

## **EXHIBIT A** **TASK ORDER NUMBER 07**

This Task Order is made effective as of this 12th day of February 2026 under the terms and conditions established in the MASTER TASK ORDER PRIME AGREEMENT FOR PROFESSIONAL SERVICES, dated September 27, 2018 (the Agreement), between **LAKE HOUSTON REDEVELOPMENT AUTHORITY and REINVESTMENT ZONE NUMBER TEN, CITY OF HOUSTON, TEXAS** (collectively, the "Authority") and HNTB CORPORATION (HNTB).

This Task Order is made of the following purpose, consistent with the Project defined in the Agreement:

Northpark Drive Regional Detention Basin PS&E (T-1015)

### **Section A. – HNTB shall perform the following scope of services:**

#### **A.1. Scope of Services**

This Task Order will serve to primarily provide engineering services required for the preparation of Design Concept Report Intake Form and Report, plans, specifications and estimates (PS&E) and related documents for the construction of a detention pond (yellow shape) and associated excavation along the KDD (orange shape) to provide necessary drainage mitigation for the future Northpark Drive Reconstruction Project (T-1014). See Figure 1 below for details. These services shall include, but are not limited to, preparing detention pond design including necessary excavation plans for the KDD, confirmation of hydrologic and hydraulic design, geotechnical data collection and agency coordination to route the plans through COH and Harris County Flood Control District (HCFCD) for review and approval. The plans will be developed based on the latest version of TxDOT, COH and HCFCD design criteria, standards and specifications.

Refer to Attachment A – Northpark Drive Regional Detention Basin PS&E (T-1015) Scope of Services, Task Order No. 7 for details.

### **Section B. – Schedule**

B.1. HNTB shall perform the Services and deliver the related Documents (if any) according to the following schedule: The final design is scheduled to be complete and ready for letting no later than January 20, 2027.

### **Section C. – Compensation**

C.1. For performing the Services identified with Section A, Scope of Services, the Authority shall pay HNTB a lump sum amount of **\$792,594.06**. HNTB may alter the compensation distribution between individual phases, task or work assignments to be consistent with the Services actually rendered within the total lump sum amount. The Authority shall make monthly periodic progress payments for Services in accordance with the milestone completion mutually agreed by Authority and HNTB.

### **Section D. – Authority's Responsibilities**

Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of HNTB, and HNTB may rely on the accuracy and completeness thereof: None

### **Section E. – Other Provisions**

The parties agree to the following provisions with respect to this specific Task Order: None

IN WITNESS WHEREOF, the Authority and HNTB have executed this Task Order.

**LAKE HOUSTON REDEVELOPMENT  
AUTHORITY**  
(Authority)

Signature\_\_\_\_\_  
Name\_\_\_\_\_  
Title\_\_\_\_\_

**HNTB CORPORATION**  
(Engineer)

Signature\_\_\_\_\_  
Name\_\_\_\_\_  
Title\_\_\_\_\_

**ATTACHMENT 1**  
**[Insert Name of this Attachment 1]**

**Northpark Drive Regional Detention Basin PS&E (T-1015)**

**Attachment A – Scope of Services**

**Task Order No. 07**

Lake Houston Redevelopment Authority/TIRZ 10 (LHRA) will reconstruct Northpark Drive from approximately 750 feet east of Russell Palmer Rd to about 800 feet east of Woodland Hills Dr. The existing four-lane boulevard will be upgraded to a six-lane boulevard, including a six-lane grade separation bridge over the Kingwood Diversion Ditch (KDD). This reconstruction requires drainage mitigation measures to handle increased flows resulting from the additional impervious surfaces created by the newly widened roadway.

This Task Order will serve to primarily provide engineering services required for the preparation of Design Concept Report Intake Form and Report, plans, specifications and estimates (PS&E) and related documents for the construction of a detention pond (yellow shape) and associated excavation along the KDD (orange shape) to provide necessary drainage mitigation for the future Northpark Drive Reconstruction Project (T-1014). See Figure 1 below for details. These services shall include, but are not limited to, preparing detention pond design including necessary excavation plans for the KDD, confirmation of hydrologic and hydraulic design, geotechnical data collection and agency coordination to route the plans through COH and Harris County Flood Control District (HCFCD) for review and approval. The plans will be developed based on the latest version of TxDOT, COH and HCFCD design criteria, standards and specifications.

HNTB is currently under contract with LHRA according to the COH-LHRA agreement.



**Figure 1**

Scope Outline is as follows:

**Task 1 – Project Management, Administration and Coordination**

- 1.1 – Project Management and Coordination
- 1.2 – Harris County Flood Control District Coordination (HCFCD)
- 1.3 – Project Stakeholder Coordination Meetings

**Task 2 – Design Concept Report (DCR)**

- 2.1 – Design Concept Report Intake Form
- 2.2 – Design Concept Report

**Task 3 – Drainage Design**

- 3.1 – Data Collection
- 3.2 – Hydrologic Studies
- 3.3 – Hydraulic Design
- 3.4 – Detention Pond Design and Documentation
- 3.5 – Temporary Drainage Facilities
- 3.6 – Drainage Report
- 3.7 – PS&E Development for Hydraulics

**Task 4 – KDD Channel Improvements**

- 4.1 – KDD Channel Improvement Plans
- 4.2 – Typical Sections
- 4.3 – Cross Sections
- 4.4 – General Sheets

**Task 5 – Miscellaneous Roadway Design**

- 5.1 – Traffic Control Plan, Detours, Sequence of Construction
- 5.2 – Storm Water Pollution Prevention Plans (SW3P)
- 5.3 – Compute and Tabulate Quantities
- 5.4 – Construction Cost Estimate
- 5.5 – Contract Time Determination
- 5.6 – Specifications and General Notes
- 5.7 – Constructability Review
- 5.8 – TDLR Review

**Task 6 – Geotechnical Borings and Investigations**

- 6.1 – Geotechnical Drilling Services and Miscellaneous Field Services
- 6.2 – Geotechnical Laboratory Testing Services
- 6.3 – Geotechnical Engineering Services

**Task 7 – Landscape Architecture**

- 7.1 – Planning Consultation for Drainage Study
- 7.2 – Final Design Services
  - 7.2.1 – Existing Tree Inventory, Analysis & Preservation Strategy
  - 7.2.2 – Soil Preparation & Vegetative Establishment Plans
  - 7.2.3 – Site Circulation, Sidewalk, and Trail Coordination
  - 7.2.4 – Technical Specifications for Landscape & Site Elements

- 7.2.5 – Permitting & Agency Coordination Assistance
- 7.2.6 – Final Visualization Materials

**Task 1 – Project Management, Administration and Coordination**

The Engineer shall be responsible for directing and coordinating all activities associated with the project to deliver the project on time.

**1.1 – Project Management and Coordination.** The Engineer shall coordinate all subconsultant activity to include quality of and consistency of plans and administration of the invoices and monthly progress reports. The Engineer shall coordinate with necessary local entities.

The Engineer shall:

- A. Prepare monthly written progress reports for the project (assume 12-month schedule).
- B. Develop and maintain a detailed project schedule to track project progress (assume 12-month schedule).
- C. Meet on a scheduled basis with LHRA to review project progress (up to 12 meetings).
- D. Prepare, distribute, and file both written and electronic correspondence.
- E. Prepare and distribute meeting minutes.
- F. Document phone calls and conference calls as required during the project to coordinate the work for various team members.

*Deliverables:*

- *Monthly progress reports (PDF format)*

**1.2 – Harris County Flood Control District Coordination (HCFCD).** The Engineer shall coordinate with HCFCD to schedule coordination meetings, review proposed plans, address comments, and obtain final approval for construction plans. Project milestone submissions should occur at the 30%, 60%, 95%, and 100% stages.

The Engineer shall prepare a HCFCD Express Review Sheet that will be used to document project details and will be included in the final PS&E package to show evidence of project approval.

The Engineer shall coordinate with HCFCD to establish a point of contact for all necessary coordination and approval activities.

*Deliverables:*

- *HCFCD Express Review Sheet (PDF format)*
- *Meeting Minutes – up to five (5) meetings (PDF format)*

**1.3 – Project Stakeholder Coordination Meetings.** The Engineer shall participate in up to twelve (12) project coordination meetings with LHRA and critical project stakeholders such as City of Houston, TxDOT, Harris County, Montgomery County, etc. All meetings attended by the Engineer shall be documented by a meeting summary forwarded to LHRA's Project Manager. Through these meeting summaries, the Engineer shall maintain an ongoing, functional catalogue of attendee names, dates, locations, telephone numbers and addresses, and matters discussed.

*Deliverables:*

- *Meeting Minutes, as needed (PDF format)*

- *Meeting Log (PDF format)*

**Task 2 – Design Concept Report (DCR)**

The Engineer shall provide the following services:

**2.1 – Design Concept Report Intake Form.** The Engineer shall prepare a Design Concept Report Intake Form for submittal to the City of Houston for their review and determination if a Design Concept Report is required to proceed with the project.

**2.2 – Design Concept Report.** The Engineer shall prepare and compile the Design Concept Report per City of Houston requirements which shall include the following items:

- Executive Summary
- Project background and purpose
- Existing conditions documentation
- Hydrologic/hydraulic summary
- Alternatives analysis
- Preliminary Construction Cost Estimates
- Recommended concept
- Figures (pond layouts, grading sketches, drainage maps, cross-sections, etc.)

Available data from the previously developed Drainage Impact Study for the Northpark Reconstruction Project (T-1014) shall be used to compile the content required for the DCR.

*Deliverables:*

- *Draft DCR (PDF format)*
- *Final DCR (PDF format + native figures/files)*

**Task 3 – Drainage Design**

The Engineer shall provide the following services:

**3.1 – Data Collection.** The Engineer shall provide the following data collection services:

- A. Conduct field inspections to observe current conditions and the outfall channels, the cross-drainage structures, drainage easements, the tributary channel, and land development projects that contribute flow to the tributary. Document field inspections with digital photos.
- B. Collect available applicable data including GIS data and maps, site survey data, construction plans, previous reports and studies, and readily available rainfall history for the area. Particular sources of data collected must include, but are not limited to, the State, County, and Federal Emergency Management Agency (FEMA).
- C. Collect available Flood Insurance Rate Maps (FIRMs), Flood Insurance Study (FIS) study data, and best available hydraulics and hydrology (H&H) models for the area.
- D. Review survey data and coordinate any additional surveying needs with LHRA.
- E. Present existing drainage structures in a 3D corridor ORD model.
- F. Meet with local government officials to obtain historical flood records. Interview local residents or local government employees to obtain additional high-water information if available. Obtain frequency of road closure and any additional high-water information from the City of Houston.

**3.2 – Hydrologic Studies.** The Engineer shall conduct the hydrologic analysis for the contributing drainage area to the storm drains, and detention ponds. The Engineer shall provide the following services:

- A. Check the existing models available, incorporate in the hydrologic study an evaluation and selection of appropriate hydrologic method including comparison of the results of two or more methods, and calibration of results against measured data, if available. Evaluate the contributing drainage area to the project ROW for two methods for the design storm event as directed by the design manual.
- B. Calculate discharges using appropriate hydrologic methods and as approved by the State. National Oceanic and Atmospheric Administration Atlas 14 rainfall data must be used.
- C. Consider the pre-construction and post-construction conditions in the hydrologic study.
- D. Delineate pre-construction and post-construction conditions drainage area boundaries and determine hydrologic parameters such as impervious covered areas, and overland flow paths and slopes from appropriate sources including, but not limited to, topographic maps, GIS modeling, the National Land Cover Dataset (NLCD), construction plans, and existing hydrologic studies. The Engineer shall not use existing hydrologic studies without assessing of their validity.
- E. Include, at a minimum, the “design” frequency specified by local governing agency and the 1% Annual Exceedance Probability (AEP) storm frequency. The report must include the full range of frequencies (50%, 20% 10%, 4%, 2%, 1%, and 0.2% AEP).
- F. Compare calculated discharges to the effective FEMA flows. If calculated discharges are to be used in the model instead of the effective FEMA flows, full justification must be documented.

**3.3 – Hydraulic Design.** The Engineer shall provide the following services for proposed culverts at Northpark Drive:

- A. Perform hydraulic analysis to evaluate the post-construction stormwater system and confirm that the proposed detention ponds function as desired with the existing or proposed drainage crossings. Assess hydraulic capacity, water surface impacts, and system performance under proposed conditions in accordance with the TxDOT Hydraulic Design Manual, District criteria, and any State-provided guidance. Hydraulic modeling shall be performed using HY-8, HEC-RAS, or other approved tools.

**3.4 – Detention Pond Design and Documentation.** The Engineer shall provide the following services for the proposed detention pond at Northpark Drive:

- A. Gather information regarding existing drainage facilities and features from existing plans and other available studies or sources.
- B. Perform hydraulic design and analysis using appropriate hydraulic methods, which may include computer models such as EPASWMM5, unsteady HEC-RAS, or 2D models such as HEC-RAS 2D. The Engineer shall not develop 2D models without the express permission of LHRA. Data entry for appropriate hydraulic computer programs must consist of a combination of both on-the-ground survey and other appropriate sources including, but not limited to topographic maps, GIS modeling, construction plans, and existing hydrologic studies.

- C. Use the current effective FEMA models, where appropriate, as a base model for the analysis. If a “best available data” model is provided by the local floodplain administrator, it must be utilized accordingly for this analysis. Review the provided base model for correctness and update as needed. If the provided effective model is not in a HEC-RAS format, convert it to HEC-RAS for this analysis.
- D. If the appropriate hydrologic model requires storage discharge relationships, develop HEC-RAS models or other State-approved models that will compute these storage discharge relationships along the channel.
- E. Consider pre-construction, present, and post-construction conditions, as well as future planned projects.
- F. Quantify impacts, beneficial or adverse, in terms of increases in peak flow rates and water surface elevations for the above listed hydraulic conditions for any standard frequency event up to 1% AEP flood event and including the check-flood event. Impacts will be determined both upstream and downstream of the bridge crossings. Based on the impact analysis results, perform a risk-based evaluation of the potential for the project to cause adverse impacts to existing conditions.
- G. Compute right of way corridor 1% AEP flood plain volumes for existing and proposed roadway elevations. The Engineer shall provide mitigation to offset a decrease in 1% AEP flood plain volumes.
- H. Use hydrograph calculations and peak flows to determine the storage required.
- I. If necessary, present mitigation measures along with the advantages and disadvantages of each. Each method must consider the effects on the entire area. Include approximate construction costs in the report.
- J. Provide calculations which quantify the cut and fill within the 1% AEP flood plain.

**3.5 – Temporary Drainage Facilities.** The Engineer shall develop plans for all temporary drainage facilities necessary to allow staged construction of the project and to conform with the phasing of adjacent construction projects without significant impact to the hydraulic capacity of the area. Drainage area maps are not required for temporary drainage.

**3.6 – Drainage Report.** The Engineer shall develop a drainage report and submit the drainage report to LHRA and other governing agencies for review. The drainage report must include applicable hydrologic and hydraulic models such as HY-8, OpenRoads for Drainage Utility (ORD-DU), HEC-RAS, HEC-HMS, and EPASWMM5. This modeling must evaluate pre-construction versus post-construction conditions. The drainage report must also include, but is not limited to, the following: drainage area maps, drainage outfall descriptions, tailwater selection and descriptions, storm water detention facilities, recommendations for mitigation of impacts.

The Engineer shall address review comments received on the drainage report and update the drainage report accordingly. The Engineer shall submit a final drainage report that is signed and sealed by a Professional Engineer.

**3.7 – Plans, Specifications and Estimates (PS&E) Development for Hydraulics.** The Engineer shall provide the following services:

- A. Prepare the PS&E package in accordance with the applicable requirements of TxDOT's specifications, standards, and manuals, including the TxDOT PS&E Preparation Manual. Include the following sheets and documents, as appropriate:
  - A.1 Drainage Area Maps (Detention Ponds)
  - A.2 Hydrologic Data Sheets

**Northpark Drive Regional Detention Basin PS&E (T-1015)**

**Attachment A – Scope of Services**

**Task Order No. 07**

- A.3 Drainage Computation sheets
- A.4 Hydraulic Calculation Sheets
- A.5 Detention Pond Layout sheets
- A.6 Detention Pond Detail sheets
- A.7 Other related sheets
  
- B. Identify areas requiring trench protection, excavation, shoring, and de-watering.
- C. Prepare drainage area maps including storm drain and detention pond Drainage Area Maps.
- D. Prepare plan and profile sheets for storm drain systems and outfall ditches.
- E. Select any necessary standard details from TxDOT's list of standards for items such as inlets, manholes, junction boxes, and end treatments.
- F. Prepare details for non-standard inlets, manholes, and junction boxes.
- G. Prepare drainage details for outlet protection, outlet structures, and utility accommodation structures.
- H. Identify pipe strength requirements.
- I. Prepare drainage facility quantity summaries.
- J. Identify potential utility conflicts and, if feasible, design to mitigate or avoid those identified conflicts.
- K. Consider pedestrian facilities, utility impacts, driveway grades, retaining walls, and concrete traffic barrier drainage impacts.
- L. Identify existing ground elevation profiles at the ROW lines on storm sewer plan and profile sheets.
- N. Develop a 3D model of the proposed drainage structures using the Drainage Utility (DU) capabilities of the ORD product.

The Engineer shall use standard details where practical.

*Deliverables:*

- *Drainage and Detention Pond PS&E Sheets*

**Task 4 – KDD Channel Improvements**

The Engineer shall provide the following services:

**4.1 – KDD Channel Improvement Plans.** The Engineer shall use Bentley's OpenRoads Designer (ORD) software for the design and preparation of the channel excavation design and associated plan sheets.

The Engineer shall provide plan and profile drawings using CADD standards as required by TxDOT. The drawings must consist of a planimetric file of existing features and files of the proposed improvements. The roadway base map must contain line work that depicts existing surface features. Existing major subsurface and surface utilities must be shown. Existing and proposed right-of-way lines must be shown.

The Engineer shall prepare plans and profiles for the proposed improvements. The profile and cross sections must depict the 2, 5, 10, 25, 50, 100 and 500-year (if available) water surface elevations. The drawings shall provide an overall view of the KDD and existing ground elevations with respect to the various storm design frequencies for the length of the project. The plans must be organized in the sequence as described in the *TxDOT PS&E Preparation manual*.

**4.2 – Typical Sections.** The Engineer shall prepare typical sections for existing and proposed conditions. Typical sections must include width of proposed excavation limits, estimated ordinary high water mark (OHWM) elevations and ROW lines. The typical section must also include centerline of KDD, side slopes, sodding or seeding limits, limits of embankment and excavation, etc.

**4.3 – Cross Sections.** The Engineer shall develop an earthwork analysis to determine cut and fill quantities and provide final design cross sections at 100 feet intervals. Cross sections must be delivered on 11"x17" sheets and electronic files. The Engineer shall prepare proposed cross-section sheets depicting the proposed condition of the improvements along the KDD. Annotation shall include at a minimum existing ROW, side slopes (front & back), OHWM, etc.

The Engineer shall submit the current ORD generated 3D model for each submittal, starting with the 60% milestone submittal.

**4.4 – General Sheets.** The Engineer shall prepare general project sheets to be incorporated into the plan set. The general sheets to be prepared shall include a project title sheet, index of sheets, project layouts and horizontal and vertical survey control sheets.

*Deliverables:*

- *PS&E Sheets as noted herein*
- *Design cross sections at every 100' (for 60%, 95% and 100% submittals)*
- *Detailed 3D Model in .dgn Format*

**Task 5 – Miscellaneous Roadway Design**

The Engineer shall provide the following services:

**5.1 – Traffic Control Plan, Detours, Sequence of Construction.** The Engineer shall develop Traffic Control Plans (TCP) that address the staging of construction equipment for accessing both the proposed detention pond area and the KDD area. The Engineer must also follow current TxDOT Barricade and Construction (BC) standards, as well as applicable TCP standards.

The Engineer shall:

- A. Provide a written narrative of the construction sequencing and work activities and determine the existing and proposed traffic control devices (regulatory signs, warning signs, guide signs, route markers, construction pavement markings, barricades, flag personnel, temporary traffic signals, etc.) to be used to handle traffic during construction.
- B. Provide applicable TxDOT standards that apply to the project and address the staging of construction equipment for accessing both the proposed detention pond area and the KDD area.

No detailed TCP plans shall be developed as work zone is located off Northpark Drive ROW.

*Deliverables:*

- *TCP PS&E Sheets*
- *TCP Standards*

**5.2 – Storm Water Pollution Prevention Plans (SW3P).** The Engineer shall develop SW3P to minimize potential impact to receiving waterways. The SW3P must include text describing the

**Northpark Drive Regional Detention Basin PS&E (T-1015)**

**Attachment A – Scope of Services**

**Task Order No. 07**

plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control.

*Deliverables:*

- *SW3P PS&E Sheets*

**5.3 – Compute and Tabulate Quantities.** The Engineer shall provide the summaries and quantities within all formal submittals.

*Deliverables:*

- *Summary of Quantities Sheets for all Disciplines*

**5.4 – Construction Cost Estimate.** The Engineer shall independently develop and report quantities necessary to construct the contract in standard TxDOT bid format at the specified milestones and Final PS&E submittals. The Engineer shall prepare each construction cost estimate using Microsoft Excel. The estimate shall be provided at each milestone submittal.

*Deliverables:*

- *Construction Cost Estimates At 30%, 60%, 95% and Final PS&E Submittals*

**5.5 – Contract Time Determination.** The Engineer shall prepare a detailed contract time estimate to determine the approximate time required for construction of the project in calendar and working days (based on the TxDOT standard definitions of calendar and working days) at the 95% and Final PS&E milestone. The schedule must include tasks, subtasks, critical dates, milestones, deliverables, and review requirements in a format which depicts the interdependence of the various items and adjacent construction packages.

*Deliverables:*

- *Construction Time Determination At 95% and Final PS&E Submittals*

**5.6 – Specifications and General Notes.** The Engineer shall identify necessary standard specifications, special specifications, special provisions and the appropriate reference items. The Engineer shall prepare General Notes from the TxDOT Houston District's Master List of General Notes, Special Specifications and Special Provisions for inclusion in the plans and bidding documents. The Engineer shall provide General Notes, Special Specifications and Special Provisions in the required format.

*Deliverables:*

- *General Notes*
- *List of Special Specifications and Special Provisions for inclusion in the plans and bidding documents*

**5.7 – Constructability Review.** The Engineer shall provide Independent Quality Review of the constructability PS&E sets.

The Engineer shall perform constructability reviews at two major project design milestones (60% and 95% submittals) to identify potential constructability issues and options that would provide substantial time savings during construction. The constructability review must be performed for all design elements such as Sequence of Work and Traffic Control, Drainage (Temporary and

Permanent), Storm Water Pollution Prevention Plan (SW3P), identify Utility conflicts; ensuring accuracy and appropriate use of Items, Quantities, General Notes, Standard and Special Specifications, Special Provisions, Contract Time and Schedule, Standards; and providing detailed comments in an approved format. Reviews must be captured in a Constructability Log identifying areas of concern and potential conflict. The Engineer shall provide the results of all Constructability reviews and recommendations to LHRA at major project design milestone submittals.

*Deliverables:*

- *Memo with Results of Constructability Reviews and Recommendation*

**5.8 – TDLR Review.** The Engineer shall prepare a plan review package to be sent to American Construction Investigations, LTD (ACI) for review and approval. ACI will handle submission of the plans package to the Texas Department of Licensing and Regulation (TDLR).

**Task 6 – Geotechnical Borings and Investigations**

The Engineer shall provide the following services:

**6.1 – Geotechnical Drilling Services and Miscellaneous Field Services.** The Engineer shall provide drilling/excavation and sampling of subsurface materials as follows in accordance with this Proposal and in conformance with ASTM guidelines:

- Soil Boring – Six (6) Borings will be drilled at approximate locations of the proposed detention pond location on the project (Borings will be advanced to a depth of approximately 30 feet below the existing top of natural ground) (Boring Designation B-01 through B-06). Proposed typical drilling scheme will be continuous in top 20 feet and intermittent at 5-foot intervals thereafter.
- Piezometer (Temporary) – One (1) Piezometer will be placed at approximate locations of the proposed detention pond location on the project (Piezometers will be advanced to a depth of approximately 30 feet below the existing top of natural ground) (Piezometer Designation P-01) (1 of Soil Borings B-01 through B-06 will be converted to piezometers).

The Engineer shall stake the boring locations and provide utility clearances prior to performing the field exploration portion of the project. LHRA shall be responsible to provide any necessary permits or authorization to access areas (right of entry) where borings are to be drilled. All borings will be located in the field by a representative of the Engineer. All boring locations will be documented with GPS coordinates. Field survey and tie-down locations of all borings shall be the responsibility of LHRA's assigned surveyor.

The borings will be advanced to the specified depth(s) and in-situ soil testing will be performed in general accordance with ASTM Standard Test Procedures (thin-walled Shelby tube samples may be collected (ASTM D1587 – Thin Walled Tube Sampling)). The soils will be sampled as needed to verify subsurface materials and strata changes. Final drilling depths and elevations will be based on topographic conditions at the time of drilling operations.

All samples will be removed from the sample apparatus during drilling operations. The Engineer will conduct various field tests on the recovered samples, visually classify the samples, and record the appropriate data on a field boring log. The samples will be appropriately packaged to minimize

loss of natural moisture content and to reduce the possibility of damage during transportation to the soil testing laboratory facility.

Drilling services will include an initial water strike depth and a 24-hour water level reading at each boring location if applicable. Following completion of drilling and sampling, all boreholes will be backfilled with soil cuttings from the completed borings and/or alternate fill as needed.

**6.2 – Geotechnical Laboratory Testing Services.** Geotechnical Laboratory Testing will be performed by the Engineer on the samples recovered during the field study to evaluate their physical and engineering properties. Laboratory testing will be performed in general accordance with ASTM Standard Test Procedures. Testing shall include the following test procedures:

- 1) Atterberg Limits (ASTM D4318)
- 2) Gradation (-200) (ASTM D1140)
- 3) Lab. Determination of Moisture in Soils (ASTM D2216)
- 4) Particle Size (Sieve) Analysis with Hydrometer (ASTM D422)
- 5) Unconfined Compression (ASTM D2166)
- 6) Unconsolidated Undrained Triaxial Test (ASTM D2850)
- 7) Consolidated Undrained Triaxial Test (ASTM D4767)
- 8) Specific Gravity (ASTM D854) (Completed with CU Test)
- 9) Double Hydrometer Test (ASTM D4221)
- 10) Crumb Test (ASTM D6572)

**6.3 – Geotechnical Engineering Services.** The Engineer shall utilize information gathered from the field and laboratory testing to provide LHRA with Geotechnical Engineering results and analyses for the Project. The findings and conclusions derived from the results and analyses will be presented in an engineering report and provided to LHRA (electronic .pdf medium only). The report will include a boring location plan, boring logs with laboratory classification of recovered soil samples at the boring locations and subsurface water conditions encountered. The report will provide analyses and/or engineering recommendations as follows:

- Structural Evaluation of Borings / Calc. Shear Strength Models / Soil Profiles
- Slope Stability Modeling and Analysis of Proposed Channel and Detention Pond Side Slopes
- Construction Recommendations based on Geotechnical Investigation/Analyses
- Geotechnical Report (Including Soil Survey/Geog./All Analyses)

The report will provide site specific comments and applicable recommendations regarding construction methods, sequences, and potential difficulties that may arise during overall construction as it relates to the soil aspects of this project. This information may serve to guide both geometric modeling and foundation selection and design as well as provide assistance in the preparation of specifications for the project.

*Deliverables:*

- *Draft Geotechnical Report*
- *Final Geotechnical Report*

**Task 7 – Landscape Architecture**

The Engineer shall provide the following services:

**7.1 – Planning Consultation for Drainage Study.** The Engineer shall provide professional planning support for the proposed drainage study associated with the Northpark Drive Detention Basin. Services will include coordination with the civil engineering team to ensure landscape, environmental, and site-planning considerations are fully integrated into the drainage mitigation strategy and basin configuration.

## **7.2 – Final Design Services**

- **7.2.1. – Existing Tree Inventory, Analysis & Preservation Strategy**
  - The Engineer shall:
    - Conduct a detailed inventory of existing trees within the project limits, identifying species, caliper, condition, and preservation priority.
    - Evaluate opportunities for tree preservation and develop strategies for protection, mitigation, or transplanting in accordance with applicable municipal ordinances and project requirements.
    - Develop preliminary planting concepts including reforestation zones, species selection, plant quantities, spatial layout, and sustainable landscape strategies.
    - Provide preliminary technical details for soil amendments, planting installation, staking, and establishment requirements.
- **7.2.2 – Soil Preparation & Vegetative Establishment Plans**
  - The Engineer shall:
    - Prepare schematic plans and preliminary technical specifications for soil preparation, turf establishment, native grass restoration, wetland planting (as applicable), and wildflower habitat development.
    - Identify required soil amendments, grading considerations, and establishment periods to achieve long-term vegetation performance.
    - Coordinate with the drainage design team to ensure planting strategies are compatible with basin slopes, hydrology, and maintenance needs.
- **7.2.3 – Site Circulation, Sidewalk, and Trail Coordination**
  - The Engineer shall:
    - Assist LHRA in evaluating and refining sidewalk and trail alignments within the basin and surrounding area.
    - Recommend strategies that improve accessibility, maintain circulation efficiency, preserve existing trees, and ensure coherent integration with the overall landscape design.
    - Provide coordination exhibits and conceptual layouts to support decision-making.
- **7.2.4. – Technical Specifications for Landscape & Site Elements**
  - The Engineer shall:
    - Prepare technical specifications for components within the Engineer's scope, including landscape planting, irrigation systems, site furnishings, and green stormwater infrastructure (GSI) elements.
    - Ensure specifications align with City of Houston, Montgomery County, and TxDOT requirements as applicable.
- **7.2.5. – Bid Phase Support**

**Northpark Drive Regional Detention Basin PS&E (T-1015)**

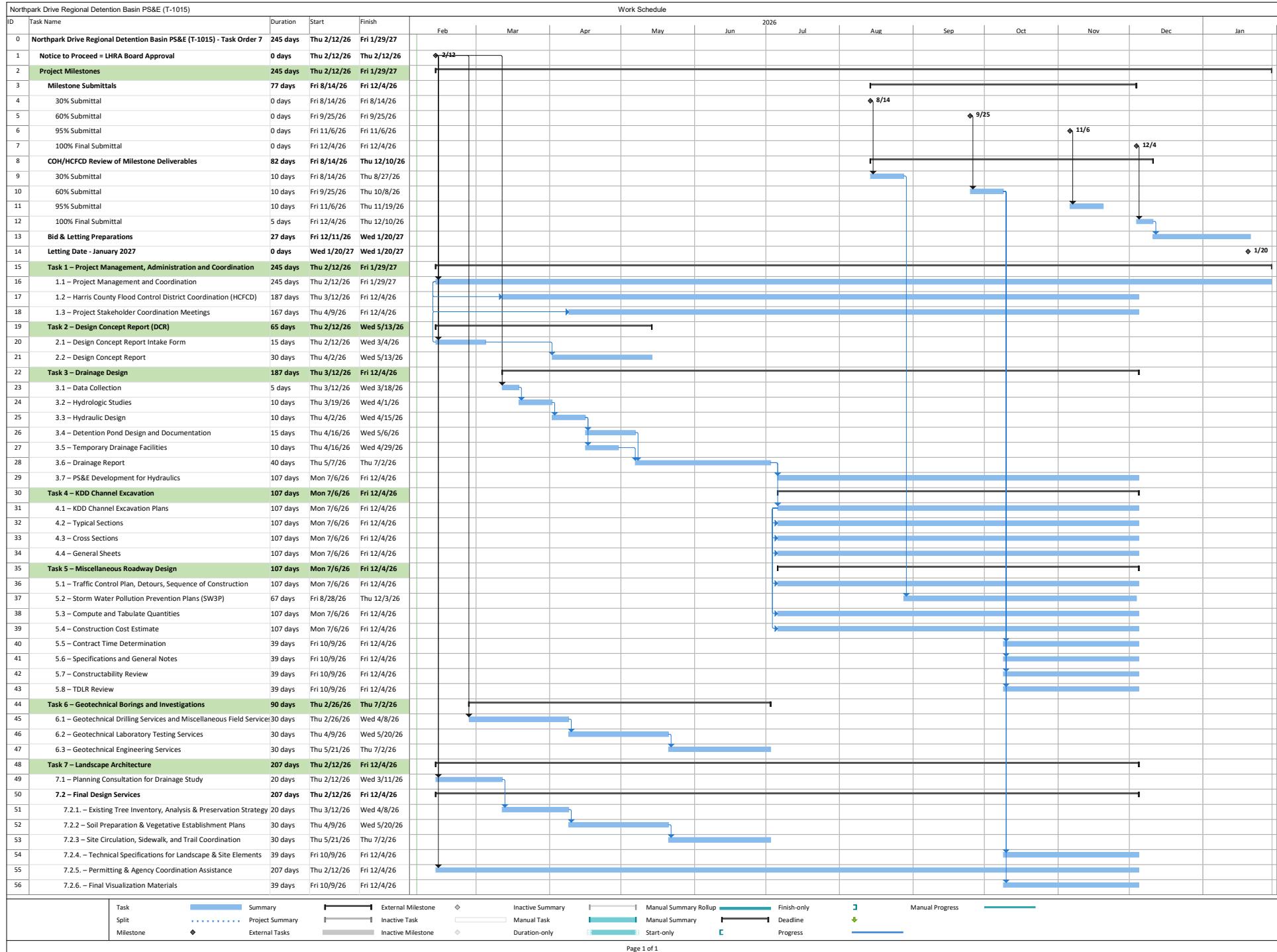
**Attachment A – Scope of Services**

**Task Order No. 07**

- The Engineer shall:
  - Develop bid-ready documents related to the Engineer's scope of work for incorporation into the overall PS&E package.
  - Provide support to LHRA during bid and procurement activities, including responses to bidder questions, addendum preparation, and review of contractor-submitted alternates related to landscape elements.
- **7.2.6. – Permitting & Agency Coordination Assistance**
  - The Engineer shall:
    - Assist LHRA with preparation of landscape-related materials needed for regulatory approvals from agencies including TDNR, Montgomery County, City of Houston, and Harris County Flood Control District.
    - Coordinate with regulatory staff as required to address comments and deliver revised submittals.
- **7.2.7. – Final Visualization Materials**
  - Upon selection of the preferred design alternative, the Engineer shall:
    - Prepare conceptual sketches, 3D massing imagery, and rendered perspective views to illustrate the proposed landscape and site improvements.
    - Provide digital files suitable for public meetings, client presentations, and stakeholder coordination.

*Deliverables:*

- *Planning exhibits showing integration of landscape/environmental considerations with basin configuration*
- *Existing tree inventory (species, caliper, condition, preservation priority)*
- *Tree preservation analysis & strategy report*
- *Preliminary planting concept exhibits*
- *Schematic plans for soil preparation, turf establishment, native grass restoration, wetlands planting (if applicable), and wildflower habitat*
- *Preliminary technical specifications for soil preparation and vegetative establishment*
- *Sidewalk/trail alignment evaluation memo*
- *Recommended accessibility and circulation strategy*
- *Conceptual layouts and coordination exhibits illustrating trail/sidewalk refinements*
- *Technical specifications for Landscape planting, Irrigation systems, Site furnishings and Green Stormwater Infrastructure (GSI) elements*
- *Conceptual sketches illustrating the preferred landscape design*
- *3D massing imagery of basin and site improvements*
- *Rendered perspective views suitable for public meetings and stakeholder briefings*



**Fee Schedule Summary**

**Prime Provider: HNTB Corporation**

**Project Name: Northpark Drive Regional Detention Basin PS&E (T-1015)**

**County: Montgomery and Harris**

<b>Task Order No. 7 - Project Mgmt, Coordination Mtgs, Design Concept Report and Detention Basin Final Design (Lump Sum Fee Type)</b>					
<b>Description</b>	<b>HNTB Corporation</b>	<b>B2Z Engineering, Inc.</b>	<b>M2L Associates Inc.</b>	<b>Task Order Totals</b>	
Labor	\$ 696,484.52	\$ 26,003.04	\$ 37,500.00	\$ 759,987.56	
Direct Expenses	\$ 1,112.50	\$ 23,957.00	\$ 500.00	\$ 25,569.50	
Subconsultant Markup (8%)	\$ 7,037.00	\$ -	\$ -	\$ 7,037.00	
<b>Time and Materials Subtotals</b>	<b>\$ 704,634.02</b>	<b>\$ 49,960.04</b>	<b>\$ 38,000.00</b>	<b>\$ 792,594.06</b>	
<b>Firm Totals</b>	<b>\$ 704,634.02</b>	<b>\$ 49,960.04</b>	<b>\$ 38,000.00</b>	<b>\$ 792,594.06</b>	
<b>Contract Totals</b>	<b>\$ 704,634.02</b>	<b>\$ 49,960.04</b>	<b>\$ 38,000.00</b>	<b>\$ 792,594.06</b>	
<b>Firm Percentages</b>	<b>88.9%</b>	<b>6.3%</b>	<b>4.8%</b>	<b>100.0%</b>	
<b>MWDBE Percentages</b>	<b>0.0%</b>	<b>6.3%</b>	<b>4.8%</b>	<b>11.1%</b>	

**Fee Schedule**  
**Lump Sum Payment Basis**  
**Task Order No. 7**

**PRIME PROVIDER NAME: HNTB Corporation**

**PROJECT NAME: Northpark Drive Regional Detention Basin PS&E (T-1015)**

TASK DESCRIPTION	PROJECT DIRECTOR	DEPUTY PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER/ ARCHITECT I	ENGINEER IN TRAINING/ GRADUATE ENGINEER	PROJECT ANALYST	TOTAL LABOR HRS.
CONTRACT RATE PER HOUR	\$424.31	\$258.27	\$239.83	\$214.00	\$169.72	\$147.59	\$191.86	
<b>Task 1 – Project Management, Administration and Coordination</b>								
<b>1.1 – Project Management and Coordination</b>								
Project Management	24	24						12 60
Project Administration (Invoices, Progress Reports, Correspondence)	24	24						24 72
<b>1.2 – Harris County Flood Control District Coordination (HCFCD)</b>								
HCFCD Express Review Sheet Prep and Coordination		8	20					28
Coordination Meetings (up to 5 meetings)	20	20						40
<b>1.3 – Project Stakeholder Coordination Meetings</b>								
Coordination Meetings (up to 12 meetings)	36	36						72
HOURS SUB-TOTALS	104	112	20	0	0	0	36	272
TOTAL LABOR COSTS	\$44,128.24	\$28,926.24	\$4,796.60	\$0.00	\$0.00	\$0.00	\$6,906.96	\$84,758.04
% DISTRIBUTION OF STAFFING	38.2%	41.2%	7.4%	0.0%	0.0%	0.0%	13.2%	100%
<b>SUBTOTAL - TASK 1</b>								<b>\$84,758.04</b>

TASK DESCRIPTION	PROJECT DIRECTOR	DEPUTY PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER/ ARCHITECT I	ENGINEER IN TRAINING/ GRADUATE ENGINEER	PROJECT ANALYST	TOTAL LABOR HRS.
CONTRACT RATE PER HOUR	\$424.31	\$258.27	\$239.83	\$214.00	\$169.72	\$147.59	\$191.86	
<b>Task 2 – Design Concept Report (DCR)</b>								
<b>2.1 – Design Concept Report Intake Form</b>								
Prepare Design Concept Report Intake Form	2	8	24					34
COH Coordination of Design Concept Report Intake Form	2	4						6
<b>2.2 – Design Concept Report</b>								
Executive Summary	2	4	4					10
Project background and purpose			4		12	12		28
Existing conditions documentation			8		20	20		48
Hydrologic/hydraulic summary			8		20	20		48
Alternatives analysis		4	16		24	24		68
Preliminary Construction Cost Estimates		2	8		16	16		42
Recommended concept		2	4		28	28		62
Figures (pond layouts, grading sketches, drainage maps, cross-sections, etc.)		4	12		40	40		96
HOURS SUB-TOTALS	6	28	88	0	160	160	0	442
TOTAL LABOR COSTS	\$2,545.86	\$7,231.56	\$21,105.04	\$0.00	\$27,155.20	\$23,614.40	\$0.00	\$81,652.06
% DISTRIBUTION OF STAFFING	2.2%	10.3%	32.4%	0.0%	58.8%	58.8%	0.0%	163%
<b>SUBTOTAL - TASK 2</b>								<b>\$81,652.06</b>

**Fee Schedule**  
**Lump Sum Payment Basis**  
**Task Order No. 7**

**PRIME PROVIDER NAME: HNTB Corporation**

**PROJECT NAME: Northpark Drive Regional Detention Basin PS&E (T-1015)**

TASK DESCRIPTION	PROJECT DIRECTOR	DEPUTY PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER/ ARCHITECT I	ENGINEER IN TRAINING/ GRADUATE ENGINEER	PROJECT ANALYST	TOTAL LABOR HRS.
<b>Task 3 – Drainage Design</b>								
<b>3.1. Data Collection</b>								
Field Inspections			1	1	2	2		6
Collect Data, Survey, Construction Plans, Reports, etc.			1	1	2	2		6
Collect FIRM, FIS, and Models			1	1	2	2		6
Review Survey Data			1	1	2	2		6
<b>3.2. Hydrologic Studies</b>								
Check Hydrologic models developed by sub			1	1	1	1		4
Delineate Drainage Areas			13	20	16	16		65
Calculate Hydrologic Parameters			8	11	9	9		37
Compute Discharges			8	11	9	9		37
Compare Discharges to FEMA flows			1	1	1	1		4
<b>3.3. Hydraulic Design</b>								
Hydraulic Analysis			13	20	16	16		65
<b>3.4. Detention Pond Design and Documentation</b>								
Perform Detention Pond Design and Analysis using EPASWMM	8	56	96	80	80			320
Quantify Impacts		7	10	8	8			33
Calculate Pre-and Post-ROW Floodplain Volumes		5	8	6	6			25
Develop Mitigation Measures		7	10	8	8			33
<b>3.5. Temporary Drainage Facilities</b>								
Temporary Drainage Facilities			12	18	15	15		60
<b>3.6. Drainage Report</b>								
Preliminary 30% H&H Report	4	26	40	40	40			150
Preliminary 60% H&H Report	4	10	26	20	20			80
Pre-Final 90% H&H Report	2	4	14	10	10			40
Final 100% H&H Report	2	2	6	5	5			20
<b>3.7. Plans, Specifications and Estimates (PS&amp;E) Development for Hydraulics</b>								
Drainage Area Maps	2	18	30	25	25			100
Hydrologic Data Sheets		2	3	3	3			11
Drainage Computation		10	15	12	12			49
Hydraulic Calculation Sheets	2	18	32	26	26			104
Detention Pond Layouts	4	28	53	43	43			171
Detention Pond Details	4	28	53	43	43			171
Pedestrian Trail Alignments and Details	8	24	40	40	40			112
Prepare Standard Details		2	2	2	2			8
Prepare Special Drainage Details		4	4	4	4			16
Drainage Quantities		8	18	15	15			56
Identify Utility Conflicts		2	4	4	4			14
<b>HOURS SUB-TOTALS</b>	<b>0</b>	<b>40</b>	<b>321</b>	<b>510</b>	<b>469</b>	<b>469</b>	<b>0</b>	<b>1809</b>
<b>TOTAL LABOR COSTS</b>	<b>\$0.00</b>	<b>\$10,330.80</b>	<b>\$76,985.43</b>	<b>\$109,140.00</b>	<b>\$79,598.68</b>	<b>\$69,219.71</b>	<b>\$0.00</b>	<b>\$345,274.62</b>
<b>% DISTRIBUTION OF STAFFING</b>	<b>0.00%</b>	<b>2.21%</b>	<b>17.74%</b>	<b>28.19%</b>	<b>25.93%</b>	<b>25.93%</b>	<b>0.00%</b>	<b>100%</b>
<b>SUBTOTAL - TASK 3</b>								<b>\$345,274.62</b>

**Fee Schedule**  
**Lump Sum Payment Basis**  
**Task Order No. 7**

**PRIME PROVIDER NAME: HNTB Corporation**

**PROJECT NAME: Northpark Drive Regional Detention Basin PS&E (T-1015)**

TASK DESCRIPTION	PROJECT DIRECTOR	DEPUTY PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER/ ARCHITECT I	ENGINEER IN TRAINING/ GRADUATE ENGINEER	PROJECT ANALYST	TOTAL LABOR HRS.
<b>Task 4 – KDD Channel Improvements</b>								
<b>4.1 – KDD Channel Improvement Plans</b>								
Plan and Profile Sheets		8	20		40	60		128
Misc Details		4	8		16	16		44
<b>4.2 – Typical Sections</b>								
Existing Typical Sections			4		4	12		20
Proposed Typical Sections		2	8		16	24		50
<b>4.3 – Cross Sections</b>								
3D Model Templates and Corridor Design				16	20	10		46
Cross Section Sheet Development		4	24		20	20		68
<b>4.4 – General Sheets</b>								
Title Sheet		2	4		16			22
Index of Sheets		2	8		14			24
Project Layouts		2	4		8	16		30
Horizontal and Vertical Alignment Data Sheets		2	4		8	16		30
Survey Control Sheets			2		4			6
<b>HOURS SUB-TOTALS</b>	<b>0</b>	<b>26</b>	<b>102</b>	<b>0</b>	<b>166</b>	<b>174</b>	<b>0</b>	<b>468</b>
<b>TOTAL LABOR COSTS</b>	<b>\$0.00</b>	<b>\$6,715.02</b>	<b>\$24,462.66</b>	<b>\$0.00</b>	<b>\$28,173.52</b>	<b>\$25,680.66</b>	<b>\$0.00</b>	<b>\$85,031.86</b>
<b>% DISTRIBUTION OF STAFFING</b>	<b>0.00%</b>	<b>5.56%</b>	<b>21.79%</b>	<b>0.00%</b>	<b>35.47%</b>	<b>37.18%</b>	<b>0.00%</b>	<b>100%</b>
<b>SUBTOTAL - TASK 4</b>								<b>\$85,031.86</b>

TASK DESCRIPTION	PROJECT DIRECTOR	DEPUTY PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER/ ARCHITECT I	ENGINEER IN TRAINING/ GRADUATE ENGINEER	PROJECT ANALYST	TOTAL LABOR HRS.
<b>Task 5 – Miscellaneous Roadway Design</b>								
<b>5.1 – Traffic Control Plan, Detours, Sequence of Construction</b>								
Conceptual Traffic Control Plan		4	4		8			16
TCP Narrative			2		4			6
TCP Standards			4		4			8
<b>5.2 – Storm Water Pollution Prevention Plans (SW3P)</b>								
SW3P Plan Layouts		2	8		20	30		60
SW3P Quantity Summaries			4		4	12		20
SW3P Standards			2		2			4
<b>5.3 – Compute and Tabulate Quantities</b>								
Earthwork Quantity Summaries			8		16	24		48
TCP Quantity Summaries			2		6			8
<b>5.4 – Construction Cost Estimate</b>								
Construction Cost Estimates at 30%, 60%, 95% and 100% Milestones		8	24		48			80
<b>5.5 – Contract Time Determination</b>								
Prepare Construction Time Determination at 95% and 100% Milestones		4	48		8			60
<b>5.6 – Specifications and General Notes</b>								
General Notes		12	20		20			52
Specifications, Provisions and Project Manual		12	24		36			72
<b>5.7 – Constructability Review</b>								
Constructability Reviews at 60% and 95% Milestones		8	40					48
<b>5.8 – TDLR Review</b>								
Prepare TDLR Review Package		2	2		4			8
<b>HOURS SUB-TOTALS</b>	<b>0</b>	<b>52</b>	<b>192</b>	<b>0</b>	<b>180</b>	<b>66</b>	<b>0</b>	<b>490</b>
<b>TOTAL LABOR COSTS</b>	<b>\$0.00</b>	<b>\$13,430.04</b>	<b>\$46,047.36</b>	<b>\$0.00</b>	<b>\$30,549.60</b>	<b>\$9,740.94</b>	<b>\$0.00</b>	<b>\$99,767.94</b>
<b>% DISTRIBUTION OF STAFFING</b>	<b>0.00%</b>	<b>11.11%</b>	<b>41.03%</b>	<b>0.00%</b>	<b>38.46%</b>	<b>14.10%</b>	<b>0.00%</b>	<b>105%</b>
<b>SUBTOTAL - TASK 5</b>								<b>\$99,767.94</b>

**Fee Schedule  
Lump Sum Payment Basis  
Task Order No. 7**

**PRIME PROVIDER NAME:** HNTB Corporation

**PROJECT NAME:** Northpark Drive Regional Detention Basin PS&E (T-1015)

DESCRIPTION	TOTAL HOURS BY TASK	TOTAL COSTS BY TASK
<b>TOTALS BY TASK</b>		
Task 1 – Project Management, Administration and Coordination	272	\$ 84,758.04
Task 2 – Design Concept Report (DCR)	442	\$ 81,652.06
Task 3 – Drainage Design	1,809	\$ 345,274.62
Task 4 – KDD Channel Improvements	468	\$ 85,031.86
Task 5 – Miscellaneous Roadway Design	490	\$ 99,767.94
<b>SUBTOTAL LABOR EXPENSES</b>	3,481	<b>\$ 696,484.52</b>

OTHER DIRECT EXPENSES	TYPE	UNIT	COST/UNIT	TOTAL # OF UNITS	TOTALS
Mileage	per mile	\$ 0.725	500	\$ 362.50	
Printing / Reproduction	each	\$ 0.50	1500	\$ 750.00	
<b>SUBTOTAL OTHER DIRECT EXPENSES</b>					<b>\$ 1,112.50</b>

SUBCONSULTANT EXPENSES	TYPE	UNIT	COST/UNIT	TOTAL # OF UNITS	TOTALS
B2Z Engineering (Task 6)	LS	\$ 49,960.04	1	\$ 49,960.04	
M2L & Associates (Task 7)	LS	\$ 38,000.00	1	\$ 38,000.00	
<b>SUBTOTAL SUBCONSULTANT EXPENSES</b>					<b>\$ 87,960.04</b>

SUMMARY	
TOTAL COSTS FOR HNTB ONLY	\$ 696,484.52
OTHER DIRECT EXPENSES FOR HNTB ONLY	\$ 1,112.50
SUBCONSULTANT EXPENSES	\$ 87,960.04
SUBCONSULTANT MARKUP (8%)	\$ 7,037.00
<b>GRAND TOTAL</b>	<b>\$ 792,594.06</b>



## Attachment 2 - Cost Breakdown

			MANHOURS						
			Project Principal / Manager	Senior Engineer	Project Engineer	Logger (Technician)	CADD Tech	Admin/ Clerical	Total
Engineering Services HNTB - Lake Houston Redevelopment Authority - Northpark East Detention Ponds Project									
TASKS									
	1	Manage Field Activities, Soil Classification, Logs and Summaries	2		4	12			18
	2	Structural Evaluation of Borings / Calc. Shear Strength Models / Soil Profiles		2	4				6
	3	Slope Stability Modeling and Analysis of Proposed Channel and Detention Pond Side Slopes		8	40				48
	4	Construction Recommendations based on Geotechnical Investigation/Analyses		2	4				6
	5	Geotechnical Report (Including Soil Survey/Geog./All Analyses)	4	8	24		2	2	40
	6	Meetings/Coordination/Invoicing/Misc.	2	4	2		2		10
	7	Monitoring of Piezometer (Based on 4 Monitoring Times) - Addendum to Report			2	4		2	8
<b>Labor Hours</b>			<b>8</b>	<b>24</b>	<b>80</b>	<b>16</b>	<b>4</b>	<b>4</b>	<b>136</b>
Contract Rate (per HCFCD Cost Codes)			\$ 235.95	\$ 215.13	\$ 208.19	\$ 100.63	\$ 91.95	\$ 79.81	
<b>Total Labor Costs</b>			<b>\$ 1,887.60</b>	<b>\$ 5,163.12</b>	<b>\$ 16,655.20</b>	<b>\$ 1,610.08</b>	<b>\$ 367.80</b>	<b>\$ 319.24</b>	<b>\$ 26,003.04</b>

Direct Expenses      Geotechnical Field and Laboratory Services      \$ 23,957.00

*Total Direct Expenses \$ 23,957.00*

B2Z Engineering Total Cost

**\$ 49,960.04**



Attachment 2 - Cost Breakdown  
Geotechnical Field and Laboratory Services  
HNTB - Lake Houston Redevelopment Authority - Northpark East Detention Ponds Project

	SERVICES		UNITS	UNITS	UNIT COST	TOTAL COST
I.	<b>ODE</b>					
II.	<b>Utility Clearances / Boring Locates</b>					
III.	<b>Field Exploration</b>					
A	Mobilization/Demobilization					
	1. Mobilization/Demobilization	Each	2	\$ 475.00	\$ 950.00	
B	Field Exploration					
	1a. Soil Boring, Continuous 3-in. (0 to 20')	Feet	120	\$ 38.00	\$ 4,560.00	
	1b. Soil Boring, Intermittent 3-in. (0 to 50')	Feet	60	\$ 38.00	\$ 2,280.00	
	2a. Piezometer Installation	Feet	30	\$ 60.00	\$ 1,800.00	
	3. Vehicle Charge	Hours	80	\$ 12.00	\$ 960.00	
IV.	<b>Engineering Data Analysis / Report</b>					
	1. Moisture Content (ASTM D 2216)	Ea.	72	\$ 12.00	\$ 864.00	
	2. Atterberg Limits (ASTM D 4318)	Ea.	30	\$ 135.00	\$ 4,050.00	
	3. -200 Determination (ASTM D 1140)	Ea.	30	\$ 60.00	\$ 1,800.00	
	4. Sieve Analysis (w/ Hyd) (ASTM D 7928)	Ea.	6	\$ 90.00	\$ 540.00	
	5. Dispersive Char. Crumb (ASTM D 6572)	Ea.	12	\$ 60.00	\$ 720.00	
	6. Double Hydrometer (ASTM D 4221)	Ea.	6	\$ 315.00	\$ 1,890.00	
	7. UC Strength (ASTM D 2166)	Ea.	6	\$ 51.00	\$ 306.00	
	8. UU Triaxial (ASTM D 2850)	Ea.	6	\$ 72.00	\$ 432.00	
	9. CU Triaxial (ASTM D 4767)	Ea.	6	\$ 467.50	\$ 2,805.00	
<b>Project Sub-Total (Geo Field and Lab)</b>						<b>\$ 23,957.00</b>



M2L ASSOCIATES INC.  
8955 Katy Fwy., Suite 300  
Houston, Texas 77024  
Tel: (713) 722 8897  
Fax: (713) 722 8048

Urban Planning  
Urban Design  
Landscape Architecture

January 29, 2026

Joel Salinas, P.E.  
Project Manager  
HNTB Corporation  
1301 Fannin Street  
Suite 2000  
Houston, TX 77002

RE: HNTB2501- North Park Drive Detention Study Landscape Architectural Services Proposal

Dear Joel,

M2L Associates Inc. is pleased to submit the following proposal to provide landscape architectural services for Northpark Detention Study in Kingwood, Texas. This AGREEMENT is made by and between M2L Associates Inc. hereinafter referred to as CONSULTANT, and HNTB Corporation hereinafter referred to as the CLIENT.

The AGREEMENT between the parties consists of the terms and conditions set forth herein. Any changes to this AGREEMENT must be mutually agreed to in writing.

#### **I. SCOPE OF SERVICES**

- A. CONSULTANT shall provide Planning Consultation for the proposed drainage study at the Northpark Dr. Detention Basin .
- B. CONSULTANT shall provide schematic design services, as later described, for the following scope items.
  - 1. Existing Tree Inventory and Analysis, including coordination of preservation measures, mitigation, and transplanting strategies in accordance with applicable ordinances and project requirements. Tree plantings and reforestation zones identifying plant material types, sizes, quantities, and locations, including planting layout, soil amendments, and temporary staking details
  - 3. Soil Preparation, turf, native grass, wetlands, and wildflower Establishment plans, details, and technical specifications.
  - 4. Coordination Assistance with the CLIENT in the layout of site sidewalks and trails to support accessibility, circulation, tree preservation, and integration with landscape.
  - 5. Technical Specifications for landscape, planting, irrigation, site furnishings, and GSI components within the CONSULTANT's Scope of Work.
  - 6. Bid Phase Support, including preparation of bid documents related to the CONSULTANT's Scope of Work and assistance to the CLIENT during the bidding process.
  - 7. Permitting and Agency Coordination Assistance, including support to the CLIENT in submitting landscape-related documentation for regulatory approvals, including TDNR, Montgomery County, City of Houston, and Harris County Flood Control District permitting, as applicable..
  - 8. Upon final approval by CLIENT prepare sketches, 3D Model, and perspective views of preferred option.

C. CONSULTANT shall provide the following project and client related services.

1. Obtain and review all available existing site information (provided by CLIENT) and become familiar with the site's landscape opportunities and constraints
2. Visit and obtain photographic coverage of the project site to get familiar with overall physical site characteristics and the context of the surrounding area.
3. Meet with the CLIENT to discuss the general design approach
4. Prepare estimates of probable construction costs for final plan for CONSULTANT's Scope of Work.
5. Conform to application local regulatory authority as applicable
6. Coordinate with CLIENT'S other consultants.

## II. PROCEDURE

### A. **Phase 1 PRELIMINARY ENGINEERING**

Upon authorization to proceed, the CONSULTANT shall review existing site conditions, available survey data, environmental constraints, and prepare preliminary conceptual drawings prepared by the CLIENT for proposed landscape, trail, and pedestrian improvements. The CONSULTANT's scope shall include evaluation of existing vegetation and tree resources, preliminary tree preservation strategies, and coordination with the CLIENT to maximize retention of significant landscape features while identifying areas requiring mitigation or enhancement.

The CONSULTANT shall collaborate with the CLIENT and project team to develop preliminary landscape and trail layout concepts that integrate site amenities, circulation, and user experience while supporting engineering constraints and regulatory requirements. As part of the Preliminary Engineering phase, the CONSULTANT shall prepare an opinion of probable construction cost for the CONSULTANT's Scope of Work based on conceptual layouts and assumed materials and construction methods.

### B. **Phase 2 FINAL DESIGN**

Upon CLIENT approval of the Preliminary Engineering documents and the associated opinion of probable construction cost, the CONSULTANT shall advance the approved concepts into Final Design. The CONSULTANT shall prepare working drawings, details, and technical sections of specifications necessary to construct the landscape, trail, amenities, tree preservation, and landscape-based storm water infrastructure components of the project.

Final Design documents shall be prepared in accordance with applicable City of Houston and shall reasonably conform to all applicable codes and regulations of governmental authorities having jurisdiction at the time of preparation. The CONSULTANT shall coordinate its services with the CLIENT, and the CLIENT's other consultants to ensure consistency across disciplines and to maintain general conformance with the approved Preliminary Engineering concepts and construction budget. The CONSULTANT shall prepare a final opinion of probable construction cost for the CONSULTANT's Scope of Work based on the completed Final Design documents.

Submittal milestones for the Final Design phase shall include 60%, 90%, and 100% Construction Document submittals for CLIENT and agency review.

### C. **Phase 3 BIDDING**

Upon CLIENT'S approval of the construction drawings and specifications,

CONSULTANT will assist the CLIENT with the bidding process to include contractor clarifications and possible addendum. The CONSULTANT shall attend up to one (1) pre-bid meeting, if requested by the CLIENT. If requested by the CLIENT, the CONSULTANT, will review proposed bid items for the CONSULTANT's Scope of Work.

### III. BILLING AND PAYMENT

The CLIENT will pay CONSULTANT a lump sum Fee as shown below. Fees for Professional Services and Reimbursable Costs shall be submitted to the CLIENT by the CONSULTANT monthly. Refer to Article II of the Professional Services Agreement for additional terms and conditions.

Item	Fee
1. Preliminary Engineering	\$10,500.00
2. Final Design	\$20,500.00
3. Additional Services - 3D Rendering (Selection Option)	\$ 6,500.00
4. <u>Reimbursable Expenses</u>	\$ 500.00
<b>Total Proposed Fee</b>	<b>\$ 38,000.00</b>

### IV. ADDITIONAL SERVICES

The CLIENT shall provide the following information or services as required for the CONSULTANT to perform work. The CONSULTANT assumes no responsibility and shall not be liable for the accuracy of such information or services provided by the CLIENT. The CONSULTANT shall provide the following services with written authorization by the CLIENT. Such services shall be paid for by the CLIENT as additional services. Additional services shall be provided on a time and material basis and shall be billed at CONSULTANT's normal billing rates:

Additional services include but not limited to the following items:

- (1) Topography and boundary surveys.
- (2) Property legal descriptions.
- (3) Existing site engineering and utility base information.
- (4) Soils, geotechnical, structural, electrical or mechanical engineering services.
- (5) Preparation of final Plats.
- (6) Work, not defined in the scope of services, requested and/or authorized by the CLIENT.
- (7) Additional work performed due to lack of performance, default, insolvency, errors and/or omissions by other consultants retained by the CLIENT and due to no fault of the CONSULTANT.
- (8) Work performed due to delays as a result of CLIENT decisions or other project reasons and due to no fault of the CONSULTANT.
- (9) Tree Survey.
- (10) Tree preservation plans and details
- (11) Models, special renderings, promotional photography, special printing, special equipment, special printed reports or publications, maps, and documents requested by the CLIENT that are not already included herein.
- (12) Grading or cut and fill studies for roads and project areas.
- (13) Schematic Design Development, Construction Documents, and Construction Phase Services.
- (14) Meetings and coordination with government agencies to obtain approval on variances requested by the CLIENT.

- (15) 3D Models and Sketches/Renderings, unless specified herein.
- (16) Animation for 3D Models, unless specified herein

## **V. TERMINATION**

This AGREEMENT may be terminated by either party seven (7) days after written notice. In the event of termination, CONSULTANT will be paid for services performed prior to the date of termination.

## **VI. SUCCESSOR AND ASSIGNS**

This Agreement shall be binding upon the CLIENT and the CONSULTANT, and upon both parties' successors and assigns. Neither party shall assign nor transfer its interest in this Agreement or any part thereof without the written consent of the other party.

## **VII. POST CONSTRUCTION MAINTENANCE**

The CONSULTANT shall not be responsible for the means, methods, and techniques of the Contractor and/or Owner/Client during the required maintenance and warranty periods or subsequent years after the completion of the warranty period.

Client acknowledges and agrees that proper Project maintenance is required after the Project is complete. A lack of or improper maintenance may result in damage to property or persons. Client further acknowledges and agrees that, as between the parties to this Agreement, the Owner is solely responsible for the results of any lack of or improper maintenance.

## **VIII. INDEMNIFICATION**

CONSULTANT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS CLIENT FROM AND AGAINST ANY LIABILITIES, DAMAGES, AND COSTS (INCLUDING REASONABLE ATTORNEYS FEES AND COST OF DEFENSE) ARISING OUT OF THE DEATH OR BODILY INJURY TO ANY PERSON OR THE DESTRUCTION OR DAMAGE TO ANY PROPERTY, TO THE EXTENT CAUSED, DURING PERFORMANCE OF SERVICES UNDER THIS AGREEMENT, BY THE NEGLIGENT ACTS, ERRORS AND OMISSIONS OF THE CONSULTANT OR ANYONE FOR WHOM CONSULTANT IS LEGALLY RESPONSIBLE, [SUBJECT TO THE LIMITATIONS SET FORTH IN THE LIMITATION OF LIABILITY ARTICLE OF THIS AGREEMENT].

THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW TO INDEMNIFY AND HOLD HARMLESS THE CONSULTANT, IT OFFICERS, DIRECTORS, PRINCIPALS AND EMPLOYEES, FROM ANY LIABILITIES, DAMAGES, AND COSTS (INCLUDING REASONABLE ATTORNEYS FEES AND COST OF DEFENSE) TO THE EXTENT CAUSED BY THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OR THE CLIENT, CLIENT'S CONTRACTORS, CONSULTANTS OR ANYONE FOR WHOM CLIENT IS LEGALLY RESPONSIBLE.

## **IX. CREDITS AND ACKNOWLEDGMENTS**

The consultant shall be given proper credit and acknowledgments for all services including, but not limited to, planning, design and implementation. proper credit shall be defined as being named by the client or the client's agent/client in such media as project identification boards, published articles or promotional brochures, and interviews and press releases to newspapers, professional journals and other similar publications. the consultant reserves the right to issue press releases, marketing information and utilize public relations services to make public the role of the consultant on projects which have been made "public" by the client.

**X. Professional Practice Jurisdiction**

In the event that the Authority has a complaint and/or grievance against the Consultant's employees during the performance of any of the Services, the Authority shall direct all such complaints to the Texas Board of Architectural Examiners who has jurisdiction over the professional practice of persons registered as landscape architects in Texas. at the Address listed below.

Texas Board of Architectural Examiners  
Architecture/Interior Design/Landscape Architecture  
P O Box 12337  
Austin, TX 78711  
Telephone: 512/305-9000  
Fax: 512/305-8900

**XI. GOVERNING LAW AND SURVIVAL**

The law of the State of Texas will govern the validity interpretation and performance of these TERMS. If any of the provisions contained in the AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of the AGREEMENT for any cause.

The Parties have read the foregoing, understand completely the terms, and willingly enter into this AGREEMENT which will become effective on the date signed by the CLIENT below.

Agreed By and Between:

M2L Associates Inc.

HNTB Corporation

By:  \_\_\_\_\_ By: \_\_\_\_\_

Michael Mauer, ASLA

Name: \_\_\_\_\_

Title: Principal

Title: \_\_\_\_\_

Date: 01/29/2026

Date: \_\_\_\_\_