

**ORIGINAL**  
**ECONOMIC IMPACT ANALYSIS**  
**ERIE RACETRACK**  
**Erie, Pennsylvania**

Prepared for:  
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# Erie Racetrack Economic Impact

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## Introduction

Mountaineer Racing Corporation is proposing the construction and operation of the new Presque Isle thoroughbred racetrack, to be located near the intersection of Interstates 90 and 79 in the northwestern Pennsylvania city of Erie. The racetrack is expected to offer a live racing schedule beginning in the first year of operation with 50 days of live racing, and increasing to 120 race days by the fifth year of operation. The facility will offer live entertainment and several dining options in addition to the live and simulcast racing. Construction on the facility and grounds is scheduled for completion over a time frame of approximately one year, at a cost of \$26.1 million, not including furnishings and fixtures.

A racetrack is capable of generating significant economic impacts to its local community or region, as a wide variety of industries are supported by the day-to-day operations. In addition to the wholesale purchase of goods to be sold to the public, ranging from food in the restaurants to paper in the Autototes, the agriculture industries supply a variety of goods and services to the track and horsemen. This can also generate demand for farm/barn construction and operation in the area, as well as veterinary services. As these are all labor-intensive industries, a significant amount of labor demand can be expected. As a result, the racetrack development should be a significant addition to the Erie economy.

This economic impact assessment will evaluate the benefits to the local, regional and State economies as a result of the racetrack construction and development, including the incremental spending, employment, earnings and taxes that will be generated. The impacts can be expected to occur in two phases. The first wave of economic benefits will occur during the construction phase. These benefits are temporal in that their impact will only be felt during the course of construction, and slightly beyond due to secondary spending attributable to the initial expenditures, but would not recur annually during the operational years of the track. The second phase of economic benefits will result from the ongoing operations of the racetrack facility and ancillary operations. As it is expected that there will be a ramp-up in scale of operations in terms of the length of the live racing calendar, the impact will be demonstrated for the first and fifth years of operation, with the assumption that from the fifth year onward the impact would be comparable to the fifth year in real terms.

During the past eight years the country experienced the longest sustained period of economic prosperity in modern history. Unemployment rates fell sharply and production increased steadily. For most of the country the strengthening of the economy was obvious. However, in the Erie economy, the decline in unemployment rate from the early 1990's was not as substantial as it was in the rest of the state or the rest of the country. During the recession in the early 1990's, the unemployment rate in the Erie Metropolitan Statistical Area (MSA) was within  $\frac{1}{4}$  of a percent of the state average, with a slightly

greater differential versus the national average. However, the gap widened during the mid to late 1990's, as the discrepancy between the Erie and statewide unemployment rate averages grew to between .5 and .7%, and nearly a full percentage above the national average. With a slowing economy in 2001 and into 2002, the gap has narrowed again, back to the previous recession's differential levels. The development of the Presque Isle racetrack in Erie could therefore bring the unemployment rate in the area to the statewide average, or potentially below. The following table presents the comparative historical unemployment rates.

	ERIE MSA	PA STATE	U.S.	Diff. ERIE MSA - PA	Diff. ERIE MSA - U.S.
1990	5.81%	5.44%	5.62%	0.37%	0.19%
1991	7.22%	6.99%	6.85%	0.23%	0.37%
1992	7.73%	7.59%	7.49%	0.14%	0.24%
1993	7.08%	7.12%	6.91%	-0.04%	0.17%
1994	6.68%	6.18%	6.10%	0.50%	0.58%
1995	6.39%	5.88%	5.59%	0.51%	0.80%
1996	5.80%	5.31%	5.41%	0.49%	0.39%
1997	5.86%	5.18%	4.95%	0.68%	0.91%
1998	5.22%	4.63%	4.51%	0.59%	0.71%
1999	5.02%	4.40%	4.23%	0.62%	0.79%
2000	4.82%	4.18%	4.01%	0.64%	0.81%
Current	5.10%	4.60%	4.90%	0.50%	0.20%

Source: Bureau of Labor Statistics

The construction of the racetrack will provide an immediate stimulus to the local economy. The construction will require the employment of many city and regional workers, ranging from the construction industry to architecture firms and food and beverage establishments. The construction phase of the project will create a large number of short-term employment positions, as well as provide supplementary income and employment to those already with jobs. When operating, the racetrack will provide steady employment to workers from the city and throughout the state, not only within its walls, but also externally via the customer and agricultural service industries. With the current rate of unemployment at approximately 5%, and an economic slowdown in process, the supply of jobs in the market, both skilled and unskilled, could accommodate the vast majority of the area residents capable of and seeking employment. These jobs would include not only those inside the racetrack facility, but also those that will be created throughout the community as attributable to the Presque Isle development. Therefore, a broad array of skilled and unskilled jobs will be created.

## Economic Impact Analysis Introduction

An economic impact analysis of the racing industry was performed by Public Sector Consultants, Inc. for the Commonwealth of Pennsylvania in 1994. It was determined that at the time the tracks generated an annual economic impact of \$253 million. These

operations contributed to an increase of earnings statewide totaling nearly \$230 million annually, supporting over 10,800 jobs both directly and indirectly.

Spending in the equine industry was seen as occurring throughout the statewide economy, not simply just at the tracks. Nearly a half billion dollars was spent in 1994 on equine-related goods and services, with the greatest expense being feed – over \$87 million in total, or an average of \$514 per horse. Nearly one-third of these expenditures are on race-horse breeds. A broad variety of services are also utilized in the equine industry, ranging from trainers to veterinarians to farriers (blacksmiths). Farms also require a broad array of equipment in order to operate, ranging from bedding to grooming supplies to capital improvements on the facilities. Transportation is also a considerable expense, both for humans and horses. In 1994 transportation costs ran nearly \$15 million. One of the indirect benefits pointed out in the study was the preservation of agricultural green-space. According to a citation in the Public Sector Consultants study, 520,000 acres of land were devoted to equine use in 1990.

A substantial amount of these benefits accrued in the southeastern Pennsylvania area, near Philadelphia, the opposite side of the state, such that the Erie area attained a minimal, if any, benefit. The construction and operation of this racetrack would therefore result in a significant expansion of the equine and equine-related industries in the Erie area, as well as stimulate the construction and landscaping industries during development. Additionally, fiscal benefits would result from taxation on racing operations, spending and incremental incomes.

The construction and site development budget for the racetrack facility is \$26.2 million, not including the furnishings, fixtures and equipment, which are projected to amount to an additional \$2.5 million. The breakdown of expenditures is expected to be as follows:

**Projected Presque Isle Development Costs**

	Budgeted Cost
Site Work*	\$5,818,680
Track Area	\$4,703,270
Club House Building	\$6,191,429
Paddock Building	\$579,540
Out Buildings**	\$8,863,420
<b>Total Construction Cost</b>	<b>\$26,156,339</b>

\*Water, sewer, parking area, landscaping.

\*\*Barns, dormitories, entrance security, etc.

Source: Mountaineer Racing

During the first year of facility operations, it is projected that the revenues of the track will be nearly \$13 million, but should increase to nearly \$33 million by the fifth year due to an annual extension of the live racing season. The track is expected to spend locally \$10.8 million in the first year of operations, including \$4 million in purses, increasing to

over \$25 million in the fifth year, of which \$9.6 million would be purses. An additional \$790 thousand to \$2.3 million is expected to be paid out by the track each year in taxes on admissions, wagering and sales.

The physical construction of the complex will stimulate the local economy by necessitating the employment of many local laborers and craftsmen creating a large number of short-term employment positions within the construction industry. When operating, the racetrack will continue to provide steady employment for town, county and state residents.

Job creation, both temporary and permanent, translates to earnings for area residents. This directly increases spending in the local economy on goods and services, which indirectly results in increased expenditures by merchants to their suppliers. As a result, jobs are created throughout the economy and earnings rise as the new spending is introduced. Similarly, the government benefits as tax revenues rise as a result of increases in spending and incomes.

This assessment will consider benefits that should accrue based on the proposed configuration and scheduling of the racetrack facilities and operations. These benefits are those that could be expected to exist as long as the racetrack is in operation, and represent the quantifiable economic impact to the community.

## **Economic Impact Methodology**

The economic impact analysis is an assessment of the economic benefit that will accrue to the area due to the construction and operation of the proposed racetrack development. The benefits that are typically examined in an economic impact analysis include the total spending that is introduced to the area, the increase in earnings to area residents, the number of new jobs created, and the fiscal benefits that subsequently accrue to state and local governments. A qualitative assessment is included which will show the incremental benefits that could be expected with respect to changes in the unemployment rate in the region, and changes in the tax base and tax revenues.

This economic impact assessment will evaluate the benefits that could be expected during the construction phase as well as the ongoing operational stage of the racetrack and its facilities. The economic impact analysis examines the spending that can be anticipated to take place in the economy, and the resulting employment and earnings that the new revenues allow. The construction phase of the project will be considered as a *one-time benefit* to the area. This refers to the fact that these dollars will be introduced into the economy only during the construction phase of the project, and cannot be expected to continue to provide permanent jobs or revenues beyond the completion of development. This differs from the economic benefits that accrue from the annual operations of the racetrack once it has opened for business. These are termed *ongoing benefits*, as they are revenues, jobs, earnings, and tax dollars that can be expected to accrue annually as a result of operations and the attraction of racing fans.

## **Construction Impact**

The development budget for the racetrack is projected to be approximately \$26.16 million, as outlined above. The 54,717 square foot clubhouse will consist of two 23,396-square foot levels, including a club and grandstand level. A kitchen level, apron, press box seating and bleachers will comprise the balance of the facility. An additional \$2.47 million is anticipated to be spent on furnishings and equipment in the clubhouse and the out-buildings. In total, the startup cost is projected to be \$28.6 million. It is expected that most of the equipment and furnishings will be available for purchase at the local or regional level.

The initial economic impact of the property will result from the expenditures for the development, as evaluated below. The total economic impact of racetrack development and construction can be divided between a direct impact and an indirect impact.

### ***Direct Impact***

The direct impact of construction is the total of the local expenditures made on the project during the construction process. It is anticipated that the total cost of development for the complex will be approximately \$28.6 million, including land development costs and furnishing. Development is expected to take approximately 12 months.

It is estimated that 30% of the construction project's \$26.2 million in local expenditures will be the payment of salaries to construction workers, project administrators, and designers, with the remaining 70% being spent on construction materials. Assuming that the project is completed in 12 month, it could be expected that construction salaries would be approximately \$7.85 million. This would directly support the employment of approximately 165 persons. Employment totals and tasks could be expected to vary over the course of development, ranging from designers to construction workers.

Expenditures locally on construction materials and capital goods are therefore projected to total approximately \$18.3 million, with an additional \$2.5 million spent on FF&E.

### ***Indirect Impact***

The indirect impact of construction is the additional spending that will take place in the area that is made possible by the initial expenditures at the construction site. Local firms that provide goods and services to the site are the recipients of new dollars in the economy. These new dollars enhance their ability to spend, and therefore the incremental spending attributable to this income is considered an indirect impact. These additional expenditures and revenues continue to take place throughout the economy, during the construction period, in a rippling effect. Economic impact analyses use industry multipliers that have been developed based on U.S. Census data to determine the indirect impacts that occur from the direct expenditures. Based on the construction costs as provided above, it could be expected that indirect expenditures would be approximately

\$20 million during the course of development. If construction costs exceed projections, indirect impacts would rise accordingly, and would naturally lag if there were delays. The indirect spending will provide for approximately \$5.4 million in earnings to the area during the course of development, supporting the equivalent of 132 new full-time jobs based on the above estimated expenditures.

### **Total Construction Impact**

In total, the temporary economic impact to the area that could be expected to occur during construction is estimated to be \$48.1 million. Earnings to regional employees are expected to rise by over \$13 million during construction. As a result of the expenditures attributable to the racetrack construction, these earnings would cover the equivalent of nearly 300 full-time jobs. Unlike the ongoing economic impact, which will be discussed in the following section, these are the total benefits that could be expected during construction, and are not ongoing averages. It is expected that the construction period would be approximately a 12-month process, after which the direct benefits would cease to exist, and subsequent phases of the multiplier process will trickle down.

**One - Time Economic Impact**

	Direct	Indirect	Total
Total Spending	\$28,012,000	\$20,084,000	\$48,096,000
Total Earnings	\$7,847,000	\$5,423,000	\$13,270,000
Average Annual Employment	165	132	297

### **Fiscal Benefit**

The construction of the racetrack will also provide a fiscal benefit to the area. The purchases made by construction workers and material suppliers indirectly in the community will provide sales tax revenues to the County and Commonwealth. Purchases for construction could also be expected to be subject to sales taxes.

The sales tax rate in Pennsylvania is 6%. Based on purchases of \$48 million in the local economy, it is estimated that the fiscal impact of construction should be \$2.9 million. Additionally, a state income tax is imposed at a rate of 2.8% on earnings. This would generate an additional \$371 thousand in State tax revenues.

### **Ongoing Economic Impact**

Unlike the construction phase, economic benefits resulting from the ongoing operation of the racetrack complex can be expected to occur annually, resulting in a constant stimulus to the economy. Expenditures by patrons on site, as well as by the racetrack and horse owners are considered to be *direct* expenditures. Expenditures by racing fans and horse owners elsewhere in the local economy that would otherwise not have occurred are referred to as *induced* expenditures. These expenditures are important because their existence allows for a revitalization of the region *aside from* the proposed racetrack.

Merchants and restaurateurs will be needed to provide goods and services to visitors to the racetrack, both patrons and those that are party to the competition. These expenditures will create the need for new jobs, and will be filled by residents of the area.

### ***Direct Spending***

Expenditures that emanate within the racetrack complex constitute the direct spending in the economy. These expenditures are traced to the activities of the patrons, horsemen, and the racetrack operation. The spending category sums the expected revenues of the food and beverage sectors of the complex, as well as revenues received from the export of the simulcast signal, along with expenditures of the horsemen and the racetrack and its administration on salaries, wages, goods, and services required. Wagering expenditures by patrons are not considered as 'direct expenditures', though it could be argued that they would fall into a gray area of 'entertainment service expenditures'. As such, though the betting win by the racetrack is not reflected in this economic impact analysis, the disbursement of purses is tracked, as are the spending by the racetrack and horsemen in the community and on employees as a direct result of the betting revenues. This is considered to be the starting point of the racetrack impact analysis, and thus the wagering expenditures are the catalyst for the economic impact of the racetrack. Direct earnings and employment figures are the expected totals for the complex during the ongoing operating phase, as projected in the market assessment and operational pro forma.

The direct economic impacts are tracked from four areas—spending by patrons on racing forms and the food and beverage facilities, spending by the racetrack on goods, services, purses and labor, spending on-site by horsemen on goods and services to support their operations, and revenues from the exported simulcast signal. It is noted that not all of the expenditures by the track or the horsemen will be consummated within the local economy, such as the imported simulcast signals and the transportation costs for the horses. This will be considered in our calculations.

The scale of the operation of the track is expected to change dramatically during the first several years of operation, such that the length of the live racing schedule will be extended on an annual basis until stabilization in the fifth year of operation. This economic impact analysis will provide an estimate of the impact in the first and fifth years, such that a ramp-up could be expected during the interim years, and a stabilized annual impact could be expected from the fifth year onward.

Based on the market assessment calculations, it is projected that the racetrack will attract 73,100 live racing patrons in the first year of operation and 120,516 patrons for the simulcast wagering. By the fifth year of operation the live racing attendance is projected to increase to nearly 150 thousand live racing patrons in the fifth year, with 132,495 annual simulcast patrons. These patrons could be expected to generate a commission of \$6.9 million in live and simulcast wagering in the first year of operation, increasing to \$9.6 million by the fifth year. An additional \$2.6 million in revenues for the track are expected in the first year to come from the export of the simulcast signal, as well as phone betting. This subtotal is expected to increase to over \$11 million by the fifth year.



Breakage, resulting from the downward rounding of odds at the track, should provide the facility with an additional \$22 to \$50 thousand in revenues per year.

Patrons can be expected to spend on a variety of goods and services at the track as well, ranging from parking to racing forms to F&B to other forms of live entertainment. The following table presents the expected expenditures during the first and fifth years by racetrack patrons on these ancillary goods and amenities, as well as the racetrack's commissions on live and simulcast wagering.

	Year 1	Year 5
Admissions	\$193,616	\$563,310
Parking	\$154,893	\$225,324
Programs	\$116,170	\$332,343
F&B	\$2,247,062	\$3,856,476
Special Events	\$500,000	\$1,200,000
Live Commissions	\$1,189,331	\$2,643,674
Simulcast Commissions	\$5,745,839	\$6,984,103
Phone Wagering Commissions	\$1,590,000	\$7,420,000
Signal Export	\$1,007,355	\$3,600,000
Breakage	\$22,440	\$49,881

The track is expected to pay out in purses in the first year of operation \$4 million, increasing to \$9.6 million by the fifth year. These purses can be considered as income to horsemen, supporting the expenditures as may be consummated on-site in the dormitories and stables.

Salaries and benefits for employees at the track are projected to be \$3.0 million, increasing to \$6.3 million by the fifth year. Therefore it could be estimated that the total direct earnings at the track will be \$7 million in the first year of operation, and will increase to nearly \$16 million by the fifth year.

A share of the expenditures that will be made by the racetrack will not be consummated within the local market, such as the host-track simulcast expense, reflecting 15% of the simulcast commissions, and the Tote rental, which would likely be from a national provider. Special events, which are expected to be once or twice a month, may be either regional or national in scope, but could conservatively be assumed to be non-local purchases. The following table presents a breakdown of the projected expenditures of Presque Isle racetrack during the first and fifth years of operation.

**Projected Racetrack Operating Expenses**

	Year 1	Year 5
Phone Wagering	\$795,000	\$3,710,000
Salaries	\$1,685,929	\$4,019,727
Benefits	\$252,889	\$602,959
Racing Op. Expense	\$1,790,716	\$4,080,194
Host Track - Simulcast	\$861,876	\$1,047,615
Purses	\$4,000,000	\$9,600,000
Food & Beverage Costs	\$674,119	\$1,156,943
Food & Beverage Operating Expense	\$898,825	\$1,542,590
Tote Rental	\$468,100	\$513,600
G&A Expenses	\$360,000	\$360,000
Housekeeping	\$120,000	\$144,000
Marketing	\$365,000	\$315,000
Special Events	\$500,000	\$1,200,000
Taxes	\$790,181	\$2,275,677
<b>Total Expenses</b>	<b>\$13,562,634</b>	<b>\$30,568,305</b>

The income from purses will support the horsemen's ability to conduct business at the track, including providing feed and veterinary care to the horses, and pay for jockeys and trainers. Based on historical maintenance costs for horses at other tracks, it is estimated that the average maintenance expenditure per horse stabled on site will be \$1,767 per month. This includes \$40 per day in trainer fees, \$300 per month in feed fees, and \$250 per month for services such as trainers, jockeys and veterinarians for each horse.

It is projected that in the first year of operations there will be 1,000 horses stabled at the track for a period of two months. This would result in \$3.5 million in local expenditures by horsemen in the first year. By the fifth year the season is expected to last for four months, and it is assumed that an average of 1,100 horses will be stabled. This will result in expenditures of \$7.8 million by horsemen, in current dollars. Naturally there may be a large number of horses that will race at Presque Isle that may be stabled elsewhere. To the extent that these horses are brought into the state as a result of the addition of Presque Isle to the competitive mix, an economic benefit would be induced. The exclusion here therefore makes this estimate conservative.

The following tables outline the direct benefits as discussed above for the first and fifth years of operation of the facilities. The direct benefits are broken down by expenditures made by patrons, horsemen, the track, and other operators. In the section below regarding indirect impacts, only the expenditures made by the horsemen and the track (net of the purses) will be subject to the methodology of the economic multiplier, as the expenditures made by the horsemen and the track would have been made possible by the initial expenditures of its racing patrons and simulcast importers.

Direct Spending	Year 1	Year 5
Patron Spending	\$3,211,740	\$6,177,453
Signal Export	\$1,007,355	\$3,600,000
Racetrack Spending	\$10,759,977	\$25,373,913
Horsemen Spending	\$3,533,333	\$7,773,333
<b>Total Spending</b>	<b>\$18,512,406</b>	<b>\$42,924,699</b>

The estimation of direct employment at the track in terms of full-time equivalents is difficult to depict due to the seasonal nature of the business. During the live racing season it could be expected that there would be a considerably larger workforce, both for the racetrack and in the stables, than during the simulcast-only months.

The racetrack is projected to spend \$3 million in the first year of operations on salaries and benefits. Based on a 50 day live racing season, is projected that in the first year of operation that there will be 450 employees during the live racing season, of which 100 would work year-round. In the fifth year of operation it is assumed that the racing season will be extended to 120 days. It is projected that employment would increase to 575 persons during the live racing season by the fifth year, with 115 of these employees working year-round.

Additionally, based on the horsemen expenses that would be paid with the purses won, it is estimated that the horsemen would provide employment for 150 people during the live racing season in the first year, with a slightly greater number in the fifth year to take into consideration a greater number of days taken off. This total does not include the 'employment' of horse owners, though they may also be considered as new residents of the local community, and contribute to the tax base as such.

It is projected that the direct spending that will be generated in the first year of operation of the racetrack will be \$18.5 million, supporting the employment of 600 persons with earnings of \$6.4 million for the year. By the fifth year of operations the direct spending is projected to increase to \$42.9 million annually, with direct employment of 740 persons on-site attaining \$14.6 million in earnings. It is noted above that these earnings and jobs do not reflect all full-year jobs, thus a clear average wage cannot be determined from these tables.

The following tables aggregate the expected direct benefits that would accrue to the community as a result of the operation of Presque Isle Racetrack in the first and fifth years of operation.

	Facility Impact	Patron Impact	Horsemen Impact	Total Impact
Direct Spending	\$11,767,332	\$3,211,740	\$3,533,333	\$18,512,405
Direct Earnings	\$3,424,267		\$2,933,333	\$6,357,600
Direct Employment	450	-	150	600

**Direct Economic Impacts of Operations, Year 5**

	Facility Impact	Patron Impact	Horsemen Impact	Total Impact
Direct Spending	\$28,973,913	\$6,177,453	\$7,773,333	\$42,924,699
Direct Earnings	\$8,842,633		\$6,453,333	\$14,589,300
Direct Employment	575	-	165	740

### ***Induced Spending***

Local merchants and hoteliers will benefit from the introduction of the racing facility to the area as well. Patrons can be expected to spend some money elsewhere in the area during their visit, ranging from convenience stores and gas stations to area restaurants, hotels, and entertainment venues, such as the Erie Zoo. These expenditures are deemed to be induced by the presence of the Presque Isle racetrack, meaning that these merchants would not be able to expect these revenues were it not for the presence of the proposed facility. This would apply primarily to patrons coming from outside of the local market area, as it would otherwise not be considered as being a new expenditure in the economy. While local patron spending is not included in this analysis due to the substitution effect, it should be noted that this is a conservative approach. Without a racetrack in Erie, local market race fans would need to go to tracks in West Virginia, New York, or elsewhere in the state. As a result, the presence of a track in Erie brings back in expenditures that would have gone elsewhere. Nevertheless, since the quantity of racetrack visits for local patrons would likely increase if one were to be located in the local market area, it is likely that a sizable substitution effect would occur.

The racetrack market analysis divided the market potential into six distinct market areas, along with the existing tourist base. Four of the defined market areas were generated from population bases beyond 50 miles, such that it could be assumed that a share of the patronage would be from outside of the Erie area. In the first year of operation it is projected that nearly 14,500 live racing patrons would be from outside of the local market. By the fifth year of operation it is projected that over 35,000 local market live racing patrons would come from outside the immediate area.

As racing would occur on consecutive days, it may be assumed that many of the patrons that stay overnight would come to the track for more than one session. It is estimated that 20% of local market patrons coming from beyond 50 miles would stay overnight, with the average patron making 1.5 trips to the track. This would reflect nearly 2,900 track visits in the first year, or 1,932 patrons. By the fifth year of operation it is estimated that 4,728 overnight visitors will make nearly 7,100 trips to the track.

Many of these patrons will be coming with their families or friends, and may be expected to stay for extended periods. In Erie the average length of stay for visitors is approximately 5.2 days. It is assumed that the average race fan will have a slightly shorter stay. Assuming an average length of stay of 3 nights and 1.8 race fans per room, a total of 3,220 room nights would be demanded in the first year, and 7,880 room nights by the fifth year.

Erie has numerous minimum and moderate service hotels, including Holiday Inn, Fairfield Inn, Hampton Inn, Days Inn, Best Western, Ramada Inn, Quality Inn, Courtyard and Residence Inn. There are numerous budget hotels in the area as well. The Residence Inn has the highest room rates in the market at \$160 to \$200 per night, while most of the other chain hotels have room rates in the \$60 to \$100 range. Based on an average expenditure of \$80 per room night, it is estimated that the racetrack would induce \$258 thousand in room revenues in the first year of operations, increasing to \$630 thousand by the fifth year.

The average Erie tourist also spends \$40 per day on entertainment, retail and food and beverages according to the D.K. Shifflet report cited in the market assessment. Assuming an average party size of 2.5 persons, overnight visitors induced by the track could be expected to spend \$322 thousand in the local economy in the first year, and nearly \$800 thousand by the fifth year. These revenues would support the employment of local residents, as well as support the local tax base through hotel occupancy taxes and sales taxes.

#### Total Induced Expenditures

It is projected that the induced expenditures attributable to the racetrack will total \$580 thousand in the first year of operation, and increase to \$1.4 million by the fifth year. This takes into consideration local product substitution, as local gamers and existing tourists are not figured into these calculations.

Projected Induced Expenditures		
	Year 1	Year 5
Hotel	\$257,636	\$630,436
Restaurant	\$112,716	\$275,816
Entertainment	\$128,818	\$315,218
Retail	\$80,511	\$197,011
<b>Total</b>	<b>\$579,680</b>	<b>\$1,418,480</b>

#### Total Induced Employment and Earnings

Wages for hotel workers are factored to amount to approximately 30% of room revenues. Assuming that the average hotel worker earns \$30,000 per year, this would support the equivalent of between 3 and 6 full time jobs, with a total of between \$77 and \$189 thousand in earnings in the first five years of operation. Restaurant expenditures could be expected to include gratuity, with some earnings coming in the form of salary as well, particularly for management. It is estimated that 3 induced jobs would be created in the first year in the food and beverage, entertainment and retail industries, based on \$140 thousand in earnings in the first year of racetrack operations. By the fifth year it is estimated that approximately 6 full-time jobs will be induced in the local economy, based on new earnings of approximately \$170 thousand.

The following table shows the spending by patrons, and the earnings and employment that should be induced by the presence of the racetrack complex. Expenditures on goods and services by these establishments will be introduced as indirect impacts.

**Induced Economic Impact of the Presque Isle Racetrack**

	Year 1	Year 5
Spending	\$579,680	\$1,418,480
Earnings	\$147,335	\$360,530
Employment	5.1	12.4

**Indirect Spending**

Indirect spending is the result of the multiplier effect in the economy. A ripple of increased revenues and incomes is created that begins with purchases made by the recipients of the direct expenditures, as described in the construction phase. The following calculations assess the indirect expenditures that would accrue from the direct expenditures of the track and horsemen.

Indirect expenditures from racetrack operations will originate with the expenditures of the racetrack vendors and employees. Indirect expenditures emanating from horsemen operations include the expenditures of the veterinarians' and trainers' households, as well as the feed suppliers and others who provide services locally to the horse owners.

In total, it is projected that \$11 million in indirect expenditures will result in this market as a result of the presence of the Presque Isle Racetrack facility in the first year of operations. Earnings to area residents could be expected to increase by \$4.3 million, covering the equivalent of approximately 200 full time jobs. These totals could be expected to increase to over \$25 million in spending by the fifth year of operation, yielding \$9.8 million in earnings, covering approximately 445 jobs. These figures are summed in the following tables.

**Projected Indirect Expenditures, Year 1**

	Indirect Spending	Indirect Earnings	Indirect Employment
Spending By Households	\$4,938,669	\$1,476,370	62
Spending by Presque Isle	\$3,816,985	\$1,774,892	89
Spending by Horsemen	\$1,640,427	\$791,447	39
Spending From Induced Business	\$617,353	\$264,579	12
<b>Total Indirect</b>	<b>\$11,013,433</b>	<b>\$4,307,288</b>	<b>201</b>

**Projected Indirect Expenditures, Year 5**

	Indirect Spending	Indirect Earnings	Indirect Employment
Spending By Households	\$11,394,196	\$3,406,191	135
Spending by Presque Isle	\$8,892,577	\$4,147,620	208
Spending by Horsemen	\$3,383,266	\$1,627,652	76
Spending From Induced Business	\$1,510,666	\$647,427	27
<b>Total Indirect</b>	<b>\$25,180,705</b>	<b>\$9,828,891</b>	<b>446</b>

It should be noted that the spending by the racetrack has already been included in the direct expenditure calculations, therefore the first round of indirect expenditures from that segment would include payment of salaries for vendor companies and suppliers. Therefore, the fact that the earnings are a larger percentage of the spending totals in this segment relative to those in the other segments for which the expenditures are indirect should be duly noted. Additionally, the jobs that are created indirectly are based on annual earnings and expenditures, and therefore may have some variance due to seasonal fluctuations. The indirect jobs, however, may be expected to have less of a variance as the direct employment, as the new money will continue to circulate through the local economy well after the live racing season is completed.

### ***Ongoing Economic Impact of Presque Isle Racetrack***

Combining the indirect impacts with the direct and induced impacts of racetrack operations, the impact on spending, employment, and earnings of Erie area residents can be determined.

An economic impact of \$30 million will accrue to the Erie area as a result of initial expenditures at the proposed property and by patrons coming to the area in the first year of operations alone. As the number of live race days increases and the operations stabilize, the economic impact could be expected to approach \$70 million. As a result of operations, it is estimated that approximately 800 jobs will be created in the community in order to serve the patrons and the horses at the track in the first year of operations, as well as incrementally through induced and indirect spending in the local economy. It is estimated that 600 of these jobs will be at the track, with many of these jobs being seasonal. By the fifth year of operations it is projected that the total employment that will be generated will be nearly 1,200 persons, of which 740 will be at the racetrack property. The seasonal variation should decline as the live racing season will be more extended than in the first year of operation, thus the community as a whole will reap significant benefits for a longer period. The impact of the facility will also mean the creation of new earnings for area residents in the range of \$10.8 to \$24.8 million during each of the first five years of operation.

The following tables outline the economic impact as calculated above for both the first year of operation and the fifth year of operation, which is expected to correspond to the first year of stabilized operation at a full live racing schedule.

<b>Economic Impact Estimate of Presque Isle Racetrack, Year 1</b>				
	Direct	Induced	Indirect	Total
Spending	\$18,512,406	\$579,680	\$11,013,433	\$30,105,519
Earnings	\$6,357,600	\$147,335	\$4,307,288	\$10,812,223
Employment	600	5	201	806

**Economic Impact Estimate of Presque Isle Racetrack, Year 5**

	Direct	Induced	Indirect	Total
Spending	\$42,924,699	\$1,418,480	\$25,180,705	\$69,523,884
Earnings	\$14,589,300	\$360,530	\$9,828,891	\$24,778,721
Employment	740	12	446	1,198

### ***Incremental Economic Impact of Racetrack Operations on Erie County***

As projected above, it is estimated that the presence of the Presque Isle racetrack in Erie County would help to create approximately 806 new jobs in the first year, and nearly 1,200 jobs by the fifth year of operations. Currently there are 7,667 unemployed persons in Erie County, reflecting an unemployment rate of 5.3%. The unemployment level reached a decade-low of 6,180 persons in December 1999, after being above 10,000 during the early 1990's. The level of unemployment level in 2001 has remained approximately 1,200 to 1,400 persons above the monthly averages for 2000. As a result, it could be concluded that the unemployment rate could be cut by 0.55% to 0.8% with the operation of the racetrack. It should also be duly noted that the seasonal nature of live racing will mean that there may be fluctuations in the employment needs during the course of the year, such that the annual averages computed through the economic multipliers for indirect impacts, as well as employment as estimated through annual wages, may be distorted, or not meaningfully additive. This helps to explain the discrepancy between the direct employment totals and the indirect totals, which generally have more of a one-to-one relationship.

### ***Fiscal Benefit***

The local economy benefits from the presence of the Presque Isle racing facilities by expansion of the state tax base and an increase in overall economic activity. The State will benefit by an increase in a variety of tax revenues, including sales taxes on the direct, induced and indirect purchases, as well as wagering and admission taxes.

Spending by the racetrack patrons on food and beverage purchases at the track should generate between \$135 thousand and \$231 thousand in sales tax revenues during each of the first five years of operation. An additional \$11 to \$28 thousand in sales tax revenues should be induced by retail and food and beverage purchases by patrons elsewhere in the local community. As hotel occupancy rates increase, the hotel room occupancy tax revenues should rise. A 6% State tax on hotel revenues will translate to between \$15 and \$38 thousand in induced State hotel taxes, while a 5% local tax would induce \$13 to \$32 thousand per year in taxes.

The racetrack will pay the State a 5% tax on admissions revenues, which is projected to range from nearly \$10 thousand to over \$28 thousand per year. Additionally, wagering taxes should generate between \$645 thousand and \$2.0 million in each of the first five years of operation. Horsemen will also pay between \$36 thousand and \$80 thousand per year in taxes for feed. This does not include feed for horses stabled during the off-season.



In total, it is projected that in the first year of operation the State tax revenues from direct and induced purchases will total \$853 thousand. By the fifth year, these totals should reach \$2.4 million.

<u>Direct And Induced Tax Generation Projections</u>		
	Year 1	Year 5
F&B on site	\$134,824	\$231,389
F&B and Retail - Induced	\$11,594	\$28,370
Admissions	\$9,681	\$28,166
Wagering	\$645,676	\$2,016,123
Feed	\$36,000	\$79,200
Hotel (State)	\$15,458	\$37,826
<b>Total</b>	<b>\$853,232</b>	<b>\$2,421,073</b>
<b>Hotel (Local)</b>	<b>\$12,882</b>	<b>\$31,522</b>

Earnings of residents are also taxed at the State level at an effective rate of 2.8%. Based on a total earnings projection ranging from \$10.8 to \$24.8 million per year during each of the first five years, the personal income taxes that should accrue will annually be in the range of \$300 to \$700 thousand. As a result, the total fiscal impact, not including indirect sales taxes, will be over \$1.15 million in the first year of racetrack operation, and should increase to well over \$3.1 million by the fifth year.

## Conclusion

Mountaineer Racing is proposing the development of the Presque Isle racetrack in the city of Erie, Pennsylvania. It is expected that the track would operate a 50-day live racing season in the first year of operation, but increase the live racing schedule annually such that by the fifth year a season of 120 days would be scheduled. To support the racing operations, stables will be built to accommodate 1,000 horses. In this economic impact analysis the benefits to the local community were calculated, both in terms of the initial impact that would be generated during the construction phase, as well as annual impacts that may be expected during the operating phase.

It is anticipated that the cost of development will be approximately \$26 million. It is projected that development would take approximately one year to complete. During the course of construction it is projected that spending in the local area would increase by approximately \$48 million, which would result in an increase in resident earnings of \$13 million, covering the creation of approximately 297 jobs. These jobs would exist as long as the construction was occurring, but would phase out once the property starts operating.

During the operating phase it is projected that the total economic impact of operations would be over \$30 million in the first year of operation, increasing to nearly \$70 million by the fifth year. Earnings to area residents should increase by \$10 to \$25 million per

year, supporting the creation of between 800 and 1,200 jobs, increasing as the length of the live racing season increases. Unemployment in the region can be expected to decline by over 0.5% as a result of these new employment opportunities.

It is also projected that the fiscal welfare of the State would be impacted by these developments. Tax revenues of \$1.15 to \$3.1 million should be generated as a result of the increased purchases and earnings.

## Disclaimer

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To the extent possible, we have attempted to verify and confirm estimates and assumptions used in this analysis. However, some assumptions inevitably will not materialize and unanticipated events and circumstances may occur, therefore actual results achieved during the period covered by our analysis will vary from our estimates and the variations may be material. As such The Innovation Group accepts no liability in relation to the estimates provided herein.

# **MTR GAMING GROUP, INC.**



P R E S Q U E I S L E D O W N S

## **Diversity Plan**

# **Table of Contents**

- I. Table Of Contents
- II. Policy Statement
- III. Development and Execution of Action-Oriented Program
- IV. Designation of Responsibilities
- V. Recruiting Procedures
- VI. Dissemination of Affirmative Action Policy
- VII. Annual Review Report
- VIII. Attachments



## PRESQUE ISLE DOWNS

### **DIVERSITY PLAN POLICY STATEMENT**

It is the policy of Presque Isle Downs (Presque Isle) to take affirmative action to enhance the diversity of our resort. The policy supports the company's strategic plan to achieve excellence in providing quality products and services to our guests.

Presque Isle is committed to promoting diversity initiatives that attract qualified candidates who are minority, female or disabled. Furthermore, the company is committed to:

- using job-related requirements to evaluate staff for promotion and applicants for employment;
- prohibiting discrimination on the basis of race, color, religion, gender, sexual orientation, age, national or ethnic origin, veteran status, or non-job-related disability; and
- complying with applicable federal, state and local laws.

The company is committed to basing its employment decisions on the principle of equal employment opportunity and to ensuring that all personnel actions, including, but not limited to, recruitment, hiring, training, promotion, compensation, benefits, transfer, layoff, and social and recreational programs are administered in accordance with the company's commitments to non-discrimination, equal employment and affirmative action.

The management of Presque Isle believes equal employment and affirmative action policies are a shared responsibility. The Director of Human Resources oversees Presque Isle's affirmative action program. The board of directors, vice presidents, department directors, department heads and hiring supervisors support the Director of Human Resources in maintaining the importance of affirmative action as a critical component of resort operations. The Director of Human Resources coordinates and implements policies and programs, monitors the company's efforts in these areas and reports results, and handles or refers complaints to appropriate company contact points. The broad-based, decentralized efforts of the community are key to meeting the company's equal employment opportunity and affirmative action commitments.

Through administration of these equal employment opportunity and affirmative action policies, the company intends to ensure that all people are included in the diversity that strengthens Presque Isle in its pursuit of excellence.

Any applicant or employee of Presque Isle who believes that he or she has received inequitable treatment because of discrimination violating Presque Isle's stated policy of equal opportunity in employment should communicate, either in writing or in person, with the Human Resources Department, PO Box 358, Chester, WV 26034, or by contacting the HR office at 304-387-8000.



## PRESQUE ISLE DOWNS

### DEVELOPMENT AND EXECUTION OF ACTION-ORIENTED PROGRAMS

The Company applies the following guidelines in developing and executing action-oriented programs:

1. Position Descriptions
  - a. Conduct detailed analysis of position descriptions to ensure that they accurately reflect the position functions and are consistent for the same position from one location to another. The analyses are conducted as the duties of a position change and are distributed to members of management, recruitment personnel, and referral sources.
  - b. Develop worker specifications using essential function criteria. Job requirements include education, experience, and skill requirements necessary to qualify for the job opening. Worker specifications are distributed to referral sources.
2. Hiring-Selection
  - a. Evaluate selection process periodically to ensure freedom from bias. Select and train personnel involved in the recruiting, screening, selection, promotion, discipline, and related processes. The recruiting, screening, referral, and selection process must demonstrate a good-faith effort to remove identified barriers, expand employment opportunities, and produce measurable results
  - b. Observe the requirements of the "EEO UNIFORM GUIDELINES on Employee Selection Procedures" by performing periodic audits of personnel activities and the retention of records if adverse impact of minorities or women is noted.
  - c. Monitor the manner applicants are referred to Managers for hiring consideration to ensure the process is nondiscriminatory.
3. Compensation System(s)

Review compensation system(s) periodically to determine if there is apparent gender, race, or ethnicity-based disparities. Where the disparities cannot be justified in terms of performance, length of service, etc., corrective actions will be taken.
4. Recruitment Efforts

Establish recruitment efforts to maintain the flow of minority and female applicants:

  - a. Solicit minority, women's, and veteran's organizations and organizations concerned with persons with disabilities for referral of applicants.
  - b. Offer briefings on premises with representatives from recruitment sources concerning current and future job openings.
  - c. Encourage minority, female, veteran, and employees with a disability to refer applicants for employment.
  - d. Participate in career day programs, using minority and female employees whenever possible.



- e. Expand "Help Wanted" advertising to include minority news media and women's interest media.
  - f. Establish recruitment efforts at schools with special programs to reach minorities, women, and persons with a disability.
  - g. Expand applicant pool with "Help Wanted" advertising to include minority news media and women's interest media, especially for those job groups with Placement Goals.
  - h. Encourage community child care, housing, and transportation programs designed to improve the employment opportunities for minorities, women, and persons with a disability.
  - i. Ensure that job openings have been listed with the State Job Service.
5. Promotions
- Ensure that all employees are given equal opportunity for promotion:
- a. Communicate promotional opportunities.
  - b. Maintain an inventory of academic skills and experience level.
  - c. Initiate job training and work-study programs wherever possible.
  - d. Conduct employee performance evaluation programs.
  - e. Provide clearly define job specifications.
6. Career Counseling
- Monitor career counseling to ensure that all employees are given equal opportunity for career counseling:
- a. Counsel employees relative to advancement opportunities open to them and the training programs available to assist them in their career development.
  - b. Instruct managers and supervisors to keep the Equal Employment Opportunity Coordination informed of all action taken in career counseling.
7. Training
- Give all employees equal opportunity to attain training:
- a. Announce training opportunities.
  - b. Develop training programs that enhance advancement potential.
  - c. Coordinate training programs for workforce development.



## P R E S Q U E I S L E D O W N S

### DESIGNATION OF RESPONSIBILITY FOR IMPLEMENTATION OF DIVERSITY PLAN

The Director of Human Resources has been designated as the Equal Employment Opportunity Coordinator of the company and has the full support of the president and other top management in carrying out these duties.

This company's philosophy and policy on equal employment opportunity and affirmative action is set out in its corporate employment policy and in its company handbooks.

The Director of Human Resources, as Equal Employment Opportunity Coordinator, has the following responsibilities:

- Develop policy statements and internal and external communication of those policies
- Develop action-oriented programs that establish goals and objectives to remove identified barriers to minority and female employment and expand employment opportunities for those groups.
- Measure the effectiveness of all affirmative action programs.
- Design and implement audit systems.
- Serve as liaison with enforcement agencies.
- Serve as liaison with minority and women's groups and with disabled and veteran's groups.
- Keep management informed of the latest developments in the entire equal opportunity area.
- Provide career counseling for employees.
- Make sure that posters are properly displayed.
- Make sure that all facilities are desegregated.
- Maintain the prior years' diversity plan and all related documents.
- Maintain all required records.



P R E S Q U E I S L E D O W N S

## HR Recruiter Procedures

After Recruiter receives an approved request for hire the following steps will be taken:  
Must be signed off by the Department Head and Human Resources

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1. Recruiter posts the open position at designated employee locations on property:
  - Recruiter will interview all qualified applicants, both internal and external, and will forward any favorable applicants to the manager of the department with the open position.
  - If no qualified applicants are found, Recruiter will proceed to the next step.
  
2. Recruiter will contact the local employment service agencies, Affirmative Action Agencies, local colleges and technical schools:
  - a. **PA Career Link**
    - [www.pacareerlink.state.pa.us](http://www.pacareerlink.state.pa.us)
  - b. **Pittsburgh Culinary Institute**
    - Heather Stefkovich 412-325-3193  
<mailto:HSTEFKOVICH@paculinary.com>
  - c. **Pittsburgh Technology Institute**
    - Cindy Lubinski 412-809-5279  
<mailto:lubinski@pti-tec.com>
  - d. **Erie County Technical School**
    - 814-864-0641
    - [www.ects.org](http://www.ects.org)
  - e. **Penn State Erie**
    - **The Behrend College**
    - [www.pserie.psu.edu](http://www.pserie.psu.edu)
  - f. **Edinboro University of Pennsylvania**
    - [Webs.edinboro.edu](http://Webs.edinboro.edu)
  - g. **NAACP – Region II**
    - Allentown 610-682-9096
    - Easton PA Branch 610-252-7099
  - h. **Vietnam Veterans of America – Chapter 435**
    - Erie, PA 814-899-2858
  - i. **Veterans Outreach and Assistance Center**
    - 15 East 12<sup>th</sup> Street 814-453-5719  
Erie, PA 16501
  - j. **Hispanic-American Council Community Center**
    - 554 East 10<sup>th</sup> Street 814-455-0212  
Erie, PA 16503
  - k. **National Organization for Women**
    - N.W.P.A.  
PO Box 93  
Edinboro, PA 16412  
President: Susan Woodland - [nwpanow@surferie.net](mailto:nwpanow@surferie.net)

**I. Bureau of Minority and Women Business Opportunities**

- Main Office 717-787-6708  
Room 611 North Office Building  
Harrisburg, PA 17125
- [www.dqs.state.pa.us/bcabd/site/default.asp](http://www.dqs.state.pa.us/bcabd/site/default.asp)

- Recruiter will interview all qualified applicants, both internal and external, and will forward any favorable applicants to the manager of the department with the open position.
- If no qualified applicants are found, Recruiter will proceed to the next step.

3. Recruiter will contact the local newspapers to post the open positions:

- Contact Marketing

Local Papers

**a. Meadville Tribune**

- [www.meadvilletribune.com](http://www.meadvilletribune.com)

**b. Erie Times**

- [www.goerie.com](http://www.goerie.com)

High Volume City Papers

**c. Pittsburgh Post Gazette**

- Rick Kane 412-263-1275  
<mailto:rkane@post-gazette.com>

**d. Youngstown Vindicator**

- Classified Advertising 330-747-7981

**e. Buffalo News**

- [www.buffalonews.com](http://www.buffalonews.com)

**f. The Plain Dealer – Cleveland**

- [www.plaindealer.com](http://www.plaindealer.com)

**g. The Post Journal – Jamestown, NY**

- [www.post-journal.com](http://www.post-journal.com)

- Recruiter will interview all qualified applicants, both internal and external, and will forward any favorable applicants to the manager of the department with the open position.
- If no qualified applicants are found, Recruiter will proceed to the next step.

4. Recruiter will post open position on selected online recruiting web-sites:

**a. [www.Monster.com](http://www.Monster.com)**

- Sang Lee 703-269-0141

**b. [www.Employmentguide.com](http://www.Employmentguide.com)**

- Terry Nickle 412-257-2979 x223  
<mailto:terry.nickell@employmentguide.com>

**c. [www.ihirehospitality.com](http://www.ihirehospitality.com)**

- 877-798-4854

**d. [www.Careerbuilder.com](http://www.Careerbuilder.com)**

- Tim Hennessey 773-527-5614  
<mailto:Tim.hennessey@careerbuilder.com>

**e. [www.Casinocareers.com](http://www.Casinocareers.com)**

- 609-813-2333  
<mailto:Info@casinocareers.com>

- Recruiter will interview all qualified applicants, both internal and external, and will forward any favorable applicants to the manager of the department with the open position.
  - If no qualified applicants are found, Recruiter will proceed to the next step.
5. Recruiter will notify Human Resources and the Department Head that there are no current local applicants qualified for the position. Necessary steps will be taken to fill the position.

Note: Steps may be run simultaneously depending on the nature of the position.



PRESQUE ISLE DOWNS

## HR Recruiter Procedures Checklist

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HR Recruiter: \_\_\_\_\_

Department: \_\_\_\_\_ Position: \_\_\_\_\_

1. Date Recruiter Posted the open position internally: \_\_\_\_\_
2. Local employment service agencies, local colleges and technical schools, Affirmative Action Agencies and the date posted:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  - e. \_\_\_\_\_
  - f. \_\_\_\_\_
3. Local newspaper contacted with date contacted and date published:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
4. High volume city paper contacted with date contacted and date published:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
5. Online recruiting website contacted and date job was posted:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
6. Date Recruiter contacted the Director of Human Resources and Department Head that there are no current local applicants qualified for the positions:
  - a. \_\_\_\_\_



## PRESQUE ISLE DOWNS

### DISSEMINATION OF AFFIRMATIVE ACTION POLICY

#### Dissemination of Policy

Presque Isle Downs has established various channels of communication to ensure that employees and the community are aware of the company's positive posture toward equal employment opportunity (EEO) and affirmative action.

#### Internal Dissemination

The diversity plan is stated as part of Presque Isle Downs, Inc.'s employee relations policy and is covered in our employee policies & procedures.

Formal presentations are made to management, supervisors, and employees from time to time concerning affirmative action. The Diversity Plan is developed each year with the assistance of key line manager and staff members. If hiring takes place, regular updates are given to local and corporate management on progress in remedying underutilized areas. In those units where employees are represented by a collective bargaining agent, the unions are formally made aware of this policy.

In management and supervisory training, the entire concept of affirmative action is covered. Our policy and its implementation are reviewed; the policy is included in our management policy manual.

When we hire, new employees are formally made aware of our policy on affirmative action and anti-harassment, sex discrimination guidelines, and the Equal Pay Act. This policy is posted on a number of plant and office bulletin boards at this location.

Key local management and support personnel undergo EEO and affirmative action training from time to time. Supervisors and managers participate in the review of underutilized categories and in the setting of affirmative action goals.

When we feature employees in our employee publications, minorities and women are included.

Our local affirmative action program is monitored on a quarterly basis by our headquarters office.

## External Dissemination

As part of our policy of good communication, this facility has notified appropriate recruiting sources and the headquarters offices of the unions with whom we deal on the company's policy concerning EEO and affirmative action. When hiring occurs, we request referral of qualified women and minorities for all positions.

Our customers, contractors, and various community groups have been notified of our policies. The company communicates its commitment to EEO by recruitment advertising through regular media and through minority and women's publications.

Minority and non-minority men and women are pictures in product and consumer advertising and in our annual report.

Written notification of EEO policy, as well as requests for certification regarding compliance with EEO laws, is sent to suppliers and subcontractors. We require that EEO clauses be incorporated as part of all purchase orders and contracts.

All "Help Wanted" advertisements carry the notice "Equal Opportunity Employer **M/F**", and this designation is included in recruiting brochures and literature.



	MALE		Hispanic	Asian/Pacific Islander	Am. Indian/Alaskan Native	White	FEMALE Black	Hispanic	Asian/Pacific Islander	Am. Indian/Alaskan Native	Total
	White	Black									
Overall Totals	0	0	0	0	0	0	0	0	0	0	0
Officer/Manager											
Professionals											
Technicians											
Sales Workers											
Officer/Clerical											
Craft Workers(Skilled)											
Operatives(Semi-skilled)											
Laborers											
Service Workers											
Total Employees	0	0	0	0	0	0	0	0	0	0	0

Male 0.0%  
 Female 0.0%  
 White 0.0%  
 Black 0.0%  
 American Indian/Alaskan Native 0.0%  
 Asian/Pacific Islander 0.0%  
 Hispanic 0.0%

**Business Facts**

	<b>Erie</b>	<b>Pennsylvania</b>
Manufacturers shipments, 1997 (\$1000)	1,788,955	11,600,008
Wholesale trade sales, 1997 (\$1000)	487,417	159,354,185
Retail sales, 1997 (\$1000)	772,261	109,948,462
Retail sales per capita, 1997	\$7,432	\$9,150
Accommodation and food services sales, 1997 (\$1000)	81,011	12,227,177
Total number of firms, 1997	5,907	837,756
Minority-owned firms, percent of total, 1997	9.70%	5.90%
Women-owned firms, percent of total, 1997	15.40%	24.20%

**Geography Facts**

	<b>Erie</b>	<b>Pennsylvania</b>
Land area, 2000 (square miles)	22	44,817
Persons per square mile, 2000	4,722.90	274
FIPS Code	24000	42

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.



PRESQUE ISLE DOWNS

**Erie, Pennsylvania City Facts**

<b>People Facts</b>	<b>Erie</b>	<b>Pennsylvania</b>
Population, 2000	103,717	12,281,054
Population, percent change, 1990 to 2000	-4.60%	3.40%
Persons under 5 years old, percent, 2000	7.20%	5.90%
Persons under 18 years old, percent, 2000	25.40%	23.80%
Persons 65 years old and over, percent, 2000	15.40%	15.60%
Female persons, percent, 2000	52.40%	51.70%
White persons, percent, 2000 (a)	80.60%	85.40%
Black or African American persons, percent, 2000	14.20%	10.00%
American Indian and Alaska Native persons, percent, 2000 (a)	0.20%	0.20%
Asian persons, percent, 2000 (a)	0.70%	1.80%
Native Hawaiian and Other Pacific Islander, percent, 2000 (a)	Z	Z
Persons reporting some other race, percent, 2000 (a)	1.90%	1.50%
Persons reporting two or more races, percent, 2000	2.30%	1.20%
Person of Hispanic or Latino origin, percent, 2000 (b)	4.40%	3.20%
Living in same house in 1995 and 2000', pct, pct age 5+, 2000	56.20%	63.50%
Foreign born persons, 2000	4.20%	4.10%
Language other than English spoken at home, pct age 5+, 2000	9.20%	8.40%
High school graduates, percent of persons age 25+, 2000	79.90%	81.90%
Bachelor's degree or higher, pct of persons age 25+, 2000	17.40%	22.40%
Mean travel time to work (minutes), workers age 16+, 2000	16.3	25.2
Housing units, 2000	44,971	5,249,750
Homeownership rate, 2000	56.20%	71.30%
Median value of owner-occupied housing units, 2000	\$65,900	\$97,000
Households, 2000	40,938	4,777,003
Persons per household, 2000	2.39	2.48
Median household income, 1999	\$28,387	\$40,106
Per capita money income, 1999	\$14,972	\$20,880
Persons below poverty, percent, 1999	18.80%	11.00%



## PRESQUE ISLE DOWNS

August 12, 2005

To Whom It May Concern:

In recognition of its role as a contributing citizen and its sincere and effective effort to provide equal opportunity, Presque Isle Downs, Inc., has adopted all procedures contained in our Diversity Plan as a matter of policy. It is our policy to take whatever affirmative action necessary to offer equal employment opportunity regardless of race, color, religion, age, sex, physical or mental disability, covered veteran status, or national origin provided that the applicant is qualified for the position and to ensure that personnel actions, such as recruitment, selection, placement, testing, training programs, promotions and transfer, layoffs and recalls, terminations, disciplinary actions, social and recreational programs, and all employee benefits and compensation are equally applied. A copy of our policy statement is attached.

I personally make my commitment that all of the objectives of equal employment opportunity shall be fulfilled for all. I will expect the cooperation of all employees of Presque Isle Downs, Inc., to meet these goals and to exercise leadership toward the accomplishment of these ends.

Very truly yours,

Human Resources Director



## PRESQUE ISLE DOWNS

### **VENDOR DIVERSITY PLAN POLICY STATEMENT**

It is the policy of Presque Isle Downs (Presque Isle) to assist in providing economic opportunities for disadvantaged and emerging small businesses and make reasonable good faith efforts to achieve these goals.

Presque Isle is committed to promoting diversity initiatives that attract qualified contractors, subcontractors, assignees, lessees, agents, suppliers, and vendors who are minority, female or disabled. To the extent feasible, the company is committed to:

- Contracting or transacting directly with minority and women's business enterprises.
- Contracting with a non-minority business enterprise under terms and conditions that establish a participation plan.

The management of Presque Isle believes vendor diversity is a shared responsibility. The Operations Controller oversees Presque Isle's vendor diversity program. The general manager, department directors, department heads and contracting supervisors support the Operations Controller in maintaining the importance of vendor diversity as a critical component of resort operations. The Operations Controller coordinates and implements policies and programs, monitors the company's efforts in these areas, reports results, and handles or refers complaints to appropriate company contact points.

Through administration, monitoring, and communication of this policy, the company intends to ensure that all people are included in the diversity that strengthens Presque Isle in its pursuit of excellence and enhancing the representation of diverse groups in the operation.

Any contractor, subcontractor, assignee, lessee, agent, vendor, or supplier of Presque Isle who requires additional information regarding this policy should communicate, either in writing or in person, with the Director of Purchasing, PO Box 358, Chester, WV 26034, or by contacting the purchasing department at 304-387-8000.



P R E S Q U E I S L E D O W N S

## DESIGNATION OF RESPONSIBILITY FOR IMPLEMENTATION OF VENDOR DIVERSITY PLAN

The Operations Controller has been designated as the Vendor Diversity Coordinator of the company and has the full support of the general manager and other top management in carrying out these duties.

The Operations Controller, as Vendor Diversity Coordinator, has the following responsibilities:

- Develop policy statements and internal and external communication of those policies
- Develop action-oriented programs that establish goals and objectives to remove identified barriers to disadvantaged, female, and minority contractors, suppliers, and vendors and expand opportunities for those groups.
- Educate management staff on the requirements of the program.
- Design appropriate procedures that enable effective monitoring of the program.
- Measure the effectiveness of the programs.
- Design and implement audit systems.
- Prepare analysis of diversity program progress on a quarterly basis and communicate the results to Management.
- Serve as liaison with regulatory agencies.
- Serve as liaison with minority, women's, disabled, and veteran's groups.
- Keep management informed of the latest developments.
- Maintain the prior years' diversity plan and all related documents.
- Maintain all required records for a minimum of five years.



## PRESQUE ISLE DOWNS

### DEFINITIONS

The Company applies the following guidelines in defining the business categories and terminology addressed within this program:

1. Good Faith Effort
  - a. Means a reasonable effort to accomplish goals and objectives.
2. Minority-Owned Business Concern
  - a. The term "minority-owned business concern" refers to a minority business that is at least 51 percent owned and controlled by groups recognized as being socially and economically disadvantaged. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means actively involved in the day-to-day management of the business.
  - b. Socially and economically disadvantaged individuals include African-Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, and Asian Indian Americans, found to be disadvantaged by Federal Government Agencies empowered to make this determination.
3. Physically Challenged Owner
  - a. The term "physically challenged owner" refers to a business that is at least 51 percent owned by an individual or individuals with a disability, i.e. "a physical or mental impairment which substantially limits one or more major life activities" (as defined by the Americans With Disabilities Act of 1990, 42 U.S.C. section 12111 et seq., its interpretive regulations, 29 C.F.R. part 1630, and case law) who also control(s) and operate(s) it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means actively involved in the day-to-day management of the business.
4. Small Disadvantaged Business Concern
  - a. The term "small business concern owned and controlled by socially and economically disadvantaged individuals" means a "small business concern" (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more of such individuals and (b) whose management and daily business operations are controlled by one or more of such individuals in the day-to-day management of the business.
  - b. Socially and economically disadvantaged individuals include African Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, and other minorities or individuals, including subcontinent Asian Americans, found to be disadvantaged by Federal Government Agencies empowered to make this determination.

5. Veteran-Owned Business Concern

- a. The term "veteran-owned business concern" is a business that is at least 51 percent owned by a veteran or veterans who also control and operate it; "control" in this context means exercising the power to make policy decisions; "operate" in this context means actively involved in the day-to-day management of the business.

6. Women-Owned Business Concern

- a. The term "women-owned business" is a business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means actively involved in the day-to-day management of the business.



# Presque Isle Downs, Inc.

## A. Company Name and Address

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Contact Name

\_\_\_\_\_  
D/B/A (if applicable)

\_\_\_\_\_  
Phone #

\_\_\_\_\_  
Fax #

\_\_\_\_\_  
Address

\_\_\_\_\_  
Company Website

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Federal Tax No. (ID#/Social Security #)

\_\_\_\_\_  
State Sales Tax #

\_\_\_\_\_  
Payment Terms

\_\_\_\_\_  
Discount Terms

## B. Type of Business (Check all that apply)

\_\_\_\_\_  
Corporation

\_\_\_\_\_  
Large Business

\_\_\_\_\_  
Distributor

\_\_\_\_\_  
Individual

\_\_\_\_\_  
Small Business

\_\_\_\_\_  
Manufacturer

\_\_\_\_\_  
Partnership

\_\_\_\_\_  
Disadvantaged Business

\_\_\_\_\_  
Other

## C. Business Information

We are committed to the purchase of goods and services from minority and woman owned businesses. Please check the category (s) in which your business falls and complete attached corresponding paperwork:

Woman-Owned \_\_\_\_\_

Minority-Owned \_\_\_\_\_

Type of Business/Goods or Services:  
\_\_\_\_\_  
\_\_\_\_\_

Number of years in business providing goods and/or services? \_\_\_\_\_

Number of Employees: \_\_\_\_\_

Total Customer Base: \_\_\_\_\_

Existence and nature of warehouse and storage facilities. (Photo)

Existence and number of commercial delivery vehicles owned or leased. \_\_\_\_\_

Are the goods and/or services provided to the licensee brokered, and if so from where?  
\_\_\_\_\_

# Presque Isle Downs, Inc.

Based on the aforementioned information on this page, please check the categories that accurately describe your company's status/ownership:

American Indian or Alaskan Native

Hispanic

Caucasian

African American

Asian or Pacific Islander

Female

Please list the names of your company's owners and officers:

NAME	TITLE	OWNERSHIP %
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*This form must be completed and returned to Presque Isle Downs, Inc. prior to any contract, agreement, or shipment. This information is critical in setting up an account and for the issuance of a purchase order, which guarantees payment.*

**PROJECTED ECONOMIC IMPACTS OF  
PRESQUE ISLE DOWNS, INC. RACE TRACK AND SLOTS CASINO  
ON THE NORTHWESTERN PENNSYLVANIA REGION**

**Prepared for  
P.O. Box 358  
Chester, West Virginia 26034**

**Prepared by  
CONSAD Research Corporation  
121 North Highland Avenue  
Pittsburgh, Pennsylvania 15206**

**March 6, 2006  
Revised March 7, 2006**

## **Background**

The development and operation of the proposed Presque Isle Downs, Inc. (PIDI) thoroughbred race track and slots casino (or, alternatively, racino) near the intersection of Interstate Highway 90 and State Route 97 in Summit Township in Erie County will involve substantial expenditures by PIDI, its employees, and its visitors. Those expenditures will stimulate economic activity throughout the Northwestern Pennsylvania region. The purchases of labor, supplies, and materials by the racino will generate indirect impacts as the providers of those goods and services, in turn, purchase labor, supplies, and materials from others. Similarly, the purchases of goods and services by PIDI employees will produce induced impacts as the suppliers of those outputs purchase and utilize labor and non-labor inputs. Finally, the purchases of food, beverages, lodging, and incidental items by racino visitors will induce analogous impacts from their suppliers.

## **Projected Resource Use, Revenues, and Expenditures**

Economic impacts will be stimulated both during the construction of the racino and during its operation. As reported in Table 1, the estimated direct costs of constructing the racetrack, grandstand, casino facility, and associated infrastructure will be incurred mainly between 2005 and 2007, and will total \$183.9 million through 2010.

The projected expenditures on and use of key resources by PIDI for operation of the racino throughout the six-year period from 2005 through 2010 are summarized in Table 1 also. As shown in the table, PIDI plans to begin operation of the slots casino in November 2006 with 1,600 slot machines, and to add up to 400 slot machines in April 2007. Thereafter, at most 2,000 slot machines will be installed in the casino. Because the machines will not be produced within the region, their costs have not been included in Table 1 as sources of indirect economic impacts for the region.

Similarly, PIDI plans to initiate thoroughbred racing in late September or early October of 2007. It expects to have 15 days of racing in 2007, and to operate a full racing calendar with 100 days of racing in each subsequent year.

Table 1 next contains estimates of the net revenues that PIDI will earn from its operation of the slots casino and the racetrack, and the expenditures on labor and non-labor resources that PIDI will make in operating those facilities. Foremost among those expenditures are the wages, salaries, and benefits that will be paid to the projected 750 employees at the racino. That total includes 135 employees affiliated with the racetrack

and 625 employees affiliated with the slots casino. It is anticipated that employees will earn \$25,000 per year on average. The other key expenditures by PIDI that will stimulate indirect economic impacts within the region are: purchases of food and beverage supplies; expenditures on operating supplies, materials, and repairs; purchases of energy, water, and sewerage from public utilities; and spending on advertising and promotions.

Between 2006 and 2010, the net gaming revenues projected for the racino amount to \$593.5 million, of which \$579.7 million will be generated in the slots casino and \$13.9 million will originate at the racetrack. During that period, total expenditures on labor resources are projected to be almost \$75.0 million, and projected expenditures on the four key categories of non-labor resources total \$28.0 million.

Finally, Table 1 contains estimates of the net expenditures by visitors to the racino that will induce additional economic activity throughout the region. Their expenditures include their outlays, net of winnings, from playing slot machines in the casino and from pari-mutuel gaming on live and simulcast racing at the racetrack, and their spending outside the racino on food and beverages, lodging, and incidental items while partaking in that entertainment.

For local and regional residents, a portion of those expenditures would have been spent on alternative forms of entertainment or goods and services within the region if the racino were not available. Conversely, many of those racino visitors would otherwise have traveled to racetracks and casinos out of state in the absence of a racino in Erie County. Thus, the operation of Presque Isle Downs, Inc. will recover a portion of the expenditures that would otherwise have been made in other states by regional residents. The estimated net effect of such substitution and recovery of alternative expenditures in each year has been taken into account in the projections of net expenditures by visitors that are presented in Table 1.

As reported in the table, the projected spending by visitors to the racino on pari-mutuel and slot machine gaming, net of winnings, substitution, and recovery, totals \$539.2 million between 2006 and 2010. Their corresponding net expenditures on food, beverages, lodging, and incidentals in the region are \$276.6 million, in total, during that period.

### **Projected Direct, Indirect, and Induced Economic Impacts**

Projections of the total direct, indirect, and induced economic impacts that, as explained above, will be stimulated by the construction and the first five years of operation of the racino are summarized in Table 2. The impact estimates have been produced by applying to the corresponding expenditure estimates in Table 1 economic multipliers from the Regional Input-Output Modeling System (RIMS II) that have been prepared by the Regional Economic Analysis Division of the Bureau of Economic Analysis in the U.S. Department of Commerce. The multipliers have been computed for the Northwestern Pennsylvania region consisting of Erie, Crawford, Warren, Mercer,

Venango, and Forest Counties. The multipliers produce estimates of the total impacts of the racino-related expenditures on the total output of all industries affected by the spending, on the earnings of households with workers employed in those industries, and on employment in those industries throughout the six-county region.

The estimates indicate that the planned \$183.9 million of direct expenditures on construction of the racino will stimulate, in total, \$352.9 million of direct, indirect, and induced output throughout the region. Associated with that incremental output will be \$109.8 million in earnings for regional workers. Those earnings will pay for 3,068 person-years of employment in the region.

The impacts of operation of the racino on output, earnings, and employment in the region and the county will also be substantial. Cumulatively over the five years from 2006 through 2010, the \$103.0 million of impact-stimulating expenditures on operation of the racino will yield an estimated \$115.9 million of additional output in the region. To produce that output, 1,031 additional person-years of labor will be provided by workers in the region, who will earn \$32.4 million.

Thus, in total, it is projected that the construction and the first five years of operation of the racino will generate cumulative economic impacts throughout the region consisting of \$468.8 million of additional output, \$142.3 million in additional earnings, and 4,099 additional person-years of employment.

Finally, additional economic impacts will be induced by the net expenditures by visitors to the racino on food and beverages outside the racino, on lodging, and on incidental items. As explained above, these projected impacts must account for the substitution of racino-related expenditures for expenditures that otherwise would have been made in the region, and the recovery of expenditures that otherwise would have been made outside of the region by people who will now visit the racino. Thus, the projections in the table do not attribute to the racino any economic activity that will occur in the region even if the racino is not constructed and operated. The estimates in Table 2 indicate that the \$276.6 million of relevant net expenditures by racino visitors between 2006 and 2010 will stimulate an additional \$458.0 billion of output, \$145.4 million in earnings, and 8,102 person-years of employment in the region throughout that period.

In summary, between 2005 and 2010, the construction and operation by Presque Isle Downs, Inc. of a racino in Summit Township and the incremental expenditures in Northwestern Pennsylvania by visitors to the racino will cumulatively stimulate throughout the region a projected \$926.8 million of additional output, 12,201 additional person-years of employment, and \$287.7 million of additional earnings for those workers during that six-year period.

## **Impacts on Tax Revenues**

A preliminary estimate of the impacts of the proposed Presque Isle Downs, Inc. (PIDI) racino on the tax revenues of specific taxing authorities is summarized in Table 3. Estimates are presented for the federal government, for the Commonwealth of Pennsylvania, and for the local municipalities in the six county region of Northwestern PA. Further, these estimates include the initial application and licensing fees required by the Commonwealth, impacts during the start of the initial construction phase which occurred in 2005, as well as the estimated tax revenues for the first five years of operation (2006 through 2010).

The estimates are based primarily on the current tax rates for each type of tax considered, and in particular, the tax rates stipulated by the Commonwealth for the gaming industry, and specifically, for the operation of a slots casino in conjunction with a thoroughbred racetrack (i.e., a Category 1 license).

The federal government revenues are expected to result from the direct, indirect, and induced (DII) employment and earnings flowing from the operation of the PIDI racino. These include: Federal Insurance Contribution Act (FICA) taxes (i.e., Social Security and Medicare taxes) paid by employees and employers (totaling 15.3 percent); and federal unemployment taxes (of 6.2 percent) paid by employers under the Federal Unemployment Tax Act (FUTA), but also allowing for the maximum credit (of 5.4 percent), given that employers are also paying Pennsylvania unemployment taxes (discussed below). In addition, the PIDI racino will pay corporate income taxes (at marginal rates ranging from 34 to 38 percent) on the profits flowing from its endeavor each year.

In total, the federal government is expected to receive tax revenues of \$1.5 million in 2005 during the start of the construction, increasing to \$11.1 million in 2006 and to \$16.2 million by 2010, for a total of \$73.6 million over the 6-year period.

The Commonwealth will benefit from a variety of tax revenue sources. Some are specific to the slot machine operations, including the one time application and licensing fees, and four additional taxes levied on the gross slot revenues totaling 55 percent of these revenues in 2006 and 2007 and 52 percent of these revenues in 2008 through 2010 (when the PA Racehorse Development Fund tax rate is expected to drop to 9 percent from its maximum of 12 percent). The racetrack operation will also generate admission tax revenues of 5 percent and wagering tax revenues (on the total handle) of 0.875 percent.

Combined, the gross slot revenues are expected to produce tax revenues of \$10 million in 2006 increasing to almost \$77 million by 2010, for a total of \$306 million over the 5-year period. The racetrack admission and wagering tax revenues are expected to produce additional tax revenues of almost \$64 thousand in 2007 increasing to \$487 thousand by 2010, for a total of \$1.5 million over the 5-year period.

Pennsylvania personal income taxes (of 3.07 percent) and unemployment compensation taxes (of 0.09 percent) will be paid by individuals directly and indirectly employed as a result of the PIDI racino development. Pennsylvania employers, notably the PIDI racino and others benefiting from the racino operation, will also pay unemployment compensation taxes. This rate can vary between 2.208 percent and 10.3984 percent, based on an employer's experience rating. For this analysis, CONSAD used 3.752 percent, the rate applied to new employers.

These two taxes are expected to produce tax revenues of \$381 thousand in 2005 during the start of the construction, increasing to \$2.8 million in 2006 and to \$3.5 million in 2007, and then level off at about 2.6 million for 2008-2010, for a total of \$14.5 million over the 6-year period.

In addition, the Commonwealth will receive sales tax revenues of 6 percent on the direct, indirect, and induced (DII) net expenditures (i.e., sales) resulting from the PIDI racino operation, to the extent that these purchases are taxable items (most notably, the purchase of non-prepared food and clothing are not taxable). CONSAD adjusted the total DII sales to account for the taxable sales (it was estimated that approximately 50 percent of the total DII sales were purchases that are taxable).

The sales tax is expected to produce tax revenues of \$931 thousand in 2005 during the start of the construction, increasing to \$6.5 million in 2006 and to \$7 million in 2007, and then decreasing to \$4.6 million by 2010, for a total of \$27.8 million over the 6-year period.

Finally, the Commonwealth will receive corporate income tax revenues of 9.99 percent of the net income produced by the PIDI racino. These taxes are estimated at \$174 thousand in 2006 increasing to \$1.9 million by 2010, for a total of \$5.9 million over the 5-year period.

In total, the Commonwealth is expected to receive tax revenues of \$1.3 million in 2005, increasing to \$19.5 million in 2006 and to \$86.4 million by 2010, for a total of \$355.7 million over the 6-year period. With the one time application and licensing fees, the total tax revenues are estimated at \$406 million.

The local governments within the six county Northwestern PA region are also expected to receive tax revenues from a number of sources. First, the local municipalities will receive tax revenues on the earnings of workers directly and indirectly employed as a result of the PIDI racino. This will amount to about 1.13 percent of the direct, indirect, and induced (DII) earnings [almost all municipalities within the six county region levy a 1 percent earned income tax, but a few have earned income tax rates as high as 2.5 percent (the City of Erie levies a tax rate of 1.18 percent)]. In addition, an Emergency and Municipal Services (EMS) tax is levied by most municipalities on employees working in their jurisdiction, ranging from \$10 to \$52 per employee. Summit Township, where the PIDI racino is located, has an EMS tax of \$10, which it will receive from all



PIDI racino employees (and others working in the township). The remaining municipalities in the six county region have a weighted average EMS tax of about \$27 (based on the 18-64 working age population), which they will receive from workers indirectly employed as a result of the PIDI racino.

The earned income and EMS tax revenues are estimated at \$131 thousand in 2005 during the start of the construction, \$929 thousand in 2006 increasing to \$1.2 million in 2007, and then declining from 2008-2010 to \$806-\$864 thousand, for a total of \$4.7 million over the 6-year period.

Erie County will also receive increased hotel occupancy tax revenues equal to 5 percent of the direct hotel expenditures made by PIDI racino visitors in Erie County, to the extent that they can be attributable to visiting the racino. The five surrounding counties all have hotel occupancy taxes of 3 percent and may also receive some of these increased hotel occupancy tax revenues from the direct hotel expenditures made by PIDI racino visitors in their counties. However, because it is uncertain as to how to distribute the direct hotel expenditures among the six counties, the analysis presently assumes all hotel occupancy tax revenues will accrue to Erie County.

The hotel tax revenues are estimated at \$163 thousand in 2006 increasing to \$1.4 million by 2010, for a total of \$5.5 million over the 5-year period.

Summit Township (and the Fort LeBoeuf School District) will receive property tax revenues equal to 1.426 percent of the value of the PIDI racino and Erie County will receive property tax revenues equal to 0.468 percent of the value of the PIDI racino. The value of the racino has been estimated on the basis of the proposed total investment in land and property. The major capital expenditures are estimated to occur in 2006 and 2007, with less modest investments occurring in 2008 through 2010.

The property tax revenues are estimated at \$2.3 million in 2006 increasing to \$3.5 million by 2010, for a total of \$15.9 million over the 5-year period.

In total, the local government tax revenues are estimated at \$131 thousand in 2005 during the start of the construction, increasing to \$3.4 million in 2006 and to \$5.8 million by 2010, for a total of \$26 million over the 6-year period. It should be noted that these local tax estimates do not adequately represent the total amount of local tax revenues because the distribution of the Commonwealth's tax revenues, among local taxing authorities, and specifically related to the slot machine operations, has not yet been decided by the Commonwealth.

For all three governmental bodies, the total tax revenues estimated to be generated as a result of the Presque Isle Downs, Inc. (PIDI) racino are estimated at \$50.3 million in application and licensing fees in 2006, and then, another \$34 million in 2006 once the racino begins operations, increasing to \$108.3 million by 2010, for a total of \$505.7 million over the entire period of the analysis.

## Impacts on Police Capabilities

The site where Presque Isle Downs, Inc. proposes to develop a racino is located in Summit Township. The township does not have a local police force. Instead, it relies on the State Police for enforcing the law and maintaining public order. Thus, any increase in the need for police services that might accompany operation of the racino will affect the capabilities of a large state agency, and not those of a local agency.

Also, for the proposed racino to have an adverse impact on police capability, its development and operation must have an adverse impact on crime. The available empirical evidence relating to this impact is, however, quite equivocal.

The most pertinent extant empirical evidence relates to the relationship between casinos and criminal activity. The most extensive statistical study of the effects of proximity to a casino on the incidence of crime is a multilevel time-series analysis conducted by the National Opinion Research Center (NORC) at the University of Chicago. The analysis was part of the Gambling Impact and Behavior Study that was conducted for the National Gambling Impact Study Commission (NGISC). It examined changes in a variety of annual county-level measures of criminal activity between 1980 and 1997 in a sample of 100 communities. Among those communities, the number located within 50 miles of a casino increased, without any reversions, from five in 1980 to 45 in 1997. The measures of criminal activity in each community included the numbers of larcenies, burglaries, motor vehicle thefts, assaults, and robberies per 100,000 population and two FBI crime indices. The results of the analysis detected no statistically significant increases in any of the crime measures throughout the 18-year period. Based on these results, the authors conclude:

This is not to say that there is no casino-related crime or the like; rather, these effects are either small enough as not to be noticeable in the general wash of the statistics, or whatever problems that are created along these lines when a casino is built may be countered by other effects.<sup>1</sup>

The Gambling Impact and Behavior Study also included case studies of ten communities that had populations of at least 10,000 people and were located within 50 miles of at least one major casino. Interviews were conducted with seven or eight prominent people in each of the communities. In the interviews, an overall reduction in crime was reported in two communities, and three communities reported an overall increase. The patterns of changes in the rates of specific types of criminal activity also varied substantially among the ten communities.<sup>2</sup>

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<sup>1</sup> National Opinion Research Center (NORC), *Gambling Impact and Behavior Study*, report to the National Gambling Impact study Commission, April 1, 1999, p. 70.

<sup>2</sup> *Ibid.*, p. 78.

In addition, in its report<sup>3</sup>, the NGISC explicitly cited two other studies of the relationship between casinos and criminal activity. First, in relation to white-collar crime, a study conducted by Jay S. Albanese reported:

An examination of arrest trends for embezzlement, forgery and fraud in nine of the largest casino markets shows no consistent pattern, although more jurisdictions report more decreases than increases in arrests.<sup>4</sup>

Second, based on a review of available information on gambling and crime in ten jurisdictions that have commercial casinos, Jeremy Margolis stated that he found little documentation of a causal relationship between casinos and crime.<sup>5</sup>

On the basis of those research results, the NGISC concluded: “Taken as a whole, the literature shows that communities with casinos are just as safe as communities that do not have casinos.”<sup>6</sup> The absence of coherent empirical evidence that casinos are associated with elevated rates of criminal activity indicates that any adverse impacts of the proposed racino on police capabilities in and near Summit Township should be minor. In fact, the evidence suggests that the overall impacts of a well-managed casino on those capabilities might, on balance, be favorable.

### **Impacts on Demand for Affordable Housing**

The development and operation of the proposed racino in Summit Township will doubtless be accompanied by increased demand for affordable housing by employees of the racino and any ancillary activities that are stimulated by the racino. Because the unemployment rate in Erie County is appreciably higher than the unemployment rate statewide (5.1 percent in Erie County and 4.3 percent statewide in December 2005), it is likely that much of the increased employment stimulated by the racino will be fulfilled by currently unemployed residents of the county. Thus, the additional housing units that will be demanded by new employees will likely correspond to a small portion of the increase in employment.

The available empirical evidence indicates that the supply of affordable residential real estate will be ample to satisfy that increase in demand. First, the *2003 American Community Survey* conducted by the U.S. Census Bureau estimated that there were 116,272 housing units in Erie County, of which 63,013 were specified as owner-occupied. Most of the remaining 53,259 units doubtless were rental units. Second, a tabulation of the residential properties that were listed as active and available in the

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<sup>3</sup> *National Gambling Study Commission Report*, Washington, DC, June 18, 1999, p. 7-14.

<sup>4</sup> Jay S. Albanese, Ph.D., Professor and Chair, Department of Criminal Justice, Virginia Commonwealth University, “Casino Gambling and White Collar Crime: An Examination of the Evidence”, presented at *Gambling and Gaming: Winners or Losers?*, April 30, 1999, p. 32.

<sup>5</sup> Jeremy Margolis, former director of Illinois State Police, former U.S. Attorney for Northern District of Illinois, and former Inspector General of Illinois, “Casinos and Crime: An Analysis of the Evidence”, December 1977.

<sup>6</sup> NGISC, *op. cit.*, p. 7-14.

Multiple Listing System of the Erie County Board of Realtors on December 16, 2005 identified 987 properties with an average value of \$85,665. Finally, data compiled by the Economics Division of the PNC Financial Services Group for February 2006 indicate that, in 2005, housing permits were issued in Erie County for 890 housing units, including 730 single family units. In combination, this information demonstrates that there should be more than enough affordable housing in the county to accommodate the increased employment that will be directly or indirectly generated by the racino.

### **Impact on Demand for Social Services**

Much of the impact that development and operation of a racetrack or casino in any locality stimulates in the form of increased demand for health care, child care, and public transportation is associated with increases in population that are attracted by the racino rather than increases in the need for such services by preexisting residents. As explained above, however, much of the increased employment that will be stimulated by the racino will likely be fulfilled by currently unemployed residents of the county. Moreover, to the degree that health care, child care, or transportation services will be demanded by employees of the proposed racino in Summit Township, their cost will be defrayed by the wages, salaries, and benefits provided to the employees. Indeed, to the degree that racino employees and other workers whose employment is stimulated by the racino are currently receiving publicly funded social services, the public financing requirements for those services will decline.

Further, the available supply of health care resources in Erie County is sufficient to satisfy any increase in demand for health care services that development and operation of the racino generates. The major health care facilities in the county include: two tertiary facilities (Hamot Medical Center and Saint Vincent Health System) with 849 beds, two community hospitals (Corry Memorial Hospital and Millcreek Community Hospital) with 217 beds, one rehabilitation hospital (HealthSouth Rehabilitation Hospital of Erie) with 100 beds, one pediatric orthopedic hospital (Shriners Hospital for Children) with 30 beds, and one Veterans Medical Center with 87 beds. The staffs of those facilities collectively represent most medical specialties, and provide ample physician, nursing, medical technology, and therapeutic capabilities to serve the current and future demands of the county's population.

The supply of child care services in Erie County is less easily documented. Recent surveys of Erie County residents have not identified the availability of child care services as a problem, however.<sup>7</sup> However, if the availability of services is inadequate to meet the

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<sup>7</sup> Brian Bosworth (2001), *Toward an Economic Development Strategy for Erie: Findings and Recommendations of Consultants*, The FutureWorks Company and Regional Technology Strategies, Inc., October 16; COMPASS (Community Objectives Met through a Partnership of All Segments of Society) (2001), *Household Survey and Community Forums: Summary of Overall Results*, prepared for the United Way of Erie County, May; Erie County Department of Housing assisted by Graney, Grossman, Ray, Colosimo and Associates, Inc. (2002), *The Erie County Citizen Survey: Draft*, February; Amy Onest (2002), *Perceptions of the Quality of Erie County Life from the COMPASS Study*, Final Report, Strategy Solutions, Inc., May.

demands of racino employees, PIDI has indicated its willingness to consider adding a day care center in existing outbuildings on its site that would provide child care services that would comply with all applicable state and local guidelines.

Except for school transportation, people in Northwestern Pennsylvania do not rely heavily on public transportation. Thus, adverse impacts of the racino on traffic flow and congestion are more pertinent concerns than are impacts on public transportation. PIDI will mitigate those impacts by making improvements to specific intersections and traffic routes that will serve the racino and that have been required by Summit Township and the Pennsylvania Department of Transportation. The extension of Pennbriar Drive, in particular, will have the favorable effect of enhancing response times for emergency vehicles to certain sites.

Finally, in a study commissioned by the USA Niagara Development Corporation with the Center on Gaming Research (CGR), the NORC was "...unable to detect a statistically significant association between the presence of a casino and community-wide indicators of social dysfunction, e.g., divorce rates, health impacts, and others."<sup>8</sup> Yet, in its report to the NGISC, the NORC also states: "The availability of a casino within 50 miles (versus 50-250 miles) is associated with about double the prevalence of problem and pathological gamblers, according to the combined patron and survey results."<sup>9</sup> The prevalence rates are not different, however, in the results from the telephone survey alone. Moreover, the patron survey was expressly designed to intercept patrons of gambling facilities, with the specific intent of interviewing an atypically large proportion of problem and pathological gamblers. Comparison of the results from the two surveys indicates that the patron survey was successful in fulfilling its specific intent. Only when the results obtained from this intentionally atypical group of respondents were combined with the results from the representative group of respondents to the telephone survey was a difference in prevalence rates detected. The notable difference in results from the telephone survey alone and from the two surveys in combination makes any inference drawn from the entire body of evidence quite equivocal. In addition, the degree to which any difference in prevalence rates that might exist among communities with different proximity to casinos is due to pathological gamblers being attracted to areas where casinos are located rather than to the actuation of latent problem or pathological gamblers is unknown.

Nevertheless, if problem or pathological gambling is detected at the racino, PIDI's compliance with the provisions of the Gaming Act will be sufficient to avoid adverse impacts from problem or pathological gambling on the delivery of social services in the region. Gaming facilities operated by the MTR Gaming Group in other jurisdictions have successfully mitigated such impacts by implementing similar programs.

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<sup>8</sup> CGR, Inc. (2005). *Seneca Niagara Casino, Fiscal and Economic Impact on Niagara Falls, NY*. Prepared for: USA Niagara Development Corporation, June, p. 14.

<sup>9</sup> NORC (1999), *Op. cit.*, p. ix.

## **Impacts on Tourism, Including Historical and Cultural Resources**

The study commissioned by the USA Niagara Development Corporation with the CGR focused on competitive analysis of existing casinos and new casinos proposed for Niagara Falls. The analysis revealed that "...in urban settings, there is a little evidence that these operations [casinos] destroy other sectors in the leisure industry."<sup>10</sup> Indeed, part of Niagara Falls' economic development plan is to target tax revenues generated from casinos to promote additional special events. The racino in Summit Township should have similar favorable effects on tourism in Erie County and throughout the region.

Further, with regard to historical and cultural resources, PIDI has commissioned Christine Davis Consultants from Verona, Pennsylvania to conduct Phase I and Phase II archaeological surveys on the site of the racino. The surveys discovered six artifacts that were recovered from the site and donated to the Pennsylvania Historic and Museum Commission. Preservation of those artifacts is a direct favorable consequence of development of the racino.

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<sup>10</sup> CGR, Inc. (2005), *Op. cit.*

**Table 1: Projected Resource Use, Gaming Revenues, and Expenditures by Presque Isle Downs, Inc. and Visitors**

Activity	Resource Use or Expenditure Category	Year						Total
		2005	2006	2007	2008	2009	2010	
Construction	Expenditure	\$16,162,782	\$103,944,840	\$56,590,909	\$1,330,874	\$2,880,278	\$2,966,686	\$183,876,369
Operation	Slot machines		1,600 <sup>a</sup>	2,000 <sup>b</sup>	2,000	2,000	2,000	----
	Total casino gaming revenues <sup>c</sup>		\$18,240,000	\$131,788,800	\$138,998,000	\$143,167,940	\$147,462,978	\$579,657,718
	Total pari-mutuel gaming revenues			\$600,000	\$4,300,000	\$4,429,000	\$4,561,870	\$13,890,870
	Employment		615 <sup>d</sup>	750 <sup>e</sup>	750	750	750	----
	Expenditures							
	Labor (payroll @ \$25,000 / year)		\$2,562,500	\$16,218,750	\$18,750,000	\$18,750,000	\$18,750,000	\$75,031,250
	Food and beverage supplies		\$151,848	\$1,097,142	\$1,157,158	\$1,191,873	\$1,227,629	\$4,825,651
	Total operating supplies and repairs		\$238,032	\$1,821,844	\$2,544,924	\$2,621,272	\$2,699,910	\$9,925,981
Total utilities		\$65,071	\$542,157	\$1,011,875	\$1,042,232	\$1,073,499	\$3,734,833	
Advertising and promotions		\$410,000	\$2,000,000	\$2,300,000	\$2,369,000	\$2,440,070	\$9,519,070	
Visitors	Visitor expenditures (net of substitution and recovery)							
	Net visitor gaming expenditure		\$16,648,661	\$120,729,790	\$130,016,152	\$133,916,636	\$137,934,135	\$539,245,374
	Net visitor food and beverage expenditure		\$4,116,569	\$30,107,690	\$33,981,822	\$35,001,277	\$36,051,315	\$139,258,673
	Net visitor hotel/motel expenditure		\$3,259,104	\$23,819,721	\$26,784,164	\$27,587,689	\$28,415,320	\$109,865,999
	Net visitor incidental expenditure		\$811,869	\$5,938,941	\$6,709,845	\$6,911,140	\$7,118,474	\$27,490,268

<sup>a</sup>1,600 slot machines between November 7, 2006 and December 31, 2006.

<sup>b</sup>1,600 slot machines between January 1, 2007 and March 31, 2007; 2,000 slot machines between April 1, 2007 and December 31, 2007.

<sup>c</sup>Projected average net win per day is \$190.

<sup>d</sup> 615 workers employed in slots casino during November and December 2006.

<sup>e</sup> 615 workers employed in slots casino all year; 135 workers employed at racetrack during October through December 2007.

**Table 2: Projected Total Direct, Indirect, and Induced Economic Impacts from Expenditures by Presque Isle Downs, Inc., Its Employees and Its Visitors and Visitors**

Impacts on Outputs of All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$31,021,227	\$199,501,331	\$108,614,932	\$2,554,347	\$5,528,117	\$5,693,961	\$352,913,916
Operation	Employee wages and salaries		\$2,474,863	\$15,664,069	\$18,108,750	\$18,108,750	\$18,108,750	\$90,543,750
	Food and beverage supplies		\$233,542	\$1,687,404	\$1,779,710	\$1,833,101	\$1,888,094	\$7,421,850
	Operating supplies and repairs		\$366,093	\$2,801,996	\$3,914,093	\$4,031,516	\$4,152,461	\$15,266,159
	Utilities		\$98,498	\$820,662	\$1,531,676	\$1,577,626	\$1,624,955	\$6,026,901
	Advertising and promotions		\$633,860	\$3,092,000	\$3,555,800	\$3,662,474	\$3,772,348	\$14,716,482
Casino visitors	Food and beverage expenditure		\$7,148,422	\$52,282,003	\$59,009,434	\$60,779,717	\$62,603,109	\$241,822,685
	Hotel/motel expenditure		\$5,113,535	\$37,373,143	\$42,024,354	\$43,285,085	\$44,583,637	\$172,379,753
	Incidental expenditure		\$1,292,982	\$9,458,357	\$10,686,098	\$11,006,681	\$11,336,882	\$43,781,001
<b>Total net impact</b>		<b>\$31,021,227</b>	<b>\$216,863,127</b>	<b>\$231,794,566</b>	<b>\$143,164,262</b>	<b>\$149,813,067</b>	<b>\$153,764,196</b>	<b>\$944,872,497</b>
Impacts on Earnings of Households Employed in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$9,494,018	\$61,057,199	\$33,241,500	\$781,756	\$1,691,875	\$1,742,631	\$109,847,743
Operation	Employee wages and salaries		\$687,775	\$4,353,113	\$5,032,500	\$5,032,500	\$5,032,500	\$25,162,500
	Food and beverage supplies		\$68,301	\$493,494	\$520,490	\$536,105	\$552,188	\$2,169,612
	Operating supplies and repairs		\$107,067	\$819,465	\$1,144,707	\$1,179,048	\$1,214,419	\$4,462,721
	Utilities		\$19,873	\$165,575	\$309,027	\$318,298	\$327,846	\$1,140,618
	Advertising and promotions		\$194,750	\$950,000	\$1,092,500	\$1,125,275	\$1,159,033	\$4,521,558
Casino visitors	Food and beverage expenditure		\$3,971,666	\$29,047,899	\$32,785,662	\$33,769,232	\$34,782,309	\$77,260,712
	Hotel/motel expenditure		\$1,628,900	\$11,905,097	\$13,386,725	\$13,788,327	\$14,201,977	\$54,911,026
	Incidental expenditure		\$391,889	\$2,866,727	\$3,238,842	\$3,336,007	\$3,436,087	\$13,269,552
<b>Total net impact</b>		<b>\$9,494,018</b>	<b>\$68,127,420</b>	<b>\$83,842,869</b>	<b>\$58,292,208</b>	<b>\$60,776,666</b>	<b>\$62,448,991</b>	<b>\$292,746,044</b>
Impacts on Employment in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		270	1,735	944	22	48	50	3,068
Operation	Employee wages and salaries		25	157	181	181	181	905
	Food and beverage supplies		2	12	13	13	13	53
	Operating supplies and repairs		3	20	28	29	30	109
	Utilities		0	3	6	6	6	22
	Advertising and promotions		5	26	30	31	31	123
Casino visitors	Food and beverage expenditure		152	1,110	1,252	1,290	1,329	5,133
	Hotel/motel expenditure		71	522	587	604	623	2,407
	Incidental expenditure		17	121	137	141	146	562
<b>Total net impact</b>		<b>270</b>	<b>2,009</b>	<b>2,915</b>	<b>2,256</b>	<b>2,343</b>	<b>2,408</b>	<b>12,382</b>



**Table 3: Projected Tax Revenues from Presque Isle Downs, Inc. to Different Taxing Authorities**

Taxing Authority	Tax Type	Tax Basis	Tax Rate	Year of Operation						Total
				2005	2006	2007	2008	2009	2010	
Federal Government	Federal Insurance Contribution Tax (FICA) (employer and employee paid)	Regional Direct Indirect Induced (DII) earnings	0.153	\$1,452,585	\$10,423,495	\$12,827,959	\$8,918,708	\$9,298,830	\$9,554,696	\$52,476,273
	Federal Unemployment Tax Act (FUTA) Tax (employer paid)	First \$7000 of wages per employee for total DII employment	0.008	\$15,120	\$112,504	\$163,237	\$126,334	\$131,230	\$134,863	\$683,287
	Corporate Income Taxes	Income from \$335,000 to \$10 million	0.34	\$0	\$592,697	\$4,131,782	\$4,084,605	\$5,167,614	\$6,516,916	\$20,493,614
	<i>Total Federal Expected Tax Revenue</i>				\$1,467,705	\$11,128,696	\$17,122,978	\$13,129,647	\$14,597,674	\$16,206,474
Commonwealth of Pennsylvania	Application Fees (Category 1)	One Time	NA	\$321,250	\$0	\$0	\$0	\$0	\$0	\$321,250
	Licensing Fees (Category 1)	One Time	NA	\$0	\$50,000,000	\$0	\$0	\$0	\$0	\$50,000,000
	Slot Machine Taxes	Gross Slot Revenues	0.34	\$0	\$6,201,600	\$44,808,192	\$47,259,320	\$48,677,100	\$50,137,413	\$197,083,624
	Host Community Facility Tax (Category 1)	Gross Slot Revenues	0.04	\$0	\$729,600	\$5,271,552	\$5,559,920	\$5,726,718	\$5,898,519	\$23,186,309
	Economic Development and Tourism Tax	Gross Slot Revenues	0.05	\$0	\$912,000	\$6,589,440	\$6,949,900	\$7,158,397	\$7,373,149	\$28,982,886
	PA Racehorse Development Fund	Gross Slot Revenues	0.12	\$0	\$2,188,800	\$15,814,656	\$12,509,820	\$12,885,115	\$13,271,668	\$56,670,059
	Racetrack Admission Taxes	Admission Revenues	0.05	\$0	\$0	\$1,939	\$13,895	\$14,312	\$14,741	\$44,887
	Racetrack Wagering Taxes	Total Handle	0.00875	\$0	\$0	\$62,073	\$444,859	\$458,205	\$471,951	\$1,437,089
	Personal Income Tax and PA Unemployment Compensation Tax (employee paid)	Regional Direct Indirect Induced (DII) earnings	0.0316	\$300,011	\$2,152,826	\$2,649,435	\$1,842,034	\$1,920,543	\$1,973,388	\$10,838,237
	PA Unemployment Compensation Tax (employer paid)	First \$8000 of wages per employee for total DII employment	0.03752	\$81,043	\$603,020	\$874,948	\$677,148	\$703,394	\$722,866	\$3,662,420
	Sales Taxes	Adjusted Regional Direct Indirect Induced (DII) net expenditures (taxable sales)	0.06	\$930,637	\$6,505,894	\$6,953,837	\$4,294,928	\$4,494,392	\$4,612,926	\$27,792,613
Corporate Income Taxes	Net Income	0.0999	\$0	\$174,148	\$1,207,872	\$1,194,406	\$1,503,131	\$1,860,114	\$5,939,670	
<i>Total Pennsylvania Expected Tax Revenue</i>				\$1,632,941	\$69,467,889	\$84,233,943	\$80,746,230	\$83,541,305	\$86,336,735	\$405,959,043
Local Governments (within six county Northwestern PA region)	Earned Income Tax (six county region)	Regional Direct Indirect Induced (DII) earnings	0.013	\$123,422	\$885,656	\$1,089,957	\$757,799	\$790,097	\$811,837	\$4,458,768
	Emergency and Municipal Services Tax (per employee) (within Summit Township)	Total Direct Employment for the Slot Machine and Racetrack Operations	\$10.00	\$0	\$6,150	\$7,500	\$7,500	\$7,500	\$7,500	\$36,150
	Emergency and Municipal Services Tax (per employee) (within remaining six county region)	Regional Direct Indirect Induced (DII) Employment less racino employment	\$27.00	\$7,290	\$37,638	\$58,453	\$40,661	\$43,022	\$44,773	\$231,837
	Erie County Hotel Taxes	Direct hotel expenditures by racino visitors	0.05	\$0	\$162,955	\$1,190,986	\$1,339,208	\$1,379,384	\$1,420,766	\$5,493,300
	Summit Township Real Estate Property Tax	Racino Construction Cost	0.01426	\$0	\$1,712,735	\$2,519,721	\$2,538,699	\$2,579,772	\$2,622,077	\$11,973,004
	Erie County Real Estate Property Tax	Racino Construction Cost	0.00468	\$0	\$562,104	\$826,949	\$833,178	\$846,657	\$860,541	\$3,929,429
	<i>Total Local Expected Tax Revenue</i>				\$130,712	\$3,367,238	\$5,693,567	\$5,517,045	\$5,646,432	\$5,767,495
<b>TOTAL ANNUAL EXPECTED TAX REVENUES</b>				\$3,231,358	\$83,963,823	\$107,050,488	\$99,392,921	\$103,785,411	\$108,310,704	\$505,734,705

**ORIGINAL Table 2: Projected Total Direct, Indirect, and Induced Economic Impacts from Expenditures  
by Presque Isle Downs, Inc., Its Employees and Its Visitors and Visitors**

Impacts on Outputs of All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$31,021,227	\$199,501,331	\$108,614,932	\$2,554,347	\$5,528,117	\$5,693,961	\$352,913,916
Operation	Employee wages and salaries		\$2,474,863	\$15,664,069	\$18,108,750	\$18,108,750	\$18,108,750	\$72,465,181
	Food and beverage supplies		\$233,542	\$1,687,404	\$1,779,710	\$1,833,101	\$1,888,094	\$7,421,850
	Operating supplies and repairs		\$366,093	\$2,801,996	\$3,914,093	\$4,031,516	\$4,152,461	\$15,266,159
	Utilities		\$98,498	\$820,662	\$1,531,676	\$1,577,626	\$1,624,955	\$5,653,417
	Advertising and promotions		\$633,860	\$3,092,000	\$3,555,800	\$3,662,474	\$3,772,348	\$14,716,482
Casino visitors	Food and beverage expenditure		\$7,148,422	\$52,282,003	\$59,009,434	\$60,779,717	\$62,603,109	\$241,822,685
	Hotel/motel expenditure		\$5,113,535	\$37,373,143	\$42,024,354	\$43,285,085	\$44,583,637	\$172,379,753
	Incidental expenditure		\$1,292,982	\$9,458,357	\$10,686,098	\$11,006,681	\$11,336,882	\$43,781,001
<b>Total net impact</b>		<b>\$31,021,227</b>	<b>\$216,863,127</b>	<b>\$231,794,566</b>	<b>\$143,164,262</b>	<b>\$149,813,067</b>	<b>\$153,764,196</b>	<b>\$926,420,445</b>
Impacts on Earnings of Households Employed in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$9,494,018	\$61,057,199	\$33,241,500	\$781,756	\$1,691,875	\$1,742,631	\$108,008,979
Operation	Employee wages and salaries		\$687,775	\$4,353,113	\$5,032,500	\$5,032,500	\$5,032,500	\$20,138,388
	Food and beverage supplies		\$68,301	\$493,494	\$520,490	\$536,105	\$552,188	\$2,170,578
	Operating supplies and repairs		\$107,067	\$819,465	\$1,144,707	\$1,179,048	\$1,214,419	\$4,464,706
	Utilities		\$19,873	\$165,575	\$309,027	\$318,298	\$327,846	\$1,140,618
	Advertising and promotions		\$194,750	\$950,000	\$1,092,500	\$1,125,275	\$1,159,033	\$4,521,558
Casino visitors	Food and beverage expenditure		\$3,971,666	\$29,047,899	\$32,785,662	\$33,769,232	\$34,782,309	\$134,356,768
	Hotel/motel expenditure		\$1,628,900	\$11,905,097	\$13,386,725	\$13,788,327	\$14,201,977	\$54,911,026
	Incidental expenditure		\$391,889	\$2,866,727	\$3,238,842	\$3,336,007	\$3,436,087	\$13,269,552
<b>Total net impact</b>		<b>\$9,494,018</b>	<b>\$68,127,420</b>	<b>\$83,842,869</b>	<b>\$58,292,208</b>	<b>\$60,776,666</b>	<b>\$62,448,991</b>	<b>\$342,982,174</b>
Impacts on Employment in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		270	1,735	944	22	48	50	3,068
Operation	Employee wages and salaries		25	157	181	181	181	724
	Food and beverage supplies		2	12	13	13	13	53
	Operating supplies and repairs		3	20	28	29	30	109
	Utilities		0	3	6	6	6	22
	Advertising and promotions		5	26	30	31	31	123
Casino visitors	Food and beverage expenditure		152	1,110	1,252	1,290	1,329	5,133
	Hotel/motel expenditure		71	522	587	604	623	2,407
	Incidental expenditure		17	121	137	141	146	562
<b>Total net impact</b>		<b>270</b>	<b>2,009</b>	<b>2,915</b>	<b>2,256</b>	<b>2,343</b>	<b>2,408</b>	<b>12,201</b>

**CORRECTED Table 2: Projected Total Direct, Indirect, and Induced Economic Impacts from Expenditures by Presque Isle Downs, Inc., Its Employees and Its Visitors and Visitors**

Impacts on Outputs of All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$31,021,227	\$199,501,331	\$108,614,932	\$2,554,347	\$5,528,117	\$5,693,961	\$352,913,916
Operation	Employee wages and salaries		\$2,474,863	\$15,664,069	\$18,108,750	\$18,108,750	\$18,108,750	\$72,465,181
	Food and beverage supplies		\$233,542	\$1,687,404	\$1,779,710	\$1,833,101	\$1,888,094	\$7,421,850
	Operating supplies and repairs		\$366,093	\$2,801,996	\$3,914,093	\$4,031,516	\$4,152,461	\$15,266,159
	Utilities		\$105,005	\$874,878	\$1,632,863	\$1,681,849	\$1,732,305	\$6,026,901
	Advertising and promotions		\$633,860	\$3,092,000	\$3,555,800	\$3,662,474	\$3,772,348	\$14,716,482
Casino visitors	Food and beverage expenditure		\$7,148,422	\$52,282,003	\$59,009,434	\$60,779,717	\$62,603,109	\$241,822,685
	Hotel/motel expenditure		\$5,113,535	\$37,373,143	\$42,024,354	\$43,285,085	\$44,583,637	\$172,379,753
	Incidental expenditure		\$1,292,982	\$9,458,357	\$10,686,098	\$11,006,681	\$11,336,882	\$43,781,001
<b>Total net impact</b>		<b>\$31,021,227</b>	<b>\$216,869,634</b>	<b>\$231,848,781</b>	<b>\$143,265,450</b>	<b>\$149,917,290</b>	<b>\$153,871,546</b>	<b>\$926,793,929</b>
Impacts on Earnings of Households Employed in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		\$9,655,646	\$62,096,647	\$33,807,409	\$795,064	\$1,720,678	\$1,772,298	\$109,847,743
Operation	Employee wages and salaries		\$687,775	\$4,353,113	\$5,032,500	\$5,032,500	\$5,032,500	\$20,138,388
	Food and beverage supplies		\$68,271	\$493,275	\$520,258	\$535,866	\$551,942	\$2,169,612
	Operating supplies and repairs		\$107,019	\$819,101	\$1,144,198	\$1,178,524	\$1,213,879	\$4,462,721
	Utilities		\$19,873	\$165,575	\$309,027	\$318,298	\$327,846	\$1,140,618
	Advertising and promotions		\$194,750	\$950,000	\$1,092,500	\$1,125,275	\$1,159,033	\$4,521,558
Casino visitors	Food and beverage expenditure		\$2,283,873	\$16,703,746	\$18,853,115	\$19,418,708	\$20,001,270	\$77,260,712
	Hotel/motel expenditure		\$1,628,900	\$11,905,097	\$13,386,725	\$13,788,327	\$14,201,977	\$54,911,026
	Incidental expenditure		\$391,889	\$2,866,727	\$3,238,842	\$3,336,007	\$3,436,087	\$13,269,552
<b>Total net impact</b>		<b>\$9,655,646</b>	<b>\$67,478,997</b>	<b>\$72,064,042</b>	<b>\$44,372,230</b>	<b>\$46,454,183</b>	<b>\$47,696,834</b>	<b>\$287,721,931</b>
Impacts on Employment in All Affected Industries								
Source of Impacts		Era / Year						Total
Activity	Resource Use or Expenditure Category	2005	2006	2007	2008	2009	2010	
Construction		270	1,735	944	22	48	50	3,068
Operation	Employee wages and salaries		25	157	181	181	181	724
	Food and beverage supplies		2	12	13	13	13	53
	Operating supplies and repairs		3	20	28	29	30	109
	Utilities		0	3	6	6	6	22
	Advertising and promotions		5	26	30	31	31	123
Casino visitors	Food and beverage expenditure		152	1,110	1,252	1,290	1,329	5,133
	Hotel/motel expenditure		71	522	587	604	623	2,407
	Incidental expenditure		17	121	137	141	146	562
<b>Total net impact</b>		<b>270</b>	<b>2,009</b>	<b>2,915</b>	<b>2,256</b>	<b>2,343</b>	<b>2,408</b>	<b>12,201</b>

\$926,793,929

\$287,721,931

\$12,201





**TRAFFIC IMPACT STUDY  
FOR  
PRESQUE ISLE DOWNS**



P R E S Q U E I S L E D O W N S

**SUMMIT TOWNSHIP  
ERIE COUNTY, PENNSYLVANIA**

**DECEMBER 2002**

**HRG**

**Herbert, Rowland & Grubic, Inc.**

**Engineering & Related Services**

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**TRAFFIC IMPACT STUDY  
FOR  
PRESQUE ISLE DOWNS**

**SUMMIT TOWNSHIP  
ERIE COUNTY, PENNSYLVANIA**

PREPARED FOR:  
**PRESQUE ISLE DOWNS, INC.  
130 7<sup>TH</sup> STREET  
SUITE 820  
PITTSBURGH, PA 15222**

PREPARED BY:  
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**DECEMBER 2002**

**HRG PROJECT No.: 2586.002**

**TRAFFIC IMPACT STUDY  
FOR  
PRESQUE ISLE DOWNS**

**TABLE OF CONTENTS**

	<b>PAGE</b>
<b>EXECUTIVE SUMMARY .....</b>	<b><i>i</i></b>
<b>INTRODUCTION.....</b>	<b>1</b>
<b>EXISTING TRANSPORTATION SYSTEM.....</b>	<b>1</b>
▪ Study Area .....	1
▪ Roadway Network Description.....	2
▪ Existing Traffic Volumes.....	2
▪ Capacity Analyses.....	3
<i>Table 1: Unsignalized Intersections – LOS Criteria.....</i>	<i>3</i>
<i>Table 2: Signalized Intersections – LOS Criteria.....</i>	<i>3</i>
<i>Table 3: Existing Conditions Level of Service Summary.....</i>	<i>4</i>
▪ Crash Analysis .....	5
<i>Table 4: Crash Summary.....</i>	<i>5</i>
<b>SITE ANALYSIS .....</b>	<b>7</b>
▪ Trip Generation.....	7
<i>Table 5: Full Build-Out Entering Trip Generation Summary.....</i>	<i>8</i>
▪ Trip Distribution and Assignment.....	8
<i>Table 6: Trip Distribution Summary.....</i>	<i>9</i>
<b>FUTURE TRANSPORTATION SYSTEM .....</b>	<b>9</b>
▪ Roadway Network Description.....	9
▪ Future Traffic Volumes.....	9
▪ Capacity Analyses.....	10
<i>Table 7: Existing and Future Conditions Level of Service Summary.....</i>	<i>11</i>
<b>IMPROVEMENT ANALYSIS .....</b>	<b>14</b>
▪ Peak Hour Volume Warrant Evaluation .....	14
▪ Left-turn Phasing Analyses.....	14
▪ Required Turn Lane Lengths at Unsignalized Intersections.....	15
▪ Capacity Analyses.....	15
<i>Table 8: Level of Service Summary with Improvements.....</i>	<i>16</i>
▪ Analyses of Anticipated Queues at Signalized Intersections.....	20
<i>Table 9: Anticipated Queues at Signalized Intersections.....</i>	<i>21</i>
<b>CONCLUSIONS.....</b>	<b>22</b>
▪ Study Findings .....	22
▪ Recommendations.....	24
<b>LIST OF REFERENCES .....</b>	<b>28</b>





**TRAFFIC IMPACT STUDY  
FOR  
PRESQUE ISLE DOWNS**

**LIST OF TABLES**

---

	<b>TABLE NO.</b>
Unsignalized Intersections – LOS Criteria.....	1
Signalized Intersections – LOS Criteria.....	2
Existing Conditions Level of Service Summary.....	3
Crash Summary.....	4
Full Build-Out Entering Trip Generation Summary.....	5
Trip Distribution Summary.....	6
Existing and Future Conditions Level of Service Summary.....	7
Level of Service Summary with Improvements.....	8
Anticipated Queues at Signalized Intersections.....	9

**LIST OF FIGURES**

---

	<b>FIGURE NO.</b>
Site Location Map.....	1
Existing Intersection Geometry and Traffic Control.....	2
2002 PM Peak Hour Existing Traffic Volumes.....	3
Opening Day 2004 PM Peak Hour Racetrack Trip Generation.....	4A
Full-Operational 2008 PM Peak Hour Racetrack Trip Generation.....	4B
PM Peak Hour Showroom Trip Generation.....	5
Opening Day 2004 PM Peak Hour Total Trip Generation.....	6A
Full-Operational 2008 PM Peak Hour Total Trip Generation.....	6B
2004 PM Peak Hour Traffic Volumes Without Development.....	7
2004 PM Peak Hour Traffic Volumes With Development.....	8
2008 PM Peak Hour Traffic Volumes Without Development.....	9
2008 PM Peak Hour Traffic Volumes With Development.....	10
2014 PM Peak Hour Traffic Volumes Without Development.....	11
2014 PM Peak Hour Traffic Volumes With Development.....	12
2004 Proposed Geometry.....	13
2008 Proposed Geometry.....	14
2014 Proposed Geometry.....	15



**TRAFFIC IMPACT STUDY  
FOR  
PRESQUE ISLE DOWNS**

**LIST OF APPENDICES – SEE ATTACHED**

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APPENDIX A: Traffic Count Data

APPENDIX B: Existing Capacity Analyses

APPENDIX C: Crash Data

APPENDIX D: Trip Generation, Distribution and Assignment Analysis

APPENDIX E: 2004 Capacity Analyses

- i. 2004 Capacity Analyses Without Development
- ii. 2004 Capacity Analyses With Development

APPENDIX F: 2008 Capacity Analyses

- i. 2008 Capacity Analyses Without Development
- ii. 2008 Capacity Analyses With Development

APPENDIX G: 2014 Capacity Analyses

- i. 2014 Capacity Analyses Without Development
- ii. 2014 Capacity Analyses With Development

APPENDIX H: Improvement Analyses

APPENDIX I: Improvement Capacity Analyses

- i. 2004 Capacity Analyses With Improvements
- ii. 2008 Capacity Analyses With Improvements
- iii. 2014 Capacity Analyses With Improvements



## **EXECUTIVE SUMMARY**

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### ***Overview of the Development***

- ▶ The Presque Isle Downs development is planned to be located to the south of Interstate 90 and to the east of Perry Highway in Summit Township, Erie County, Pennsylvania.
- ▶ The proposed horse racing development is planned to consist of a 3000 person capacity grandstand, a 500 person capacity restaurant and a 50,000 square foot showroom.
- ▶ Access to the development is planned via two full-access driveways located on Perry Highway and one full-access driveway on Footmill Road, which will be used by employees only.
- ▶ The development, upon full build-out in 2008, is anticipated to generate 1633 entering trips and 313 exiting trips during the PM peak hour.

### ***Study Intersections***

- ▶ I-90 Westbound Ramps and Perry Highway (S.R. 0097)
- ▶ I-90 Eastbound Ramps and Perry Highway (S.R. 0097)
- ▶ Fairfield Avenue and Perry Highway (S.R. 0097)
- ▶ Jefferson Avenue and Perry Highway (S.R. 0097)
- ▶ North Site Driveway/Frank Avenue and Perry Highway (S.R. 0097)
- ▶ Race Avenue and Perry Highway (S.R. 0097)
- ▶ South Site Driveway and Perry Highway (S.R. 0097)
- ▶ Academy Avenue and Perry Highway (S.R. 0097)
- ▶ Johnson Road and Perry Highway (S.R. 0097)
- ▶ Robison Road (S.R. 4024) and Perry Highway (S.R. 0097)
- ▶ Robison Road (S.R. 4024) and Footmill Road

### ***Deficiencies Without Development***

- ▶ I-90 Westbound Ramps/Perry Highway – 2004, 2008 and 2014
- ▶ I-90 Eastbound Ramps/Perry Highway – 2002, 2004, 2008 and 2014
- ▶ Jefferson Avenue/Perry Highway – 2014
- ▶ Johnson Road/Perry Highway – 2014

### ***Additional Deficiencies with Development***

- ▶ I-90 Westbound Ramps/Perry Highway – 2004, 2008 and 2014
- ▶ I-90 Eastbound Ramps/Perry Highway – 2004, 2008 and 2014
- ▶ Fairfield Avenue/Perry Highway – 2004, 2008 and 2014
- ▶ Frank Avenue/North Site Driveway/Perry Highway – 2004, 2008 and 2014
- ▶ Race Avenue/Perry Highway – 2008 and 2014
- ▶ South Site Driveway/Perry Highway – 2008 and 2014
- ▶ Johnson Road/Perry Highway – 2008 and 2014
- ▶ Robison Road/Perry Highway – 2008 and 2014

### ***Improvements Necessary to Mitigate Impact of Development in 2004***

- ▶ The phasing at both I-90 ramp intersections should be changed to simultaneous lagging phasing. A 225-foot westbound left-turn lane should be constructed on the I-90 Westbound Off-Ramp. A 475-foot eastbound right-turn lane should be constructed on the I-90 Eastbound Off-Ramp.

- ▶ The two-way-left-turn lane that currently ends north of the Fairfield Avenue/Perry Highway intersection should be extended through the Fairfield Avenue intersection and end as a 370-foot exclusive southbound left-turn lane at the North Site Driveway intersection.
- ▶ A signal should be installed at the North Site Driveway intersection with Route 97. With the concurrence of both Summit Township and PENNDOT, Frank Avenue, currently a paper street, should be extended to align with the North Site Driveway. The existing Jefferson Avenue and Route 97 intersection should be converted to a right-in/right-out only access to Jefferson Avenue. All left turns to the area currently accommodated by Jefferson may be rerouted to the signal at Frank Avenue.
- ▶ Dual westbound right-turn lanes should be constructed on the North Site Driveway approach and two receiving lanes should be provided. A second northbound through lane currently begins immediately north of the Fairfield Avenue intersection and should be lengthened to continue through the Fairfield Avenue intersection and end at the North Site Driveway intersection to accommodate the dual westbound right-turn lanes. An additional northbound through lane should begin immediately south of the North Site Driveway and can be received by the same additional receiving lane constructed for the dual westbound right-turn lanes.

### ***Improvements Necessary to Mitigate Impact of Development in 2008***

- ▶ A second eastbound right-turn lane is required on the I-90 Eastbound Off-Ramp and should be constructed to a length of 425 feet. To receive the dual eastbound right-turn lanes, a second receiving lane is required to begin at the I-90 Eastbound Ramps/Perry Highway intersection. Additionally, to accommodate high exiting volumes during time periods other than the PM peak hour, dual northbound left-turn lanes are required at the I-90 Westbound Ramps/Perry Highway intersection. Rather than constructing a second northbound left-turn lane, the innermost existing northbound through lane should be converted, only during certain time periods, to a northbound left-turn lane. Proper illuminated overhead signage must be provided to indicate if the middle northbound lane is operating as a left-turn lane or a through lane. Furthermore, when the signage is indicating that the dual northbound left-turn lanes are in operation, protected/prohibited phasing for the northbound left-turning movement must be implemented. The phasing can remain protected/permitted when only one northbound left-turn lane is operating. Finally, to receive the dual northbound left-turn lanes, a second receiving lane is required on the I-90 Westbound On-Ramp and can be tapered back to one lane prior to reaching the merge point with I-90.
- ▶ The additional southbound lane that was required to receive the dual eastbound right-turn lanes at the I-90 Eastbound Ramps/Perry Highway intersection will continue as an additional southbound through lane at the Fairfield Avenue/Perry Highway intersection.
- ▶ As was the situation in the 2004 improvements, the two-way-left-turn lane that was continued through the Fairfield Avenue/Perry Highway intersection will be striped as an exclusive southbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection. An additional southbound left-turn lane is also required at this intersection to accommodate the high volume of turning movements into the site. The additional southbound through lane, which is proposed to begin at the I-90 Eastbound Ramps/Perry Highway intersection, should end as the second southbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection. The two-way-left-turn lane should also be striped as an exclusive northbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection to a minimal length of 75 feet.
- ▶ Although striped as exclusive left-turn lanes at the Frank Avenue/North Site Driveway/Perry Highway intersection, the two-way-left-turn lane should continue through the unsignalized intersections of Perry Highway with Race Avenue, the South Site Driveway, Academy Avenue, and Johnson Road. The two-way-left-turn lane is recommended to end south of the Johnson Road/Perry Highway intersection (i.e. prior to reaching the Robison Road/Perry Highway intersection). The two-

way-left-turn lane should be striped as a 300-foot exclusive southbound left-turn lane at the South Site Driveway/Perry Highway intersection.

- ▶ A southbound advance phase should be implemented at the intersection of Robison Road and Perry Highway.

### ***Improvements Necessary to Mitigate Impact of Development in 2014***

- ▶ At the I-90 Westbound Ramps/Perry Highway intersection, the existing exclusive southbound right-turn lane must be converted to a shared through/right lane. A second receiving lane will need to be constructed under the I-90 overpass and then will continue to the I-90 Eastbound Ramps/Perry Highway intersection where an additional southbound through lane will already be provided under the 2008 improvements. This may be a possible partnership project with PENNDOT to widen under the I-90 overpass to obtain proper design width including shoulders for the additional lane.
- ▶ A southbound left-turn lane should be constructed at the Robison Road/Perry Highway intersection to a length of 100 feet and the phasing should remain as protected/permitted for this movement.

### ***Improvements the Developer is willing to Construct***

The developer is willing to do the following:

- ▶ Construct a 225-foot westbound left-turn lane on the I-90 Westbound Off-Ramp as well as a 475-foot eastbound right-turn lane on the I-90 Eastbound Off-Ramp. Modify the traffic signals as necessary at the I-90 ramps and Route 97 intersections.
- ▶ Extend the two-way-left-turn lane that currently ends north of the Fairfield Avenue/Perry Highway intersection through the South Site Driveway intersection.
- ▶ Add a traffic signal at the North Site Driveway intersection with Route 97. With the concurrence of both Summit Township and PENNDOT the developer is willing to extend Frank Avenue, currently a paper street, to align with the North Site Driveway. The existing Jefferson Avenue and Route 97 intersection may be converted to a right-in/right-out only access to Jefferson Avenue with the addition of Frank Avenue. All left turns to the area currently accommodated by Jefferson may then be rerouted to the signal at Frank Avenue.
- ▶ Construct dual westbound right-turn lanes exiting the North Site Driveway and construct an additional receiving lane along Route 97. This additional northbound lane along Route 97 will begin immediately south of the north site drive and extend north to join the existing second northbound thru lane.

The engineer believes that while the traffic study includes both 2008 full operational and 2014 ten-year horizon study years, the possible improvements listed to mitigate those study years should not be constructed at the time of the development. The improvements listed above should be more than adequate to handle the development traffic for the first several years of operation. They include transportation system improvements identified for the 2004 with proposed development condition as well as an additional two-way-left-turn lane terminating at the south site driveway as an exclusive left turn lane.

We further suggest that a follow up study be conducted several years into operation to more accurately determine the need for additional roadway improvements beyond those the developer is willing construct at this time.

After the follow up study is completed negotiations should take place between PENNDOT and the developer to complete the improvements required to accommodate future development traffic, while also

investigating the potential for partnering on more comprehensive traffic solutions for the benefit of the entire area.

## **INTRODUCTION**

---

The Presque Isle Downs development is planned on a 135-acre parcel of land in Summit Township, Erie County, Pennsylvania. The proposed horse racing development is intended to consist of a 3000 person capacity grandstand with a 500 person capacity restaurant and a 50,000 square foot showroom. Currently, this parcel of land is mostly vacant with a few residential buildings that are planned to be acquired upon development of the proposed site. The proposed development will be equipped for horse racing events that, for purposes of this traffic study, were assumed to commence at approximately 6:00 PM with most of the patron traffic arriving between 4:30 PM and 5:30 PM. The proposed development is anticipated to be operational in 2004 and operating at full capacity by 2008. The site location map is shown in Figure 1.

All patron traffic destined for the proposed horse racing development will utilize two full-access driveways located along Perry Highway. Most of the employee traffic is expected to utilize a rear full-access entrance located along Footmill Road. The surrounding area is mostly residential with a few commercial land uses closer to the I-90 interchange and along Perry Highway. Specifically, a Pilot truck stop, Shell gas station and Super 8 Motel are located immediately south of the I-90 interchange.

The objectives of this study were to analyze existing traffic conditions in the study area, project and analyze traffic conditions in the study area for opening day, full build-out and the 10-year horizon year, identify any traffic impact that operation of the proposed site will have on the study area, and recommend improvements to mitigate any adverse effects caused by the proposed development. This study has been conducted in accordance with the Institute of Transportation Engineers (ITE) Traffic Impact Study Guidelines, PENNDOT criteria outlined in Publication 282 (1) and the scope of work PENNDOT District 1-0 had previously agreed upon.

## **EXISTING TRANSPORTATION SYSTEM**

---

### ***Study Area***

The study area, which was determined by both Summit Township and PENNDOT District 1-0, was selected based on the intersections and roadways that potentially could be affected by the proposed development. In addition to the proposed site driveways, the following intersections were selected for further study:

1. I-90 Westbound Ramps and Perry Highway (S.R. 0097)
2. I-90 Eastbound Ramps and Perry Highway (S.R. 0097)
3. Fairfield Avenue and Perry Highway (S.R. 0097)
4. Jefferson Avenue and Perry Highway (S.R. 0097)
5. Race Avenue and Perry Highway (S.R. 0097)
6. Academy Avenue and Perry Highway (S.R. 0097)
7. Johnson Road and Perry Highway (S.R. 0097)
8. Robison Road (S.R. 4024) and Perry Highway (S.R. 0097)
9. Robison Road (S.R. 4024) and Footmill Road

## ***Roadway Network Description***

Interstate 90 is a 4-lane, limited access divided highway that provides access to Interstate 79 and Cleveland, Ohio to the west, and to the state of New York to the east. The I-90 interchange with Perry Highway provides full access from the east and west to the site. There are no existing turn lanes on the I-90 exit ramps. The eastbound and westbound I-90 ramps on Perry Highway are currently signalized. Counts conducted on the eastbound and westbound I-90 exit ramps yielded average daily traffic volumes of approximately 5150 and 5450 vehicles, respectively.

Perry Highway (S.R. 0097) is a state roadway classified as a minor arterial in the study area with an average daily traffic volume of 10,500 vehicles per day. Perry Highway provides access to the City of Erie to the north. The typically two-lane roadway widens to include an additional northbound through lane near the I-90 interchange. All lanes are delineated with pavement markings and separated by raised concrete medians near the I-90 interchange intersections. The through travel lanes are twelve feet in width. The heavy vehicle percentage counted along Perry Highway was approximately nine percent.

Robison Road (S.R. 4024) is a two-lane state roadway classified as a minor arterial in the study area with an average daily traffic volume of 3000 vehicles per day. Approximately fourteen percent of the vehicles are classified as heavy vehicles. Many of these are accessing the nearby Waste Management Site. Robison Road is delineated with white and yellow pavement markings with ten-foot travel lanes in each direction.

The remaining roads included in the study area are two-lane township roads with average daily traffic volumes ranging from approximately 120 vehicles per day to 1000 vehicles per day. Johnson Road is delineated with yellow and white pavement markings with 10-foot lanes in each direction.

Average daily traffic volumes provided in the above discussion were obtained from traffic counts described below and the roadway classifications were similarly found using PENNDOT functional classification maps. Figure 2 shows the existing intersection geometry and traffic control for the roadway network within the study area.

## ***Existing Traffic Volumes***

Turning movement counts at each of the study intersections were conducted for the PM time period during the weeks of October 14, 2002 and October 28, 2002 from 4:00PM to 6:00PM. Twenty-four hour traffic volume counts were also collected using Automatic Traffic Recorders (ATR's) which were placed along Perry Highway, Robison Road, Jefferson Avenue, Race Avenue and on the I-90 Eastbound and Westbound Off-Ramps. The ATR's were in place during the weeks of October 14, 2002 and November 2, 2002. The traffic count data can be found in Appendix A. Figure 3 displays the existing PM peak hour traffic volumes for each of the study intersections.



## Capacity Analyses

Capacity analysis, as defined by the Highway Capacity Manual (2), is a set of procedures used to estimate the traffic-carrying ability of a facility over a range of defined operational conditions. The capacity analysis uses *Levels of Service* (LOS) to describe the operational conditions. Levels of Service are assigned letter designations “A” through “F,” with “A” being the most desirable operating conditions. A Level of Service “E” is considered to be at or near capacity, while a Level of Service “D” is considered acceptable according to the Highway Capacity Manual (2). The LOS criteria for unsignalized intersections and signalized intersections are given in Table 1 and Table 2, respectively.

At unsignalized intersections, the level of service measures the ability of turning traffic to find gaps in the major street traffic flow that permit successful completion of the desired turning movement. The critical movements at unsignalized intersections are the left turns from the major street and egress movements from the minor street.

TABLE 1: UNSIGNALIZED INTERSECTIONS – LOS CRITERIA		
AVERAGE CONTROL DELAY (SEC/VEH)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long delays
> 50	F	*

\*When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing, which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvements to the intersection. LOS “F” is considered to be unacceptable to most drivers.

For signalized intersections, the level of service measures the average control delay time per vehicle. Also, the volume to capacity ratio, which is a ratio of the peak hour traffic volumes for a facility to the theoretical maximum traffic volume the facility can handle, relates to the level of service of a facility.

TABLE 2: SIGNALIZED INTERSECTIONS – LOS CRITERIA		
AVERAGE CONTROL DELAY (SEC/VEH)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
≤ 10	A	Little or no delay
> 10 and ≤ 20	B	Short traffic delays
> 20 and ≤ 35	C	Average traffic delays
> 35 and ≤ 55	D	Long traffic delays
> 55 and ≤ 80	E	Very long delays
> 80	F	*

\*When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing, which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvements to the intersection. LOS “F” is considered to be unacceptable to most drivers.

Capacity analyses at each of the study intersections were performed using HCS2000™ (3) software. The analyses were conducted based on the existing traffic volumes, intersection controls, and geometrics for each study intersection. Existing conditions analyses were performed at each study intersection for the PM peak hour. Table 3 provides a summary of the PM peak hour existing levels of service at each of the study intersections.

<b>TABLE 3: EXISTING CONDITIONS LEVEL OF SERVICE SUMMARY</b>		
<i>INTERSECTION</i>	<i>MOVEMENT</i>	<i>2002 EXISTING</i>
		<i>PM</i>
<b>I-90 WESTBOUND RAMPS AND PERRY HIGHWAY</b>		
I-90 WESTBOUND OFF-RAMP	WBLTR	D
PERRY HIGHWAY	NBL	D
	NBT	A
	SBT	D
	SBR	C
OVERALL		C
<b>I-90 EASTBOUND RAMPS AND PERRY HIGHWAY</b>		
I-90 EASTBOUND OFF-RAMP	EBLTR	E
PERRY HIGHWAY	NBTR	C
	SBL	A
	SBT	A
OVERALL		C
<b>PERRY HIGHWAY AND FAIRFIELD AVENUE</b>		
PERRY HIGHWAY	NBLT	A
FAIRFIELD AVENUE	EBLR	C
<b>PERRY HIGHWAY AND JEFFERSON AVENUE/PRIVATE DRIVEWAY</b>		
PERRY HIGHWAY	NBLTR	A
	SBLTR	A
PRIVATE DRIVEWAY	WBLTR	C
JEFFERSON AVENUE	EBLTR	C
<b>PERRY HIGHWAY AND RACE AVENUE</b>		
PERRY HIGHWAY	NBLT	A
RACE AVENUE	EBLR	C
<b>PERRY HIGHWAY AND ACADEMY AVENUE</b>		
PERRY HIGHWAY	NBLT	A
ACADEMY AVENUE	EBLR	C
<b>PERRY HIGHWAY AND JOHNSON ROAD</b>		
PERRY HIGHWAY	NBLTR	A
	SBLTR	A
JOHNSON ROAD	WBLTR	C
	EBLTR	C

<b>TABLE 3: EXISTING CONDITIONS LEVEL OF SERVICE SUMMARY (CONT.)</b>		
<i>INTERSECTION</i>	<i>MOVEMENT</i>	<i>2002 EXISTING</i>
		<i>PM</i>
<b>ROBISON ROAD AND PERRY HIGHWAY</b>		
ROBISON ROAD	EBLTR	C
	WBLTR	B
PERRY HIGHWAY	NBLTR	A
	SBLTR	B
OVERALL		B
<b>ROBISON ROAD AND FOOTMILL ROAD</b>		
ROBISON ROAD	EBLTR	A
	WBLTR	A
FOOTMILL ROAD	NBLTR	B
	SBLTR	A

As shown in Table 3, the levels of service for each movement or approach at the study intersections, with the exception of the I-90 Eastbound Ramp intersection, are all at acceptable levels under the existing conditions (i.e. LOS "D" or higher). At the I-90 Eastbound Ramps/Perry Highway intersection, the eastbound approach is operating at a deficient LOS "E" under the existing lane configuration and signal timings. Worksheets for the level of service/capacity analyses for existing conditions are included in Appendix B.

### **Crash Analysis**

Crash data summaries for each of the study intersections were obtained from PENNDOT, Engineering District 1-0. The crash data are contained in Appendix C and Table 4 summarizes the data found in the appendix.

<b>TABLE 4: CRASH SUMMARY</b> (-- Indicates zero accidents reported)												
<b>INTERSECTION</b>			<b>NUMBER OF INCIDENTS</b>									<b>INTERSECTION TOTAL</b>
			<i>Non-Collision</i>	<i>Rear-End</i>	<i>Head-On</i>	<i>Backing Up</i>	<i>Angle</i>	<i>Sideswipe</i>	<i>Hit Fixed Object</i>	<i>Hit Pedestrian</i>	<i>All Others</i>	
<i>Year</i>	<i>Number of Accidents</i>											
<b>I-90 WESTBOUND RAMPS AND PERRY HIGHWAY</b>												
1998	0		--	--	--	--	1	--	--	--	--	1
1999	0											
2000	1											
<b>I-90 EASTBOUND RAMPS AND PERRY HIGHWAY</b>												
1998	3		--	--	--	--	1	--	2	--	--	3
1999	0											
2000	0											

**TABLE 4: CRASH SUMMARY (CONT.)**

(-- Indicates zero accidents reported)

INTERSECTION		NUMBER OF INCIDENTS										
		Non-Collision	Rear-End	Head-On	Backing Up	Angle	Sideswipe	Hit Fixed Object	Hit Pedestrian	All Others	Unknown	INTERSECTION TOTAL
Year	Number of Accidents											
<b>FAIRFIELD AVENUE AND PERRY HIGHWAY</b>												
1998	0	--	--	--	--	1	--	--	--	--	--	1
1999	1	--	--	--	--	--	--	--	--	--	--	--
2000	0	--	--	--	--	--	--	--	--	--	--	--
<b>JEFFERSON AVENUE AND PERRY HIGHWAY</b>												
1998	0	--	--	--	--	--	--	1	--	--	--	1
1999	1	--	--	--	--	--	--	--	--	--	--	--
2000	0	--	--	--	--	--	--	--	--	--	--	--
<b>RACE AVENUE AND PERRY HIGHWAY</b>												
1998	1	--	--	--	--	--	--	--	--	1	--	1
1999	0	--	--	--	--	--	--	--	--	--	--	--
2000	0	--	--	--	--	--	--	--	--	--	--	--
<b>ACADEMY AVENUE AND PERRY HIGHWAY</b>												
1998	1	--	1	--	--	--	--	--	--	--	--	1
1999	0	--	--	--	--	--	--	--	--	--	--	--
2000	0	--	--	--	--	--	--	--	--	--	--	--
<b>JOHNSON ROAD AND PERRY HIGHWAY</b>												
1998	0	--	--	--	--	--	--	1	--	--	--	1
1999	0	--	--	--	--	--	--	--	--	--	--	--
2000	1	--	--	--	--	--	--	--	--	--	--	--
<b>ROBISON ROAD AND PERRY HIGHWAY</b>												
1998	2	--	--	--	--	5	--	--	--	--	1	6
1999	1	--	--	--	--	--	--	--	--	--	--	--
2000	3	--	--	--	--	--	--	--	--	--	--	--
<b>ROBISON ROAD AND FOOTMILL ROAD</b>												
1998	0	--	--	--	--	--	--	--	--	--	--	0
1999	0	--	--	--	--	--	--	--	--	--	--	--
2000	0	--	--	--	--	--	--	--	--	--	--	--

The detailed summary for each crash was categorized according to location, type of crash, and the movement of each vehicle involved. A trend or pattern was determined to be present if five or more of the same type of accident occurred at a particular intersection (±500 feet of the intersection in each direction) each year over a three year period. Per this criterion and as shown in Table 4, no trend or pattern in the crash data was apparent at any of the study intersections and the proposed development is not anticipated to have an adverse effect on the crash rate at any of the study intersections.

## SITE ANALYSIS

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### *Trip Generation*

The PM peak hour was assumed to be the crucial time period due to the nature of this development. It is assumed that with a 6:00 PM post time, most of the horse racing patron traffic and restaurant customer traffic will arrive during the PM peak hour of the local roadway. Patrons utilizing the showroom are expected to be more evenly distributed throughout the day and evening since the facility does not have a designated start time but rather may host conferences or events that last an entire day or over a multiple day period. The various values discussed throughout this trip generation section are based on intended operating characteristics and capacity of the proposed site development.

With a 3,000 person capacity grandstand and a 500 person capacity restaurant under the full-operational scenario (i.e. 2008), approximately 3600 patrons are expected to attend the horse racing events. During the PM peak hour 80% of these patrons are expected to arrive. This is a conservative estimate based upon the client's previous experience. Using a vehicle occupancy of 2.5 patrons per vehicle, approximately 1152 patron vehicles will arrive during the PM peak hour. The auto occupancy rate of 2.5 patrons per vehicle is comparable to 2.6 auto occupancy rate derived from the Mountaineer counts summarized in Appendix A. Furthermore, for a facility this size, the total number of employees will amount to approximately 136 racing department employees, 100 food and beverage employees and 1,200 backside employees, which include stable workers, owners of the horses, and horse trainers. On a racing day, all 136 racing department employees, 80% of the food and beverage employees and 45% of the backside employees are expected to be working. Of those employees that will be working on a race day, 20% of them are expected to arrive during the same PM peak hour the patrons arrive. Most employees are expected to arrive before 4:00 PM and more specifically, the backside employee arrival will depend heavily upon their specific race times. This amounts to 756 employees (i.e. 136 racing department, 80 food and beverage, and 540 backside) working on a race day, of which 151 will arrive during the PM peak hour. Assuming a vehicle occupancy of 1.1 employees per vehicle, 138 employee vehicles are expected to enter the horse racing facility during the PM peak hour. Excluding the showroom trips, 1290 vehicles are expected to arrive during the PM peak hour and a nominal number of vehicles will exit during the PM peak hour (i.e. 32 exiting trips).

In the 50,000 square foot showroom, which will generate traffic throughout the day due to the various types of events planned to be held, the average space required per person is expected to be 15 square feet. Taking the 50,000 square feet and dividing it by the space per person results in a 3333 person capacity facility. Because the same 3333 people will not occupy the showroom for an entire day a turnover rate, which converts the capacity to the total expected daily attendance, was utilized. Due to the nature of the showroom facility, a turnover rate of 1.8 was assumed. Multiplying the capacity by the turnover rate results in a daily attendance of 6000 patrons. Utilizing the same 2.5 patrons per vehicle occupancy rate as used for the horse racing facility, approximately 2400 vehicles are expected to arrive in a day and the equivalent 2400 vehicles will exit in the same day. Of the 4800 total trips generated by the showroom, 13% were assumed to be generated during the PM peak hour which results in 624 PM peak hour trips. Assuming 55% of the trips enter and 45% of the trips exit, approximately 343 entering trips and 281

exiting trips are expected during the PM peak hour. Including the showroom trips, during the PM peak hour the total number of trips is estimated to be 1633 entering vehicles and 313 exiting vehicles. See Table 5 for details on the entering trip generation.

<b>TABLE 5: FULL BUILD-OUT ENTERING TRIP GENERATION SUMMARY</b>					
<b>TOTAL NUMBER OF PATRONS/EMPLOYEES ENTERING</b>	<b>% AT RACETRACK DAY OF EVENT</b>	<b>% ARRIVING DURING PEAK HOUR</b>	<b>NUMBER OF PATRONS/EMPLOYEES ARRIVING DURING PEAK HOUR</b>	<b>VEHICLE OCCUPANCY</b>	<b>VEHICLES ARRIVING DURING PEAK HOUR</b>
<b>HORSE RACING/RESTAURANT FACILITY</b>					
3599 Horse Racing/ Restaurant Patrons	100%	80%	2879	2.5	1152
136 Racing Department Employees	100%	20%	27	1.1	138
100 Food and Beverage Employees	80%		16		
1200 Backside Employees	45%		108		
<b>SHOWROOM FACILITY</b>					343
<b>TOTAL NUMBER OF VEHICLES ARRIVING DURING PEAK HOUR</b>					<b>1633</b>

In the opening year 2004, approximately 60% of the full-operational scenario racetrack/restaurant traffic is expected to utilize the proposed site. The showroom trips are expected to be the same in 2004 as they were determined for the full build-out year. Therefore, the 1290 racetrack/restaurant entering PM peak hour trips determined for the full build-out year were reduced to 774 trips entering in 2004. Added to the 343 entering trips from the showroom, the total number of entering trips in 2004 is expected to be 1,117 PM peak hour trips. Figure 4A displays the racetrack/restaurant trips expected in 2004 and similarly, Figure 4B displays the racetrack/restaurant trips expected upon full build-out in 2008 and 2014. Figure 5 displays the showroom trips utilized for each study year. Finally, Figure 6A displays the total trips for 2004 and Figure 6B displays the total trips upon full build-out in 2008 and 2014. See Appendix D for details on the trip generation analysis.

### ***Trip Distribution and Assignment***

The distribution of trips generated by the site was based on data obtained from a marketing study along with a graphical analysis of all possible travel routes accessing the site. As part of the marketing study, the surrounding area that is expected to attract patrons was divided into regions by postal zip codes. Based on various demographics, each zip code was assigned a corresponding number of patrons expected to travel to the proposed development. A map showing the zip code boundaries as well as the roadway network was examined to determine the most logical route choice(s) to access the site for patrons from each zip code region. In some cases, the entire zip code region would logically use the same route, while in other cases, multiple routes will be used depending on one's location within the zip code region. Seven main routes to the site were established as follows: I-90 Eastbound, I-90 Westbound, Perry Highway (S.R. 0097) Northbound, Perry Highway (S.R. 0097) Southbound, Robison Road Eastbound, Robison Road Westbound and Johnson Road Eastbound. The distribution of trips to these various routes is

displayed in Table 6. Details of the trip distribution and assignment analyses can be found in Appendix D.

<b>TABLE 6: TRIP DISTRIBUTION SUMMARY</b>		
<b>ROADWAY</b>	<b>DIRECTION</b>	<b>DISTRIBUTION</b>
INTERSTATE 90	Eastbound	69.1%
	Westbound	21.1%
PERRY HIGHWAY (S.R. 0097)	Northbound	2.9%
	Southbound	5.2%
ROBISON ROAD	Eastbound	0.9%
	Westbound	0.5%
JOHNSON ROAD	Eastbound	0.3%

## **FUTURE TRANSPORTATION SYSTEM**

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### ***Roadway Network Description***

Because the North Site Driveway to the proposed development is planned to be located immediately south of the existing Jefferson Avenue/Perry Highway intersection, it has been assumed in the future with development analyses that Frank Avenue would be extended to align with the North Site Driveway. Extending Frank Avenue to Route 97 and aligning the North Site Driveway will allow the eastbound approach on Frank Avenue to utilize the planned signal at this intersection (to be discussed in detail in later sections). No other major changes to the local roadway network are anticipated.

### ***Future Traffic Volumes***

In order to establish future traffic volumes before considering the increased traffic volumes from the proposed development, the existing traffic volumes were factored to project the volumes for the opening day year of 2004, the full build-out year of 2008 and the 10-year horizon year in 2014. To obtain these future volumes, a linear growth factor of 2% per year was used. This growth factor for Summit Township was obtained from PENNDOT, Engineering District 1-0. The 2% growth factor accounts for potential traffic from the background growth of the area. Figure 7, Figure 9 and Figure 11 show the future traffic volumes in 2004, 2008 and 2014, respectively, for the without development conditions. The future traffic volumes without the proposed development were then combined with the total anticipated trip generation volumes from the proposed development for that year to provide the total future traffic volumes with the proposed site in place. The 2004, 2008 and 2014 traffic volumes with the proposed site trips are displayed in Figure 8, Figure 10 and Figure 12, respectively.

## *Capacity Analyses*

The future conditions capacity analyses were performed for the 2004, 2008 and 2014 PM peak hour with and without the proposed development. Table 7 displays the a summary of the levels of service found at the 2004, 2008 and 2014 volumes in addition to displaying the existing condition levels of service previously discussed. The volumes at the current Jefferson Avenue/Route 97 intersection are assumed to be transferred to the new North Site Drive/Frank Avenue and Route 97 intersection. The capacity analyses for the 2004, 2008 and 2014 future conditions can be found in Appendix E, Appendix F and Appendix G, respectively.



**TABLE 7: EXISTING AND FUTURE CONDITIONS LEVEL OF SERVICE SUMMARY**

INTERSECTION	MOVEMENT	2002 EXISTING		2004 WITH DEVELOPMENT		2008 WITHOUT DEVELOPMENT		2008 WITH DEVELOPMENT		2014 WITHOUT DEVELOPMENT		2014 WITH DEVELOPMENT	
		PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM
<b>I-90 WESTBOUND RAMP AND PERRY HIGHWAY</b>													
I-90 WESTBOUND OFF-RAMP	WBLTR	D	D	F (360.2)	E	F (562.9)	E	F (608.7)					
	NBL	D	D	F (109.9)	D	F (123.9)	E	F (136.4)					
	NBT	A	A	A	A	A	A	A					
	SBT	D	E	E	E	F (88.7)	F (126.7)	F (131.1)					
	SBR	C	C	C	C	C	C	D					
OVERALL		C	D	F (108.3)	D	F (171.3)	E	F (191.3)					
<b>I-90 EASTBOUND RAMP AND PERRY HIGHWAY</b>													
I-90 EASTBOUND OFF-RAMP	EBLTR	E	E	F (863.0)	F (82.7)	F (1257.0)	F (116.7)	F (1317.0)					
	NBTR	C	C	C	C	C	C	C					
PERRY HIGHWAY	SBL	A	A	A	A	A	A	D					
	SBT	A	A	A	A	B	A	C					
OVERALL		C	C	F (255.8)	C	F (407.7)	C	F (421.9)					
<b>PERRY HIGHWAY AND FAIRFIELD AVENUE</b>													
PERRY HIGHWAY	NBLT	A	A	C	A	C	A	C					
FAIRFIELD AVENUE	EBLR	C	C	F (106.3)	C	F (348.8)	C	F (602.3)					
<b>PERRY HIGHWAY AND JEFFERSON AVENUE (FRANK AVENUE)/NORTH SITE DRIVEWAY</b>													
PERRY HIGHWAY	NBLTR	A	A	A	A	B	A	B					
	SBLTR	A	A	C	A	F (111.0)	A	F (136.6)					
NORTH SITE DRIVEWAY	WBLT	C	C	F (*)	C	F (*)	D	F (*)					
	WBR	C	C	C	D	D	D	D					
JEFFERSON AVENUE (FRANK AVENUE)	EBLTR	C	D	F (*)	D	F (*)	E	F (*)					
OVERALL		--	--	--	--	--	--	--					
<b>PERRY HIGHWAY AND RACE AVENUE</b>													
PERRY HIGHWAY	NBLT	A	A	B	A	B	A	B					
RACE AVENUE	EBLR	C	C	D	C	E	C	E					

(99.9) = Delay in second/vehicle  
 "--" = No analysis performed

(Frank Avenue) – Assumed to be in place in the with development scenario



**TABLE 7: EXISTING AND FUTURE CONDITIONS LEVEL OF SERVICE SUMMARY (CONT.)**

INTERSECTION	MOVEMENT	2002 EXISTING		2004 WITHOUT DEVELOPMENT		2008 WITHOUT DEVELOPMENT		2008 WITH DEVELOPMENT		2014 WITHOUT DEVELOPMENT		2014 WITH DEVELOPMENT	
		PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	PM
<b>PERRY HIGHWAY AND SOUTH SITE DRIVEWAY</b>													
PERRY HIGHWAY	SBLT	--	--	A	A	--	--	A	A	--	--	B	B
	WBL	--	--	E	E	--	--	F (80.0)	F (80.0)	--	--	F (99.7)	F (99.7)
	WBR	--	--	B	B	--	--	B	B	--	--	B	B
<b>PERRY HIGHWAY AND ACADEMY AVENUE</b>													
PERRY HIGHWAY	NBLT	A	A	A	A	A	A	A	A	A	A	A	A
ACADEMY AVENUE	EBLR	C	C	C	C	C	C	C	C	C	C	C	D
<b>PERRY HIGHWAY AND JOHNSON ROAD</b>													
PERRY HIGHWAY	NBLTR	A	A	A	A	A	A	A	A	A	A	A	A
	SBLTR	A	A	A	A	A	A	A	A	A	A	A	A
JOHNSON ROAD	WBLTR	C	D	D	D	D	D	F (50.5)	F (50.5)	E	E	F (90.1)	F (90.1)
	EBLTR	C	C	C	C	C	C	D	D	C	C	D	D
<b>ROBISON ROAD AND PERRY HIGHWAY</b>													
ROBISON ROAD	EBLTR	C	C	C	C	C	C	C	C	C	C	C	C
	WBLTR	B	B	B	B	B	B	B	B	B	B	B	B
PERRY HIGHWAY	NBLTR	A	A	A	A	A	A	A	A	A	A	A	B
	SBLTR	B	B	C	C	C	C	E	E	C	C	F (124.3)	F (124.3)
<b>OVERALL</b>													
<b>ROBISON ROAD AND FOOTMILL ROAD</b>													
ROBISON ROAD	EBLTR	A	A	A	A	A	A	A	A	A	A	A	A
	WBLTR	A	A	A	A	A	A	A	A	A	A	A	A
FOOTMILL ROAD	NBLTR	B	B	B	B	B	B	C	C	B	B	C	C
	SBLTR	A	A	A	A	A	A	A	A	A	A	A	B

(99.9) = Delay in second/vehicle  
 "--" = No analysis performed

As shown in Table 7, under the 2004 without development volumes, one additional deficiency occurs do to the background growth in the area. Specifically, the southbound through movement on Perry Highway at the I-90 Westbound Ramps intersection drops from an acceptable LOS “D” under the existing condition to a deficient LOS “E” in 2004 without the proposed development traffic. Factoring the volumes to 2008 causes the westbound approach at the I-90 Westbound Ramps/Perry Highway intersection to drop a LOS “E” while the southbound through movement remains at a LOS “E.” At the I-90 Eastbound Ramps/Perry Highway intersection in 2008, factoring the volumes causes the eastbound approach to drop to a failing level of service. Finally, in 2014 before considering the proposed development, additional movements and approaches drop to deficient levels of service. At the I-90 Westbound Ramps/Perry Highway intersection, the northbound left-turn movement drops to a LOS “E” as does the overall level of service and furthermore, the southbound through movement drops to a failing level of service. At the I-90 Eastbound Ramps/Perry Highway intersection, the eastbound approach, which was already failing under the 2008 without development volumes, continues to fail with an increased delay. The eastbound approach on Jefferson Avenue and the westbound approach on Johnson Road at their intersections with Perry Highway drop to deficient LOS “E” under the 2014 without development volumes.

Adding the trips anticipated to be generated by the proposed development to the future without development traffic volumes causes various movements and approaches at several study intersections to drop to unacceptable levels of service. The additional deficiencies are outlined as follows:

I-90 Westbound Ramps and Perry Highway (S.R. 0097): At the I-90 Westbound Ramps/Perry Highway intersection, the westbound approach, northbound left-turn movement and overall level of service fail in the 2004, 2008 and 2014 with development conditions. Furthermore, at this intersection, the southbound through movement will drop from a LOS “E” in 2008 without the development to a failing level of service with the development and then continue to fail under the 2014 with development condition.

I-90 Eastbound Ramps and Perry Highway (S.R. 0097): At the I-90 Eastbound Ramps/Perry Highway intersection, eastbound approach will drop from a LOS “E” in 2004 without the development to a failing level of service with the development. This approach will continue to fail in 2008 and 2014 with the development with large increases in the delay per vehicle compared to the without development conditions. In each future year, the overall level of service will drop from a LOS “C” without the development to a failing level of service with the development.

Fairfield Avenue and Perry Highway (S.R. 0097): The eastbound approach on Fairfield Avenue at its intersection with Perry Highway will drop from a LOS “C” without the development to a failing level of service with the development in each future year.

Jefferson Avenue (Frank Avenue)/North Site Driveway and Perry Highway (S.R. 0097): Under the existing unsignalized condition and with the addition of the north site driveway, the westbound shared left/through movement and the eastbound approach will have failing levels of service in 2004, 2008 and 2014 with the proposed development. In 2008 and 2014 with the proposed development, the southbound approach will drop to failing levels of service.

Race Avenue and Perry Highway (S.R. 0097): In the 2008 and 2014, the eastbound approach on Race Avenue at its intersection with Perry Highway will drop from a LOS “C” in the without development conditions to a LOS “E” in the with development scenarios.

South Site Driveway and Perry Highway (S.R. 0097): The westbound left-turn movement exiting the proposed site onto Perry Highway is expected to operate a LOS “E” in 2004 and a failing level of service in 2008 and 2014.

Johnson Road and Perry Highway (S.R. 0097): The westbound approach on Johnson Road at its intersection with Perry Highway is expected to drop from a LOS “D” in 2008 without the development to a failing level of service with the development and will continue to operate at a failing level of service in 2014 with the proposed development.

Robison Road and Perry Highway (S.R. 0097): The southbound approach on Perry Highway at its signalized intersection with Robison Road is expected to drop from a LOS “B” in 2008 without the development to a deficient LOS “E” in 2008 with the development. Also, in 2014, this approach is expected to drop from a LOS “C” under the without development conditions to a failing level of service with the proposed development.

## **IMPROVEMENT ANALYSIS**

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### ***Peak Hour Volume Warrant Evaluation***

In accordance with PENNDOT Publication 201, Engineering and Traffic Studies (4), an evaluation of the peak hour traffic signal warrant was conducted for the unsignalized intersection of Frank Avenue and the North Site Driveway with Perry Highway. Evaluation of this intersection under the with development traffic volumes indicated that for each future year (i.e. 2004, 2008 and 2014) a traffic signal will be warranted. The traffic signal warrant analysis is documented in Appendix H.

### ***Left-turn Phasing Analyses***

In accordance with PENNDOT Publication 149 (5), the Robison Road/Perry Highway intersection and the Perry Highway/Frank Avenue/North Site Driveway intersection were both evaluated to determine the most appropriate left-turn phasing. The PENNDOT criteria recommends either protected/permitted or protected/prohibited left-turn phasing if the conflict factors, which are based on the left-turn and opposing through volumes, exceed the minimum for at least two hours during a 24 hour period. Additionally, the criteria indicate that the left-turn movement under consideration for left-turn phasing must exceed two left-turns per cycle during at least two hours. Details of the left-turn phasing analyses can be found in Appendix H.

At the Perry Highway/Frank Avenue/North Site Driveway intersection, it was determined that the southbound left-turn movement exceeds the criteria to warrant protected/prohibited left-turn phasing for each future with development condition. As shown in the following improvement capacity analyses, this

movement will need two southbound left-turn lanes in 2008 and 2014 to accommodate the high turning volume and would require protected/prohibited phasing due to the lane configuration.

At the intersection of Perry Highway and Robison Road, protected phasing is warranted under each future with development condition (i.e. 2004, 2008 and 2014). In 2004, however, the protected phasing is not required to mitigate the impact of the development and was not implemented in the following capacity analyses. In 2008, with the existing lane configuration, protected/permitted phasing for the southbound left-turning movement is needed to mitigate the impact of the development. Finally, in 2014, an auxiliary southbound left-turn lane and protected/permitted phasing is required to mitigate the impact of the development, which is displayed in the following improvement capacity analyses.

### ***Required Turn Lane Lengths at Unsignalized Intersections***

The need for a southbound left-turn lane at the South Site Driveway intersection was evaluated using the Volume Warrants for Left Turn Storage Lanes at Unsignalized Grade Intersections by Harmelink (6). The southbound left-turn lane at this intersection should be striped as an exclusive left-turn lane for a length of 300 feet in 2008 and 2014. The detailed left-turn lane analyses are located in Appendix H.

### ***Capacity Analyses***

Taking into consideration the above analyses at the various intersections, an incremental series of improvements were implemented to determine the level of improvements necessary to mitigate the impact of the additional traffic added by the proposed development. The effect of these improvements was documented through additional capacity analyses. Table 8 displays the levels of service under existing conditions, future conditions with and without the proposed development, and future conditions with the proposed development with recommended improvements. Appendix H contains the detailed improvement capacity analyses for each intersection.

**TABLE 8: LEVEL OF SERVICE SUMMARY WITH IMPROVEMENTS**

INTERSECTION	MOVEMENT	2002 EXISTING	2004 WITHOUT DEVELOPMENT	2004 WITH DEVELOPMENT	2004 WITH DEVELOPMENT WITH IMPROVEMENTS	2008 WITHOUT DEVELOPMENT	2008 WITH DEVELOPMENT	2008 WITH DEVELOPMENT WITH IMPROVEMENTS	2014 WITHOUT DEVELOPMENT	2014 WITH DEVELOPMENT	2014 WITH DEVELOPMENT WITH IMPROVEMENTS
		PM	PM	PM	PM	PM	PM	PM	PM	PM	PM
<b>I-90 WESTBOUND RAMPS AND PERRY HIGHWAY</b>											
I-90 WESTBOUND OFF-RAMP	WBL	D	D	F (360.2)	D	E	F (562.9)	E	E	F (608.7)	E
	WBTR				C			C			C
PERRY HIGHWAY	NBL	D	D	F (109.9)	B	D	F (123.9)	D	E	F (136.4)	E
	NBT	A	A	A	A	A	A	A	A	A	A
	SBT	D	E	E	D	E	F (88.7)	E	F (126.7)	F (131.1)	D
	SBR	C	C	C	B	C	C	B	C	D	
OVERALL		C	D	F (108.3)	C	D	F (171.3)	D	E	F (191.3)	D
<b>I-90 EASTBOUND RAMPS AND PERRY HIGHWAY</b>											
I-90 EASTBOUND OFF-RAMP	EBLT	E	E	F (863.0)	B	F (82.7)	F (1257.0)	C	F (116.7)	F (1317.0)	C
	EBR				E			E			D
PERRY HIGHWAY	NBTR	C	C	C	D	C	C	C	C	C	D
	SBL	A	A	A	B	A	A	A	A	D	B
	SBT	A	A	A	D	A	B	D	A	C	A
OVERALL		C	C	F (255.8)	D	C	F (407.7)	D	C	F (421.9)	C
<b>PERRY HIGHWAY AND FAIRFIELD AVENUE</b>											
PERRY HIGHWAY	NBLT	A	A	C	C	A	C	C	A	C	C
FAIRFIELD AVENUE	EBLR	C	C	F (106.3)	E	C	F (348.8)	F (56.3)	C	F (602.3)	F (67.8)
<b>PERRY HIGHWAY AND JEFFERSON AVENUE (FRANK AVENUE)/NORTH SITE DRIVEWAY</b>											
PERRY HIGHWAY	NBL	A	A	A	D	A	B	C	A	B	C
	NBTR							D			D
	SBL	A	A	C	D	A	F (111.0)	D	A	F (136.6)	D
	SBTR				A			B			C
NORTH SITE DRIVEWAY	WBLT	C	C	F (*)	D	C	F (*)	C	D	F (*)	C
	WBR				B		D	B		D	B
JEFFERSON (FRANK) AVENUE	EBLTR	C	D	F (*)	D	D	F (*)	C	E	F (*)	C
OVERALL		--	--	--	C	--	--	C	--	--	D
<b>PERRY HIGHWAY AND RACE AVENUE</b>											
PERRY HIGHWAY	NBLT	A	A	B	--	A	B	B	A	B	B
RACE AVENUE	EBLR	C	C	D	--	C	E	C	C	E	D
<b>PERRY HIGHWAY AND SOUTH SITE DRIVEWAY</b>											
PERRY HIGHWAY	SBLT	--	--	A	--	--	A	A	--	B	B
SOUTH SITE DRIVEWAY	WBL	--	--	E	--	--	F (80.0)	E	--	F (99.7)	E
	WBR	--	--	B	--	--	B	B	--	B	B
<b>PERRY HIGHWAY AND ACADEMY AVENUE</b>											
PERRY HIGHWAY	NBLT	A	A	A	--	A	A	A	A	A	A
ACADEMY AVENUE	EBLR	C	C	C	--	C	C	C	C	D	C

(99.9) = Delay in second/vehicle  
 "--" = No analysis performed

**TABLE 8: LEVEL OF SERVICE SUMMARY WITH IMPROVEMENTS (CONT.)**

INTERSECTION	MOVEMENT	2002 EXISTING	2004 WITHOUT DEVELOPMENT	2004 WITH DEVELOPMENT	2004 WITH DEVELOPMENT WITH IMPROVEMENTS	2008 WITHOUT DEVELOPMENT	2008 WITH DEVELOPMENT	2008 WITH DEVELOPMENT WITH IMPROVEMENTS	2014 WITHOUT DEVELOPMENT	2014 WITH DEVELOPMENT	2014 WITH DEVELOPMENT WITH IMPROVEMENTS
		PM	PM	PM	PM	PM	PM	PM	PM	PM	PM
<b>PERRY HIGHWAY AND JOHNSON ROAD</b>											
PERRY HIGHWAY	NBLTR	A	A	A	--	A	A	A	A	A	A
	SBLTR	A	A	A	--	A	A	A	A	A	A
JOHNSON ROAD	WBLTR	C	D	D	--	D	F (50.5)	C	E	F (90.1)	D
	EBLTR	C	C	C	--	C	D	C	C	D	C
<b>ROBISON ROAD AND PERRY HIGHWAY</b>											
ROBISON ROAD	EBLTR	C	C	C	--	C	C	D	C	C	C
	WBLTR	B	B	B	--	B	B	C	B	B	C
PERRY HIGHWAY	NBLTR	A	A	A	--	A	A	B	A	B	C
	SBL	B	B	C	--	B	E	C	C	F (124.3)	B
	SBTR										B
OVERALL		B	B	C	--	B	D	C	C	E	B
<b>ROBISON ROAD AND FOOTMILL ROAD</b>											
ROBISON ROAD	EBLTR	A	A	A	--	A	A	--	A	A	--
	WBLTR	A	A	A	--	A	A	--	A	A	--
FOOTMILL ROAD	NBLTR	B	B	B	--	B	C	--	B	C	--
	SBLTR	A	A	A	--	A	A	--	A	B	--

(99.9) = Delay in second/vehicle  
 "--" = No analysis performed

As shown in Table 8, the proposed improvements at the various study intersections dramatically reduce the amount of delay and show significant increases in the levels of service compared to the with development without improvement conditions. The improvements and corresponding levels of service are outlined as follows:

I-90 Westbound Ramps and Perry Highway (S.R. 0097): First, the phasing at this intersection (and at the I-90 Eastbound Ramps intersection) needed to be altered to a lagging simultaneous phasing which is typical for a diamond interchange. The simultaneous lagging phasing allows good coordination between the ramp intersection and more efficiently allocates green time to the heavier movements. In addition to the altered phasing, in each study year at this intersection, a westbound left-turn lane on the I-90 Westbound Off-Ramp would need to be constructed to achieve the adequate levels of service shown on Table 8. In 2014 with the proposed development, the southbound right-turn lane will need to be converted to a shared through/right lane and correspondingly an additional receiving lane for the two southbound through lanes would need to be constructed under the I-90 overpass. Dual northbound left-turn lanes are required at this intersection in 2008 and 2014 to accommodate the peak exiting traffic volumes from the proposed site. The second northbound left-turn lane can be provided by converting the innermost northbound through lane to an exclusive northbound left-turn lane only when exiting traffic from the proposed site is heavy. This allows for the middle northbound lane to be switched between a through lane and a left-turn lane depending on the time of day when certain movements are heaviest. To receive the dual northbound left-turn lanes, in 2008 and 2014 an additional receiving lane on the I-90 Westbound Off-Ramp should be constructed and tapered back to one lane prior to the merge point with I-90. The PM capacity analyses for this intersection do not reflect the dual northbound left-turn lanes as they are not required for the PM peak hour volumes anticipated and the middle northbound lane is best utilized as a through lane during this time period.

I-90 Eastbound Ramps and Perry Highway (S.R. 0097): As discussed above, the phasing at this intersection would also change to simultaneous lagging under each future with improvement scenario. In 2004, an auxiliary eastbound right-turn lane is required to mitigate the impact of the development. Furthermore, in 2008 and 2014, an additional westbound right-turn lane will be required and correspondingly an additional receiving lane for the dual westbound right-turns will be needed. In 2014, because an additional receiving lane will be required for the two southbound through lanes at the I-90 Westbound Ramp intersection, an additional southbound through lane will also be present at this intersection.

Fairfield Avenue and Perry Highway (S.R. 0097): Because signalization is not warranted at this intersection under any of the future with development scenarios, few improvements are available to improve the levels of service for the minor street approach. Currently, a two-way-left-turn lane begins immediately south of the I-90 Eastbound Ramps/Perry Highway intersection and ends prior to the Fairfield Avenue/Perry Highway intersection. To improve the levels of service for the side street, the improvement capacity analyses shown in Table 8 include continuing that two-way-left-turn lane through the Fairfield Avenue/Perry Highway intersection. The two-way-left-turn lane allows eastbound left-turning vehicles to make their turn when a sufficient gap is present in the southbound traffic and then wait in the lane until a sufficient gap is present in the northbound traffic. In 2008 and 2014, an additional



southbound through lane will be added through the Fairfield Avenue/Perry Highway intersection due to the improvements necessary at the intersections to the north. As will be discussed in the following paragraph, an additional northbound through lane will also be required to continue from the North Site Driveway intersection through the Fairfield Avenue/Perry Highway intersection in all future with development conditions.

Frank Avenue/North Site Driveway and Perry Highway (S.R. 0097): As discussed previously, signalization of this intersection will be warranted under each future with development condition. Furthermore, the improvement capacity analyses indicated that in 2004 one southbound left-turn lane is required to mitigate the impact of the development and in 2008 and 2014 dual southbound left-turn lanes are needed. As mentioned in the above paragraph, a two-way-left-turn lane is planned to continue through the Fairfield Avenue/Perry Highway intersection. In 2004, this two-way-left-turn lane can end as the single southbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection. In 2008 and 2014, the two-way-left-turn lane from Fairfield Avenue can be striped as the innermost exclusive southbound left-turn lane at the North Site Driveway and then continue past the North Site Driveway to the next intersection south. In 2008 and 2014, this geometry allows for the two-way-left-turn lane to be striped for an exclusive northbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection, which is reflected in the improvement capacity analyses shown in Table 8. In each improvement scenarios, protected/prohibited left-turn phasing was implemented for the southbound left-turn movement and permitted phasing was implemented for the northbound left-turn movement. Finally, the westbound approach on the North Site Driveway is planned to consist of a shared left/through lane and dual right turn lanes in each future with development scenario. An additional receiving lane for the dual right-turn lanes will need to be constructed north of this intersection. Presently, a second northbound through lane begins north of the Fairfield Avenue/Perry Highway intersection and could be extended southward to receive the dual right-turn lanes at the North Site Driveway intersection. Utilizing this additional receiving lane, in each study year, a second northbound through lane at this intersection was implemented and should begin immediately south of the North Site Driveway.

Race Avenue and Perry Highway (S.R. 0097): As part of the improvements for the above intersections, the two-way-left-turn lane is planned to extend past the Frank Avenue/North Site Driveway/Perry Highway intersection in 2008 and 2014. Therefore, the improvement capacity analyses for the Race Avenue/Perry Highway intersection reflect the addition of the two-way-left-turn lane through this intersection in those study years. As was the case for the Fairfield Avenue/Perry Highway intersection, signalization is not warranted and few other improvements are available to improve the levels of service for the minor street approach. The two-way-left-turn lane improves the level of service for the minor street approach by allowing two-stage gap acceptance.

South Site Driveway and Perry Highway (S.R. 0097): Consistent with the improvements at the intersection of Race Avenue and Perry Highway, the two-way-left-turn lane will also continue through this unsignalized intersection in 2008 and 2014. Furthermore, the westbound approach on the South Site Driveway is planned to include separate left and right-turn lanes that are both stop controlled. Signalization is not warranted at this intersection under any future with development condition and the

two-way-left-turn lane will allow for the westbound left-turns to utilize the area while waiting for acceptable gaps in the southbound traffic. The two-way-left-turn lane should be striped as an exclusive southbound left-turn lane in 2008 and 2014.

Academy Avenue and Perry Highway (S.R. 0097): In 2008 and 2014, the two-way-left-turn lane will continue through this intersection thus providing two-stage gap acceptance for the eastbound left-turning vehicles. Signalization is not warranted at this intersection under any future with development condition and although the two-way-left-turn lane is not needed from a mitigation standpoint at this intersection, it is planned to continue through because it is needed at the next intersection to the south.

Johnson Road and Perry Highway (S.R. 0097): Signalization of this intersection is not warranted under any future with development scenario and therefore, the two-way-left-turn lane is planned to continue through this intersection in 2008 and 2014. The two-way-left-turn lane can then end south of this intersection, prior to the next intersection to the south (i.e. the intersection of Robison Road and Perry Highway).

Robison Road and Perry Highway (S.R. 0097): In 2004 at this intersection, no improvements are required to mitigate the impact of the proposed development. In 2008, an advanced southbound phase was added to the phasing along with minor modifications to the green times to mitigate the impact of the development. Finally, in 2014 to mitigate the impact of the development, the advanced southbound phase must remain and a southbound left-turn lane is required.

Robison Road and Footmill Road: No improvements are required to mitigate the impact of the proposed development.

The new portions of the two-way-left-turn lane will be striped as exclusive left-turn lanes at major intersections to a length appropriate for the number of left-turns at the particular intersection.

### ***Analyses of Anticipated Queues at Signalized Intersections***

Using AASHTO's A Policy on Geometric Design of Highways and Streets (7), queue analyses were performed at existing signalized intersections of I-90 Westbound Ramps and Perry Highway, I-90 Eastbound Ramps and Perry Highway, and Robison Road and Perry Highway and at the proposed signalized intersection of Frank Avenue/North Site Driveway and Perry Highway. The results of the analyses are summarized in the following table.

**TABLE 9: ANTICIPATED QUEUES AT SIGNALIZED INTERSECTIONS**

<i>INTERSECTION</i>	<i>MOVEMENT</i>	<i>2004 WITH IMPROVEMENTS (FT.)*</i>	<i>2008 WITH IMPROVEMENTS (FT.)*</i>	<i>2014 WITH IMPROVEMENTS (FT.)*</i>	<i>AVAILABLE STORAGE LENGTH (FT.)</i>
I-90 WESTBOUND RAMPS AND PERRY HIGHWAY (S.R. 0097)	WBL	224	316	340	--
	WBTR	130	150	176	> 500
	NBL	89	118	75	170
	NBT	54	73	51	630
	SBR	137	161	--	325
I-90 EASTBOUND RAMPS AND PERRY HIGHWAY (S.R. 0097)	EBLT	98	134	125	> 500
	EBR	474	422	355	--
	SBL	66	62	73	145
	SBT	307	326	365	630
FRANK AVENUE/NORTH SITE DRIVEWAY AND PERRY HIGHWAY (S.R. 0097)	NBL	--	1	1	--
	SBL	370	267	276	--
ROBISON ROAD AND PERRY HIGHWAY (S.R. 0097)	SBL	--	--	76	--

\* Assumes a length of 20 feet per vehicle

At the I-90 Westbound Ramps/Perry Highway intersection, the existing 170-foot northbound left-turn lane will provide adequate storage under each future with development condition. Likewise, the existing 325-foot southbound right-turn lane will provide adequate storage in 2004 and 2008 until it is converted to a shared through/right lane in 2014. Furthermore, the northbound through queue is not expected to exceed the 630 feet between the two interchange intersections and the westbound queues on the I-90 Westbound Off-Ramp will not extend onto I-90. Finally, the proposed westbound left-turn lane on the I-90 ramp is expected to have queues of 224 feet in 2004, 316 feet in 2008 and 340 feet in 2014 which can be accommodated in the I-90 Westbound Off-Ramp length.

At the I-90 Eastbound Ramps/Perry Highway intersection, the existing 145-foot southbound left-turn lane will provide adequate storage under each future with development condition. Similar to the westbound ramp, the eastbound queues are not expected to extend onto I-90 and the southbound through queue will not exceed the 630 feet between the two interchange intersections. In 2004, when only a single westbound right-turn lane is required, the queue is expected to be 474 feet. Upon adding a second westbound right-turn lane, each turn lane is expected to have queues of 422 feet and 355 feet in 2008 and 2014, respectively, which can be accommodated in the I-90 Eastbound Off-Ramp length.

In 2004, at the Frank Avenue/North Site Driveway/Perry Highway intersection, only one southbound left-turn lane will be present and the resulting southbound left-turn queue is expected to be 370 feet. In 2008 and 2014, when dual southbound left-turn lanes are proposed, the queue is expected to be 267 feet and 276 feet, respectively, for each left-turn lane. The northbound left-turn movement at this intersection has minimal volume and, in turn, the northbound queue is expected to be negligible.



At the intersection of Robison Road and Perry Highway, the southbound left-turn lane which is only required in 2014 will have a queue of approximately 76 feet. The analyses for the queues at these signalized intersections can be found in Appendix H.

## **CONCLUSIONS**

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### *Study Findings*

Based on the data collected and the analyses performed under various conditions, the following are the results found:

- ▶ The proposed horse racing/restaurant facility, under the full-build out scenario, will generate an estimated 1290 entering trips and 32 exiting trips during the PM peak hour.
- ▶ The proposed showroom facility, in each study year, will generate an estimated 343 entering trips and 281 exiting trips during the PM peak hour.
- ▶ In total, the proposed Presque Isle Downs development will generate an estimated 1633 entering trips and 313 exiting trips during the PM peak hour under the full-operational scenario.
- ▶ The proposed site will be accessed by two full-access driveways located along Perry Highway. The North Site Driveway is planned to align with an extended Frank Avenue to form a “+” intersection. The South Site Driveway will be located immediately north of Academy Avenue and will remain a “T” intersection. Finally, a third full-access driveway will be located on Footmill Road and will only be utilized employees.
- ▶ Capacity analyses indicate that under existing conditions the following deficiencies are present:
  - Eastbound approach at the I-90 Eastbound Ramps/Perry Highway intersection operates at a LOS “E.”
- ▶ By factoring the existing volumes to 2004, the following additional deficiencies are anticipated:
  - Southbound through movement at the I-90 Westbound Ramps/Perry Highway intersection drops to a LOS “E.”
- ▶ By factoring the existing volumes to 2008, the following additional deficiencies are anticipated:
  - Westbound approach at the I-90 Westbound Ramps/Perry Highway intersection drops to a LOS “E.”
  - Eastbound approach at the I-90 Eastbound Ramps/Perry Highway intersection drops to a failing level of service.

- ▶ By factoring the existing volumes to 2014, the following additional deficiencies are anticipated:
  - Northbound left-turn movement at the I-90 Westbound Ramps/Perry Highway intersection drops to a LOS “E” as does the overall level of service at this intersection. Southbound through movement drops to a failing level of service at the I-90 Westbound Ramps/Perry Highway intersection.
  - Eastbound approach at the I-90 Eastbound Ramps/Perry Highway intersection continues to fail with an increase in delay.
  - Eastbound approach at the Frank Avenue/Perry Highway intersection drops to a LOS “E.”
  - Westbound approach at the Johnson Road/Perry Highway drops to a LOS “E.”
  
- ▶ Capacity analyses show that operation of the proposed site will impact the traffic operations in the study area. The following is a list of the study intersections and the years at which additional deficiencies are anticipated:
  - I-90 Westbound Ramps/Perry Highway – 2004, 2008 and 2014
  - I-90 Eastbound Ramps/Perry Highway – 2004, 2008 and 2014
  - Fairfield Avenue/Perry Highway – 2004, 2008 and 2014
  - Frank Avenue/North Site Driveway/Perry Highway – 2004, 2008 and 2014
  - Race Avenue/Perry Highway – 2008 and 2014
  - South Site Driveway/Perry Highway – 2008 and 2014
  - Academy Avenue/Perry Highway – N/A
  - Johnson Road/Perry Highway – 2008 and 2014
  - Robison Road/Perry Highway – 2008 and 2014
  - Robison Road/Footmill Road – N/A
  
- ▶ The intersection of Frank Avenue/North Site Driveway and Perry Highway will meet signal warrants in 2004, 2008 and 2014 under the with development conditions.
  
- ▶ Under the signalized conditions, the southbound left-turn movement at the Frank Avenue/North Site Driveway/Perry Highway intersection will meet the criteria for protected/prohibited left-turn phasing under each future with development scenario.
  
- ▶ The southbound left-turn movement at the Robison Road/Perry Highway intersection will meet the criteria for protected/permitted phasing under each future with development scenario.
  
- ▶ At the South Site Driveway/Perry Highway intersection, a 300-foot exclusive southbound left-turn lane is required in 2008 and 2014 with the proposed development’s traffic.

- ▶ All existing storage lanes will provide adequate storage for the queues anticipated under each future with development scenario. Additionally, the northbound through queue at the I-90 Westbound Ramps/Perry Highway intersection will not extend through the I-90 Eastbound Ramps/Perry Highway intersection. Likewise, the southbound through queue at the I-90 Eastbound Ramps/Perry Highway intersection will not extend through the I-90 Westbound Ramps/Perry Highway intersection.

### ***Recommendations***

Based on traffic engineering observations of the study area, data collected, development assumptions, and various analyses, and to ensure the proper management of traffic flow through the study area, the recommendations for each study year are outlined below.

It is the engineers' recommendation that only the 2004 opening day improvements need to be constructed prior to the opening of the development with the addition of a two way left turn lane extended to the south site drive. The previous transportation analysis illustrates that with the following improvements in place, the roadway network surrounding the site should be more than adequate to handle the current and initial development traffic requirements. Based on the conservative nature of the peak hour trip generation, as stated previously in this report, the following 2008 and 2014 improvements should not be implemented until the development is in operation for several years, and a follow up study can be conducted to verify that the additional improvements are indeed warranted.

Due to the facilities one of a kind nature, no trip generation calculation can be expected to be fool proof in estimating future development traffic. While the trip generation is based on as much knowledge as was available at the time of this report, no guarantee can be made that all approximated factors will be realized. One main concern is that assumed future racetrack attendance is based primarily upon the client's expectations. If business does not go as expected, the improvements listed for 2008 and 2014 may not be warranted. To the contrary, if business takes off, or a change in business characteristics occurs, more roadway improvements may be required to mitigate the development traffic. Therefore, in the best interest of Presque Isle Downs, Summit Township and PENNDOT, it is suggested that a follow up study be conducted within four (4) years after the opening of the development to better identify future transportation improvements for the study area..

#### **GENERAL IMPROVEMENTS NECESSARY FOR EACH STUDY YEAR**

At the proposed unsignalized driveways, stop signs should be installed and adequate sight distance should be provided in accordance with PENNDOT Publication 282, Highway Occupancy Permit Handbook (1).

#### **2004 IMPROVEMENTS**

- ▶ The phasing at both I-90 ramp intersections should be changed to simultaneous lagging phasing which will allow for better coordination between intersections and the best allocation of green time to heavy movements. A 225-foot westbound left-turn lane should be

constructed on the I-90 Westbound Off-Ramp. A 475-foot eastbound right-turn lane should be constructed on the I-90 Eastbound Off-Ramp.

- ▶ The two-way-left-turn lane that currently ends north of the Fairfield Avenue/Perry Highway intersection should be extended through the Fairfield Avenue intersection and end as a 370-foot exclusive southbound left-turn lane at the North Site Driveway intersection.
- ▶ A traffic signal should be installed at the North Site Drive intersection with Route 97. Frank Avenue, currently a paper street, should be extended to align with the North Site Driveway at the concurrence of both PENNDOT and Summit Township. Existing Jefferson Avenue should then be modified to right-in/right-out only access to Route 97.
- ▶ Dual westbound right-turn lanes should be constructed on the North Site Driveway approach and two eastbound receiving lanes should be provided. A second northbound through lane on Perry Highway currently begins north of the Fairfield Avenue intersection and should be lengthened to continue through the Fairfield Avenue intersection and end at the North Site Driveway intersection to accommodate the dual westbound right-turn lanes. An additional northbound through lane is also recommended to begin immediately south of the North Site Driveway and can be received by the same additional receiving lane constructed for the dual westbound right-turn lanes.

The following 2008 and 2014 improvements are included to illustrate PENNDOT's requirement of a ten year horizon year for a traffic impact study. These improvements should not be necessary prior to the opening of the development and should be reevaluated after the development is in full operation.

#### **2008 IMPROVEMENTS**

- ▶ The phasing at both I-90 ramp intersections should remain as simultaneous lagging phasing as was needed for the 2004 improvements. A second eastbound right-turn lane is required on the I-90 Eastbound Off-Ramp and should be constructed to a length of 425 feet. To receive the dual eastbound right-turn lanes, a second receiving lane is required to begin at the I-90 Eastbound Ramps/Perry Highway intersection. Additionally, to accommodate high exiting volumes during time periods other than the PM peak hour, dual northbound left-turn lanes are required at the I-90 Westbound Ramps/Perry Highway intersection. Rather than constructing a second northbound left-turn lane, it is recommended that the innermost existing northbound through lane be converted, only during certain time periods, to a northbound left-turn lane. Proper internally illuminated overhead signage must be provided to indicate if the middle northbound lane is operating as a left-turn lane or a through lane. Furthermore, when the signage is indicating that the dual northbound left-turn lanes are in operation, protected/prohibited phasing for the northbound left-turning movement must be implemented. The phasing can remain protected/permitted when only one northbound left-turn lane is operating as was shown in the PM peak hour capacity analyses. Finally, to receive the dual northbound left-turn lanes, a second receiving lane is required on the I-90 Westbound On-Ramp and can be tapered back to one lane prior to reaching the merge point with I-90.

- ▶ The additional southbound lane that was required to receive the dual eastbound right-turn lanes at the I-90 Eastbound Ramps/Perry Highway intersection will continue as an additional southbound through lane at the Fairfield Avenue/Perry Highway intersection. Consistent with the 2004 improvements, the geometry on Perry Highway at this intersection will include a southbound shared through/right lane, an exclusive southbound through lane, a two-way-left-turn lane, and two exclusive northbound through lanes.
- ▶ As was the situation in the 2004 improvements, the two-way-left-turn lane that was continued through the Fairfield Avenue/Perry Highway intersection will be striped as an exclusive southbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection. An additional southbound left-turn lane is also required at this intersection to accommodate the high volume of turning movements into the site. It is recommended that the additional southbound through lane, which is proposed to begin at the I-90 Eastbound Ramps/Perry Highway intersection, end as the second southbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection. The two-way-left-turn lane will also be striped as an exclusive northbound left-turn lane at the Frank Avenue/North Site Driveway/Perry Highway intersection to a minimal length of 75 feet. In the 2008 improvements, the dual westbound right-turn lanes will remain on the North Site Driveway approach and the additional receiving lane will still be required.
- ▶ Although exclusive left-turn lanes are proposed along Perry Highway at its planned intersection with Frank Avenue and the North Site Driveway, the two-way-left-turn lane is recommended to be continued through the unsignalized intersections with Race Avenue, the South Site Driveway, Academy Avenue, and Johnson Road, thus providing two-stage gap acceptance for minor street left-turns at each of these intersections. The two-way-left-turn lane is recommended to end south of the Johnson Road/Perry Highway intersection (i.e. prior to reaching the Robison Road/Perry Highway intersection). The two-way-left-turn lane should be striped as a 300-foot exclusive southbound left-turn lane at the South Site Driveway/Perry Highway intersection.
- ▶ A southbound advance phase should be implemented at the intersection of Robison Road and Perry Highway.

#### 2014 IMPROVEMENTS

- ▶ At the I-90 Westbound Ramps/Perry Highway intersection, the existing exclusive southbound right-turn lane must be converted to a shared through/right lane. A second receiving lane will need to be constructed under the I-90 overpass and then will continue to the I-90 Eastbound Ramps/Perry Highway intersection where an additional southbound through lane will already be provided under the 2008 improvements.
- ▶ A southbound left-turn lane should be constructed at the Robison Road/Perry Highway intersection to a length of 100 feet and the phasing should remain as protected/permitted for this movement.



The recommended lane configuration and traffic control for the 2004, 2008 and 2014 future conditions with the proposed development are illustrated in Figure 13, Figure 14 and Figure 15, respectively.

## LIST OF REFERENCES

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1. Highway Occupancy Permit Handbook, Publication 282, Pennsylvania Department of Transportation, September 1993.
2. 2000 Highway Capacity Manual, Transportation Research Board, Washington D.C., 2000.
3. Highway Capacity Software 2000, Version 4.1, University of Florida, Gainesville, FL, 2000.
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6. Harmelink, M.D., Volume Warrants for Left Turn Storage Lanes at Unsignalized Grade Intersections, RR122, Department of Highways, Ontario, 1967.
7. A Policy on the Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, Washington, D.C., 2001.

**FIGURES  
FOR  
PRESQUE ISLE DOWNS  
TRAFFIC IMPACT STUDY**

**SUMMIT TOWNSHIP  
ERIE COUNTY, PENNSYLVANIA**

**NOVEMBER 2002**

**HRG**

**Herbert, Rowland & Grubic, Inc.  
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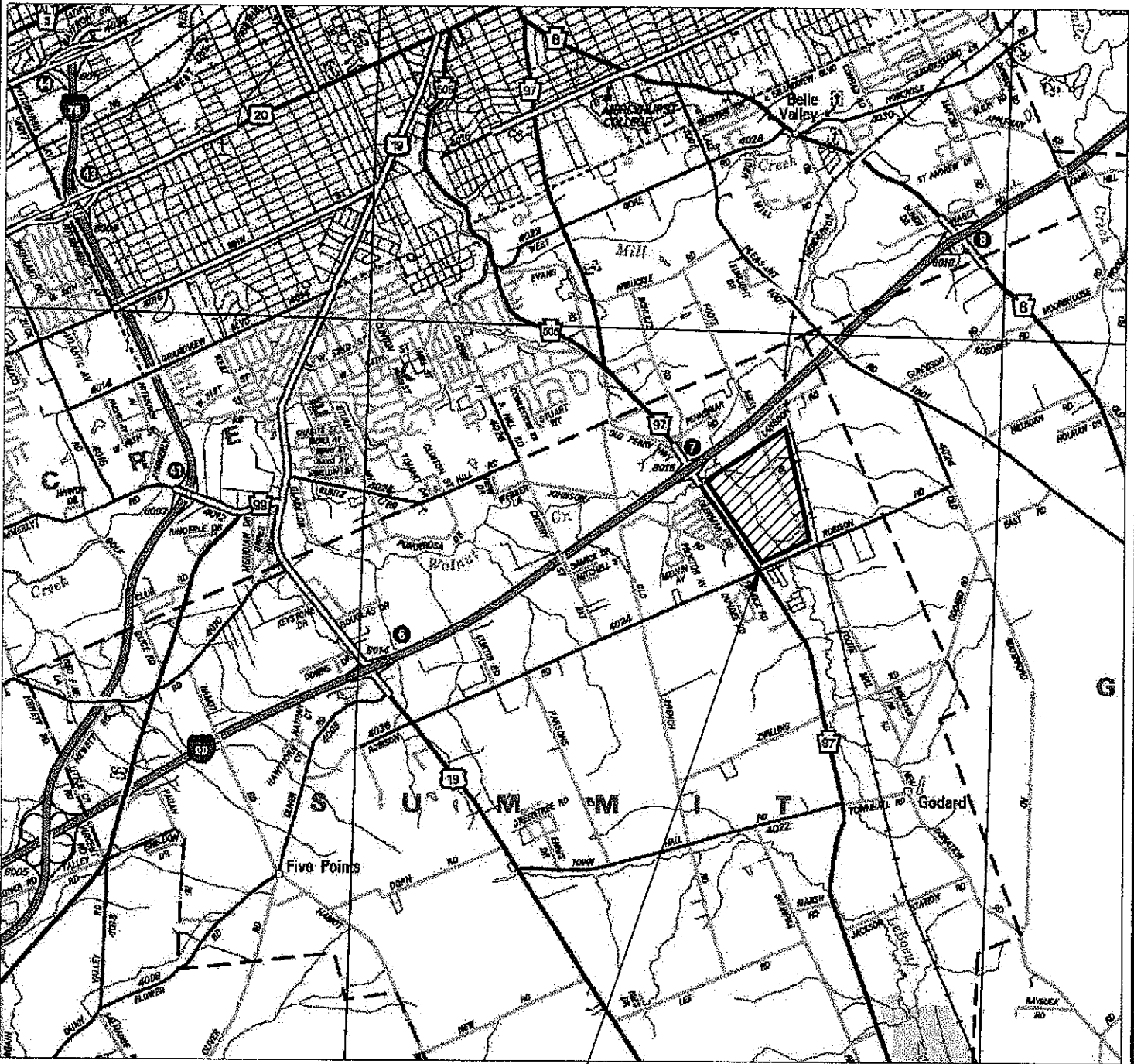


IMAGE SOURCE: TYPE 10 GENERAL HIGHWAY MAP,  
 ERIE COUNTY, PENNSYLVANIA  
 COPYRIGHT - COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF GENERAL SERVICES

SCALE: 1 INCH = 1 MILE

SITE LOCATION

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**FIGURE 1**  
**PROJECT LOCATION MAP**  
**PRESQUE ISLE DOWNS**

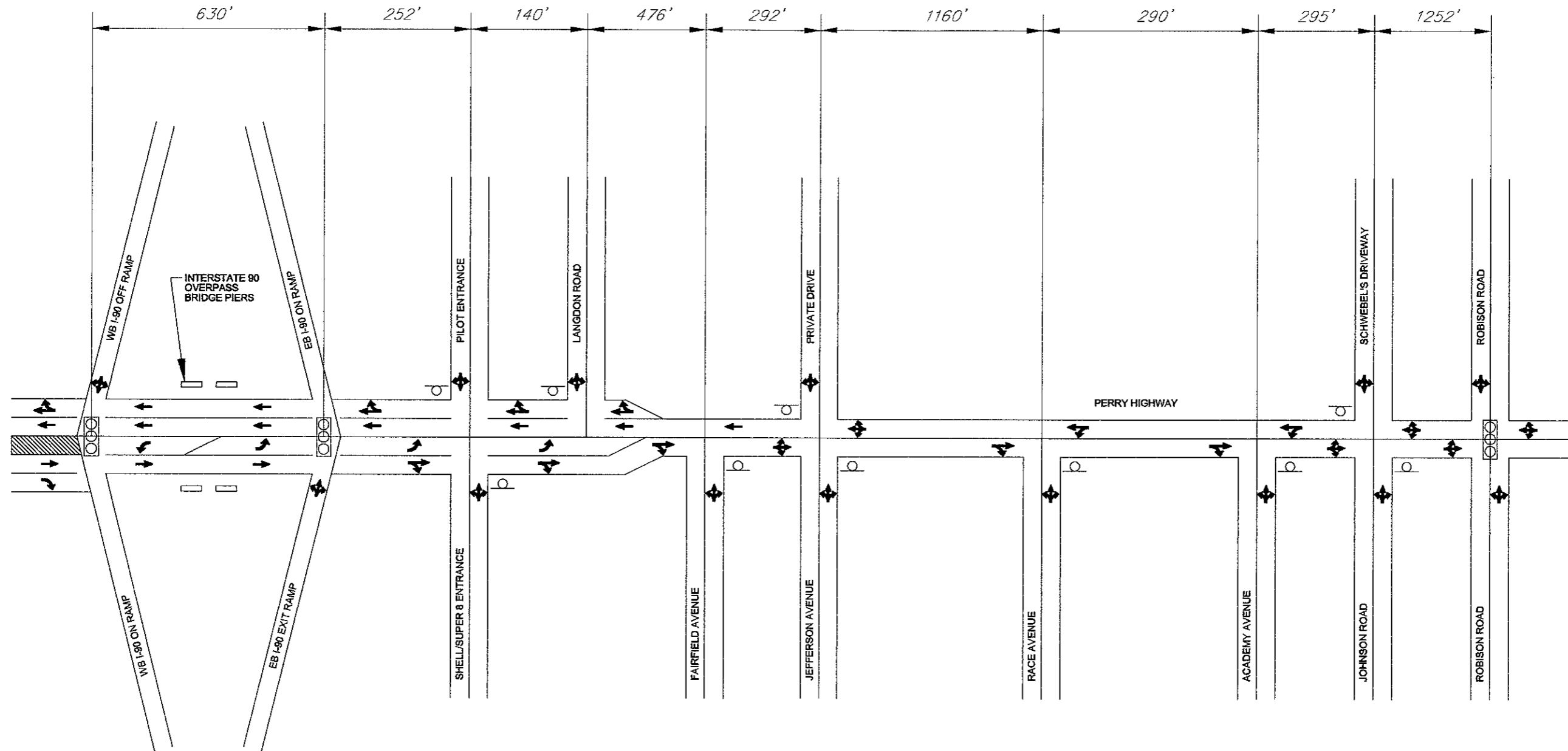
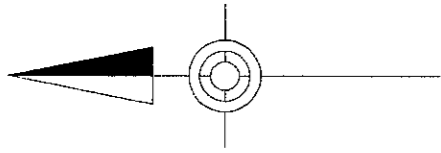
SUMMIT TOWNSHIP    ERIE COUNTY    PENNSYLVANIA

PROJ. MGR. —	MJR
DESIGN —	DSM
CADD —	DSM
CHECKED —	MJR
SCALE —	NTS
DATE —	

FIGURE NO.



**1**

PROJECT 2586.002



NOTES: DRAWING NOT TO SCALE  
ALL DIMENSIONS ARE APPROXIMATE

**LEGEND**

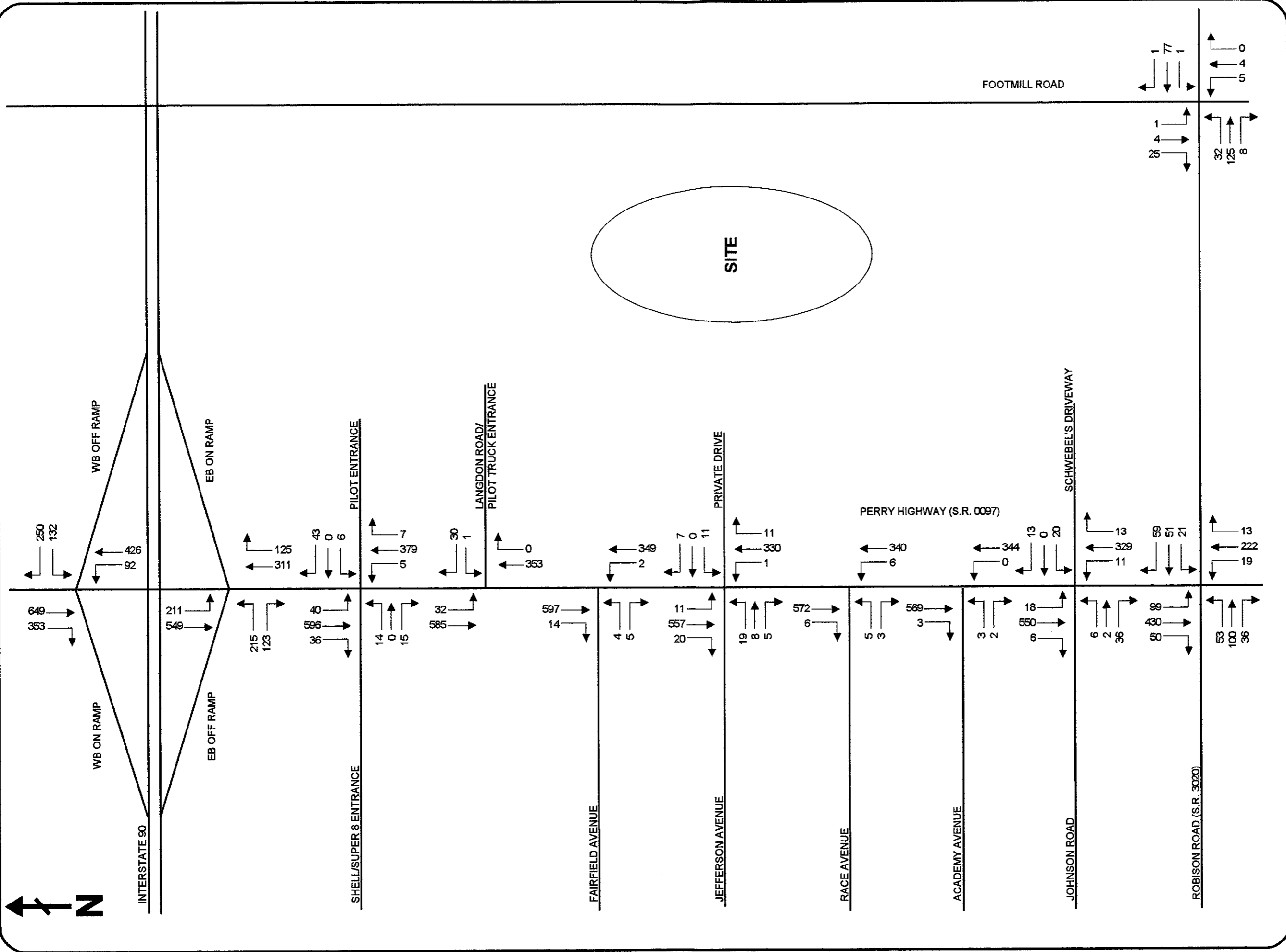
-  EXISTING TRAFFIC SIGNAL
-  EXISTING STOP CONTROL

PROJ. MGR. - MJR	DESIGN-- DSM/AND
CADD-- DSM	CHECKED--MJR
SCALE-- Not To Scale	DATE-- NOV. 2002

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**FIGURE 2**  
**2002 EXISTING GEOMETRY**  
**PRESQUE ISLE DOWNS DEVELOPMENT**

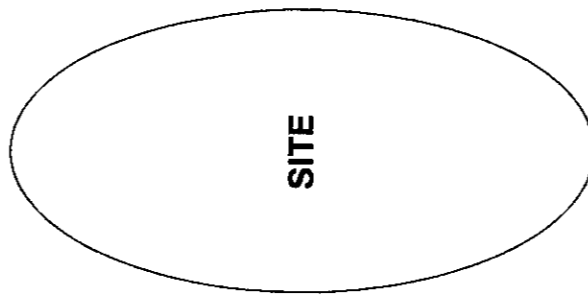
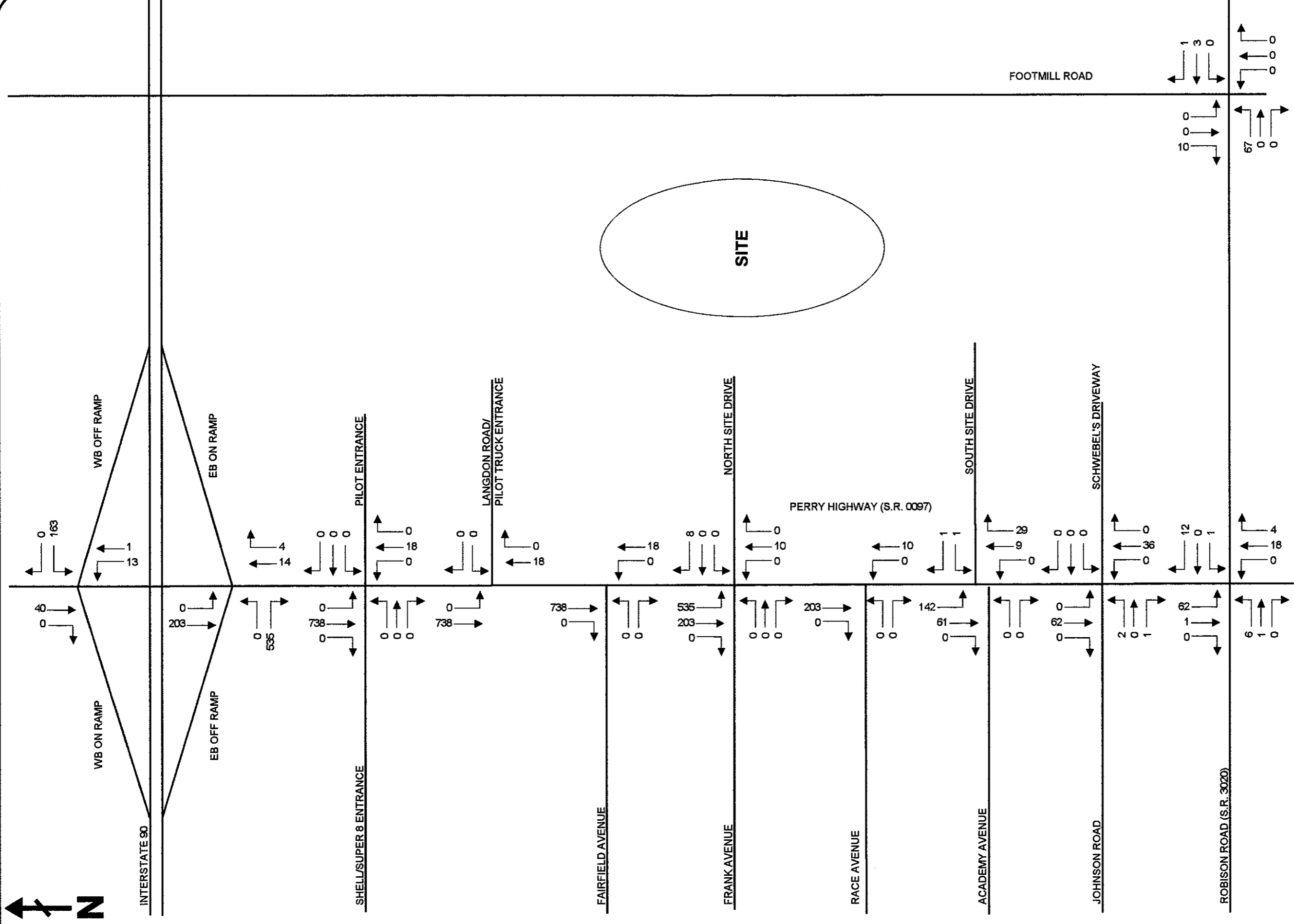


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**FIGURE 3**  
**2002 EXISTING PM PEAK HOUR**  
**TRAFFIC VOLUMES**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**3**  
 PROJECT 2586.002



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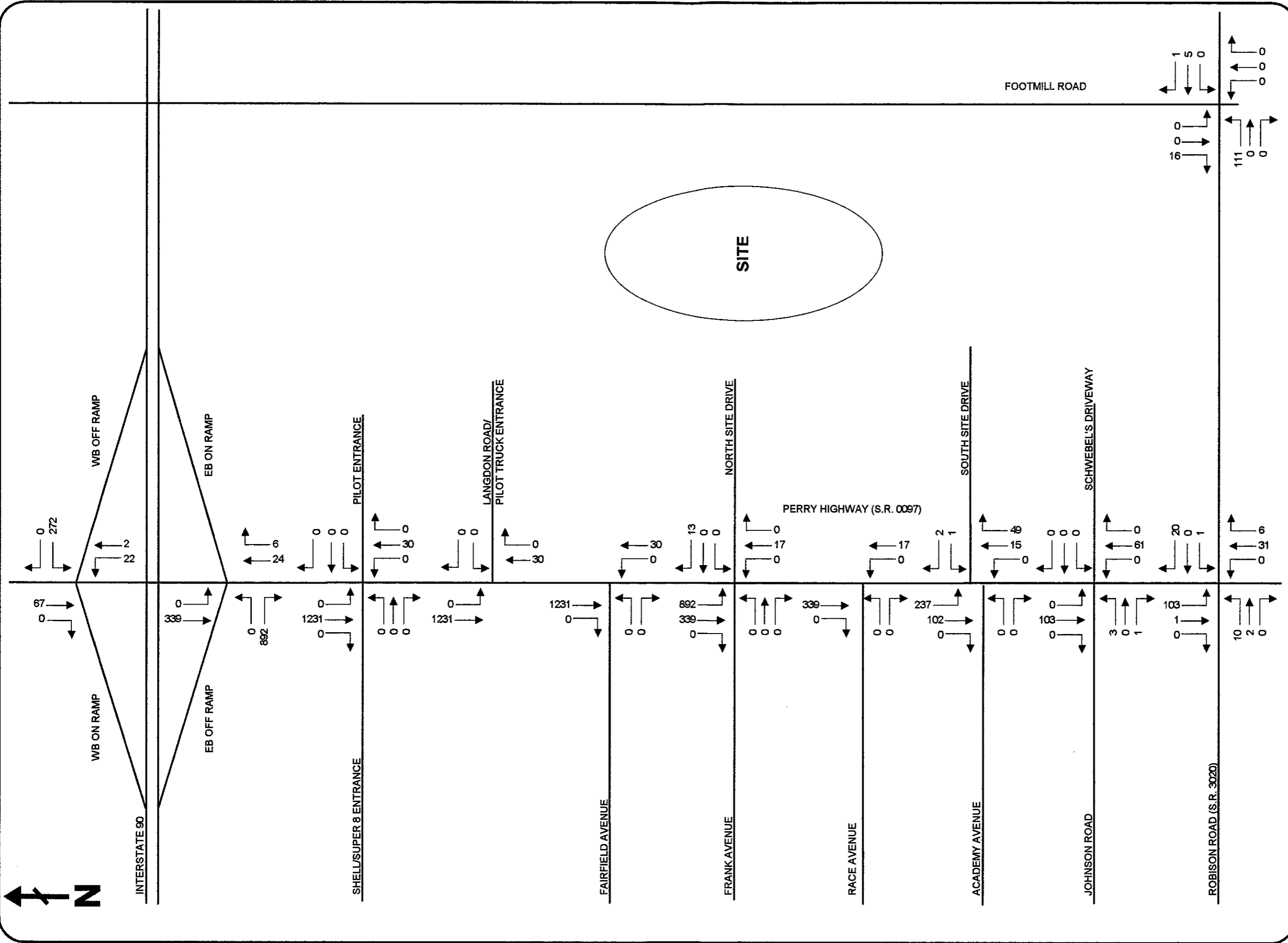
**FIGURE 4A**  
**OPENING YEAR**  
**2004 PM PEAK HOUR**  
**RACETRACK TRIP GENERATION**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANIM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.

**4A**

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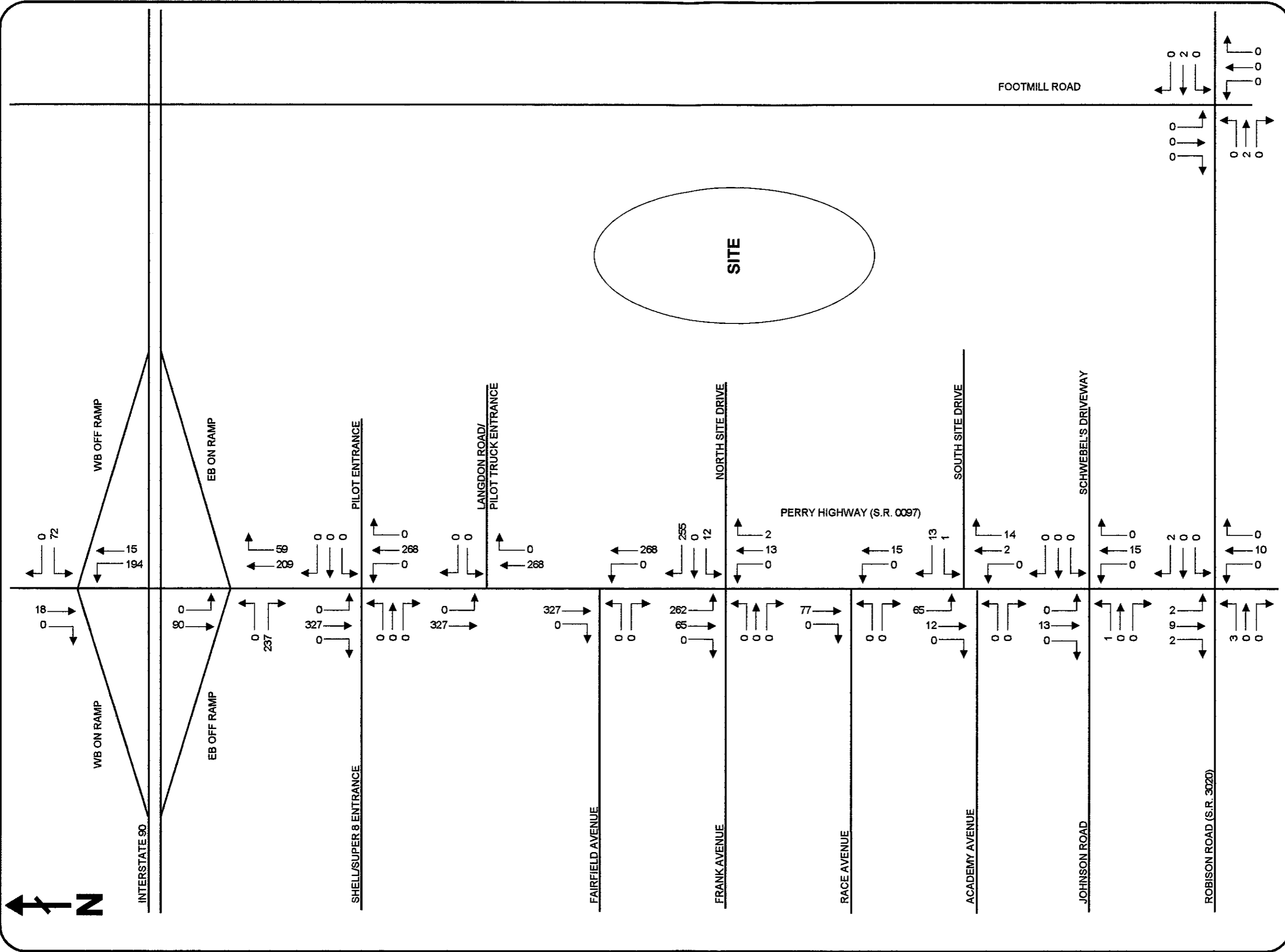

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**FIGURE 4B**  
**FULL OPERATIONAL**  
**2008 PM PEAK HOUR**  
**RACETRACK TRIP GENERATION**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**4B**  
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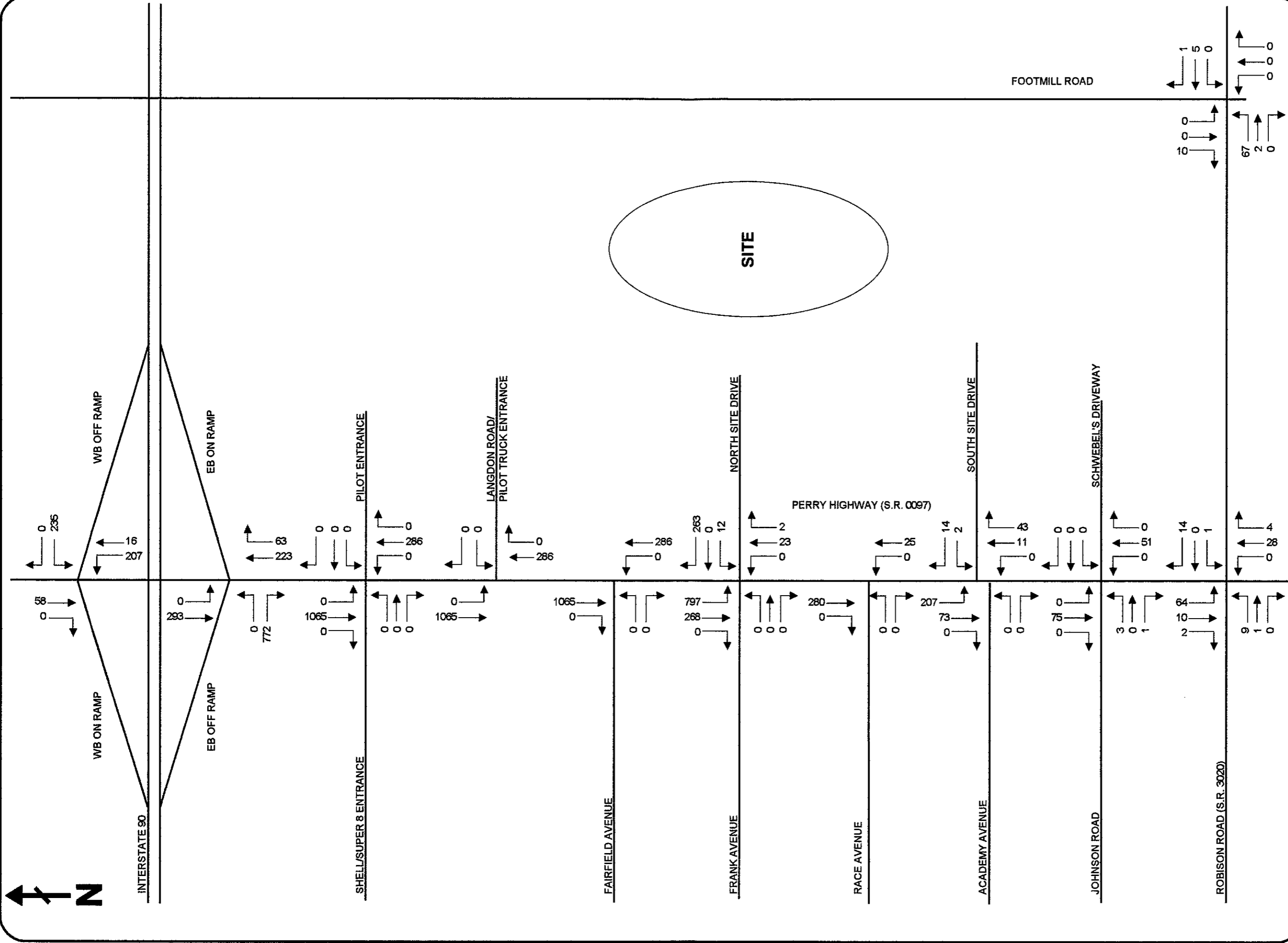
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**FIGURE 5**  
**PM PEAK HOUR**  
**SHOWROOM TRIP GENERATION**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO. **5**

PROJECT 2596.002



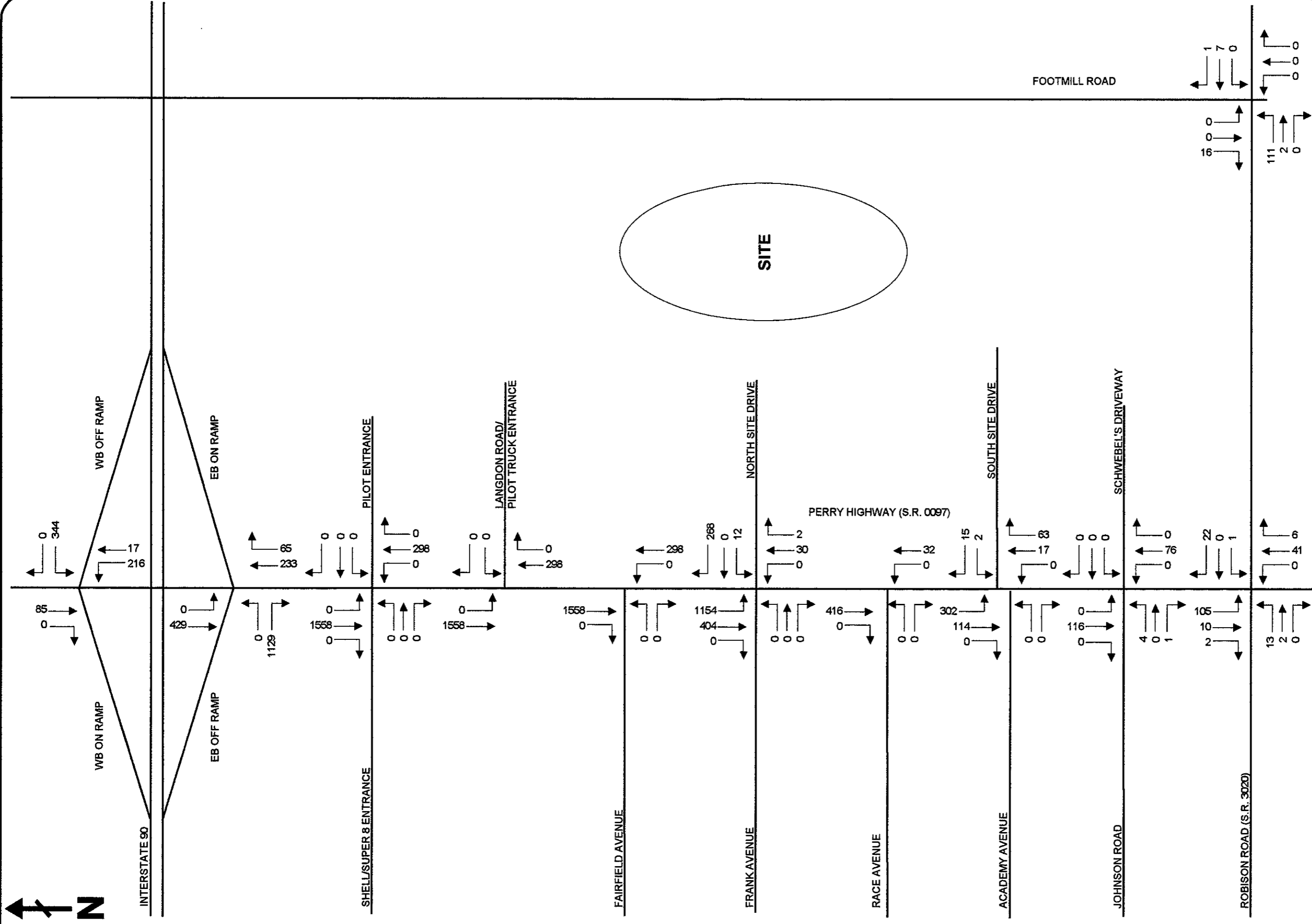
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**FIGURE 6A**  
**OPENING YEAR**  
**2004 PM PEAK HOUR**  
**TOTAL TRIP GENERATION**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**6A**  
 PROJECT 2586.002



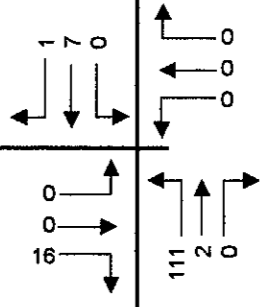
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 Email - [pbgh@hrg-inc.com](mailto:pbgh@hrg-inc.com)  
 Website - [www.hrg-inc.co](http://www.hrg-inc.co)

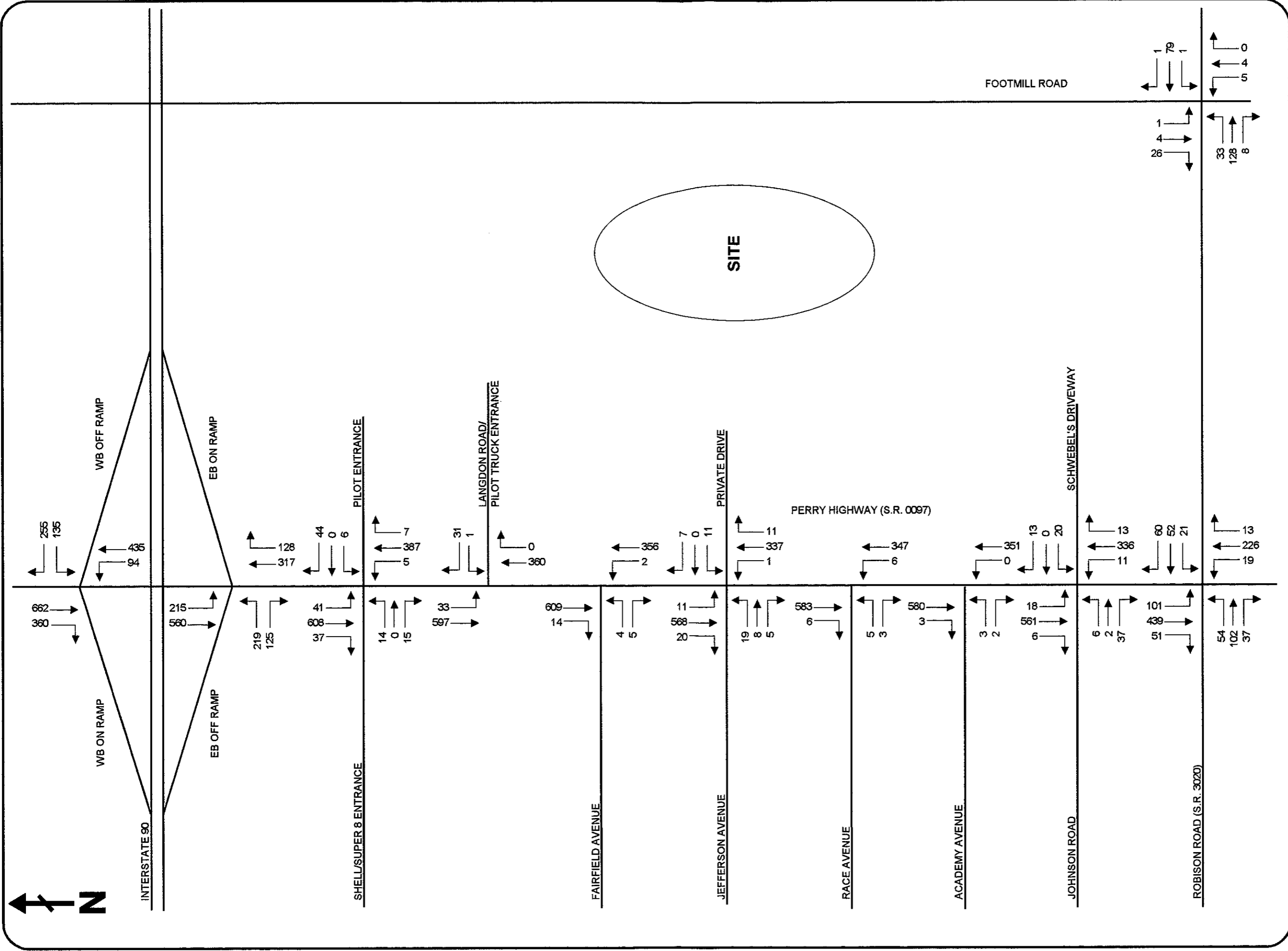
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**FIGURE 6B**  
 FULL OPERATIONAL  
 2008 PM PEAK HOUR  
 TOTAL TRIP GENERATION

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**6B**  
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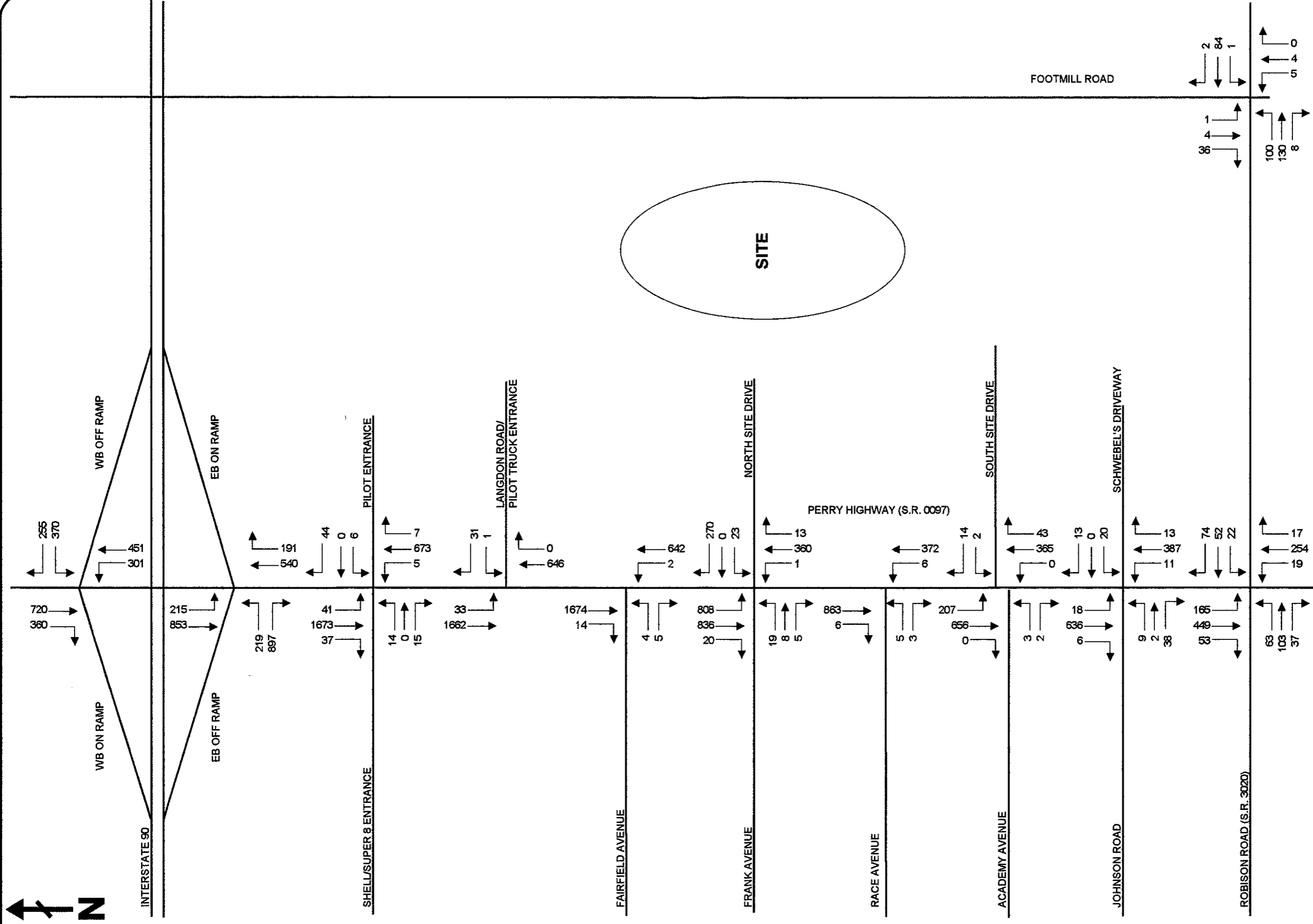
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**FIGURE 7**  
**2004 PM PEAK HOUR TRAFFIC VOLUMES WITHOUT DEVELOPMENT**

PROJ. MGR. - MJR  
 DESIGN - DSM  
 DRAWING - DSM  
 CHECKED - ANM  
 SCALE - N.T.S.  
 DATE - NOV. 2002

FIGURE NO. **7**

PROJECT 2586.002

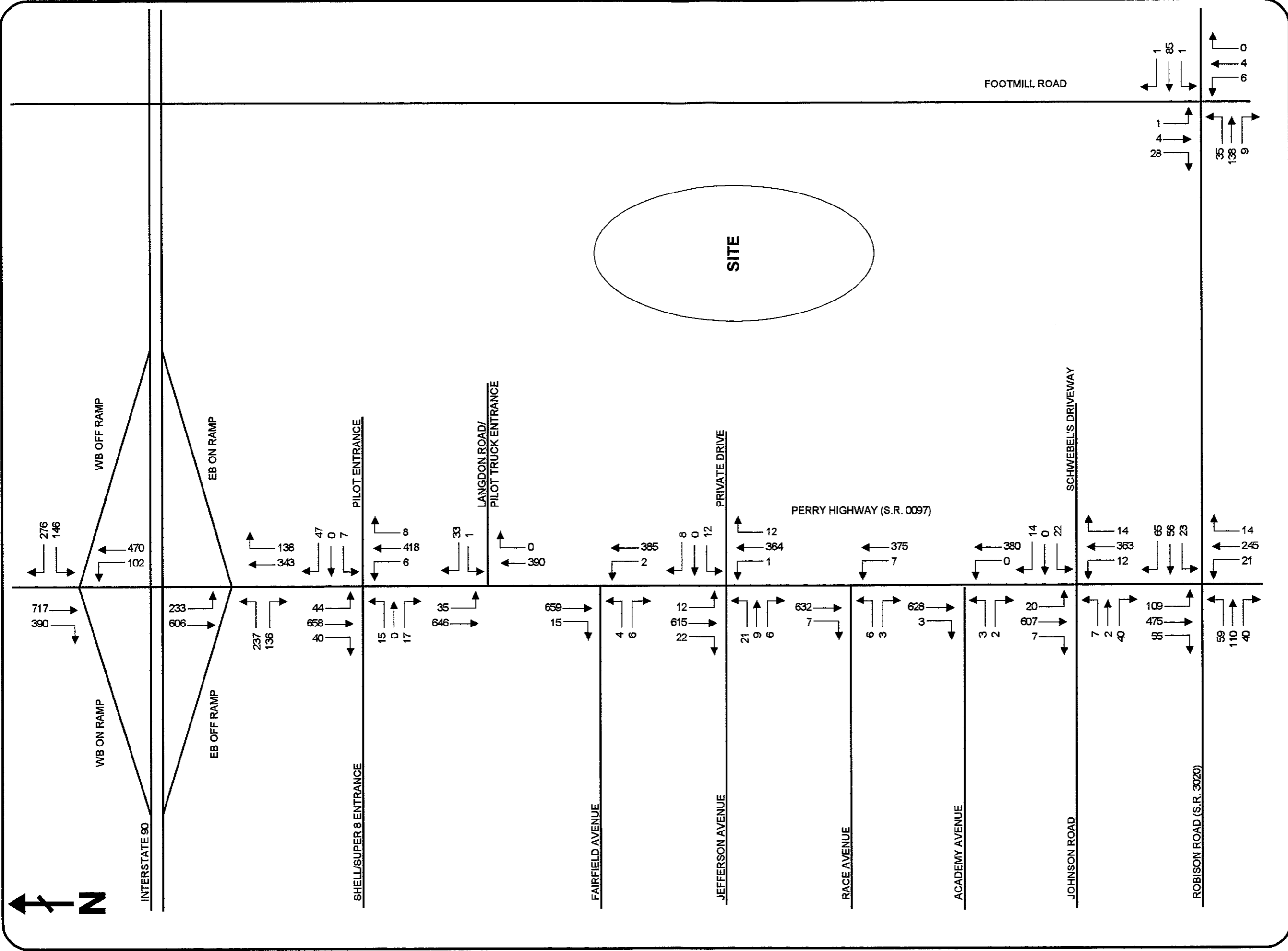


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**FIGURE 8**  
**2004 PM PEAK HOUR TRAFFIC VOLUMES WITH DEVELOPMENT**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**8**  
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**FIGURE 9**

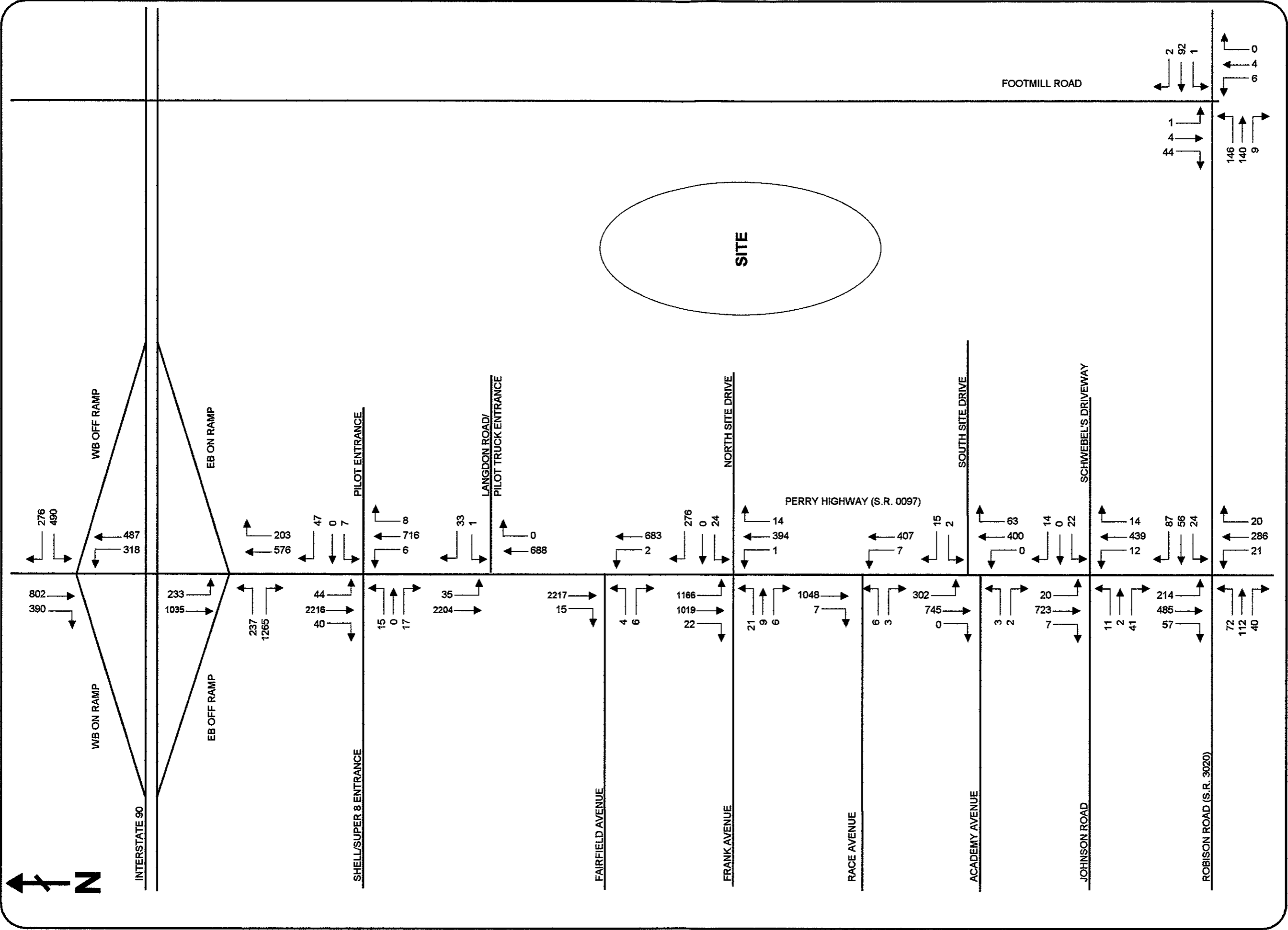
**2008 PM PEAK HOUR TRAFFIC VOLUMES WITHOUT DEVELOPMENT**

FIGURE NO.

**9**

PROJ. MGR. - MJR  
 DESIGN - DSM  
 DRAWING - DSM  
 CHECKED - ANM  
 SCALE - N.T.S.  
 DATE - NOV. 2002

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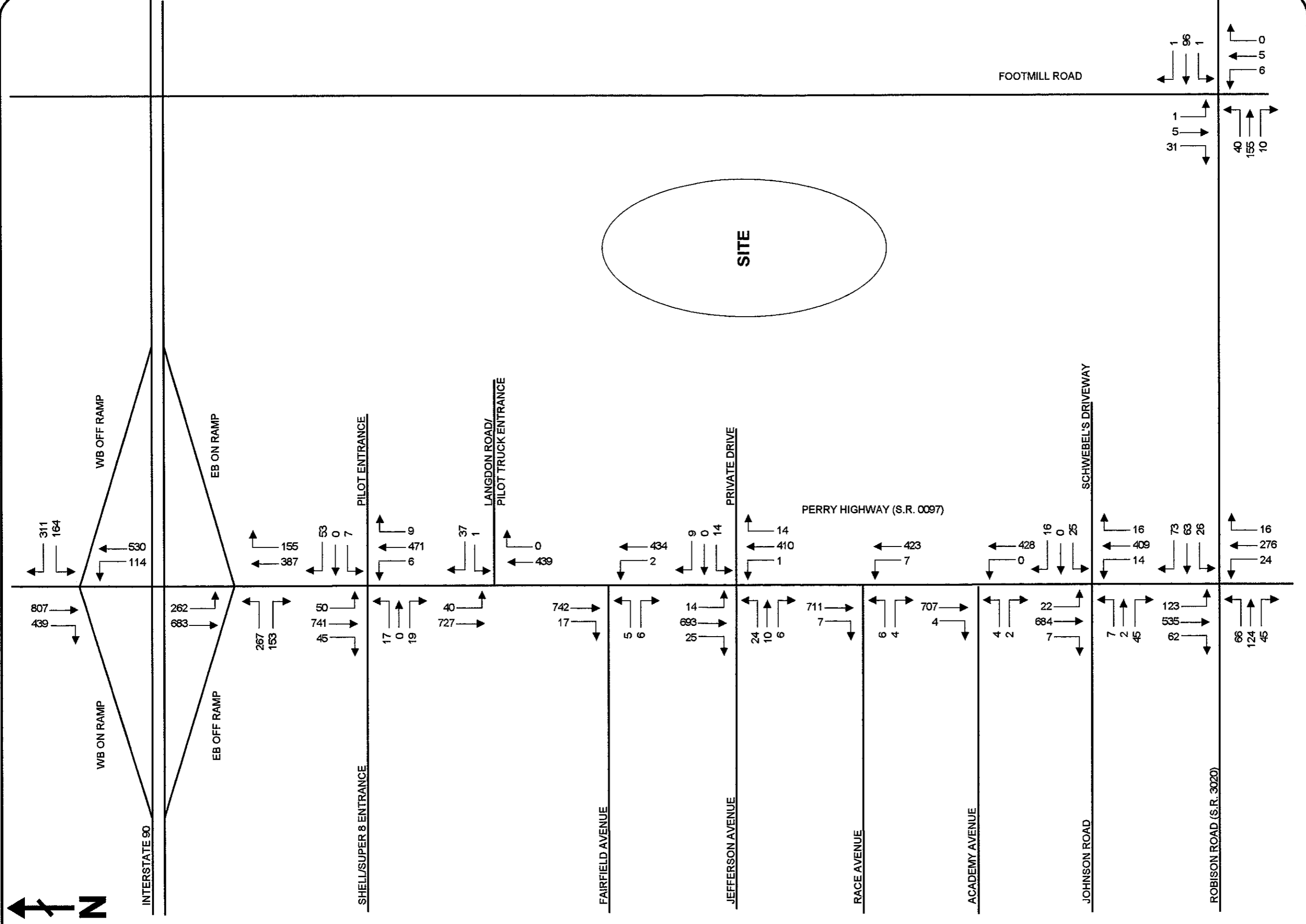
**FIGURE 10**  
**2008 PM PEAK HOUR TRAFFIC VOLUMES WITH DEVELOPMENT**

PROJ. MGR. - MJR  
 DESIGN - DSM  
 DRAWING - DSM  
 CHECKED - ANM  
 SCALE - N.T.S.

DATE - NOV. 2002

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FIGURE NO.  
**10**



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**FIGURE 11**

**2014 PM PEAK HOUR TRAFFIC VOLUMES WITHOUT DEVELOPMENT**

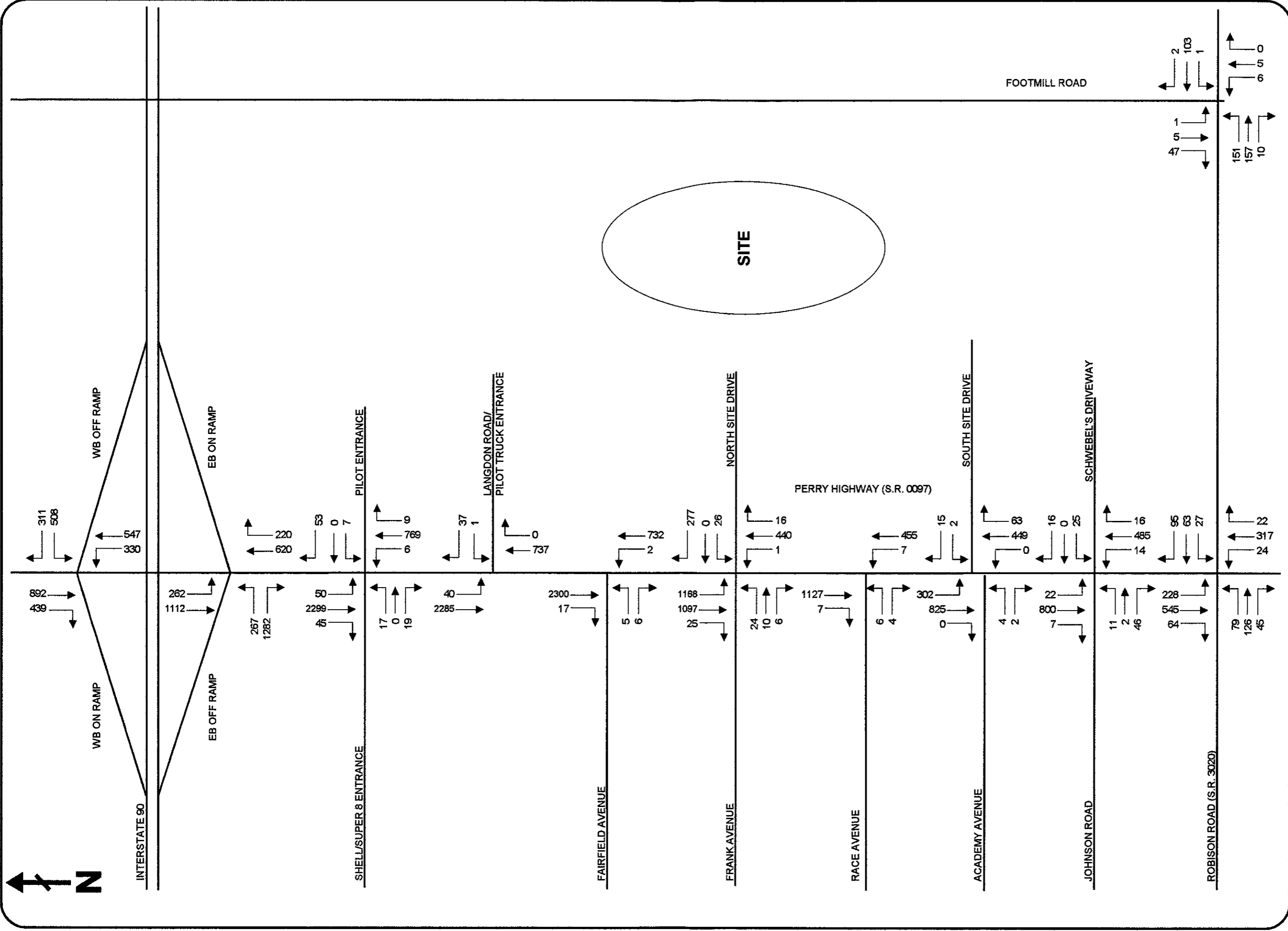
FIGURE NO.

**11**

PROJ. MGR. - MJR  
 DESIGN - DSM  
 DRAWING - DSM  
 CHECKED - ANM  
 SCALE - N.T.S.  
 DATE - NOV. 2002

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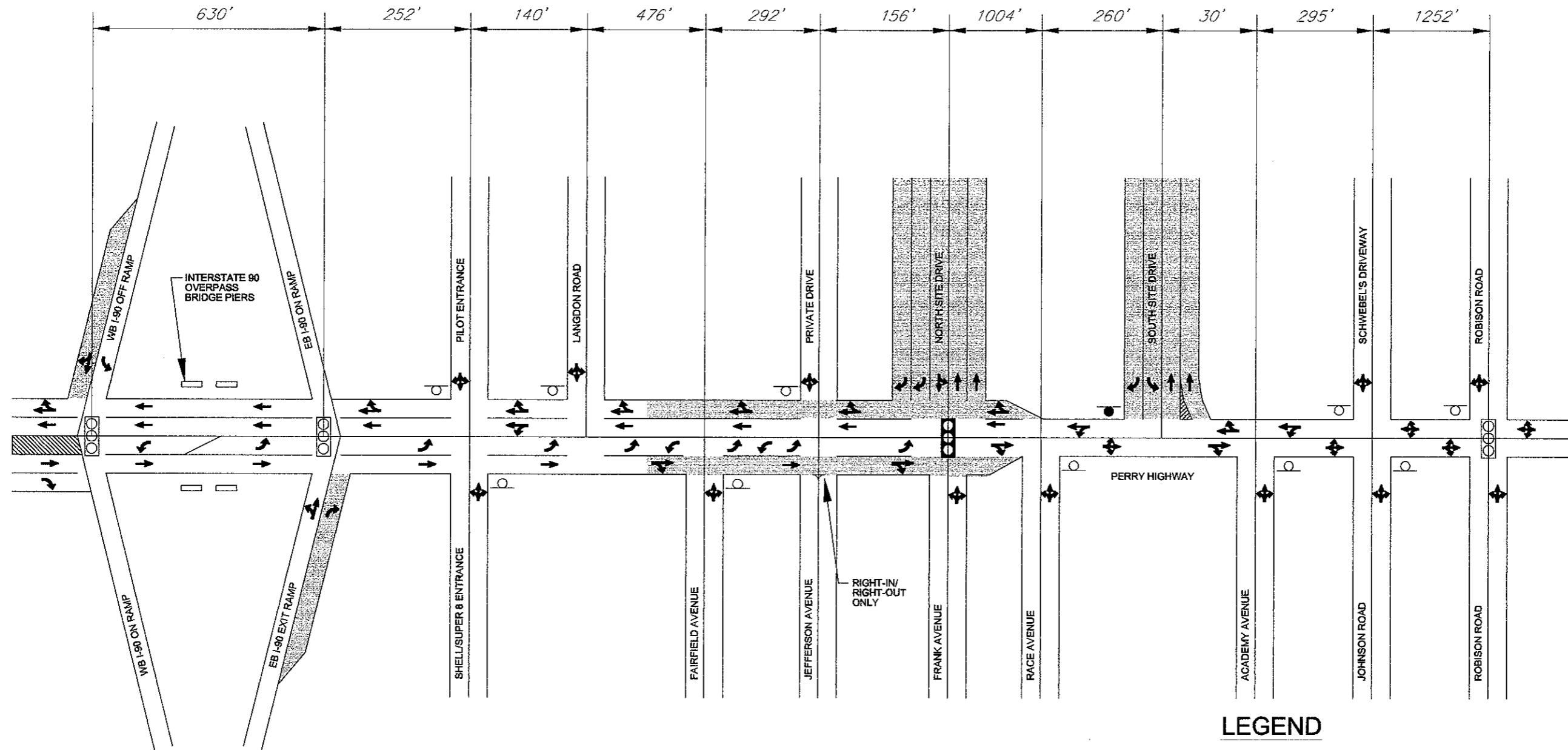
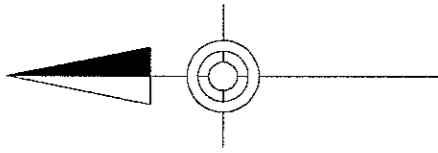
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**FIGURE 12**  
**2014 PM PEAK HOUR TRAFFIC VOLUMES WITH DEVELOPMENT**

PROJ. MGR. - MJR
DESIGN - DSM
DRAWING - DSM
CHECKED - ANM
SCALE - N.T.S.
DATE - NOV. 2002

FIGURE NO.  
**12**  
 PROJECT 2586.002



**LEGEND**

- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- EXISTING STOP CONTROL
- PROPOSED STOP CONTROL
- PROPOSED LANE ADDITION

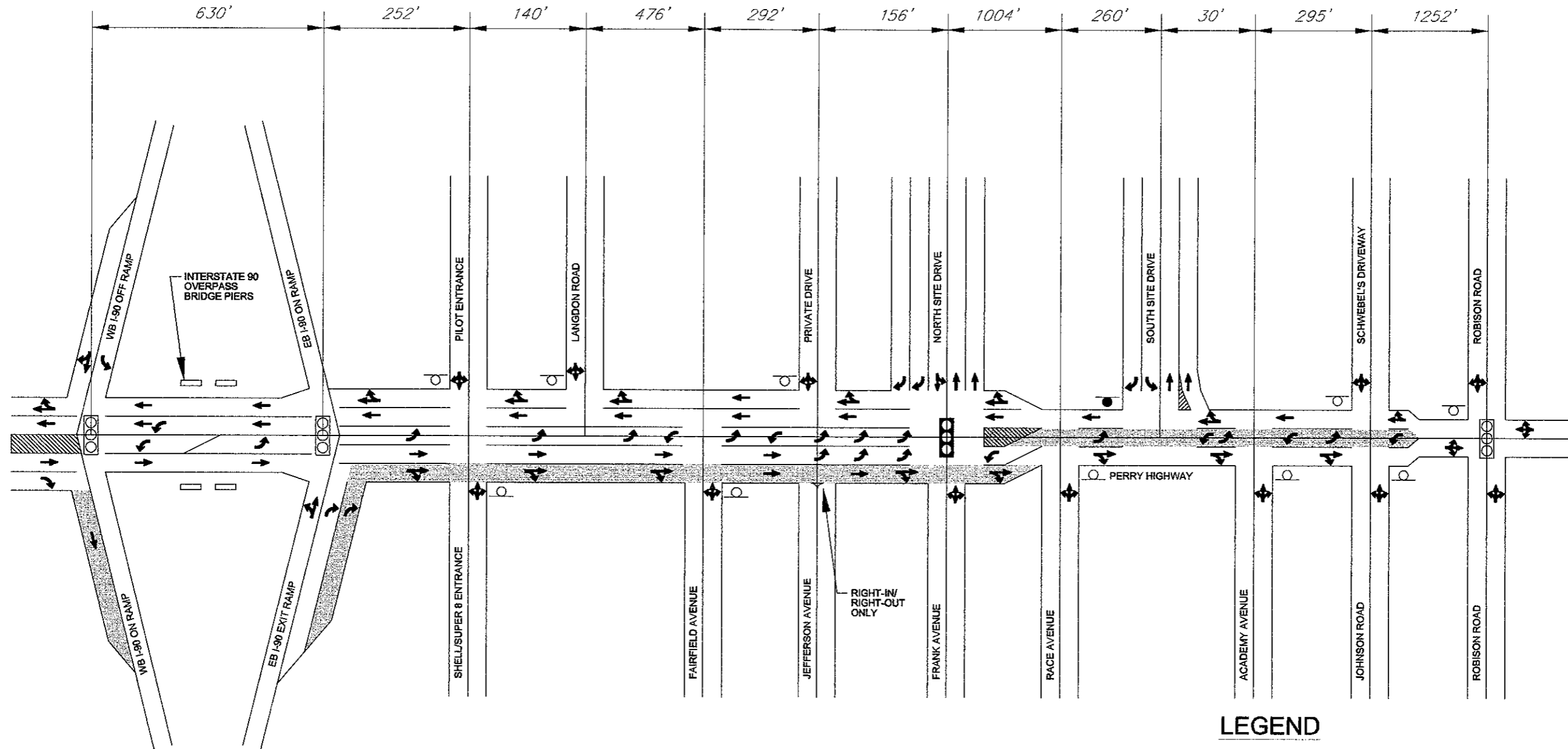
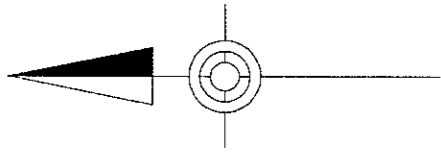
NOTE: DRAWING NOT TO SCALE  
ALL DIMENSIONS ARE APPROXIMATE

PROJ. MGR. - MJR
DESIGN - DSM/AND
CADD - DSM
CHECKED - MJR
SCALE - Not To Scale
DATE - NOV. 2002

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**FIGURE 13**  
**2004 PROPOSED GEOMETRY**  
**PRESQUE ISLE DOWNS DEVELOPMENT**



NOTE: DRAWING NOT TO SCALE  
ALL DIMENSIONS ARE APPROXIMATE

**LEGEND**

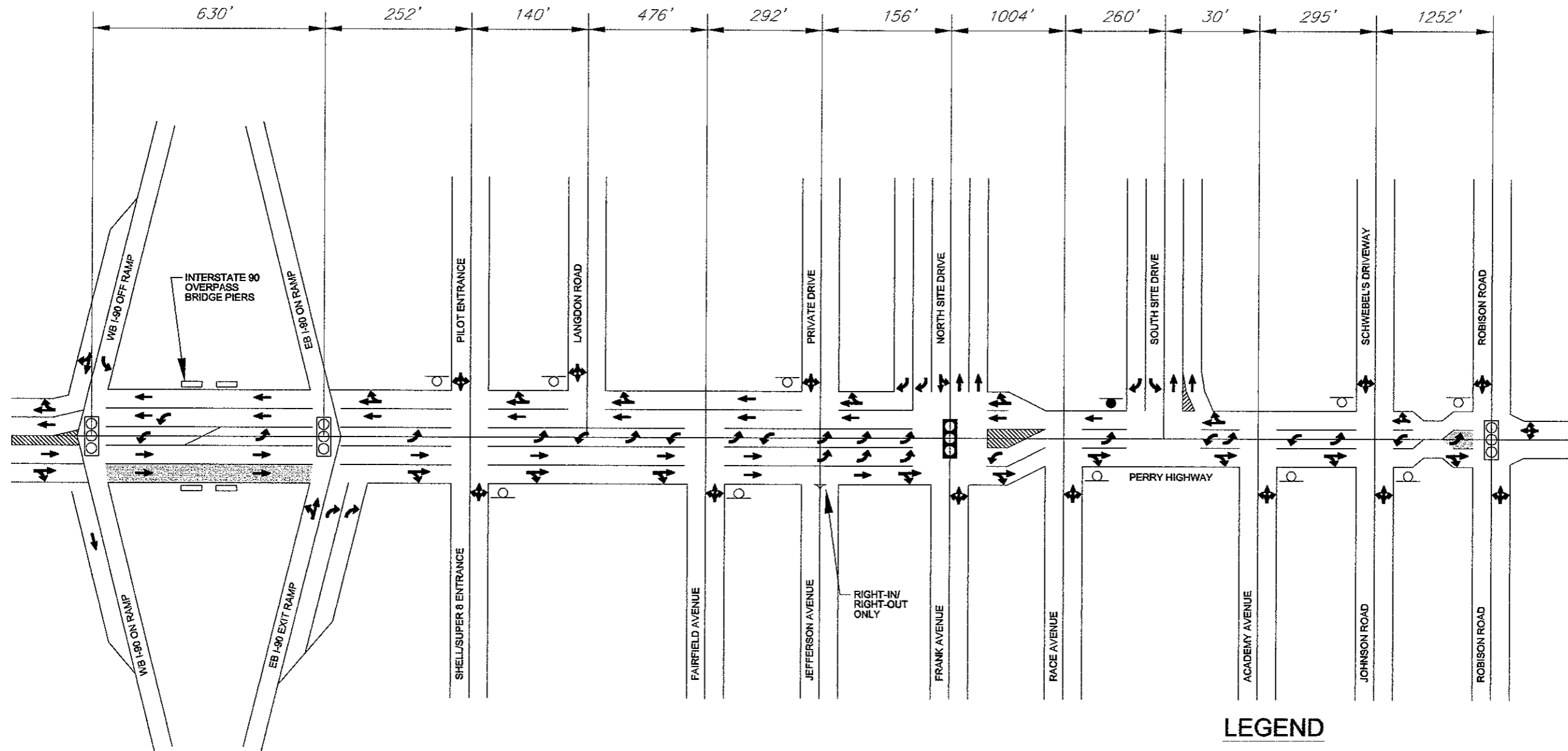
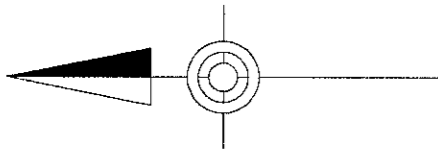
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- EXISTING STOP CONTROL
- PROPOSED STOP CONTROL
- PROPOSED LANE ADDITION

PROJ. MGR. - MJR	DESIGN - DSM/AND
CADD - DSM	CHECKED - MJR
SCALE - Not To Scale	DATE - NOV. 2002

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**FIGURE 14**  
**2008 PROPOSED GEOMETRY**  
**PRESQUE ISLE DOWNS DEVELOPMENT**



**LEGEND**

- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- EXISTING STOP CONTROL
- PROPOSED STOP CONTROL
- PROPOSED LANE ADDITION

NOTE: DRAWING NOT TO SCALE  
ALL DIMENSIONS ARE APPROXIMATE

PROJ. MGR. - MJR	DESIGN - DSM/AND
CADD - DSM	CHECKED - MJR
SCALE - Not To Scale	DATE - NOV. 2002

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**FIGURE 15**  
**2014 PROPOSED GEOMETRY**  
**PRESQUE ISLE DOWNS DEVELOPMENT**