




MD28 Sidewalk between MD97 and Bailey's Lane Safety/Spot Improvements (MO1715176), Mandatory Referral No. MR2018024

 Stephen Aldrich, Master Planner/Supervisor, FP&P, stephen.aldrich@montgomeryplanning.org, 301-495-4528
 Brian Lewandowski, Engineer, Park Development, brian.lewandowski@montgomeryparks.org, (301) 495-2516
 Pamela Dunn, Chief, FP&P, pamela.dunn@montgomeryplanning.org, 301-650-5649

Completed: 05/17/2018

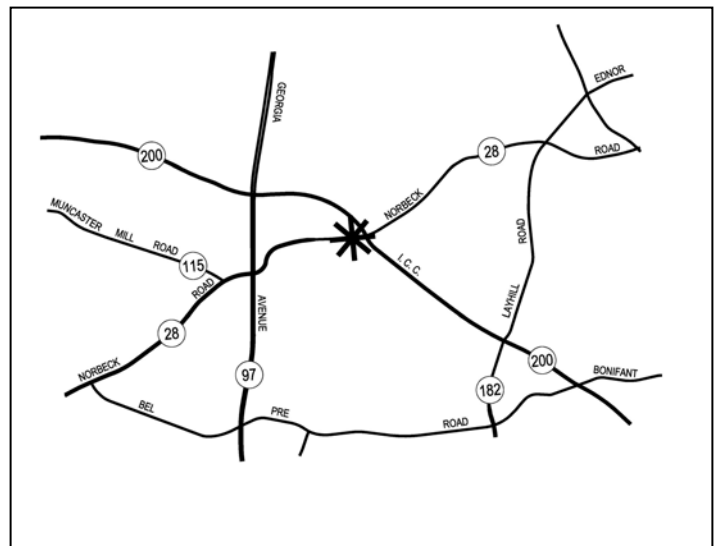
Description

Mandatory Referral MR2018024: MD28 Sidewalk between MD97 and Bailey's Lane - Safety/Spot Improvements

Construct 3,600 feet of sidewalk along the south side of MD28 (Norbeck Road) between MD97 and Bailey's Lane. Project includes curb ramps at cross streets, and traffic signal and intersection improvements at Bailey's Lane/East Norbeck Park entrance.

Applicant: Maryland Department of Transportation – State Highway Administration

Filing Date: April 16, 2018



Summary

- Staff recommends approval of Mandatory Referral MR2018024 (Item 8) with comments shown on page 3.
- The Maryland Department of Transportation-State Highway Administration proposes to construct a 3,600 foot-long sidewalk on the south side of MD28 (Norbeck Road) between MD97 (Georgia Avenue) and Bailey's Lane. A traffic signal and related pedestrian crossing improvements are included in this project at the intersection of MD28 with Bailey's Lane/East Norbeck Park Entrance. This project is SHA Project No. MO1715176; State funds will be used for the project. The project limits are as follows:
 - Norbeck Road (MD28) from MD97 (Georgia Avenue) to Bailey's Lane; and
 - The intersection of Norbeck Road (MD28) with Bailey's Lane and the East Norbeck Park Entrance.

The site vicinity and project location are displayed in Figure 1 on the following page. A copy of the road design and signal plans are included with this staff report as Attachment A. The project includes the following improvements:

- Construction of a five-foot wide sidewalk along the south side of Norbeck Road (MD28) starting approximately 100 feet east of MD97 and ending on the west side of Bailey's Lane,
- Sidewalk ramp connections with crosswalks on Norbeck Road at Norbeck Boulevard, and the Hampshire Village Entrance, and
- Addition of a traffic signal with intersection improvements at Bailey's Lane/East Norbeck Park Entrance, including a crosswalk across Norbeck Road and a second crosswalk across the East Norbeck Park entrance.
- The intersection design work will impact Park property adjacent to the East Norbeck Park Entrance, including a relocation of the existing sidepath on the east side of the Park Entrance to cross at the intersection,
- The proposed sidewalk design varies depending on whether an existing curb is present. The red shaded sections shown in Figure 1 are closed-section design (with curbing) and the yellow-shaded sections are open-section design.

Issues

- Submittal/Approval of Park Construction Permit
- Minimization of impacts to parkland and environmental resources
- Improvements to intersection geometry at Bailey's Lane/East Norbeck Park Entrance



Figure 1: Project Location

Recommendations

Staff recommend that the Board approve this project with the following comments transmitted to the Maryland Department of Transportation – State Highway Administration:

1. The sidewalk project creates excessive amounts of tree clearance; however, this is in compliance with MDOT-SHA design standards in open section portions of the design. Had the entire road been curbed, the tree impacts would be much less severe. This is regrettable for a relatively small sidewalk project that will likely only serve the road on an interim (less than ten years) basis, until the full MD28/MD198 Corridor Improvement Study Alternative is selected and built. MDOT-SHA should re-consider the open-section design from MD97 (Georgia Avenue) eastward for a distance of 1,300 feet, re-designing it as closed-section by adding curbing. This would reduce the tree clearance disturbance by more than half an acre (the area not covered in the MD29/MD198 Corridor Improvement Study).
2. Submit final roadway construction plans to the M-NCPPC Department of Parks for review as part of the park permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies.
3. Any parkland needed for the proposed road improvement should be valued by independent appraisal of the properties “highest and best use” in order to determine just compensation to M-NCPPC. Final ROW plats and compensation for the loss of parkland must be agreed to and finalized between MCDOT and M-NCPPC before the issuance of a Park Construction Permit. All fee simple disposition of real estate is subject to Planning Board approval.
4. Temporary and permanent tree protection shall be incorporated in the design to increase survival rates of existing trees on parkland. Reforestation trees to be planted on parkland shall meet M-NCPPC Planting Requirements.
5. Ensure curb radius is consistent on both sides of the Park’s entrance road. A 25’ radius should be used on both sides. This would further reduce park impacts to M-NCPPC property, and would move the sidewalk and the traffic pole further away from the Park’s existing sign.
6. With the relocation of the existing sidepath on the north side of Norbeck Road (MD28) to the east of the East Norbeck Park Entrance, any future extension of this sidepath should smoothly connect from the crosswalk at the Norbeck Park Entrance back to the proposed alignment shown in MDOT-SHA concept plans for the MD28/MD198 Corridor Improvement Study. This may require a future relocation of the East Norbeck Park sign by MDOT-SHA.

Existing Conditions

MD28 (Norbeck Road) is a 2-lane, undivided roadway that travels in an east-west direction. Within the project limits, it is classified as Urban Arterial according to SHA Highway Location Reference, or

Suburban Major Highway according to Montgomery County's Master Plan of Highways and Transitways. The travel lanes are 12 feet wide with paved shoulders, with exclusive turn lanes at major intersections with MD97, Clara Downey Ave, Coolidge Ave, Norbeck Blvd, Hampshire Village Entrance, and Bailey's Lane/East Norbeck Park Entrance. The posted speed limit is 40 MPH. The roadway is primarily open section along the south side, with the exception of approximately 450 feet of curb at Norbeck Blvd, and 800 feet of curb west of Hampshire Village Entrance to Bailey's Lane intersection. There are no pedestrian facilities along the south side of MD28, except for very short stretches of sidewalks at MD97 and Norbeck Blvd for tie-ins.

Land uses along MD28 within the project limits include a residential neighborhood, East Norbeck Park, Leisure World (a Planned Retirement Community), Our Lady of Grace Church, and True Buddha Temple Maryland. Figure 2 below illustrates the residential zoning associated with the existing surrounding land uses.



Figure 2. Surrounding Land Uses and Zoning

Proposed Improvements/Mandatory Referral Narrative

The Maryland Department of Transportation - State Highway Administration District 3 initiated the MD28 from MD97 to Bailey's Lane Safety and Spot Improvements project, S.H.A. Contract No. MO1715176. The limits of work lie along the south side of MD28 between MD97 and East Norbeck Park, north of Bailey's Lane for approximately 0.72 miles, encompassing approximately 2.94 acres of area. SHA funds will be used for the project.

The proposed improvement includes providing a 5-foot wide ADA compatible sidewalk along the south side of MD28 (Norbeck Road) from MD97 to Bailey's Lane/East Norbeck Park Entrance that ties into the Intercounty Connector Trail at the park. Additional improvements include a new full traffic signal

with audible and countdown pedestrian signals (APS/CPS) and pedestrian amenities at East Norbeck Park/Bailey's Lane, tree planting within the project limits, new stormwater management facilities, and guardrail installation.

Typical Section

The proposed improvement is mainly off road along the south side of MD 28. Typical sections and lane configurations on MD28 will not change.

Along the open section portions of MD28, the 5-foot wide sidewalk is proposed to be approximately 22 to 24 feet away from the edge of travel lane just outside the clear zone for vehicular traffic, or 6 feet behind existing W-beam traffic barrier if needed.

Along the closed section portions of MD 28, the 5-foot wide sidewalk is either offset with a 6-foot-wide green buffer from the existing curb, or right behind the curb to minimize impacts on existing utilities, environmental features or drainage features. SHA plans to continue to coordinate with M-NCPPC to determine whether the green buffer can be extended to other stretches of curbed sections along MD28.

- Between Stations 102 and 103+75 at the western end of the project, (175 feet), this 5-foot wide sidewalk will have no buffer and will be located flush to the existing curb. This section is constrained by stormwater management improvements to be constructed for the ongoing MD28/MD97 intersection improvement project (To be completed in 2018).
- Between Stations 103+75 and 119+00 (1,525 feet), the sidewalk will be in an open section and will be offset from the road's edge by 22 feet.
- Between Stations 119+00 and 122+60 (360 feet), the sidewalk will be in a closed section to the west of Norbeck Boulevard and will be offset from the curb by 6.7 feet.
- To the east of Norbeck Boulevard between Stations 122+60 and 127+75 (515 feet), the sidewalk will be offset from the road edge by 22.5 to 23.5 feet.
- Between Stations 127+75 and 130+55 (280 feet), the sidewalk will transition to an offset of 10 feet from the road edge (behind guardrail).
- Between Stations 130+55 and 138+00 (745 feet- area between the Hampshire Village entrance and Bailey's Lane), the sidewalk will be located primarily flush to the curb with no buffer.

Relationship to Other Comprehensive Transportation Projects

There are several projects or studies in the Norbeck Road area as displayed in Figure 3 including:

- Subject project – MD28 Sidewalk and Safety/Spot Improvements (CTP Project No. MO17151767),
- MD28 Intersection Improvements at MD97 (SHA Project No. MO1685187). This project is currently under construction and expected to be complete in 2018.
- MD28/MD198 Corridor Improvement Study (SHA Project No. MO8665170). This project had a location/design public hearing in June 2017, and a preferred alternative selection is expected by MDOT-SHA during the current year. The alternatives evaluated for MD28

consistently include the widening of this road to a four-lane divided roadway with bike and pedestrian facilities between MD97 (West of Norbeck Boulevard and Layhill Road, and

- MD97 Interchange at MD28 (SHA Project No. MO8525171). This project would require a relocation of Norbeck Road (MD28) to the north and the construction of an interchange with MD97. This project has been on hold by MDOT-SHA since 2009.

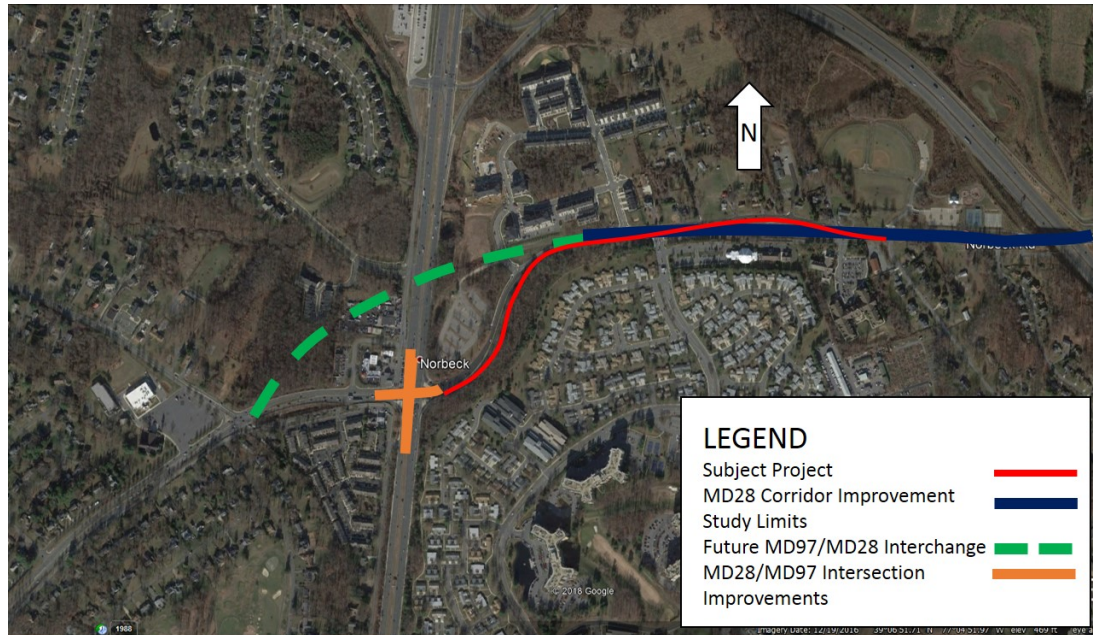


Figure 3. Project Relationship to Other MDOT-SHA Projects

SWM and Erosion and Sediment Control Design

The Stormwater Design Methodology is in accordance with the latest version of Maryland State Highway Administrations Sediment and Stormwater Guidelines and Procedures. Points of Investigation (POI) and Lines of Investigation (LOI) were identified throughout the project limits and classified. Stormwater Management (SWM) Criteria for each POI has been developed. SWM Measures were then identified using planning techniques.

Erosion and Sediment (E&S) Control design will follow the criteria set forth in the latest version of Maryland State Highway Administrations Sediment and Stormwater Guidelines and Procedures. E&S strategies will include the use of multiple types of E&S measures to protect natural features.

This project has received Concept Approval from MDOT-SHA Plan Review Division (PRD) (supporting document 09-SWM- MR2018024-000.pdf). MDOT will finalize the design to obtain the SWM/E&S permit from SHA-PRD.

Park Property

East Norbeck Park is located to the north side of MD28 near the east project limit. SHA will continue to coordinate with M-NCPPC to obtain the Park construction permit due to work being proposed on the Park property and acquisition needs for signal equipment. The proposed intersection improvements, including the relocation of the existing sidewalk on the west side of the East Norbeck Park entrance are expected to impact 0.18 acres of parkland.

Wetland/Waters of the United States (WUS)

The site does not fall within the 100-year floodplain or Chesapeake Bay Critical Area. There are two designated wetlands and one WUS within the project limits. A joint permit application has been submitted to MDE for wetland and WUS impacts.

Historical

According to Medusa (the Maryland Historical Trust's online database of architectural and archeological sites and standing structures), Norbeck Historic District was located to the north side of MD28, but a 1986 amendment has found it does not merit designation in the Master Plan for Historic Preservation.

There was also one historical property (3212 Norbeck Road) located within the project limits, but based on Maryland Inventory of Historic Properties (Architectural Inventory), the building has been demolished and is no longer eligible for listing in the National Register of Historic Places.

Utilities

Within the project limits, there are overhead power/communication lines along the south side of MD28. These overhead lines will not be impacted per the current design.

According to utility designation data, there are also underground water lines, gas lines, and sanitary lines running along MD28. None of these underground utilities are expected to be impacted based on test pit results.

Bike/Ped Statement

Within the project limits, there are no pedestrian facilities along the south side of MD28, except for very short stretches of sidewalks at MD97 and Norbeck Blvd for tie-ins.

Along the north side of MD28, there is a stretch of sidewalk between the Park and Ride entrance and Clara Downey Ave, and a side path from Clara Downey Ave to just east of Coolidge Ave. The side path is planned to be extended to 800 feet east of Norbeck Blvd by the Bradford's Landing development project.

Also to the north side of MD28, the Intercounty Connector Trail starts from East Norbeck Park and extends all the way along MD200. The subject project will add a signalized intersection on Norbeck Road at Bailey's lane which will provide a signalized crossing for bicycles and pedestrians at this

location.

Within the project limit, the subject project proposed pedestrian facilities including:

- ADA compliant 5-foot wide sidewalk along the south side of MD28 from MD97 to Bailey's Lane intersection;
- Full traffic signal with audible and countdown pedestrian signals (APS/CPS) and pedestrian amenities at East Norbeck Park/Bailey's Lane intersection;
- A relocated bus pad 200' west of East Norbeck Park Entrance with standard knee wall.
- ADA compliant 5-foot wide sidewalk along the north side of MD28 from the relocated bus pad to East Norbeck Park entrance and then connect to the Intercounty Connector Trail.

By adding these features, MDOT SHA is proposing a continuous network of pedestrian facilities in this area and allowing a safer route for the local senior communities to access the park facility.

MDOT-SHA will design pedestrian crossings to meet the requirements of the Americans with Disabilities Act (ADA), the Manual on Uniform Traffic Control Devices, American Association of State Highway and Transportation Officials, and other relevant requirements and guidelines to ensure that a high level of service, safety and durability are provided.

MDOT-SHA Outreach Efforts

The subject project had two scheduled outreach efforts during the design phase.

- April 28, 2016 – MDOT SHA – District 3 held 1st Public Informational meeting to present the concept to the community. Meeting took place in the Gym of Mid-County Community Recreation Center (2004 Queensguard Road, Silver Spring MD 20906)
- May 17, 2016 – MDOT SHA – District 3 held 2nd Public Informational meeting at the Hampshire Village's senior housing complex. Ms. Millie Ryan, President of the Hampshire Village Community was in attendance.

In addition, this project was the focus of public protests in June 2016 when residents of Hampshire Village staged a protest/march for pedestrian improvements along Norbeck Road. The attached web-link provides the video news article. During the march, Norbeck Road was closed under police supervision. <http://www.mymcmedia.org/pedestrian-safety-march-planned-today-on-norbeck-road/>

Environmental Guidelines

The MD28 (Norbeck Road) sidewalk plan is located in the Northwest Branch watershed – a Use III watershed. The linear project crosses areas that are either in forest or treecover but there are no streams or wetlands in the project area.

Forest Conservation

For non-highway projects, the State Highway Administration (SHA) complies with the State Forest Conservation Act and Regulations (NRA §5-1601 —5-1612, Annotated Code of Maryland), which is administered by the MD Forest Service.

Environmental Review of Proposed Project

The proposed sidewalk and associated stormwater management improvements take place within the existing MD28 Right-Of-Way (ROW). In open-section segments of this design, these improvements require approximately 20' to 50' of disturbance from the current shoulder of the road. Most of the disturbance is necessary to accommodate the grass swales proposed to provide stormwater management and associated grading.

For example, in Figure 4 below, the eastbound lane has 15' of paving, while the grass swale and associated grading requires 22' of disturbance. The proposed sidewalk is 5' wide, with a 5' lawn panel and 15' landscape strip. This creates a wide cross-section for a road that currently has forest and treecover within ~8' of the existing paving. This amount of disturbance is excessive for a 5' sidewalk.

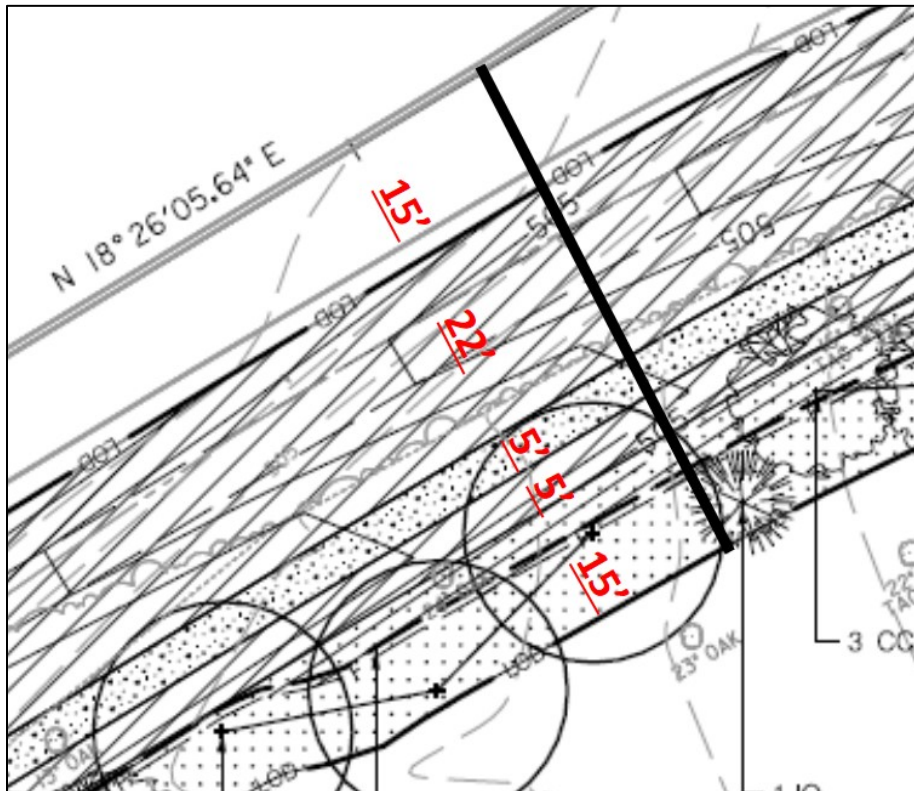


Figure 4. Example of Open-Section Design Impacts

Master Plan Consistency

Transportation/Master Plan of Highways and Transitways

This segment of Norbeck Road is discussed in the 1994 Aspen Hill Master Plan. The Plan recommends:

Reconstruct Norbeck Road, east of Georgia Avenue, as a four-lane divided highway and extend it to New Hampshire Avenue (MD650). The extension of Norbeck Road will provide a less circuitous east-west route through the area and relieve the traffic demand on other parallel roads. The project should be designed as a “green corridor” with control of access maintained by the use of service roads feasible. (p.91)

An SHA study to implement this recommendation was completed in 2017 (MD28/MD198 Corridor Improvement Study). The improvements proposed by this mandatory referral are interim until a preferred alternative is selected for MD28 between Georgia Avenue and Layhill Road, design plans are prepared, and the project can be funded. The proposed work does not preclude the master plan recommendations, and will be removed once the master plan recommended expansion is implemented.

The improvement of bicycle and pedestrian facilities is a high priority of Montgomery County. In its 2017 Transportation Priorities letter to MDOT, the advancement of MD28 (Norbeck Road) between MD97 (Georgia Avenue) and Wintergate Drive was recommended “to improve pedestrian and bicycle facilities.”

The provision of pedestrian facilities on both sides of a Major Highway is consistent with the master-planned uses within Master Planned Rights-of-Way in the Master Plan of Highways and Transitways.

Bicycle Master Plan

The Public Hearing draft of the Bicycle Master Plan recommends the following improvements:

- Norbeck Road between MD97 (Georgia Avenue) and Wintergate Drive – separated bikeways sidepath on north side.

The sidewalk improvements proposed is not inconsistent with the Public Hearing Draft of the Bicycle Master Plan.

Review of Subject Project versus MD28/MD198 Corridor Improvement Study Alternatives

The subject project is considered by staff to be a short-to medium term project, as the proposed sidewalk serves an immediate need and would be totally replaced (within the limits of the MD28/MD198 study area) with any future widening. Figures 5 and 6 display the subject project overlay with Alternative 2 of the MD28/MD198 Corridor Improvement Study. As shown in Figure 4, the first 1,200 feet of the proposed sidewalk project between MD97 and approximately 300 feet east of Clara Downey Drive would not be affected. As shown more clearly in Figure 5, the future location of the roadway is planned to shift significantly to the south when MD28 is widened. For all alternatives being considered, a sidepath is proposed on the north side of MD28, while a sidewalk is only proposed in one of the alternatives being considered (Alternative 3 – Base Alternative – Bicycle/Pedestrian Provisions).



Figure 5. Project Overlap with MD28/MD198 Corridor Improvement Study

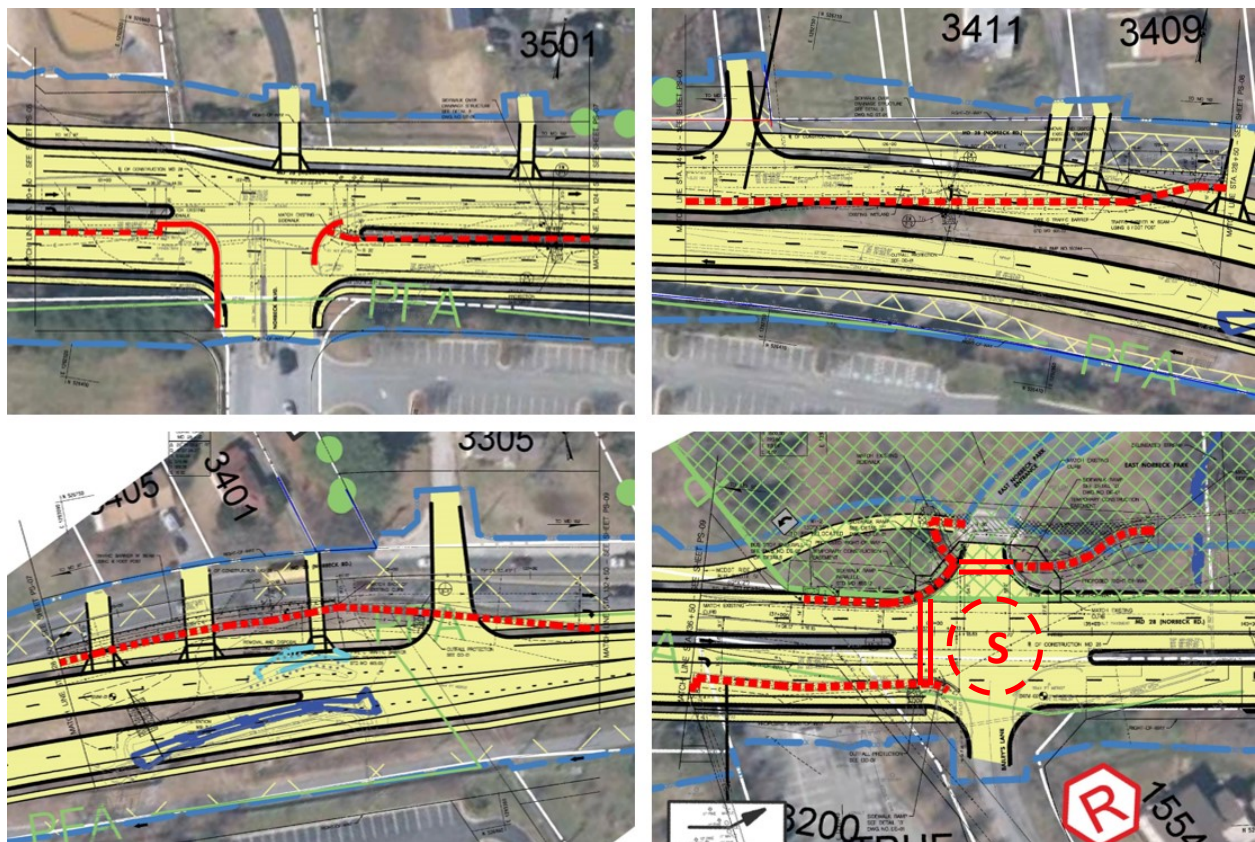


Figure 6. Project Overlap – Zoomed in Sections

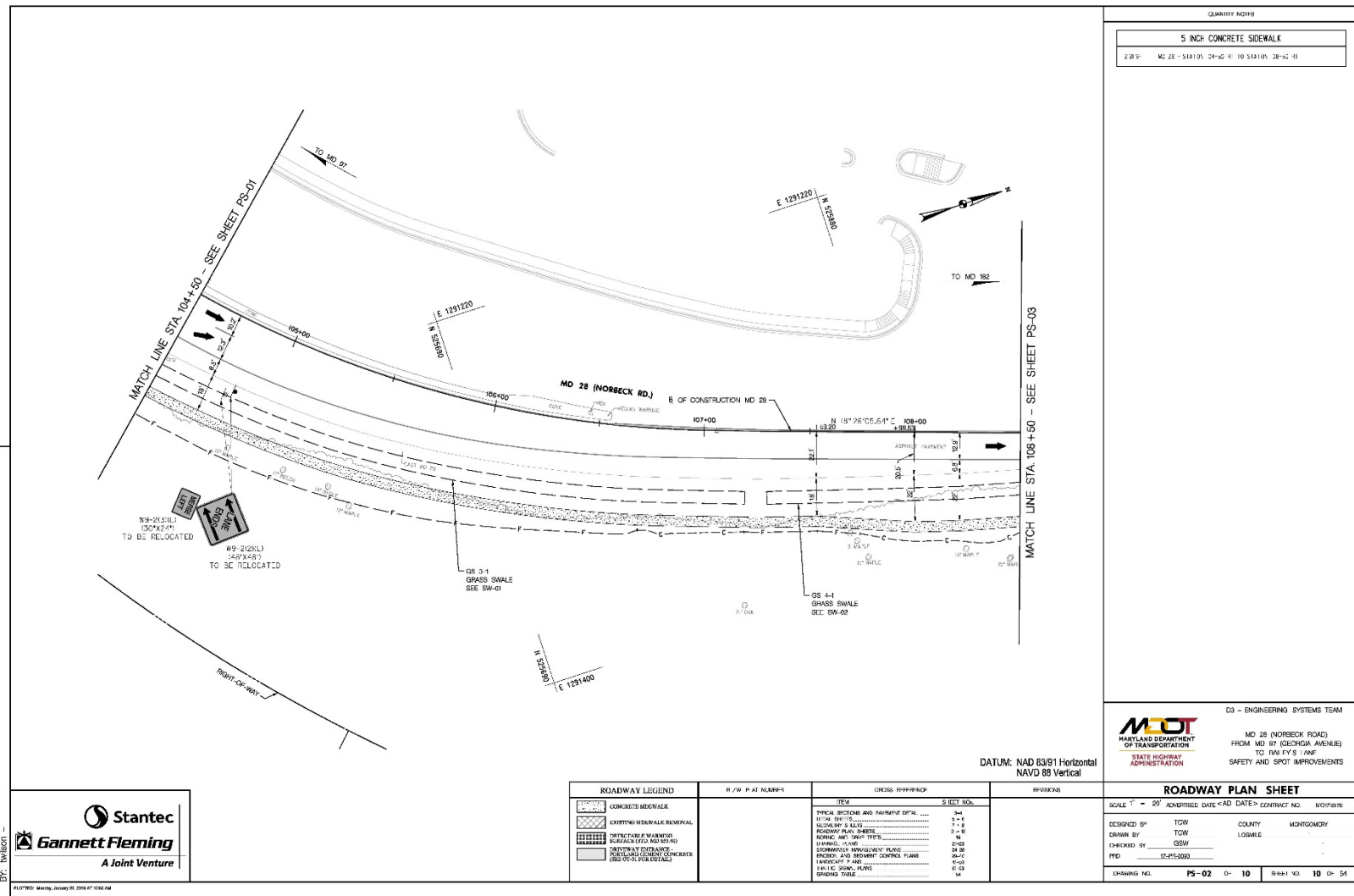
Impacts to Parkland/Park Construction Permit

A total of approximately 0.18 acres of parkland would be impacted by the project as shown on the plans dated January 19, 2018. MDOT-SHA will be required to obtain a Park Construction Permit from Montgomery County Department of Parks prior to commencement of any construction activities on parkland. During Park Construction Permit Review Parks staff will work with MDOT-SHA to minimize Park impacts to the greatest extent possible.

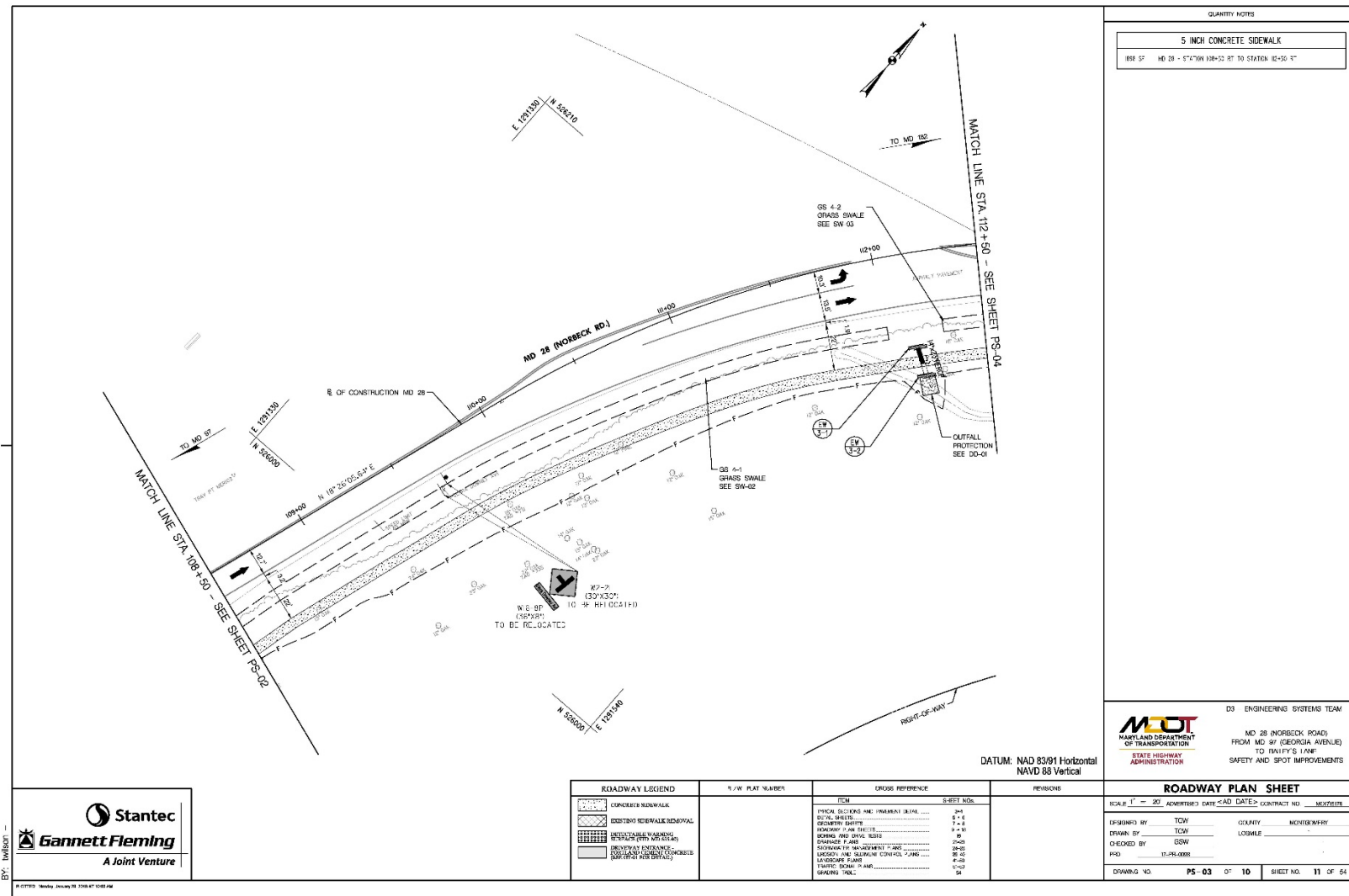
Roadway Design Plans (Sheet PS-01)



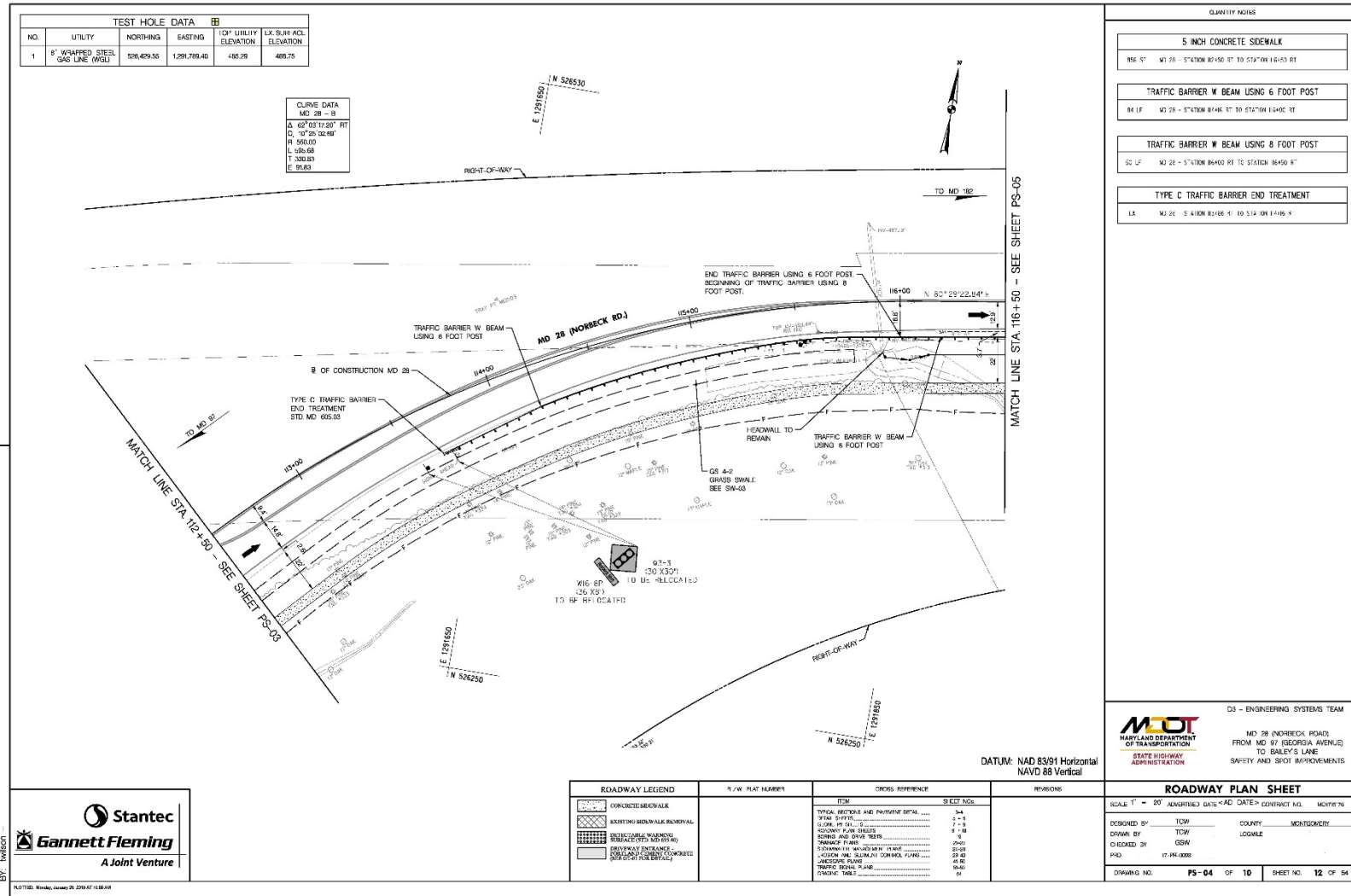
Roadway Design Plans (Sheet PS-02)



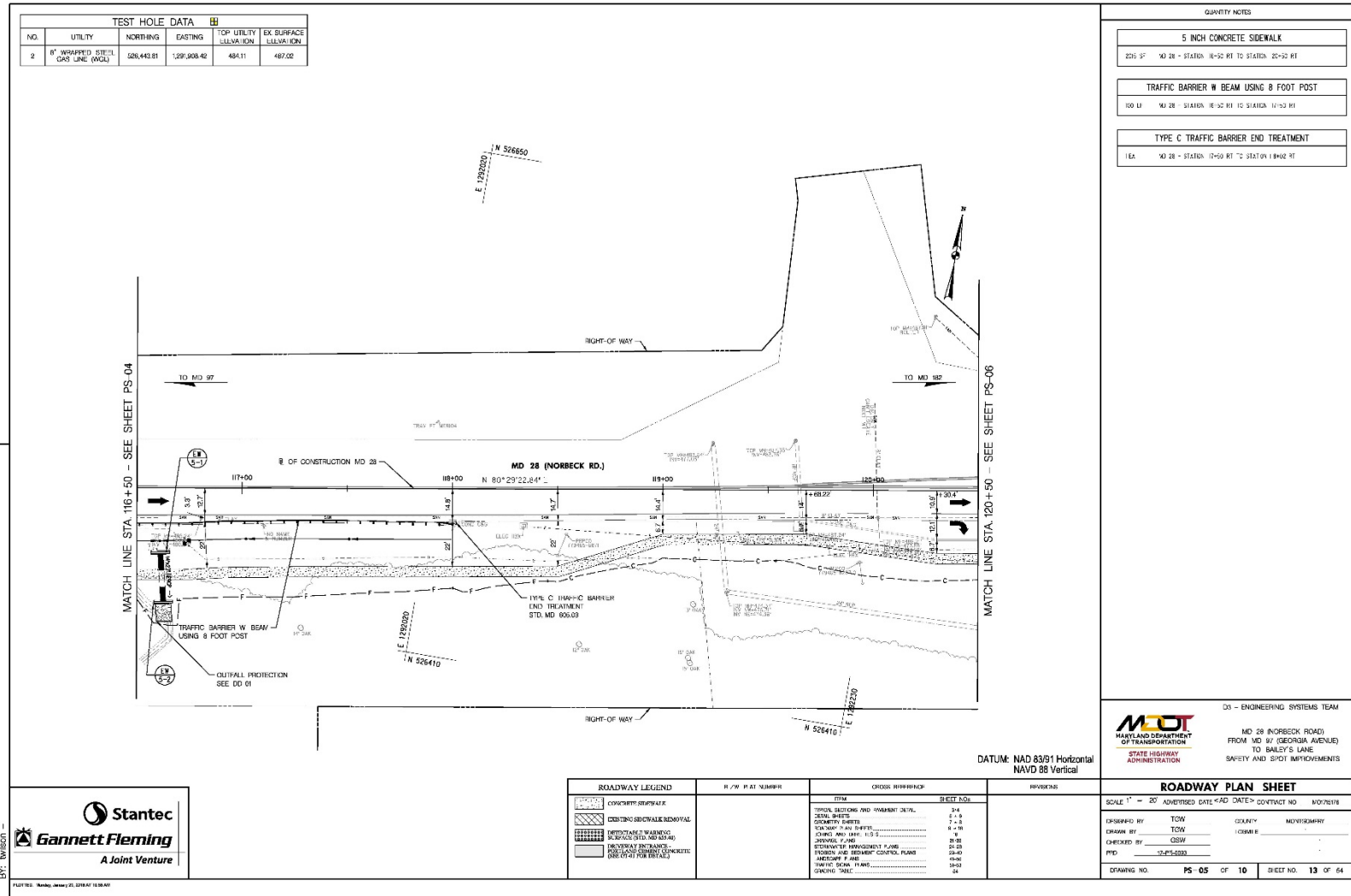
Roadway Design Plans (Sheet PS-03)



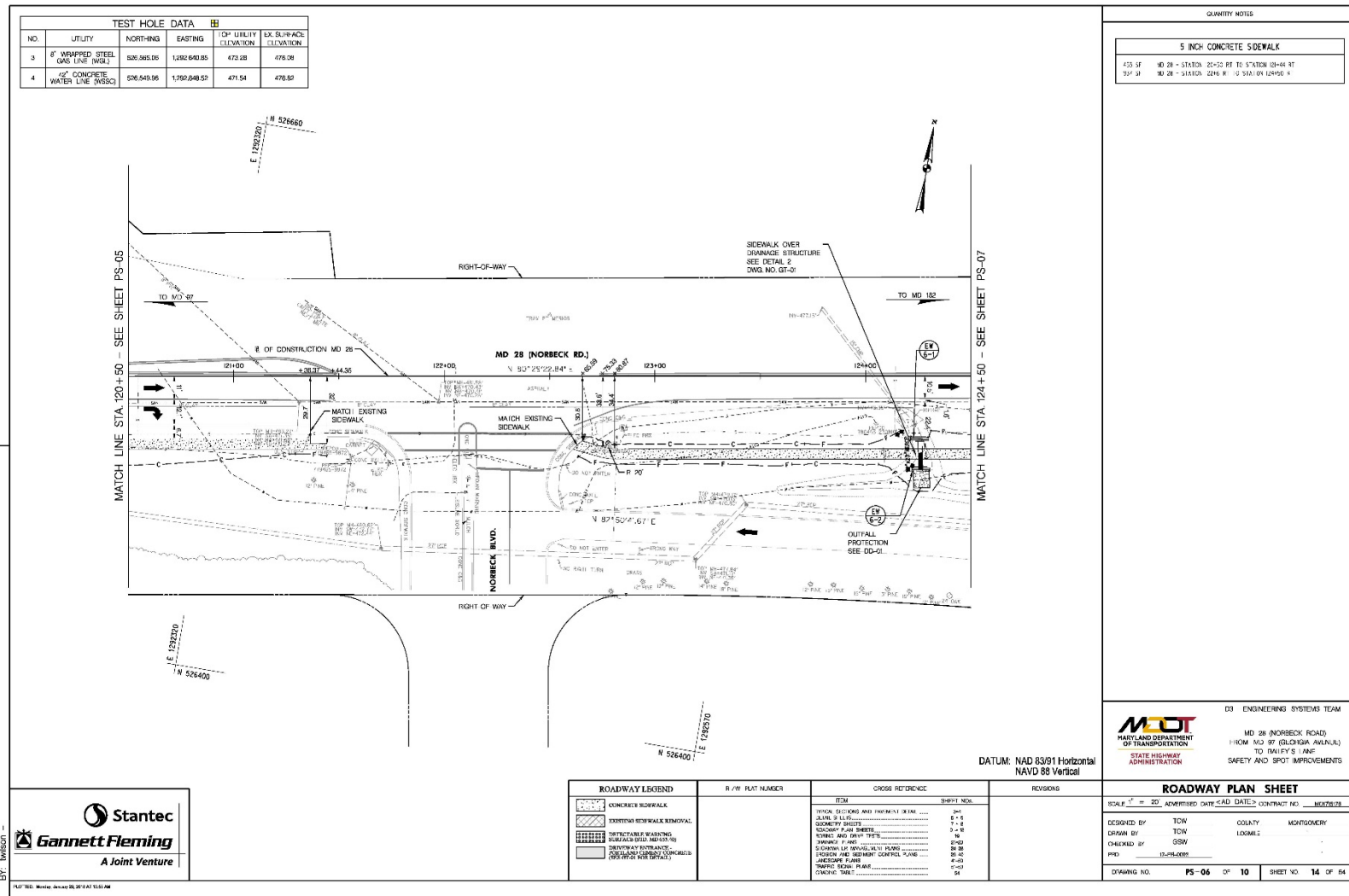
Roadway Design Plans (Sheet PS-04)



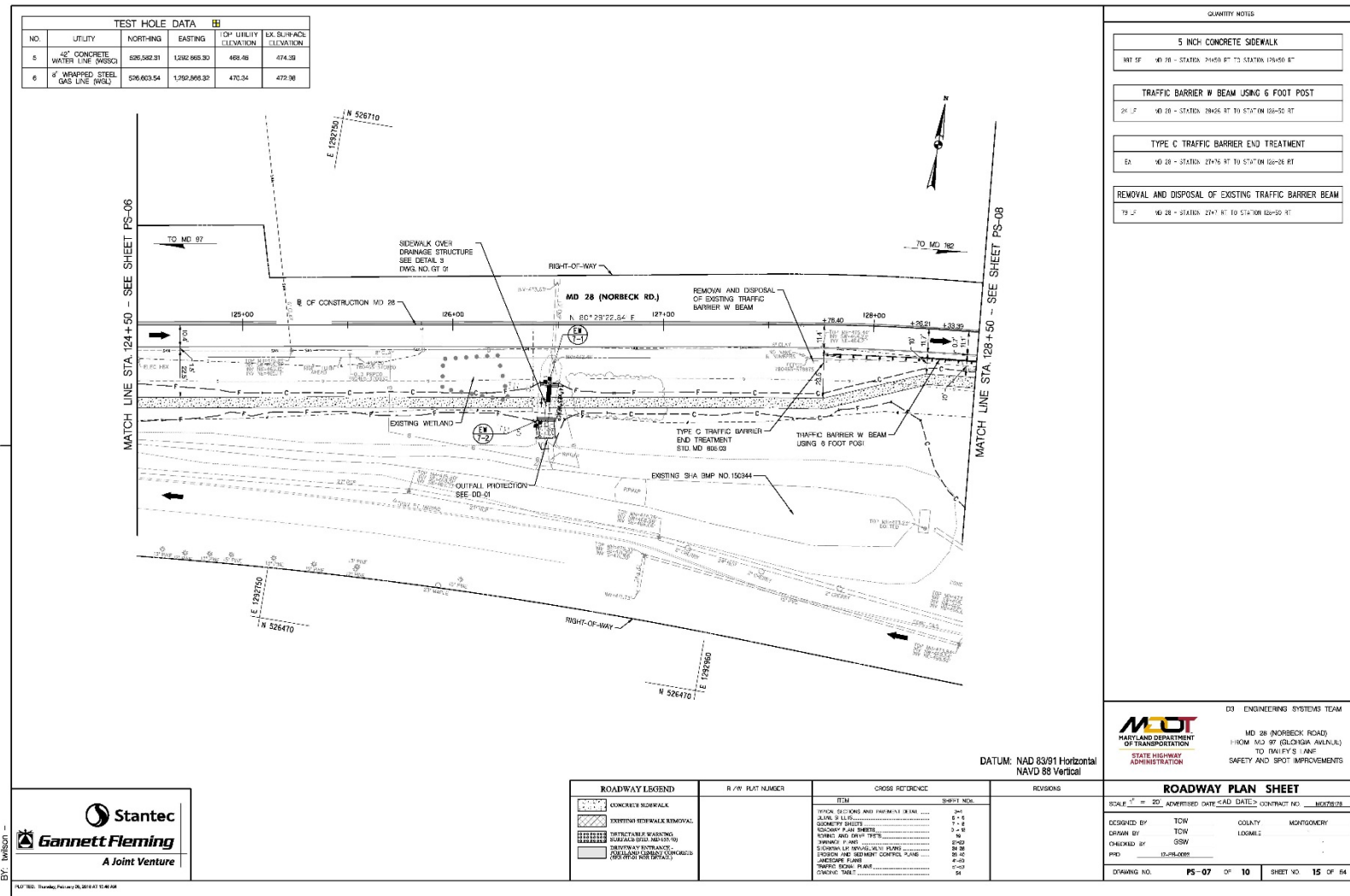
Roadway Design Plans (Sheet PS-05)



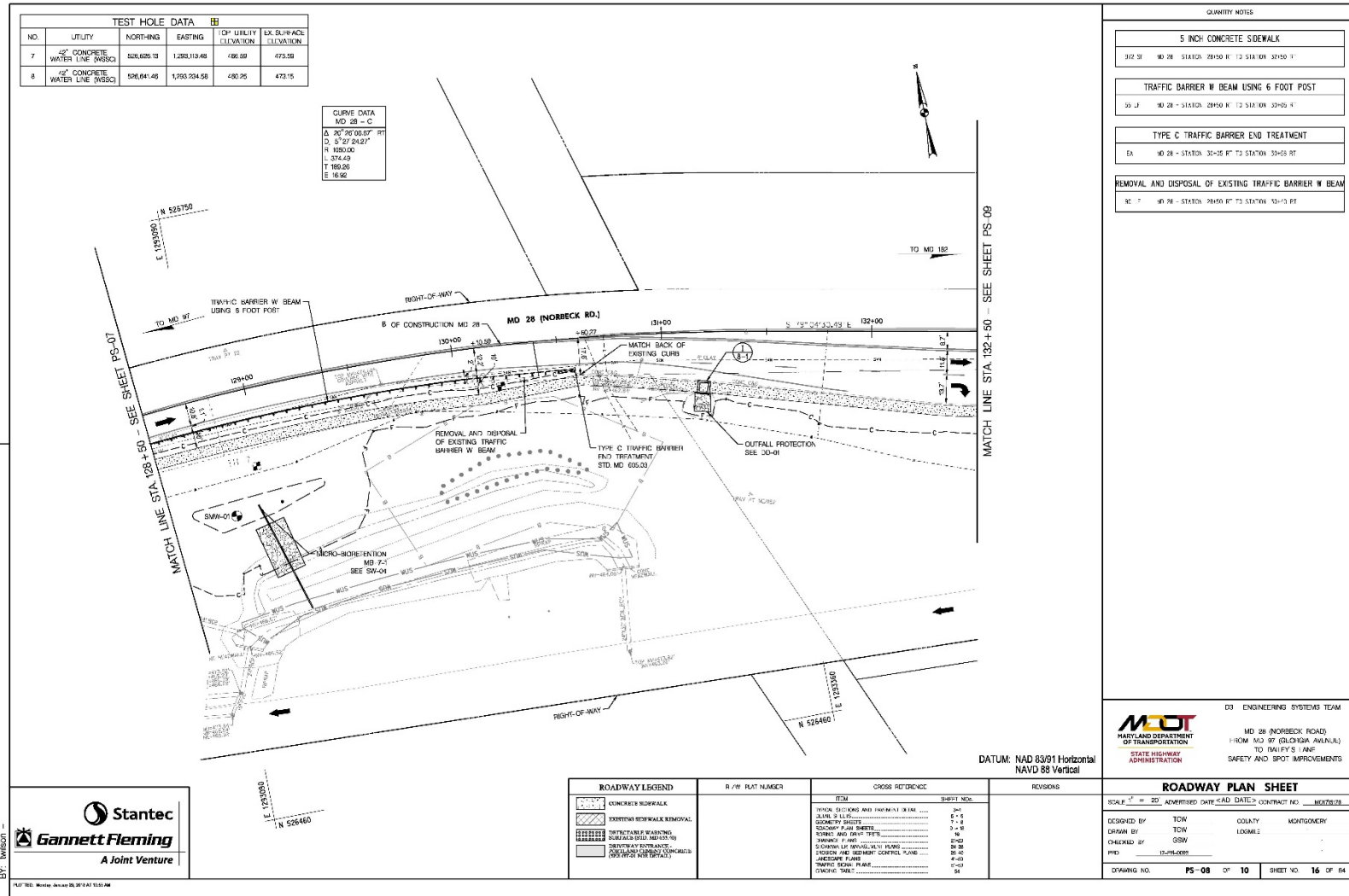
Road Design Plans (Sheet PS-06)



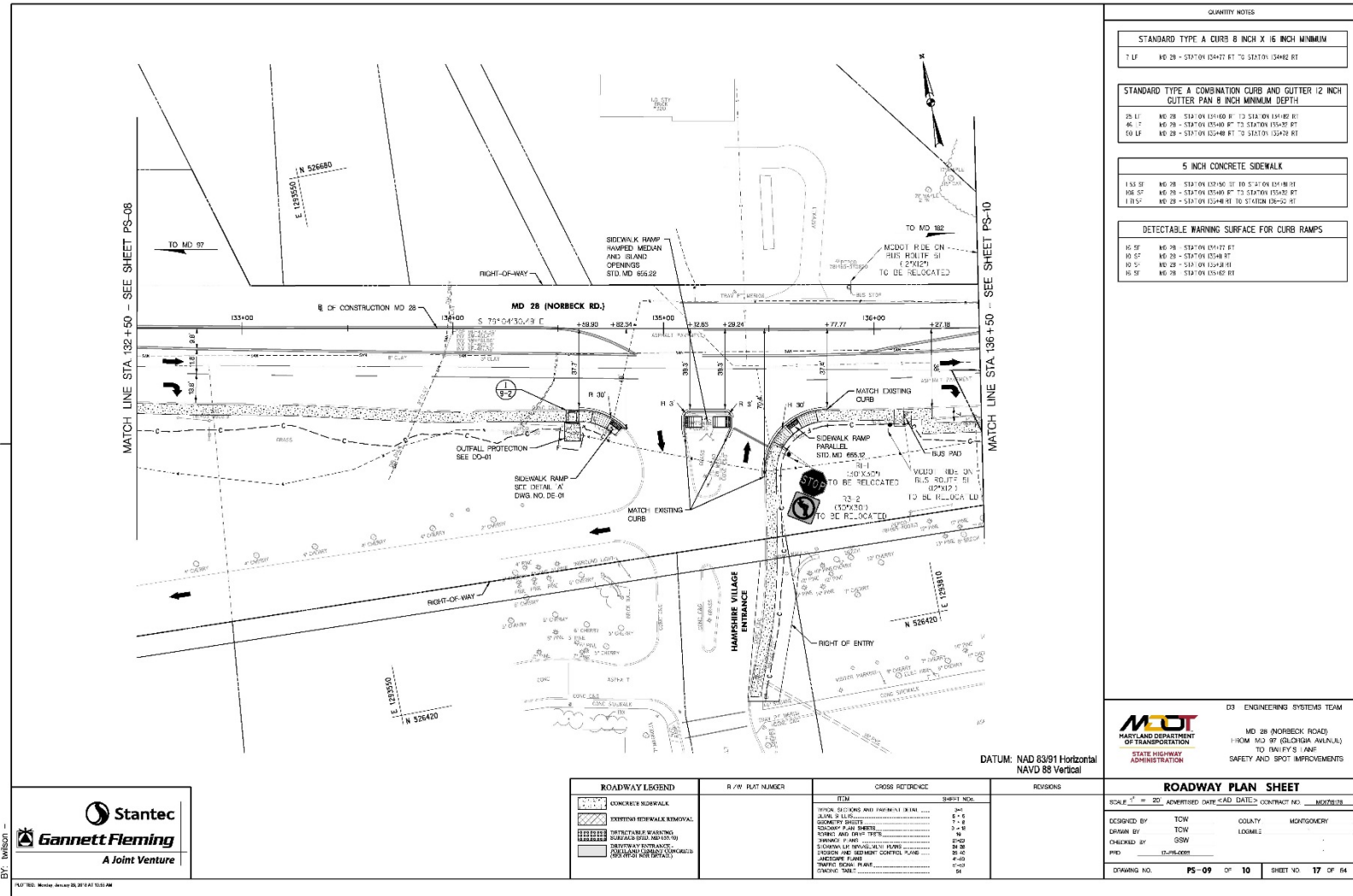
Road Design Plans (Sheet PS-07)



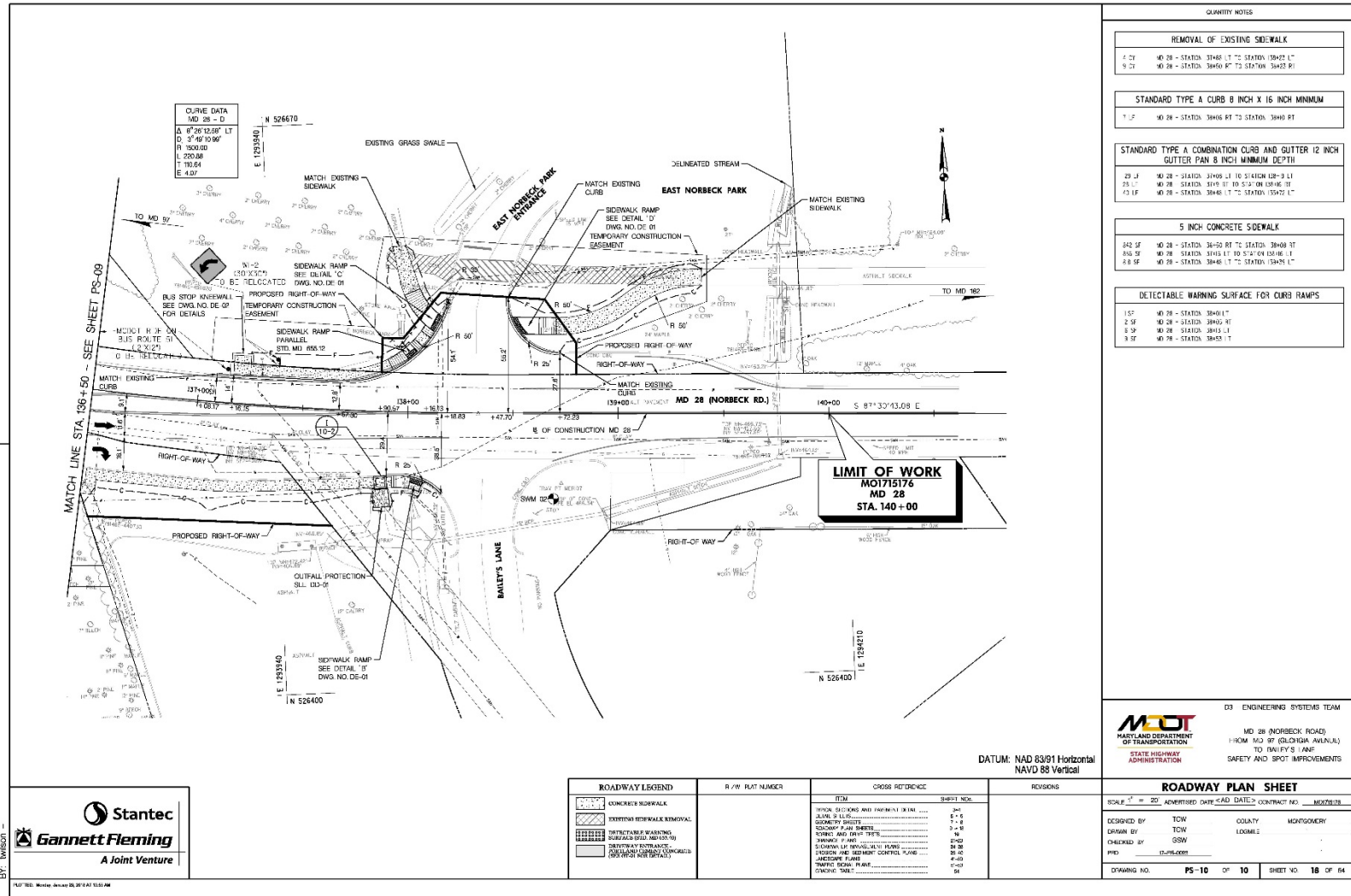
Road Design Plans (Sheet PS-08)



Road Design Plans (Sheet PS-09)



Road Design Plans (Sheet PS-10)



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