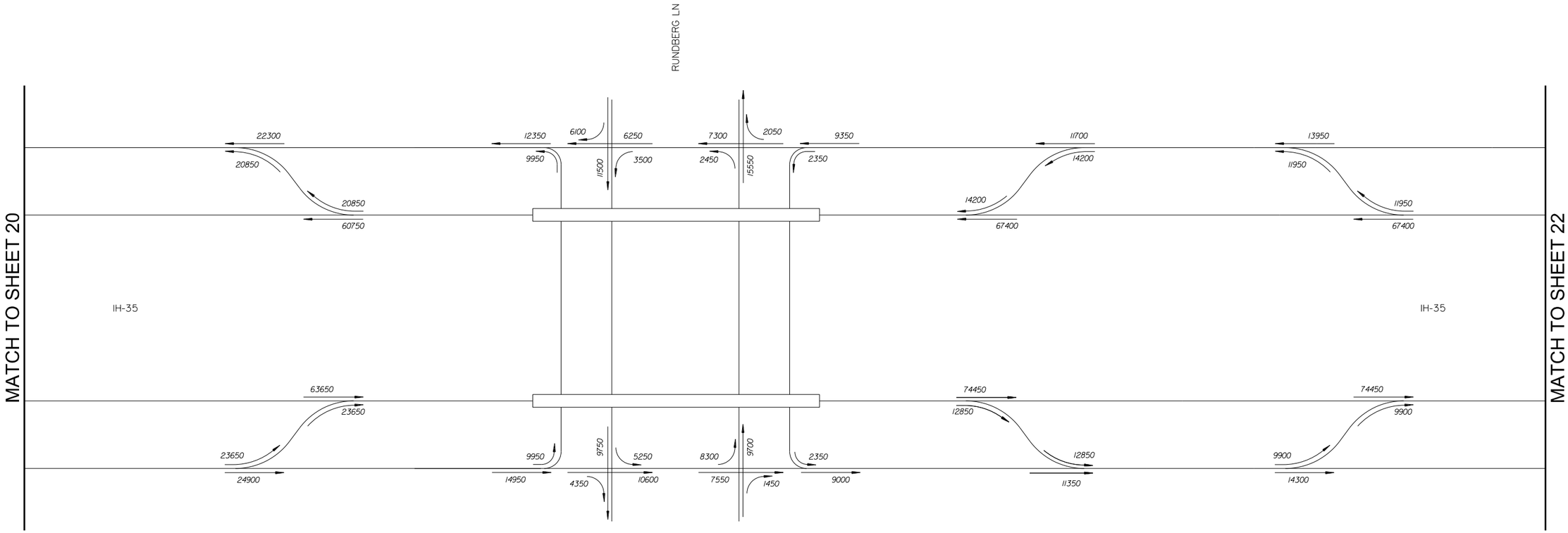
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 20 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 20

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

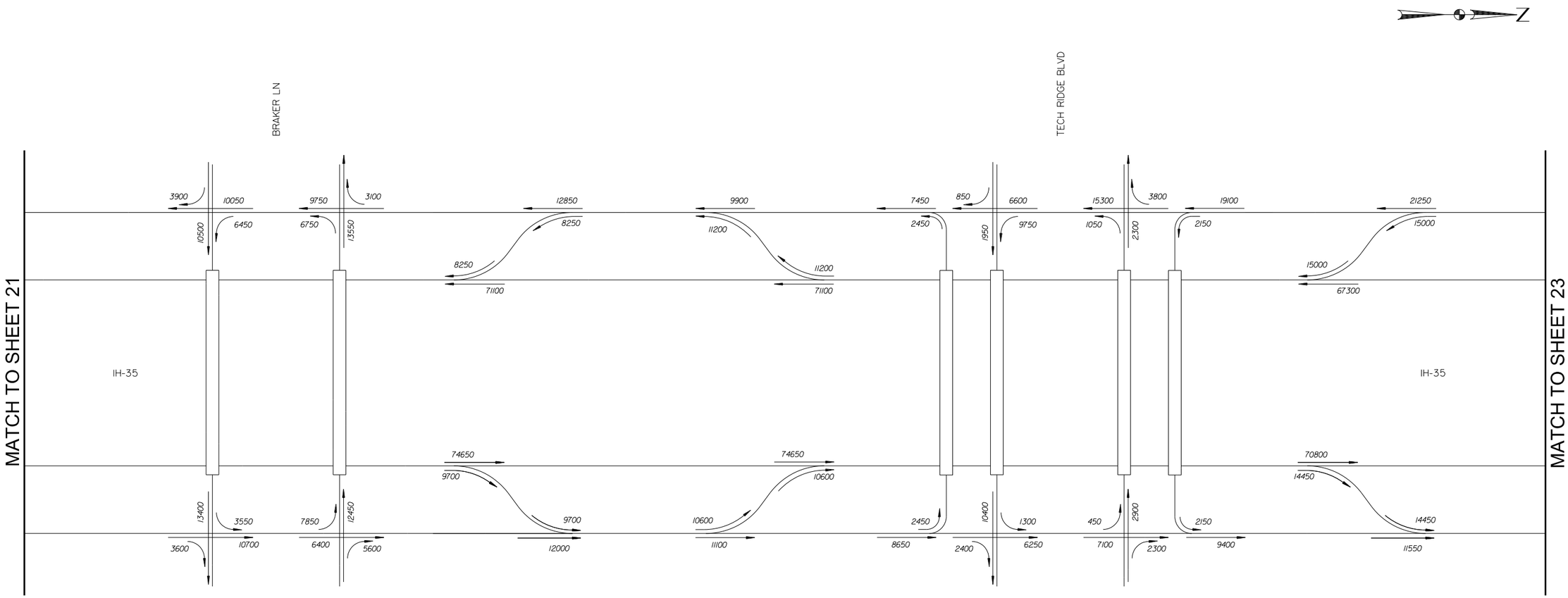
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 21 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 21

1/25/2019 10:28:37 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 812

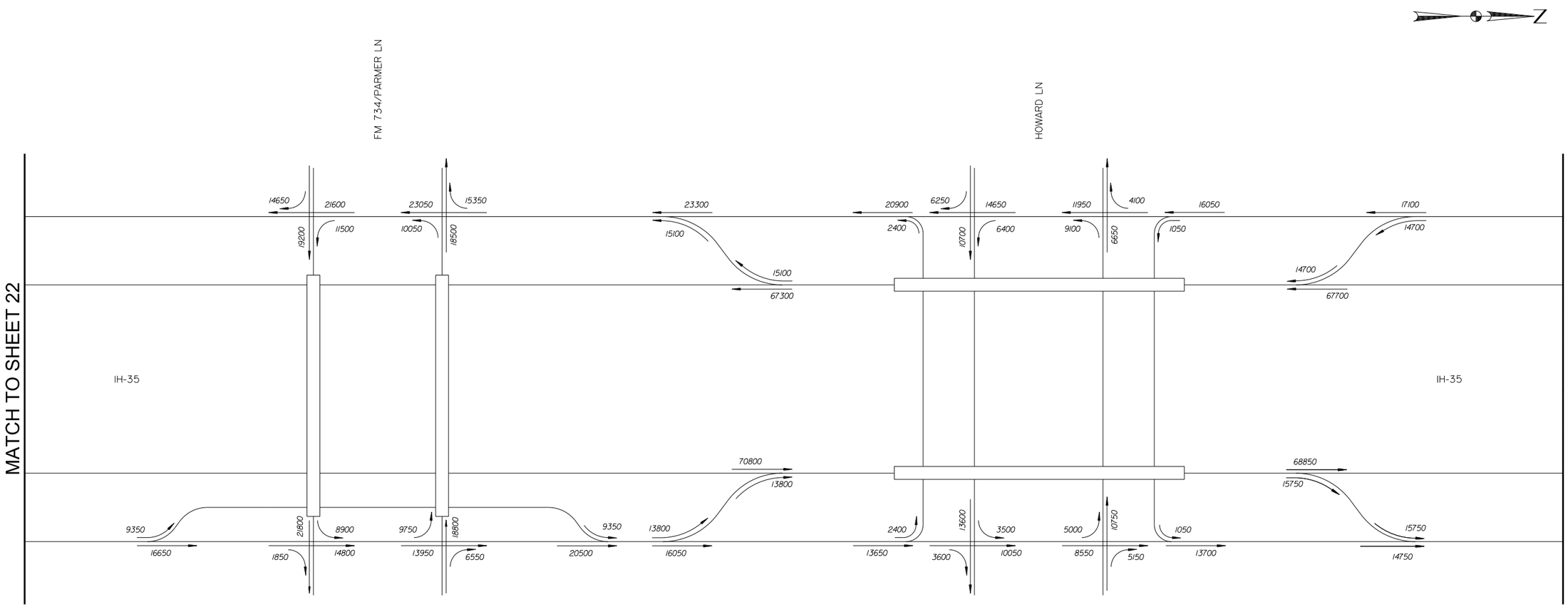
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 22 OF 28)

SCALE : N.T.S.			PROJECT NO.	
DWN: TH	CKD: HH			
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY	
TEXAS	14	6	TRAVIS	
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	22

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 912

Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 23 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 23

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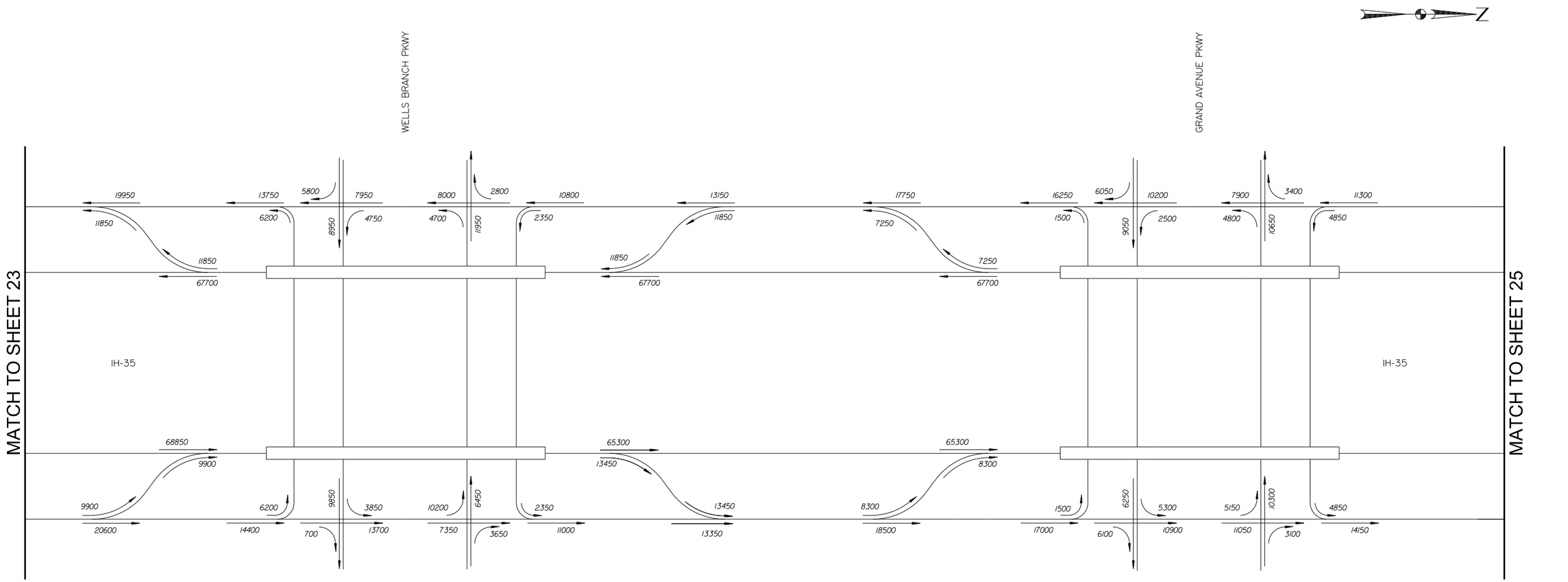
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-912

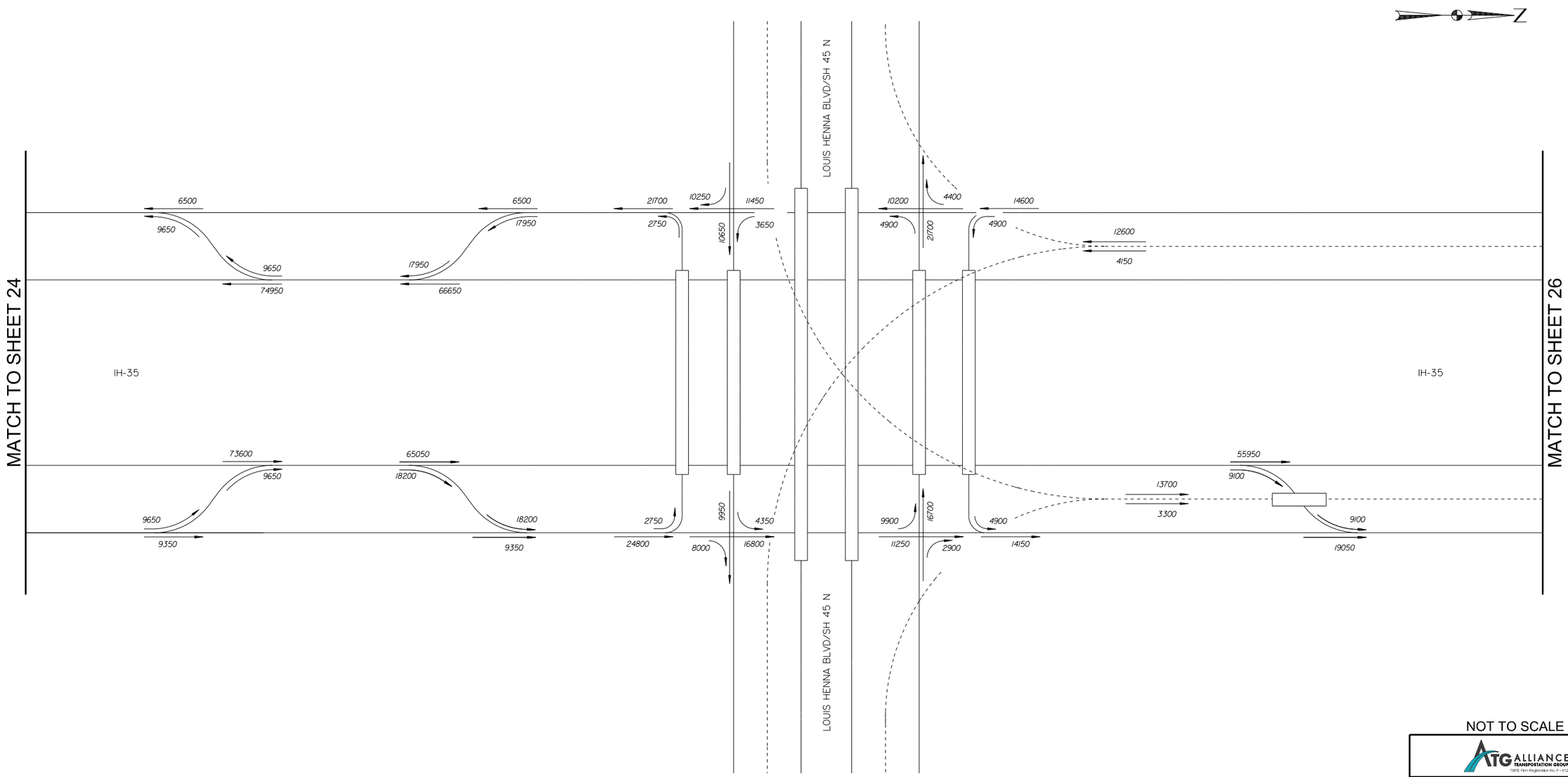
Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 24 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 24

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

Texas Department of Transportation

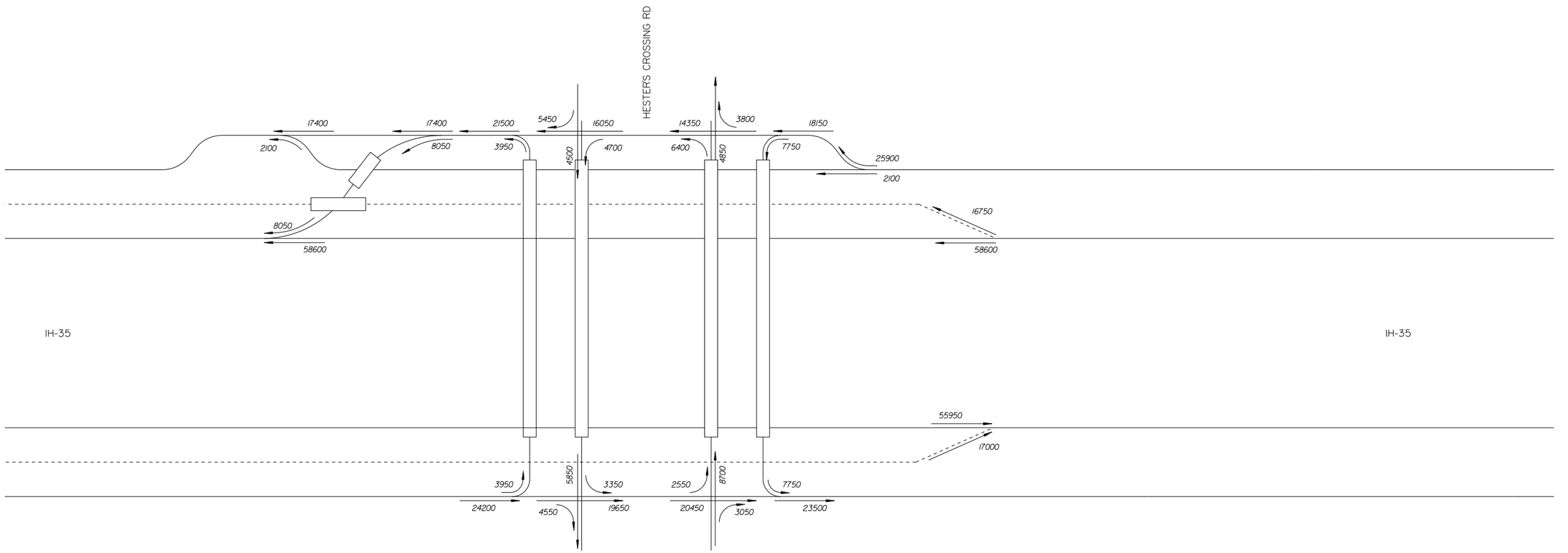
CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 25 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 25

1/25/2019 10:28:38 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-512

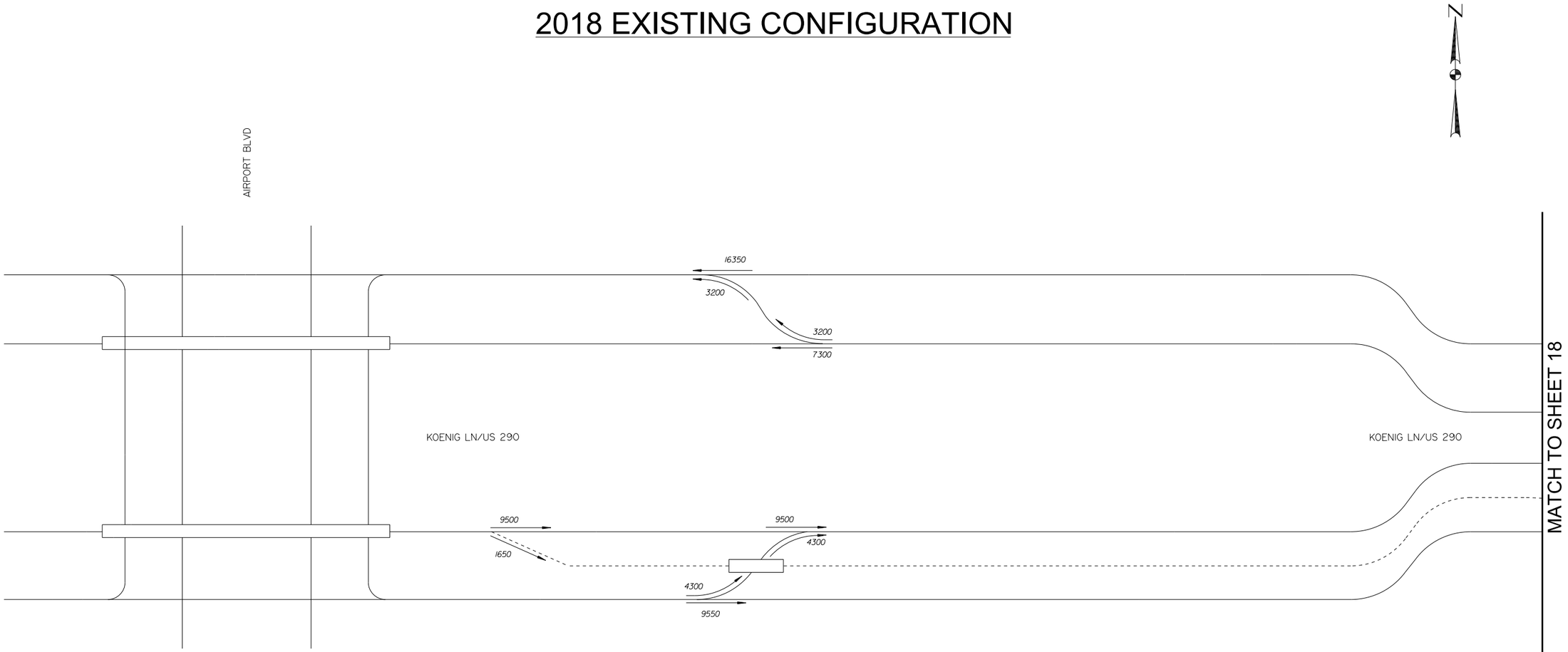
Texas Department of Transportation

CAPITAL EXPRESS

2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 26 OF 28)

SCALE : N.T.S.		PROJECT NO.	
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	WILLIAMSON
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 26

2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
→ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F-932

Texas Department of Transportation

CAPITAL EXPRESS
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 27 OF 28)

SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO.	SHEET NO.
5000	00	106	IH-35	27

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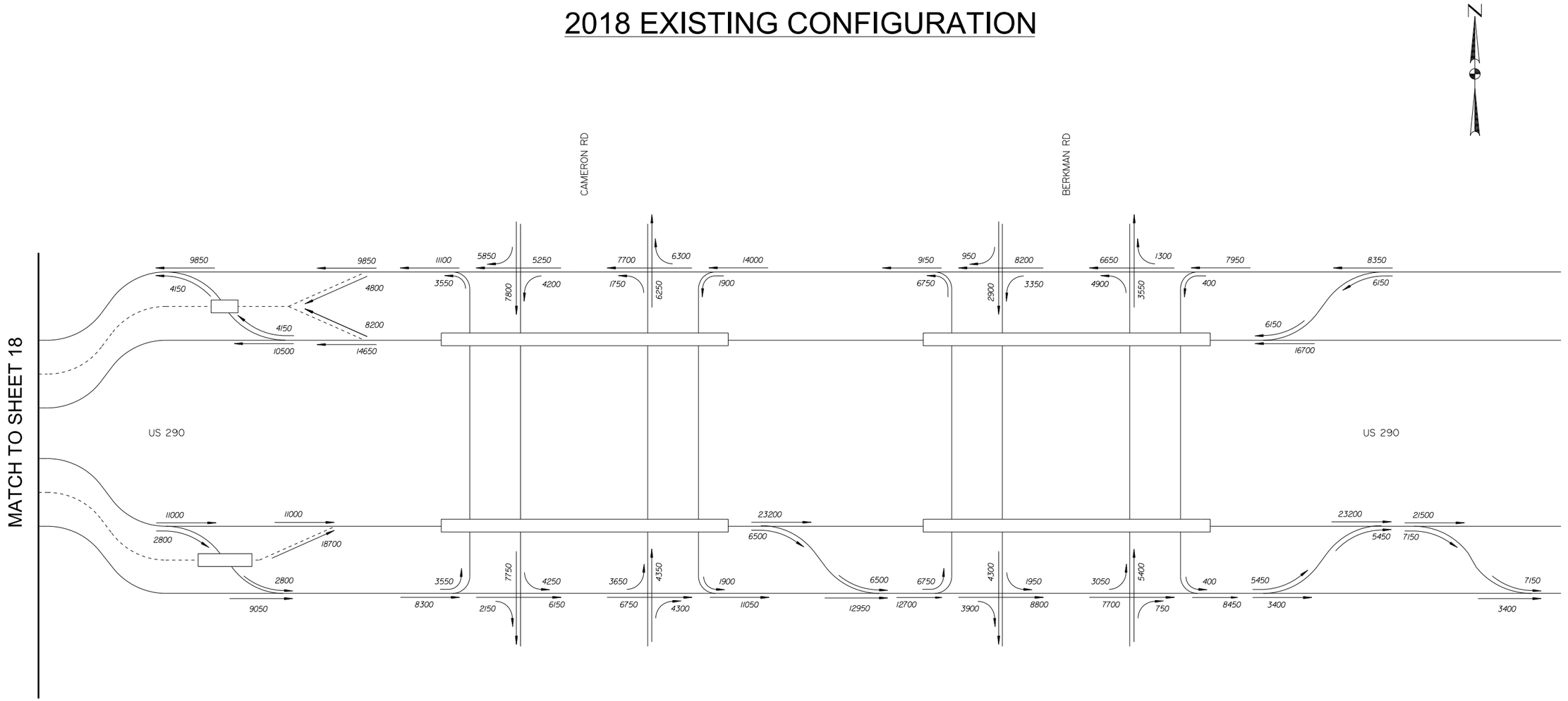
2018 EXISTING CONFIGURATION



2018 FORECASTED AVERAGE DAILY TRAFFIC VOLUMES
AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG
IH-35 FROM MAIN ST TO HESTER'S CROSSING ROAD
AND US 290 FROM AIRPORT BLVD TO US 183

LEGEND

1000 - 2018 ADT
LD - LOWER DECK
UD - UPPER DECK
⟶ TRAVEL DIRECTION

NOT TO SCALE

ATG ALLIANCE TRANSPORTATION GROUP
TBPE Firm Registration No. F - 512

Texas Department of Transportation

CAPITAL EXPRESS

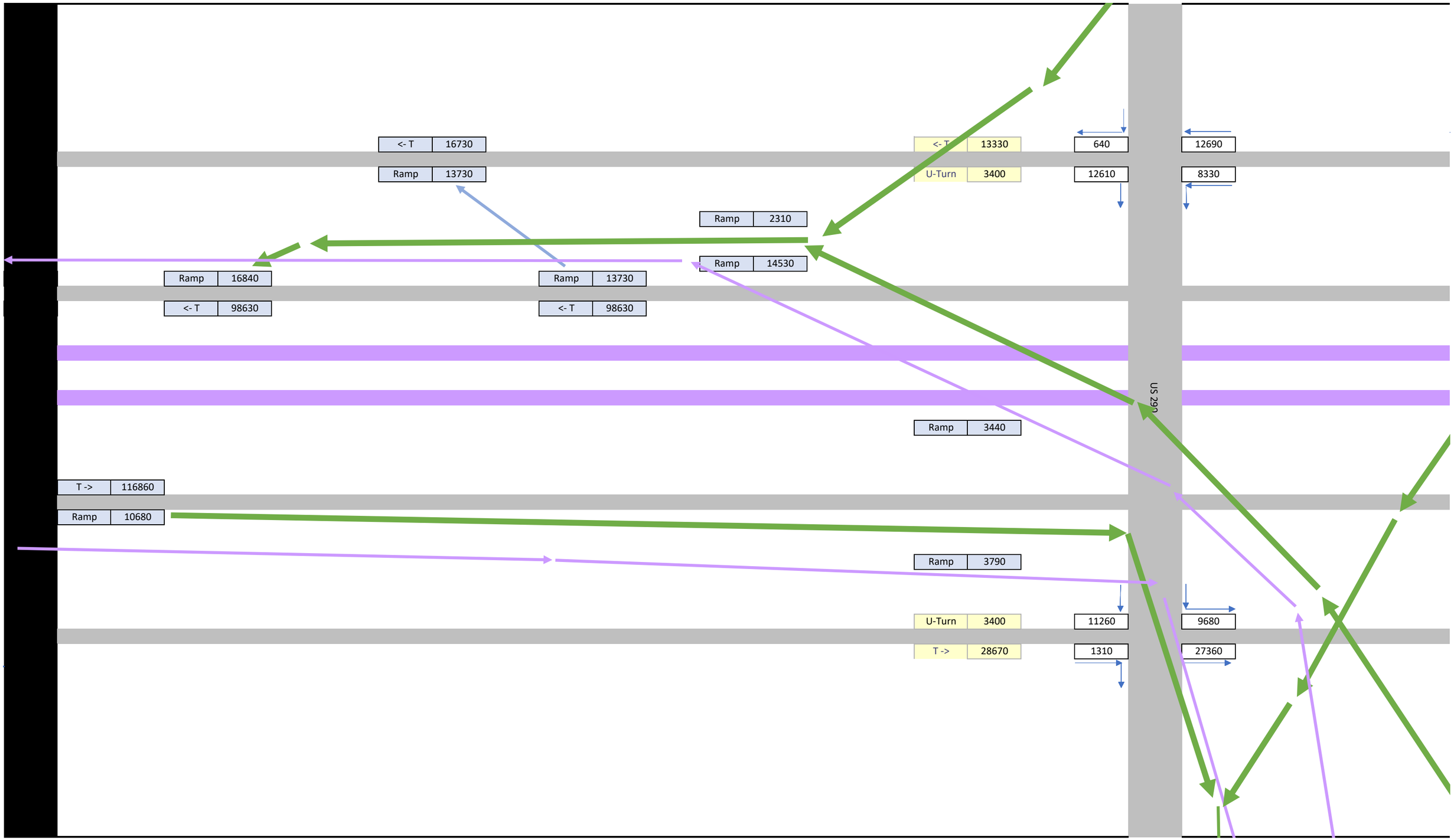
2018 EXISTING CONFIGURATION
24 HOUR VOLUMES
(SHEET 28 OF 28)

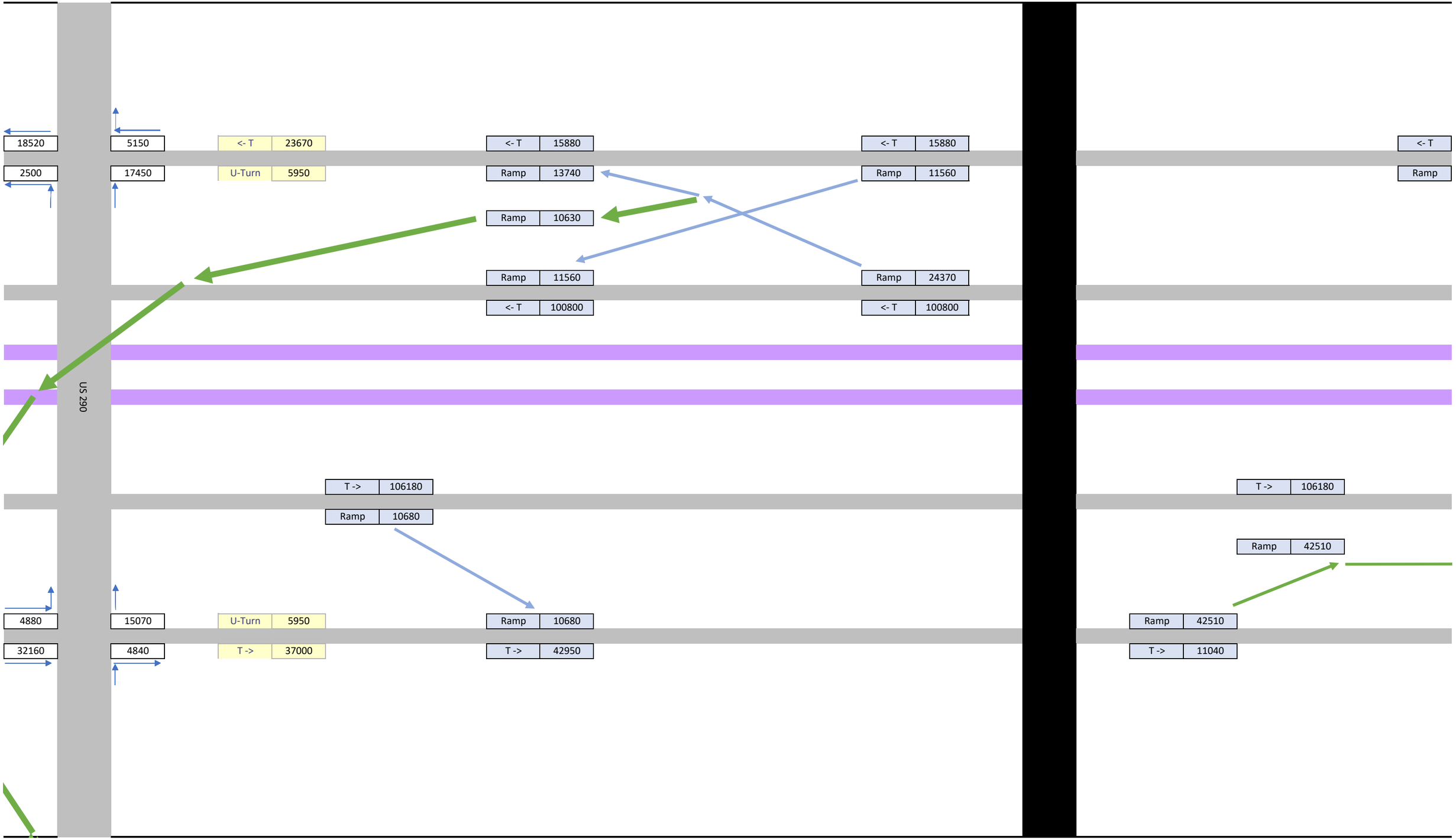
SCALE : N.T.S.			PROJECT NO.
DWN: TH	CKD: HH		
STATE	STATE DISTRICT	FED. RD. DIV. NO.	COUNTY
TEXAS	14	6	TRAVIS
CONTROL	SECTION	JOB	HWY. NO. / SHEET NO.
5000	00	106	IH-35 / 28

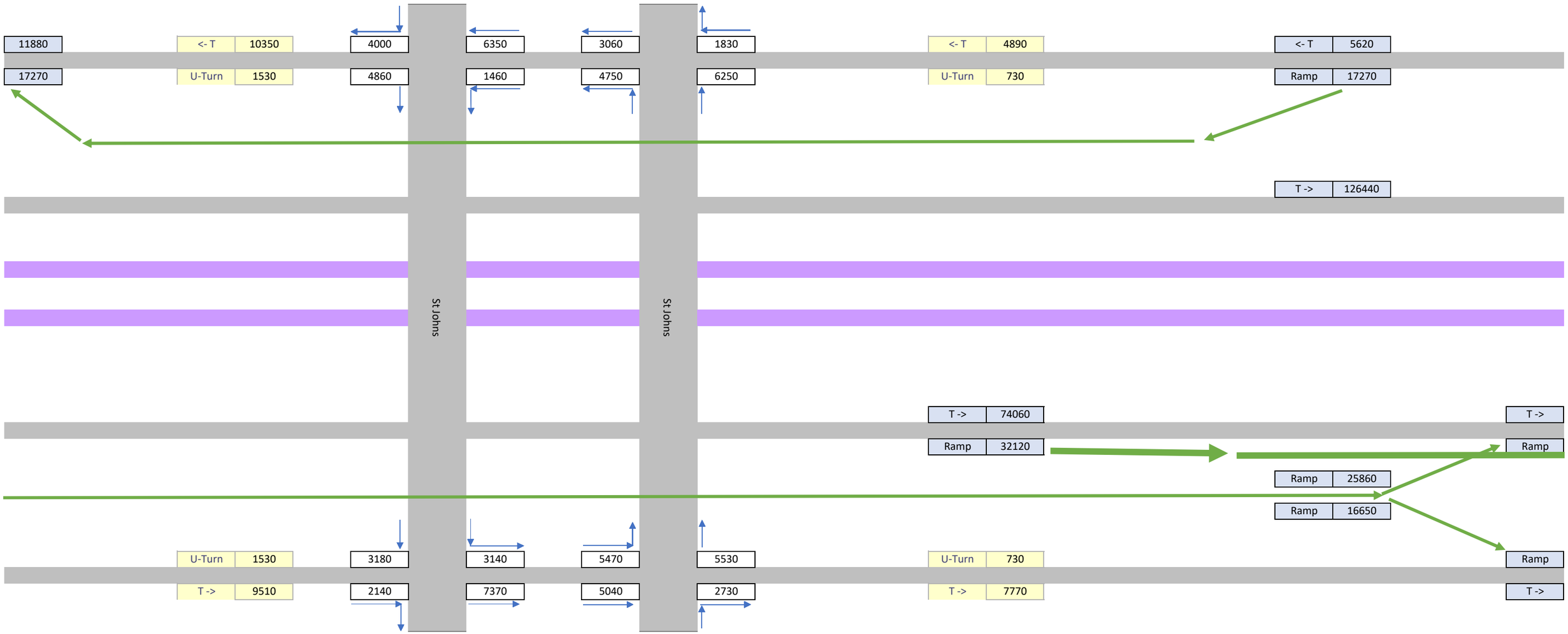
1/25/2019 10:28:39 AM THouston ...\2018.0011*LineDiagrams*TPP*Existing*2018.dgn

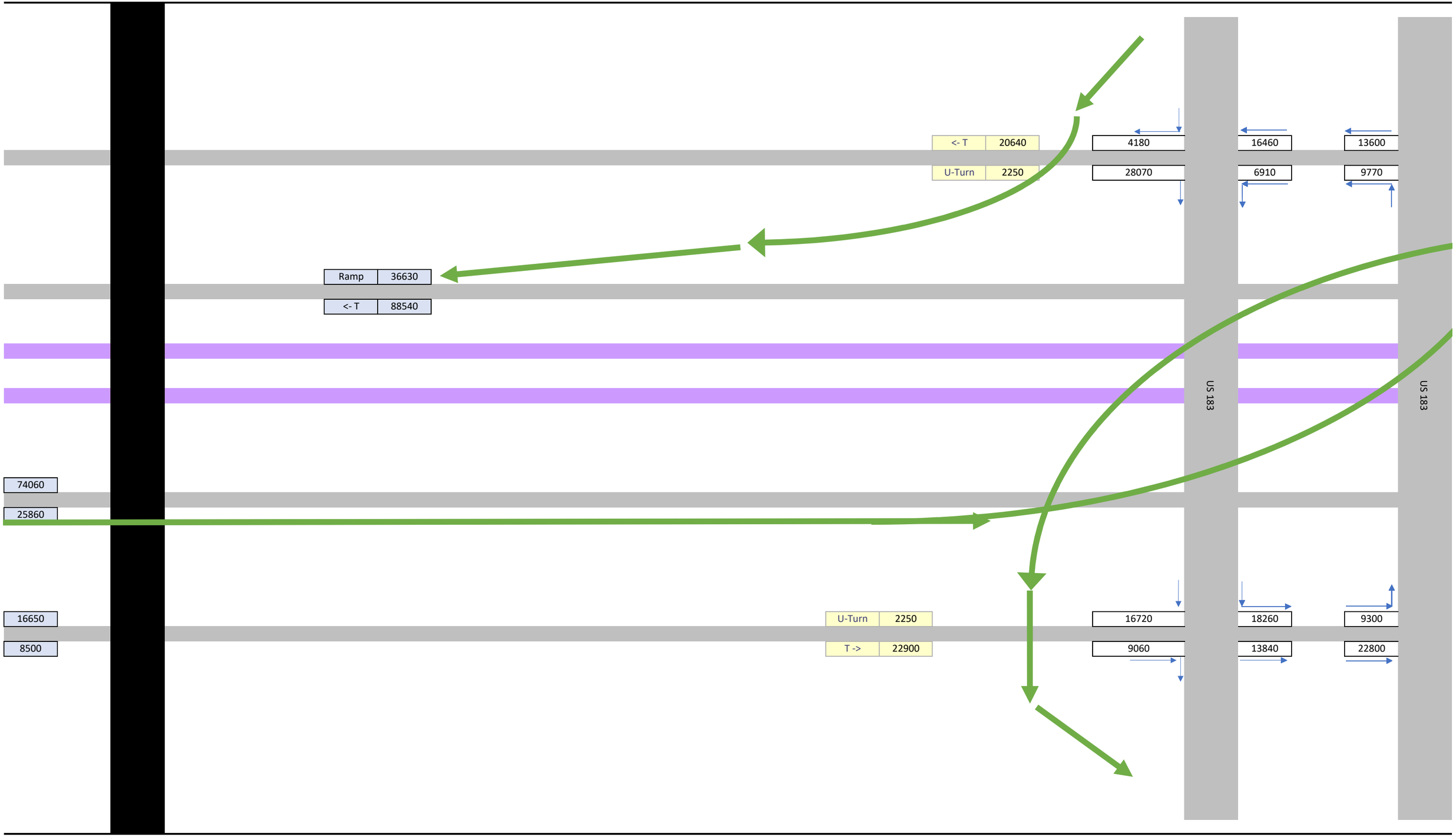
PROPOSED (2038) TRAFFIC LINE DIAGRAM

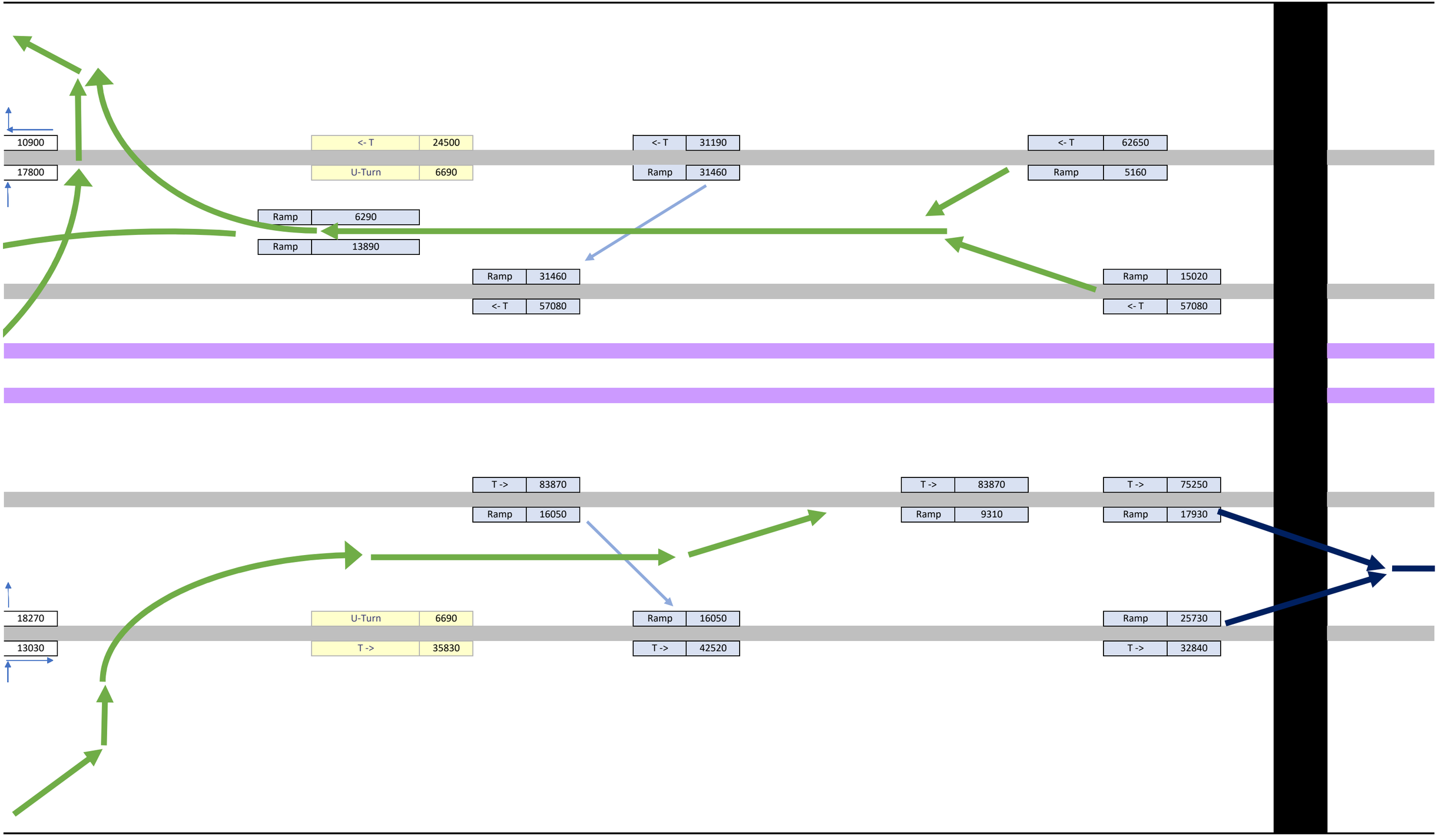
FOR DETAILED TRAFFIC INPUT

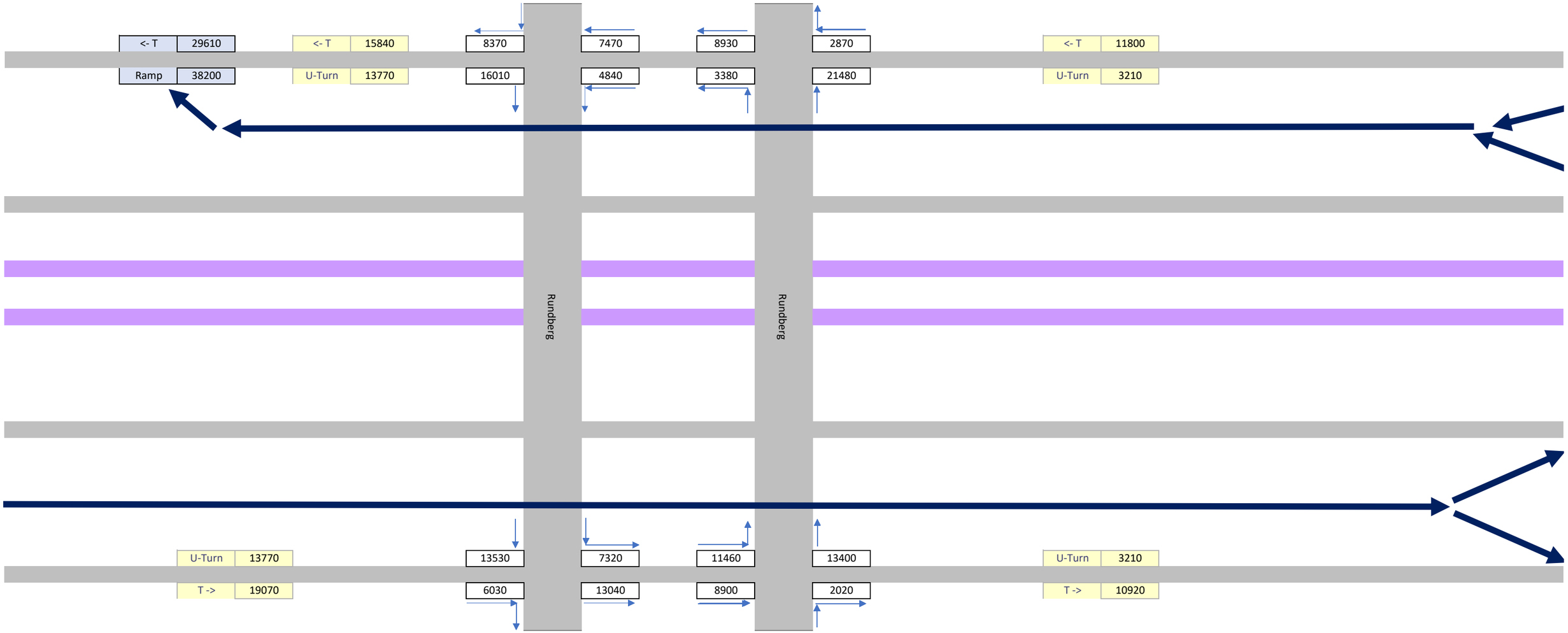

<- T 16730
Ramp 13730
<- T 13330
U-Turn 3400
640
12690
12610
8330
Ramp 2310
Ramp 14530
Ramp 16840
<- T 98630
Ramp 13730
<- T 98630
US 29
Ramp 3440
T -> 116860
Ramp 10680
Ramp 3790
U-Turn 3400
11260
9680
T -> 28670
1310
27360

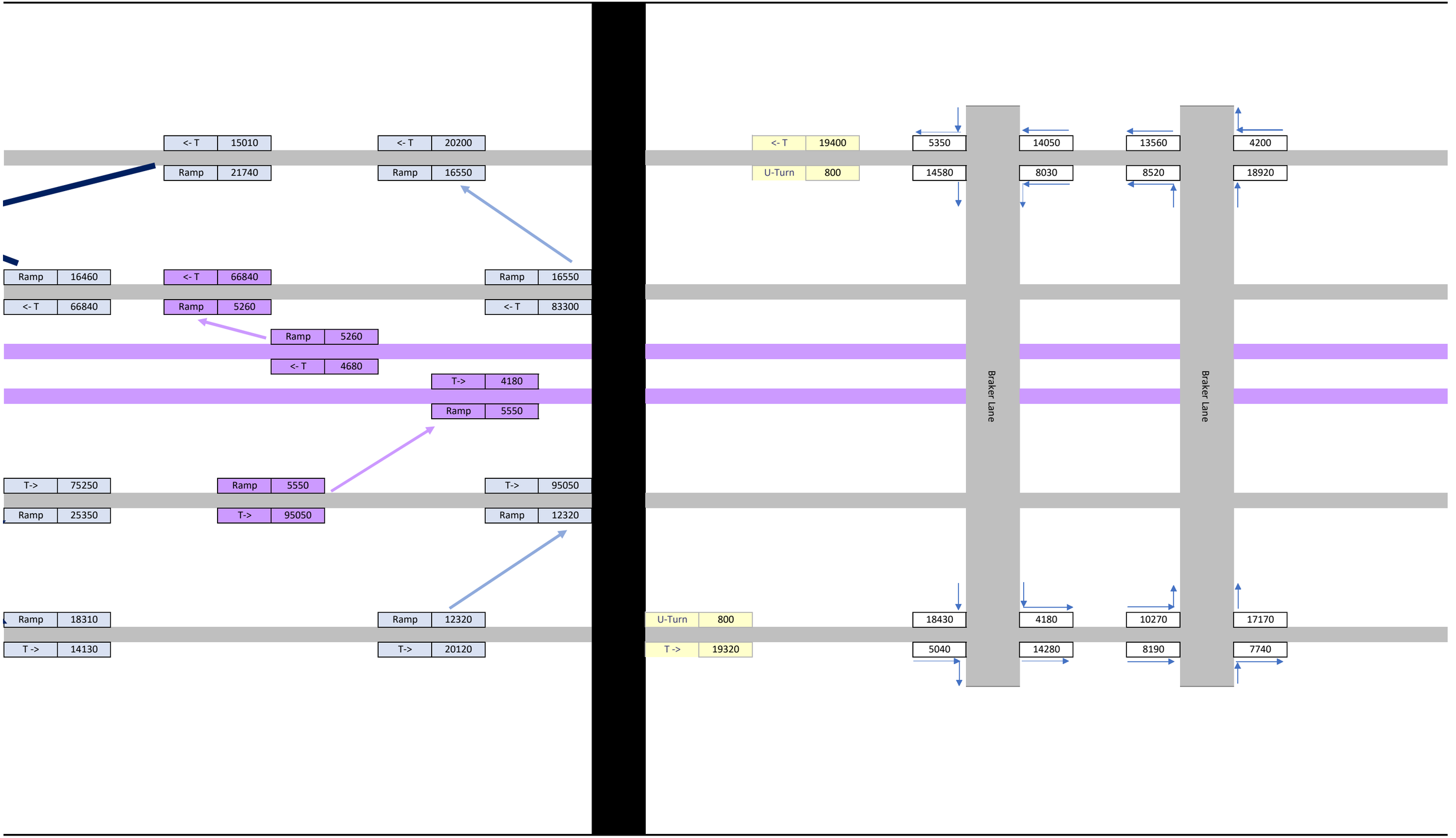

18520
2500
5150
17450
<- T
23670
U-Turn
5950
<- T
15880
Ramp
13740
Ramp
10630
Ramp
11560
<- T
100800
<- T
15880
Ramp
11560
Ramp
24370
<- T
100800
<- T
Ramp
US 290
T ->
106180
Ramp
10680
T ->
106180
Ramp
42510
4880
32160
15070
4840
U-Turn
5950
T ->
37000
Ramp
10680
T ->
42950
Ramp
42510
T ->
11040

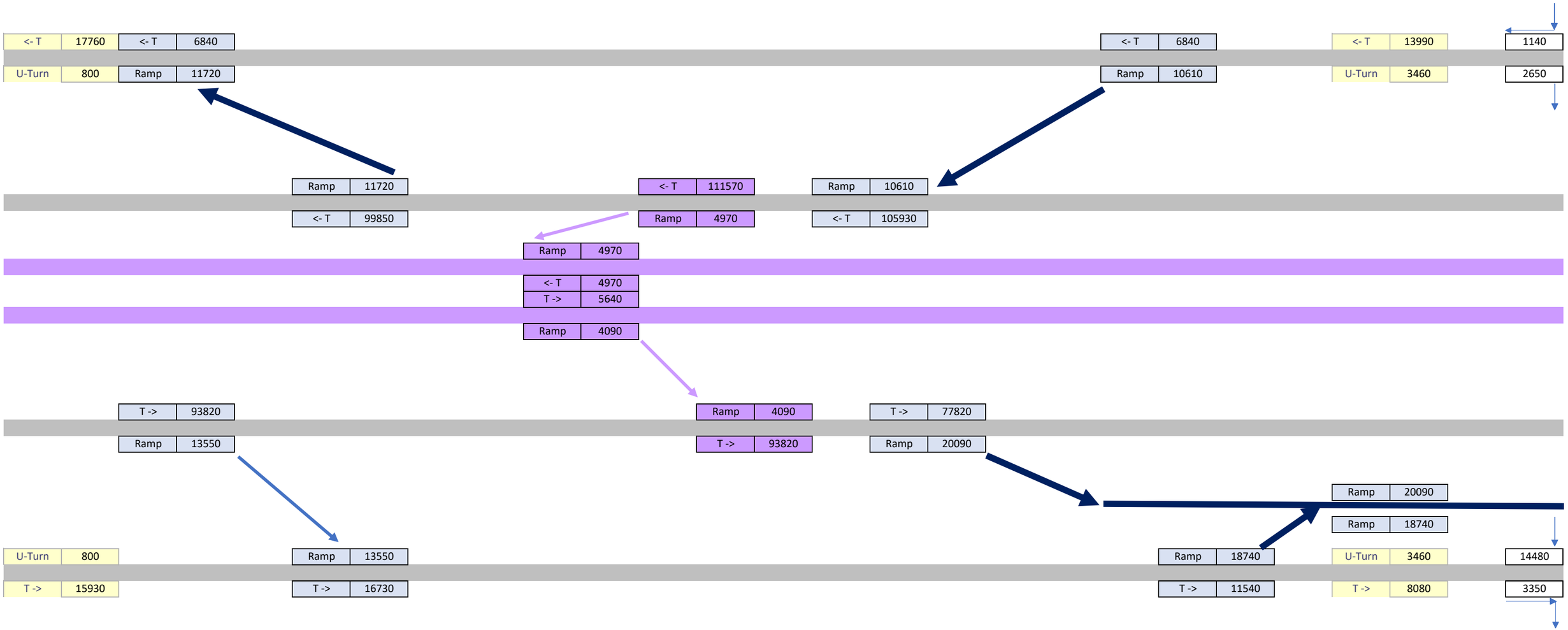

11880
17270
<- T
10350
U-Turn
1530
4000
4860
6350
1460
3060
4750
1830
6250
<- T
4890
U-Turn
730
<- T
5620
Ramp
17270
T ->
126440
St Johns
St Johns
T ->
74060
Ramp
32120
T ->
Ramp
Ramp
25860
Ramp
16650
Ramp
U-Turn
1530
T ->
9510
3180
2140
3140
7370
5470
5040
5530
2730
U-Turn
730
T ->
7770
Ramp
T ->

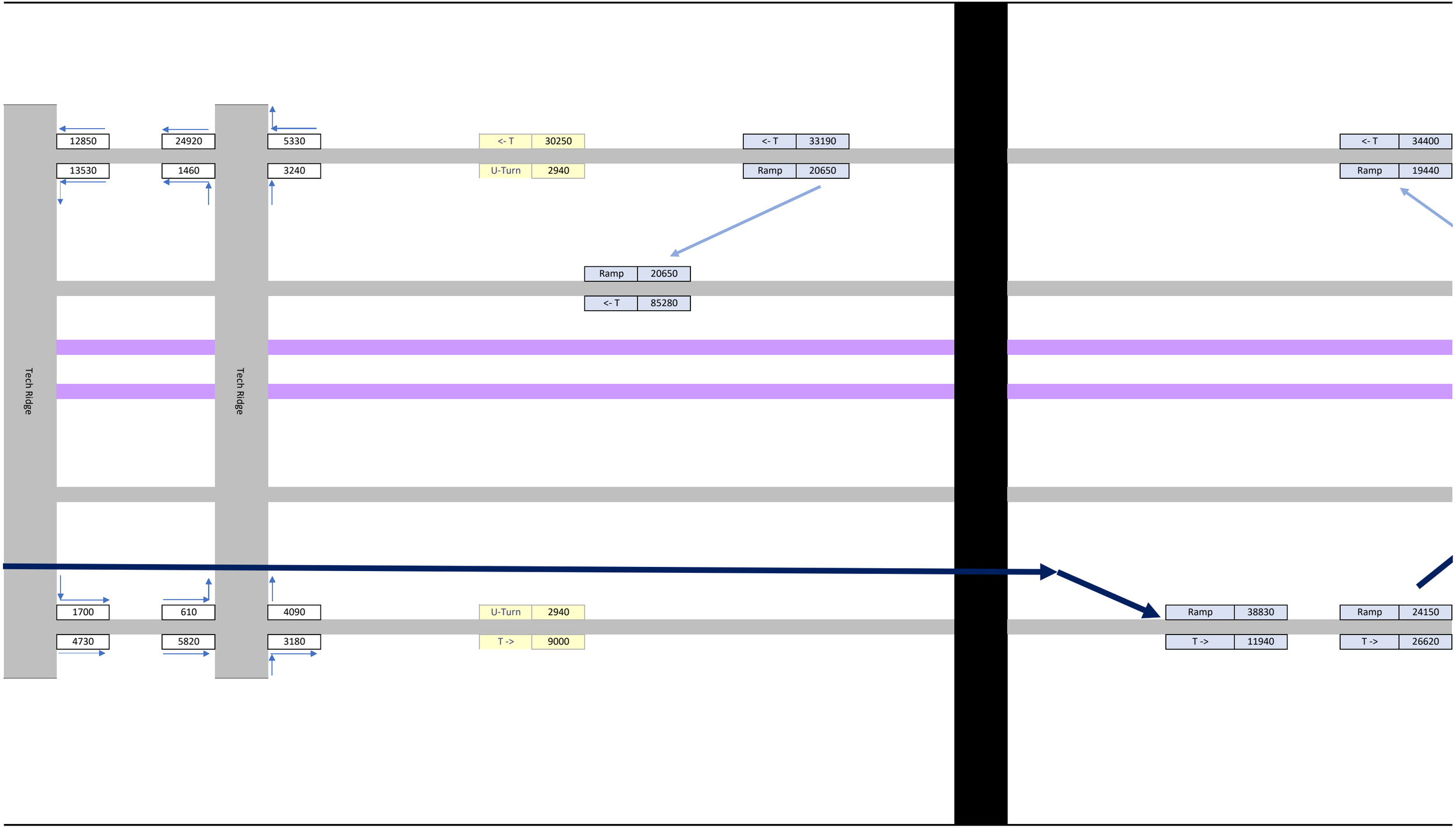

<- T
20640
U-Turn
2250
4180
28070
16460
6910
13600
9770
Ramp
36630
<- T
88540
US 183
US 183
74060
25860
16650
8500
U-Turn
2250
T ->
22900
16720
9060
18260
13840
9300
22800

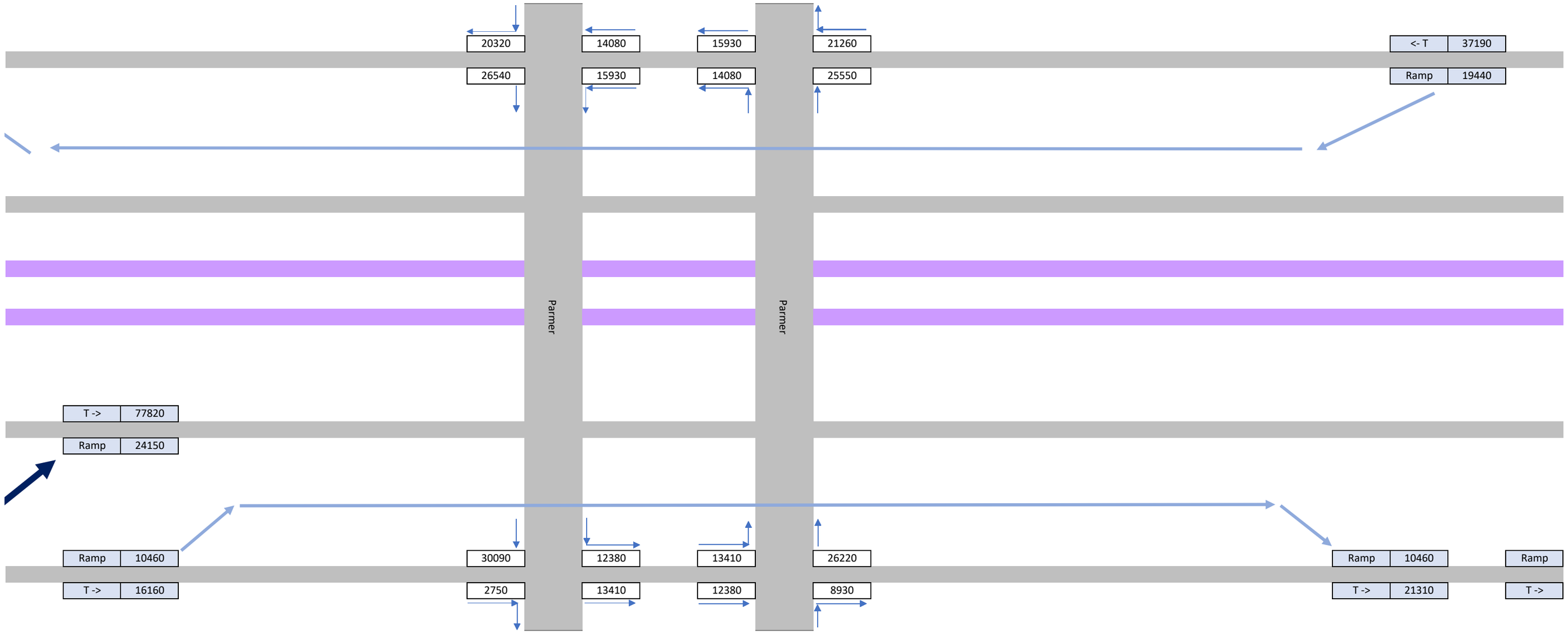

10900
17800
<- T
24500
U-Turn
6690
<- T
31190
Ramp
31460
<- T
62650
Ramp
5160
Ramp
6290
Ramp
13890
Ramp
31460
<- T
57080
Ramp
15020
<- T
57080
T ->
83870
Ramp
16050
T ->
83870
Ramp
9310
T ->
75250
Ramp
17930
18270
13030
U-Turn
6690
T ->
35830
Ramp
16050
T ->
42520
Ramp
25730
T ->
32840

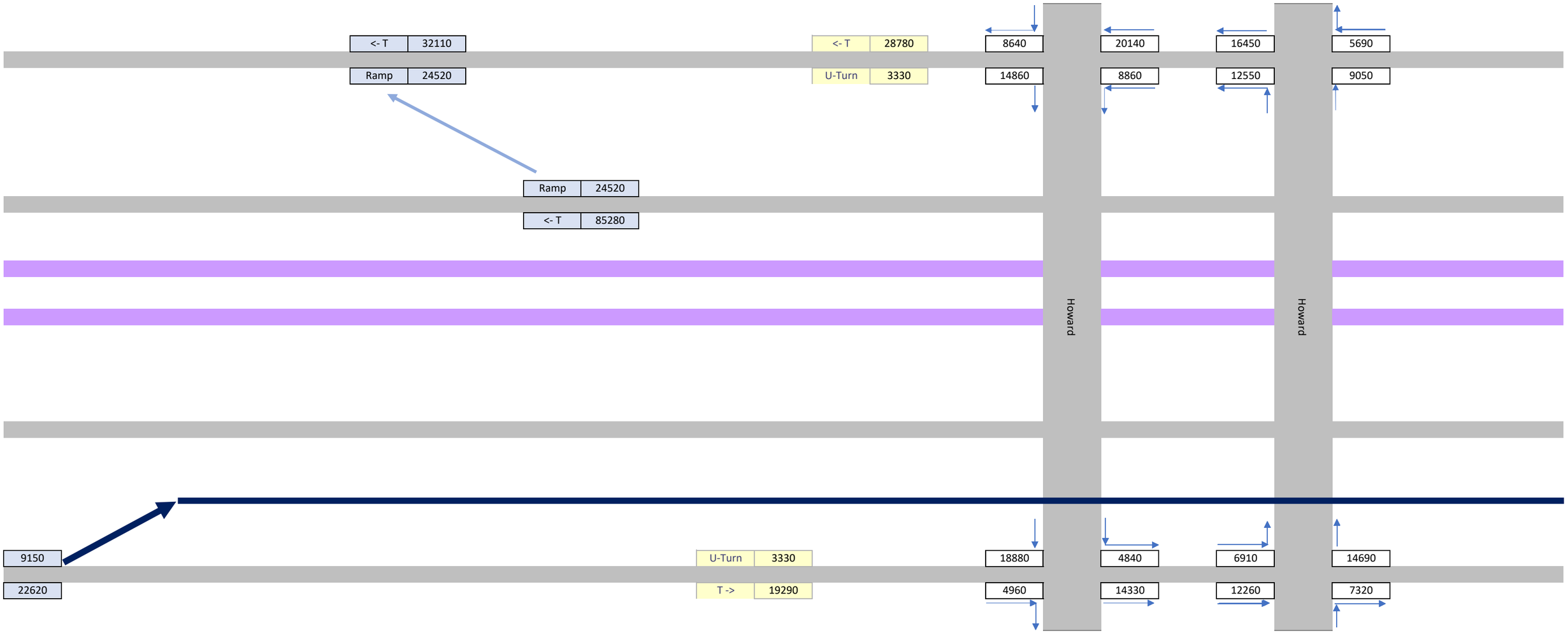

<- T
29610
Ramp
38200
<- T
15840
U-Turn
13770
8370
16010
7470
4840
8930
3380
2870
21480
<- T
11800
U-Turn
3210
Rundberg
Rundberg
U-Turn
13770
T ->
19070
13530
6030
7320
13040
11460
8900
13400
2020
U-Turn
3210
T ->
10920

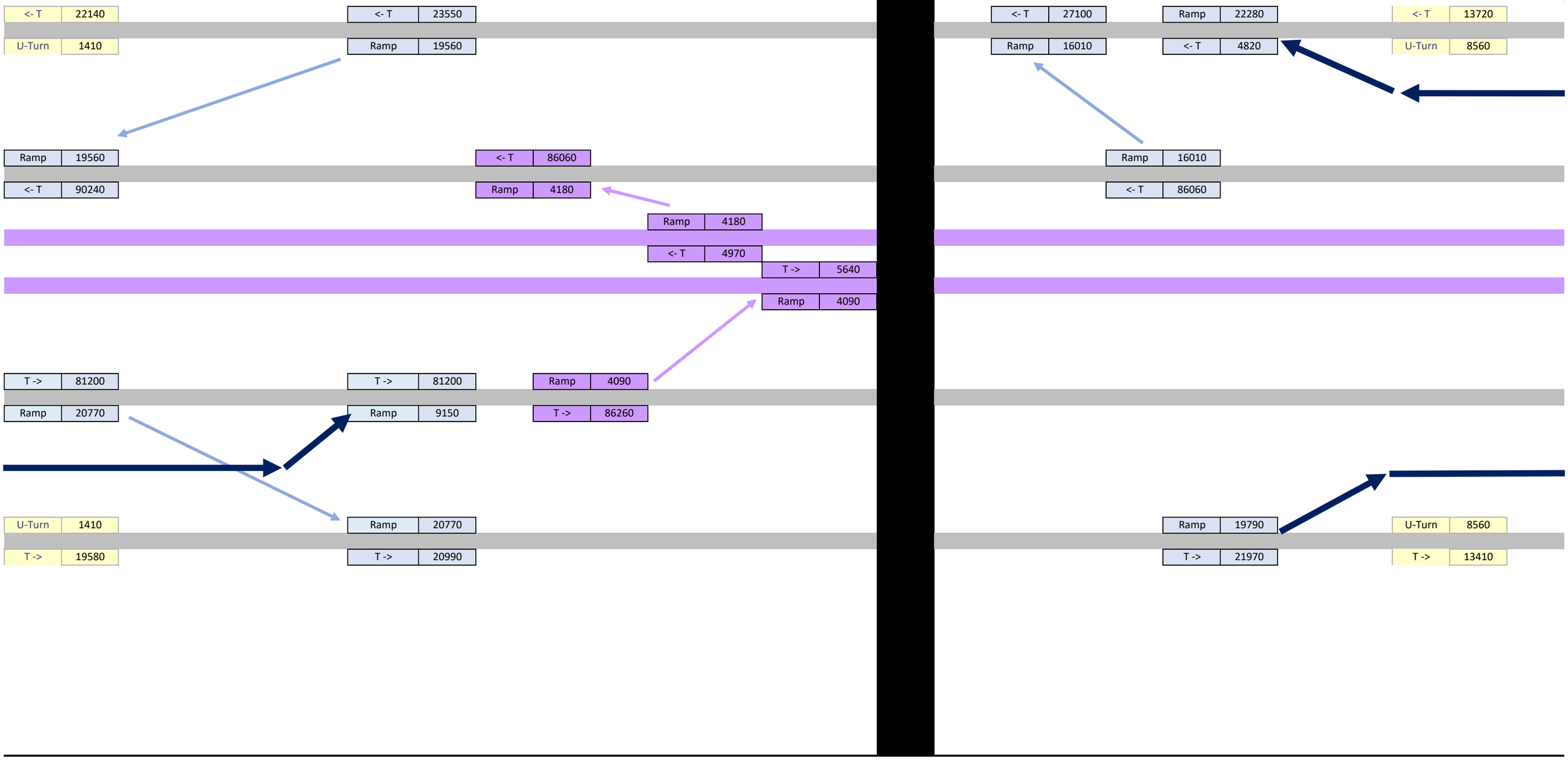

<- T 15010
Ramp 21740
<- T 20200
Ramp 16550
Ramp 16460
<- T 66840
<- T 66840
Ramp 5260
Ramp 16550
<- T 83300
Ramp 5260
<- T 4680
T-> 4180
Ramp 5550
T-> 75250
Ramp 25350
Ramp 5550
T-> 95050
T-> 95050
Ramp 12320
Ramp 18310
T -> 14130
Ramp 12320
T-> 20120
<- T 19400
U-Turn 800
U-Turn 800
T -> 19320
5350
14580
14050
8030
13560
8520
4200
18920
18430
5040
4180
14280
10270
8190
17170
7740
Braker Lane
Braker Lane

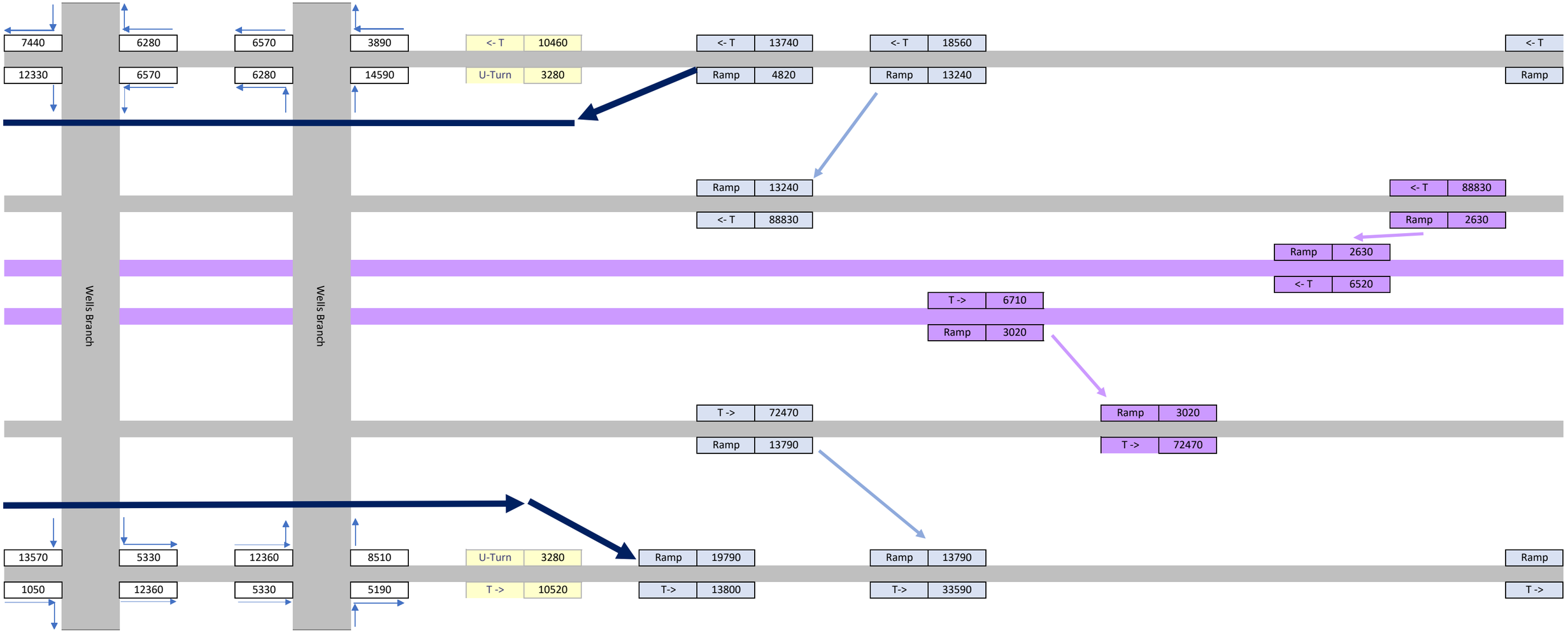

<- T 17760
<- T 6840
U-Turn 800
Ramp 11720
<- T 6840
Ramp 10610
<- T 13990
U-Turn 3460
1140
2650
Ramp 11720
<- T 99850
<- T 111570
Ramp 4970
Ramp 10610
<- T 105930
Ramp 4970
<- T 4970
T -> 5640
Ramp 4090
Ramp 4090
T -> 93820
Ramp 4090
T -> 93820
Ramp 13550
T -> 77820
Ramp 20090
Ramp 20090
Ramp 18740
U-Turn 800
T -> 15930
Ramp 13550
T -> 16730
Ramp 18740
T -> 11540
U-Turn 3460
T -> 8080
14480
3350

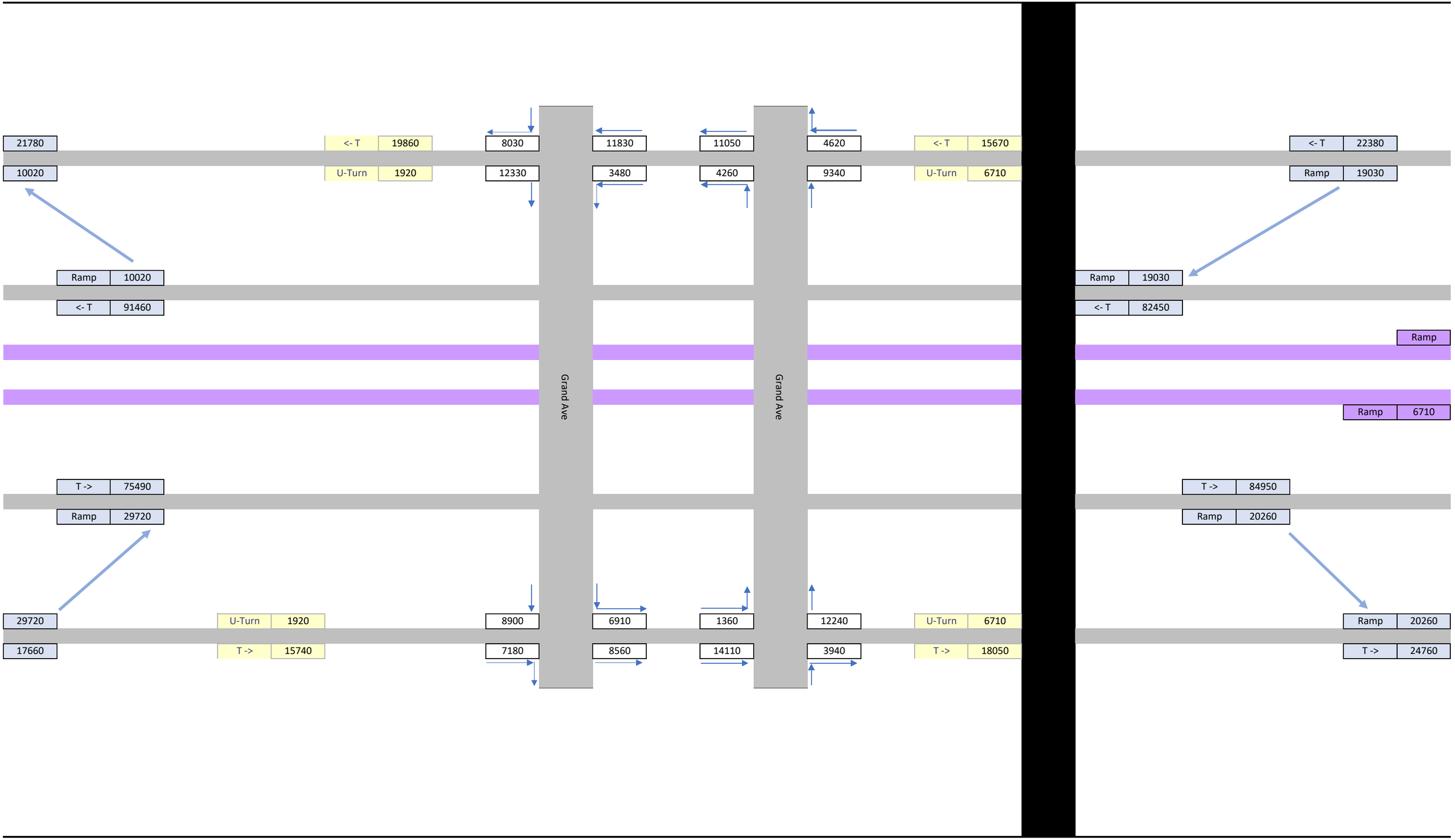

Tech Ridge
Tech Ridge
12850
24920
5330
<- T
30250
<- T
33190
<- T
34400
13530
1460
3240
U-Turn
2940
Ramp
20650
Ramp
19440
Ramp
20650
<- T
85280
1700
610
4090
U-Turn
2940
Ramp
38830
Ramp
24150
4730
5820
3180
T ->
9000
T ->
11940
T ->
26620

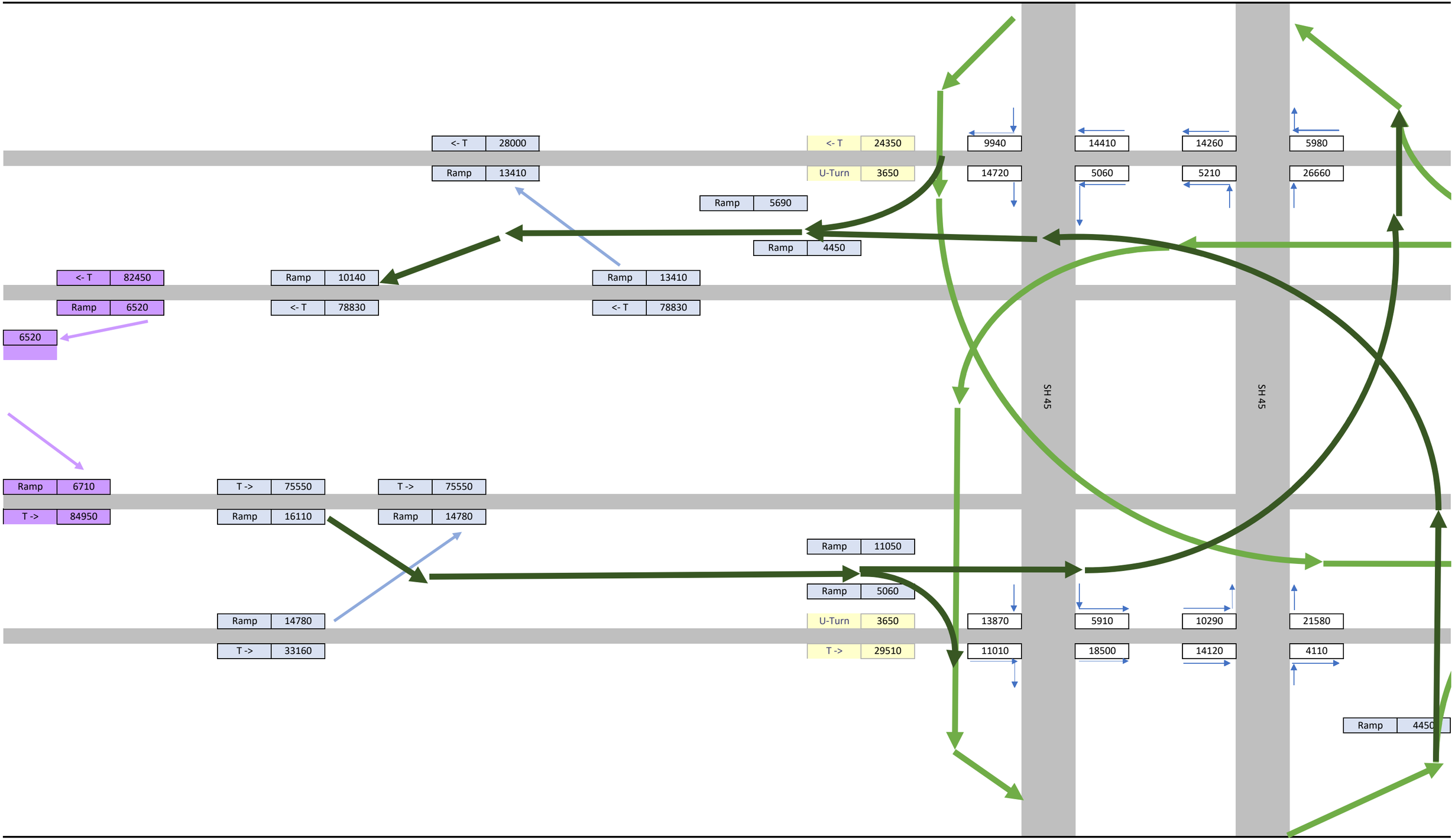

20320
14080
15930
21260
<- T
37190
26540
15930
14080
25550
Ramp
19440
Parmer
Parmer
T ->
77820
Ramp
24150
Ramp
10460
30090
12380
13410
26220
Ramp
10460
Ramp
T ->
16160
2750
13410
12380
8930
T ->
21310
T ->

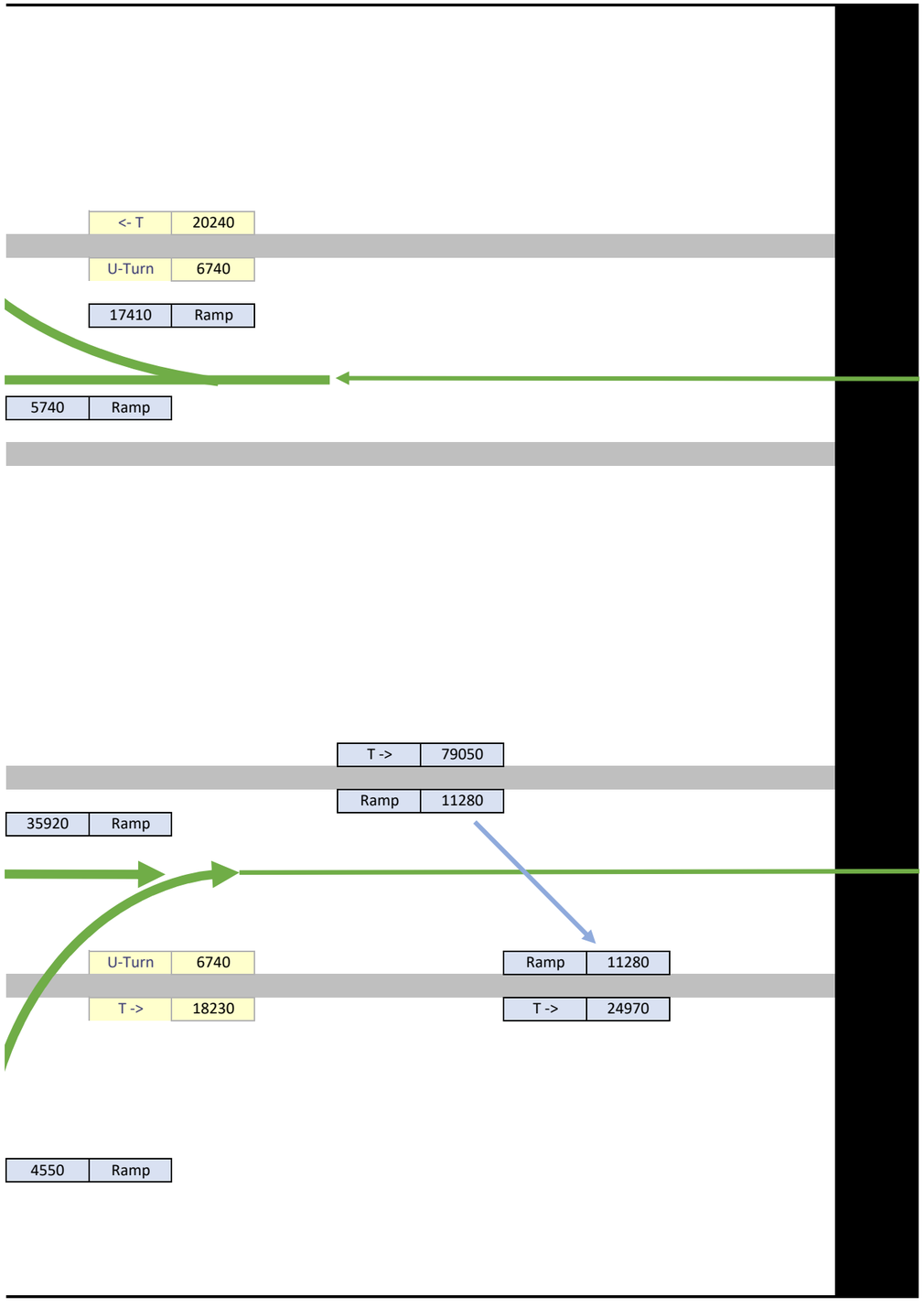

<- T
32110
Ramp
24520
<- T
28780
U-Turn
3330
8640
20140
16450
5690
14860
8860
12550
9050
Howard
Howard
Ramp
24520
<- T
85280
9150
22620
U-Turn
3330
T ->
19290
18880
4840
6910
14690
4960
14330
12260
7320


<- T 22140
U-Turn 1410
<- T 23550
Ramp 19560
Ramp 19560
<- T 90240
<- T 86060
Ramp 4180
Ramp 4180
<- T 4970
T -> 5640
Ramp 4090
T -> 81200
Ramp 20770
T -> 81200
Ramp 9150
Ramp 4090
T -> 86260
U-Turn 1410
T -> 19580
Ramp 20770
T -> 20990
<- T 27100
Ramp 16010
Ramp 22280
<- T 4820
<- T 13720
U-Turn 8560
Ramp 16010
<- T 86060
Ramp 19790
T -> 21970
U-Turn 8560
T -> 13410


7440
6280
6570
3890
<- T
10460
12330
6570
6280
14590
U-Turn
3280
<- T
13740
<- T
18560
<- T
Ramp
4820
Ramp
13240
Ramp
Ramp
13240
<- T
88830
<- T
88830
Ramp
2630
Ramp
2630
<- T
6520
T ->
6710
Ramp
3020
Ramp
3020
T ->
72470
T ->
72470
Ramp
13790
13570
5330
12360
8510
U-Turn
3280
Ramp
19790
Ramp
13790
Ramp
1050
12360
5330
5190
T ->
10520
T->
13800
T->
33590
T ->
Wells Branch
Wells Branch


21780
10020
<- T
19860
U-Turn
1920
8030
12330
11830
3480
11050
4260
4620
9340
<- T
15670
U-Turn
6710
<- T
22380
Ramp
19030
Ramp
10020
<- T
91460
Grand Ave
Grand Ave
Ramp
19030
<- T
82450
Ramp
6710
T ->
75490
Ramp
29720
T ->
84950
Ramp
20260
29720
17660
U-Turn
1920
T ->
15740
8900
7180
6910
8560
1360
14110
12240
3940
U-Turn
6710
T ->
18050
Ramp
20260
T ->
24760

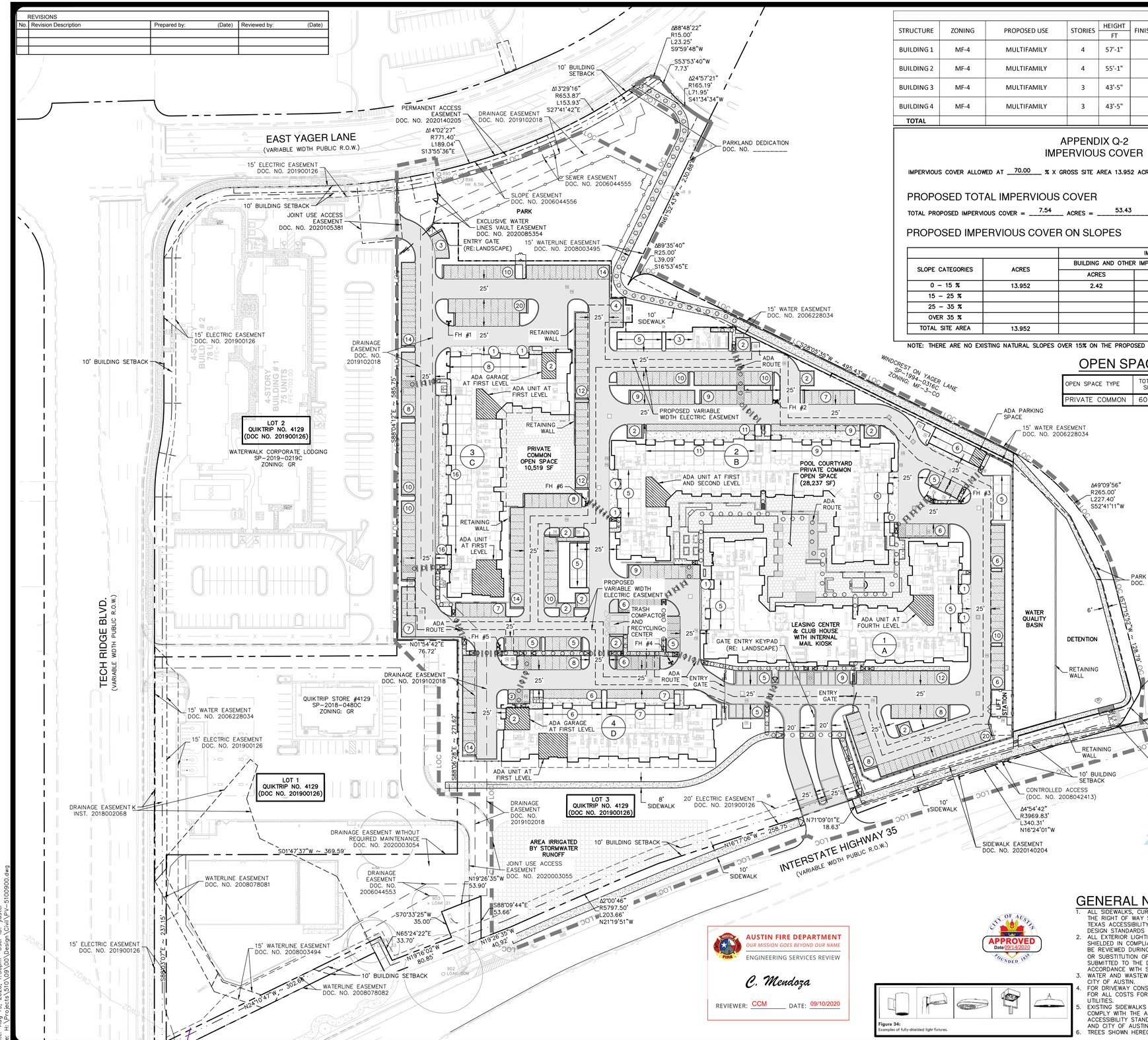

SH 45
SH 45
<- T 28000
Ramp 13410
<- T 24350
U-Turn 3650
9940
14720
14410
5060
14260
5210
5980
26660
Ramp 5690
Ramp 4450
<- T 82450
Ramp 6520
6520
Ramp 10140
<- T 78830
Ramp 13410
<- T 78830
Ramp 6710
T -> 84950
T -> 75550
Ramp 16110
T -> 75550
Ramp 14780
Ramp 14780
T -> 33160
Ramp 11050
Ramp 5060
U-Turn 3650
T -> 29510
13870
11010
5910
18500
10290
14120
21580
4110
Ramp 4450


<- T
20240
U-Turn
6740
17410
Ramp
5740
Ramp
T ->
79050
Ramp
11280
35920
Ramp
U-Turn
6740
T ->
18230
Ramp
11280
T ->
24970
4550
Ramp

APPENDIX C

Planned Development Plats

REVISIONS				
No.	Revision Description	Prepared by: (Date)	Reviewed by: (Date)	



BUILDING INFORMATION TABLE									
STRUCTURE	ZONING	PROPOSED USE	STORIES	HEIGHT FT	FINISHED FLOOR ELEVATION	TOTAL SF		TOTAL FLOOR AREA RATIO		
						BUILDING (SF)	TOTAL SITE (SF)	TOTAL FLOOR AREA (SF)	MAXIMUM F.A.R.	RATIO
BUILDING 1	MF-4	MULTIFAMILY	4	57'-1"	VARIES	33,308	607,769	126,312	0.75	**0.61**
BUILDING 2	MF-4	MULTIFAMILY	4	55'-1"	VARIES	34,180		127,287		
BUILDING 3	MF-4	MULTIFAMILY	3	43'-5"	VARIES	26,185		69,293		
BUILDING 4	MF-4	MULTIFAMILY	3	43'-5"	VARIES	17,625		48,956		
TOTAL						**111,298**	**18%**	**371,848**		

APPENDIX Q-2
IMPERVIOUS COVER

IMPERVIOUS COVER ALLOWED AT 70.00 % X GROSS SITE AREA 13.952 ACRES = 9.766 ACRES

PROPOSED TOTAL IMPERVIOUS COVER

TOTAL PROPOSED IMPERVIOUS COVER = 7.54 ACRES = 53.43 %

PROPOSED IMPERVIOUS COVER ON SLOPES

SLOPE CATEGORIES	ACRES	IMPERVIOUS COVER		
		BUILDING AND OTHER IMPERVIOUS COVER		DRIVEWAYS/ROADWAYS
		ACRES	% OF CATEGORY	ACRES
0 – 15 %	13.952	2.42	32.10	5.12
15 – 25 %				
25 – 35 %				
OVER 35 %				
TOTAL SITE AREA	13.952			

NOTE: THERE ARE NO EXISTING NATURAL SLOPES OVER 15% ON THE PROPOSED SITE

OPEN SPACE REQUIREMENT

OPEN SPACE TYPE	TOTAL GROSS SITE AREA	OPEN SPACE REQ. (5%)	OPEN SPACE PROVIDED
PRIVATE COMMON	607,769 SF	30,388 SF	38,756 SF

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EXISTING CURB
- PROPOSED 6" CURB
- HEADER CURB
- SAWCUT LINE
- PROPOSED ADA ROUTE
- PROPOSED HEAVY DUTY ASPHALT (RE: 44 OF 77 FOR DTL)
- PROPOSED LIGHT DUTY ASPHALT (RE: 44 OF 77 FOR DTL)
- PROPOSED CONCRETE SIDEWALK/PAVEMENT (RE: 44 OF 77 FOR DTL)
- PARKING STALL COUNT (5)
- SIDEWALK RAMP
- LANDSCAPE AREA (LS)

PARKING SUMMARY

UNIT TYPE	UNITS	PARKING SPACES (REQUIRED)	MIN. PARKING (REQUIRED)
TYPE A (1 BEDROOM)	204	1.5	306
TYPE B (2 BEDROOM)	91	2.0	182
TYPE C (3 BEDROOM)	16	2.5	40
TOTAL UNITS	**311**		
TOTAL MIN. REQUIRED PARKING SPACES			528

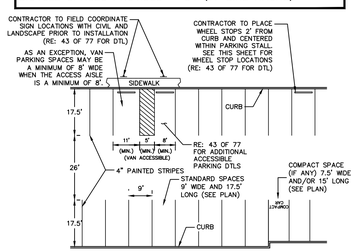
SURFACE STANDARD PARKING	=	290
SURFACE ADA PARKING	=	8
SURFACE COMPACT PARKING	=	50
CARPORT PARKING	=	37
CARPORT ADA PARKING	=	1
GARAGE STANDARD PARKING	=	100
GARAGE ADA PARKING	=	5
SURFACE TANDEM PARKING	=	38
COMPACT TANDEM PARKING	=	19
TOTAL PARKING PROVIDED	=	548

ADA PARKING SUMMARY

ADA SPACES REQUIRED (2% OF MIN REQ) = 13

BICYCLE PARKING SUMMARY

BICYCLE SPACES REQUIRED (5% OF MIN REQ) = 27
BICYCLE SPACES PROVIDED = 34 (17 BIKE RACKS)



NOTE: ALL SPACES SHOWN ON PLAN STD. (9x18) UNLESS OTHERWISE NOTED

NOTE: ALL PAVEMENT MARKINGS AND SIGNAGE OF ACCESSIBLE PARKING AREAS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ACCESSIBILITY MANUAL.

TYPICAL PARKING STRIPING DETAIL

NOT-TO-SCALE

REVIEWED
September 08, 2020
@
Austin Water Utility
Alfredo Torres

SITE PLAN RELEASE

SITE PLAN APPROVAL SHEET 09 OF 77

FILE NUMBER SP-2019-0262C APPLICATION DATE JUNE 19, 2019

APPROVED BY COMMISSION UNDER SECTION 112 OF

CHAPTER 25-5 OF THE CITY OF AUSTIN CODE.

EXPIRATION DATE (25-5-81, LDC) CASE MANAGER A DESANCTIS

PROJECT EXPIRATION DATE ORD. #970905-A) DWPZ DDZ

DEVELOPMENT SERVICES DEPARTMENT

RELEASED FOR GENERAL COMPLIANCE: ZONING : MF-4

Rev. 1 Correction 1
Rev. 2 Correction 2
Rev. 3 Correction 3

Final plat must be recorded by the Project Expiration Date, if applicable. Subsequent Site Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction (if a building permit is not required), must also be approved prior to the Project Expiration Date.

GENERAL NOTES:

1. ALL SIDEWALKS, CURBS, RAMPS, AND DRIVE APPROACHES IN THE RIGHT OF WAY SHALL BE IN COMPLIANCE WITH CURRENT TEXAS ACCESSIBILITY STANDARDS AND CITY OF AUSTIN DESIGN STANDARDS PRIOR TO FINAL INSPECTION APPROVAL.
2. ALL EXTERIOR LIGHTING WILL BE FULL CUT-OFF AND FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E 2.5 AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/LIGHT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 2.5.2.E
3. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN.
4. FOR DRIVEWAY CONSTRUCTION, THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
5. EXISTING SIDEWALKS TO REMAIN HAVE BEEN VERIFIED TO COMPLY WITH THE APPLICABLE VERSION OF THE TEXAS ACCESSIBILITY STANDARDS, FEDERAL ADA REQUIREMENTS AND CITY OF AUSTIN STANDARDS.
6. TREES SHOWN HEREON, WERE LOCATED FEBRUARY 05, 2019.

AUSTIN FIRE DEPARTMENT
OUR MISSION GOES BEYOND OUR NAME
ENGINEERING SERVICES REVIEW
C. Mendoza
REVIEWER: CCM DATE: 09/10/2020

CITY OF AUSTIN
APPROVED
Date 09/14/2020
FOUNDED 1839

Figure 34:
Examples of fully-shielded light fixtures.

NO.	REVISION	DATE

8/13/2020

STATE OF TEXAS
THOMAS MATTHEW CARTER
79272
LICENSED
PROFESSIONAL ENGINEER

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

TECH RIDGE APARTMENTS
12217 N IH 35 SVRD NB
AUSTIN, TEXAS

SITE AND PAVING PLAN

PLAT NO. 201900126
JOB NO. 51009-00
DATE AUGUST 2019
DESIGNER DLS/KP
CHECKED ____ DRAWN JS
SHEET 09 OF 77

Date: Aug 19, 2020, 1:50pm User ID: jaster
File: H:\Projects\510\09\00\Design\Civil\PV-5100900.dwg

ISSUE FOR PERMIT SP-2019-0262C