

Resolution of the Demarest Governing Body

Resolution No. 173-26

September 14, 2026

Council Member	Motion	Second	Yes	No	Abstain	Absent
Slowikowski	✓		✓			
Carmeli			✓			
Collins			✓			
Jiang			✓			
Marks			✓			
Reiss		✓	✓			

TITLE: RESOLUTION AUTHORIZING ENGINEERING SERVICES FOR 2026 UNIMPROVED ROADS PROJECT

=====

WHEREAS, the Borough of Demarest has a need for engineering design and bidding services related to 2026 Unimproved Roads Project; and

WHEREAS, the Borough received a proposal dated April 14, 2026, from Colliers Engineering & Design to provide those services, attached, for the sum of \$229,500.00; and

WHEREAS, the appointment and the contract are exempted from the competitive bidding requirements of the Local Public Contracts Law, (NJSA 40A:11-1 et. Seq.) as "Professional Services", pursuant to NJSA 40A:11-5(1)(a); and

WHEREAS, the vendor is the currently appointed 2026 Borough Engineer for the Borough of Demarest and the Mayor and Council awarded said 2026 contract pursuant to the provisions of NJSA 19:44A-20.5; and

NOW THEREFORE, BE IT RESOLVED, by the Borough of Demarest that the Borough Administrator is authorized to execute the agreement to authorize Colliers Engineering & Design to perform the work described herein not to exceed \$229,500.00, a copy of which is annexed to this Resolution.

APPROVED:


Brian Bernstein, Mayor

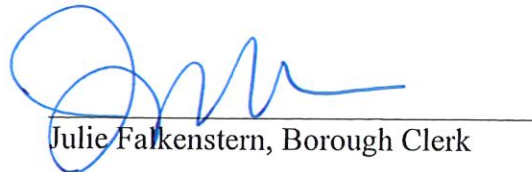
CERTIFICATION OF CFO

I, Jessie Coward, do hereby certify the availability of funds for the expenditure referenced herein.

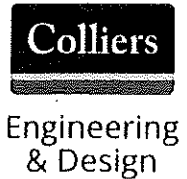

Jessie Coward, CFO

CERTIFICATION

I, Julie Falkenstern, Borough Clerk, of the Borough of Demarest, in the County of Bergen and the State of New Jersey do hereby certify that the foregoing Resolution is a true copy of the original resolution duly passed and adopted by the Governing Body at the meeting on September 14, 2026.


Julie Falkenstern, Borough Clerk

400 Valley Road
Suite 304
Mt. Arlington, NJ 07856
Main: 877 627 3772



April 14, 2026

Julie Falkenstern, Borough Administrator
Borough of Demarest
118 Serpentine Road
Demarest, New Jersey 07627

2026 Unimproved Roads
Professional Engineering Services
Borough of Demarest, Bergen County
Colliers Engineering & Design Project No. DEB0087P

Dear Ms. Falkenstern,

Colliers Engineering & Design Inc. (CED) is pleased to present this agreement to provide survey, design and bidding services for the 2026 Unimproved Roads. Specifically, the roadways and limits are:

- Demarest Avenue (east) (Rodney Place east to the cul-de-sac);
- Demarest Avenue (west) (Rodney Place west to the cul-de-sac);
- Lincoln Street (Central Avenue to Northwood Avenue);
- Blanche Avenue (Serpentine Road to the northern terminus);
- Carlotta Way (County Road to the southern terminus);
- Pine Terrace (Piermont Road to the east gate).

It is our understanding that all roadways are under the Borough's jurisdiction. It is also our understanding that these roadways are currently unimproved, consisting of compacted gravel driving surfaces and are generally in poor condition. We have conducted an initial evaluation of the roadways to determine a general design approach needed to construct a full pavement section and improve the roads. CED will design the roadways with curbing and consistent roadway widths. New drainage infrastructure will be designed and installed to capture stormwater, as feasible. Some minor re-grading of each roadway may be required to establish positive drainage along the curblines. A final evaluation will be conducted once survey is completed and the project is in the design phase.

Survey and Subsurface Utility Evaluation (SUE) will be performed within the roadways so that CED can evaluate the existing conditions and design the new roadways with minimal disruption to existing infrastructure. In addition, any ponding or drainage issues due to low spots in existing grade elevation, failing infrastructure and/or lack of infrastructure can be identified and mitigated as part of the design. Furthermore, areas that require curbing and/or modification to the roadway grading can be designed with roadway profiles and cross sections. Accordingly, the improvements within both roadways will include drainage improvements, curbing, base repair, paving, striping, and restoration. It is our understanding that the project will be fully funded by the Borough.

It is our understanding that the Borough may decide that Pine Terrace will not be included in the project; therefore, the costs associated with Pine Terrace have been included as separate tasks under the Fee Agreement section.

Accordingly, this agreement includes survey services, design and bidding.

CED will provide the following services:

SCOPE OF SERVICES

TASK 1.0 SURVEY SERVICES

Task 1.1 Boundary Survey & Topographic Survey

CED will prepare a Boundary Survey of each of the subject roads in the Borough of Demarest, Bergen County, State of New Jersey in accordance with the standards set forth in the Laws of the State of New Jersey Statutory Reference NJSA 45:8-28(e) and more specifically, the administrative rules and regulations promulgated by the State Board of Professional Engineers and Land Surveyors and contained in N.J.A.C. 13:40-5.1.

Included in this task of service are the following tasks:

- Public records research and pre-field records review;
- Field traverse, location survey and data collection;
- Field survey data reduction and computation;
- Boundary analysis and survey calculations.

The fee does not include setting property corners, and this task is based upon the assumption that the deed mathematically closes, that there are no title problems, that there are no overlaps or gores with adjoining properties and that extraordinary research or analysis is not required. If any of the items cited in this paragraph do become issues during our survey efforts, we will discuss the necessary additional services and related costs with you prior to proceeding with the additional services.

CED will perform a topographic survey of the subject roads. The limits of the survey are outlined in **red** depicted in the Survey Limits images below:

SURVEY LIMITS



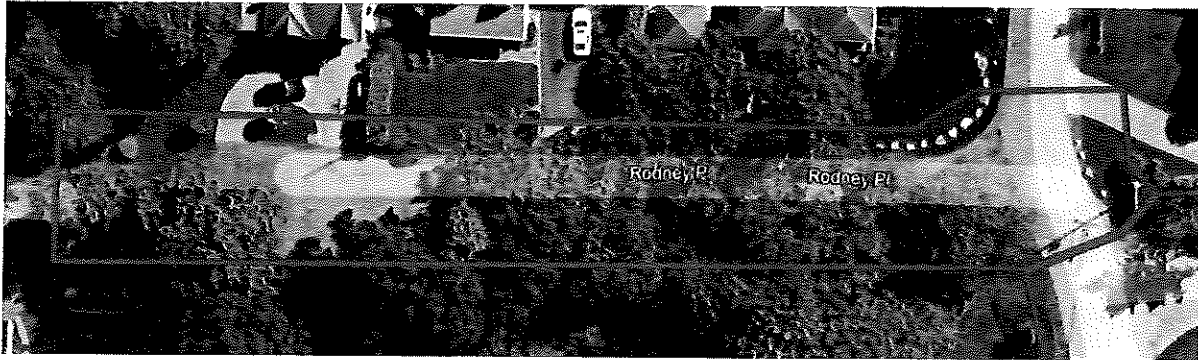
Blanche Avenue (400± L.F.)



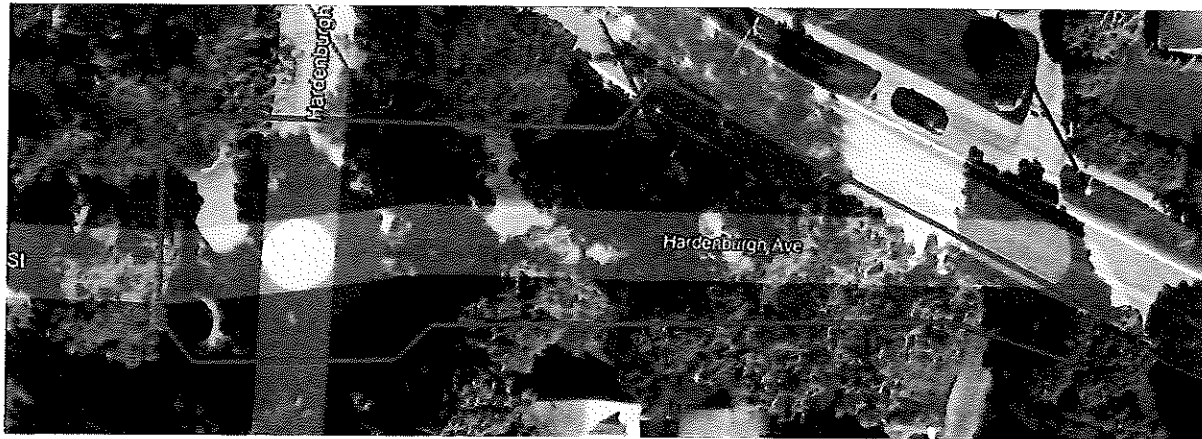
Carlotta Way (400± L.F.)



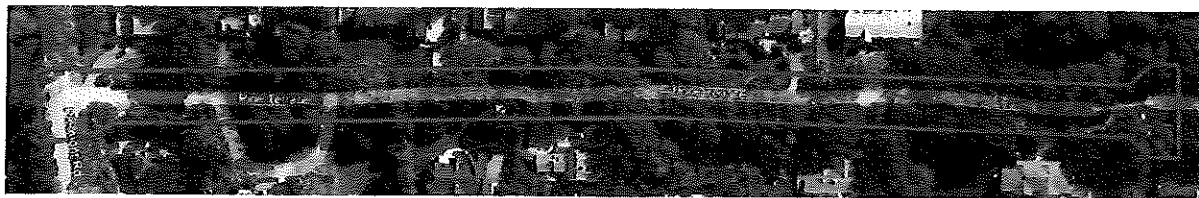
Demarest Avenue - East (700± L.F.)



Demarest Avenue - West (400± L.F.)



Lincoln Street (200± L.F.)



Pine Terrace (1500± L.F.)

Our office will prepare a topographic survey map that is a graphic pictorial representation of existing site features observed at the time of the field survey such as curbs, sidewalks, roadways, driveways, retaining walls, fences, individual trees four inches (4") in diameter and greater, and utility hardware. The topographic map will depict existing spot elevations and contours at a one foot (1') contour interval. GPS surveying techniques will be used to control the survey with the resulting horizontal datum being New Jersey State Plane Coordinate System NAD83 and the vertical datum being North American Vertical Datum NAVD88.

Visible and accessible utilities and/or utility structures within the survey limits, as described above, will be surveyed and shown on the plan to include rim and grate elevations. For the purposes of this contract, accessible utilities shall be defined as those utilities that are visible to the naked eye at ground level and are safely accessible by foot by CED field survey personnel without the need for additional safety measures and/or assistance with making pipes visible, open and clear for inspection and measuring.

We will survey visible evidence of existing utilities within the survey limits, but may not be able to confirm the existence, or actual position of, all underground utilities which may be running through or servicing the subject property. The NJ One Call System prohibits the use of its service for surveying and mapping of subsurface utilities for engineering design purposes. We will enlist the services of our in-house subsurface utility engineers to investigate and mark the approximate location of subsurface utilities that may exist on the site. The fee for this additional service is outlined in Task 1.2 below.

Included in this task of service are the following tasks:

- Establish on-site survey control;
- Field traverse, topographic survey and data collection;
- Extend topography 25 feet beyond edge of travel way;
- Extend topography 10 feet beyond the opposite curb of intersecting roads;
- Extend topography 50 feet into intersecting roads;
- Field survey data reduction and computation;
- Preparation of topographic survey map in AutoCAD Civil 3D 2025 format.

Traffic safety protection for field survey crew and cleaning of clogged or obstructed drain and sewer structures is **not** included in the fee for this survey. If it is determined that safety protection is required for any of the survey services performed under this contract, we will advise you of the approximate cost prior to moving forward. Such additional costs would be invoiced as a reimbursable expense pursuant to prior authorization.

Task 1.2 Utility Investigation and Mapping

CED proposes to provide the following professional Utility Investigation and Mapping Services in support of the above-named project in accordance with the project limits as indicated on the provided map and site sketch.

Utility Records Research. Conduct comprehensive utility records research and collect applicable utility owner records to assist in identifying utility owners that may have facilities on or be affected by the project. Includes interfacing with utility owners/operators to ascertain the availability and completeness of record documents and to obtain verbal or historical information on existing subsurface facilities and operational status. All utility records obtained through this process will be included as an attachment in the final deliverable.

Buried Utility Mapping (Horizontal Mapping of Utilities). Designating the presence and approximate horizontal location of subsurface utilities using geophysical prospecting techniques including electromagnetic, sonic and acoustical techniques. CED will provide the following designating services to aid the Borough:

As a "Value-Added" service, to the extent possible, CED will provide electronic depth measurements at regular intervals along each designated subsurface facility. The electronic depth information will be recorded at approximate 25-foot intervals and shall be collected in the normal course of utility mapping. The collected electronic depth information will be incorporated into the project deliverable (field sketch on aerial mapping) for the project from which utility profiles may be developed.

- Provide equipment, personnel and supplies needed for performing designating services. CED shall determine equipment, personnel and supplies needed to perform these services.
- Designate the existing underground utility pipeline facilities within the identified area as described in the Survey Limits maps above. Conduct appropriate investigation of site conditions.
- Mark the horizontal position of underground utilities on the ground with spray paint to be surveyed by CED Survey team (fees for the survey are included in another Task). These utilities may include water, natural gas, electric, and telecommunications.
- Measure inverts and record data at all sanitary and storm drain structures including, but not limited to, manholes, inlets, catch basins, cleanouts. This information will be provided to the CED Survey team for inclusion in the final mapping. Sanitary and storm drain lines between structures will not be marked out.
- GPR data will be collected approximately every 50 feet of roadway to evaluate the pavement and sub-base thickness. The data will be post-processed and interpreted to determine the thickness of these materials within the project limits. This information will be included in the final deliverable.
- Formulate a field sketch on aerial mapping documenting all utilities designated with electronic depth information and notes. This will be provided to the CED Survey team who will be providing the final CAD deliverable.
- Coordinate with CED Survey team to ensure that the utility investigation results are accurately represented in their final deliverable.
- Aerial utilities are excluded from this Task.
- A final report detailing the results of the utility investigation will be provided within two (2) weeks of completion of field work. The report will include the investigation methodology and equipment used, along with a detailed summary of all the information obtained through the course of this work, including pipe sizes, materials, duct bank limits and any other pertinent information.

GPR Assumptions/Clarifications. GPR effectiveness and resolution is highly dependent on soil conditions within the investigation area. GPR's ability to identify or resolve subsurface anomalies may vary significantly across the investigation area. GPR resolution depths are soil dependent and can vary from zero feet (0') to eight feet (8') of penetration at infinite points across an investigation area. While GPR can be a very effective tool in locating or identifying subsurface objects or facilities (anomalies), the results are interpretive and subject to possible misinterpretation or error. SUE Provider personnel will make every reasonable effort to properly identify and interpret GPR anomalies in accordance with the performance limitations of the technology and provide recognizable markings for the Borough.

TASK 2.0 DESIGN AND BIDDING

CED will develop construction drawings and specifications to be utilized for public bid. Bid documents will be prepared in accordance with NJDOT requirements. The scope of improvements within each roadway expressed in the bid documents will be as previously discussed with the Borough and coordinated during the design phase.

The existing site conditions will be investigated during the design; more specifically, the conditions of the curbing, sidewalk, driveway, roadway, and drainage structures. Utilizing the survey prepared in Task 1.0 above as a base map for all roadways, this information will be located, inspected for condition, and depicted on the plans that will be utilized for bidding.

The improvements will include the design of curbing along both sides of each roadway in an effort to achieve a uniform travel-way-width consistent with industry standards to the greatest extent feasible. A concept will be prepared and presented to the Borough to review the potential roadway widths and the impact of each. While tree removals and/or utility pole relocations are typically avoided as much as feasible, during design it may be necessary for us to recommend these removals/relocations to facilitate the proposed improvements. We will advise accordingly. This concept will be reviewed with the Borough prior to preparation of the full design documents and CED will attend a public meeting with residents (if requested) to discuss the design approach and the resulting impacts.

Improvements will also include review of potential drainage issues toward mitigation. The installation of storm water infrastructure in the form of inlets and piping will be proposed. Runoff collected by the proposed infrastructure will be conveyed to the nearest existing infrastructure while maintaining existing drainage patterns to the greatest extent feasible. Roadway cross slopes, gutter slopes and longitudinal slopes will be evaluated, and grading will be designed, as feasible, to improve slopes and associated drainage. Where applicable, the vertical profile and cross sections of the proposed roadway will be modified in an effort to meet industry standards while minimizing drainage issues and impact to the surrounding properties.



Engineering
& Design

Accordingly, for all roadways, curbing, drainage structures, milling, paving, replacement of inlet grates and curb pieces, reconstruction of storm inlets to remain, pavement base repair as needed, striping, and restoration of landscape areas are included as part of the project. Based on a preliminary review of the roadways, ADA ramps are not anticipated as part of the project. In addition, modifications to gutter profiles may require re-design of certain driveway aprons.

CED will prepare the base mapping, title sheet, general notes and legend, estimate of quantities, construction plans and the construction details. CED will also prepare the supplemental and technical specifications for the site improvement items that are specified on our construction drawings for incorporation into the overall bid specifications. The specifications will be prepared in the latest NJDOT format, as amended. As this project develops, and the Construction Cost Estimate (CCE) is closer to completion during the design phase, the Borough will be updated with the status of design and whether alternate bids are recommended.

The project limits may be adjusted by utilizing alternate bids based upon the budget approved by the Borough. CED will prepare the CCE based on the quantity required for each alternate bid and finalize the design in order for the project to remain within the construction budget. Bidding services will be coordinated through our Mount Arlington office.

Specifications will be developed in accordance with NJDOT Standard Specifications for Road and Bridge Construction, as currently amended. An Engineer's Estimate will be prepared and submitted to the Borough. Upon completion of the design documents, we will coordinate with the Borough regarding public advertisement of the bid documents.

Regulatory Agency Approvals – CED will contact the regulatory agencies listed below to confirm whether permits will be required. The preparation and submittal of the applications and supporting information required to apply for the approvals and/or permits is indicated in this phase. The completed construction plans, as described below, will be packaged, along with the required applications, for permit review submission to the following agencies:

- Bergen County Soil Conservation District for Soil Erosion and Sediment Control Plan Certification and NJPDES Stormwater Discharge Permit (RFA).

NJDEP Land Use permitting is not anticipated for this project. If NJDEP Land Use permitting becomes necessary for any reason, CED will prepare a separate agreement to the Borough for review and approval.

CED will coordinate with the Borough regarding the Bidding Period Services, specifically, the following shall be conducted:

- Order the advertisement for bid;
- Development of addendum(s) to clarify or review the bid documents, as required;
- Attend bid opening and reading of bids in order to tabulate them;

- Review the proposals from the responsive bidders and make recommendations to the Borough regarding the selection and evaluation of the bids.

TASK 3.0 PINE TERRACE - SURVEY AND DESIGN

The scope for survey, design and bidding of Pine Terrace is similar to the other roadways, as described above in Tasks 1.0 and 2.0. The fee for Pine Terrace has been separated as it is our understanding that the Borough may decide that Pine Terrace will not be included in the project.

FEE AGREEMENT

For your convenience, we have broken down the total estimated cost of the project into the categories identified within the Scope of Services.

TASK 1.0	SURVEY SERVICES	\$ 38,500.00
TASK 2.0	DESIGN AND BIDDING	\$ 112,500.00
TASK 3.0	PINE TERRACE - SURVEY AND DESIGN	\$ 78,500.00
TOTAL LUMP SUM FEE		\$229,500.00

The above engineering services will be provided on a lump sum basis not to exceed the listed amount. This contract and fee schedule are based upon the Borough Engineering Contract, authorized by the Borough.

ANTICIPATED PROJECT SCHEDULE

The following is the anticipated project schedule:

	<u>Anticipated Duration</u>
Borough Award of Professional Design Services	Anticipate Authorization April 2026
Survey Services	To be completed within 60 days of Authorization
Preparation of Design Plans and Specifications	To be completed within 150 days of Authorization
Bidding of Project	Anticipate 30 days for bidding process
Contractor Award	Fall 2026
Construction (Anticipated)	TBD - Fall 2026 - Winter/Spring 2027

PROJECT DELIVERABLES

During the design process, CED will provide the Borough with one (1) set of drawings for review. Bid packages will be distributed and coordinated through our Mount Arlington office. Two (2) final bid documents will be provided prior to bidding.

PLAN REVISIONS AND EXTRA SERVICES

Any revision requested by the Borough or review agencies, that is a major redesign or not an error or omission on the part of CED, will be billed on an hourly basis in accordance with our current contract.

EXCLUSIONS

If any item listed herein or otherwise not specifically mentioned within this agreement or the Borough Engineering Agreement is deemed necessary, then CED may prepare an addendum to this agreement for your review, outlining the scope of additional services and associated professional fees with regard to the extra services. Therefore, any service associated with the following items is specifically excluded from the scope of professional services within this agreement:

- Services not specifically outlined above;
- Modifications of or additions to the completed survey map after it has been distributed. If additional survey requirements or other form of survey certification is requested, a separate fee will be negotiated for performing such service;
- Stream Cross Sections;
- Property title search;
- Traffic studies and/or analyses;
- Ecological due diligence;
- Permit submissions other than Soil Conservation District;
- Construction stakeout services;
- Wetland delineation, reports or surveys;
- Tree Location Plan and/or surveys;
- Subdivision or Consolidation Plans and/or Parcel Maps;
- Security clearance and/or site access protocol;
- Traffic safety costs.

Unanticipated additional services shall be in accordance with the Schedule of Hourly Rates. No extra services will be performed without authorization from the Borough.



Engineering
& Design

Please forward a copy of the Resolution of Approval and/or Approved Purchase Order for this agreement to this office. This will constitute approval of the proposed engineering services.

We thank you very much for the opportunity to offer our services and look forward to working with you on this and future projects. In the meantime, should you have any questions regarding this agreement, please feel free to contact me.

Sincerely,
Colliers Engineering & Design

A handwritten signature in black ink, appearing to read "N. Chelius", with a long horizontal flourish extending to the right.

Nick Chelius, P.E., C.M.E.
Borough Engineer Representative

cc: Andrea Johe, CFO (via email)
Carl O'Brien, CED (via email)
Patrick Jamieson, CED (via email)

R:\PROPI\GOV\NJ\A-D\DEB\DEB0087P - 2026 Unimproved\Proposals\260414_NC_Falkenstern_2026 Unimproved Roads_DEB0087P.docx