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LOCAL IMPACT REPORT

FOR

PENN NATIONAL RACE COURSE RACING AND GAMING FACILITY

December 5, 2005

Prepared For:

Penn National Gaming, Inc.
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In Cooperation With:

McCarthy Engineering Associates, P.C.
Traffic Planning and Design, Inc.

We have prepared this Local Impact Report pursuant to 58 Pa. Code § 441.4(a)(21), which requires that an application for a slot machine license include a local impact report. This report describes (i) the local impact of the Racing and Gaming Facility that Penn National Gaming, Inc. ("Penn National") proposes to operate at Penn National Race Course (the "Racing and Gaming Facility") and (ii) significant state and local governmental permits and approvals that Penn National already has obtained to construct and operate the Racing and Gaming Facility.

I. BACKGROUND

A. The Property and Existing Race Track

The Racing and Gaming Facility is proposed to be located at Penn National Race Course ("PNRC"). PNRC is situated on an approximately 600-acre tract that is located in East Hanover Township, Dauphin County, Pennsylvania (the "Property").¹ PNRC has operated a horse racing track at the Property since it opened in the mid-1970s. An aerial photograph of the Property is attached (Exhibit A).² The Property is outlined in red on the photograph.

As shown on the attached Existing Conditions Plan (Exhibit B), the Property is bounded by three roads: Bow Creek Road to the west, Mountain Road to the north and Fox Run Road to the south. Firehouse Road bisects the Property and connects Fox Run Road to Mountain Road.

The main access to PNRC is located along Bow Creek Road. A secondary access is located along Fox Run Road. Tertiary access is provided along Mountain Road. The Bow Creek Road and Fox Run Road accesses will continue to serve as the primary and secondary (respectively) accesses to the Property. The Mountain Road access is expected to have limited use because most of the traffic will utilize Interstate 81 and, therefore, enter and exit the Property at the Bow Creek Road access.

The Property conveniently is located approximately one-half of a mile to the north of Interstate 81. Bow Creek Road provides direct access between the Property and Interstate 81. An existing interchange (i.e. exit and entrance ramps) is located at the bridge that extends Bow Creek Road over Interstate 81. This existing interchange (the "Bow Creek Road/Interstate 81 Interchange") is outlined in blue on Exhibit A and depicted in its current condition and configuration on Exhibit C.

The existing horse racing track, 259,000 square foot grandstand (outlined in orange on Exhibit A) and related facilities are located approximately in the middle of the Property.

¹ A small portion of the Property extends into East Hanover Township of Lebanon County. This portion consists of approximately 20 acres and is the easternmost area of the Property. It is undeveloped. No improvements are proposed for this portion of the Property.

² This photograph and all other aerial photographs attached to this memorandum were taken by the U.S. Geological Survey in 2003.

Because the Property is expansive, those facilities physically are separated from adjoining lands by a considerable distance. In fact, as shown on the Existing Conditions Plan (Exhibit B), the racetrack and grandstand are located approximately 1,612 feet from its northern boundary, 2,377 feet from its western boundary, 1,764 feet from its southern boundary and 3,619 feet from its eastern boundary. This vast separation serves as a buffer between PNRC's facilities and adjoining properties.

B. The Proposed Racing and Gaming Facility

The proposed Racing and Gaming Facility will be located approximately in the same location as the existing grandstand. That grandstand will be demolished and a new, state-of-the-art 325,000-square foot integrated Racing and Gaming Facility will be constructed in its place. The Racing and Gaming Facility is proposed to house slot machines, horse racing operations, hospitality services, restaurants, eateries, wagering facilities, offices and other related uses. The new Racing and Gaming Facility is shown on the plan that is attached as Exhibit D and is described in more detail in other parts of Penn National's application for a license to operate slot machines.

II. DISCUSSION OF IMPACT

A. Zoning and Planning

The Property not only is located in an area that is planned for commercial development, it specifically is zoned and planned for use as a horse racing facility with related wagering and slot machines. The Property historically has been zoned for commercial recreational use. Under the 1972 Zoning Ordinance of East Hanover Township of Dauphin County (the "Township"), the Property was located in the Commercial Recreational District. That zone permitted automobile racing, horse racing facilities, restaurants, retail stores and other commercial uses.

In April of 2003, the Township repealed the 1972 Zoning Ordinance and adopted a new Zoning Ordinance and Map. Under the new Zoning Ordinance and Map, the Property continues to be classified in a commercial recreational district (now called the "Commercial Recreation Zone"). The purpose of the new Commercial Recreation Zone is in part to "accommodate development associated with Penn National Raceway. . . ." Horse racing facilities with related wagering are permitted in the Commercial Recreation Zone. That use includes the operation of slot machines.

The fact is that nearly the entire area along and near Bow Creek Road from the northern side of Mountain Road to the southern side of Interstate 81 (the "Bow Creek Road/Interstate 81 Corridor") specifically is planned for commercial and industrial development. Several years ago the Township, four other nearby municipalities³ and Lower

³ The original participating municipalities included East Hanover Township, Hummelstown Borough, South Hanover Township, Londonderry Township and Conewago Township. Currently, only East Hanover Township, Hummelstown Borough, Londonderry Township and Lower Dauphin School District participate in the Regional Comprehensive Plan. East

(cont'd footnote)

Dauphin School District began to jointly plan for land uses on a regional basis. This regional coalition, known as the Lower Dauphin Area Regional Planning Group, ultimately produced a regional comprehensive land use plan (the "Regional Comprehensive Plan").⁴ East Hanover Township formally approved and adopted this Regional Comprehensive Plan in July 5, 2005. A copy of the Land Use Plan of the Regional Comprehensive Plan as adopted by the Township is attached (Exhibit E). That Land Use Plan depicts the contemplated future land use classifications of all areas of all five municipalities.

As shown on the attached magnified portion of that Land Use Plan (Exhibit F), nearly the entire area between Jonestown Road and the northern side of Mountain Road is planned for commercial and industrial development (see light purple and red areas). Indeed, the land use classifications for this Bow Creek Road/Interstate 81 Corridor principally are Commercial and Light Industrial. The only exception is the brown area that is located to the south of the Property and designated as High Density Residential. That brown area, however, in large part reflects the existence of a dense, mobile home or manufactured housing development (known as "Chesapeake"). Indeed, as reflected on the Township's current Zoning Ordinance and Map, that brown area is located in the Mobile Home Park Zone. As shown on the Exhibit G, a substantial portion of the brown area comprises the Chesapeake development. The remaining undeveloped portion of that land is located to the south of Chesapeake and along Interstate 81. That area is located in the Commercial classification under the Land Use Plan (presumably because of its proximity to Interstate 81). A considerable portion of that area consists of steep slopes and is not developable.

Accordingly, through its land use policies and regulations, the Township has planned for substantial commercial development along the Bow Creek Road/Interstate 81 Corridor and specifically has planned for the operation of slot machines at Penn National Race Course and the Property.

B. Governmental Permits and Approvals

Nearly all governmental permits and approvals that are required to develop and construct the Racing and Gaming Facility already have been obtained. Among other permits and approvals, the following paragraphs describe significant permits and approvals that the Racing and Gaming Facility already has obtained. These reviews, permits and approvals are indicative of the regulatory scrutiny that Penn National's plans for the proposed Racing and Gaming Facility has undergone.

1. Final Land Development Plan Approval

(continued footnote)

Hanover Township, Hummelstown Borough and Londonderry Township have adopted the Regional Comprehensive Plan.

⁴ A comprehensive plan is a land use and growth management plan that municipalities may adopt pursuant to the Pennsylvania Municipalities Planning Code, 53 P.S. § 10101 *et seq.* Comprehensive plans generally are developed to guide land uses, development and land use regulation.

Land development plans for constructing a gaming facility on the Property were reviewed and considered by the Township during the last two years. A land development plan first was filed with the Township in the spring of 2003. After several months of review and deliberation, the Township's Planning Commission recommended approval of the plan. The Township's Board of Supervisors approved the plan on October 21, 2003.

Subsequent revisions were made to that plan and approved by the Board of Supervisors on July 6, 2004. The final version of the plan was approved by the Board of Supervisors on March 15, 2005. That final version of the land development plan was signed and released by the Board of Supervisors and has been recorded in the Office of Recorder of Deeds of Dauphin County, Pennsylvania. Such recordation means that Penn National satisfied all conditions of approval of the land development plan and now may apply for and obtain a building permit to construct the Racing and Gaming Facility.

2. PennDOT Approvals

As is described in more detail in Part II.C below, a traffic impact study was prepared by Traffic Planning & Design, Inc. The purpose of that study was to examine the potential traffic impact of the Racing and Gaming Facility and to identify and recommend transportation improvements that are necessary to accommodate the traffic impact of the Racing and Gaming Facility. The study is attached as Exhibit H.

The traffic impact study was approved by the Township's consultants and submitted to the Commonwealth of Pennsylvania, Department of Transportation ("PennDOT"). By letter of Barry G. Hoffman, P.E., of PennDOT Engineering District 8-0, PennDOT approved and found to be acceptable the traffic study and the more than \$2 million in off-site transportation improvements that were recommended in the study. A copy of the letter is attached as Exhibit I. The traffic impact study and the recommended transportation improvements are discussed in detail in Part II.C of this memorandum.

Traffic signal and highway occupancy permits are required to construct the recommended transportation improvements. Applications for those permits have been submitted to PennDOT. It is expected that those permits will be issued before construction of the Racing and Gaming Facility begins. Penn National anticipates that the off-site transportation improvements will be completed before the Racing and Gaming Facility opens for business.

3. Development Agreement with Township

On December 19, 2003, Penn National Gaming, Inc. and the Township entered into a Development Agreement. The purpose of that agreement is to (i) provide for financial security for certain public improvements that are to be constructed on the Property (e.g. stormwater management improvements, on-site transportation improvements, parking lot improvements, landscaping, etc.) and (ii) provide for construction of the more than \$2 million in off-site transportation improvements that were recommended in the traffic impact study.

Those off-site transportation improvements predominately are located at or near the Bow Creek Road/Interstate 81 Interchange. As off-site improvements, the Township is not permitted under the Pennsylvania Municipalities Planning Code, 53 P.S. § 10101 et seq., to require construction of these improvements. To provide for safe and convenient access and to reduce any financial burden on the Township in funding any portion of the costs of constructing these off-site transportation improvements, Penn National voluntarily committed under the Development Agreement to construct, at no cost to the Township, the more than \$2 million in off-site transportation improvements. A copy of the Development Agreement and amendments thereto are attached as Exhibit J.

C. Impact on Transportation and Transit Access

A traffic impact study for the Racing and Gaming Facility was prepared by Traffic Planning and Design, Inc. on behalf of Penn National. The traffic impact study has been approved by the Township's consultants and PennDOT. A copy of the approved traffic study is attached as Exhibit H and a copy of the PennDOT approval letter is attached as Exhibit I. The following paragraphs briefly summarize the traffic impact study. Additional information and details may be found in the traffic impact study.

The traffic impact study evaluated nine intersections:

1. Bow Creek Road and Mountain Road;
2. Bow Creek Road and Fox Run Road;
3. Fox Run Road and Firehouse Road;
4. Bow Creek Road and Southbound Interstate 81 On/Off-Ramps;
5. Bow Creek Road and Northbound Interstate 81 On/Off-Ramps;
6. Bow Creek Road/Laudermilch Road and Jonestown Road;
7. Laudermilch Road and Route 22;
8. Bow Creek Road and Site Driveway; and
9. Fox Run Road and Site Driveway.

These intersections were identified by the Township and PennDOT as intersections that should be evaluated by the traffic impact study. The intersections are shown and numerically identified on Exhibit A.

The traffic impact study evaluates the efficiency, or levels of service, of these intersections.⁵ As more particularly described in the traffic impact study, nearly all of these intersections were operating at acceptable levels of service. The only exceptions are (i) left turns at the intersections Bow Creek Road and at the on and off-ramps of Interstate 81 and (ii) east and west bound traffic traveling along Jonestown Road and through that road's

⁵ Level of service analysis is the accepted traffic engineering methodology for evaluating intersections and determining whether improvements should be constructed. As stated in the traffic impact study, level of service is a measure of driver discomfort and frustration, fuel consumption and lost travel time. It is evaluated in terms of control delay per vehicle. Levels of service of signalized and unsignalized intersections are rated on a scale of A through F, with A being the best or most efficient rating and F being the worst rating.

intersection with Bow Creek Road/Laudermilch Road.⁶ Without the transportation improvements that Penn National proposes to construct, those intersections are projected to worsen and fail in 2009 and 2014 respectively.

Based upon these existing levels of service, the traffic impact study then factors in the traffic that is projected to be generated by the Racing and Gaming Facility and future growth in the area. The levels of service of these intersections then are projected into the future to determine whether these intersections will operate efficiently and acceptably. Transportation improvements then are proposed to mitigate any unacceptable levels of service.

As set forth in the traffic impact study, several on-site and off-site improvements were proposed to improve existing and future level of service deficiencies, offset level of service impacts, and provide safe and efficient access to the Racing and Gaming Facility. The on-site improvements (i.e. road improvements that are to be constructed on or along the Property) include the following:

- Realignment of the Penn National main site driveway to intersect Bow Creek Road at an approximate 90 degree angle. The realigned section of the driveway will provide access for the entering left turn movement, as well as exiting left and right turn movements. The realigned section of the driveway will have a 28-foot wide cartway to provide for 12-foot wide entering and exiting lanes and a 4-foot wide paved shoulder on the northern side (exiting approach). A channelized right-turn lane will also be constructed at the driveway entrance. The channelized right turn lane will be 12-feet wide lane with a 4 foot wide paved shoulder. Thus, the approach to the PNRC will consist of two inbound travel lanes for approximately 300 feet, with a lane drop and lane transition taking place at a point after that distance;
- Construction of a 250-foot deceleration lane with a 125-foot taper on the northbound Bow Creek Road approach to the PNRC driveway to safely and efficiently accommodate the entering right-turn movement; and
- Removal of an on-site embankment to the north of the existing Bow Creek Road driveway location to provide the required sight distance per applicable traffic engineering standards.

Penn National also proposes to construct the following off-site improvements:

- Signalize and reconfigure/realign the Interstate 81 interchange intersections with Bow Creek Road. The signalization and reconfiguration/realignment is to include construction of a 275-foot left-turn lane on the Interstate 81 southbound off-ramp. Additionally, a 545-foot left-turn lane will be constructed on the Interstate 81 northbound off-ramp;

⁶ At this intersection, Bow Creek Road ends and Laudermilch Road begins. Laudermilch Road then extends southward to Route 22.

- Maximize widening outside the limits of the Bow Creek Road bridge (over Interstate 81) to construct/stripe 100-foot left-turn lanes on Bow Creek Road at the Interstate 81 interchange intersections and install overhead lane use control.
- Signalize the intersection of Laudermilch Road/Bow Creek Road and Jonestown Road;

The improvements to the Bow Creek Road/Interstate 81 Interchange have been identified in the Regional Comprehensive Plan as a "Suggested Project." The costs of constructing the off-site transportation improvements are expected to exceed \$2 million. Penn National voluntarily committed in the Development Agreement to construct these off-site transportation improvements in connection with development of the Racing and Gaming Facility. Pursuant to that agreement, the Township has no obligation to pay any portion of those construction costs.

As determined by the traffic impact study and confirmed by PennDOT approval of that study, these improvements will provide safe and efficient vehicular access to and from the Racing and Gaming Facility and will improve the overall level of service of intersections and roads in the area of the Property (including the Bow Creek Road/Interstate 81 Interchange, which is in dire need for improvement and for which, without the Racing and Gaming Facility, there is no funding or plans for improvement in the foreseeable future).

With respect to transit access, the Racing and Gaming Facility will be bus-accessible and include staging areas for buses. Although there is no regular transit access to PNRC, the Racing and Gaming Facility is designed to accommodate such transit access. If such access becomes desirable, Penn National will work with transportation providers to provide convenient access.

D. Impact on Housing

The Racing and Gaming Facility is not expected to have any material, adverse impact on existing or future housing. First, the Property is located in a predominately commercial area. Although much of the surrounding lands are undeveloped, rural areas, the Township has planned and zoned those areas (i.e. the Bow Creek Road/Interstate 81 Corridor) for commercial and industrial development. In fact, except for the land on which the Chesapeake development is located, all of the land in this corridor is classified by the Township in the Commercial Recreation, Industrial, Highway Commercial or Interchange Commercial Zones. None of those zoning districts permit residential dwellings. Accordingly, there is very limited potential for residential growth in the immediate area of the Property (and indeed in the Bow Creek Road/Interstate 81 Corridor), and it is not anticipated that significant, new residential development will occur in close proximity to the Racing and Gaming Facility.

Second, the nearest area where new residential development could be constructed is the undeveloped portion of the Mobile Home Park Zone. The Mobile Home Park Zone lies immediately to the south of the Property. As noted above, when the current Zoning Ordinance and Map were adopted, that classification was selected for this land because the Chesapeake mobile home or manufactured housing development already existed on the land. The undeveloped area of that zone lies primarily to the south and west of the existing

Chesapeake development (with the existing Chesapeake development situated between this undeveloped area and the Property).

This undeveloped area is located approximately 1,307 feet from the Property and 3,088 feet from the proposed location of the Racing and Gaming Facility. Given this limited, undeveloped area, existing steep slopes and other natural features, and the close proximity to Interstate 81, it is not likely that this undeveloped area will accommodate significant, new residential development.⁷ Moreover, because this undeveloped area is designated in the Commercial classification under the Land Use Plan (Exhibit E), it is possible that this area will not be available for residential use in the future.

Third, there is an expansive, physical separation between the existing Chesapeake development and the Racing and Gaming Facility. The Racing and Gaming Facility will be located nearly in the middle of a 580-acre tract and a substantial distance from the boundaries of the Property. Based upon the approved land development plans, the proposed Racing and Gaming Facility will be located approximately 1,775 feet from the nearest portion of the existing Chesapeake development. It will be located an additional 1,313 feet from the undeveloped portion of the Mobile Home Park Zone. That physical separation will provide a substantial, spatial buffer between the Racing and Gaming Facility and existing and potential residential development.

Fourth, Penn National also has designed the Racing and Gaming Facility to limit the traffic that is anticipated to enter or exit the Racing and Gaming Facility via Fox Run Road (which adjoins the Chesapeake development). Signs will encourage motorists to use the Main (Bow Creek Road) entrance. The purpose of this design is to limit the amount of traffic that travels on Fox Run Road and by the Chesapeake development.

Accordingly, based upon the design and layout of the Racing and Gaming Facility site, the vast separation between the proposed Racing and Gaming Facility and existing residential uses, the fact that the area of the Property and the Bow Creek Road/Interstate 81 Corridor is planned and zoned predominately as a commercial area and the limited residential growth potential in the area of the Property, the proposed Racing and Gaming Facility is not expected to have any material, adverse effect on existing or future housing.⁸

E. Impact on Water and Sewer Systems

1. Sewer System

⁷ A sketch plan for adding 125 mobile or manufactured homes to the Chesapeake development was presented to the Township within the past several months, but no land development plans have been submitted. If such a land development plan ever is implemented, little if any developable area will remain in the Mobile Home Park Zone.

⁸ Moreover, it is important to note that the existing Chesapeake development and PNRG have co-existed for decades, and it is not anticipated that the new Gaming Facility will have any greater impact.

The proposed Racing and Gaming Facility will not effect public sewer systems. PNRC has operated a private wastewater treatment plant (the "Sewer Plant") on the Property for more than 30 years. The Sewer Plant has a capacity for treating an annual average of 230,000 gallons per day (gpd). It serves the wastewater treatment needs of the PNRC, the nearby Holiday Inn,⁹ and a local pizza shop.

The Sewer Plant was constructed in or about 1972 and has operated without significant violation for more than 30 years. It is now reaching the end of its useful life. The construction of the Racing and Gaming Facility and potentially connecting horse washing facilities to the plant will alter the strength of the wastewater, making it two to three times the strength of domestic wastewater in terms of biological oxygen demand (BOD), ammonia, and solids content. Effective and available wastewater treatment is critical for operation of the Racing and Gaming Facility. Given the age of the Sewer Plant and its treatment capabilities, the existing plant likely will be insufficient to treat the anticipated wastewater flows and strength from the expanded facility or serve as a consistent long-term treatment alternative. As a result, Penn National must replace the Sewer Plant, and it has obtained land development approvals from the Township to construct a 230,000 gpd annual average replacement wastewater treatment facility (the "Replacement Sewer Plant") that will discharge through the same pipe as the existing facility (which will then be decommissioned).

The new state-of-the-art facility is an activated sludge facility with solid batch reactor (SBR) technology, along with chemical precipitation for enhanced phosphorous removal and tertiary filtration. The Replacement Sewer Plant will cost approximately \$5 million. An NPDES (discharge) permit was issued by the Commonwealth of Pennsylvania, Department of Environmental Protection ("DEP") to permit the discharge of the treated wastewater. A Water Quality Management Part II permit was issued by DEP to permit construction of the Replacement Sewer Plant. The Township has issued a building permit for the Replacement Sewer Plant and a construction contract has been awarded.

Penn National has operated the Sewer Plant for over 30 years without significant violation, interruption or major incident. The Replacement Sewer Plant and conveyance system were designed to meet the long-term needs of the Racing and Gaming Facility. Given Penn National's outstanding compliance history, Penn National's long-term operation of a wastewater treatment plant is the most environmentally sound alternative, and is the only alternative that provides any guaranty of effective wastewater treatment for the Racing and Gaming Facility.

One significant benefit of the Replacement Sewer Plant is potential water reuse. Penn National intends to seek the necessary DEP approvals to reuse treated wastewater from Replacement Sewer Plant for watering its dirt and turf tracks and potentially for use in toilets in the grandstand. The water reuses will result in greater groundwater recharge, will decrease the amount of water withdrawn, and will eliminate the discharge of additional

⁹ Penn National is obligated to provide sewer treatment capacity to the Holiday Inn property pursuant to a long-term agreement with the owner of that property.

nutrients to surface waters (all of which are within the Chesapeake Bay watershed). Without long-term operation of the Replacement Sewer Plant, the water reuses will not be possible.

The Replacement Sewer Plant includes tertiary treatment that will permit the water reuse opportunities. The WQM Part II permit application includes a 150,000 gallon storage tank to store treated wastewater for track watering, and Penn National will seek reuse approval. Penn National estimates that, during peak seasons, as much as 120,000 gallons per day of wastewater will be reused as part of that operation. In addition, MTRA is currently exploring the feasibility of using treated wastewater in toilets within a portion of the Racing and Gaming Facility. It is estimated that, if such reuse is feasible, there will be times where 100% of the treated wastewater is reused. The water reuse will not be possible if Penn National does not operate the Replacement Sewer Plant.

The Township's Board of Supervisors discussed at length whether it should consent to and support the construction of the Replacement Sewer Plant or instead whether Penn National should be required to connect to the Township's sewer system. After much deliberation, the Board of Supervisors formally voted on July 19, 2005 at a public meeting to consent to the construction of the Replacement Treatment Plant. That decision is consistent with the Township's Act 537 sewer plan.¹⁰ That plan provides for and contemplates a private treatment facility at PNR and designates Penn National's facility to serve a "sewer district" consisting of the racetrack, a nearby hotel (Holiday Inn) and an adjacent pizza shop. That is, the Township's current long-term sewer planning contemplates a treatment plant at PNR.

2. Water System

East Hanover Township does not operate a water system. There are no municipal water systems that serve the area of the Property. Rather, the proposed Racing and Gaming Facility will utilize two private wells that are located on the Property. Those wells currently provide water to PNR. They have been operated and used without incident since they were established in 1970. DEP has issued permits for the wells (Permit Nos. 2270502 and 2270502).

Both wells are drilled to a depth of 300 feet. They are tested and monitored regularly. As of September, 2005, one well had a pumping rate of 391 gallons per minute. The other well had a pumping rate of 420 gallons per minute. The wells together have capacity to produce 811 gallons of water per minute. That rate and volume of water is approximately two times the maximum peak demand that the Racing and Gaming Facility is expected to generate.

Moreover, it is anticipated that the proposed Racing and Gaming Facility will improve groundwater recharge. Indeed, the existing grandstand and other improvements will be

¹⁰ Municipalities in Pennsylvania are required to adopt Act 537 plans. These documents set forth the manner in which sewer needs are to be accommodated in all areas of the municipality (i.e. on-lot systems, private treatment plants, public treatment systems, etc.).

demolished. The net result is that with the proposed Racing and Gaming Facility will reduce impervious coverage by at least 20 acres. This reduced impervious coverage will enhance groundwater recharge on the Property. In addition, as noted above, Penn National intends to seek DEP approval to reuse treated wastewater from Replacement Sewer Plant for watering its dirt and turf tracks and potentially for use in toilets in the grandstand. The water reuses will result in greater groundwater recharge, will decrease the amount of water that otherwise would be withdrawn, and will eliminate the discharge of additional nutrients to surface waters (all of which are within the Chesapeake Bay watershed).

Accordingly, the existing wells are more than sufficient to provide water service to the proposed Racing and Gaming Facility and, with the water reuse technologies, it is anticipated that groundwater recharge on the Property substantially will be improved.

F. Impact on Police and Emergency Services

1. Existing Police Services

The Township does not have its own police force. Instead, the Pennsylvania State Police (the "State Police") provides police services to the Township. This arrangement is not uncommon. Of the 2,568 or so municipalities in Pennsylvania, 1,282 are served only by the State Police.¹¹ At least 15 of 40 municipalities located in Dauphin County rely solely on the State Police to provide police services.¹² There are 103 municipalities (including the Township) in Pennsylvania that have 5,000 or more residents and no police force (or only part-time police forces).¹³

East Hanover Township of Lebanon County also does not have its own police force. Like the Township, it relies on the State Police for police services. Given that (i) the proposed Racing and Gaming Facility and all related improvements are located in the Township (not East Hanover Township of Lebanon County), (ii) the proposed Racing and Gaming Facility is to be entered and exited via access drives that are located in the Township (and not in East Hanover Township of Lebanon County) and (iii) the vast majority of motorists are expected utilize Interstate 81 and Bow Creek Road to travel to the proposed Racing and Gaming Facility, this analysis focuses on the police and emergency services that are provided in the Township.

In recent years the Township's rate of incidents has been less than half of the average incident rate utilized by the Governor's Center for Local Government Services. According to the Governor's Center for Local Government Services publication entitled,

¹¹ Bob Stiles, *In Pennsylvania: State Police Fee Plan Has Few Backers*, Daily Courier, August 23, 2004, at 4, available at PittsburghLIVE.com.

¹² We were able to reach 31 of the 40 municipalities in Dauphin County. Accordingly, the actual number of municipalities that exclusively utilize the State Police's services is between 15 and 24.

¹³ Bob Stiles, *In Pennsylvania: State Police Fee Plan Has Few Backers*, Daily Courier, August 23, 2004, at 4, available at PittsburghLIVE.com.

"Administering Police Services in Small Communities," there are annually on average 550 incidents for every 1,000 residents. Based upon the 2000 Census data, the Township has 5,322 residents. Using the 550 incidents/1,000 residents ratio, the estimated number of incidents in the Township is 2,927. The actual number of incidents in the Township in 2002, 2003 and 2004 is 1,480, 1,165 and 1,394, respectively. Those incidents are on average 54% below the number of incidents based on the average incident rate of 550 incidents per 1,000 residents.

The police services that the State Police provides to the Township have been found to be adequate by surveyed residents. In connection with preparing the Regional Comprehensive Plan, the Lower Dauphin Area Regional Planning Group sent surveys to residents of all of the participating municipalities. One question on the survey asked the residents to rate the police services that are provided to the Township. As shown in the results of the survey (a copy of which is attached as Exhibit K), 77% of the respondents who live in the Township indicated that the police services are at least adequate.¹⁴

The State Police publicly has indicated that after the proposed Racing and Gaming Facility is opened, it will be able to continue to provide adequate police services to the entire Township and that, if necessary, additional troopers will be provided. The Township has no current plans to change police services providers or to establish its own police force or a joint or regional police force.

2. Existing Fire and Emergency Medical Services

Fire services are provided to the Township by the Grantville Volunteer Fire Company. This fire company has entered into mutual aid agreements to serve (and receive service from) other municipalities or fire companies, including East Hanover Township of Lebanon County, South Hanover Township, West Hanover Township and Palmyra. The Grantville Volunteer Fire Company has the ability and equipment to serve the proposed Racing and Gaming Facility. In fact, it currently serves PNR. PNR currently allows the Grantville Volunteer Fire Company to utilize PNR's on-site wells to refill fire trucks.

Emergency medical (ambulance and paramedic) services are provided by South Central Emergency Medical Services. That provider serves numerous municipalities in the Lower Dauphin area.

As noted in the Regional Comprehensive Plan, fire protection and emergency medical services were rated the highest amongst all of the public services that are provided to the municipalities within the Lower Dauphin School District.

3. Anticipated Impact of Racing and Gaming Facility

¹⁴ Fourteen percent (14%) rated the services as excellent, 35% rated the services as good and 28% rated the services as adequate. Thirteen percent (13%) reported the police services as being poor and 10% offered no opinion.

The proposed Racing and Gaming Facility is not expected to significantly increase the number of incidents in the Township. This conclusion is based in part upon the insignificant impact that Charles Town Races & Slots has had on police and emergency services in Charles Town, West Virginia. Charles Town Races & Slots is operated by Penn National and is located in Jefferson County. It is very similar to the proposed Racing and Gaming Facility in terms of size and operation. Charles Town Races & Slots consists of a horse racing track and more than 4,000 slot machines.

It is not anticipated that the proposed Racing and Gaming Facility will have any impact on police services. The following are excerpts from recent letters of support (attached as Exhibit L) from the Chiefs of Police for the Charles Town and Ranson Police Departments. These letters indicate that Charles Town Racing & Slots has not had any effect on crime statistics:

Since the implementation of the video lottery in our community, there has been no increase in area crimes that can be contributed to the gaming facility." - *William Roper, Chief of Police, City of Ranson Police Department, Ranson, W. Va.*

This office has seen no indicator or trend that the corporation's operations have caused any increase or change in our crime statistics." - *W.M. Aldridge, Chief of Police, City of Charles Town Police Department, Charles Town, W. Va.*

Moreover, the following is an excerpt from an article in the August 6, 2004 edition of the *Washington Times* (attached as Exhibit M). This article also supports this same conclusion:

John Melton, a lawyer with West Virginia's lottery commission, acknowledges some increase in vehicle violations, but he attributed it to the increased number of track customers who come to play the slots machine.

However, Mr. Melton said municipalities around Charles Town Races & Slots, which borders Maryland, have reported either decreases or no increases in major crimes.

He said according to the most recent statistics, Charles Town had no reported arsons or sexual assaults in 2003-04 and calls for burglaries and narcotics significantly decreased. There were seven reported burglaries during that period, 12 fewer than the year before. And the number of narcotics calls had decreased by 15 from 2002-03 to 2003-04.

Accordingly, the proposed Racing and Gaming Facility is not expected to have any impact on the adequate level of police services that are provided to the Township.

Charles Town Races & Slots has not had any significant effect on the fire departments that serve Jefferson County. In fact, in 2003 the total fire calls for all five fire departments in Jefferson County totaled 863. Over the past six and one-half years, there

were 22 Fire calls to Charles Town Races & Slots, which is less than four fire calls to the track per year.

Moreover, PNRK currently has an on-site fire truck and other fire equipment that is operated by trained personnel, and more than sufficient water supply. This fire response team currently is the first responder to any fires that occur on site and will continue to be the first responder at the proposed Racing and Gaming Facility.

Nor has Charles Town Races & Slots had any significant effect the provider of emergency medical services in Charles Town. The following information was provided by the Jefferson County Ambulance Authority and shows the total number of emergency medical services calls in the county for the last 10 years (column two) as well as the number of calls specifically to Charles Town Races & Slots (column three.)

YEAR	EMS	CT RACES	% OF CALLS	FIRES	FIRE LOSS	TYPE
1995	1471	*				
1996	1498	*				
1997	1638	*				
1998	1452	3**				
1999	1603	16	1.0	3	\$0	Rubbish
2000	1685	47	2.8	3	\$2,500	Auto
2001	1857	79	4.3	3	\$0	Rubbish / EMS Assist
2002	2057	142	6.9	5	\$0	Electrical & Rubbish
2003	2236	123	5.5	6	\$300,000	Business & Rubbish / EMS Assist
2004	1686***	125***	7.4	2	\$0	MVA / EMS Assist
<p>*Manual -- No Data **Partial Year Data ***YTD as of 9/30/04</p>						

As shown on this chart, over the last five years, Charles Township Race & Slots has accounted for only about four percent of the total number of incidents.

In addition, Penn National will hire and train its own security teams to provide for guest safety, including surveillance of the interior facility and exterior parking lot, and security units that patrol the grounds. At Charles Town Races & Slots, there are more than 100 guest safety employees, with an annual security payroll of \$2.8 million. The surveillance team there has 14 employees.

Many of these men and women have EMT training and serve as "first responders" in the event of an accident or medical emergency. Others are trained to investigate thefts, detain suspects or check IDs to keep out underage individuals. The proposed Racing and Gaming Facility is not expected to have any impact on South Central Emergency Medical Services' ability to serve its current service area.

Accordingly, given (i) the adequacy of the existing police and emergency services that are provided to the Township, (ii) the fact that the proposed Racing and Gaming Facility

will have its own team of "first responders" and (iii) the actual, minimal impact that a similar facility had on such services in Charles Town, the proposed Racing and Gaming Facility is not expected to adversely affect the adequate police and emergency services that are provided to the Township.

G. Impact on Tourism

The Hershey area is a hotbed of tourism in Central Pennsylvania. It is the home to Hershey Park, Giant Center, The Hotel Hershey, the Outlets at Hershey and other significant tourist attractions, including Penn National Race Course, which is a featured attraction in the Hershey Capital Region Visitors Bureau's publications. In fact, spending by travelers in Dauphin County totaled \$1,147 million in 2003, which is a two percent increase over 2002's total of \$1,123 million.¹⁵ Travelers spent \$242 million in lodging, \$188 million at restaurants and \$717 million on a broad range of goods and services, including transportation, entertainment and shopping.¹⁶

Given the close proximity of these attractions to the proposed Racing and Gaming Facility, it is anticipated that the proposed Racing and Gaming Facility not only will increase tourist revenue at these attractions and generally in the Hershey area, but will further distinguish the Hershey area as a unique, focal point of travel in Central Pennsylvania. As such, Mr. Gary Luderitz, General Manager of the proposed Racing and Gaming Facility, was pleased to accept an invitation by the Dauphin County Commissioners to serve on the restructured Hershey Harrisburg Regional Tourism Bureau to work together with area business leaders in Dauphin, Franklin and Perry Counties to drive additional tourism into the region. In addition, Penn National Race Course is a proud member of the African American Chamber of Commerce of Central Pennsylvania.

In an effort to keep the regional business community informed of its plans for Penn National Race Course, company representatives recently met with the local Business Association of three townships in Greater Harrisburg.

H. Impact on Historical and Cultural Resources

¹⁵ As reported by Hershey Capital Region Visitors Bureau and based on findings of *The Economic Impact of Travel & Tourism in Pennsylvania*, prepared by Global Insight and D.K. Shifflet & Associates Ltd. Spending includes transportation, food and beverage, lodging, shopping and entertainment.

¹⁶ As reported by Hershey Capital Region Visitors Bureau and based on findings of *The Economic Impact of Travel & Tourism in Pennsylvania*, prepared by Global Insight and D.K. Shifflet & Associates Ltd.

The Racing and Gaming Facility will have no adverse impact on historical or cultural resources. In connection with Penn National's applications for permits from DEP, the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation (the "PHMC"), reviewed the project to determine whether there will be any adverse effect on historic and archaeological resources. Based upon its review, the PHMC determined that there are no National Register eligible or listed historic or archaeological properties in the area of the project and that the project, therefore, is "unlikely to affect archaeological or historical resources." Copies of the PHMC's written determinations are attached as Exhibit N.

In addition, a Pennsylvania Natural Diversity Inventory Search Form was completed and submitted to the Dauphin County Conservation District (the "DCCD"). The purpose of this form is to provide information to the Pennsylvania Department of Conservation and Natural Resources so that it may perform a screening for species of special concern that are listed in the Endangered Species Act of 1973, the Wild Resource Conservation Act, the Pennsylvania Fish and Boat Code and the Pennsylvania Game and Wildlife Code. That screening was performed and identified no potential conflicts with species of special concern. A copy of that determination is attached as Exhibit O.

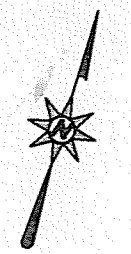
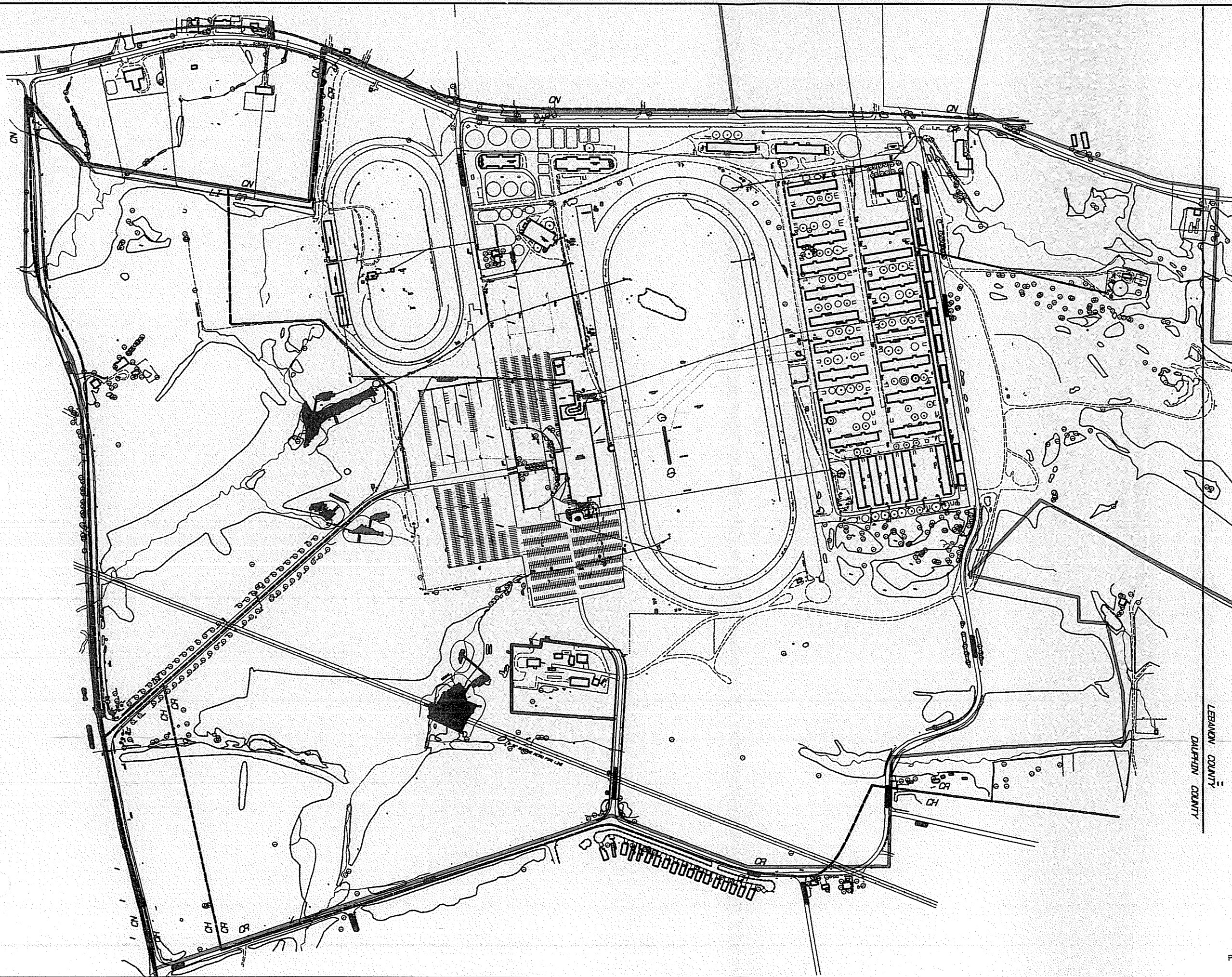
Accordingly, the Racing and Gaming Facility will have no adverse impact on historical or cultural resources or any protected species.

EXHIBIT A



McCarthy Engineering
ASSOCIATES, P.C.
Professional Engineers, Planners and Surveyors
1121 Snyder Road, West Lawn, PA 19609
Phone (610) 313-8001 Phone (717) 484-2146 Fax (610) 313-8011
WWW.MEASSOC.COM

EXHIBIT B



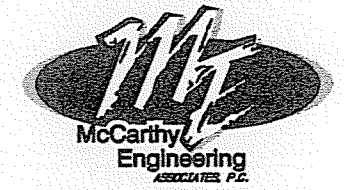
GRAPHIC SCALE

1" = 500'



LEAMAN COUNTY
DUPON COUNTY

OVERALL EXISTING SITE "

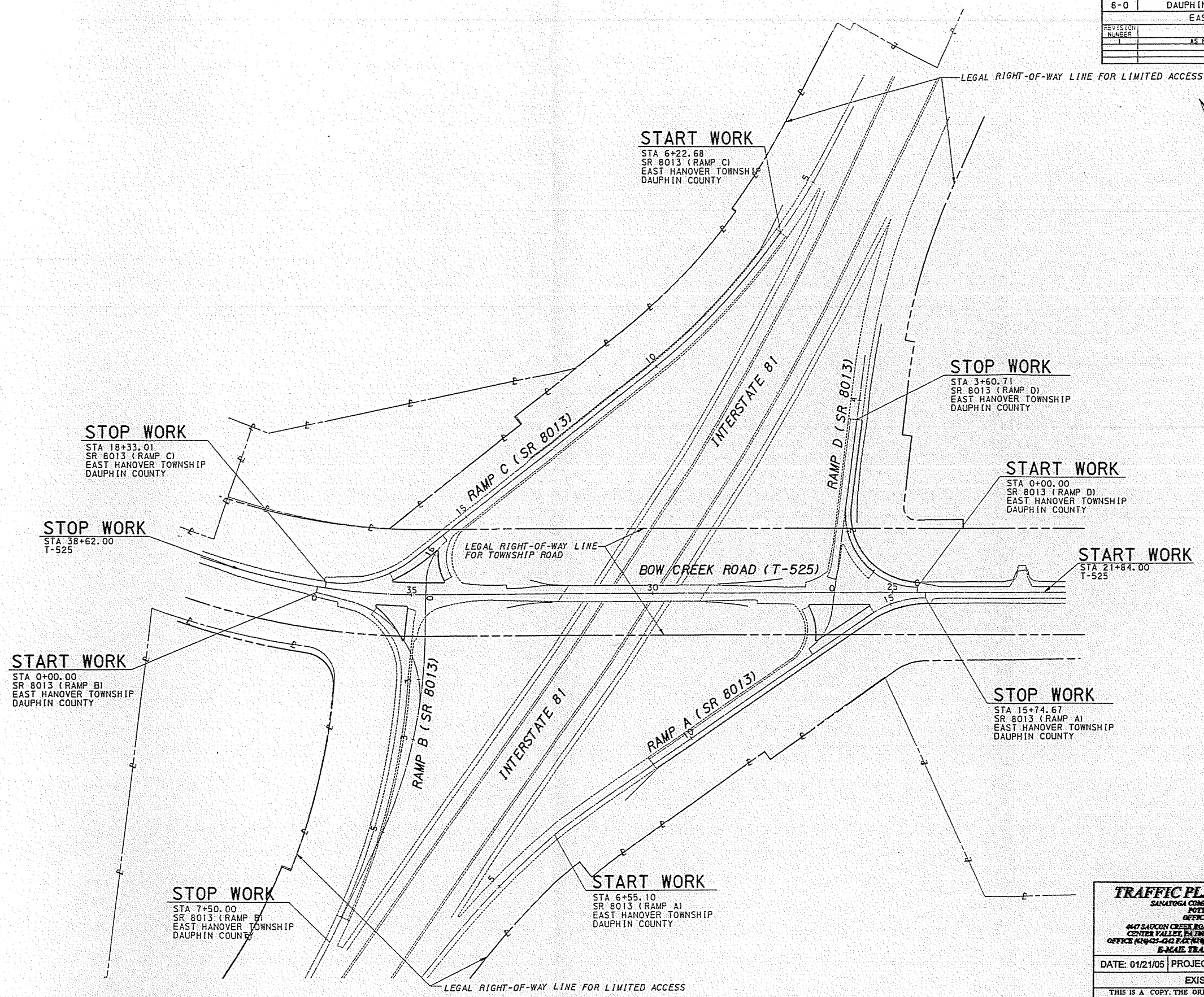
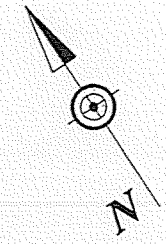


Professional Engineers, Planners and Surveyors

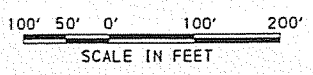
1121 Snyder Road, West Lawn, PA 19609
 Phone (610) 373-8001 Phone (717) 484-2146 Fax (610) 373-8077
 WWW.MEASSOC.COM

EXHIBIT C

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	8013	N/A	2 of 95
EAST HANOVER TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	
1	AS PER COMMENTS 05-18-2005	05-2005	LH	



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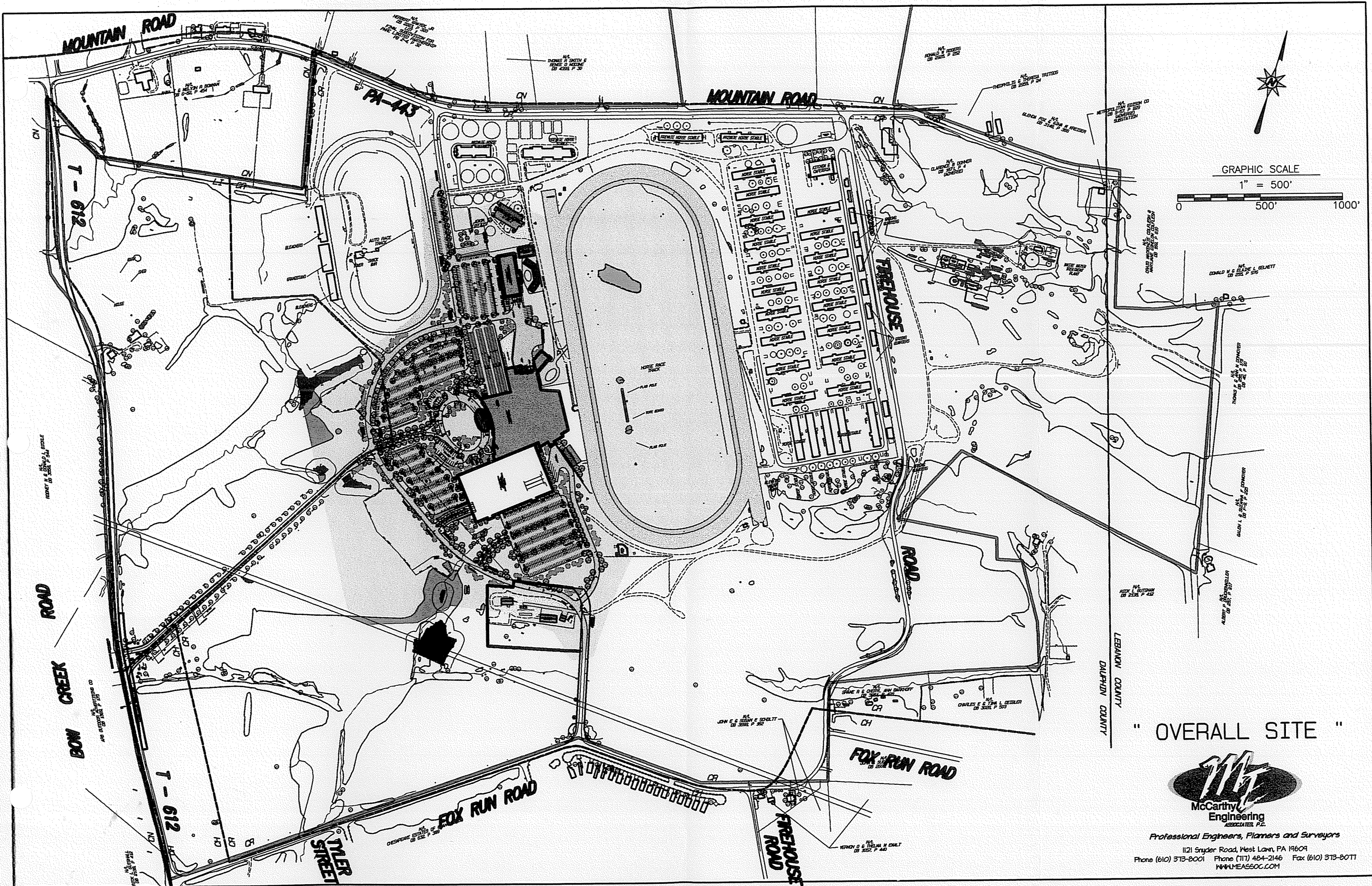
TRAFFIC PLANNING & DESIGN, INC.
 SANITOGA COMMONS, 290 EAST BIRCH STREET, SUITE 608
 PITTSBURGH, PENNSYLVANIA 15201
 OFFICE (412) 324-1400 FAX (412) 324-1409
 440 SAFFRON CREEK ROAD / 100 LINGLESTOWN ROAD
 CENTER VALLEY, PA 16834 / HARRISBURG, PA 17118
 OFFICE (717) 234-1400 FAX (717) 234-4009
 E-MAIL: TRAFFIC@TPD.COM TRAFFIC@TPD.COM

DATE: 01/21/05 PROJECT DESIGNER: RGP JOB NO: PNGLB.00001

EXISTING CONDITION PLAN

THIS IS A COPY. THE ORIGINAL DRAWING IS ON FILE WITH TRAFFIC PLANNING AND DESIGN, INC. ANY AND ALL LIABILITY IS LIMITED TO THE ORIGINAL UP TO AND INCLUDING THE LAST REVISIONS. (P/NR/TEL)

EXHIBIT D



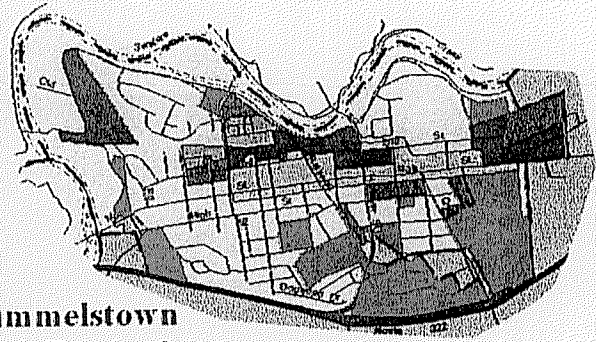
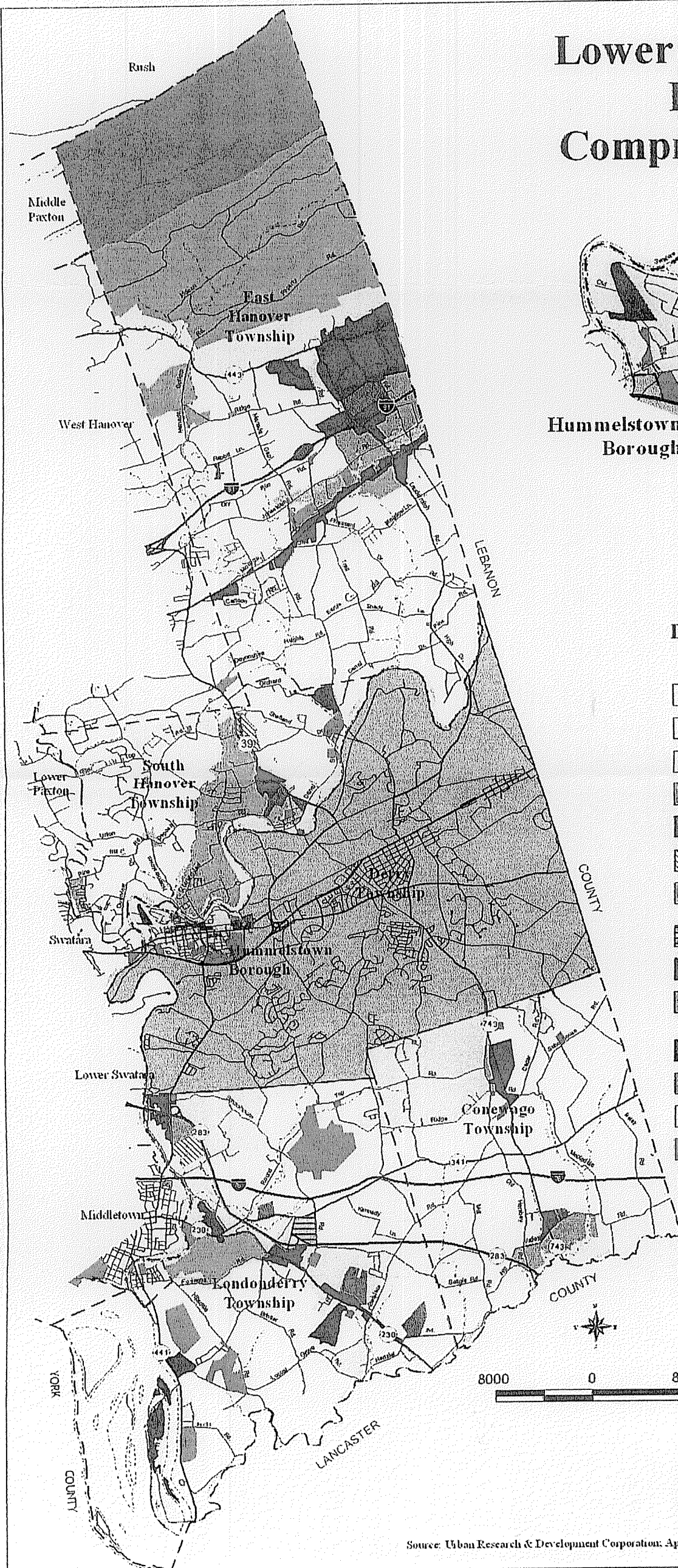
" OVERALL SITE "



McCarthy Engineering Associates, P.C.
 Professional Engineers, Planners and Surveyors
 1121 Snyder Road, West Lawn, PA 19604
 Phone (610) 373-8001 Phone (117) 484-2146 Fax (610) 373-8011
 WWW.MEASSOC.COM

EXHIBIT E

Lower Dauphin Area Regional Comprehensive Plan



Hummelstown
Borough



3000 0 3000 Feet

MAP 3.1

Draft Land Use Plan

- Rural
- Agricultural Conservation
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Office
- Village or Town Center
(Mixed Light Commercial & Residential)
- Commercial Business Park
- Commercial
- Light Industrial
(Some Commercial Uses Allowed)
- General Industrial
- Military
- Conservation
- Major Community Facilities,
Parks & Recreation



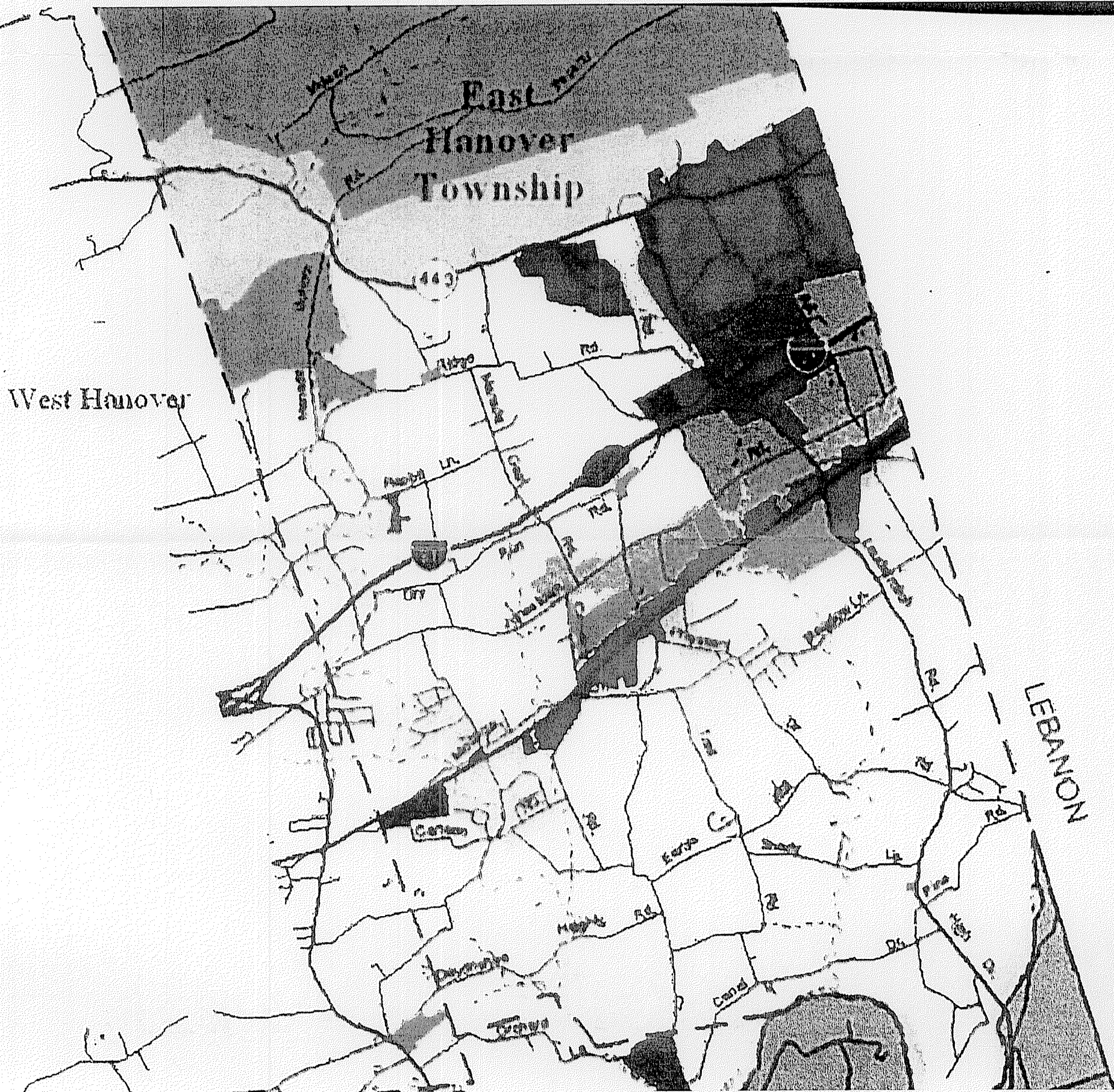
8000 0 8000 Feet



Community Planning Consultants
Urban Research & Development Corporation
24 East 10th Street • Carlisle, Pennsylvania 17015 • 717-655-0701

Source: Urban Research & Development Corporation; April 2003.

EXHIBIT F



East Hanover Township

West Hanover

LEBANON

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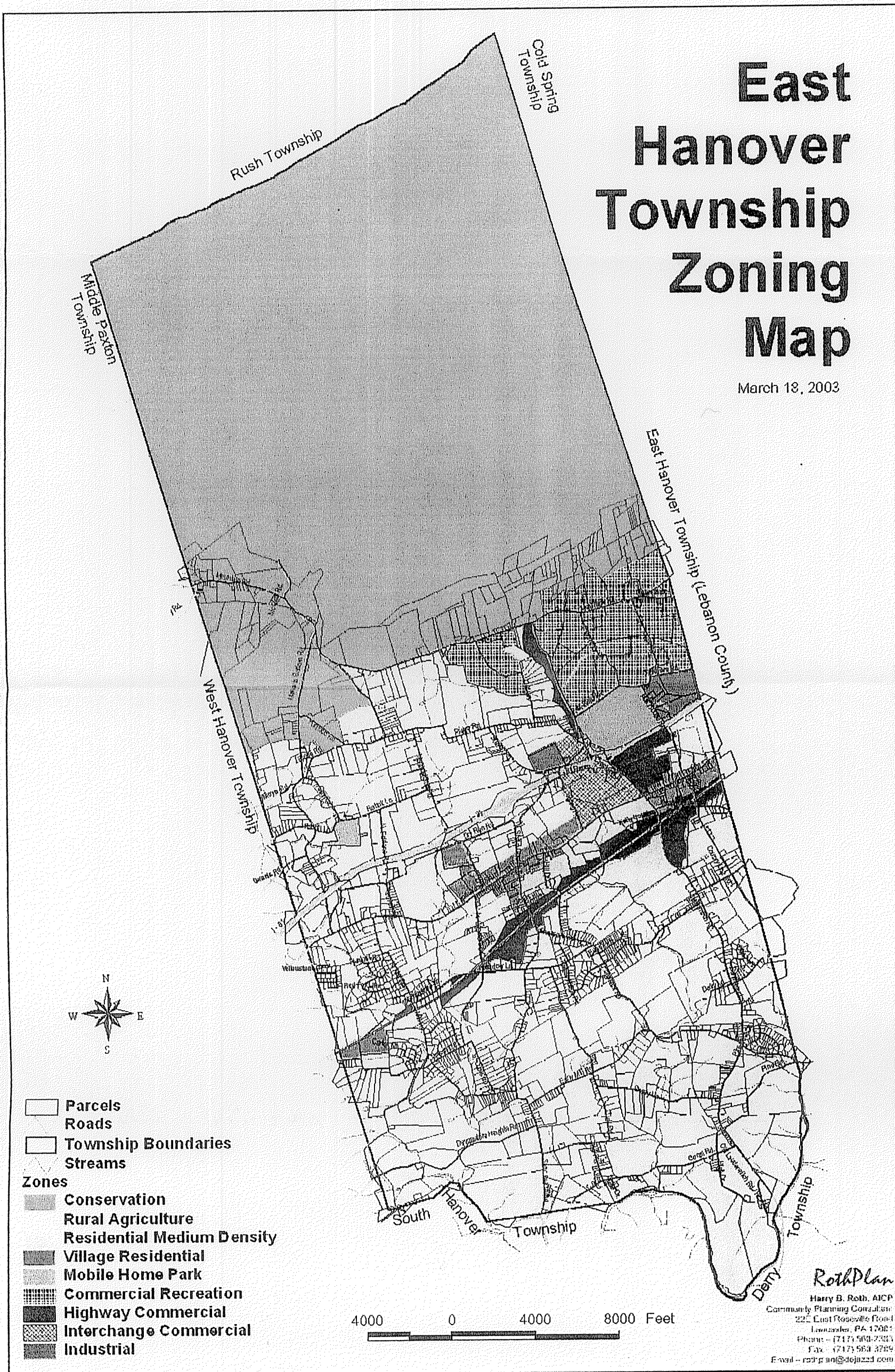
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1070

EXHIBIT G

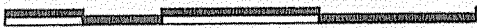
East Hanover Township Zoning Map

March 18, 2003



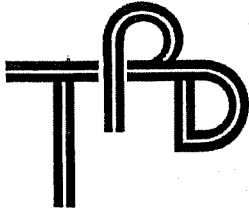
- Parcels
- Roads
- Township Boundaries
- Streams
- Zones**
- Conservation
- Rural Agriculture
- Residential Medium Density
- Village Residential
- Mobile Home Park
- Commercial Recreation
- Highway Commercial
- Interchange Commercial
- Industrial

4000 0 4000 8000 Feet



RothPlan
 Harry B. Roth, AICP
 Community Planning Consultant
 222 East Roseville Road
 Lancaster, PA 17601
 Phone - (717) 569-2333
 Fax - (717) 569-3769
 E-mail - rothplan@dejazz.com

EXHIBIT H



TRAFFIC PLANNING AND DESIGN, INC.

**PENN NATIONAL RACE COURSE EXPANSION
EAST HANOVER TOWNSHIP, DAUPHIN COUNTY
TRAFFIC IMPACT STUDY**

**FOR SUBMISSION TO
PENNDOT DISTRICT 8-0**

TPD# PNGLA.00001

- Transportation Planning
- Highway Design
- Bridge Design and Inspection
- Closed Loop Traffic Signal Design
- Municipal Design and Review Services
- Noise and Air Quality Studies
- Environmental Services
- Construction Management

TrafficPD.com

Pottstown, PA
(610) 326-3100

Harrisburg, PA
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Lehigh Valley, PA
(610) 625-4242

**PENN NATIONAL RACE COURSE EXPANSION
EAST HANOVER TOWNSHIP, DAUPHIN COUNTY
TRAFFIC IMPACT STUDY**

**FOR SUBMISSION TO
PENNDOT DISTRICT 8-0**

TPD# PNGI.A.00001

**October 9, 2003
(revised September 14, 2004)**

**Prepared by:
Traffic Planning and Design, Inc.
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(610) 326-3100
(610) 326-9410 (fax)
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Respectfully submitted,

TRAFFIC PLANNING AND DESIGN, INC.

TPD Contact: John M. Pyne

C. Donald Jacobs

**C. Donald Jacobs, P.E.
Executive Vice-President
PENNSYLVANIA P.E. NO. 056341-E**

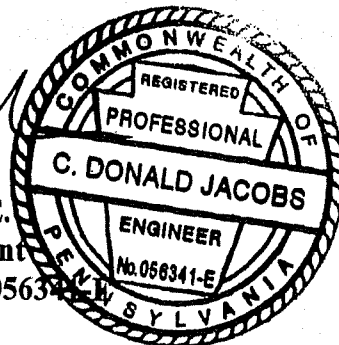


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Appendix G:	Signal Warrant Analyses Worksheets
Appendix H:	Crash Investigation
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EXECUTIVE SUMMARY

The purpose of this study is to examine the potential traffic impact of the proposed expansion to the Penn National Race Course on the surrounding transportation system in East Hanover Township, Dauphin County, Pennsylvania. Upon completion of the traffic impact study, the following has been determined:

- The site is located on the eastern side of Bow Creek Road, north of the I-81 interchange, in East Hanover Township, Dauphin County, Pennsylvania. The Penn National Race Course expansion will consist of a 200,000 square foot structure at the existing Grantville racetrack, that when fully developed, will house approximately 3,000 slot machines, and associated support services including a food court.
- The main access to the development will be provided via the existing full-access driveway to Bow Creek Road. The site is currently served, and will continue to be served by two secondary access points, one to Fox Run Road and one to Mountain Road. It is anticipated based on the location and improvements to the main access to Bow Creek Road, that the vast majority of the traffic generated will utilize the improved main access point.
- The developer has proposed the following on-site improvements:
 - Realignment of the Penn National main site driveway to intersect Bow Creek Road at an approximate 90° angle. The realigned section of the driveway will provide access for the entering left turn movement, as well as exiting left and right turn movements. The realigned section of the driveway will have a 28-foot wide cartway, to provide for 12-foot wide entering and exiting lanes, and a 4-foot wide paved shoulder on the northern side (exiting approach). A channelized right-turn lane will also be constructed at the driveway entrance. The channelized right turn lane will be 12-foot wide lane with a 4 foot wide paved shoulder. Thus, the approach to the Penn National Race Course will consist of two inbound travel lanes for approximately 300 feet, with a lane drop and lane transition taking place at a point after that distance;
 - Construction of a 250-foot deceleration lane with a 125-foot taper on the northbound Bow Creek Road approach to the Penn National Race Course driveway to safely and efficiently accommodate the entering right-turn movement;
 - Removal of an on-site embankment to the north of the existing Bow Creek Road driveway location to provide the required sight distance per AASHTO requirements.
- The developer has proposed the following improvements to mitigate existing and future Level of Service deficiencies at the study area intersections:
 - Signalize and reconfigure/realign the I-81 interchange intersections with Bow Creek Road. The signalization and reconfiguration/realignment should include construction of a 275-foot left-turn lane on the I-81 SB off-ramp. Additionally, a 545-foot left-turn lane will be constructed on the I-81 NB off-ramp;

- In addition to the above referenced improvements, the developer is proposing to maximize widening outside the bridge limits to construct/stripe 100-foot left-turn lanes on Bow Creek Road at the I-81 interchange intersections and install overhead lane use control. This is proposed due to the fact that the width of the Bow Creek Road bridge over I-81 is not wide enough to support fully shadowed left turn lanes. With respect to the I-81 improvements, Penn National Gaming is willing to install either of the above-referenced improvements (with or without left-turn lanes on Bow Creek Road). As such, the alternative improvement plan (with the addition of left-turn lanes on Bow Creek Road) has also been submitted for the Department's review.
- Signalize the intersection of Laudermilch Road/Bow Creek Road and Jonestown Road;
- The improvements outlined above should be implemented to improve existing and future level of service deficiencies, offset level of service impacts, and to provide safe and efficient access to the proposed development.
- Level of service matrices for the study area intersections and proposed site driveways are shown in Tables I and II on the following pages for the weekday P.M. and Saturday evening peak hours, respectively.

**TABLE I
LEVEL OF SERVICE SUMMARY**

Intersection	Movement	WEEKDAY P.M. PEAK HOUR LOS							
		2003	2004	2004	2009	2009	2014	2014	
		Existing	Base	Projected*	Base	Projected*	Base	Projected*	
Bow Creek Road & Mountain Road (Route 443)	WBL	A	A	A	A	A	A	A	
	NB	B	B	B	B	B	B	B	
Bow Creek Road & Fox Run Road	WB	B	B	D	B	D	B	E	
	SBL	A	A	A	A	A	A	A	
Fox Run Road & Firehouse Road	WBL	A	A	A	A	A	A	A	
	NB	A	A	A	A	A	A	A	
Bow Creek Road & SB I-81 On/Off-Ramps	WBL	D	E	C	F	C	F	C	
	WBR	B	B	D/C	B	C	B	C	
	NBL	A	A	A	A	A	A	A	
	NBT	---	---		A		---		A
	SBT	---	---	A	---	A	---	A	
Bow Creek Road & NB I-81 On/Off-Ramps	EBL	D	E	C	F	C	F	C	
	EBR	B	B	C	B	C	C	D/C	
	NBT	---	---	A	---	A	---	A	
	SBL	A	A	A	A	B	A	A	
	SBT	---	---		A		---		A
Laudermilch Road (S.R. 2025)/Bow Creek Road & Jonestown Road	EB	E	F	D	F	D	F	D	
	WB	E	F	D	F	D	F	D	
	NBL	A	A	A	A	A	A	A	
	NBT/R	---	---		---				
	SBL	A	A	A	A	A	A	A	
	SBT/R	---	---		---				
Route 743/Laudermilch Road & Route 22	EBL	D	D	D	D	D (D)	D	D (D)	
	EBT	C	D	C	D	C (D)	D	D (D)	
	EBR	C	C	C	C	C (C)	C	C (C)	
	WBL	D	D	D	D	D (D)	D	D (D)	
	WBT	C	C	C	C	C (D)	C	C (D)	
	WBR	C	C	C	C	C (C)	C	C (C)	
	NBL/T	B	B	B	B	C (B)	C	C (B)	
	NBR	B	B	B	B	B (A)	B	B (A)	
	SB	B	C	D	D	F (D)	F (130.2)	F (F 123.3)	
Bow Creek Road & Site Driveway	WB	---	---	C	---	C	---	C	
	SBL	---	---	A	---	A	---	A	
Fox Run Road & Site Driveway	EBL	---	---	A	---	A	---	A	
	SB	---	---	A	---	A	---	A	

* = With Implementation of Developer Proposed Improvements
A/A = Without/With Proposed Bow Creek Road Left-Turn Lanes
(A) = If Signal Timing Modifications are Implemented

**TABLE II
LEVEL OF SERVICE SUMMARY**

Intersection	Movement	SATURDAY EVENING PEAK HOUR LOS									
		2003	2004	2004	2009	2009	2014	2014			
		Existing	Base	Projected*	Base	Projected*	Base	Projected*			
Bow Creek Road & Mountain Road (Route 443)	WBL	A	A	A	A	A	A	A			
	NB	A	B	B	B	B	B	B			
Bow Creek Road & Fox Run Road	WB	B	B	F	B	F	C	F			
	SBL	A	A	A	A	A	A	A			
Fox Run Road & Firehouse Road	WBL	A	A	A	A	A	A	A			
	NB	A	A	A	A	A	A	A			
Bow Creek Road & SB I-81 On/Off-Ramps	WBL	F	F	C	F	C	F	C			
	WBR	B	B	D	B	D	B	D			
	NBL	A	A	B	A	A	B	A	C	A	
	NBT	---	---		A	---		A		---	A
	SBT	---	---	A	---	A	---	A			
Bow Creek Road & NB I-81 On/Off-Ramps	EBL	F	F	D/C	F	D	F	D			
	EBR	B	B	B	B	B	B	B			
	NBT	---	---	B	---	B	---	B			
	SBL	A	A	B	B	A	C	B	A	D	C
	SBT	---	---		A	---		B	---		B
Laudermilch Road (S.R. 2025)/Bow Creek Road & Jonestown Road	EB	D	E	D	F	D	F	D			
	WB	C	E	D	F	D	F	D			
	NBL	A	A	A	A	A	A	A			
	NBT/R	---	---		---						
	SBL	A	A	A	A	A	A	A			
	SBT/R	---	---		---						
Route 743/Laudermilch Road & Route 22	EBL	C	C	C	C	C	C	C			
	EBT	B	C	C	C	C	C	C			
	EBR	B	C	C	C	C	C	C			
	WBL	C	C	C	C	C	C	C			
	WBT	B	C	C	C	C	C	C			
	WBR	B	C	C	C	C	C	C			
	NBL/T	B	B	B	B	B	B	B	C		
	NBR	A	A	A	A	A	A	A			
	SB	B	B	B	B	B	B	B	C		
Bow Creek Road & Site Driveway	WB	---	---	D	---	E	---	E			
	SBL	---	---	A	---	A	---	A			
Fox Run Road & Site Driveway	EBL	---	---	A	---	A	---	A			
	SB	---	---	A	---	B	---	B			

* = With Implementation of Developer Proposed Improvements
A/A = Without/With Proposed Bow Creek Road Left-Turn Lanes
(A) = If Signal Timing Modifications are Implemented

INTRODUCTION

Traffic Planning and Design, Inc. (TPD) has completed a traffic impact study (TIS) for the proposed expansion to the Penn National Race Course. The site is located on the eastern side of Bow Creek Road, north of the I-81 interchange, in East Hanover Township, Dauphin County, Pennsylvania (Figure 1). As shown in Figure 2, The Penn National Race Course expansion will consist of a 200,000 square foot structure at the existing Grantville racetrack, that when fully developed, will house approximately 3,000 slot machines, and associated support services including a food court.

EXISTING ROAD NETWORK

A review of the existing roadway system in the study area is as follows:

Mountain Road (Route 443, S.R. 0443) is a two lane, east-west rural minor collector roadway with a posted speed limit of 45 m.p.h. in the vicinity of the site. In the vicinity of the site, Mountain Road has 10 foot wide travel lanes. Both the pavement surface and the pavement markings are in fair condition.

Bow Creek Road is a two lane, north-south local roadway with no posted speed limit in the vicinity of the site. It intersects Mountain Road at an unsignalized "T" intersection, with Bow Creek Road being the STOP-controlled approach. In the vicinity of the site, Bow Creek Road has 12-foot wide travel lanes with paved shoulders ranging from 1 to 8 feet wide. Both the pavement surface and the pavement markings are in good condition. It should be noted that south of Jonestown Road, Bow Creek Road becomes Laudermilch Road (S.R. 2025). South of Route 22, Laudermilch Road (S.R. 2025) becomes Route 743 (S.R. 0743).

Fox Run Road is a two lane, east-west local roadway with no posted speed limit in the vicinity of the site. It intersects Bow Creek Road at an unsignalized "T" intersection, with Fox Run Road being the STOP-controlled approach.

Fire House Road is a two lane, east-west local roadway with no posted speed limit in the vicinity of the site. It intersects Bow Creek Road at an unsignalized "T" intersection, with Fox Run Road being the STOP-controlled approach. Both the pavement surface and the pavement markings are in good condition.

Interstate-81 (I-81) is a north-south Interstate with an interchange at Bow Creek Road (Interchange 80). Both the northbound and southbound on/off ramp intersections with Bow Creek Road are unsignalized. I-81 travels through Harrisburg to the south and Scranton/Wilkes-Barre to the north.

Route 22 (S.R. 0022) is four lane, east-west rural minor arterial with a posted speed limit of 50 m.p.h. in the vicinity of the site. At its signalized intersection with Laudermilch Road/Route 743, Route 22 has separate right-turn and left-turn lanes in both the eastbound and westbound directions. In the vicinity of the site, Route 22 has 12 foot wide travel lanes. Both the pavement surface and the pavement markings are in good condition.

Jonestown Road is a two lane, east-west local roadway with a posted speed limit of 35 m.p.h. in the vicinity of the site. It intersects Bow Creek Road at an unsignalized "T" intersection, with Jonestown Road being the STOP-controlled approach. In the vicinity of the study area, Jonestown Road has 11-foot wide travel lanes with paved shoulders ranging from 1 to 3 feet wide. Both the pavement surface and the pavement markings are in good condition

Figure 3 shows the existing lane configurations and intersection controls at the study area intersections.

SITE ACCESS

The main access to the development will be provided via the existing full-access driveway to Bow Creek Road. Currently the driveway approach to Bow Creek Road is skewed, such that vehicles make a sweeping left turn to enter from southbound Bow Creek Road and a very tight right turn to exit northbound on Bow Creek Road. TPD recommends that the site driveway be realigned to intersect Bow Creek Road at an approximate 90° angle. Under this configuration, TPD recommends providing an entering channelized right turn lane. The realigned section of the driveway would provide access for the entering left turn movements, as well as exiting left and right turn movements. The realigned section of the driveway should be designed with a 28-foot wide cartway, to provide for 12-foot wide entering and exiting lanes, and a 4-foot wide paved shoulder on the northern side (exiting approach). The channelized right turn lane should be designed with a 12-foot wide lane with a 4 foot wide paved shoulder. The existing approach to the Penn National Race Course should consist of two inbound travel lanes for approximately 300 feet, with a lane drop and lane transition taking place at a point after that distance. This improvement is depicted on the latest land development plans prepared by McCarthy Engineering Associates.

The site is currently served (and will continue to be served) by two secondary access points, one to Fox Run Road and one to Mountain Road. Based on the location and improvements to the main access to Bow Creek Road, it is anticipated that the vast majority of the new site-generated traffic will utilize the improved main access point.

SIGHT DISTANCE ANALYSIS

A sight distance analysis was performed for the main site driveway intersection with Bow Creek Road. In general, recommended safe sight distances depend upon the posted speed limit, roadway grades, and the number of travel lanes. The existing sight distances were measured and compared to PennDOT's safe stopping sight distance (SSSD) standard as calculated by the following equation:

$$SSSD = 1.47VT + V^2/[30(ftg)]$$

SSSD = safe stopping sight distance (acceptable sight distance)

V = Travel Speed (mph)

T = Perception Reaction Time of Driver (2.5 seconds)

f = Coefficient of Friction for Wet Pavements (average of 0.30)

g = Percent of Roadway Grade Divided by 100

PennDOT's safe stopping sight distance standards both meet or exceed the stopping sight distance requirements as specified in A Policy on Geometric Design of Highways and Streets, of the American Association of State Highway and Transportation Officials (AASHTO), Chapter III, "Elements of Design," 2001.

Tables 1 shows the existing, and acceptable sight distances for exiting and entering movements at the site drive intersection with Bow Creek Road.

**TABLE 1
SIGHT DISTANCE ANALYSIS FOR
SITE DRIVE LOCATION ON BOW CREEK ROAD**

	Direction	Travel Speed ¹ (mph)	Sight Distances (feet)		
			Grade (%)	ACC	EXIST
Exiting Movements	To the Left	55	-3	576	637
	To the Right	55	-1	550	700+ ²
Entering Left Turns	Approaching same direction	55	-1	550	1000
	Approaching opposite direction	55	-3	576	600+

ACC = PennDOT Acceptable Sight Distance
EXIST = Existing (measured) Sight Distance
Grade = Roadway grade approaching driveway

1 = No posted speed limit, assumed 55 mph
2 = Assumes the removal of an on-site embankment

As shown in Table 1, with the removal of an on-site embankment to the north of the driveway, the sight distances for the Penn National Race Course site driveway will exceed PennDOT's sight distance criteria in all applicable cases.

PLANNED ROADWAY IMPROVEMENTS

Programmed Improvements

Based on TPD's review of PennDOT's 12 Year Plan, there are currently no programmed roadway improvements in the vicinity of the site.

Developer Proposed Improvements

In addition to the driveway improvements near Bow Creek Road, the following roadway improvements are proposed in conjunction with the expansion at the Penn National Race Course:

- Signalize and reconfigure/realign the I-81 interchange intersections with Bow Creek Road. The signalization and reconfiguration/realignment should include construction of a 275-foot left-turn lane on the I-81 SB off-ramp. Additionally, a 545-foot left-turn lane will be constructed on the I-81 NB off-ramp;
- In addition to the above referenced improvements, the developer is proposing to maximize widening outside the bridge limits to construct/stripe 100-foot left-turn lanes on Bow Creek Road at the I-81 interchange intersections and install overhead lane use control. This is proposed due to the fact that the width of the Bow Creek Road bridge over I-81 is not wide

enough to support fully shadowed left turn lanes. With respect to the I-81 improvements, Penn National Gaming is willing to install either of the above-referenced improvements (with or without left turn lanes on Bow Creek Road). As such, the alternative improvement plan (with the addition of left turn lanes on Bow Creek Road) has also been submitted for the Department's review.

- Signalize the intersection of Laudermilch Road/Bow Creek Road and Jonestown Road.

The future lane configurations and intersection controls with the proposed expansion of the Penn National Race Course are shown in Figure 4.

EXISTING TRAFFIC VOLUMES

Manual traffic counts were conducted during the weekday P.M. (4:00-6:00 P.M.) and Saturday evening (5:00-9:00 P.M.) peak hours of adjacent street traffic at the following intersections:

- Bow Creek Road and Mountain Road;
- Bow Creek Road and the Penn National Site Driveway;
- Bow Creek Road and Fox Run Road;
- Fox Run Road and Fire House Road;
- Laudermilch Road/Bow Creek Road and Jonestown Road;
- Route 743/Laudermilch Road and Route 22.

The counts were taken at fifteen-minute intervals on the following days:

- Tuesday, May 6, 2003;
- Saturday, May 10, 2003;
- Friday, August 22, 2003;
- Saturday, August 23, 2003;
- Friday, August 13, 2004;
- Saturday, August 14, 2004.

The existing condition traffic volumes for the following intersections were obtained from the 3/23/01 Traffic Impact Study (TIS) for Napa Transportation, Inc. completed by TPD, and subsequently utilized in the 3/11/03 TIS for Station Road Truck Terminal completed by Trans Associates:

- Bow Creek Road and I-81 Southbound on/off ramps;
- Bow Creek Road and I-81 Northbound on/off ramps.

The traffic counts taken for Napa Transportation, Inc. were taken at fifteen-minute intervals in March of 2001. It should be noted that in order to account for possible growth, the existing condition traffic volumes were increased by a growth factor of 1.6% per year for 2 years in order to represent 2003 existing conditions.

For a given peak traffic period, the “peak hour” consists of the four consecutive 15-minute intervals during which the highest traffic volumes occur. The existing condition traffic volumes for the intersections in the study area are shown in Figures 5 and 6 for the weekday P.M. and Saturday evening peak hours, respectively. The manual counts are included in Appendix A. Study area photographs are included in Appendix B.

BASE CONDITION TRAFFIC VOLUMES

2004 Conditions

To account for background traffic in the study area, the 2003 existing condition traffic volumes were increased by a background growth rate of 1.6% per year. Thus, 2004 base condition traffic volumes were developed using a background growth factor of 1.016 (1.6% per year for 1 year) to adjust existing traffic volumes to account for traffic growth due to development within and outside the study area that will be occupied by 2004. It should be noted that Table 371 of PennDOT publication, “Traffic Data Collection and Factor Development Report”, 2001 data, published October 2002 suggests using a background growth trend factor of 1.010 (1.0%) per year in Dauphin County for Functional Class Group (FCG) 6, pertaining to rural local roadways.

Nearby Developments

In addition to the background growth, TPD included the following developments, which are not operating under existing conditions, but may be operating by the time the proposed Penn National Race Track expansion is complete:

- **Station Road Truck Terminal** is located on the northern side of Station Road, opposite the Holiday Inn driveway. The trips generated by this development were obtained from the TIS prepared by Trans Associates dated 3/11/03. The Station Road Truck Terminal will be completed in two phases. Phase I is projected to be completed in 2003. Traffic volumes associated with Phase I of this site were included in the 2004 base condition traffic volumes. Phase II is projected to be completed in 2013. As a conservative estimate, TPD included the Phase II traffic volume from the Station Road Truck Terminal in the 2009 and 2014 base condition traffic volumes.
- **Other Nearby Developments** – TPD utilized the nearby development traffic volumes in the 3/11/03 Station Road Truck Terminal TIS prepared by Trans Associates.

It should be noted that the developments listed above did not study the Saturday evening peak hour. Therefore, as a conservative estimate TPD utilized the nearby developments weekday P.M. peak traffic volumes when developing the Saturday evening peak hour traffic volumes.

The additional traffic due to background growth, plus the nearby planned developments were added to the existing condition traffic volumes at the study area intersections to develop 2004 base condition traffic volumes during the weekday P.M. and Saturday evening peak hours. The 2004 base condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 7 and 8, respectively. Trip distribution information for the nearby planned developments is included in Appendix C.

2009 Conditions

2009 base condition traffic volumes were developed for a 5-year horizon using a background growth factor of 10% (1.6% per year compounded for 6 years), plus the traffic generated by the nearby planned developments. The 2009 base condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 9 and 10, respectively.

TRIP GENERATION

Due to the lack of available data in the ITE Trip Generation Manual regarding this type of development, a Trip Generation Study for an existing similar facility was conducted to develop trip generation rates for the proposed facility. At the time the study was performed, the similar existing facility studied, Charles Town Races in Charles Town West Virginia, consisted of a horseracing track, 2,723 slot machines, and associated food and beverage support services. Counts were performed to determine the amount of traffic generated by the facility on a typical Friday and Saturday. The amount of traffic generated by the Charles Town Facility during key peak times was compared to the number of slot machines that exist at the facility to calculate a trip generation rate per slot machine. This methodology and information provided to TPD by Penn National Gaming was utilized to calculate the proposed trip generation of the Grantville facility. The following are the procedures and results of TPD's traffic counts and trip generation calculations.

Charles Town Races Trip Generation

Existing Trip Generation

TPD conducted Automatic Traffic Recorder (ATR) counts at the two existing site access driveways at the Charles Town Races facility in Charles Town, West Virginia. The counts were taken at 15-minute intervals starting at 5:00 A.M. on Friday, May 9, 2003 and ending at 5:00 A.M. on Sunday, May 11, 2003. The purpose of the counts was to determine the existing trip generation of the facility, determine the peak traffic time periods of the facility, and develop trip generation rates on a daily basis, during the P.M. peak hour of adjacent street traffic (one hour between 4:00-6:00 P.M. on a Friday), and on a peak hour of the generator basis for the existing facility during a typical Saturday. Friday, for purposes of this analysis, was defined as 5:00 A.M. (Friday) -- 4:45 A.M. the following morning (Saturday). Similarly, Saturday is defined as 5:00 A.M. (Saturday) -- 4:45 A.M. the following morning (Sunday). Table 2 shows the existing trip generation of the Charles Town Races for a Friday, the weekday P.M. peak hour of adjacent street traffic (5:00-6:00 P.M.), a Saturday, and the Saturday peak hour of the generator (6:00-7:00 P.M.). A summary of the counts performed on a 15-minute basis is included in Appendix D.

TABLE 2
CHARLES TOWN RACES - TRIP GENERATION

Time Period	<i>Total</i>	<i>Enter</i>	<i>Exit</i>
Friday - 24 hours	14,248	7,129	7,129
Weekday P.M. Peak Hour of Adjacent Street Traffic	770	451	319
Saturday - 24 hours	19,244	9,622	9,622
Saturday Peak Hour of the Generator	1,402	932	470

Trip Generation Rate Calculation

Based on the information collected at the Charles Town Races facility, as presented in Table 2, a trip generation rate was calculated to relate the number of trips generated during the peak hour time periods analyzed, to the number of slot machines that existed at the facility (2,723). The directional distribution of traffic (enter/exit) was also calculated for each of the peak times. Table 3 shows the results of these calculations.

**TABLE 3
CHARLES TOWN RACES - TRIP GENERATION RATES**

Time Period	Trip Generation Rate	Enter	Exit
Friday - 24 hours	T = 5.232(X)	50%	50%
Weekday P.M. Peak Hour of Adjacent Street Traffic	T = 0.283(X)	59%	41%
Saturday - 24 hours	T = 7.067(X)	50%	50%
Saturday Peak Hour of the Generator	T = 0.515(X)	66%	34%

T = Total trips generated, X = # of Slot Machines

Grantville Facility: Site-Generated Trips

Proposed Service Area

Based on the information provided to TPD by Penn National Gaming, the Charles Town Races facility draws from an approximate 90-mile drive time service area. Based on census data provided to TPD by Penn National Gaming, 2,220,397 adults live within a 90-minute drive from the Charles Town Races. For the proposed Grantville facility, Penn National Gaming projects to draw from an approximate 60-minute drive time service area due to the similar facility that exist in the area (Delaware Park), and the similar facilities proposed in the area (Philadelphia Park, Philadelphia Navy Yard, Pocono Downs, and Chester Downs). Based on the census data provided to TPD by Penn National Gaming, 908,940 adults live within a 60-minute drive from the proposed Grantville facility. Therefore, based on this information, the rates presented in Table 2 were adjusted to account for the site-specific service area, as the number of adults served by the proposed facility will be less than the existing Charles Town Races facility. To take a conservative approach in developing this adjustment factor, a 50% factor of safety was applied to the Penn National Gaming projections. Table 4 shows the results of the adjustment calculations.

**TABLE 4
GRANTVILLE SERVICE AREA ADJUSTMENT CALCULATIONS**

	Service Area Adult Population	Difference in Service Area Adult Population	% Difference in Service Area Adult Population	Factor of Safety	Site-Specific % Difference	Site-Specific Service Area Adjustment Factor
Charles Town	2,220,397					
Grantville	908,940	-1,311,457	-59%	0.5	-30%	0.70

The site-specific service area adjustment factor was applied to the trip generation rates contained in Table 3 to calculate the site-specific trip generation rates for the proposed Grantville facility. Table 5 shows the results of these calculations.

**TABLE 5
GRANTVILLE - TRIP GENERATION RATES**

Time Period	Trip Generation Rates (Charles Town)	Site-Specific Service Area Adjustment Factor	Trip Generation Rates (Grantville)	Directional Distribution	
				Enter	Exit
Friday - 24 hours	T = 5.232(X)	0.70	T = 3.662(X)	50%	50%
Weekday P.M. Peak Hour of Adjacent Street Traffic	T = 0.283(X)	0.70	T = 0.198(X)	59%	41%
Saturday - 24 hours	T = 7.067(X)	0.70	T = 4.947(X)	50%	50%
Saturday Peak Hour of the Generator	T = 0.515(X)	0.70	T = 0.361(X)	66%	34%

T = Total trips generated, X = # of Slot Machines

The Grantville trip generation rates presented in Table 5 of this report were utilized to calculate the proposed trip generation for the Grantville facility in East Hanover Township. Table 6 shows the proposed trip generation for the Grantville site (3,000 slot machines).

**TABLE 6
PROPOSED TRIP GENERATION**

Time Period	X	R	Site-Generated Vehicular Trips		
			Total	Enter	Exit
Friday - 24 Hours	3,000	3.662	10,986	5,493	5,493
P.M. Peak Hour of Adjacent Street Traffic	3,000	0.198	594	350	244
Saturday - 24 Hours	3,000	4.947	14,842	7,421	7,421
Saturday Peak Hour of the Generator	3,000	0.361	1,083	715	368

X = # of Slot Machines, R = Trip Generation Rate

Note: A vehicular trip is defined as a vehicle either entering or exiting the site

TRIP DISTRIBUTION

The distribution of site-generated trips was based on the local roadway network, the existing traffic patterns, and data provided to TPD by Penn National Gaming regarding their projections from where their patrons will be traveling. Based on these factors, the following trip distribution percentages were calculated:

<u>Direction From/To</u>	<u>Distribution %</u>
South via I-81 (western ramps)	39%
North via I-81 (eastern ramps)	21%
South via Bow Creek Road	26%
East via Mountain Road	5%
West via Mountain Road	4%
South via Fire House Road	3%
East via Fox Run Road	2%

Figures 11 and 12 indicate the distribution and assignment of the site-generated trips during the weekday P.M. and Saturday evening peak hours, respectively.

PROJECTED CONDITION TRAFFIC VOLUMES

The trips generated by the proposed development were added to the 2004 and 2009 base condition traffic volumes to obtain 2004 and 2009 projected condition traffic volumes for the weekday P.M. and Saturday evening peak hours. The 2004 projected condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 13 and 14, respectively. The 2009 projected condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 15 and 16, respectively. Although the proposed trip generation is inclusive of horse racing patrons (no distinction was made between slot and horse racing patrons at our counts in Charles Town), it should be noted that the traffic on the adjacent roadway network that currently utilizes the existing facility was not subtracted from the road network, in order to take a conservative approach for this traffic impact study.

CAPACITY ANALYSIS METHODOLOGY

Capacity analyses were conducted for the weekday P.M. and Saturday evening peak hours at the following intersections:

- Bow Creek Road and Mountain Road;
- Bow Creek Road and Fox Run Road;
- Fox Run Road and Fire House Road;
- Bow Creek Road and I-81 Southbound on/off ramps;
- Bow Creek Road and I-81 Northbound on/off ramps;
- Laudermilch Road/Bow Creek Road and Jonestown Road;
- Route 743/Laudermilch Road and Route 22.

These analyses were conducted according to the methodologies contained in the 2000 Highway Capacity Manual (HCM) for the following conditions:

- 2003 Existing Conditions;
- 2004 Base Conditions (Opening-Year no-build condition);
- 2004 Projected Conditions (Opening-Year build condition);

- 2009 Base Conditions (5-Year no-build condition);
- 2009 Projected Conditions (5-Year build condition);
- 2014 Base Conditions (10-Year no-build condition);
- 2014 Projected Conditions (10-Year build condition);

Capacity analyses were also conducted at the site drive intersections with Bow Creek Road and Fox Run Road under the 2004, 2009, and 2014 projected conditions. The capacity analyses are included in Appendix E.

LEVELS OF SERVICE (LOS) FOR AN INTERSECTION

For analysis of intersections, level of service is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Level of service criteria are stated in terms of control delay per vehicle for a one-hour analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The criteria are shown in Table 7. Delay, as it relates to level of service, is a complex measure and is dependent upon a number of variables. For signalized intersections, these variables include the quality of vehicle progression, the cycle length, the green time ratio, and the volume/capacity ratio for the lane group in question. For unsignalized intersections, delay is related to the availability of gaps in the flow of traffic on the major street and the driver's discretion in selecting an appropriate gap for a particular movement from the minor street (straight across, left or right turn).

**TABLE 7
LEVEL OF SERVICE CRITERIA***

Level of Service	Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

* Obtained from the Transportation Research Board's Highway Capacity Manual, 2000 Edition

LEVELS OF SERVICE IN THE STUDY AREA

Existing Conditions

The 2003 existing conditions levels of service for the weekday P.M. and Saturday evening peak hours, are shown in Figures 17 and 18, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Fox Run Road & Fire House Road

All approaches and turning movements operate at LOS A during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, except for the westbound I-81 off-ramp left turn movement which operates at LOS F during the Saturday evening peak hour.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp left turn movement which operates at LOS F during the Saturday evening peak hour.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, except for the eastbound and westbound Jonestown Road approaches which both operate at LOS E during the weekday P.M. peak hour.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements operate at LOS D or better during the weekday P.M. and Saturday evening peak hours.

2004 Base Conditions

2004 base conditions were developed assuming 1.6% per year background growth, traffic from the nearby developments, and no development of the proposed site (the no-build scenario). The 2004 base condition levels of service for the weekday P.M. and Saturday evening peak hours are shown in Figures 19 and 20, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Fox Run Road & Fire House Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours, except for the westbound I-81 off-ramp left turn movement which will operate at LOS E during the weekday P.M. peak hour and LOS F during the Saturday evening peak hour.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp left turn movement which will operate at LOS E during the weekday P.M. peak hour and LOS F during the Saturday evening peak hour.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours, except for the eastbound and westbound Jonestown Road approaches which will operate at LOS F during the weekday P.M. peak hour and LOS E during the Saturday evening peak hour.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours.

2004 Projected Conditions

2004 projected conditions were developed assuming development of the proposed site (the build scenario). The 2004 projected condition levels of service for the weekday A.M. and P.M. peak hours are shown in Figures 21 and 22, respectively. The 2004 projected condition levels of service with the proposed roadway improvements for the weekday P.M. and Saturday evening peak hours are shown in Figures 23 and 24, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during the weekday P.M. and Saturday evening peak hours, except for the westbound approach which will degrade from LOS B to LOS D during the weekday P.M. peak hour, and LOS B to LOS F during the Saturday evening peak hour. As discussed in the traffic signal

warrant analysis section of this traffic study, traffic signal warrants are satisfied under projected conditions. Because the only time the westbound approach will operate at LOS F is during the Saturday evening peak hour, it is TPD's recommendation that the developer should reevaluate the intersection within 2 years of build-out of the proposed site. If signal warrants are satisfied at that time, the level of service of the westbound approach is a failure during other peak times, and the Township requires signalization of the intersection, the developer will seek to install a traffic signal at that time.

Fox Run Road & Fire House Road

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the westbound I-81 left turn movement which will degrade from LOS E to LOS F during the weekday P.M. peak hour, and the westbound I-81 off-ramp right turn movement which will degrade from LOS B to LOS C during the weekday P.M. peak hour and LOS B to LOS F during the Saturday evening peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer (**both with and without the northbound Bow Creek Road left-turn lane**), all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 left turn movement which will degrade from LOS E to LOS F during the weekday P.M. peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer, all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours. With the construction/stripping of a 100-foot southbound Bow Creek Road left-turn lane, all approaches and turning movements at the intersection will operate at LOS C or better during both the weekday P.M. and Saturday evening peak hours.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the eastbound and westbound Jonestown Road approaches which will degrade from LOS E to LOS F during the Saturday evening peak hour.

With the signalization of the intersection proposed by the developer, all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both weekday P.M. and Saturday evening peak hours, except for the southbound Laudermilch Road approach which will degrade from LOS C to LOS D during the weekday P.M. peak hour.

Bow Creek Road & Penn National Site Driveway

With the reconfigured/realigned site driveway and a northbound channelized right turn lane, all approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours.

Fox Run Road & Penn National Secondary Site Driveway

All approaches and turning movements will operate at LOS A the weekday P.M. and Saturday evening peak hours.

Queue Length Analysis

Queue lengths were analyzed for 2004 projected conditions (both with and without Bow Creek Road left-turn lanes) using Synchro to determine the 95th percentile queue lengths extending along Bow Creek Road between its proposed signalized intersections with the I-81 ramps. Under projected conditions, approximately 720 feet of stacking distance will be available for vehicles on Bow Creek Road between the two intersections. In addition, a scenario was analyzed under projected conditions to determine the effect of constructing/striping 100-foot left-turn lanes on northbound and southbound Bow Creek Road at its intersections with the I-81 ramps. Furthermore, the 95th percentile queues for the I-81 northbound and southbound off-ramps (left-turns) were analyzed in order to verify that the proposed left-turn lane lengths are adequate. The I-81 southbound off-ramp is proposed to have a 275 foot left-turn lane to accommodate queued vehicles. The I-81 northbound off-ramp is proposed to have a 545 foot left-turn lane to accommodate queued vehicles. The 95th percentile queue length is the queue exceeded at some point during 5% of the signal cycles. The results of the queue analysis for 2004 projected conditions are shown below in Table 8.

TABLE 8
95th % QUEUE LENGTH (in feet)

Time Period	Condition	Northbound Bow Creek Road		Southbound Bow Creek Road		Southbound I-81 Off-Ramp	Northbound I-81 Off Ramp
		Left	Thru	Left	Thru	Left	Left
Weekday P.M. Peak	Without Left-Turn Lanes	70		217		81	186
	With Left-Turn Lanes	25	114	80	109	75	166
Saturday Evening Peak	Without Left-Turn Lanes	704		309		85	401
	With Left-Turn Lanes	32	328	84	130	85	377
Available Stacking (feet)		100	720	100	720	275	545

As shown in Table 8, with or without the Bow Creek road left-turn lanes, the proposed improvements will accommodate all 95th percentile queue lengths under 2004 projected conditions.

5-YEAR HORIZON (2009) CAPACITY ANALYSES

2009 Base Conditions

2009 base conditions were developed assuming 1.6% per year background growth, traffic from the nearby developments, and no development of the proposed site (the no-build scenario). The 2009 base condition levels of service for the weekday P.M. and Saturday evening peak hours are shown in Figures 25 and 26, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Fox Run Road & Fire House Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours, except for the westbound I-81 off-ramp left turn movement which will operate at LOS F during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp left turn movement which will operate at LOS F during the weekday P.M. and Saturday evening peak hours.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours, except for the eastbound and westbound Jonestown Road approaches which will both operate at LOS F during both the weekday P.M. and Saturday evening peak hours.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours.

2009 Projected Conditions

2009 projected conditions were developed assuming development of the proposed site (the build scenario). The 2009 projected condition levels of service for the weekday A.M. and P.M. peak hours are shown in Figures 27 and 28, respectively. The 2009 projected condition levels of service with the proposed roadway improvements for the weekday P.M. and Saturday evening peak hours are shown in Figures 29 and 30, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during the weekday P.M. and Saturday evening peak hours, except for the westbound approach which will degrade from LOS B to LOS D during the weekday P.M. peak hour, and LOS B to LOS F during the Saturday evening peak hour. Again, as discussed in the traffic signal warrant analysis section of this traffic study, traffic signal warrants are satisfied under projected conditions. The recommendation for this intersection remains as was stated for 2004 conditions.

Fox Run Road & Fire House Road

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the northbound Bow Creek Road left-turn movement which will degrade from LOS A to LOS B during the Saturday evening peak hour, and the westbound I-81 off-ramp right turn movement which will degrade from LOS B to LOS C during the weekday P.M. peak hour and LOS B to LOS F during the Saturday evening peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer (**both with and without the northbound Bow Creek Road left-turn lane**), all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp right turn movement which will degrade from LOS B to LOS C during the weekday P.M. peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer (**both with and without the southbound Bow Creek Road left-turn lane**), all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will continue to operate at the same LOS as 2009 base conditions during both the weekday P.M. and Saturday evening peak hours.

With the signalization of the intersection proposed by the developer, all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will continue to operate at the same LOS as 2004 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the eastbound Route 22 through movement which will degrade from LOS C to LOS D during the weekday P.M. peak hour, the westbound Route 22 left-turn movement which will degrade from LOS C to LOS D during the Saturday evening peak hour, the northbound Route 743 left/through movement which will degrade from LOS B to LOS C during the weekday P.M. peak hour, and the southbound Laudermilch Road approach which will degrade from LOS D to LOS F during the weekday P.M. peak hour.

If modifications to the signal timings are made, all approaches and turning movements at the intersection would operate at LOS D or better during both the weekday P.M. and Saturday

evening peak hours. It will be the Township's and PennDOT's discretion whether or not the signal timings at the intersection should be modified.

Bow Creek Road & Penn National Site Driveway

With the reconfigured/realigned site driveway and a northbound channelized right turn lane, all approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours, except for the westbound exiting approach which will operate at LOS E during the Saturday evening peak hour.

Fox Run Road & Penn National Secondary Site Driveway

All approaches and turning movements will operate at LOS B or better the weekday P.M. and Saturday evening peak hours.

Queue Length Analysis

Queue lengths were analyzed for 2009 projected conditions (both with and without Bow Creek Road left-turn lanes) using Synchro to determine the 95th percentile queue lengths extending along Bow Creek Road between its proposed signalized intersections with the I-81 ramps. Under projected conditions, approximately 720 feet of stacking distance will be available for vehicles on Bow Creek Road between the two intersections. In addition, a scenario was analyzed under projected conditions to determine the effect of constructing/striping 100-foot left-turn lanes on northbound and southbound Bow Creek Road at its intersections with the I-81 ramps. Furthermore, the 95th percentile queues for the I-81 northbound and southbound off-ramps (left-turns) were analyzed in order to verify that the proposed left-turn lane lengths are adequate. The I-81 southbound off-ramp is proposed to have a 275 foot left-turn lane to accommodate queued vehicles. The I-81 northbound off-ramp is proposed to have a 545 foot left-turn lane to accommodate queued vehicles. The 95th percentile queue length is the queue exceeded at some point during 5% of the signal cycles. The results of the queue analysis for 2009 projected conditions are shown below in Table 9.

TABLE 9
95th % QUEUE LENGTH (in feet)

Time Period	Condition	Northbound Bow Creek Road		Southbound Bow Creek Road		Southbound I-81 Off-Ramp	Northbound I-81 Off Ramp
		Left	Thru	Left	Thru	Left	Left
Weekday P.M. Peak	Without Left-Turn Lanes	83		254		87	204
	With Left-Turn Lanes	35	166	89	107	80	184
Saturday Evening Peak	Without Left-Turn Lanes	770		409		88	407
	With Left-Turn Lanes	30	420	77	200	88	407
Available Stacking (feet)		100	720	100	720	275	545

As shown in Table 9, without the Bow Creek Road left-turn lanes, the proposed improvements will accommodate all 95th percentile queue lengths under 2009 projected conditions, with the exception of the northbound Bow Creek Road left/through movement which will extend beyond the intersection of Bow Creek Road and the northbound I-81 ramps by approximately 2 vehicles during the Saturday evening peak hour. With the Bow Creek Road left-turn lanes, all 95th percentile queue lengths will be accommodated under 2009 projected conditions.

10-YEAR DESIGN (2014) TRAFFIC VOLUMES AND CAPACITY ANALYSES

Traffic Volumes

Base Conditions

2014 base condition traffic volumes were developed for the design year using a background growth factor of 19% (1.6% per year compounded for 11 years), plus traffic generated by the nearby planned developments. The 2014 base condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 31 and 32, respectively.

Projected Conditions

The trips generated by the proposed development were added to the 2014 base condition traffic volumes to obtain 2014 projected condition traffic volumes for the weekday P.M. and Saturday evening peak hours. The 2014 projected condition traffic volumes for the weekday P.M. and Saturday evening peak hours are shown in Figures 33 and 34, respectively.

Levels of Service

2014 Base Conditions

2014 base conditions were developed assuming 1.6% per year background growth, traffic from the nearby developments, and no development of the proposed site (the no-build scenario). The 2014 base condition levels of service for the weekday P.M. and Saturday evening peak hours are shown in Figures 35 and 36, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours.

Fox Run Road & Fire House Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will operate at will LOS B or better during the weekday P.M. and Saturday evening peak hours, except for the westbound I-81 off-ramp left turn movement which will operate at LOS F during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp left turn movement which will operate at LOS F during both the weekday P.M. and Saturday evening peak hours.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will operate at LOS A during the weekday P.M. and Saturday evening peak hours, except for the eastbound and westbound Jonestown Road approaches which will both operate at LOS F during both the weekday P.M. and Saturday evening peak hours.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, except for the southbound Laudermilch Road approach which will operate at LOS F during the weekday P.M. peak hour.

2014 Projected Conditions

2014 projected condition traffic volumes were calculated assuming development of the proposed site (the build scenario). The 2014 projected condition levels of service for the weekday A.M. and P.M. peak hours are shown in Figures 37 and 38, respectively. The 2014 projected condition levels of service with the proposed roadway improvements for the weekday P.M. and Saturday evening peak hours are shown in Figures 39 and 40, respectively.

Bow Creek Road & Mountain Road

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & Fox Run Road

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during the weekday P.M. and Saturday evening peak hours, except for the westbound approach which will degrade from LOS B to LOS E during the weekday P.M. peak hour, and LOS C to LOS F during the Saturday evening peak hour. Again, as discussed in the traffic signal warrant analysis section of this traffic study, traffic signal warrants are satisfied under projected conditions. The recommendation for this intersection remains as was stated for 2004 conditions.

Fox Run Road & Fire House Road

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 southbound on/off ramps (eastern ramps)

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the northbound Bow Creek Road left-turn movement which will degrade from LOS A to LOS C during the Saturday evening peak hour, and the westbound I-81 off-ramp right turn movement which will degrade from LOS B to LOS C during the weekday P.M. peak hour and LOS B to LOS F during the Saturday evening peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer (**both with and without the northbound Bow Creek Road left-turn lane**), all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Bow Creek Road & I-81 northbound on/off ramps (western ramps)

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the eastbound I-81 off-ramp right turn movement which will degrade from LOS B to LOS C during the Saturday evening peak hour.

With the signalization and reconfiguration/realignment of the intersection proposed by the developer (**both with and without the southbound Bow Creek Road left-turn lane**), all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Laudermilch Road/Bow Creek Road & Jonestown Road

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours.

With the signalization of the intersection proposed by the developer, all approaches and turning movements at the intersection will operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours.

Route 743/Laudermilch Road & Route 22

All approaches and turning movements will continue to operate at the same LOS as 2014 base conditions during both the weekday P.M. and Saturday evening peak hours, except for the northbound Route 743 left/through movement which will degrade from LOS B to LOS C during the Saturday evening peak hour, and the southbound Laudermilch Road approach which will degrade from LOS B to LOS C during the Saturday evening peak hour.

If modifications to the signal timings are made, all approaches and turning movements at the intersection would operate at LOS D or better during both the weekday P.M. and Saturday evening peak hours, except for the southbound Laudermilch Road approach which would continue to operate at LOS F during the weekday P.M. peak hour. With the signal timing modifications, the delays for the LOS F condition will not degrade from 2014 Base Conditions to 2014 Projected Conditions during the weekday P.M. peak hour. Therefore, this intersection meets PennDOT design standards by operating at LOS D or better and by not worsening the delay for an LOS F condition. It will be the Township's and PennDOT's discretion whether or not the signal timings at the intersection should be modified.

Bow Creek Road & Penn National Site Driveway

With the reconfigured/realigned site driveway and a northbound channelized right turn lane, all approaches and turning movements will operate at LOS C or better during the weekday P.M. and Saturday evening peak hours, except for the westbound exiting approach which will operate at LOS E during the Saturday evening peak hour.

Fox Run Road & Penn National Secondary Site Driveway

All approaches and turning movements will operate at LOS B or better the weekday P.M. and Saturday evening peak hours.

Queue Length Analysis

Queue lengths were analyzed for 2014 projected conditions (both with and without Bow Creek Road left-turn lanes) using Synchro to determine the 95th percentile queue lengths extending along Bow Creek Road between its proposed signalized intersections with the I-81 ramps. Under projected conditions, approximately 720 feet of stacking distance will be available for vehicles on Bow Creek Road between the two intersections. In addition, a scenario was analyzed under projected conditions to determine the effect of constructing/stripping 100-foot left-turn lanes on northbound and southbound Bow Creek Road at its intersections with the I-81 ramps. Furthermore, the 95th percentile queues for the I-81 northbound and southbound off-ramps (left-turns) were analyzed in order to verify that the proposed left-turn lane lengths are adequate. The I-81 southbound off-ramp is proposed to have a 275 foot left-turn lane to accommodate queued vehicles. The I-81 northbound off-ramp is proposed to have a 545 foot left-turn lane to accommodate queued vehicles. The 95th percentile queue length is the queue exceeded at some point during 5% of the signal cycles. The results of the queue analysis for 2014 projected conditions are shown below in Table 10.

TABLE 10
95th % QUEUE LENGTH (in feet)

Time Period	Condition	Northbound Bow Creek Road		Southbound Bow Creek Road		Southbound I-81 Off-Ramp	Northbound I-81 Off Ramp
		Left	Thru	Left	Thru	Left	Left
Weekday P.M. Peak	Without Left-Turn Lane	87		280		92	214
	With Left-Turn Lane	32	152	86	99	84	209
Saturday Evening Peak	Without Left-Turn Lane	803		435		94	440
	With Left-Turn Lane	33	422	90	214	94	428
Available Stacking (feet)		100	720	100	720	275	545

As shown in Table 10, without the Bow Creek Road left-turn lanes, the proposed improvements will accommodate all 95th percentile queue lengths under 2014 projected conditions, with the exception of the northbound Bow Creek Road left/through movement which will extend beyond the intersection of Bow Creek Road and the northbound I-81 ramps by approximately 2-3 vehicles during the Saturday evening peak hour. With the Bow Creek Road left-turn lanes, all 95th percentile queue lengths will be accommodated under 2014 projected conditions.

AUXILIARY LANE ANALYSIS

Left-Turn Lane

TPD performed analyses at the site driveway intersection with Bow Creek Road using Highway Research Record (HRR) 211, which is the standard reference used by PennDOT and the “AASHTO Green Book”, to determine what length left-turn lane is required in each location. In HRR 211, the following variables are taken into account to determine the need for a left-turn lane:

- V_A = advancing volume (through, left-turning, and right-turning vehicles, vph);
- V_L = left-turning volume (vph);
- $L = V_L/V_A$ proportion of left turns in the total advancing traffic stream;
- V_O = opposing volume (opposing through and right-turning vehicles, vph);
- v = operating speed (mph).

According to HRR 211, left-turn lane warrants **are not satisfied** at the driveway intersection with Bow Creek Road for vehicles performing left-turn movements into the proposed site driveway under future build conditions.

The left-turn lane analysis worksheets are included in Appendix F.

Deceleration Lane

PennDOT has issued guidelines regarding the need for deceleration lanes approaching proposed site drives. A deceleration lane should be considered when any one or a combination of the following exists:

- 40 or more right turns in a peak hour;
- 3% or more downgrade with 20 or more right turns in a peak hour;
- High speed (35 mph or greater);
- High Average Daily Traffic (ADT) on the through road.

As a general guideline, PennDOT requires the following deceleration lane lengths, which are based on Maryland State Highway guidelines:

<u>Speed on Main Road</u>	<u>Bay Length (ft)</u>	<u>Taper Length (ft)</u>
≤35 mph	150	75
40 mph	175	75
45 mph	200	100
50 mph	225	125
55 mph	250	125

Based on the above guidelines, TPD recommends that a 250-foot bay length with a 125-foot taper be provided on the northbound Bow Creek Road approach to the Penn National Race Course driveway to safely and efficiently accommodate the entering right-turn movement.

SIGNAL WARRANT ANALYSIS

A preliminary traffic signal warrant analysis was conducted in accordance with PennDOT Publication 201, Engineering and Traffic Studies, Subchapter E, "Traffic Signals". TPD examined traffic volumes at the following intersections to determine if PennDOT Signal Warrant (xi), the Peak Hour Volume Warrant, was satisfied:

- Bow Creek Road and Penn National Race Course site driveway;
- Bow Creek Road and Fox Run Road;
- Bow Creek Road and I-81 southbound on/off ramps;
- Bow Creek Road and I-81 northbound on/off ramps;
- Laudermilch Road/Bow Creek Road and Jonestown Road.

The signal warrant analysis was performed utilizing PC-Warrants, a traffic signal warrant analysis software package, which is based upon guidelines contained in the 1989 Federal Manual on Uniform Traffic Control Devices (MUTCD). The PennDOT traffic signal warrants (67 PA Code, Chapter 201, Subsection E) utilize the same criteria as the MUTCD guidelines. The PC-Warrants worksheets are shown in Appendix G.

Bow Creek Road and Penn National Race Course Site Driveway Intersection

As shown in Figure 14, the 2004 projected condition Saturday evening peak hour traffic volumes on Bow Creek Road are 221 vehicles per hour (vph) northbound and 160 vph southbound, for a two-way peak hour volume of 381 vehicles. The westbound Penn National Race Course approach has a volume of 303 vph. In Publication 201, Subchapter E, Warrant (xi), Section A, a table is provided to evaluate the Peak Hour Volume Warrant. From this table, it was determined that, with a two-way volume of 381 vph on the major street, the minor street traffic volume must be approximately 290 vph to satisfy the warrant. Since the projected volume is 303 vehicles on the minor street approach during the Saturday evening peak hour, Warrant (xi) is marginally satisfied under 2004 future build conditions; however, because the exiting movements will operate at LOS D during this time period, they will not be considered a failing condition. Using this same methodology, Warrant (xi) is not satisfied during any weekday P.M. peak hour condition. It should be noted that this signal warrant analysis was completed assuming the reconfiguration of the site driveway, therefore per the MUTCD guidelines, the northbound Bow Creek Road right turn volume was not included in the signal warrant analysis.

Bow Creek Road and Fox Run Road Intersection

As shown in Figure 14, the 2004 projected condition Saturday evening peak hour traffic volumes on Bow Creek Road are 973 vph northbound and 365 vph southbound, for a two-way peak hour volume of 1,338 vehicles. The westbound Fox Run Road approach has a volume of 136 vph. In Publication 201, Subchapter E, Warrant (xi), Section A, a table is provided to evaluate the Peak Hour Volume Warrant. From this table, it was determined that, with a two-way volume of 1,338 vph on the major street, the minor street traffic volume must be approximately 75 vph to satisfy the warrant. Since the projected volume is 136 vehicles on the minor street approach during the Saturday evening peak hour, Warrant (xi) is satisfied under 2004 future build conditions. Using this same methodology, Warrant (xi) is satisfied during the weekday P.M. peak hour under 2004 future build conditions. The westbound Fox Run Road approach will operate at an LOS D through 2009 projected conditions and LOS E under 2014 conditions during the weekday P.M. peak hour. During the Saturday evening peak hour, the approach will operate at LOS F. Since the warrant is satisfied based on traffic projections, and the only time it will operate at LOS F is during the Saturday evening peak hour, the developer should reevaluate the intersection within 2 years of build-out of the proposed site. If signal warrants are satisfied at that time, the level of service of the westbound approach is a failure during other peak times, and the Township requires signalization of the intersection, the developer will seek to install a traffic signal at that time.

Bow Creek Road and I-81 Southbound on/off Ramps

As shown in Figure 14, the 2004 projected condition Saturday evening peak hour traffic volumes on Bow Creek Road are 1,091 vph northbound and 361 vph southbound (not including the right turn movement) for a two-way peak hour volume of 1,452 vehicles. From the peak hour warrant table, it was determined that with a two-way volume of 1,452 vph on the major-street, the minor street traffic volume must be approximately 75 vph to satisfy the warrant. The westbound I-81 left turn volume is 99 vph. It should be noted based on the MUTCD guidelines, the southbound right turn volume and the westbound right turn volume was not included in the signal warrant

analysis. Without including this volume, during the Saturday evening peak hour, Warrant (xi) is satisfied under 2004 future build conditions. Using this same methodology, Warrant (xi) is satisfied during the weekday P.M. peak hour under 2004 future build conditions.

Bow Creek Road and I-81 Northbound on/off Ramps

As shown in Figure 6, the 2003 existing condition Saturday evening peak hour traffic volumes on Bow Creek Road are 369 vph northbound (not including the right turn movement) and 242 vph southbound, for a two-way peak hour volume of 611 vehicles. From the peak hour warrant table, it was determined that with a two-way volume of 611 vph on the major-street, the minor street traffic volume must be approximately 190 vph to satisfy the warrant. The eastbound I-81 left turn volume is 203 vph. It should be noted based on the MUTCD guidelines, the northbound right turn volume and the eastbound right turn volume was not included in the signal warrant analysis. Without including this volume, during the Saturday evening peak hour, Warrant (xi) is satisfied under 2003 existing conditions. Using this same methodology, Warrant (xi) is satisfied during the weekday P.M. peak hour under 2004 future build conditions.

Laudermilch Road/Bow Creek Road and Jonestown Road Intersection

As shown in Figure 5, the 2003 existing condition weekday P.M. peak hour traffic volumes on Laudermilch Road/Bow Creek Road are 523 vph northbound and 531 vph southbound, for a two-way peak hour volume of 1,054 vehicles. The westbound Jonestown Road approach has a volume of 94 vph. In Publication 201, Subchapter E, Warrant (xi), Section A, a table is provided to evaluate the Peak Hour Volume Warrant. From this table, it was determined that, with a two-way volume of 1,054 vph on the major street, the minor street traffic volume must be approximately 75 vph to satisfy the warrant. Since the projected volume is 94 vehicles on the minor street approach during the weekday P.M. peak hour, Warrant (xi) is satisfied under 2003 existing conditions. Using this same methodology, Warrant (xi) is satisfied during the Saturday evening peak hour under 2004 future build conditions.

It will be at the discretion of East Hanover Township and PennDOT whether to signalize these intersections.

CRASH INVESTIGATION

Crash data were received for the intersections of Mountain Road (S.R. 0443) and Bow Creek Road, Bow Creek Road and the I-81 ramps (S.R. 8013), Bow Creek Road/Laudermilch Road (S.R. 2025) and Jonestown Road, and Laudermilch Road (S.R. 2025/S.R. 0743) and Allentown Boulevard (S.R. 0022). The crashes at each intersection were plotted, and are included in Appendix H. As a result of the proposed signalization of the existing unsignalized intersections of Bow Creek Road and the I-81 ramps and Bow Creek Road/Laudermilch Road and Jonestown Road, there will be an increase in safety with respect to angle crashes which occurred as a result of minor approach traffic in a stop-controlled condition conflicting with major approach traffic in a free-flow condition, which will be eliminated with the proposed signalization.

RECOMMENDATIONS

TPD has made the following recommendations in relation to the expansion of the Penn National Race Course in East Hanover Township:

On-Site Recommended Improvements

- *It is recommended that the site driveway be realigned to intersect Bow Creek Road at an approximate 90° angle. Under this configuration, TPD recommends providing an entering channelized right turn lane. The realigned section of the driveway would provide access for the entering left turn movements, as well as exiting left and right turn movements. The realigned section of the driveway should be designed with a 28-foot wide cartway, to provide for 12-foot wide entering and exiting lanes, and a 4-foot wide paved shoulder on the northern side (exiting approach). The channelized right turn lane should be designed with a 12-foot wide lane with a 4 foot wide paved shoulder. The existing approach to the Penn National Race Course should consist of two inbound travel lanes for approximately 300 feet, with a lane drop and lane transition taking place at a point after that distance.*
- *It is recommended that a 250-foot deceleration lane with a 125-foot taper be provided on the northbound Bow Creek Road approach to the Penn National Race Course driveway to safely and efficiently accommodate the entering right-turn movement.*
- *It is recommended that an on-site embankment to the north of the existing Bow Creek Road driveway location be removed to provide the required sight distance per AASHTO requirements.*

Initial Off-Site Recommended Improvements

- *Signalize and reconfigure/realign the I-81 interchange intersections with Bow Creek Road. The signalization and reconfiguration/realignment should include construction of a 275-foot left-turn lane on the I-81 SB off-ramp. Additionally, a 545-foot left-turn lane will be constructed on the I-81 NB off-ramp.*
- *In addition to the above referenced improvements, the developer is proposing to maximize widening outside the bridge limits to construct/stripe 100-foot left-turn lanes on Bow Creek Road at the I-81 interchange intersections and install overhead lane use control. This is proposed due to the fact that the width of the Bow Creek Road bridge over I-81 is not wide enough to support fully shadowed left turn lanes. With respect to the I-81 improvements, Penn National Gaming is willing to install either of the above-referenced improvements (with or without left turn lanes on Bow Creek Road). As such, the alternative improvement plan (with the addition of left turn lanes on Bow Creek Road) has also been submitted for the department's review.*
- *Signalize the intersection of Laudermilch Road/Bow Creek Road and Jonestown Road.*

- *With the proposed improvements and without the installation of the proposed Bow Creek Road left-turn lanes, the proposed improvements at the I-81 interchange with Bow Creek Road will accommodate existing traffic, background growth traffic, and site-generated traffic through 2004, and therefore a longer term solution would need to be investigated.*
- *With the proposed improvements and with the installation of the proposed Bow Creek Road left-turn lanes, the proposed improvements at the I-81 interchange with Bow Creek Road will accommodate existing traffic, background growth traffic, and site-generated traffic through 2014.*

Long-Term Off-Site Improvements

- *Due to future traffic growth in the area not associated with the subject development, it is anticipated that the Bow Creek Road bridge over I-81 in the long term may need to be replaced with an 80-foot wide structure that would accommodate 5-lanes of travel (2 lanes in each direction, plus back-to-back left-turn lanes). The I-81 off-ramps to Bow Creek Road may also need to be widened to accommodate dual left-turn lanes. The developer has agreed to work with the Township towards a long-term improvement to the Bow Creek Road interchange with I-81 (Interchange 80).*

CONCLUSIONS

The following conclusions were reached in relation to the expansion of the Penn National Race Course in East Hanover Township:

- *The proposed expansion of the Penn National Race Course will generate 594 vehicle trips during the weekday P.M. peak hour and 1,083 vehicle trips during the Saturday evening peak hour.*
- *Analyses were conducted to determine the quality of operation (LOS) of the study area intersections and proposed site drives for Existing, Year 2004 Base, Year 2004 Projected, Year 2009 Base, Year 2009 Projected, Year 2014 Base, and Year 2014 Projected Conditions.*
- *With the proposed improvements and without the installation of the proposed Bow Creek Road left-turn lanes, the I-81 and Bow Creek Road interchange will accommodate existing traffic, background growth traffic, and site-generated traffic through 2004 based on the fact that all approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, and queues will not extend through the intersections. After 2004, the queues experienced will increase, and before 2009 the queues will extend through the intersections (during the Saturday Peak Period). Therefore, the developer has agreed to examine the feasibility of providing left-turn lanes on Bow Creek Road at the I-81 interchange intersections.*

- *With the proposed improvements and with the installation of the proposed Bow Creek Road left-turn lanes, the I-81 and Bow Creek Road interchange will accommodate existing traffic, background growth traffic, and site-generated traffic through 2014 based on the fact that all approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours, and queues will not extend through the intersections. In addition, the developer has agreed to work with the Township towards a long-term improvement to the I-81 interchange.*
- *With signalization of the intersection of Laudermilch Road/Bow Creek Road & Jonestown Road, all approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours through 2014 Projected Conditions.*
- *If modifications to the signal timings are made to the traffic signal at the intersection of Route 743/Laudermilch Road and Route 22, all approaches and turning movements will operate at LOS D or better during the weekday P.M. and Saturday evening peak hours through 2014, except for the southbound Laudermilch Road approach which will continue to operate at LOS F during the weekday P.M. peak hour. With the signal timing modifications, the delays for the LOS F condition will not degrade from 2014 Base Conditions to 2014 Projected Conditions during the weekday P.M. peak hour. Therefore, this intersection meets PennDOT design standards by operating at LOS D or better and by not worsening the delay for an LOS F condition. It will be the Township's and PennDOT's discretion whether or not the signal timings at the intersection should be modified.*
- *All approaches and turning movements at the intersection of Bow Creek Road and Mountain Road will operate at LOS B or better during the weekday P.M. and Saturday evening peak hours though 2014 Projected Conditions.*
- *During the weekday P.M. peak hour, all approaches and turning movements at the intersection of Bow Creek Road and Fox Run Road will operate at LOS D or better through 2009 Projected Conditions and LOS E in 2014 Projected Conditions. During the Saturday evening peak hour the westbound Fox Run Road approach will operate at LOS F through 2014 Projected Conditions. Since the warrant is satisfied based on traffic projections, and the only time it will operate at LOS F is during the Saturday evening peak hour, it is TPD's recommendation that the developer should reevaluate the intersection within 2 years of build-out of the proposed site. If signal warrants are satisfied at that time, the level of service of the westbound approach is a failure during other peak times, and the Township requires signalization of the intersection, the developer will seek to install a traffic signal at that time.*
- *All approaches and turning movements at the intersection of Fox Run Road and Fire House Road will operate at LOS A during the weekday P.M. and Saturday evening peak hours though 2014 Projected Conditions.*

- *All approaches and turning movements at the intersection of Bow Creek Road and Penn National Site Driveway will operate at LOS C or better during the weekday P.M. peak hour through 2014 Projected Conditions. During the Saturday evening peak hour the westbound exiting approach will operate at LOS D under 2004 Projected Conditions and LOS E under 2009 and 2014 Projected Conditions.*
- *The recommended/proposed on-site improvements at the Bow Creek Road site driveway and the recommended/proposed initial off-site improvements to the I-81 and Bow Creek Road interchange, and the Laudermilch Road/Bow Creek Road and Jonestown Road intersection will not only offset and support the impact of the proposed development (3,000 slot machines), but will improve existing levels of service and/or geometrical deficiencies at those intersections.*

17028

EAST HANOVER

PROPOSED SITE

Penn. National Race Course

17028

Shelbville

Grantville

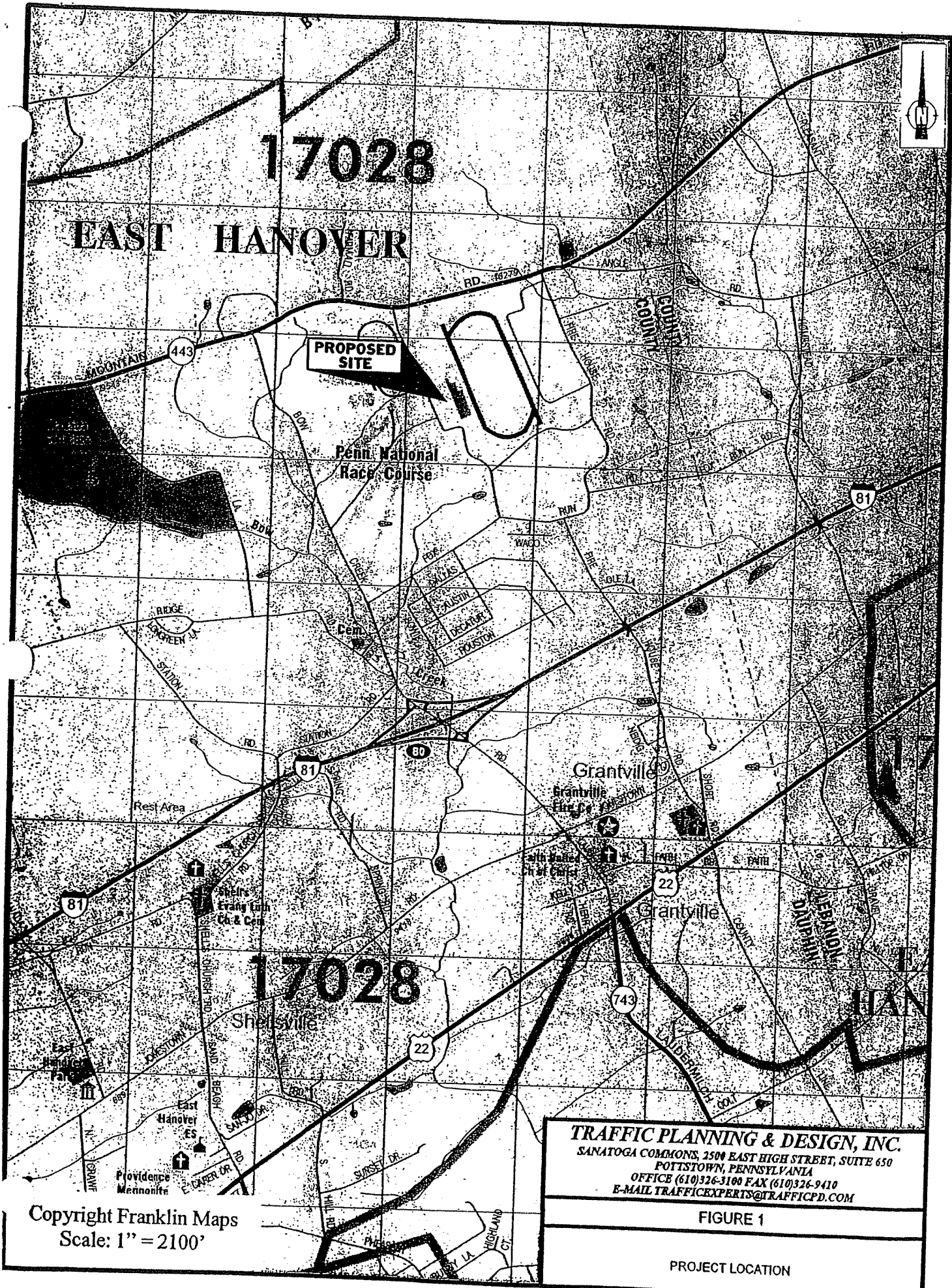
Grantville

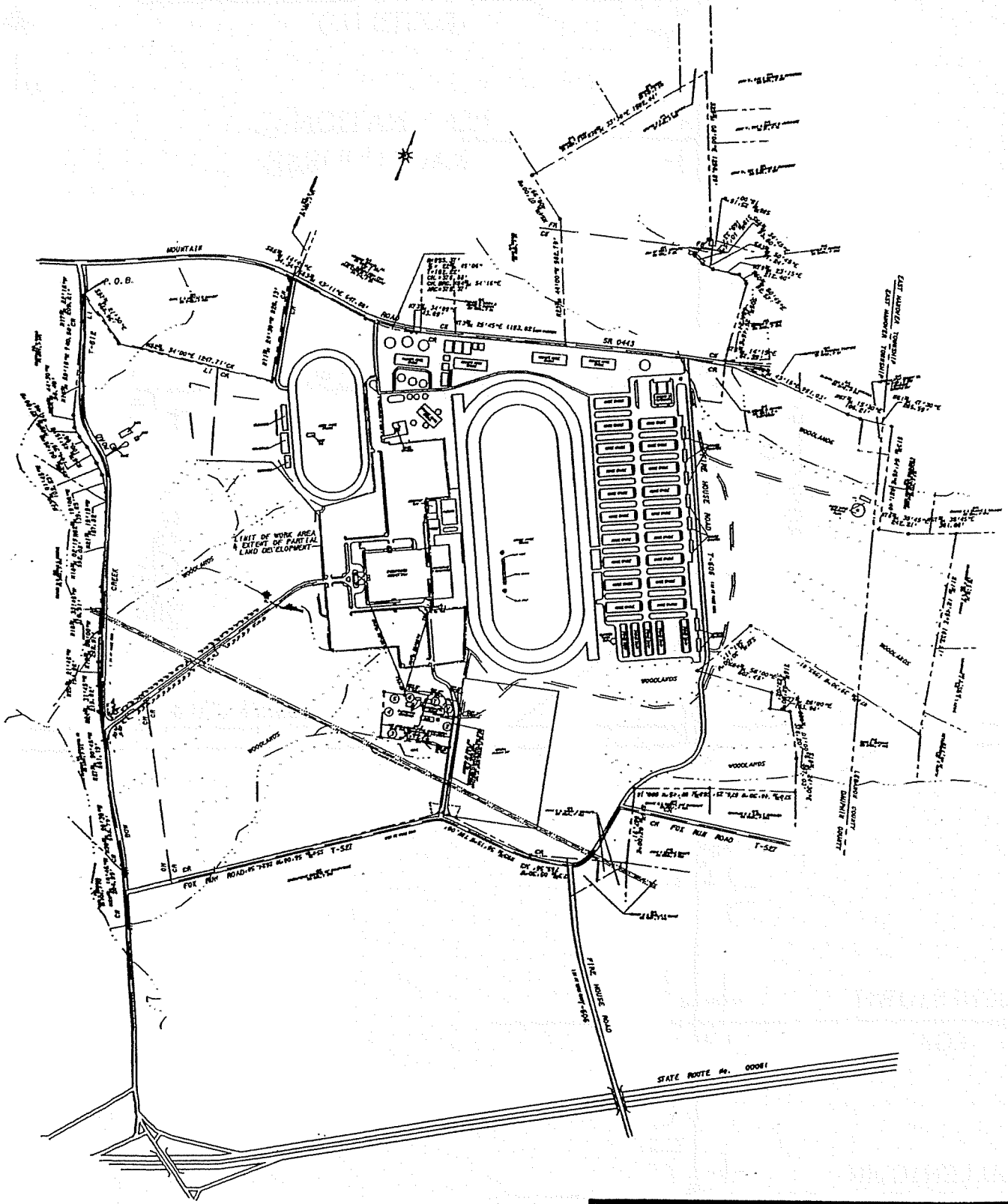
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FIGURE 1

PROJECT LOCATION

Copyright Franklin Maps
 Scale: 1" = 2100'





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FIGURE 2

PROJECT SITE

 **McCarthy Engineering Associates, P.C.**
 Professional Engineers, Consultants and Planners
 Associates, P.C.



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

BOW CREEK
ROAD

FIRE HOUSE
ROAD

INTERSTATE 81

JONESTOWN
ROAD

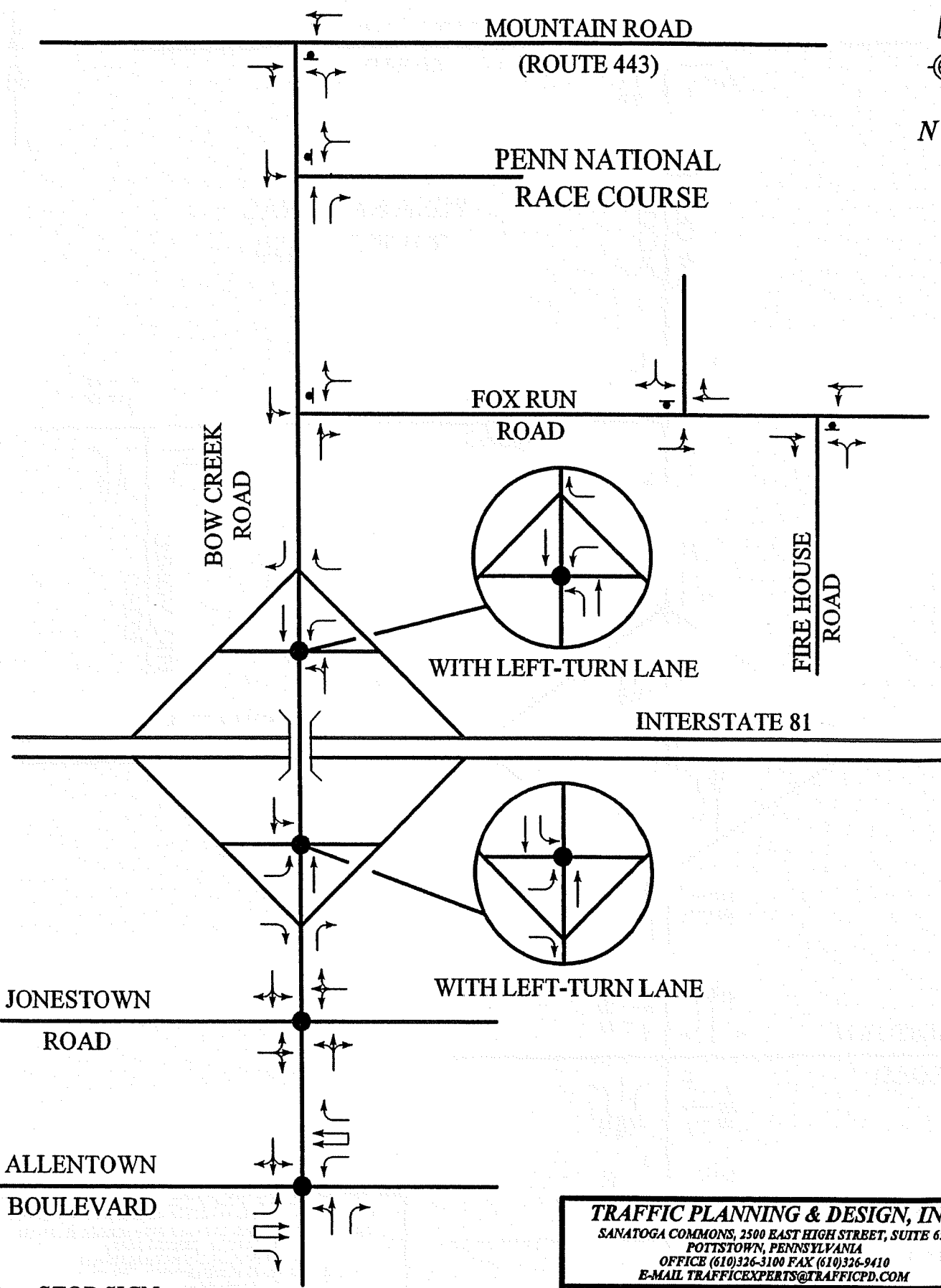
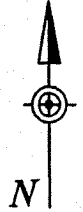
ALLENTOWN
BOULEVARD

• = STOP SIGN
● = SIGNALIZED INTERSECTION
SCHEMATIC DRAWING: NOT TO SCALE

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FIGURE 3

EXISTING LANE CONFIGURATIONS
AND
INTERSECTION CONTROL

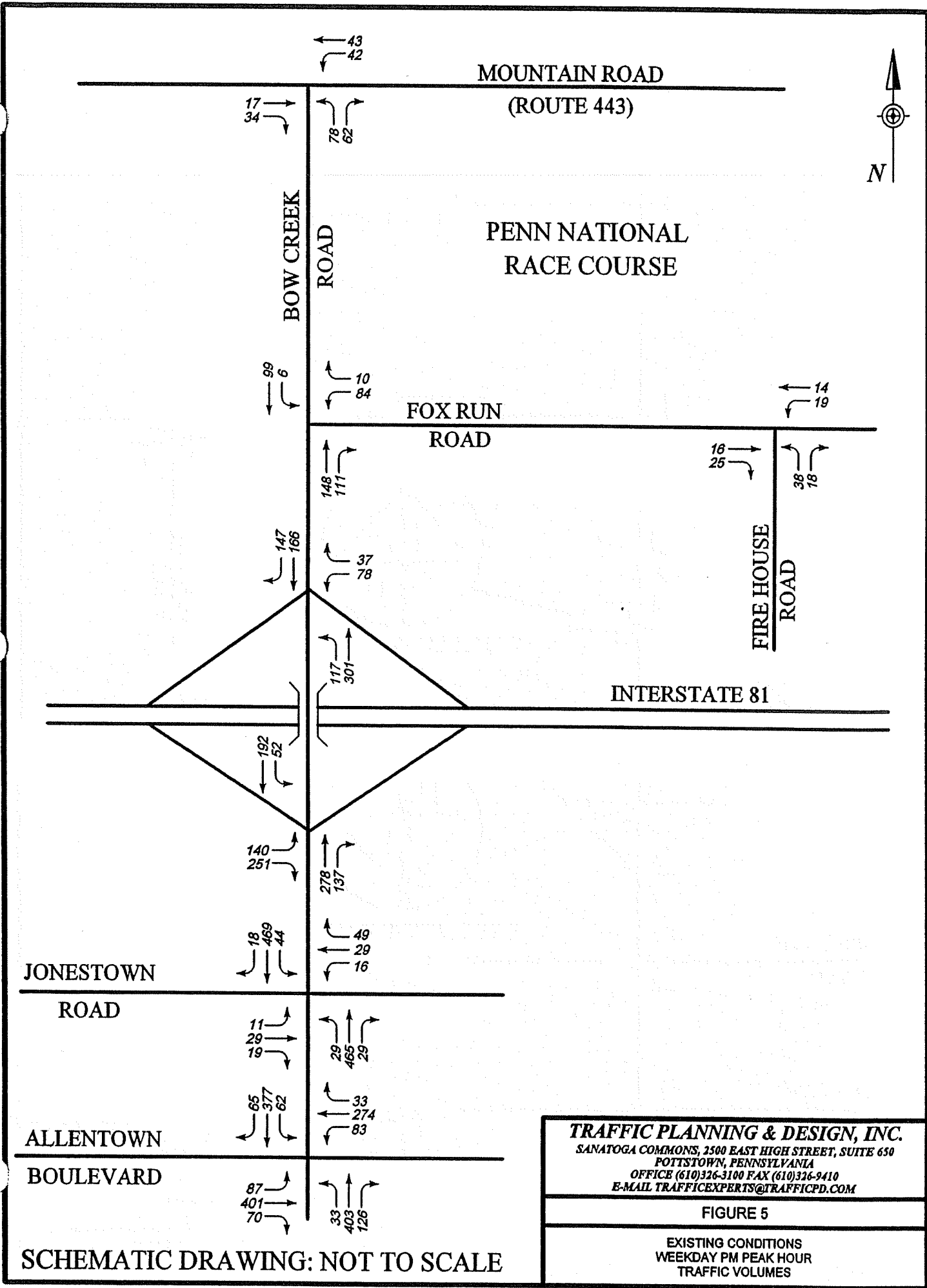


▲ = STOP SIGN
● = SIGNALIZED INTERSECTION
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FIGURE 4

PROPOSED LANE CONFIGURATIONS
AND
INTERSECTION CONTROL



JONESTOWN

ROAD

ALLENTOWN

BOULEVARD

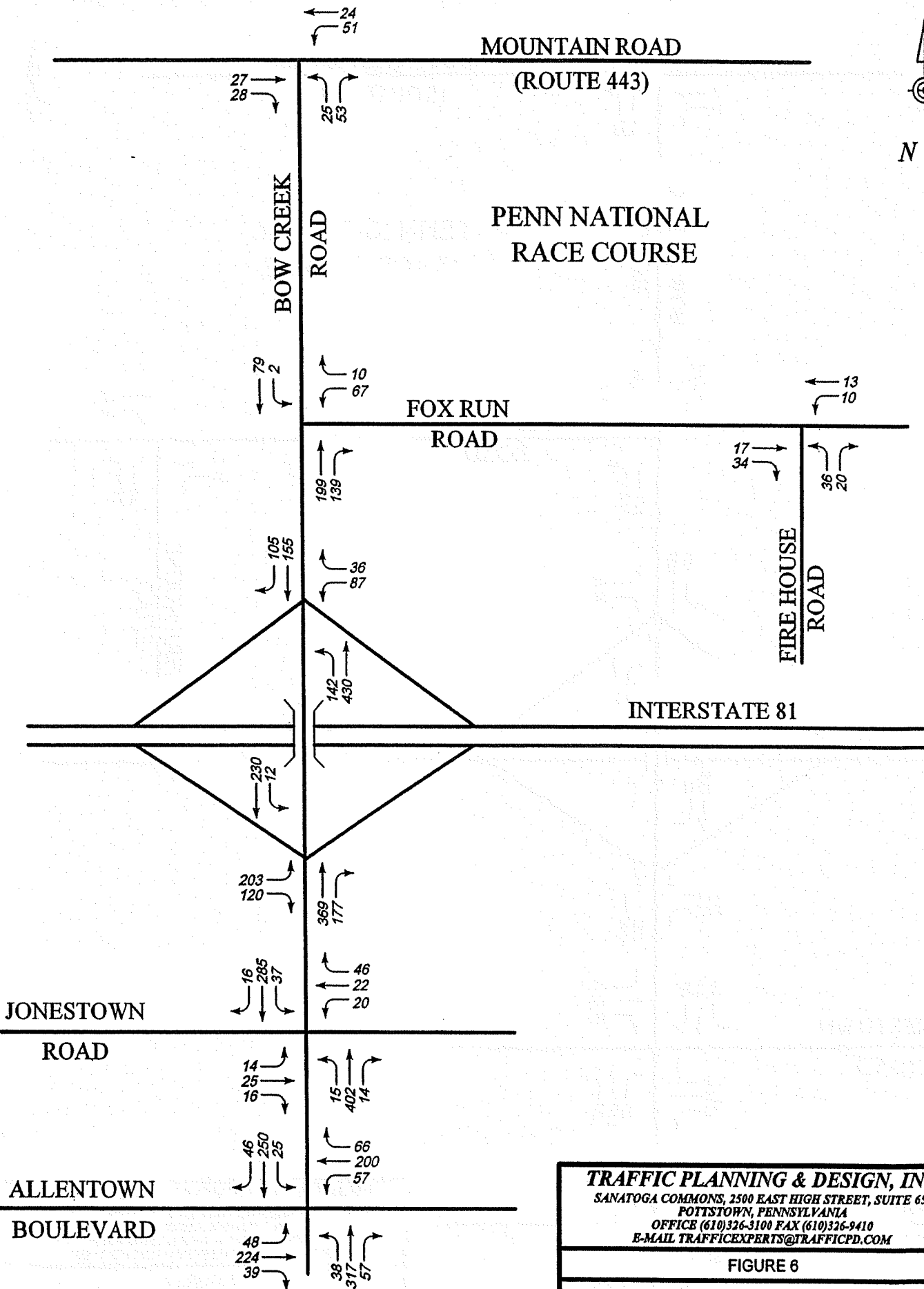
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FIGURE 5

EXISTING CONDITIONS
 WEEKDAY PM PEAK HOUR
 TRAFFIC VOLUMES



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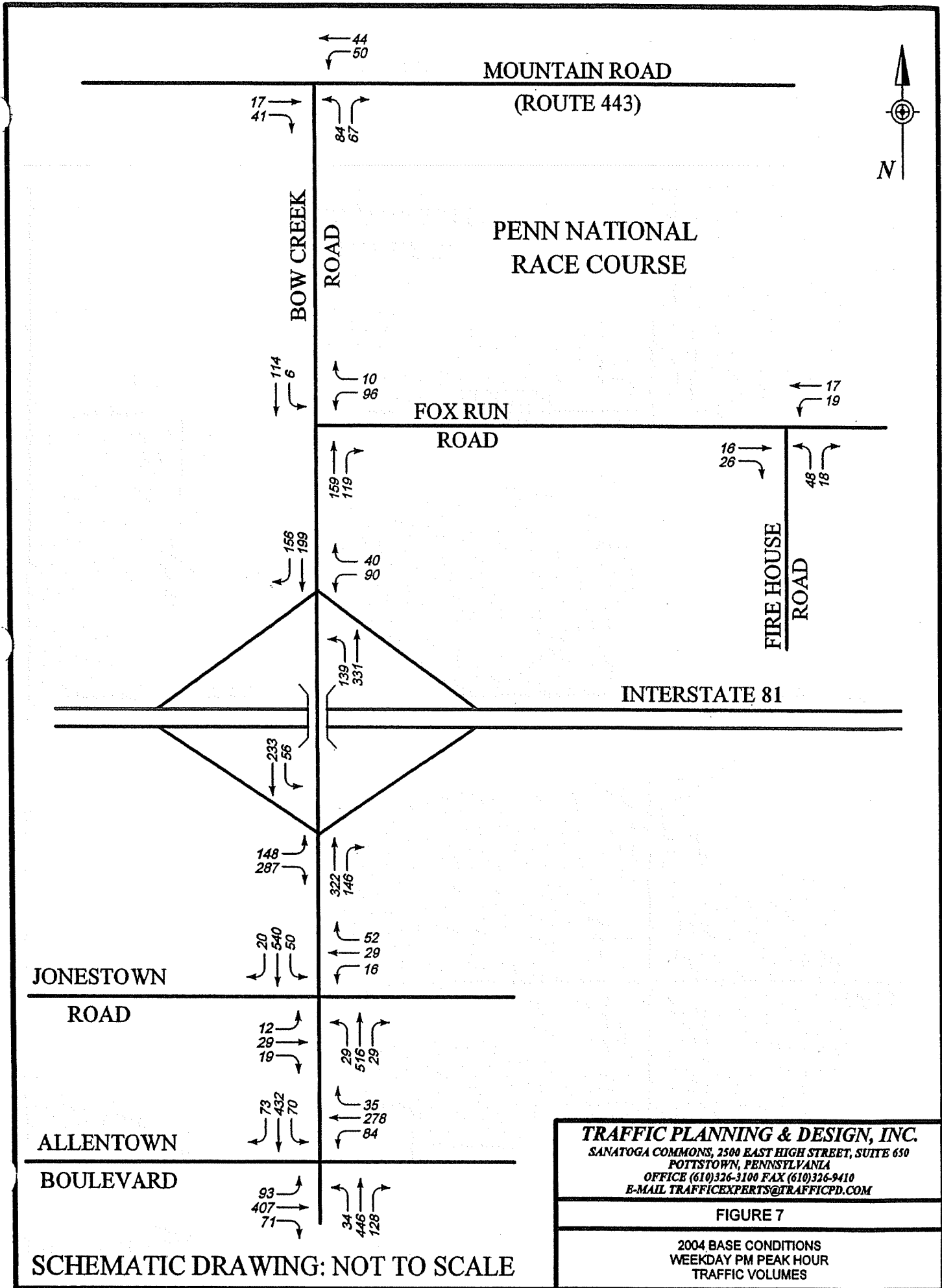
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E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 6

EXISTING CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES



← 44
↘ 50

← 17
↘ 41

↘ 84
↙ 67

← 114
↘ 6

↘ 10
↙ 96

← 17
↘ 19

← 159
↘ 119

← 16
↘ 26

↘ 48
↙ 18

← 156
↘ 199

↘ 40
↙ 90

← 139
↘ 331

INTERSTATE 81

← 233
↘ 56

← 148
↘ 287

← 322
↘ 146

← 20
↘ 540
↙ 50

↘ 52
↙ 29
↙ 16

← 12
↘ 29
↙ 19

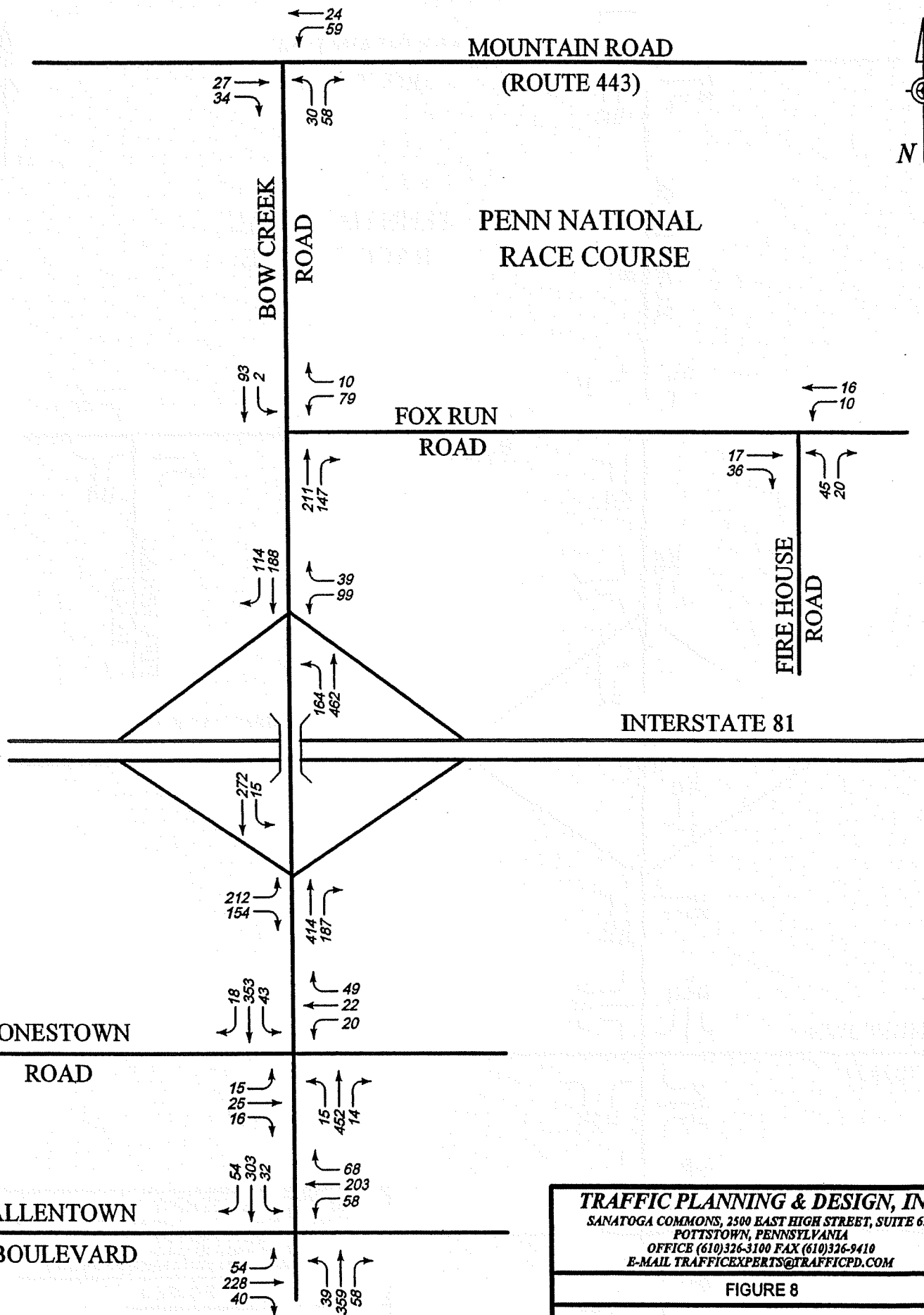
← 29
↘ 516
↙ 29

← 73
↘ 432
↙ 70

← 35
↘ 278
↙ 84

← 93
↘ 407
↙ 71

← 34
↘ 446
↙ 128



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FIGURE 8

2004 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

FOX RUN
ROAD

FIRE HOUSE
ROAD

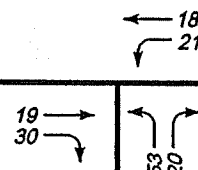
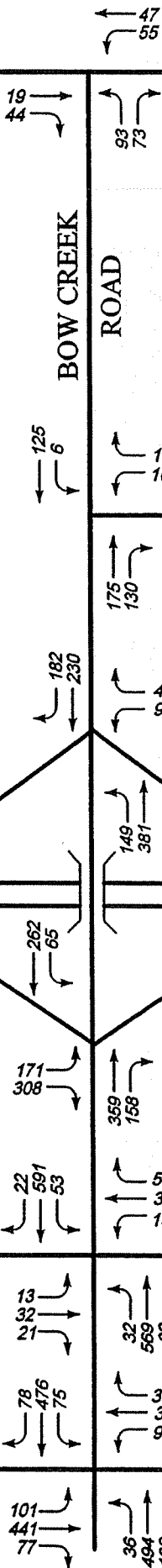
INTERSTATE 81

JONESTOWN

ROAD

ALLENTOWN

BOULEVARD



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FIGURE 9

2009 BASE CONDITIONS
WEEKDAY PM PEAK HOUR
TRAFFIC VOLUMES

SCHEMATIC DRAWING: NOT TO SCALE



MOUNTAIN ROAD

(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

FOX RUN
ROAD

FIRE HOUSE
ROAD

INTERSTATE 81

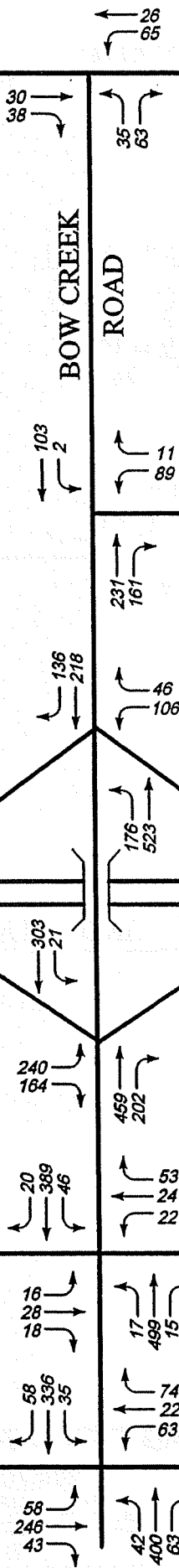
JONESTOWN

ROAD

ALLENTOWN

BOULEVARD

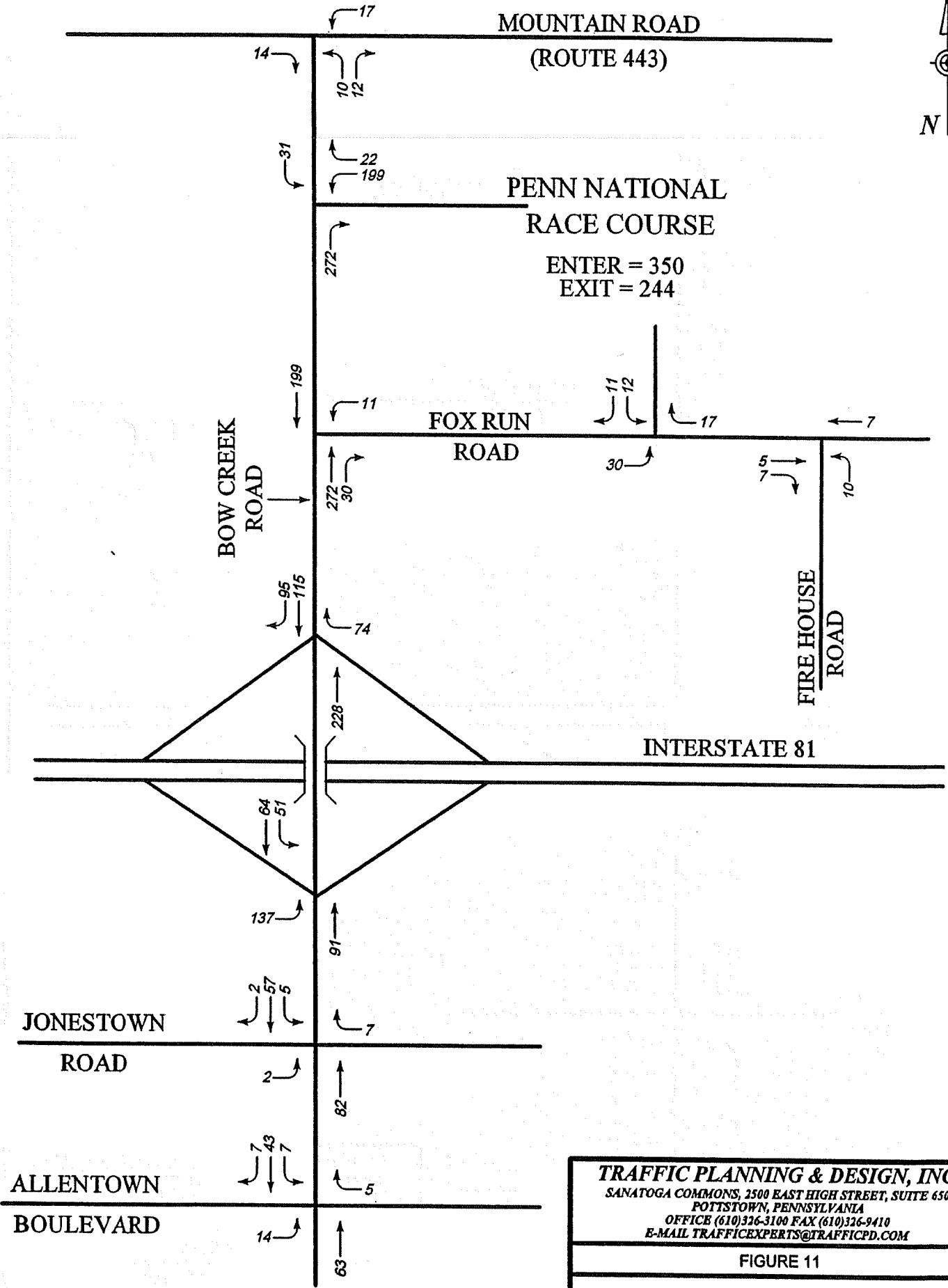
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FIGURE 10

2009 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES

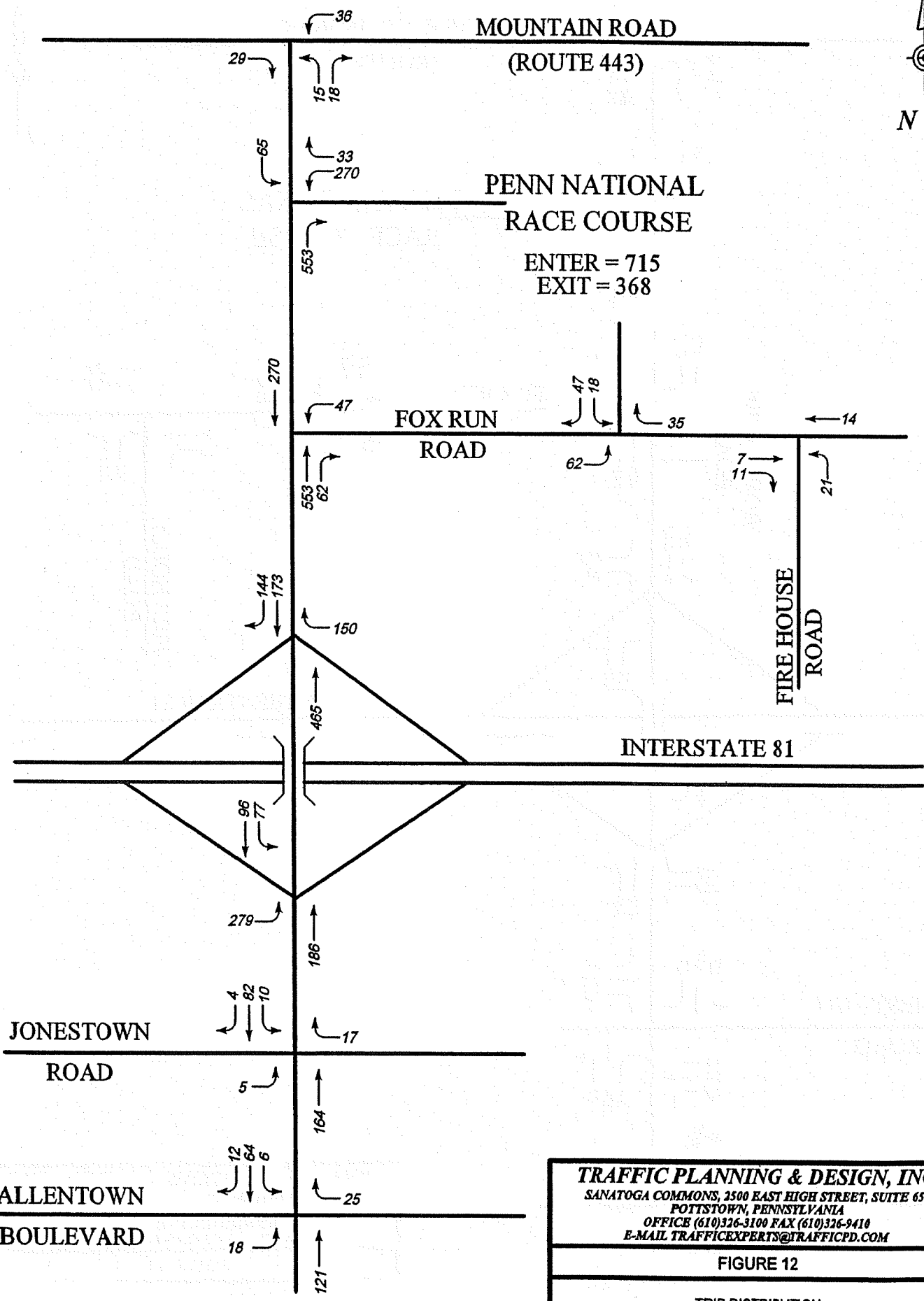


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FIGURE 11

TRIP DISTRIBUTION
WEEKDAY PM PEAK HOUR



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FIGURE 12

TRIP DISTRIBUTION
SATURDAY GENERATOR PEAK HOUR

44
67

MOUNTAIN ROAD
(ROUTE 443)



17
55

94
79

120
31

22
199

PENN NATIONAL
RACE COURSE

169
272

313
6

10
107

11
12

17
65

24
21

BOW CREEK
ROAD

FOX RUN
ROAD

431
149

30
42

21
33

58
18

251
314

114
90

FIRE HOUSE
ROAD

INTERSTATE 81

139
559

297
107

285
287

413
146

JONESTOWN
ROAD

22
597
55

59
29
16

ALLENTOWN
BOULEVARD

14
29
19

29
598
29

80
475
77

40
278
84

107
407
71

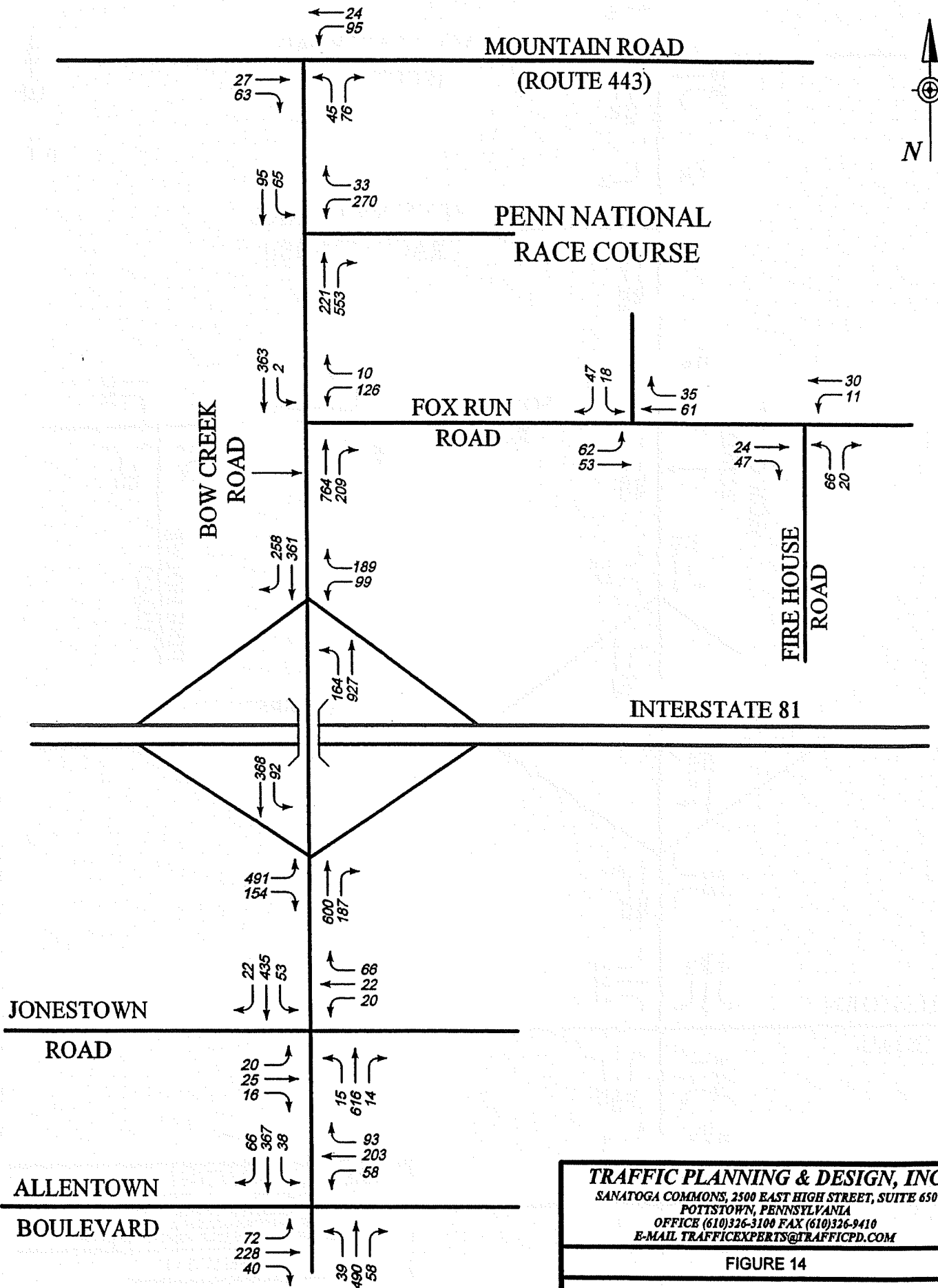
34
509
128

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FIGURE 13

2004 PROJECTED CONDITIONS
WEEKDAY PM PEAK HOUR
TRAFFIC VOLUMES

SCHEMATIC DRAWING: NOT TO SCALE



SCHEMATIC DRAWING: NOT TO SCALE

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FIGURE 14

2004 PROJECTED CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

INTERSTATE 81

BOW CREEK
ROAD

FIRE HOUSE
ROAD

JONESTOWN

ROAD

ALLENTOWN

BOULEVARD

SCHEMATIC DRAWING: NOT TO SCALE

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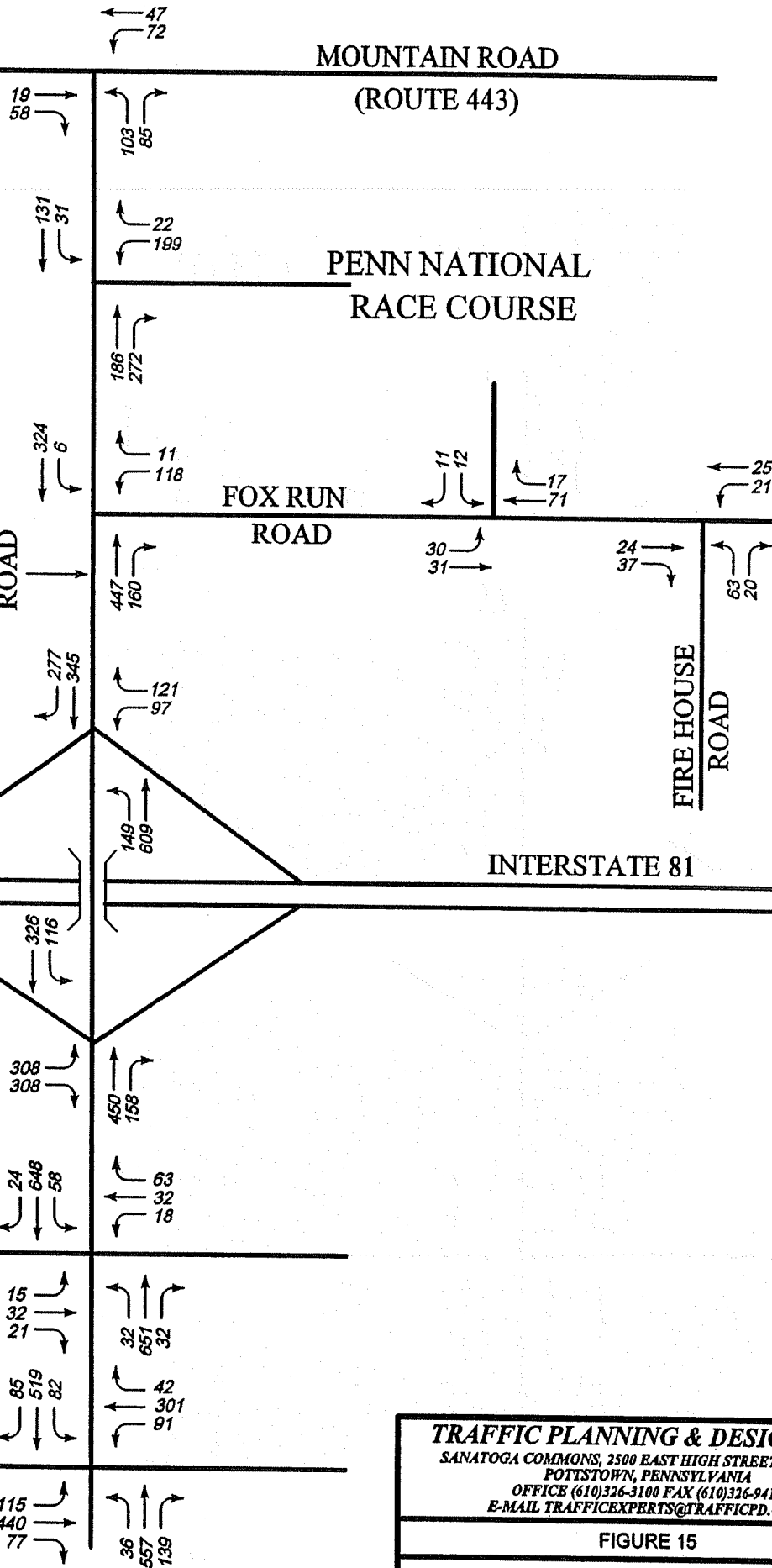
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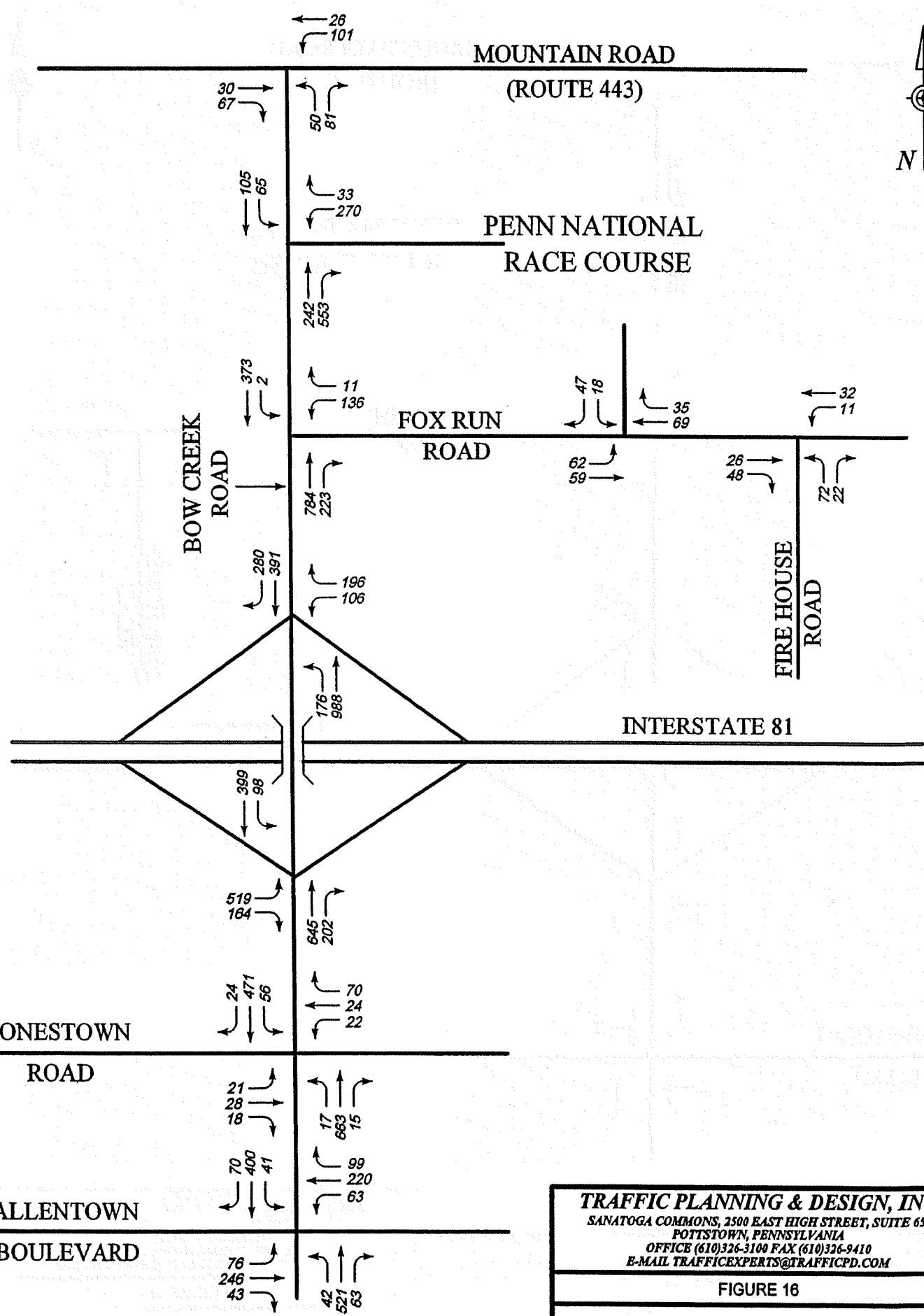
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FIGURE 15

2009 PROJECTED CONDITIONS
WEEKDAY PM PEAK HOUR
TRAFFIC VOLUMES





JONESTOWN ROAD

ALLENTOWN BOULEVARD

BOULEVARD

SCHEMATIC DRAWING: NOT TO SCALE

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FIGURE 16

2009 PROJECTED CONDITIONS
 SATURDAY EVENING PEAK HOUR
 TRAFFIC VOLUMES



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

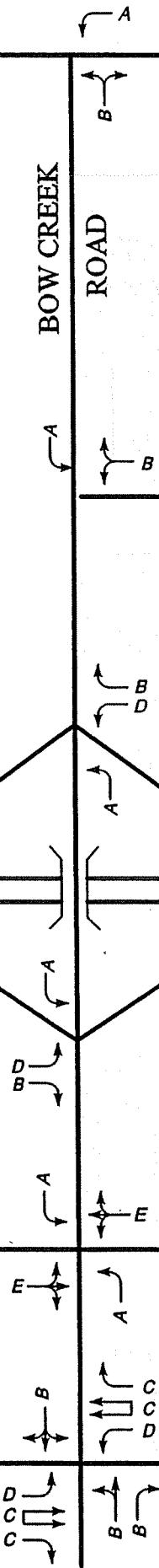
INTERSTATE 81

BOW CREEK
ROAD

FIRE HOUSE
ROAD

JONESTOWN
ROAD

ALLENTOWN
BOULEVARD

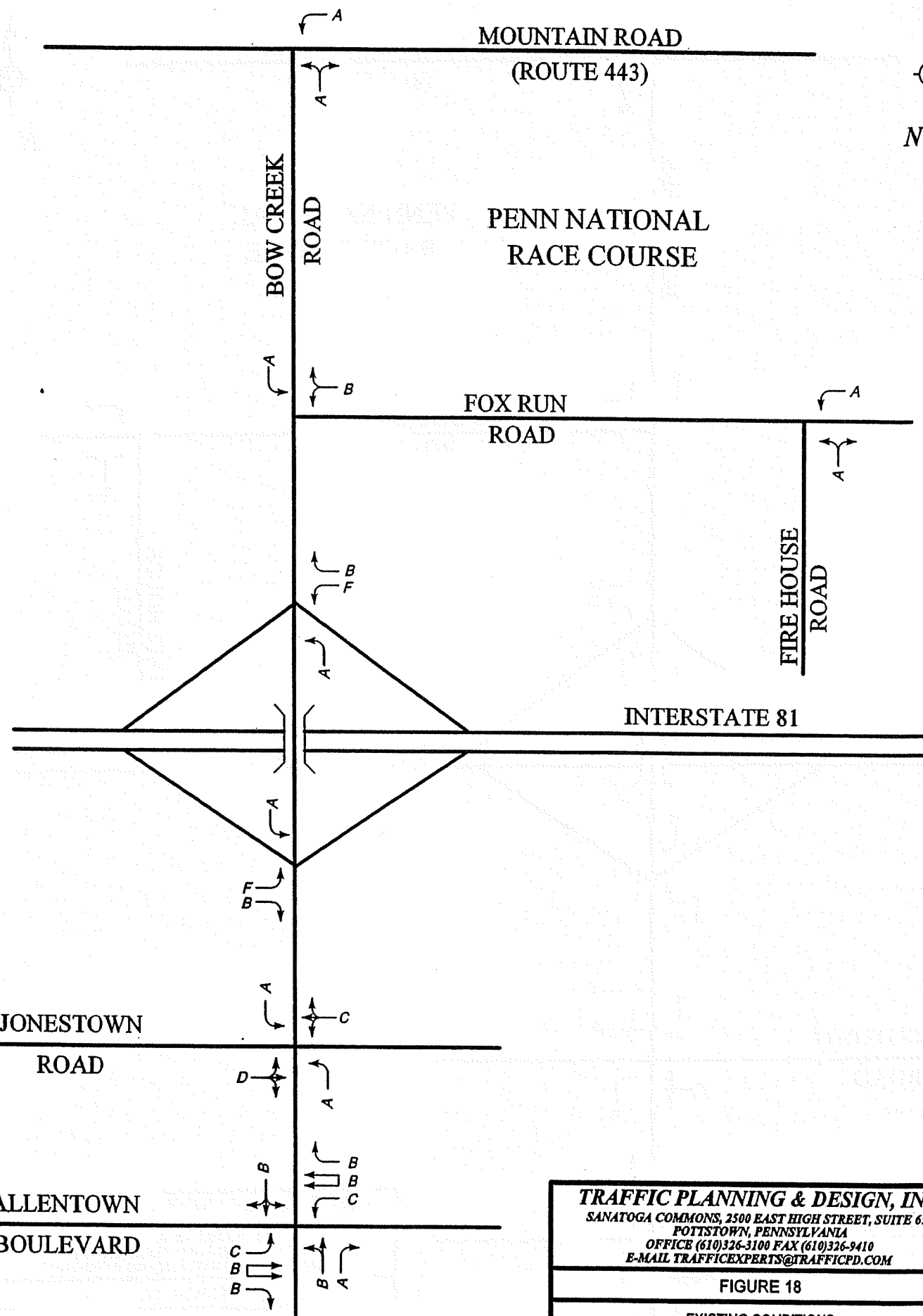


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FIGURE 17

EXISTING CONDITIONS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE

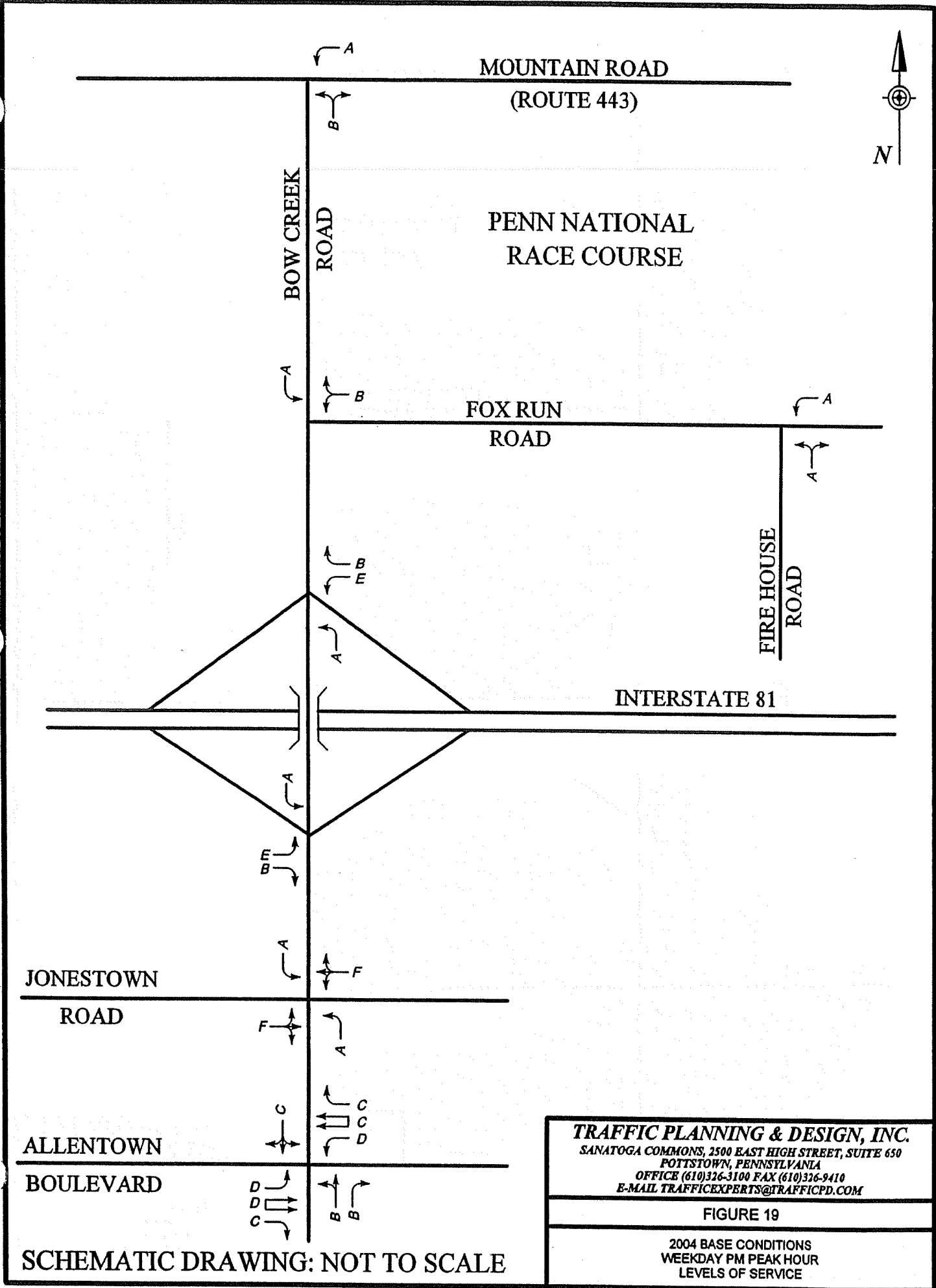


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FIGURE 18

EXISTING CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE



JONESTOWN ROAD

ALLENTOWN BOULEVARD

SCHEMATIC DRAWING: NOT TO SCALE

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FIGURE 19

2004 BASE CONDITIONS
 WEEKDAY PM PEAK HOUR
 LEVELS OF SERVICE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

INTERSTATE 81

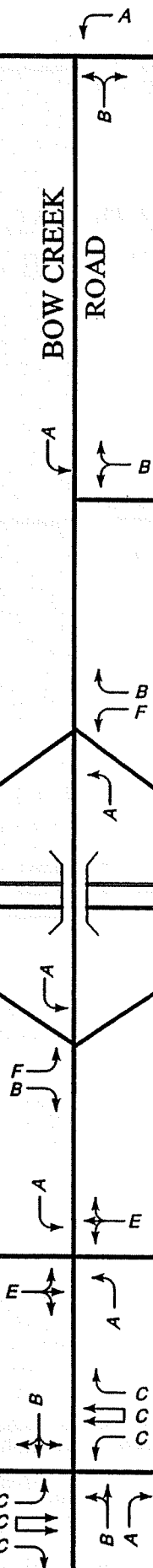
BOW CREEK
ROAD

FIRE HOUSE
ROAD

JONESTOWN
ROAD

ALLENTOWN

BOULEVARD

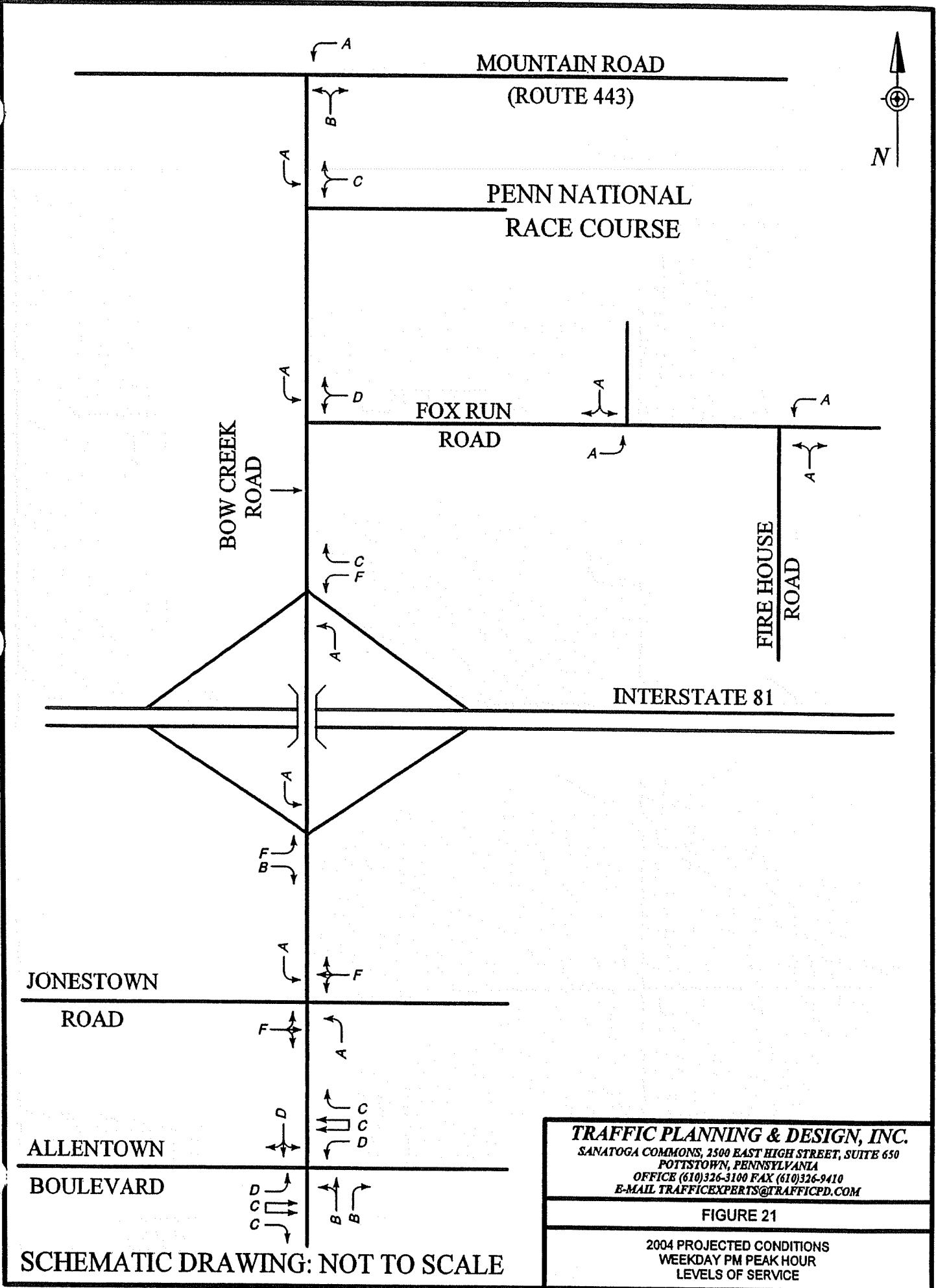


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FIGURE 20

2004 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE

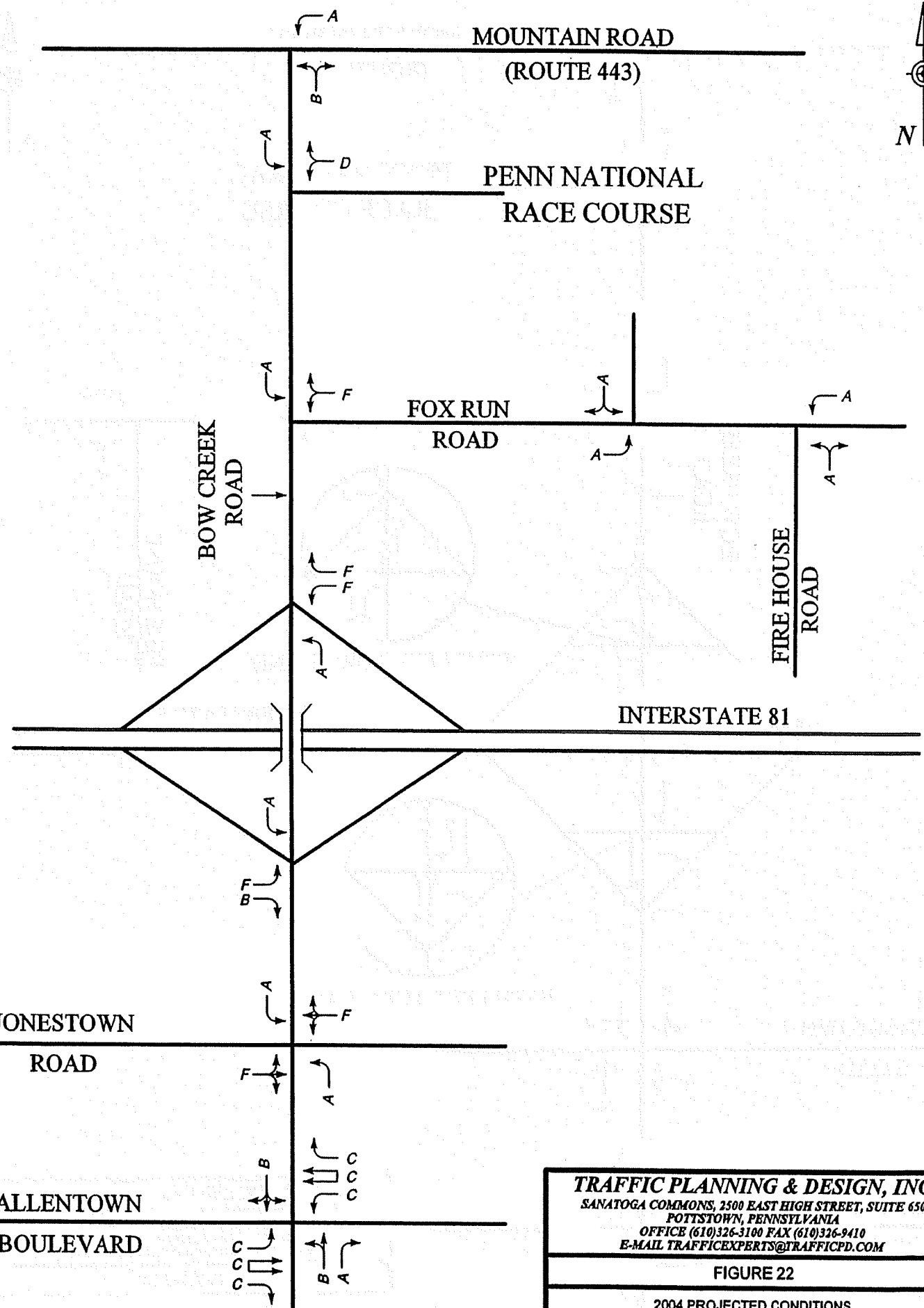


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FIGURE 21

2004 PROJECTED CONDITIONS
 WEEKDAY PM PEAK HOUR
 LEVELS OF SERVICE



JONESTOWN
ROAD

ALLENTOWN
BOULEVARD

MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

BOW CREEK
ROAD

FIRE HOUSE
ROAD

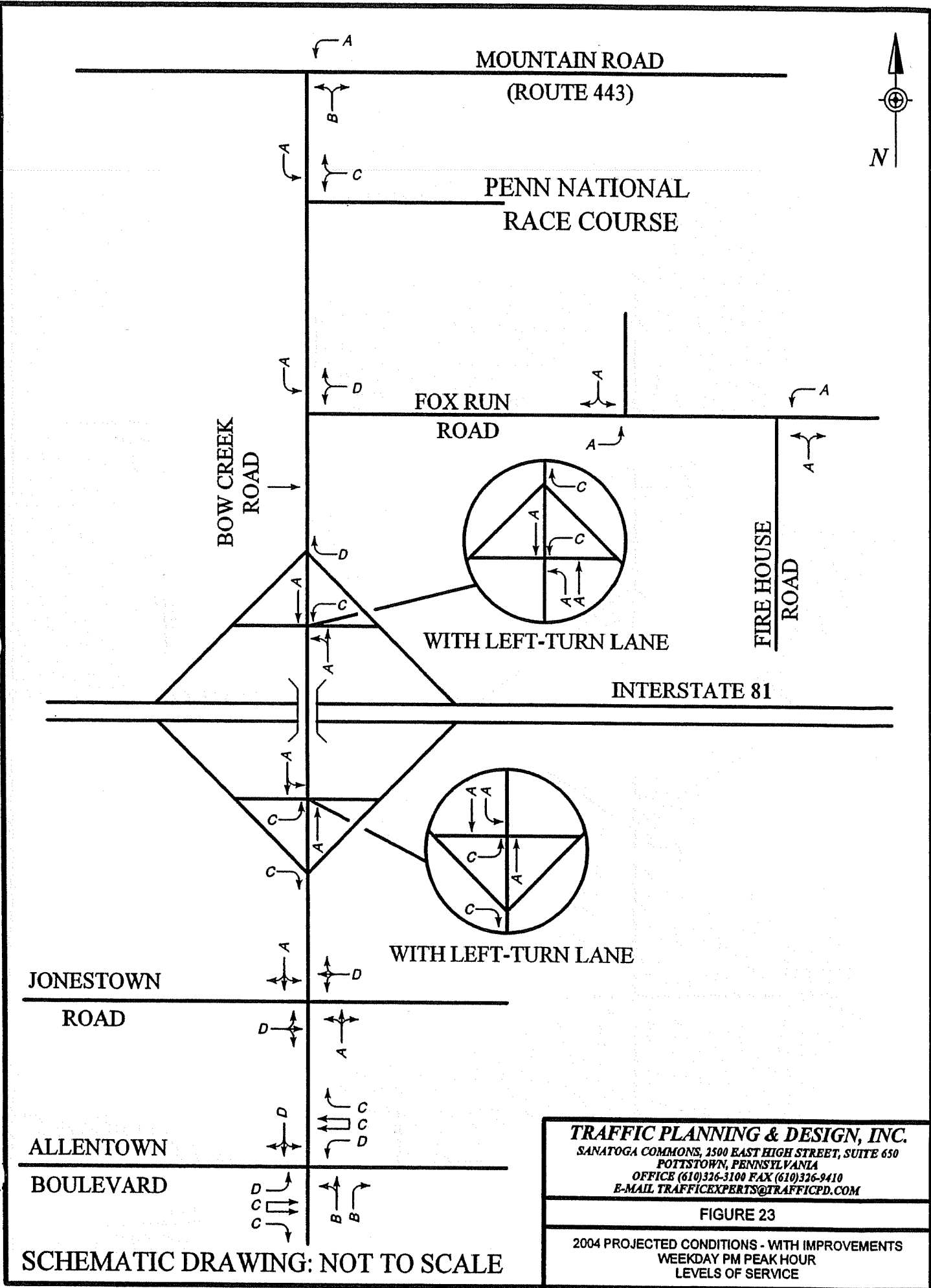
INTERSTATE 81

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FIGURE 22

2004 PROJECTED CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE

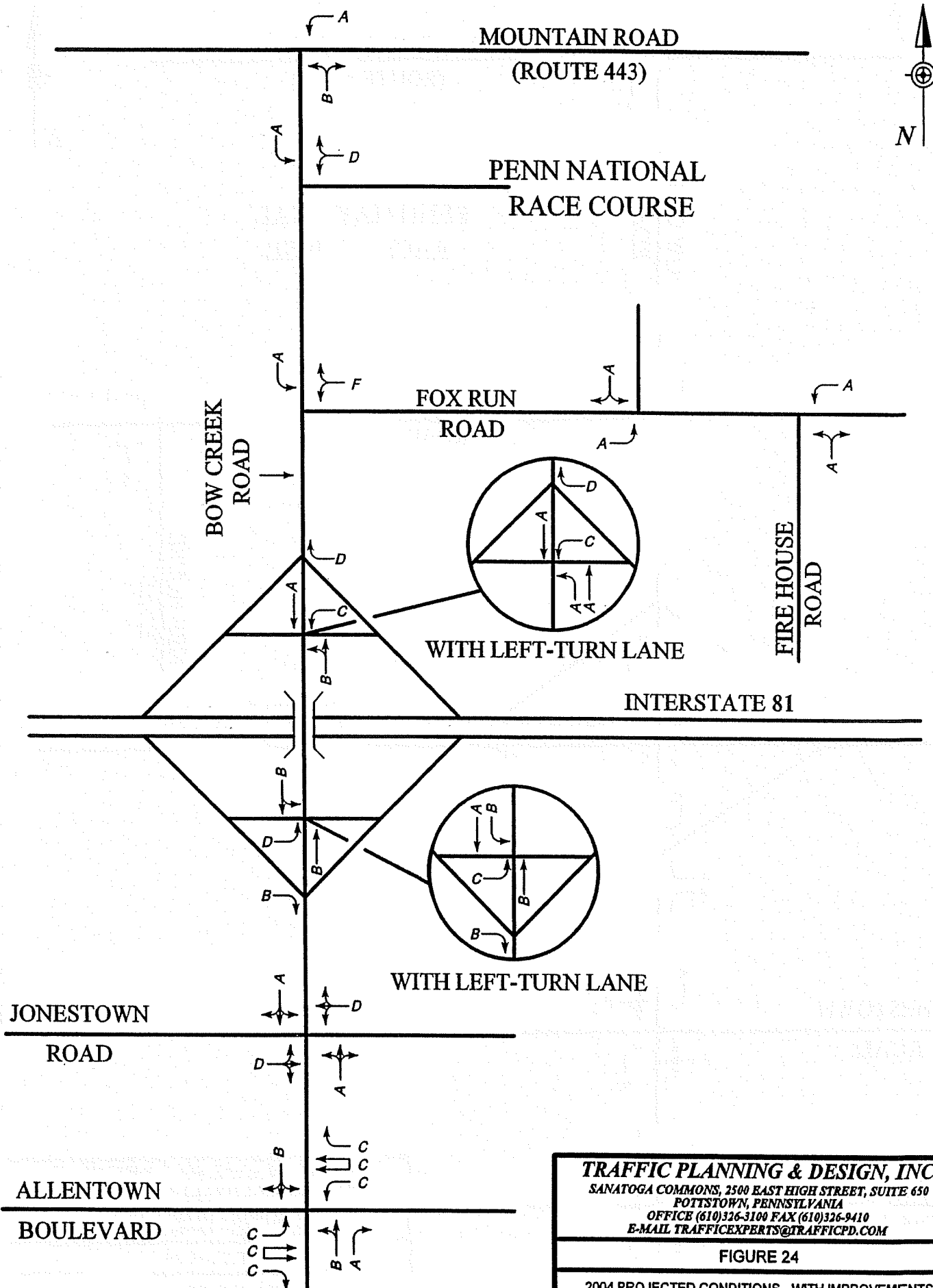


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FIGURE 23

2004 PROJECTED CONDITIONS - WITH IMPROVEMENTS
 WEEKDAY PM PEAK HOUR
 LEVELS OF SERVICE



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FIGURE 24

2004 PROJECTED CONDITIONS - WITH IMPROVEMENTS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

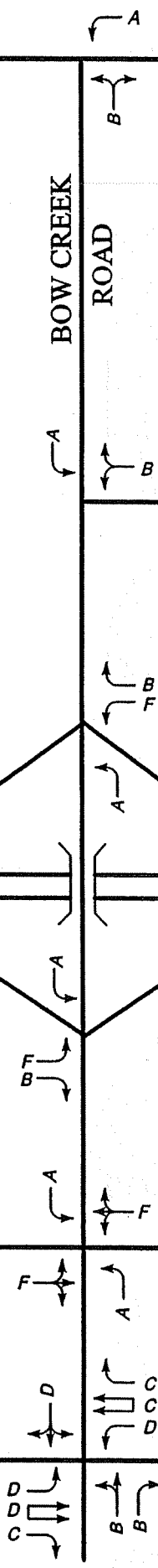
FOX RUN
ROAD

FIRE HOUSE
ROAD

INTERSTATE 81

JONESTOWN
ROAD

ALLENTOWN
BOULEVARD



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FIGURE 25

2009 BASE CONDITIONS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

FOX RUN
ROAD

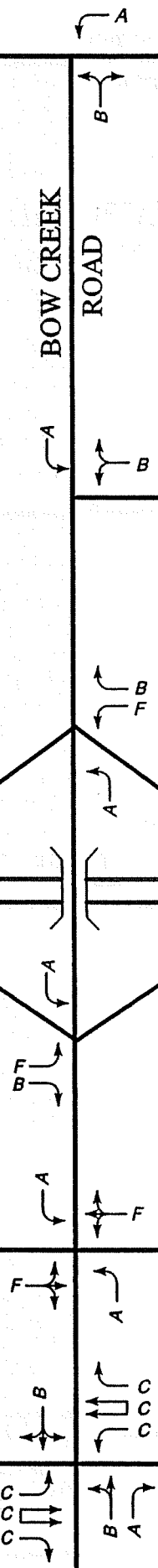
FIRE HOUSE
ROAD

INTERSTATE 81

JONESTOWN
ROAD

ALLENTOWN

BOULEVARD



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FIGURE 26

2009 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

INTERSTATE 81

BOW CREEK
ROAD

FIRE HOUSE
ROAD

JONESTOWN
ROAD

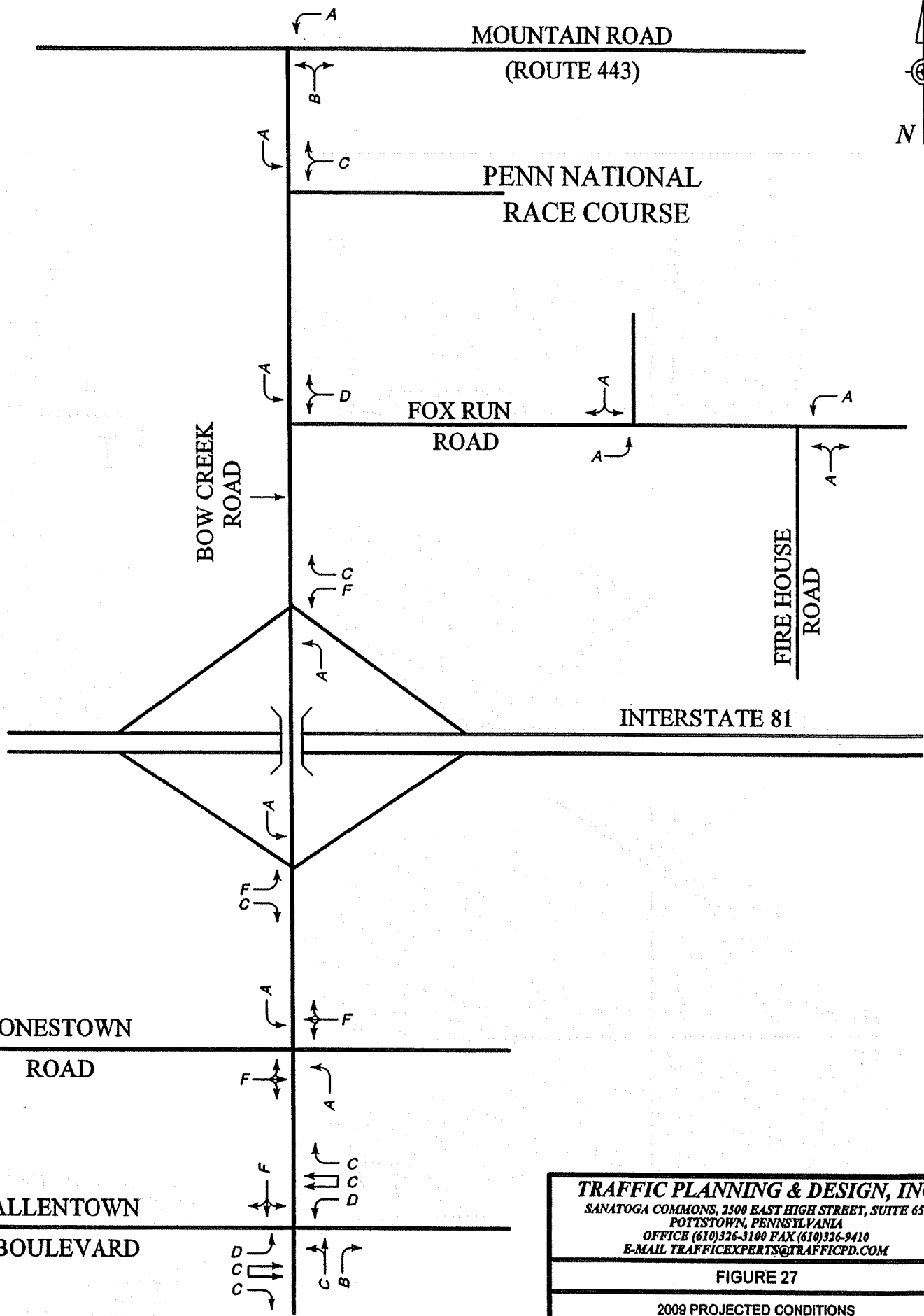
ALLENTOWN
BOULEVARD

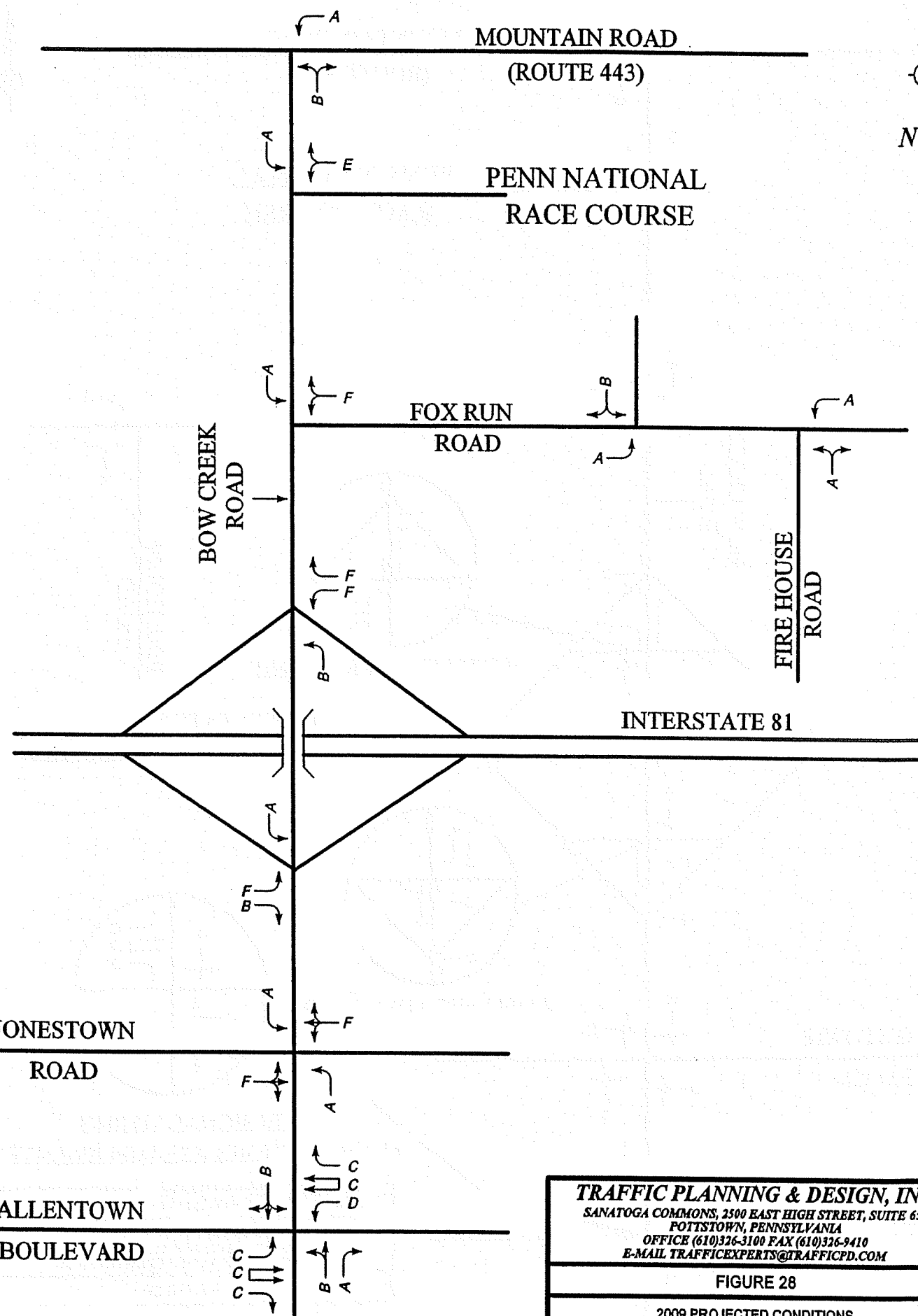
SCHEMATIC DRAWING: NOT TO SCALE

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FIGURE 27

2009 PROJECTED CONDITIONS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE





JONESTOWN
ROAD

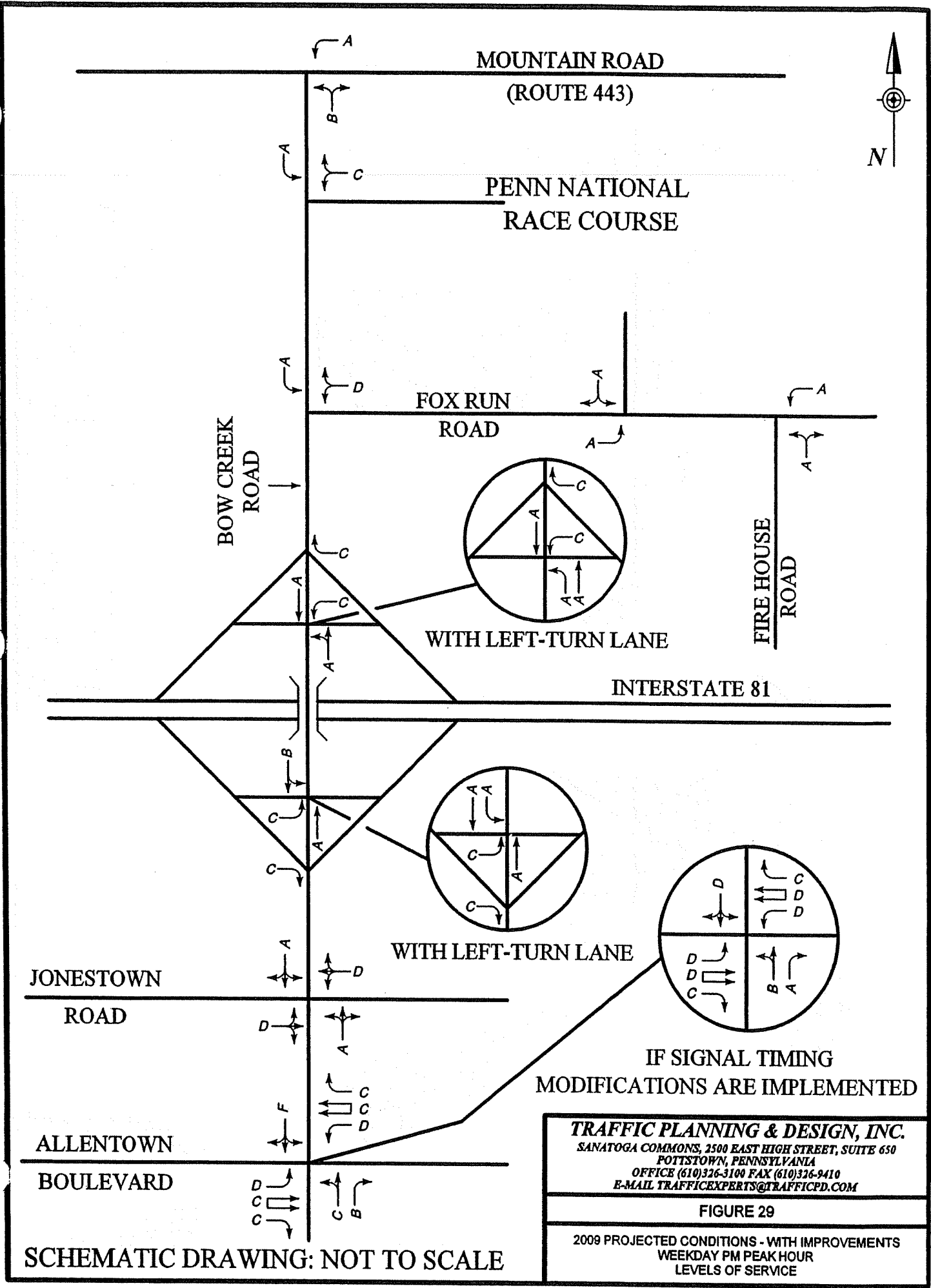
ALLENTOWN
BOULEVARD

SCHEMATIC DRAWING: NOT TO SCALE

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E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 28

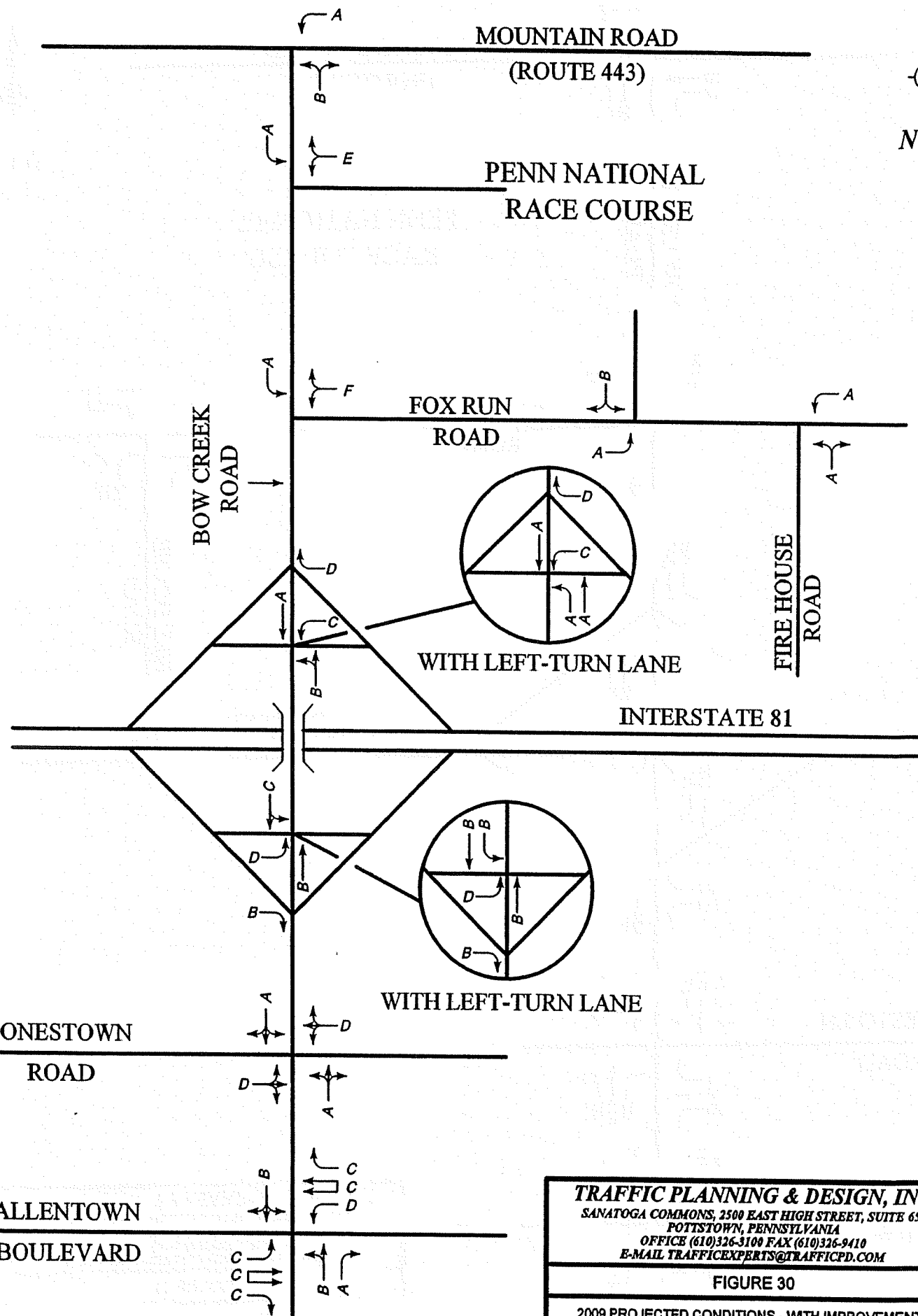
2009 PROJECTED CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE



SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
 SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
 POTTSTOWN, PENNSYLVANIA
 OFFICE (610)326-3100 FAX (610)326-9410
 E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 29
 2009 PROJECTED CONDITIONS - WITH IMPROVEMENTS
 WEEKDAY PM PEAK HOUR
 LEVELS OF SERVICE

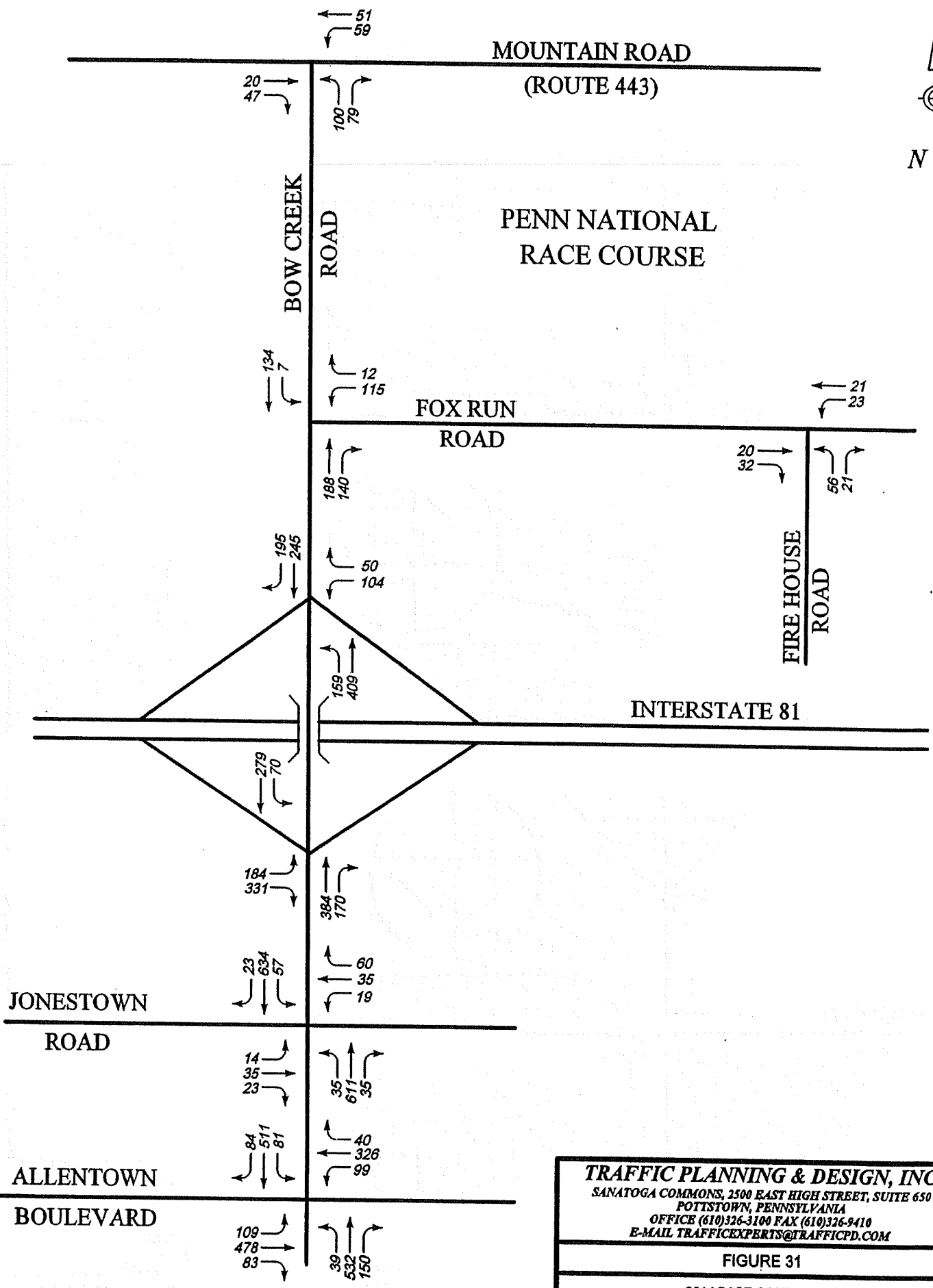


SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3109 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 30

2009 PROJECTED CONDITIONS - WITH IMPROVEMENTS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE



JONESTOWN

ROAD

ALLENTOWN

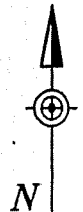
BOULEVARD

SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 31

2014 BASE CONDITIONS
WEEKDAY PM PEAK HOUR
TRAFFIC VOLUMES



MOUNTAIN ROAD

(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

FOX RUN
ROAD

FIRE HOUSE
ROAD

INTERSTATE 81

JONESTOWN

ROAD

ALLENTOWN

BOULEVARD

← 29
↘ 70

→ 32
↘ 40

↘ 37
↘ 68

← 111
↘ 2

↘ 12
↘ 95

← 19
↘ 12

↘ 249
↘ 174

→ 21
↘ 42

↘ 54
↘ 24

← 145
↘ 232

↘ 49
↘ 115

↘ 189
↘ 562

← 325
↘ 22

↘ 259
↘ 175

↘ 492
↘ 218

← 21
↘ 415
↘ 49

↘ 57
↘ 26
↘ 24

↘ 18
↘ 30
↘ 19

↘ 18
↘ 536
↘ 17

↘ 62
↘ 359
↘ 37

↘ 80
↘ 238
↘ 68

↘ 62
↘ 267
↘ 46

↘ 45
↘ 429
↘ 68

TRAFFIC PLANNING & DESIGN, INC.

SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650

POTTSTOWN, PENNSYLVANIA

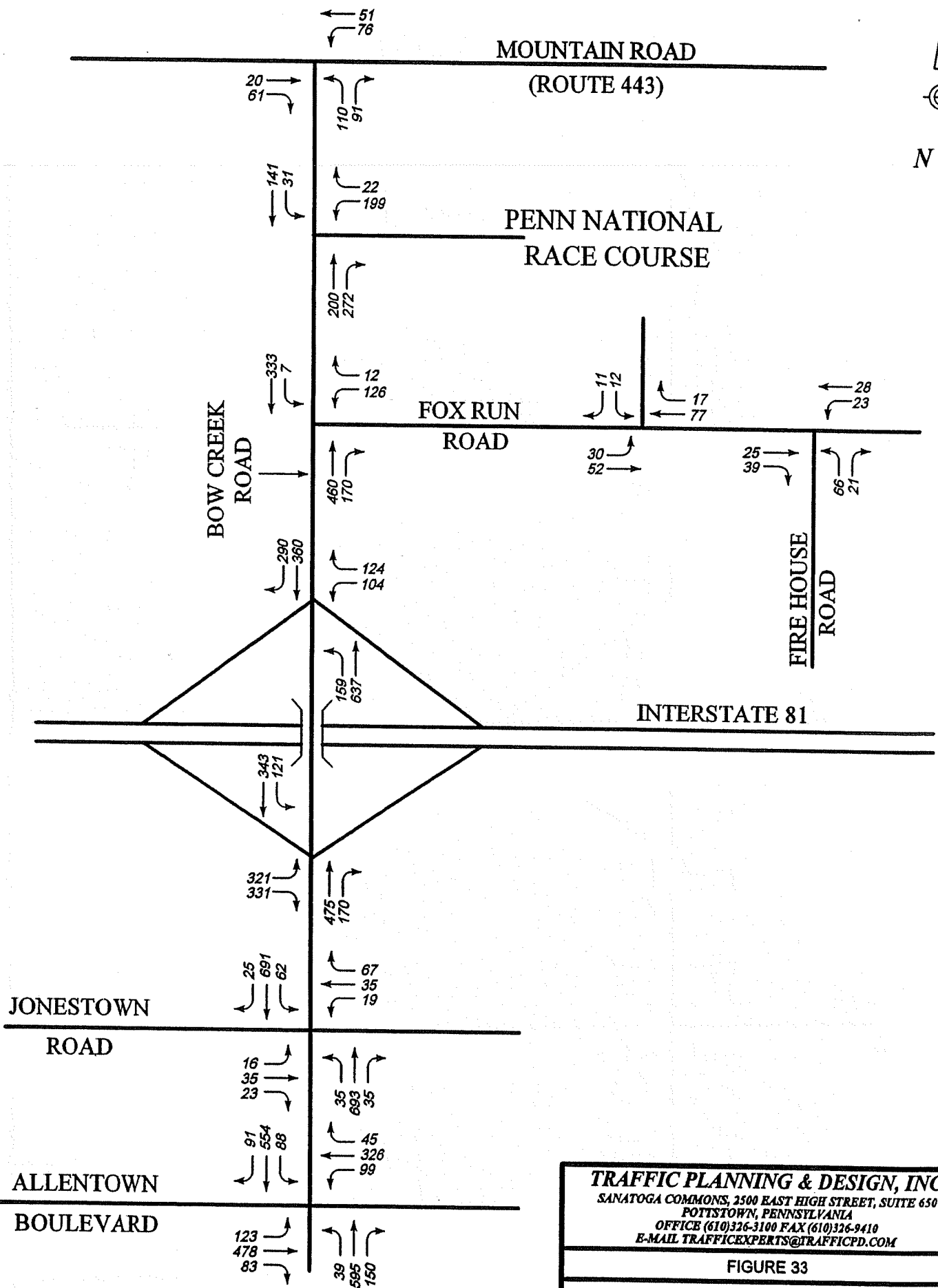
OFFICE (610)326-3109 FAX (610)326-9410

E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 32

2014 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES

SCHEMATIC DRAWING: NOT TO SCALE

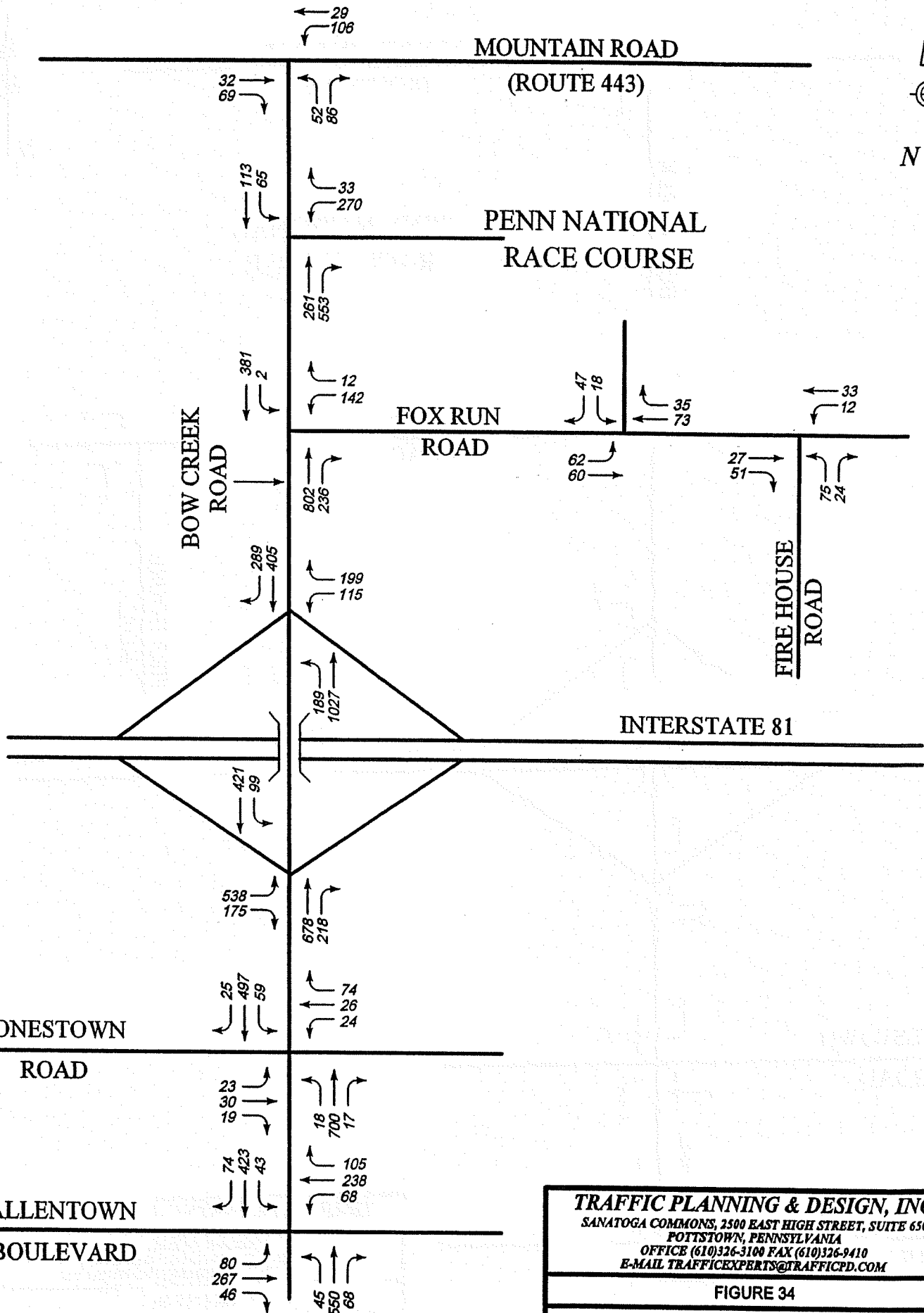


SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
 SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
 POTTSTOWN, PENNSYLVANIA
 OFFICE (610)326-3100 FAX (610)326-9410
 E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 33

2014 PROJECTED CONDITIONS
 WEEKDAY PM PEAK HOUR
 TRAFFIC VOLUMES



SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 34

2014 PROJECTED CONDITIONS
SATURDAY EVENING PEAK HOUR
TRAFFIC VOLUMES



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

BOW CREEK
ROAD

FOX RUN
ROAD

FIRE HOUSE
ROAD

INTERSTATE 81

JONESTOWN

ROAD

ALLENTOWN

BOULEVARD



TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 35

2014 BASE CONDITIONS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

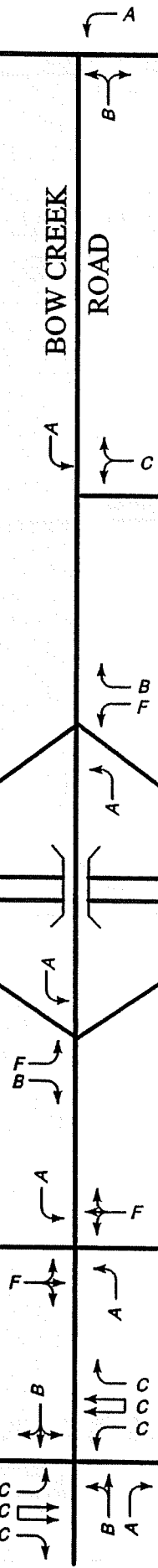
INTERSTATE 81

FIRE HOUSE
ROAD

BOW CREEK
ROAD

JONESTOWN
ROAD

ALLENTOWN
BOULEVARD



TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 36

2014 BASE CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE



MOUNTAIN ROAD
(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

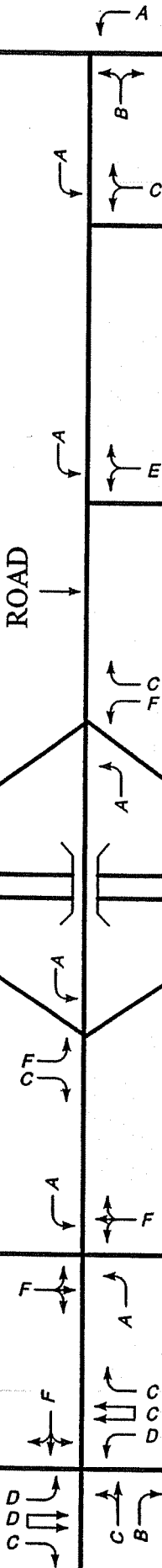
INTERSTATE 81

BOW CREEK
ROAD

FIRE HOUSE
ROAD

JONESTOWN
ROAD

ALLENTOWN
BOULEVARD

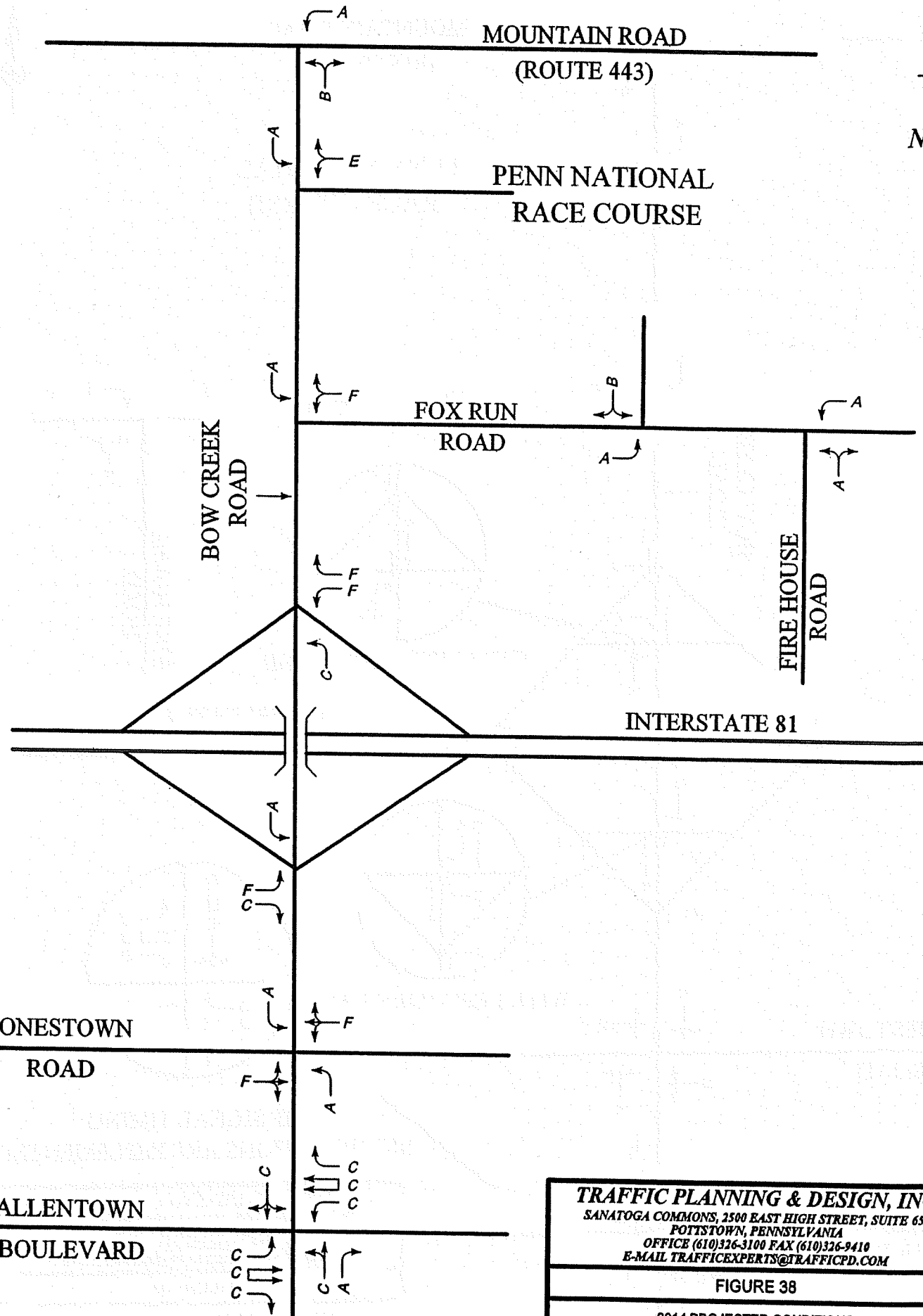


TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 3500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 37

2014 PROJECTED CONDITIONS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE



SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 38

2014 PROJECTED CONDITIONS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE



MOUNTAIN ROAD

(ROUTE 443)

PENN NATIONAL
RACE COURSE

FOX RUN
ROAD

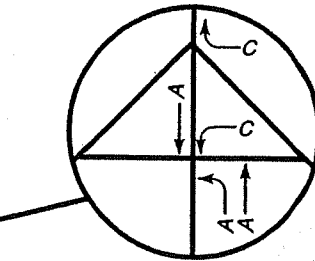
BOW CREEK
ROAD

FIRE HOUSE
ROAD

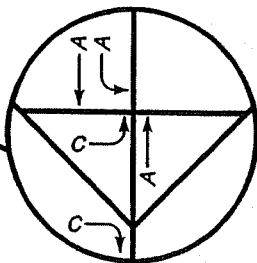
INTERSTATE 81

JONESTOWN
ROAD

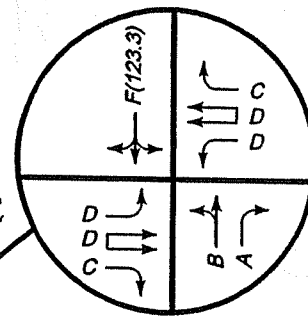
ALLENTOWN
BOULEVARD



WITH LEFT-TURN LANE



WITH LEFT-TURN LANE



IF SIGNAL TIMING
MODIFICATIONS ARE IMPLEMENTED

TRAFFIC PLANNING & DESIGN, INC.

SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650

POTTSTOWN, PENNSYLVANIA

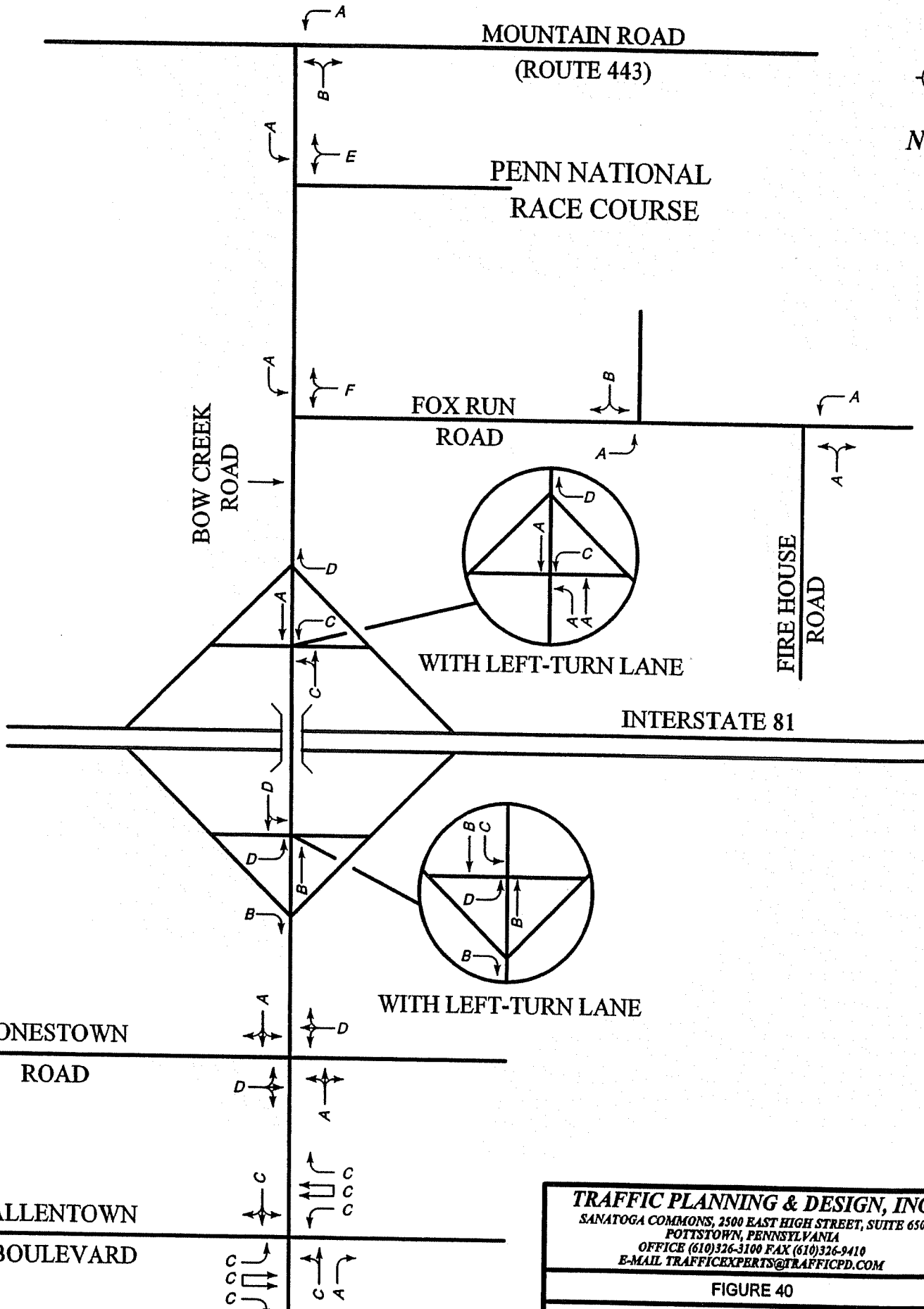
OFFICE (610)326-3100 FAX (610)326-9410

E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 39

2014 PROJECTED CONDITIONS - WITH IMPROVEMENTS
WEEKDAY PM PEAK HOUR
LEVELS OF SERVICE

SCHEMATIC DRAWING: NOT TO SCALE



SCHEMATIC DRAWING: NOT TO SCALE

TRAFFIC PLANNING & DESIGN, INC.
SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650
POTTSTOWN, PENNSYLVANIA
OFFICE (610)326-3100 FAX (610)326-9410
E-MAIL TRAFFICEXPERTS@TRAFFICPD.COM

FIGURE 40

2014 PROJECTED CONDITIONS - WITH IMPROVEMENTS
SATURDAY EVENING PEAK HOUR
LEVELS OF SERVICE

EXHIBIT I

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

www.dot.state.pa.us



Engineering District 8-0
2140 Herr Street
Harrisburg 17103-1699
October 12, 2004

Dauphin Co.-E. Hanover Twp.
Penn National Race Course Expansion
Traffic Impact Study

John Pyne
TPD, Inc.
2500 East High Street
Suite 650
Pottstown, PA 19464

Dear Mr. Pyne:

The Department has reviewed the Traffic Impact Study dated September 14, 2004, for the proposed development at the subject location and has found the study to be acceptable. We concur with the improvements that are deemed necessary in order to mitigate the LOS.

Four copies of this letter and the Traffic Impact Study should be submitted with all Highway Occupancy Permit (HOP) submissions. All HOP submissions are required to conform to PENNDOT District 8 policies and regulations as outlined in Chapter 441, and Publication 282.

If you have any further questions regarding this matter, please contact Michael J. Dzurko at 717-772-0976.

Very truly yours,

A handwritten signature in black ink, appearing to read "Barry G. Hoffman". The signature is fluid and cursive.

for: Barry G. Hoffman, P.E.,
District Executive

MJD/jtd
(mjd101211)

EXHIBIT J

DEVELOPMENT AGREEMENT

THIS AGREEMENT made and entered into this 19th day of December, 2003, by and between **PENN NATIONAL GAMING, INC.**, a Pennsylvania corporation, its successors and assigns, ("Developer") and **EAST HANOVER TOWNSHIP**, a Second Class Township located in Dauphin County, Pennsylvania (the "Township").

BACKGROUND

- A. Developer, or its affiliates, owns an approximately 580-acre parcel that is located in the Township along the eastern side of Bow Creek Road between Fox Run Road and Mountain Road, as more particularly described on the Plan (as defined below) (the "Property"). Developer currently operates a horse racing and wagering facility on the Property.
- B. Developer filed a Preliminary/Final Land Development Plan for Penn National of Grantville, prepared by McCarthy Engineering Associates, P.C. (the "Engineer"), dated March 31, 2003, last revised on July 18, 2003 (except that Sheet 5 was last revised on July 22, 2003) and approved by the Township's Board of Supervisors on October 21, 2003, as hereinafter (i) amended, modified or revised and (ii) approved by the Township (the "Plan").
- C. As noted on the Plan, the purpose of the Plan is to construct on the Property an expansion of existing facilities for horse racing and accessory uses to be conducted within the existing facilities on the Property and the expanded facilities, including hospitality services, restaurants, eateries, wagering facilities and, to the extent permitted by the laws of the Commonwealth of Pennsylvania, slot machines (the "Use").
- D. As more specifically shown on the Plan, Developer proposes to construct on the Property a facility for operating slot machines and related amenities, uses and facilities (the "Slot Machine Facility").
- E. As shown on the Plan, Developer proposes to install on the Property, or have installed on its behalf, certain improvements that are to serve the Slot Machine Facility, as more particularly described on the On-Site Improvements Financial Security Estimate prepared by the Engineer, a copy of which is attached hereto as **Exhibit "A"** (the "On-Site Improvements").
- F. The Township desires that Developer construct certain off-site improvements to Bow Creek Road to accommodate vehicular traffic that is projected to be generated by the Use. Specifically, these improvements are (i) realignment and widening of the portions of the Interstate-81 ramps that connect to Bow Creek Road in accordance with plans and permits approved by the Commonwealth of Pennsylvania, Department of Transportation ("PennDOT") (the "Ramp Realignment"); (ii) installation of traffic signals at the intersections of Bow Creek Road and the northbound and southbound entrance/exit ramps of Interstate-81 in accordance with plans and permits approved by PennDOT (the "Ramp Traffic Signals"); and (iii) installation of a traffic signal at the intersection of Bow Creek Road and Jonestown Road in accordance with

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12/17/03

plans and permits approved by PennDOT (the "Jonestown Road Traffic Signal"). The Ramp Realignment, Ramp Traffic Signals and Jonestown Road Traffic Signal collectively are referred to as the "Off-Site Improvements."

G. The Township desires that Developer provide, in accordance with the terms of this Agreement, financial security to guarantee completion of (i) the On-Site Improvements (the "On-Site Financial Security") and (ii) certain portions of the Off-Site Improvements (the "Off-Site Financial Security"). The Township also desires that Developer provide financial security to guarantee maintenance of the On-Site Improvements for a period of 18 months (the "On-Site Maintenance Financial Security").

H. The Township and Developer desire to enter into an agreement concerning the construction of the On-Site Improvements, Off-Site Improvements and the Use.

NOW THEREFORE, with intent to be legally bound and in consideration of the mutual promises contained herein, the Township and Developer agree as follows:

1. ON-SITE IMPROVEMENTS.

A. Conditions Precedent. Developer's obligations to construct the On-Site Improvements shall be conditioned upon the satisfaction of the following conditions precedent, unless waived by Developer in writing:

(1) The Commonwealth of Pennsylvania shall have adopted a law that permits slot machines to be operated in Pennsylvania;

(2) Developer shall have obtained a final, unappealable license from the Commonwealth of Pennsylvania for operating slot machines at the Property;

(3) Developer shall have obtained all final, unappealable governmental licenses, permits and approvals to construct and use the Off-Site Improvements, the Slot Machine Facility and other improvements shown on the Plan according to terms and conditions that are acceptable to Developer; and

(4) Developer elects to construct the Slot Machine Facility.

B. Township Approvals. To the extent that the Township has any jurisdiction over issuing approvals and permits for constructing and/or operating any portion of the On-Site Improvements, the Township shall issue such approvals and permits within thirty (30) days after receipt of an application or request by Developer (the "On-Site Township Approvals").

10-12-16-03
10/19/16

C. Construction of On-Site Improvements. Developer, at its cost, shall complete construction of the On-Site Improvements before the date on which a certificate of occupancy is issued for the Slot Machine Facility.

D. On-Site Financial Security.

(1) On-Site Financial Security Instrument. The total amount of financial security required to be provided by Developer to guarantee the completion of the On-Site Improvements in accordance with the terms and conditions of this Agreement shall be One Million One Hundred Fourteen Thousand Seven Hundred Seventy-Seven Dollars and 80/100 (1,114,777.80) (the "On-Site Financial Security Amount"), which amount Developer and the Township agree equals one hundred twenty percent (120%) of the cost of completing the On-Site Improvements. On or before the date on which the Plan is recorded, Developer shall provide to the Township a bond or irrevocable stand-by letter of credit in the face amount of the On-Site Financial Security Amount (the "On-Site Financial Security Instrument"). The On-Site Financial Security Instrument, On-Site Maintenance Financial Security Instrument (as defined herein) and Off-Site Financial Security Instrument (as defined herein) shall be issued in accordance with this Agreement by a duly chartered and acceptable lending institution within the meaning of Sections 509(c) and (d) of the MPC, 53 P.S. § 10509(c) and (d) (a "Bank").

(2) Right to Draw Upon On-Site Financial Security Instrument. In the event that Developer has not completed and installed the On-Site Improvements in accordance with the terms and conditions of this Agreement, the Township, subject to the notice and cure period of Paragraph 6 of this Agreement, may present to the Bank a demand for payment by sight draft from the Township of funds not to exceed the On-Site Financial Security Amount so that the Township may make, or cause to be made, the On-Site Improvements. All portions of the On-Site Financial Security Instrument paid over to the Township by the Bank pursuant to this Paragraph I.C(2) shall be used by the Township solely for the purpose of completing and installing the On-Site Improvements in accordance with this Agreement and for no other purpose. Any amounts paid to the Township from the On-Site Financial Security Instrument in excess of the actual and reasonable cost of completing the On-Site Improvements shall be refunded by the Township to Developer. No funds paid from the On-Site Financial Security Instrument to the Township shall in any way be construed as a loan to the Township, nor shall such payment to the Township, except as specifically provided herein, obligate the Township to repay such funds.

(3) Partial Releases. From time to time as work on the On-Site Improvements proceeds, Developer may make written requests to the Township, pursuant to Section 509(j) of the MPC, 53 P.S. § 10509(j), for

AC 12-16-03
PA 14/17/03

release of portions of the On-Site Financial Security Amount. The Township shall, pursuant to Developer's request and within the time limits prescribed by Section 509(j) of the MPC, provide to Developer and the Bank written notice (the "Township Approval Notice") describing (i) the portion of the On-Site Improvements that have been completed in accordance with the Plan and (ii) the dollar value attributable thereto in accordance with the unit cost of such phase or portion as set forth in the applicable line item(s) in **Exhibit "A"** (the "On-Site Release Amount"). The Township acknowledges and agrees that within five (5) business days following receipt of each Township Approval Notice, the Bank shall reduce the face amount of the On-Site Financial Security Instrument by the On-Site Release Amount.

(4) Notice of Completion and Full Release. When the On-Site Improvements have been completed and installed in accordance with the Plan and terms and conditions of this Agreement, Developer shall provide a notice of completion to the Township. Within forty-five (45) days after the date of such notice, the Township shall (i) confirm to Developer in writing that the On-Site Improvements have been completed in accordance with the Plan and applicable governmental regulations and (ii) authorize full release of the On-Site Financial Security Instrument.

E. On-Site Maintenance Financial Security.

(1) On-Site Maintenance Financial Security Instrument. The total amount of financial security required to be provided by Developer to guarantee for a period of 18 months the maintenance of the On-Site Improvements shall be One Hundred Eleven Thousand Four Hundred and Seventy-Eight Dollars (\$111,478.00) (the "On-Site Maintenance Financial Security Amount"). Pursuant to Section 509(k) of the MPC (53 P.S. § 10509(k)), upon completion of construction of the On-Site Improvements and full release of the On-Site Financial Security Instrument by the Township pursuant to Paragraph 1.D(4) above, Developer shall provide to the Township a bond or irrevocable standby letter of credit in face amount of the On-Site Maintenance Financial Security Amount (the "On-Site Maintenance Financial Security Instrument"). The term of such On-Site Maintenance Financial Security Instrument shall be 18 months from the date of such instrument (the "Maintenance Term") and shall automatically expire upon expiration of such Maintenance Term.

(2) Right to Draw Upon the On-Site Maintenance Financial Security Instrument. During the Maintenance Term, in the event that Developer fails to maintain the On-Site Improvements in a reasonably satisfactory condition, the Township, subject to the notice and cure period of Paragraph 6 of this Agreement, may present to the Bank a demand for payment, by sight draft from the Township, of funds not to exceed the On-Site Maintenance Financial Security Amount. All portions of the On-Site

JAC 12.16.03
RR 12/19/03

Maintenance Financial Security Amount paid over to the Township by the Bank pursuant to this Paragraph I.E(5) shall be used by the Township solely for the purpose of maintaining the On-Site Improvements and for no other purpose. Any amounts paid to the Township from the On-Site Maintenance Financial Security Amount in excess of the actual and reasonable cost of maintaining the On-Site Improvements shall be refunded by the Township to Developer. No funds paid from the On-Site Maintenance Financial Security Instrument to the Township shall in any way be construed as a loan to the Township, nor shall such payment to the Township, except as specifically provided herein, obligate the Township to repay such funds.

2. OFF-SITE IMPROVEMENTS.

A. Conditions Precedent. Developer's obligations to construct the Off-Site Improvements shall be conditioned upon satisfaction of the following conditions precedent, unless waived by Developer in writing:

(1) The Commonwealth of Pennsylvania shall have adopted a law that permits slot machines to be operated in Pennsylvania;

(2) Developer shall have obtained a final, unappealable license from the Commonwealth of Pennsylvania for operating slot machines at the Property;

(3) Developer shall have obtained all final, unappealable governmental licenses, permits and approvals to construct and use the Slot Machine Facility and other improvements shown on the Plan according to terms and conditions that are acceptable to Developer;

(4) All final, unappealable governmental licenses, permits and approvals for constructing and operating the Off-Site Improvements shall have been obtained according to terms and conditions that are acceptable to Developer; and

(5) Developer elects to (i) construct Slot Machine Facility or (ii) otherwise operate slot machines at the Property.

B. Design of Off-Site Improvements. Before the later of (i) sixty (60) days after the date of this Agreement or (ii) sixty (60) days after the date on which the Commonwealth of Pennsylvania grants to Developer a final, unappealable license to operate slot machines at the Property, Developer shall submit to the Township for its review and comment plans showing the design of the Off-Site Improvements (the "Design Plans"). The Township shall provide any comments on the Design Plans to Developer within thirty (30) days after the date on which the Design Plans are delivered to the Township (the "Comment

AC 12-16-03
RT 1/19/07

Period"). If the Township fails to provide comments within the Comment Period, the Township shall be deemed to have no comments on the Design Plans.

C. PennDOT Permits.

(1) Application. Within ninety (90) days after expiration of the Comment Period, Developer shall submit to PennDOT applications for highway occupancy and traffic signal permits to construct and operate the Off-Site Improvements (the "PennDOT Permits").

(2) Cooperation. The Township acknowledges that it must be the applicant and permittee for the Ramp Traffic Signals and Jonestown Road Traffic Signal, and agrees to execute such documents and do such things as may be reasonably requested by Developer to carry out the terms and conditions of this Agreement.

D. Township Permits. To the extent that the Township has any jurisdiction over issuing approvals and permits for constructing and/or operating any portion of the Off-Site Improvements (the "Off-Site Township Permits"), the Township shall issue such approvals and permits within thirty (30) days after receipt of an application or request by Developer for such permits and approvals.

E. Construction of Off-Site Improvements.

(1) By no later than 120 days after the date on which (i) the PennDOT Permits and the Township Permits (if any are required) have been issued and (ii) Developer commences construction of the Slot Machine Facility or otherwise operates slot machines on the Property, Developer shall commence construction of the Off-Site Improvements in accordance with the PennDOT Permits.

(2) Developer shall diligently pursue and complete construction of the Off-Site Improvements, and such construction shall be subject to events beyond Developer's reasonable control, including but not limited to acts of God or the public enemy or terrorists, casualties, PennDOT restrictions and weather.

F. Temporary Traffic Control. In the event that Developer desires to install and operate slot machines for public use before the Off-Site Improvements are completed, Developer, at its cost, shall provide traffic monitors or officers at the intersections of Bow Creek Road and the northbound and southbound entrance/exit ramps of I-81 for the purpose of directing and providing for safe movement of traffic at those intersections. Such traffic monitors or officers shall be (i) trained in traffic control, (ii) reasonably acceptable to the Township and (iii) provided at such times and in such a manner as the Township and Developer reasonably may agree. Developer shall not be permitted at any time to establish a one-way traffic pattern on Bow Creek Road.

DOC 12-16-03
PR 12/19/03

G. Dedication of Off-Site Improvements. Any portions of the Off-Site Improvements that are not dedicated to and accepted by the Commonwealth of Pennsylvania shall be dedicated to the Township (the "Township Improvements"). The Township shall accept dedication of the Township Improvements, provided that such Township Improvements are constructed in accordance with applicable Township specifications (to the extent that such specifications are not inconsistent with applicable PennDOT specifications). Developer agrees to post for a period of 18 months financial security (e.g. irrevocable letter of credit, bond, etc.) in the amount of 10% of the cost of constructing the roadway portions of the Township Improvements (the "Township Improvements Maintenance Security"), provided that PennDOT does not require such financial security to be provided. The cost of roadway portions of the Township Improvements shall be determined by Developer's consultant(s).

H. Off-Site Financial Security.

(1) Off-Site Financial Security Instrument. To the extent required pursuant to this Paragraph 2.H(1), on or before the earlier of (i) the date on which Developer commences construction of the Slot Machine Facility or (ii) the date on which Developer commences operation of slot machines on the Property, Developer shall deliver to the Township a bond or irrevocable stand-by letter of credit to guarantee that the Off-Site Improvements are completed and installed in accordance with the terms and conditions of this Agreement (the "Off-Site Financial Security Instrument"). Such Off-Site Financial Security Instrument shall be in the face amount of 120% of (i) the cost of the equipment portion of the Ramp Traffic Signals and the Jonestown Road Traffic Signal and (ii) the cost of constructing the road improvement portion of the Off-Site Improvements if PennDOT does not require financial security for such road improvements (the "Off-Site Financial Security Amount"). Such costs shall be determined by Developer's consultant(s). If PennDOT requires financial security for such road improvements, Developer shall use reasonable efforts to have the Township named as an additional surety or secured party in any security instrument that is provided to PennDOT, provided that (i) PennDOT permits the Township to be so named and (ii) such naming does not substantially increase the cost of providing such financial security. The Township's rights as such an additional surety and secured party shall be subject to the rights of PennDOT under any such financial security instrument or agreement that is provided to PennDOT.

(2) Right to Draw Upon the Off-Site Financial Security Instrument. In the event that Developer has not completed in accordance with the terms and conditions of this Agreement the Off-Site Improvements for which financial security is provided to the Township pursuant to Paragraph 2.H(1) above (the "Township Secured Off-Site Improvements"), the Township, subject to the notice and cure period of

12-16-03
1/14/05

Paragraph 6 of this Agreement, may present to the Bank a demand for payment by sight draft from the Township of funds not to exceed the Off-Site Financial Security Amount in order that the Township may make, or cause to be made, the Township Secured Off-Site Improvements. All portions of the Off-Site Financial Security Instrument paid to the Township by the Bank pursuant to this Paragraph 2.H(2) shall be used by the Township solely for the purpose of completing and installing the Township Secured Off-Site Improvements as required under this Agreement and for no other purpose. Any amounts paid to the Township from the Off-Site Financial Security Instrument in excess of the actual and reasonable cost of completing the Township Secured Off-Site Improvements shall be refunded by the Township to Developer. No funds paid from the Off-Site Financial Security Instrument to the Township shall in any way be construed as a loan to the Township, nor shall such payment to the Township, except as specifically provided herein, obligate the Township to repay such funds.

(3) Partial Releases. From time to time as work on the Off-Site Improvements proceeds, Developer may make written requests to the Township, pursuant to Section 509(j) of the MPC, 53 P.S. § 10509(j), for release of portions of the Off-Site Financial Security Amount. The Township shall, pursuant to Developer's request and within the time limits prescribed by Section 509(j), provide to Developer and the Bank written notice (the "Township Off-Site Approval Notice") describing (i) the portion of the Township Secured Off-Site Improvements that have been completed in accordance with the Plan and (ii) the dollar value attributable thereto in accordance with the unit cost of such portion as determined by Developer's consultant(s) (the "Off-Site Release Amount"). The Township acknowledges and agrees that within five (5) business days following receipt of each Township Off-Site Approval Notice, the Bank shall reduce the face amount of the Off-Site Financial Security Instrument by the Off-Site Release Amount.

(4) Notice of Completion and Full Release. When the Township Secured Off-Site Improvements have been completed and installed in accordance with the Plan and terms and conditions of this Agreement, Developer shall provide a notice of completion to the Township and the Township Engineer. Within forty-five (45) days after the date of such notice, the Township shall (i) confirm to Developer in writing that the Township Secured Off-Site Improvements have been completed in accordance with the Plan and (ii) authorize full release of the Off-Site Financial Security Instrument. To the extent that the Township is named as an additional surety or secured party in any financial security instrument or agreement that is provided to PennDOT for the Off-Site Improvements (the "PennDOT Instrument"), the provisions of Paragraphs 2.H(1) through (4) above also shall govern the obligations of the Township as such

AC 12.16.03
RD 12/19/

additional surety or secured party, unless such obligations of the Township specifically are modified by the terms of the PennDOT Instrument.

I. Payment of Costs of Off-Site Improvements. The Township shall have no obligation to reimburse Developer for the costs of the Off-Site Improvements. The Township, however, agrees to cooperate with Developer to obtain reimbursement for, or funding for the direct payment of, the cost of the Off-Site Improvements from the Pennsylvania Department of Community and Economic Development ("DCED") or other sources identified by Developer. The Township acknowledges and agrees that Developer may need the cooperation of the Township to seek, apply for and obtain such funding, and the Township agrees to execute such documents and do such things as may be reasonably requested to obtain such funding.

3. USE.

A. Number of Slot Machines. The number of slot machines operated at the Property shall be limited to a maximum of 3,000 (unless a greater number is permitted pursuant to Paragraph 3.B below). In addition to the existing racetrack and facilities and services operated in connection therewith, Developer's use also may include secondary uses that are operated in connection with the Slot Machine Facility, including hospitality services, restaurants, eateries and other accessory uses.

B. Increase in Number of Slot Machines. Developer shall be permitted to operate more than 3,000 slot machines at the Property if (i) PennDOT authorizes or otherwise does not restrict operation of such additional slot machines and (ii) traffic generated by such additional slot machines does not cause the intersections of Bow Creek Road/Fox Run Road, Bow Creek Road/Property driveway at Bow Creek Road and Fox Run Road/Property driveway at Fox Run Road (each individually a "Township Intersection"), as those Township Intersections then-exist or are agreed to be improved by Developer or any other person or entity, to have a failing level of service during the a.m. and p.m. peak hours of such Township Intersections, as determined according to traffic engineering standards. Notwithstanding the foregoing, if (a) it is determined that traffic generated by such additional slot machines will cause any such Township Intersection to have such a failing level of service according to traffic engineering standards, and (b) installation of a traffic signal at such Township Intersection would eliminate such failing level of service and (c) PennDOT refuses to issue a traffic signal permit for installing that traffic signal because such signal does not meet sufficient traffic signal warrants in PennDOT's judgment, then Developer nonetheless shall be permitted to operate such additional slot machines.

C. Slot Machines in Existing Facility. Developer shall be permitted to operate slot machines at the Property prior to completion of construction of the Slot Machine Facility, provided that Developer (i) provides Off-Site Financial

AC 12.16.03
17/07/06

Security to the Township or PennDOT in accordance with the terms and conditions of this Agreement, (ii) pursues the PennDOT Permits and construction of the Off-Site Improvements in accordance with the terms and conditions of this Agreement, (iii) provides temporary traffic control in accordance with the terms and conditions of this Agreement, (iv) provides the On-Site Financial Security to the Township in the amount of 120% of the cost of constructing the "Improvements to Bow Creek Road and Driveway" as set forth on **Exhibit "A"** (together with landscaping and stormwater management and erosion and sedimentation control facilities that relate to such improvements).

4. REVISIONS TO CURRENT PLAN. The Plan, as approved by the Township's Board of Supervisors on October 21, 2003 (the "Current Plan"), may be revised administratively as a minor revision to the Current Plan, without any requirement of formally filing an amended land development plan and without being subject to Township's review and approval process for new land development plans; provided, however, that (i) any such revisions are limited to the layout and design of internal driveways, circulation and parking lot, site lighting, sidewalks and landscaping configurations, (ii) any such revisions comply with applicable provisions under the Township's ordinances in effect as of March 31, 2003, (iii) any such revisions do not increase the amount of impervious coverage contemplated under the Current Plan, (iv) the Township's Board of Supervisors approves the revisions, (v) Developer provides financial security for any increase in the cost of the On-Site Improvements as modified by such revisions and (vi) Developer agrees to prepare and record an as-built plan that incorporates such revisions.

5. COOPERATION. The Township acknowledges and agrees that Developer will need the cooperation of the Township to carry out the provisions of this Agreement, and the Township hereby agrees to execute such documents and do such things as may be reasonably requested to carry out the terms and conditions of this Agreement. The Township agrees not to take any action that would tend to result in any PennDOT Permits being withheld or denied. In addition, Developer and the Township acknowledge and agree that the bridge portion of Bow Creek Road (extending over I-81) might have to be widened, or some other road improvement constructed, in the long-term to accommodate future growth and development (the "Future Improvements"). The Township and Developer agree to pursue, in good faith, funding of the Future Improvements from state, federal and other sources (including without limitation funding that is reserved in slot machine legislation for host municipality infrastructure). This paragraph shall not be construed to obligate the Township to fund any portion of the Future Improvements through (i) its existing funds, (ii) its non-slot machine-related revenue or (iii) revenue that the Township receives from the actual operation of slot machines on the Property. The Township agrees to execute such documents and do such things as may be reasonably requested to obtain such funding. In addition, Developer and the Township agree to cooperate and coordinate with each other in good faith to design and pursue all required governmental approvals for the Future Improvements, as such improvements are agreed upon between Developer and the Township, and to share the costs of such design and pursuit of approvals as the parties mutually may agree.

AC 12-16-23
17/0/05

6. DEFAULT. Should any party violate or fail to perform any of the terms or conditions of this Agreement, and fail to cure such violation or failure to perform within twenty (20) days of written notice specifying the nature of the violation or failure, the other party may bring an action for specific performance or other action at law and/or equity.

7. NOTICES. All notices, demands or other communications that are required or permitted to be given under this Agreement shall be in writing and shall be given by personal delivery, or by registered or certified mail, return receipt requested, or by recognized overnight courier requiring a receipt upon delivery, addressed to the parties at the respective addresses set forth below:

If to the Township: East Hanover Township
8848 Jonestown Road
Grantville, PA 17028

If to Developer: Penn National Gaming, Inc.
825 Berkshire Boulevard
Wyomissing, PA 19610
Attn: General Counsel

With a copy to: Charles M. Courtney, Esquire
McNees, Wallace & Nurick LLC
100 Pine Street
Harrisburg, PA 17101

8. ENTIRE AGREEMENT. This Agreement fully and completely sets forth the understanding of the parties with respect to the subject matter described herein, and any and all representations by any of the parties or their agents or representatives made prior to or concurrent with execution of this Agreement with respect to the subject matter described herein which are not specifically contained herein shall not be binding on any of the parties hereto.

9. AMENDMENT. This Agreement may not be changed orally or in any manner other than by an agreement in writing and signed by the party against whom enforcement of the change is sought.

10. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

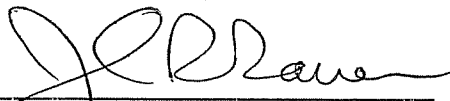
11. BINDING EFFECT. This Agreement shall be binding upon and shall benefit the parties hereto and their respective successors and assigns.

12. BACKGROUND. The foregoing Background is incorporated herein by reference and made a part hereof.

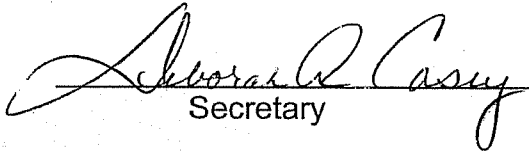
AC 12-16-03
#14/19/03

IN WITNESS WHEREOF, and with intent to be legally bound, the parties have caused these presents to be duly executed by their respective authorized officers and officials.

WITNESS:


Name: _____


ATTEST:


Secretary

(Township Seal)

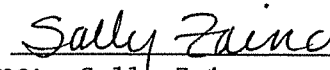
DEVELOPER:

PENN NATIONAL GAMING, INC.

By: 
Name: Robert S. Appolito
Title: Secretary/Treasurer

TOWNSHIP:

EAST HANOVER TOWNSHIP, Dauphin
County, Pennsylvania

By: 
Name: Sally Zaino
Title: Chairman, Board of Supervisors

PC 12-16-03
14/5/11

[Attach the "On-Site Improvements Financial Security Estimate"]

Exhibit "A"

AC 12.16.03
12/17/17



Professional Engineers, Planners and Surveyors

ENGINEERING COST ESTIMATE

PROJECT: Penn National of Grantville

Page: 1 of 3

Job No. 03-048

CLIENT: Penn National Gaming, Inc.

DATE: September 12, 2003

REV.: JCM

EST. BY: PWV

East Hanover Township, Dauphin County, PA

ITEM/DESCRIPTION	QUANT.	UNIT COST	EST. COST
100 STORMWATER MANAGEMENT			
101 18" RCP	52 L.F.	\$21.00	\$1,092.00
102 24" RCP	79 L.F.	\$23.00	\$1,817.00
103 15" CPP	863 L.F.	\$16.50	\$14,239.50
104 18" CPP	144 L.F.	\$19.50	\$2,808.00
105 24" CPP	120 L.F.	\$20.50	\$2,460.00
106 30" CPP	437 L.F.	\$28.50	\$12,454.50
107 8" PVC	390 L.F.	\$5.75	\$2,242.50
108 CATCH BASIN (2X4X4)	10 EA.	\$1,070.00	\$10,700.00
109 CATCH BASIN (2X4X10)	6 EA.	\$1,865.00	\$11,190.00
110 END WALL	5 EA.	\$615.00	\$3,075.00
111 OUTLET STRUCTURE	2 EA.	\$1,710.00	\$3,420.00
112 TRASH RACK - E&S	2 EA.	\$275.00	\$550.00
113 TRASH RACK (OS)	2 EA.	\$430.00	\$860.00
114 RIP-RAP APRON (R-3)	2 EA.	\$290.00	\$580.00
115 RIP-RAP APRON (R-4)	1 EA.	\$460.00	\$460.00
116 RIP-RAP APRON (R-5)	1 EA.	\$585.00	\$585.00
117 RIP-RAP APRON (R-6)	1 EA.	\$720.00	\$720.00
118 RIP-RAP APRON (R-7)	2 EA.	\$785.00	\$1,570.00
120 INFILTRATION TRENCH	1 EA.	\$1,400.00	\$1,400.00
121 SWALE 1	1 EA.	\$700.00	\$700.00
122 SWALE 2	1 EA.	\$400.00	\$400.00
123 SWALE 3	1 EA.	\$1,300.00	\$1,300.00
124 SWALE 4	1 EA.	\$620.00	\$620.00

1121 Snyder Road • West Lawn • PA 19609
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www.meassoc.com

EXHIBIT "A"

JC 12-16-03
RW 11/19/03

125 SWALE 5	1 EA.	\$280.00	\$280.00
126 SWALE 6	1 EA.	\$2,700.00	\$2,700.00
127 INFILTRATION BASIN 1	1 L.S.	\$38,000.00	\$38,000.00
128 DETENTION POND 1	1 L.S.	\$30,400.00	\$30,400.00
129 DETENTION POND 2	1 L.S.	\$36,500.00	\$36,500.00
	SUBTOTAL:		\$183,123.50

200 EROSION & SEDIMENTATION CONTROL

201 ROCK CONSTRUCTION ENT.	2 EA.	\$1,300.00	\$2,600.00
202 18" SILT FENCE	980 L.F.	\$1.35	\$1,323.00
203 SUPER SILT FENCE	2,820 L.F.	\$3.25	\$9,165.00
204 ORANGE SAFETY FENCE	820 L.F.	\$2.15	\$1,763.00
205 CLEANOUT STAKE	2 EA.	\$22.00	\$44.00
206 TEMPORARY RISER & STUB	1 EA.	\$1,150.00	\$1,150.00
207 INLET PROTECTION	5 EA.	\$145.00	\$725.00
208 STONE FILTER BERM	2 EA.	\$200.00	\$400.00
209 CRITICAL VEGETATIVE AREA	1 L.S.	\$340.00	\$340.00
210 STRIP & STOCKPILE TOPSOIL	1 L.S.	\$42,400.00	\$42,400.00
211 TEMPORARY SEEDING	1 L.S.	\$35,000.00	\$35,000.00
	SUBTOTAL:		\$94,910.00

300 SITE LIGHTING - LIGHT FIXTURES ONLY

301 SINGLE LIGHT	11 EA.	\$330.00	\$3,630.00
302 D180 (DOUBLE)	10 EA.	\$660.00	\$6,600.00
303 3@120° (TRIPLE)	34 EA.	\$990.00	\$33,660.00
	SUBTOTAL:		\$43,890.00

400 IMPROVEMENTS TO BOW CREEK ROAD & DRIVEWAY

401 GRADE/PREPARE SUBGRADE	1,340 C.Y.	\$2.20	\$2,948.00
402 STONE BASE - 8" THICK	2,000 S.Y.	\$11.50	\$23,000.00
403 BINDER COURSE	2,000 S.Y.	\$8.25	\$16,500.00
404 WEARING COURSE	2,000 S.Y.	\$3.35	\$6,700.00
405 MARKINGS	2,400 L.F.	\$0.25	\$600.00
406 SIGNS	3 EA.	\$250.00	\$750.00
	SUBTOTAL:		\$50,498.00



AC 12.16.03
12/17/03

500 ON SITE PAVING

501 GRADE/PREPARE SUBGRADE	21,200 C.Y.	\$2.20	\$46,640.00
502 STONE BASE - 6" THICK	63,740 S.Y.	\$8.00	\$509,920.00
		SUBTOTAL:	\$556,560.00

TOTAL: \$928,981.50

20% CONTINGENCY: \$185,796.30

Grand Total: \$1,114,777.80

I hereby certify that this cost estimate is a fair and reasonable estimate of the costs to construct the improvements as shown on the Final Plans for the referenced project.

James C. McCarthy
Professional Engineer
PA Lic. No. 051494 - E



Handwritten notes: JC 12-16-03, RA 1/19/03

FIRST AMENDMENT TO DEVELOPMENT AGREEMENT

THIS FIRST AMENDMENT TO DEVELOPMENT AGREEMENT (the "Amendment") is made and entered into this 6 day of July, 2004, by and between **PENN NATIONAL GAMING, INC.**, a Pennsylvania corporation, its successors and assigns, ("Developer") and **EAST HANOVER TOWNSHIP**, a Second Class Township located in Dauphin County, Pennsylvania (the "Township").

BACKGROUND:

A. On October 21, 2003, the Township's Board of Supervisors approved the Preliminary/Final Land Development Plan for Penn National of Grantville, dated March 31, 2003, last revised on July 18, 2003 (except that Sheet 5 was last revised on July 22, 2003) and approved by the Township's Board of Supervisors on October 21, 2003.

B. On July 6, 2004, the Township's Board of Supervisors approved revisions to that plan. Those revisions are dated June 22, 2004 and earlier (the "Revisions"). As defined in the Development Agreement, the term "Plan" includes any revisions that are approved by the Board of Supervisors, including the Revisions.

C. Developer and the Township entered into a Development Agreement dated December 19, 2003 (the "Development Agreement"), concerning the development of a Slot Machine Facility on the Property pursuant to the Plan (as those terms are defined in the Development Agreement).

D. Developer and the Township wish to amend the Development Agreement to increase (i) the On-Site Financial Security Amount (as defined in the Development Agreement) to \$1,177,493.10 and (ii) the On-Site Maintenance Financial Security Amount (as defined in the Development Agreement) to \$117,749.30.

E. Defined or capitalized terms that are not specifically defined herein shall have the meaning ascribed to them in the Development Agreement.

NOW, THEREFORE, intending to be legally bound, Developer and the Township hereby agree as follows:

1. The above recitals are incorporated by reference into this Amendment as if fully restated herein.

2. Exhibit "A" (the On-Site Improvements Financial Security Estimate) of the Development Agreement hereby is replaced with the revised estimate that is attached hereto as Exhibit "A."

3. Paragraph 1.D(1) of the Development Agreement hereby is amended to change the On-Site Financial Security Amount to One Million One Hundred Seventy-

Seven Thousand Four Hundred Ninety-Three Dollars and 10/100 Cents (\$1,177.493.10).


4. Paragraph 1.E(1) of the Development Agreement hereby is amended to change the On-Site Maintenance Financial Security Amount to One Hundred Seventeen Thousand Seven Hundred Forty-Nine Dollars and 30/100 Cents (\$117,749.30).

5. Except as otherwise provided herein, all other terms and conditions of the Development Agreement shall remain in full force and effect.

6. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

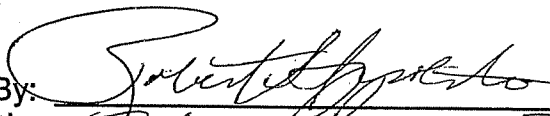
IN WITNESS WHEREOF, and with intent to be legally bound, the parties have caused these presents to be duly executed by their respective authorized officers and officials.

WITNESS:

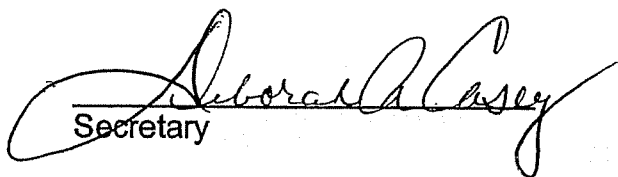

Name: John R. Rauen

DEVELOPER:

PENN NATIONAL GAMING, INC.

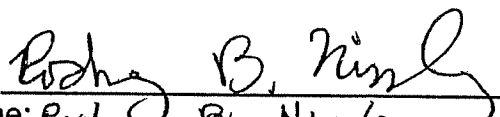
By: 
Name: Robert S. Appolite
Title: VP/Sec/Treas

ATTEST:


Secretary

TOWNSHIP:

EAST HANOVER TOWNSHIP, Dauphin County, Pennsylvania

By: 
Name: Rodney B. Nissley
Title: Chairman

(Township Seal)



Professional Engineers, Planners and Surveyors

ENGINEERING COST ESTIMATE

PROJECT: Penn National of Grantville

Page: 1 of 3
Job No. 03-048

CLIENT: Penn National Gaming, Inc.

DATE: September 12, 2003
REV.: June 22, 2004 KAM
EST. BY: FWV

East Hanover Township, Dauphin County, PA

ITEM/DESCRIPTION	QUANT.	UNIT	COST	EST. COST
100 STORMWATER MANAGEMENT				
101 24" RCP	149	L.F. ✓	\$23.00	\$3,427.00
102 30" RCP	123	L.F. ✓	\$25.00	\$3,075.00
103 15" CPP	745	L.F. ✓	\$16.50	\$12,292.50
104 18" CPP	861	L.F. ✓	\$19.50	\$16,789.50
105 24" CPP	199	L.F. ✓	\$20.50	\$4,079.50
106 30" CPP	817	L.F. ✓	\$28.50	\$23,284.50
107 CATCH BASIN (2X4X4)	19	EA. ✓	\$1,070.00	\$20,330.00
108 CATCH BASIN (2X4X10)	7	EA. ✓	\$1,865.00	\$13,055.00
109 D-W END WALL	8	EA. ✓	\$750.00	\$6,000.00
110 D ENDWALL	1	EA. ✓	\$500.00	\$500.00
111 OUTLET STRUCTURE	3	EA. ✓	\$1,710.00	\$5,130.00
112 TRASH RACK - E&S	3	EA. ✓	\$275.00	\$825.00
113 TRASH RACK (OS)	3	EA. ✓	\$430.00	\$1,290.00
114 RIP-RAP APRON (R-3)	2	EA. ✓	\$290.00	\$580.00
115 RIP-RAP APRON (R-4)	1	EA. ✓	\$460.00	\$460.00
116 RIP-RAP APRON (R-5)	3	EA. ✓	\$585.00	\$1,755.00
117 RIP-RAP APRON (R-6)	2	EA. ✓	\$720.00	\$1,440.00
118 INFILTRATION TRENCH	2	EA. ✓	\$1,400.00	\$2,800.00
119 SWALE 1	1	EA.	\$600.00	\$600.00
120 SWALE 2	1	EA.	\$650.00	\$650.00
121 SWALE 3	1	EA.	\$1,300.00	\$1,300.00
122 SWALE 4	1	EA.	\$620.00	\$620.00

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www.mccarthy.com

123 SWALE 5	1 EA.	\$280.00	\$280.00
124 SWALE 6	1 EA.	\$2,700.00	\$2,700.00
125 DETENTION POND 1	1 L.S.	\$38,400.00	\$38,400.00
126 DETENTION POND 2	1 L.S.	\$28,500.00	\$28,500.00
127 DETENTION POND 3	1 L.S.	\$36,000.00	\$36,000.00
		SUBTOTAL:	\$226,163.00

200 EROSION & SEDIMENTATION CONTROL

201 ROCK CONSTRUCTION ENT.	2 EA.	\$1,300.00	\$2,600.00
202 18" SILT FENCE	645 L.F.	\$1.35	\$870.75
203 SUPER SILT FENCE	3,750 L.F.	\$3.25	\$12,187.50
204 ORANGE SAFETY FENCE	820 L.F.	\$2.15	\$1,763.00
205 CLEANOUT STAKE	6 EA.	\$22.00	\$132.00
206 TEMPORARY RISER & STUB	3 EA.	\$1,150.00	\$3,450.00
207 INLET PROTECTION	26 EA.	\$145.00	\$3,770.00
208 STONE FILTER BERM	2 EA.	\$200.00	\$400.00
209 CRITICAL VEGETATIVE AREA	2 L.S.	\$340.00	\$680.00
210 TEMPORARY SWALE IC-1	1 EA.	\$600.00	\$600.00
211 TEMPORARY SWALE IC-2	1 EA.	\$280.00	\$280.00
212 STRIP & STOCKPILE TOPSOIL	1 L.S.	\$42,400.00	\$42,400.00
213 TEMPORARY SEEDING	1 L.S.	\$35,000.00	\$35,000.00
		SUBTOTAL:	\$104,133.25

300 SITE LIGHTING - LIGHT FIXTURES ONLY

301 SINGLE LIGHT	11 EA.	\$330.00	\$3,630.00
302 D180 (DOUBLE)	10 EA.	\$660.00	\$6,600.00
303 3@120° (TRIPLE)	34 EA.	\$990.00	\$33,660.00
		SUBTOTAL:	\$43,890.00

400 IMPROVEMENTS TO BOW CREEK ROAD & DRIVEWAY

401 GRADE/PREPARE SUBGRADE	1,340 C.Y.	\$2.20	\$2,948.00
402 STONE BASE - 8" THICK	2,000 S.Y.	\$11.50	\$23,000.00
403 BINDER COURSE	2,000 S.Y.	\$8.25	\$16,500.00
404 WEARING COURSE	2,000 S.Y.	\$3.35	\$6,700.00
405 MARKINGS	2,400 L.F.	\$0.25	\$600.00
406 SIGNS	3 EA.	\$250.00	\$750.00
		SUBTOTAL:	\$50,498.00



500 ON SITE PAVING

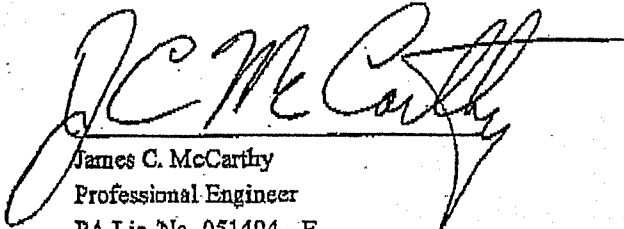
501 GRADE/PREPARE SUBGRADE	21,200 C.Y.	\$2.20	\$46,640.00
502 STONE BASE - 6" THICK	63,740 S.Y.	\$8.00	\$509,920.00
		SUBTOTAL:	\$556,560.00

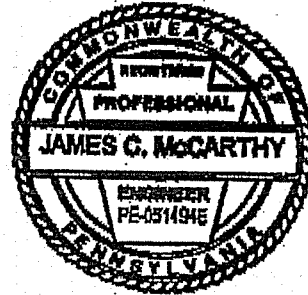
TOTAL: \$981,244.25

20% CONTINGENCY: \$196,248.85

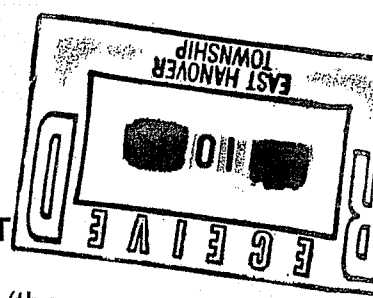
Grand Total: \$1,177,493.10

I hereby certify that this cost estimate is a fair and reasonable estimate of the costs to construct the improvements as shown on the Final Plans for the referenced project.


James C. McCarthy
Professional Engineer
PA Lic. No. 051494 - E



SECOND AMENDMENT TO DEVELOPMENT AGREEMENT



THIS SECOND AMENDMENT TO DEVELOPMENT AGREEMENT (the "Amendment") is made and entered into this 5th day of May, 2005, by and between **PENN NATIONAL GAMING, INC.**, a Pennsylvania corporation, its successors and assigns, ("Developer") and **EAST HANOVER TOWNSHIP**, a Second Class Township located in Dauphin County, Pennsylvania (the "Township").

BACKGROUND:

A. On October 21, 2003, the Township's Board of Supervisors approved the Preliminary/Final Land Development Plan for Penn National of Grantville, dated March 31, 2003, last revised on July 18, 2003 (except that Sheet 5 was last revised on July 22, 2003) and approved by the Township's Board of Supervisors on October 21, 2003.

B. On July 6, 2004, the Township's Board of Supervisors approved revisions to that plan, which revisions were dated June 22, 2004 and earlier. On March 15, 2005, the Township's Board of Supervisors approved further revisions to that plan (the "Further Revisions"). As defined in the Development Agreement, the term "Plan" includes any revisions that are approved by the Board of Supervisors, including the Further Revisions.

C. Developer and the Township entered into a Development Agreement dated December 19, 2003, as amended by a First Amendment to Development Agreement dated July 6, 2004 (collectively, the "Development Agreement"), concerning the development of a Slot Machine Facility on the Property pursuant to the Plan (as those terms are defined in the Development Agreement).

D. Developer and the Township wish to further amend the Development Agreement to increase (i) the On-Site Financial Security Amount (as defined in the Development Agreement) to \$1,818,712.68 and (ii) the On-Site Maintenance Financial Security Amount (as defined in the Development Agreement) to \$181,871.26.

E. Defined or capitalized terms that are not specifically defined herein shall have the meaning ascribed to them in the Development Agreement.

NOW, THEREFORE, intending to be legally bound, Developer and the Township hereby agree as follows:

1. The above recitals are incorporated by reference into this Amendment as if fully restated herein.

2. Exhibit "A" (the On-Site Improvements Financial Security Estimate) of the Development Agreement hereby is replaced with the revised estimate that is attached hereto as Exhibit "A."

3. Paragraph 1.D(1) of the Development Agreement hereby is further amended to change the On-Site Financial Security Amount to One Million Eight Hundred Eighteen Thousand Seven Hundred Twelve Dollars and Sixty-Eight Cents (\$1,818,712.68).

4. Paragraph 1.E(1) of the Development Agreement hereby is amended to change the On-Site Maintenance Financial Security Amount to One Hundred Eighty-One Thousand Eight Hundred Seventy-One Dollars and Twenty-Six Cents (\$181,871.26).

5. Except as otherwise provided herein, all other terms and conditions of the Development Agreement shall remain in full force and effect.

6. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, and with intent to be legally bound, the parties have caused these presents to be duly executed by their respective authorized officers and officials.

WITNESS:

Karen L. Webber
Name:

DEVELOPER:
PENN NATIONAL GAMING, INC.

By: John R. Rauen
Name: John R. Rauen
Title: Vice President, Development

ATTEST:

Sharon A. Casey
Secretary

(Township Seal)

TOWNSHIP:
EAST HANOVER TOWNSHIP, Dauphin
County, Pennsylvania

By: George M. Rish
Name: GEORGE M. RISH
Title: CHAIRMAN, BOARD OF SUPERVISORS



Professional Engineers, Planners and Surveyors

ENGINEERING COST ESTIMATE

PROJECT: Penn National of Grantville

Page: 1 of 3

Job No. 03-048

CLIENT: Penn National Gaming, Inc.

c/o Jack Rauen
855 Berkshire Boulevard
Wyomissing, PA 19610

DATE: September 12, 2003

EST. BY: PWV

REV. 1: June 22, 2004 KAM

REV. 2: February 4, 2005 KAM

East Hanover Township, Dauphin County, PA

ITEM/DESCRIPTION	QUANT.	UNIT COST	EST. COST
100 STORMWATER MANAGEMENT			
101 6" PVC	135 L.F.	\$5.55	\$749.25
102 15" CPP	3226 L.F.	\$16.50	\$53,229.00
103 18" CPP	697 L.F.	\$19.50	\$13,591.50
104 24" CPP	2471 L.F.	\$20.50	\$50,655.50
105 30" CPP	1149 L.F.	\$28.50	\$32,746.50
106 36" CPP	285 L.F.	\$38.50	\$10,972.50
107 24" RCP	70.50 L.F.	\$23.00	\$1,621.50
108 30" RCP	120 L.F.	\$25.00	\$3,000.00
109 CATCH BASIN/JUNCTION BOX (2X4X4)	38 EA.	\$1,070.00	\$40,660.00
110 CATCH BASIN/JUNCTION BOX (2X4X6)	11 EA.	\$1,335.00	\$14,685.00
111 CATCH BASIN/JUNCTION BOX (2X4X10)	11 EA.	\$1,865.00	\$20,515.00
112 CATCH BASIN (2X6X10)	2 EA.	\$2,000.00	\$4,000.00
113 CATCH BASIN TYPE 1 - 4' DEEP	3 EA.	\$1,300.00	\$3,900.00
114 CATCH BASIN TYPE 1 - 6' DEEP	8 EA.	\$1,800.00	\$14,400.00
115 CATCH BASIN TYPE 1 - 10' DEEP	11 EA.	\$2,000.00	\$22,000.00
116 TRENCH DRAIN	2 EA.	\$750.00	\$1,500.00
117 D-W END WALL	7 EA.	\$750.00	\$5,250.00
118 D ENDWALL	1 EA.	\$500.00	\$500.00
119 HEADWALL	2 EA.	\$2,375.00	\$4,750.00
120 OUTLET STRUCTURE	3 EA.	\$1,710.00	\$5,130.00
121 RIP-RAP APRON (R-5)	3 EA.	\$585.00	\$1,755.00
122 RIP-RAP APRON (R-6)	2 EA.	\$720.00	\$1,440.00
123 RIP-RAP APRON (R-7)	2 EA.	\$855.00	\$1,710.00
124 SWALE 1	1 EA.	\$620.00	\$620.00

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Toll Free: 866.496.8744 • Fax: 610.373.8077 • www.meassoc.com



125 SWALE 2	1 EA.	\$280.00	\$280.00
126 SWALE 3	1 EA.	\$1,300.00	\$1,300.00
127 SWALE 4	1 EA.	\$2,700.00	\$2,700.00
128 DETENTION POND 1	1 L.S.	\$19,500.00	\$19,500.00
129 DETENTION POND 2	1 L.S.	\$58,000.00	\$58,000.00
130 DETENTION POND 3	1 L.S.	\$47,000.00	\$47,000.00
131 30" SNOUT	1 L.S.	\$478.50	\$478.50
132 48" SNOUT	1 L.S.	\$1,200.00	\$1,200.00
		SUBTOTAL:	\$439,839.25

200 EROSION & SEDIMENTATION CONTROL

201 ROCK CONSTRUCTION ENT.	4 EA.	\$1,300.00	\$5,200.00
202 18" SILT FENCE	474 L.F.	\$1.35	\$639.90
203 30" SILT FENCE	578 L.F.	\$2.25	\$1,300.50
204 SUPER SILT FENCE	3,017 L.F.	\$3.25	\$9,805.25
205 CLEANOUT STAKE	8 EA.	\$22.00	\$176.00
206 3" SKIMMER	1 EA.	\$595.00	\$595.00
207 4" SKIMMER	2 EA.	\$790.00	\$1,580.00
208 SEDIMENT BASIN	1 EA.	\$7,000.00	\$7,000.00
209 TEMPORARY 18" CMP	1 L.F.	\$160.00	\$160.00
210 TEMPORARY RIP-RAP APRON (R-3)	1 L.F.	\$290.00	\$290.00
211 INLET PROTECTION	21 EA.	\$145.00	\$3,045.00
212 STONE FILTER BERM	2 EA.	\$200.00	\$400.00
213 CRITICAL VEGETATIVE AREA	2 L.S.	\$340.00	\$680.00
214 TEMPORARY SWALE IC-1	1 EA.	\$600.00	\$600.00
215 TEMPORARY SWALE IC-2	1 EA.	\$280.00	\$280.00
216 STRIP & STOCKPILE TOPSOIL	1 L.S.	\$42,400.00	\$42,400.00
217 TEMPORARY SEEDING	1 L.S.	\$35,000.00	\$35,000.00
218 COFFERDAM	2 L.S.	\$750.00	\$1,500.00
		SUBTOTAL:	\$110,651.65

300 SITE LIGHTING - LIGHT FIXTURES ONLY

301 SINGLE LIGHT	9 EA.	\$330.00	\$2,970.00
302 D180 (DOUBLE)	25 EA.	\$660.00	\$16,500.00
303 3@120° (TRIPLE)	15 EA.	\$990.00	\$14,850.00
		SUBTOTAL:	\$34,320.00



400 IMPROVEMENTS TO BOW CREEK ROAD & DRIVEWAY

401 GRADE/PREPARE SUBGRADE	1,340 C.Y.	\$2.20	\$2,948.00
402 STONE BASE - 8" THICK	2,000 S.Y.	\$11.50	\$23,000.00
403 BINDER COURSE	2,000 S.Y.	\$8.25	\$16,500.00
404 WEARING COURSE	2,000 S.Y.	\$3.35	\$6,700.00
405 MARKINGS	2,400 L.F.	\$0.25	\$600.00
406 SIGNS	3 EA.	\$250.00	\$750.00
			SUBTOTAL: \$50,498.00

500 ON SITE PAVING

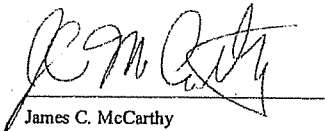
501 GRADE/PREPARE SUBGRADE	33,500 C.Y.	\$2.20	\$73,700.00
502 STONE BASE - 6" THICK	100,720 S.Y.	\$8.00	\$805,760.00
			SUBTOTAL: \$879,460.00

TOTAL: \$1,515,593.90

20% CONTINGENCY: \$303,118.78

Grand Total: \$1,818,712.68

I hereby certify that this cost estimate is a fair and reasonable estimate of the costs to construct the improvements as shown on the Final Plans for the referenced project.



James C. McCarthy
Professional Engineer
PA Lic. No. 051494 - E

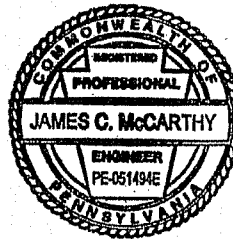


EXHIBIT K

HOME DISTRICT SELECT A SCHOOL

Lower Dauphin School District

SIGN IN REGISTER EMAIL

HOME SCHOOLS OUR DISTRICT CURRICULUM POLICIES SERVICES EMPLOYMENT COMMUNITY CALENDAR



LDARPG COMMUNITY

Survey Results - East Hanover Twp

- ☛ Welcome
- ☛ About Us
- ☛ Our By-Laws
- ☛ Delegates
- ☛ Regional Comprehensive Plan - proposed
- ☛ LDARPG Newsletter
- ☛ Resident Survey Results
 - ☛ - Resident Survey - Hummelstown
 - ☛ - Resident Survey - Conewago Twp
 - ☛ - Resident Survey - East Hanover Twp
 - ☛ - Resident Survey - Londonderry Twp
 - ☛ - Resident Survey - South Hanover Twp
- ☛ Resources
- ☛ LDARPG Calendar

As part of its regional planning effort, the Lower Dauphin Area Regional Planning Group and its consultant Urban Research and Development Corporation of Bethlehem, sent a survey to all households within the Lower Dauphin School District.

A total of 8,974 surveys were distributed by mail in mid-March 2002 along with the Lower Dauphin School District newsletter. Residents were encouraged to either mail back the survey or return it to any school district building. A total of 205 surveys were returned from East Hanover Township residents.

The following is a listing of the survey results returned by East Hanover Township residents:

East Hanover Township

1. How old are you? (n=205; median age = 47.1 years)

1% 10-19 years 2% 20-29 years 24% 30-39 years

29% 40-49 years 32% 50-64 years 18% 65 years or older

**2. How long have you lived in the Lower Dauphin School District?
(n=94)**

10% less than 3 years 22% 3-10 years

23% 11-20 years 44% more than 20 years

3. How important are the following issues to you?

Issue	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Preserving the scenic character of the region	73	13	10	3	1	12.54	201
Preserving important natural areas and creek valleys	69	13	15	2	1	12.12	203
Preserving agricultural lands	67	19	83	5	1	15.77	201

Preserving significant areas of open spaces within new development	61	18	14	5	2	11.18	204
Carefully controlling the types and locations of business development	50	24	18	6	2	10.34	203
Addressing traffic problems along Route 22	46	25	20	7	2	9.90	203
Addressing traffic problems along Route 39	40	26	25	50	4	7.42	198
Addressing traffic problems along Route 743	40	25	25	64	5	6.55	200
Addressing traffic problems at the interchanges of I-81	40	24	25	7	4	9.21	202
Expanding public parks							

and recreation facilities	32	25	27	16	1	7.85	200
Improving opportunities for bicycling and pedestrians	28	28	22	17	5	7.21	201
Preserving historic buildings	26	26	33	10	5	7.57	202
Addressing traffic problems at the interchanges of Route 283	22	17	35	15	12	6.03	199
Reducing problems of noise	21	15	37	23	5	5.35	200
Extending public sewer service to homes with failing septic systems	19	20	40	18	3	5.95	200
Addressing traffic problems along Main Street in Hummelstown	17	20	36	16	11	5.63	197
Making sure that older							

housing is properly maintained	16	24	40	13	8	6.15	200
Addressing traffic problems along Route 230	15	14	36	19	17	4.52	199

(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

4. How important are the following services to you?

Service	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Fire Protection	84	8	7	0	1	2.75	204
Emergency Medical Services	76	13	9	1	1	2.62	204
Police Protection	72	16	9	2	1	2.55	203
Public Education	67	13	13	6	1	2.34	203
Maintenance of Roads/Snow Removal	50	28	23	1	0	2.28	204

School Transportation	47	24	15	10	3	1.94	203
Trash Collection and Recycling	35	36	23	4	1	1.96	201
Parks and Recreation	27	35	27	10	1	1.68	200
Local Government Administration	24	38	29	8	1	1.69	203

(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

5. How do you rate the following services?

Service	Percent Response					Rating	n
	Excellent	Good	Adequate	Poor	No Opinion		
Fire Protection	34	42	14	1	9	1.09	201
Emergency Medical Services	30	39	17	1	15	0.98	200
Trash Collection and Recycling	25	45	26	2	2	0.93	203
Public Education	20	50	18	5	8	0.85	199

School Transportation	16	47	18	4	16	0.75	200
Parks and Recreation	15	43	34	3	5	0.70	202
Maintenance of Roads/Snow Removal by municipalities	15	42	27	13	3	0.59	203
Police Protection	14	35	28	13	10	0.50	202
Maintenance of Roads/Snow Removal by PennDOT	13	51	30	4	3	0.73	202
Local Government Administration	6	31	37	16	12	0.27	200

(Rating is the arithmetic average of scores based on the following values:
Excellent = 2, Good = 1, Adequate = 0, Poor = -1)

6. Please give your priorities for up to five types of public recreation facilities that are most needed within the Lower Dauphin Area (Use 1 for your highest priority, 2 for your second priority, etc., up to 5. Please choose no more than 5 responses.)

Facility	Priority					Responses With Priorities	Priority Average	Responses Without Priorities	Total Responses
	1	2	3	4	5				

Wooded natural areas with trails	32	35	18	16	11	112	3.54	9	121
Bicycle paths	15	16	17	19	12	79	3.04	6	85
Jogging/pedestrian paths	12	13	18	17	13	73	2.92	7	80
Recreation building with gym	5	16	13	14	8	56	2.93	5	61
Skate/rollerblading park	11	12	16	12	4	55	6.25	6	61
Children's playgrounds	18	9	11	6	8	52	3.44	8	60
Outdoor swimming pool	18	9	8	5	8	48	3.50	9	57
Indoor swimming pool	13	13	5	3	7	41	6.54	6	47
Picnic pavilions	1	2	9	8	16	36	2.00	5	41
Public fishing areas	2	10	11	4	8	35	2.83	8	43
Equestrian trails	11	3	5	4	5	28	3.39	5	33
Baseball/softball fields	4	5	5	7	7	28	2.71	6	34
Public hunting areas	10	2	5	4	3	24	3.50	6	30
Soccer/football fields	3	4	6	6	1	20	3.10	8	28
Indoor ice skating area	2	3	4	4	7	20	2.45	6	26
Outdoor									

amphitheater	4	1	5	2	7	19	2.63	5	24
Outdoor ice skating area	0	3	3	3	5	14	2.29	4	18
Outdoor basketball courts	1	1	2	4	3	11	2.36	6	17
Boat access	1	0	2	4	2	9	2.33	4	13
Golf course	2	4	0	1	1	8	3.63	5	13
Golf practice area	0	4	0	3	1	8	2.88	4	12
Tennis courts	0	2	2	2	1	7	2.71	6	13
Volleyball courts	0	0	2	2	3	7	1.86	4	11

(Priority average is based on an arithmetic average using 5 points for priority 1, 4 points for priority 2, ..., 1 point for priority 5.)



Questions or Feedback?

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Rick Test

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LDARPG COMMUNITY

Survey Results - South Hanover Twp

- ✚ Welcome
- ✚ About Us
- ✚ Our By-Laws
- ✚ Delegates
- ✚ Regional Comprehensive Plan - proposed
- ✚ LDARPG Newsletter
- ✚ Resident Survey Results
 - ✚ - Resident Survey - Hummelstown
 - ✚ - Resident Survey - Conewago Twp
 - ✚ - Resident Survey - East Hanover Twp
 - ✚ - Resident Survey - Londonderry Twp
 - ✚ - Resident Survey - South Hanover Twp
- ✚ Resources
- ✚ LDARPG Calendar

As part of its regional planning effort, the Lower Dauphin Area Regional Planning Group and its consultant Urban Research and Development Corporation of Bethlehem, sent a survey to all households within the Lower Dauphin School District.

A total of 8,974 surveys were distributed by mail in mid-March 2002 along with the Lower Dauphin School District newsletter. Residents were encouraged to either mail back the survey or return it to any school district building. A total of 221 surveys were returned from South Hanover Township residents.

The following is a listing of the survey results returned by South Hanover Township residents:

South Hanover Township

1. How old are you? (n=221; median age = 46.7 years)

0%	10-19 years	2%	20-29 years	19%	30-39 years
38%	40-49 years	30%	50-64 years	11%	65 years or older

**2. How long have you lived in the Lower Dauphin School District?
(n=94)**

7% less than 3 years 19% 3-10 years

36% 11-20 years 38% more than 20 years

3. How important are the following issues to you?

Issue	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Preserving important natural areas and creek valleys	75	16	7	2	1	11.91	220
Preserving the scenic character of the region	72	13	13	1	1	11.49	221
Preserving agricultural lands	68	16	14	1	1	11.32	220
Preserving significant areas of open spaces within new development	62	18	15	3	1	10.59	221

Carefully controlling the types and locations of business development	53	22	21	2	2	10.18	218
Addressing traffic problems along Route 39	50	23	19	7	1	9.45	220
Expanding public parks and recreation facilities	39	17	33	10	2	7.91	220
Improving opportunities for bicycling and pedestrians	34	28	27	9	3	7.93	222
Preserving historic buildings	31	24	33	8	4	7.55	220
Addressing traffic problems along Main Street in Hummelstown	28	26	33	10	4	7.16	222
Extending public sewer service to homes with failing septic	25	18	35	17	6	5.97	216

systems							
Addressing traffic problems along Route 22	21	26	31	19	3	5.75	221
Making sure that older housing is properly maintained	18	19	45	12	5	5.73	218
Addressing traffic problems at the interchanges of I-81	16	25	35	21	4	5.09	220
Reducing problems of noise	16	20	39	20	6	4.89	219
Addressing traffic problems along Route 743	13	22	36	24	5	4.38	217
Addressing traffic problems at the interchanges of Route 283	12	26	33	28	5	4.27	218
Addressing traffic problems	7	17	35	30	11	2.75	218

along Route 230							
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not
 Important = -1, No Opinion = 0)

4. How important are the following services to you?

Service	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Fire Protection	82	10	8	0	0	2.74	221
Emergency Medical Services	74	12	14	0	0	2.60	220
Police Protection	74	12	12	2	0	2.56	221
Public Education	69	15	11	4	1	2.44	219
Maintenance of Roads/Snow Removal	54	29	16	1	0	2.35	221
School Transportation	46	25	19	8	3	1.99	219
Trash Collection and Recycling	41	33	24	2	0	2.11	221
Parks and Recreation	40	29	22	7	2	1.93	221

Local Government Administration	25	33	33	8	1	1.66	221
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

5. How do you rate the following services?

Service	Percent Response					Rating	n
	Excellent	Good	Adequate	Poor	No. Opinion		
Fire Protection	24	44	20	2	10	0.90	221
Public Education	19	49	21	4	7	0.83	222
Maintenance of Roads/Snow Removal by PennDOT	18	56	22	2	2	0.90	222
School Transportation	16	48	19	2	14	0.78	219
Trash Collection and Recycling	15	55	26	3	1	0.82	221
Emergency Medical Services	15	42	24	1	19	0.71	221
Maintenance of							

Roads/Snow Removal by municipalities	12	44	34	10	1	0.58	222
Police Protection	10	32	30	19	10	0.33	218
Parks and Recreation	4	39	37	14	7	0.33	218
Local Government Administration	3	34	36	11	16	0.29	216

(Rating is the arithmetic average of scores based on the following values:
Excellent = 2, Good = 1, Adequate = 0, Poor = -1)

6. Please give your priorities for up to five types of public recreation facilities that are most needed within the Lower Dauphin Area (Use 1 for your highest priority, 2 for your second priority, etc., up to 5. Please choose no more than 5 responses.)

Facility	Priority					Responses With Priorities	Priority Average	Responses Without Priorities	Total Respon
	1	2	3	4	5				
Wooded natural areas with trails	43	24	31	28	11	137	3.44	4	14
Bicycle paths	26	29	28	17	10	110	3.40	4	114
Jogging/pedestrian paths	24	31	24	14	16	109	3.30	5	114
Recreation building with gym	29	7	16	4	15	71	3.44	5	76
Children's	13	14	11	15	14	67	2.96	2	69

playgrounds									
Indoor swimming pool	20	10	9	7	11	57	3.37	6	63
Skate/rollerblading park	5	14	10	12	5	46	3.04	1	47
Picnic pavilions	0	7	10	11	12	40	2.30	4	44
Public fishing areas	3	6	5	10	12	36	2.39	1	37
Outdoor swimming pool	4	11	4	7	4	30	3.13	5	35
Outdoor amphitheater	5	5	4	4	9	27	2.74	1	28
Soccer/football fields	5	7	5	7	1	25	3.32	2	27
Tennis courts	2	3	5	7	8	25	2.36	2	27
Baseball/softball fields	2	5	5	5	6	23	2.65	2	25
Outdoor basketball courts	2	3	7	5	5	22	2.64	1	23
Golf course	2	4	5	6	3	20	2.80	3	23
Outdoor ice skating area	1	4	3	6	6	20	2.40	2	22
Public hunting areas	2	5	4	6	2	19	2.95	2	21
Indoor ice skating area	2	5	3	1	5	16	2.88	2	18
Equestrian trails	4	0	3	1	7	15	2.53	2	17

Boat access	0	2	5	3	4	14	2.36	2	15
Golf practice area	2	1	0	4	5	12	2.25	3	15
Volleyball courts	0	3	3	0	1	7	3.14	1	8

(Priority average is based on an arithmetic average using 5 points for priority 1, 4 points for priority 2, ..., 1 point for priority 5.)



Questions or Feedback?

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Rick Test

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DISTRICT SELECT A SCHOOL

Lower Dauphin School District

SIGN IN REGISTER EMAIL

HOME SCHOOLS OUR DISTRICT CURRICULUM POLICIES SERVICES EMPLOYMENT COMMUNITY CALENDAR



LDARPG COMMUNITY

Survey Results - Londonderry Twp

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 - ✚ - **Resident Survey - Londonderry Twp**
 - ✚ - Resident Survey - South Hanover Twp
- ✚ Resources
- ✚ LDARPG Calendar

As part of its regional planning effort, the Lower Dauphin Area Regional Planning Group and its consultant Urban Research and Development Corporation of Bethlehem, sent a survey to all households within the Lower Dauphin School District.

A total of 8,974 surveys were distributed by mail in mid-March 2002 along with the Lower Dauphin School District newsletter. Residents were encouraged to either mail back the survey or return it to any school district building. A total of 153 surveys were returned from Londonderry Township residents.

The following is a listing of the survey results returned by Londonderry Township residents:

Londonderry Township

1. How old are you? (n=153; median age = 47.0 years)

1%	10-19 years	3%	20-29 years	21%	30-39 years
31%	40-49 years	28%	50-64 years	16%	65 years or older

**2. How long have you lived in the Lower Dauphin School District?
(n=94)**

11% less than 3 years 18% 3-10 years

17% 11-20 years 54% more than 20 years

3. How important are the following issues to you?

Issue	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Preserving important natural areas and creek valleys	70	15	10	3	3	16.25	152
Preserving agricultural lands	64	17	12	6	1	15.36	151
Preserving the scenic character of the region	59	20	15	4	2	15.00	152
Carefully controlling the types and locations of business development	56	11	29	2	2	14.47	150

Preserving significant areas of open spaces within new development	52	20	21	5	3	13.95	152
Extending public sewer service to homes with failing septic systems	38	14	21	22	5	9.34	151
Addressing traffic problems along Route 230	36	24	30	5	5	11.91	152
Addressing traffic problems at the interchanges of Route 283	29	31	27	9	5	11.06	151
Expanding public parks and recreation facilities	27	29	25	14	5	10.07	149
Improving opportunities for bicycling and pedestrians	25	21	33	15	7	9.00	150
Preserving historic	23	24	34	15	5	9.01	151

buildings							
Reducing problems of noise	21	23	28	22	6	7.67	150
Making sure that older housing is properly maintained	19	20	42	13	7	8.34	151
Addressing traffic problems at the interchanges of I-81	18	17	35	16	14	7.18	149
Addressing traffic problems along Main Street in Hummelstown	16	29	29	13	14	8.03	152
Addressing traffic problems along Route 743	15	29	35	10	11	8.53	150
Addressing traffic problems along Route 22	13	19	33	18	17	6.13	150
Addressing traffic problems	12	25	34	15	13	7.05	149

along Route 39							
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not
 Important = -1, No Opinion = 0)

4. How important are the following services to you?

Service	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Fire Protection	86	11	4	0	0	2.84	153
Emergency Medical Services	81	13	6	0	0	2.75	153
Police Protection	72	13	11	3	1	2.50	152
Public Education	63	15	14	3	6	2.30	151
Maintenance of Roads/Snow Removal	59	22	18	1	1	2.38	153
School Transportation	47	21	18	5	9	1.96	151
Trash Collection and Recycling	39	30	25	6	1	1.96	152
Parks and Recreation	28	31	29	6	6	1.69	150

Local Government Administration	26	27	38	7	3	1.63	149
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

5. How do you rate the following services?

Service	Percent Response					Rating	n
	Excellent	Good	Adequate	Poor	No Opinion		
Fire Protection	38	41	14	0	7	1.17	153
Emergency Medical Services	36	37	18	0	9	1.09	153
Public Education	26	44	18	3	9	0.93	149
Trash Collection and Recycling	25	31	25	15	4	0.66	150
Maintenance of Roads/Snow Removal by PennDOT	21	49	28	1	1	0.90	152
Maintenance of Roads/Snow Removal by municipalities	18	39	31	11	3	0.64	153

School Transportation	15	46	26	1	13	0.75	152
Parks and Recreation	13	42	32	6	8	0.62	149
Police Protection	13	31	31	13	12	0.44	150
Local Government Administration	1	25	50	12	12	0.15	153

(Rating is the arithmetic average of scores based on the following values:
Excellent = 2, Good = 1, Adequate = 0, Poor = -1)

6. Please give your priorities for up to five types of public recreation facilities that are most needed within the Lower Dauphin Area (Use 1 for your highest priority, 2 for your second priority, etc., up to 5. Please choose no more than 5 responses.)

Facility	Priority					Responses With Priorities	Priority Average	Responses Without Priorities	Total Responses
	1	2	3	4	5				
Wooded natural areas with trails	22	19	12	8	14	75	3.36	14	89
Jogging/pedestrian paths	7	13	21	14	7	62	2.98	11	73
Bicycle paths	8	15	13	17	5	58	3.07	11	69
Indoor swimming pool	20	10	7	4	4	45	3.84	8	53
Recreation building with gym	8	8	10	8	7	41	3.05	8	49

Children's playgrounds	13	6	4	8	9	40	3.15	10	50
Outdoor swimming pool	7	7	4	7	3	28	3.29	8	36
Skate/rollerblading park	2	7	4	6	5	24	2.79	11	35
Picnic pavilions	1	3	5	7	7	23	2.30	10	33
Public hunting areas	11	4	2	1	4	22	3.77	12	34
Public fishing areas	0	8	5	3	5	21	2.76	12	33
Baseball/softball fields	3	4	7	3	3	20	3.05	8	28
Outdoor amphitheater	3	1	0	7	7	18	2.22	7	25
Soccer/football fields	2	3	3	3	4	15	2.73	7	22
Boat access	3	0	6	2	1	12	3.17	6	18
Indoor ice skating area	1	2	4	2	2	11	2.82	9	20
Outdoor ice skating area	0	4	2	1	4	11	2.55	7	18
Tennis courts	0	1	4	4	1	10	2.50	7	17
Golf practice area	3	2	1	0	1	7	3.86	7	14
Outdoor basketball courts	1	1	2	2	1	6	3.17	7	13
Volleyball courts	0	0	1	4	0	5	2.20	2	7

Equestrian trails	1	0	0	1	4	6	1.83	6	12
Golf course	1	0	2	1	1	5	2.80	8	13

(Priority average is based on an arithmetic average using 5 points for priority 1, 4 points for priority 2, ..., 1 point for priority 5.)



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Rick Test

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Lower Dauphin School District

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LDARPG COMMUNITY

Survey Results - Conewago Twp

- ☛ Welcome
- ☛ About Us
- ☛ Our By-Laws
- ☛ Delegates
- ☛ Regional Comprehensive Plan - proposed
- ☛ LDARPG Newsletter
- ☛ Resident Survey Results
 - ☛ - Resident Survey - Hummelstown
 - ☛ - **Resident Survey - Conewago Twp**
 - ☛ - Resident Survey - East Hanover Twp
 - ☛ - Resident Survey - Londonderry Twp
 - ☛ - Resident Survey - South Hanover Twp
- ☛ Resources
- ☛ LDARPG Calendar

As part of its regional planning effort, the Lower Dauphin Area Regional Planning Group and its consultant Urban Research and Development Corporation of Bethlehem, sent a survey to all households within the Lower Dauphin School District.

A total of 8,974 surveys were distributed by mail in mid-March 2002 along with the Lower Dauphin School District newsletter. Residents were encouraged to either mail back the survey or return it to any school district building. A total of 94 surveys were returned from Conewago Township residents.

The following is a listing of the survey results returned by Conewago Township residents:

Conewago Township

1. How old are you? (n=94; median age = 47.7 years)

0% 10-19 years 1% 20-29 years 20% 30-39 years

33% 40-49 years 39% 50-64 years 6% 65 years or older

**2. How long have you lived in the Lower Dauphin School District?
(n=94)**

5% less than 3 years 27% 3-10 years

20% 11-20 years 48% more than 20 years

3. How important are the following issues to you?

Issue	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Preserving important natural areas and creek valleys	69	12	17	2	0	27.03	91
Preserving the scenic character of the region	65	19	15	0	1	26.67	93
Preserving agricultural lands	62	18	17	1	1	25.59	93
Carefully							

controlling the types and locations of business development	50	19	23	4	4	22.75	91
Preserving significant areas of open spaces within new development	49	28	17	3	2	23.59	92
Extending public sewer service to homes with failing septic systems	37	16	22	22	4	15.38	93
Addressing traffic problems along Route 743	34	30	27	7	2	19.78	92
Expanding public parks and recreation facilities	30	27	21	21	1	15.65	92
Preserving historic buildings	29	22	36	11	3	16.77	93
Improving opportunities for bicycling and pedestrians	28	26	26	17	2	15.76	92

Making sure that older housing is properly maintained	23	22	40	10	7	15.38	93
Reducing problems of noise	17	16	40	26	1	10.43	93
Addressing traffic problems along Route 39	16	21	42	11	10	13.44	90
Addressing traffic problems along Main Street in Hummelstown	10	28	34	17	11	11.20	92
Addressing traffic problems along Route 22	10	26	39	19	7	11.09	92
Addressing traffic problems at the interchanges of Route 283	9	30	41	17	4	12.20	91
Addressing traffic problems along Route 230	8	21	42	22	8	9.45	91

Addressing traffic problems at the interchanges of I-81	6	27	43	17	8	10.89	90
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

4. How important are the following services to you?

Service	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Fire Protection	72	11	15	2	0	2.51	93
Emergency Medical Services	69	13	16	2	0	2.47	93
Public Education	68	13	17	1	1	2.46	93
Police Protection	60	18	14	8	0	2.22	93
Maintenance of Roads/Snow Removal	54	26	19	1	0	2.32	93
School Transportation	39	30	22	8	2	1.91	93

Parks and Recreation	33	27	27	13	0	1.67	93
Trash Collection and Recycling	30	34	28	8	0	1.78	93
Local Government Administration	20	36	36	6	2	1.62	91

(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

5. How do you rate the following services?

Service	Percent Response					Rating	n
	Excellent	Good	Adequate	Poor	No Opinion		
Public Education	20	47	18	4	10	0.83	93
Maintenance of Roads/Snow Removal by PennDOT	16	53	27	4	0	0.81	93
Emergency Medical Services	15	38	37	2	8	0.66	92
Trash Collection and Recycling	15	23	31	28	3	0.25	91

School Transportation	13	54	19	2	12	0.78	93
Fire Protection	13	33	41	22	2	0.54	92
Maintenance of Roads/Snow Removal by municipalities	7	35	34	22	2	0.27	91
Local Government Administration	6	23	49	13	9	0.22	90
Police Protection	6	18	51	20	7	0.10	91
Parks and Recreation	4	23	43	22	8	0.37	91

(Rating is the arithmetic average of scores based on the following values:
Excellent = 2, Good = 1, Adequate = 0, Poor = -1)

6. Please give your priorities for up to five types of public recreation facilities that are most needed within the Lower Dauphin Area (Use 1 for your highest priority, 2 for your second priority, etc., up to 5. Please choose no more than 5 responses.)

Facility	Priority					Responses With Priorities	Priority Average	Responses Without Priorities	Total Respon
	1	2	3	4	5				
Wooded natural areas with trails	18	10	9	6	2	45	3.80	2	47
Jogging/pedestrian	9	14	5	8	3	39	3.46	2	41

paths									
Bicycle paths	5	10	8	6	6	35	3.06	1	36
Children's playgrounds	7	5	11	4	4	31	3.23	2	33
Outdoor swimming pool	6	6	5	0	6	23	3.26	2	25
Recreation building with gym	5	2	4	5	7	23	2.70	2	25
Picnic pavilions	2	3	4	4	8	21	2.38	1	22
Indoor swimming pool	5	5	0	7	2	19	3.21	2	21
Skate/rollerblading park	4	3	2	4	4	17	2.94	1	18
Public fishing areas	0	4	4	5	1	14	2.79	2	16
Public hunting areas	6	3	2	1	1	13	3.92	0	13
Indoor ice skating area	2	2	3	3	3	13	2.77	1	14
Golf course	0	1	4	0	6	11	2.00	0	11
Soccer/football fields	3	1	0	1	4	9	2.78	0	9
Outdoor basketball courts	1	1	2	1	3	8	2.50	1	9
Golf practice area	1	1	1	3	1	7	2.71	0	7
Tennis courts	1	0	1	2	3	7	2.14	1	8
Outdoor ice	0	0	1	5	0	6	2.17	0	6

skating area									
Equestrian trails	0	0	0	3	3	6	1.50	0	6
Baseball/softball fields	1	1	1	1	1	5	3.00	0	5
Outdoor amphitheater	0	0	1	4	0	5	2.20	2	7
Boat access	0	0	2	2	0	4	1.50	1	5
Volleyball courts	0	0	2	0	0	2	3.00	2	4

(Priority average is based on an arithmetic average using 5 points for priority 1, 4 points for priority 2, ..., 1 point for priority 5.)



Questions or Feedback?

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Rick Test

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Lower Dauphin School District

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[SERVICES](#)
[EMPLOYMENT](#)
[COMMUNITY](#)
[CALENDAR](#)



LDARPG COMMUNITY

Survey Results - Hummelstown

- ☛ Welcome
- ☛ About Us
- ☛ Our By-Laws
- ☛ Delegates
- ☛ Regional Comprehensive Plan - proposed
- ☛ LDARPG Newsletter
- ☛ Resident Survey Results
- ☛ **- Resident Survey - Hummelstown**
- ☛ - Resident Survey - Conewago Twp
- ☛ - Resident Survey - East Hanover Twp
- ☛ - Resident Survey - Londonderry Twp
- ☛ - Resident Survey - South Hanover Twp
- ☛ Resources
- ☛ LDARPG Calendar

As part of its regional planning effort, the Lower Dauphin Area Regional Planning Group and its consultant Urban Research and Development Corporation of Bethlehem, sent a survey to all households within the Lower Dauphin School District.

A total of 8,974 surveys were distributed by mail in mid-March 2002 along with the Lower Dauphin School District newsletter. Residents were encouraged to either mail back the survey or return it to any school district building. A total of 177 surveys were returned from Hummelstown Borough residents.

The following is a listing of the survey results returned by Hummelstown Borough residents:

Hummelstown Borough

1. How old are you? (n=177; median age = 49.0 years)

0% 10-19 years 6% 20-29 years 20% 30-39 years

24% 40-49 years 24% 50-64 years 27% 65 years or older

**2. How long have you lived in the Lower Dauphin School District?
(n=177)**

10% less than 3 years 20% 3-10 years

15% 11-20 years 55% more than 20 years

3. How important are the following issues to you?

Issue	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Preserving important natural areas and creek valleys	68	16	15	0	1	14.26	176
Addressing traffic problems along Main Street in Hummelstown	60	21	15	3	1	13.15	178
Preserving the scenic character of the region	58	20	19	2	1	13.35	173

Preserving agricultural lands	58	18	17	5	2	12.69	175
Preserving significant areas of open spaces within new development	53	22	19	2	3	12.94	170
Carefully controlling the types and locations of business development	51	21	21	7	1	12.15	172
Preserving historic buildings	41	26	25	6	2	10.90	178
Improving opportunities for bicycling and pedestrians	39	24	28	6	2	10.63	176
Making sure that older housing is properly maintained	33	27	32	7	2	10.06	177
Expanding public parks and recreation facilities	32	27	29	9	4	9.83	173
Reducing							

problems of noise	25	23	32	13	6	7.97	172
Addressing traffic problems along Route 39	23	22	36	13	6	7.86	173
Extending public sewer service to homes with failing septic systems	22	21	33	11	14	7.60	171
Addressing traffic problems along Route 22	18	20	37	14	12	6.80	172
Addressing traffic problems at the interchanges of Route 283	16	18	42	12	12	6.67	171
Addressing traffic problems at the interchanges of I-81	15	19	39	16	12	6.13	173
Addressing traffic problems along Route 743	14	20	39	17	10	6.05	172

Addressing traffic problems along Route 230	7	16	42	22	13	4.27	171
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(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

4. How important are the following services to you?

Service	Percent Response					Rating	n
	Very Important	Moderately Important	Important	Not Important	No Opinion		
Fire Protection	90	6	3	0	1	2.85	178
Emergency Medical Services	88	5	7	0	0	2.81	178
Police Protection	87	6	6	0	1	2.79	176
Public Education	72	13	11	1	3	2.52	175
Maintenance of Roads/Snow Removal	55	26	19	0	0	2.36	175
Trash Collection and Recycling	50	30	18	1	1	2.27	175
Local							

Government Administration	41	27	23	6	1	1.98	174
School Transportation	39	20	28	7	6	1.78	174
Parks and Recreation	35	36	26	2	2	2.01	174

(Rating is the arithmetic average of scores based on the following values:
 Very Important = 3, Moderately Important = 2, Important = 1, Not Important = -1, No Opinion = 0)

5. How do you rate the following services?

Service	Percent Response					Rating	n
	Excellent	Good	Adequate	Poor	No Opinion		
Fire Protection	58	32	4	0	7	1.48	178
Police Protection	44	43	10	2	2	1.29	178
Emergency Medical Services	41	36	9	1	14	1.17	177
Trash Collection and Recycling	34	48	17	2	0	1.14	178
Maintenance of Roads/Snow Removal by municipalities	32	43	18	4	2	1.03	175
Public							

Education	32	42	11	3	12	1.03	176
Local Government Administration	21	49	17	5	8	0.86	174
Maintenance of Roads/Snow Removal by PennDOT	17	52	18	3	10	0.83	176
Parks and Recreation	16	52	24	3	5	0.81	177
School Transportation	12	40	16	2	30	0.62	174

(Rating is the arithmetic average of scores based on the following values:
Excellent = 2, Good = 1, Adequate = 0, Poor = -1)

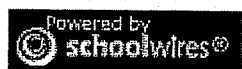
6. Please give your priorities for up to five types of public recreation facilities that are most needed within the Lower Dauphin Area (Use 1 for your highest priority, 2 for your second priority, etc., up to 5. Please choose no more than 5 responses.)

Facility	Priority					Responses With Priorities	Priority Average	Responses Without Priorities	Total Responses
	1	2	3	4	5				
Wooded natural areas with trails	31	18	22	15	8	94	2.00	10	104
Jogging/pedestrian paths	21	30	18	13	7	89	3.24	10	99
Bicycle paths	18	17	21	16	15	87	3.08	10	97

Recreation building with gym	24	11	10	9	6	60	3.63	4	64
Children's playgrounds	7	11	8	11	9	46	2.91	5	51
Indoor swimming pool	14	10	5	2	9	40	2.45	2	42
Picnic pavilions	1	9	11	7	8	36	2.67	4	40
Baseball/softball fields	4	8	3	2	10	27	2.78	6	33
Outdoor swimming pool	2	4	1	10	4	21	2.52	3	24
Outdoor amphitheater	1	1	4	5	10	21	1.95	3	24
Soccer/football fields	3	3	5	5	4	20	2.80	4	24
Skate/rollerblading park	3	1	4	6	6	20	2.45	1	21
Boat access	1	3	2	9	4	19	2.37	2	21
Tennis courts	4	0	2	7	3	16	2.69	3	19
Outdoor ice skating area	2	3	3	6	2	16	2.81	2	18
Outdoor basketball courts	2	5	1	3	4	15	2.87	5	20
Public fishing areas	1	2	6	1	5	15	2.53	5	20
Indoor ice skating area	1	2	2	2	3	10	2.60	1	11
Volleyball courts	0	4	3	2	1	10	3.00	1	11

Golf practice area	1	1	4	2	1	9	2.89	1	10
Golf course	2	0	2	0	2	6	3.00	1	7
Public hunting areas	0	1	1	1	1	4	2.50	6	10
Equestrian trails	1	0	0	0	0	1	5.00	1	2

(Priority average is based on an arithmetic average using 5 points for priority 1, 4 points for priority 2, ..., 1 point for priority 5.)



Questions or Feedback?

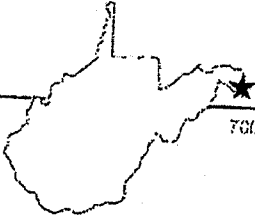
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Rick Test

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EXHIBIT L

**Police Department
City of Ranson**



700 N. Preston Street • Ranson, WV 25438 • Phone (304) 725-2411



November 24, 2003

Mayor Donald E. Esty, Jr.
City of Westbrook
2 York Street
Westbrook, Maine 04092

RE: Penn National Gaming, Incorporation

Dear Mayor Esty:

Penn National Gaming came to our area in January 1997 and purchased the Charles Town Races. Since then they committed themselves to assisting community groups with financial support, they have lived up to all of the promises made prior to their coming to the community.

Since the implementation of the video lottery in our community, there has been no increase in area crimes that can be contributed to the gaming facility.

Portions of the revenue generated through video lottery are distributed out to all county municipalities. This increase in revenue has allowed this community to grow and expand in areas it normally would not have been able to for several years.

Please feel free to contact me with any questions you may have concerning the impact of PNGI into our community.

Sincerely,

William Roper
Chief of Police

cc: James A. Violette
John B. O'Hara
Brendan Healy
Bruce Chuluda
Keith Gorman
Elmer Welch
Suzanne Joyce

**CITY of CHARLES TOWN
POLICE DEPARTMENT**

November 24, 2003

Mayor Donald E. Esty, Jr.
City of Westbrook
2 York Street
Westbrook Maine 04092

Re: Penn National Gaming Incorporated

Dear Mayor Esty,

I am writing to express my support for Penn National Gaming Incorporated. For the past seven years, PNGI has been in operation with Video Lottery Machines, which is contiguous with the corporate limits of the City of Charles Town. During the entire time, the corporation and the Charles Town Police Department have enjoyed a close working relationship.

This office has seen no indicator or trend that the corporations operations have caused any increase or change in our crime statistics. I should note that Penn National is widely known as a "good neighbor". They continually support all area charities. The City of Charles Town and conversely, the City of Charles Town Police Department, has benefited greatly from the revenues generated by the corporations tax base. If there are any questions by your Chief of Police, please feel free to contact me.

Thank you for your time and consideration to this matter.

Sincerely,



W. M. Aldridge
Chief of Police

cc: Mr. Roger Ramey
Penn National Gaming Inc.

W. M. ALDRIDGE
Chief of Police

114 West Liberty Street
Charles Town, WY 25814
304-725-2714
Fax 304-725-6755

EXHIBIT M

Copyright 2004 News World Communications, Inc.
The Washington Times
August 6, 2004 Friday

No crime increase around slots; States' statistics rebuff critics

SECTION: NATION; Pg. A14

LENGTH: 656 words

BYLINE: By Robert Redding Jr., THE WASHINGTON TIMES

West Virginia and Delaware have had no significant increase in crime since enacting slots legislation in the mid-1990s.

The states' crime statistics likely will loom large in debates over setting up slot machines in the District and Maryland, where gambling critics have argued that slots breed crime.

Delaware's statistics show decreases in the number of sex offenses, robberies, burglaries and alcohol violations since video-lottery terminals were added to the state's three horse-racing tracks in 1994.

West Virginia, which enacted slots legislation in 1997, has no annual crime survey, but the two police departments covering Charles Town Races & Slots, the state's only horse track, report similar declines in major crimes.

The FBI's Uniform Crime Report supports the statistics for both states. However, the agency has no statistics for the specific areas around the race tracks.

W. Minor Carter, a lobbyist for the group www.stopslotsmd.com, called the statistics "misleading" and said the organization stands by its credo of "wherever slots are legalized, they bring ... dramatic increases in street crime."

Mr. Carter said many of the crimes go unreported because they are committed by out-of-town gamblers in their own neighborhoods.

"This has been proven by Las Vegas," Mr. Carter said. "They have managed to import the gamblers and export the problems."

John Melton, a lawyer with West Virginia's lottery commission, acknowledges some increase in vehicle violations, but he attributed it to the increased number of track customers who come to play the slots machine.

However, Mr. Melton said municipalities around Charles Town Races & Slots, which borders Maryland, have reported either decreases or no increases in major crimes.

He said according to the most recent statistics, Charles Town had no reported arsons or

sexual assaults in 2003-04 and calls for burglaries and narcotics significantly decreased. There were seven reported burglaries during that period, 12 fewer than the year before. And the number of narcotics calls had decreased by 15 from 2002-03 to 2003-04.

William Roper, police chief in Ranson, W.Va., said there has been no significant increases in crime, despite the population increasing six-fold in the past two years. The police department is one of two that responds to incidents at and around the Charles Town track.

"I was kind of skeptical when slots first got here, but I have seen no increase in crime," he said.

Maryland Gov. Robert L. Ehrlich Jr., a Republican, has said he is concerned that the state's struggling horse-racing industry will face increased competition from venues in nearby Delaware and West Virginia, which feature slot machines that provide track owners with more money to award larger purses. The out-of-state venues draw \$309 million a year in revenue from Maryland gamblers.

For two years, House Speaker Michael E. Busch, Anne Arundel County Democrat, has led the defeat of Mr. Ehrlich's effort to put slot machines at four horse tracks and two off-track sites along Interstate 95, which would help increase racing purses.

In the District yesterday, investors failed to put on the Nov. 2 ballot an initiative that would have placed 3,500 video-lottery terminals in a new entertainment complex on New York Avenue in Northeast. Supporters of the plan vowed to appeal the ruling.

Pennsylvania Gov. Edward G. Rendell, a Democrat, signed a bill in July to put 61,000 slot machines at 14 locations around the state, making it the third state with horse racing that borders Maryland to have slots.

John F. Wayne, executive director for both the thoroughbred and harness racing commission in Delaware, hopes his neighbors never figure out the advantages of slots.

"I think that myth is circulated by a lot of people who don't want to see slots in their neighborhoods," he said. "The fact is it has a positive effect on the racing economy and the surrounding economy."

EXHIBIT N



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

RECEIVED
5/30/03

May 27, 2003

Kevin Marmas
McCarthy Engineering Associates, P.C.
1121 Snyder Road
West Lawn, PA 19609

PERMITS REFERENCE NUMBER

Re: File No. ER 03-1713-043-A
DEP NPDES General Permit: Penn National of
Grantville Partial Land Development, East
Hanover Twp., Dauphin Co.

Dear Mr. Marmas:

The Bureau for Historic Preservation has reviewed the above named project under the authority of the Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988). This review includes comments on the project's potential effect on both historic and archaeological resources.

PROJECT UNLIKELY TO AFFECT ARCHAEOLOGICAL OR HISTORICAL RESOURCES

Based on our survey files, which include both archaeological sites and standing structures, there are no National Register eligible or listed historic or archaeological properties in the area of this proposed project.

Therefore, your responsibility for consultation for this project is complete. However, should you encounter archaeological resources during construction, you must stop the project, notify the Bureau for Historic Preservation at (717) 783-8946 as well as the Department of Environmental Resources and allow the Bureau 60 days to conduct a survey to determine the significance of the archaeological resources. If the Bureau determines that the resources are significant, you must submit a mitigation plan to protect the significant resources on the site. We will review the plan within 30 days.

Sincerely,

Kurt W. Carr, Chief
Division of Archaeology &
Protection

Cc: DEP, Southcentral Regional Office

KWC/tmw



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

January 24, 2005

Thomas Jones
Gannett Fleming, Inc.
PO Box 67100
Harrisburg, PA 17106

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

Re: File No. ER 2003-1713-043-B
DEP, Water Quality Management
Permit, Mountainview Thoroughbred
Racing Association-Penn National of
Grantville WWTP, East Hanover Twp.,
Dauphin Co.

Dear Mr. Jones:

The Bureau for Historic Preservation has reviewed the above named project under the authority of the Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988). This review includes comments on the project's potential effect on both historic and archaeological resources.

Based on our survey files, which include both archaeological sites and standing structures, there are no National Register eligible or listed historic or archaeological properties in the area of this proposed project. Therefore, your responsibility for consultation on this project is complete.

Should artifacts or archaeological resources be encountered during construction, we request that you notify our office. This notification will not delay your project in any way. We simply wish to record this information before it is lost. The Bureau for Historic Preservation can be contacted at (717) 783-8946. Thank you in advance for this consideration.

Sincerely,

Kurt W. Carr, Chief
Division of Archaeology &
Protection

CC: DEP, Southcentral Region
KWC/lmm

RECEIVED

FEB 01 2005

HARRISBURG, PA
GANNETT FLEMING, INC.
Planning & Management Section

EXHIBIT O

REC'D
M/S/23/03

CC: DIM
KML

DEPARTMENT OF WATERWAYS ENGINEERING

9-20-03
File No. 921-3100

SUPPLEMENT NO. 1 PENNSYLVANIA NATURAL DIVERSITY INVENTORY SEARCH FORM

COPY

 05-010

This form provides site information necessary to perform a computer screening for species of special concern listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, the Pennsylvania Fish and Boat Code or the PA Game and Wildlife Code. Records regarding species of special concern are maintained by PA DCNR in a computer data base called the "Pennsylvania Natural Diversity Inventory" (PNDI). Results from this search are not intended to be a conclusive compilation of all potential special concern resources located within a proposed project site. On-site biological surveys may be recommended to provide a definitive statement on the presence or absence, or degree of natural integrity of any project site. Results of this PNDI search are valid for one year.

Please complete the information below, attach an 8 1/2" x 11" photocopy (DO NOT REDUCE) of the portion of the U.S.G.S. Quadrangle Map that identifies the project location and outlines the approximate boundaries of the project and mail to the appropriate DEP regional office or delegated County Conservation District prior to completing a Chapter 105 environmental assessment or any other DEP permit application. (SEE REVERSE SIDE FOR LIST OF OFFICES AND ADDRESSES).

NAME: Kevin Marmas

ADDRESS: McCarthy Engineering Associates, P. C.

1121 Snyder Road

West Lawn, PA 19809

PHONE: (610) 373-8001

COUNTY: Dauphin

TWP/MUNICIPALITY: East Hanover Township

S.G.S. 7 1/2 Minute Quadrangle

Grantville

PROJECT DESCRIPTION AND SIZE (Briefly describe entire area relevant to your project, including acreage.)

Expansion of existing facilities for horse racing and accessory uses.

The improvements will only take place on land that has previously been developed.



North (Up) 3.54 inches

West (to the left) 4.96 inches

INDICATE PROJECT LOCATION TO THE NEAREST ONE TENTH INCH MEASURING FROM THE EDGE OF THE MAP IMAGE FROM THE LOWER RIGHT CORNER.

SCREENING RESULTS - Follow the directions of the checked block.

BW 5-20-03 2-2-05 RSC
No potential conflicts were encountered during the PNDI inquiry. Include this form and the PNDI receipt with your Chapter 105 environmental assessment or other DEP permit application submissions.

Potential conflicts must be resolved by contacting the natural resource agencies listed on the PNDI receipt. Please provide a copy of this form and the PNDI receipt along with a brief description of your project to the listed agency for consultation and recommendations. Include this form, the printed PNDI search results and the natural resource agency's written recommendation with your Chapter 105 environmental assessment or other DEP permit application submissions.

PNDI Intern Database Search Results

PNDI Search Number: N120445

Search Results For dauphin.county@dep.state.pa.us

Search Performed By: bob christoff On 5/20/03 4:21:09 PM

Agency/Organization: dauphin county conservation district

Phone Number: 717 921 8100

Search Parameters: Quad - 407646; North Offset - 3.5; West Offset - 5.0; Acres - 100

Project location center (Latitude): 40.39422

Project location center (Longitude): 76.66090

Project Type: DEP Permits/NPDES - Construction

Print this page using your Internet browser's print function and keep it as a record of your search.

No conflicts with ecological resources of special concern are known to exist within the specified search area.

PNDI is a site specific information system, which describes significant natural resources of Pennsylvania. This system includes data descriptive of plant and animal species of special concern, exemplary natural communities and unique geological features. PNDI is a cooperative project of the Department of Conservation and Natural Resources, The Nature Conservancy and the Western Pennsylvania Conservancy. This response represents the most up-to-date summary of the PNDI data files and is valid for 1 year. An absence of recorded information does not necessarily imply actual conditions on-site. A field site survey may reveal previously unreported populations of rare species, their critical habitats, or other unique natural resources.

Legal authority for Pennsylvania's biological resources resides with three administrative agencies. The handout entitled Pennsylvania Biological Resource Management Agencies, outlines which species groups are managed by these agencies. Feel free to contact our office if you have questions concerning this response or the PNDI system, and please refer to the PNDI Search Number at the top of this page in future correspondence concerning this project.

