

Phase 1: A seven-story parking garage completed in June 2020



On the Horizon

State-of-the-Art Redevelopment to Attract Talent

BY TED C. WILLIAMS, P.E., PRESIDENT, LANDMARK SCIENCE & ENGINEERING

LANDMARK SCIENCE & ENGINEERING, an award-winning consulting civil engineering and environmental sciences firm headquartered in Newark, Delaware, was engaged by Delle Donne & Associates to assist them and their design team of Bernardon, EDiS, and Tarabicos & Grosso, in creating Delaware's largest mixed-use development. Avenue North would not only need to meet the criteria of the zoning classification but also provide customer-based services that large corporate tenants demand today in order to attract talent for research and development in the biotech and medical arenas. This demand includes office, residential, retail, restaurant, and hotel accommodations all within a walkable environment.

The original Corporate Office Campus was governed by a Traffic Mitigation Agreement (TMA) that required a 15% reduction in the use of single-occupancy vehicles during both the AM and PM peak hours. The challenge for the mixed-use development was to create a mixture of uses

within the 72-acre site that would provide for the necessary amenities such as retail, restaurants, hotel, etc. while maintaining the 15% reduction threshold found in the TMA. This threshold was achieved by the application of Internal Capture found in the Institute of Transportation Engineers' Trip Generation Handbook. Internal Capture accounts for trips that originate within the development such as residents of the proposed apartments walking to work or using on-site shuttles and tenants' employees using the amenities provided on the campus versus leaving to utilize off-campus facilities.

The three biggest engineering issues Landmark solved were how to:

- Create an easy, walkable site for the main Avenue where you have over 12-feet of grade differential
- Maintain vehicular and pedestrian access and parking for the three office buildings currently occupied by AstraZeneca, Solenis, and ChristianaCare



A rendering by Bernardon of the new sign that was recently installed at the Route 202 and Powder Mill corner

about 113,275 SF of office space to the existing 860,000 SF, will create 360 apartments, a 12,000 SF fitness center, a 10,000 SF day care, 200-room hotel with conference space, 45,000 SF for restaurants, and 182,753 SF for retail use.

But then the COVID-19 pandemic hit, upsetting the overall market. Delle Donne & Associates, Landmark and the entire design team have been able to pivot on short notice to revise the size and mixture of uses on the development to meet the current and projected near-future uses while adhering to the requirements of the TMA and maintaining uninterrupted utilities and access for the tenants. ■

Landmark principals Keith A. Rudy, P.E., LEED AP, project manager, and Ted C. Williams, P.E., transportation/traffic engineer, have represented the owner/developer for all aspects of the project from due diligence, surveying, planning and design, approvals, environmental assessments, state and federal environmental permits, through construction-phase services.



Ted C. Williams, P.E. is president of Landmark Science & Engineering.

- Maintain utility service to the tenants during future phases of construction

Landmark created phasing plans that allows for new utilities, roadways and parking areas to be constructed while maintaining uses by the existing tenants. This effort included coordination with the owner, tenants and the construction team, and multiple revisions when existing utilities have been found that were not discovered earlier from review of existing documentation or by use of private utility locators. In Phase 1, an aesthetic, seven-level parking garage was completed in June 2020 to serve current and future parking needs.

The original \$400 million, 1.864 million SF development would add



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