



*Infrastructure Enhancement and
Traffic Mitigation Program*

Consultant Services Manual



CITY OF BATON ROUGE
PARISH OF EAST BATON ROUGE

Department of Transportation and Drainage

Submitted by

MOVEBR PROGRAM MANAGEMENT TEAM

**Capacity Improvements – CSRS
Community Enhancements – Stantec**

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Revision Control Log

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Contents

Section	Page
Revision Control Log.....	iii
Contents.....	v
1 Introduction.....	1
1.1. Purpose	1
1.2. Project Team Interactions.....	1
1.3. Design Standards and References	2
2 Quality Management.....	3
2.1. Quality Management Goals	3
2.2. Quality Management Plan.....	3
2.3. Review Processes	4
2.4. Computation Notebooks	4
2.5. C-P Responsibility	5
3 Selection for Professional Services	7
3.1. Consultant Selection Processes	7
3.1.1. Direct Solicitation and Appointment	7
3.1.2. C-P Engineers and Surveyors Selection Board.....	7
3.2. MOVEBR Small Business Aspirations.....	8
4 Contract Negotiations.....	11
4.1. Pre-Proposal Meeting	11
4.2. Scope and Fee Negotiations	11
4.3. Fee Proposal.....	12
4.3.1. Overhead Rates.....	14
4.3.2. Profit Rate	14
4.3.3. Markups	14
4.3.4. Fee Proposal Template.....	15
4.4. Contract Execution.....	15
5 Invoicing Requirements	17
5.1. General.....	17
6 Standard Scope of Services.....	18
6.1. General.....	18
6.1.1. Health and Safety	18
6.2. Design Kick-off Meeting.....	19
6.3. Planning, Scheduling, and Project Management.....	19
6.3.1. Project Correspondence	19
6.3.2. Work Planning and Coordination.....	20
6.3.3. Project Schedule and Progress Reports	20
6.4. Project Meetings	22
6.4.1. Design Milestone Meetings	22
6.4.2. Design Coordination Meetings.....	22
6.4.3. Design Progress Meetings.....	22

6.4.4. Public Meetings	23
6.4.5. Other Agency Meetings	23
6.5. Design Services and Milestones	23
6.5.1. Preliminary Engineering Services.....	24
6.5.2. Final Plan Services	27
6.5.3. Other Services	37
6.6. Additional Support Services.....	42
6.6.1. Bid Phase Services.....	42
6.6.2. Construction Phase Services	43
6.6.3. Record Drawings.....	44
6.7. Services to be Performed by C-P and PMT	44
7 Roadway Plan Preparation	46
7.1. General	46
7.1.1. Plan Size	46
7.1.2. Plan Sheet Organization.....	46
7.2. Plan Set Content	46
7.3. Plan Modifications	48

Attachments

- A Design Deliverable Checklists
- B MOVEBR Quality Review Form
- C MOVEBR Fee Proposal Template
& Example Computation of Hourly Rates
- D MOVEBR Invoice Template
- E Sample Project Schedule

1 Introduction

1.1. Purpose

This document outlines the standard processes for selection and contracting of professional services, design process, project delivery, project team interactions. It helps define general expectations for the City of Baton Rouge and Parish of East Baton Rouge (C-P) Department of Transportation and Drainage (DTD), the Program Management Team (PMT), the MOVEBR Technical Committee (MTC), and design consultants (Consultants) procured by the C-P for professional services for following and successfully executing the overall design process for all MOVEBR Program projects.

Information, requirements, check lists, and procedures regarding preparation of various design milestone deliverables and final contract documents are presented herein. This document provides guidance for a consistent yet flexible approach to the design process and outlines the required design standards, including quality control measures for deliverables. These guidelines will provide a common process for the MOVEBR Program Project Manager (P-PM) and Consultants to follow regarding design procedures.

1.2. Project Team Interactions

The C-P has contracted a PMT to assist the DTD in managing and delivering MOVEBR Projects and act as owner representative and advocate for the overall MOVEBR Program. As such, the PMT will be the liaison between the Consultant team, most jurisdictional agencies, third party vendors, the public, contractors, and the C-P/DTD. The PMT will be the DTD representative and point of contact for the Consultant for most project design aspects such as:

- a. Contract Administration
 - i Negotiations
 - ii Scope determination & proposal evaluations
 - iii Pay request reviews
 - iv Project budget monitoring
- b. Monitoring Design Progress

- i Project schedule
 - ii Milestone submittal reviews
 - iii Stage gate approvals
- c. Technical Assistance
 - d. Project Decision Support
 - e. Risk Management/Issue Escalation and Mitigation

Refer to Section 6.3.1 for further description of team interaction requirements.

1.3. Design Standards and References

Designs prepared as part of the MOVEBR Program shall conform to the MOVEBR *Design Guidelines*, and the latest adopted version of all applicable local, state, and federal regulations. Applicable codes and standards and their editions shall be verified at the time of final design work. Design deviations may be incorporated into a project in accordance with Section 1.3 of the MOVEBR Design Guidelines and subject to MTC approval.

Projects that are on state routes and not planned for transfer to the C-P, and for any MOVEBR project that is currently a C-P route but planned for transfer to the LADOTD will generally follow LADOTD Standards and Minimum Design Guidelines. The Consultant will be required to follow the LADOTD design waiver/exception process for design deviations needed on these routes. Approved waivers and exceptions will be incorporated into the Project City-State Agreement and these design modifications shall be coordinated with the Consultant.

2 Quality Management

2.1. Quality Management Goals

The following items represent the minimum quality management goals for the MOVEBR Program:

- a. Projects that are well-coordinated with one another.
- b. Cost-effective design and construction. Cost-effective, sustainable, and resilient operable and maintainable projects that meet the needs of the public users.
- c. Contract compliance.
- d. Performance according to project schedule.
- e. Application of sound engineering in plans and specifications.
- f. Use of consistent processes and procedures.
- g. Public disruption minimized during design and construction. Pro-active communication and notification to public when changes or planned disruption will occur.
- h. Documented information in accordance with Program processes and procedures.
- i. Complete dissemination of information to all project team members.

2.2. Quality Management Plan

A project-specific Quality Management Plan (QMP) shall be submitted with the Consultant's Work Plan, including team assignments and the Consultant's standard quality management procedures. The Consultant shall appoint a Quality Manager for the project. The Consultant's Quality Manager shall:

- a. Be available to the project engineer(s) and project manager for consultations, and discussions as necessary.

- b. Provide technical direction to the project team as necessary.
- c. Review documents prior to submittal to the P-PM and sign the Design Deliverable Checklists (see Attachment A) affirming that the quality review has occurred, the documents meet the Consultant's quality standards, and all required components of the appropriate delivery milestone are included.

2.3. Review Processes

Key design submittals shall be reviewed in accordance with the Consultant's QMP prior to submission to the P-PM. Quality reviews will occur at each design milestone. The Consultant shall:

- a. Submit a letter of transmittal with the design deliverable, stating that the quality review of the submittal has occurred, and the documents meet the submittal requirements.
- b. Design Deliverables Checklists, where applicable, will be signed by the Consultant's PM and the Consultant's Quality Manager, and submitted with the design milestone deliverables.
- c. Design submittals must be uploaded to the MOVEBR Program SharePoint site under the Consultant's relative project folder. Consultant shall notify P-PM of uploaded submittal via email and transmittal letter.
- d. Review and understand PMT and C-P comments, which will be presented on a standard Quality Review Form (QRF) (see Attachment B).
- e. Respond to comments on the standard QRF.
- f. Resolve differences between the author of the document and the reviewer.
- g. Document the decisions made and/or direction given by the P-PM on the project.
- h. Coordinate with the P-PM for MTC Stage Gate reviews (as applicable) and provide supporting documents as necessary.

2.4. Computation Notebooks

Calculations shall be prepared, checked, and reviewed. Calculations shall be made available to the P-PM for informational purposes. Calculations required shall be, but not necessarily limited to, the following:

- a. Earthwork
- b. Geometry checks
- c. Roadside safety items such as guardrail lengths
- d. Drainage
- e. Fill mitigation (as applicable)
- f. Green Infrastructure element calcs
- g. Graphical Grade profiles
- h. Bridge calcs
- i. Other structural item calcs
- j. Roadway Lighting calcs
- k. Traffic movement AutoTurn analysis

Project notebooks shall be kept by the Consultant's project manager and discipline leads. Project notebooks shall contain engineering computations, engineering assumptions and directions, pertinent correspondence, and completed checklists with review comments. Although intermediate milestone submittals may require computations, assumptions, correspondence, etc., all of these shall be recompiled into one bound Computation Notebook and resubmitted at 100% Final Plan deliverable. These project notebooks are part of the project documents and shall be archived by the P-PM at the end of the project.

2.5. C-P Responsibility

The C-P, through its representative PMT, will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of Contract Documents. The C-P technical reviews are for high-level conformance and are not meant to be comprehensive reviews. The Consultant shall be fully responsible for all work performed and work products developed under their relative scope of services.

The C-P may augment the work by soliciting certain services under separate agreements with other firms. The C-P will request that the Consultant coordinate with the PMT and those firms to provide for a complete and successful project design

package. These services will be determined at the Pre-Proposal Meeting and may be added as necessary after NTP on an as-needed basis.

3 Selection for Professional Services

3.1. Consultant Selection Processes

A P-PM will be assigned by the PMT to each design project. The P-PM will develop the high-level design scope of work and estimated design cost for use in the selection of professional design and support services. Based on the type of project and estimated design fee, the C-P will select a Consultant through one of two processes, DTD direct solicitation and appointment or public solicitation and selection by the C-P Engineer's and Surveyor's Selection Board.

3.1.1. Direct Solicitation and Appointment

For projects or tasks with anticipated design fees less than \$150,000, a Design Consultant may be directly solicited and selected for each project or task through the direct appointment of the Director of Transportation and Drainage.

Consulting firms interested in doing work for the C-P are encouraged to submit their interest and company information through the MOVEBR website (<https://movebr.brla.gov/page/professional-services>). Company names and information will be collected and maintained in a database listing for future project selections. The PMT will negotiate the contract terms with the Consultant on behalf of the C-P.

3.1.2. C-P Engineers and Surveyors Selection Board

For larger projects with anticipated design fees \$150,000 and greater, a Design Consultant (Engineer) will be publicly solicited and selected for each project through the C-P Engineer's and Surveyor's Selection Board in accordance with Ordinance 8931. The P-PM will negotiate the contract terms with the Engineer on behalf of the C-P.

The C-P will publicly advertise Request for Qualifications (RFQs) for MOVEBR projects through the official journal of the Parish (The Advocate newspaper) and through the Baton Rouge Projects website (<https://rfqmanager.brprojects.com>). Interested engineering firms shall register through the web-based RFQ manager. The RFQ package will include a preliminary scope of work to assist the Consultants in selecting the appropriate teaming arrangement, sub-consultants and specialty sub-consultants.

3.2. MOVEBR Small Business Aspirations

The C-P is committed to ensuring that small, disadvantaged, minority, veteran and women-owned businesses are not precluded from competing for, proposing on, or bidding on advertised professional service and construction related opportunities planned by the MOVEBR Program. To support this commitment, the PMT provides for Small Business Outreach (SBO) to create, implement and monitor a plan to increase and maximize contracting and procurement opportunities for small businesses enterprises, including Certified and Noncertified DBE firms, throughout the entire MOVEBR program. This small business outreach effort is primarily targeted at the local level, which are those businesses in East Baton Rouge Parish who aspire to do business or continue doing business with the C-P.

While no mandatory or specific participation goal has been formally adopted for C-P contracts, Consultants are strongly encouraged to utilize local small business enterprises, including Certified and Noncertified DBE firms participation in all C-P contracts to the extent possible.

To assist larger design firms in identifying small, disadvantaged, minority, veteran and women-owned businesses as potential teaming partners, the PMT has created a database of firms and their corresponding services offered. This database is available on the MOVEBR website at <https://movebr.brla.gov/page/direct-appointment-candidates>. These firms have self-certified under one or more of the categories as defined below:

- a. **Minority Business Enterprise (MBE)** – means a business which is at least fifty-one percent (51%) owned by African Americans, American Indians, Asians, Filipinos, and/or Latinos and whose management and daily operation is controlled by one or more members of the identified ethnic groups.
- b. **Women Business Enterprise (WBE)** – means a business which is at least fifty-one percent (51%) owned by one or more women and whose management and daily operation is controlled by the qualifying parties.
- c. **Veteran Owned Business (VOB)** – means a business which is at least fifty-one percent (51%) owned by one or more Veterans and whose management and daily operation is controlled by the qualifying parties.
- d. **Local** – means a business that has a permanent address within the Parish of East Baton Rouge for a period of at least 12 months prior to the date of the contract. Temporary construction offices or Post office boxes do not constitute a business location under this definition.

- e. **State** - means a business that has a permanent address within the State of Louisiana for a period of at least 12 months prior to the date of the contract. Temporary construction offices or Post office boxes do not constitute a business location under this definition.

In addition to the database MOVEBR has launched a video library as a resource to meet small businesses for teaming opportunities. Several small, disadvantaged, minority, veteran and women-owned companies have recorded brief introductory messages introducing and describing their businesses. This small business video library is available at <https://movebr.brla.gov/page/small-business-video-library>

4 Contract Negotiations

4.1. Pre-Proposal Meeting

A pre-proposal meeting will be held between the PMT and the Consultant. DTD representatives will be invited to attend at their discretion. At the pre-proposal meeting, the Consultant will be provided a Project Concept Report, Sample Contract for Engineering Services, and Standard Scope of Engineering Services. As part of the pre-proposal meeting, a site visit may also be made to familiarize the project team with the project site and to review the project scope.

Primary information included in the Concept Report will include:

- a. Detailed project description, layout sketches, limits, and boundaries
- b. Design criteria and requirements
- c. Special design, coordination or construction requirements
- d. Type of construction contract preferred (e.g., lump sum, unit price)

4.2. Scope and Fee Negotiations

To evaluate the reasonableness of the proposed fee and facilitate progress payments, it is required that proposals be written in such a manner that provide adequate cost breakdown details. The Consultant shall provide a drawing/task list at each design phase along with the associated man-hours. The Consultant shall at this time also prepare a high-level schedule for each design phase to aid in determination of contract time and ensure consistency with Program schedules. The fee shall be submitted in the MOVEBR Fee Proposal Template to be provided by the P-PM at the pre-proposal meeting. Any changes (additions, removal, or variations) in the Standard Scope of Services, as described in Section 6, resulting from specific project requirements and/or the fee negotiations shall be clearly documented in the Project Specific Scope and Fee Proposal.

Included in the Project Specific Scope, the Consultant shall prepare a detailed list of assumptions that were used to develop the fee proposal.

Once the Consultant has submitted the fee proposal, the C-P and the PMT will review the proposal to ascertain the following:

- a. Compliance with the requested scope of work, completeness, and understanding.
- b. Clarification of ambiguity in the draft proposal especially related to deliverables at each phase of the work.
- c. Consistency with the proposed schedule or milestones.
- d. The fee proposal is fair and within the normal range for work of this type and within the funds set aside in the Program Budget.

Contract negotiations will proceed as follows:

- a. Following review of the initial fee proposal, a negotiation meeting between the Consultant and the P-PM will be held.
- b. The Consultant will re-submit their fee proposal based on comments received.
- c. The P-PM and C-P will review the revised fee proposal, and a second negotiation meeting will be held (if necessary).
- d. The Consultant will submit a final fee proposal.
- e. The P-PM will send the final fee proposal to the C-P with or without endorsement.

If satisfactory negotiations do not result, the top-rated consulting firm shall be notified in writing that a contract cannot be reached, and the C-P/PMT will proceed to negotiate with the second rated consulting firm as identified by the original selection process. If an acceptable contract cannot be reached with the second consulting firm, they too, will be notified of such in writing and the C-P/PMT will proceed to negotiate with the third consulting firm. If an acceptable contract cannot be reached with any of the top three firms, the project will be re-evaluated and re-advertised. In all cases, once contract negotiations have been terminated with a firm and begun with another, they will not be reopened with the former firm or firms. The negotiated fee and contract agreement are subject to Metropolitan (Metro) Council final review and authorization of the Mayor-President to execute the contract for engineering services for this project.

4.3. Fee Proposal

Professional service contracts will generally be structured as lump sum fees. These contracts depend upon having a detailed scope of services and a clearly defined final product that has been broken down into identified phases of work. Exceptions to this may be associated with tasks such as bidding support services and

construction/inspection support services which will be hourly time and material fees. The Consultant's compensation would be based upon an estimate of:

- a. Total work hours per job classification/salary class
- b. Sum of all work hours per job classification/salary class
- c. Audited overhead business expense factor
- d. Applied Profit factor
- e. Plus, the addition of the sum of estimated direct expenses

In preparation of the proposal, the Consultant should note the following instructions:

- a. The proposal will contain a recap of the proposed fees by phase or task as well as a proposed time limit for each phase or task.
- b. Caution should be exercised to make certain that work does not overlap between line items and/or between prime and subconsultant tasks.
- c. Proposed personnel/classification and associated pay rates must be commensurate with work/tasks to be performed. For example, if a principal anticipates charging time to the project at a principal's rate, this item must be included as "Principal's time" and be extended with the other salaries. If the principal works at any other classification, these man hours will be included with that classification.
- d. All lump sum proposals shall be supported by schedules which show in detail how the hourly rates are derived (See example in Attachment C). Consultant shall retain this schedule in case in case of audit by the C-P or requested to submit with proposal. If it is not known which employees will be utilized in the project, then all employees within a particular classification should be given equal weight in calculating the rate.
- e. In preparation of the proposal, Consultant is cautioned not to estimate the cost of the project and use a curve to determine a fee and after which adjust manhours and profit to fit.
- f. The Consultant, by submitting a proposal, acknowledges he or she has read the entire sample contract and is familiar with the requirements.

4.3.1. Overhead Rates

The DTD will generally accept all reasonable firm overhead rates if the Consultant provides justification in the form of a LADOTD audited or Certified Public Accountant audited overhead rate determination letter. The overhead rate will be applied to the labor costs. The Consultant must submit overhead audit letters for themselves and all subconsultants included in the fee calculations.

4.3.2. Profit Rate

The maximum profit percentage allowed by DTD is 15% for general engineering/related services and 12% for construction support/inspection and other field services. Profit may be adjusted based on the overhead factor. The overhead factor used in the lump sum fee profit computation is based upon the comparison of the firm's justified overhead rate to the statewide average overhead. The overhead factor is C^2 , where C is the ratio of statewide average overhead to contract overhead, up to a maximum value of 1.00.

This policy is similar to the LADOTD's profit adjustment factor, except it is only applied when a firm's overhead rate is higher than the current LADOTD statewide average overhead rate by a predetermined amount. At the time of this publication (2020), the statewide average general overhead rate is 156.16% and field overhead rate is 111.75%. DTD's determined profit adjustment trigger value is:

- General overhead rate of 176% or greater
- Field overhead rate of 132% or greater

This value will be reviewed and updated on an annual basis when the statewide average is published by LADOTD.

Example:

Prime's OH factor is 194.75%. This is greater than 176.00%, therefore the profit adjustment shall be implemented.

The adjustment factor, C^2 , is $(156.16/194.75)^2 = 0.6429$. Therefore, the profit rate should be adjusted to $15\% \times C^2 = 9.64\%$.

4.3.3. Markups

DTD allows the Consultant a 10% markup on all subconsultants' fees to cover any risk, coordination, management, and administrative costs related to the subconsultants' work. No markup is allowed on direct expenses.

4.3.4. Fee Proposal Template

A standardized fee template was developed to aid the Consultant in preparing the fee estimate, provide a consistent format for the PMT to review, and automation of certain redundant information. The template is a MS Excel® spreadsheet that includes individual tabs for the varying tasks involved in the design effort. These tasks follow along with both the MOVEBR Design Guidelines and this Consultant Services Manual. These tasks will roll up to three main phases of work:

- a. Preliminary Engineering Services
- b. Final Plan Services
- c. Other Services

The standardized invoice template, described in Chapter 5, will utilize the same tasks titles for invoicing purposes. The tasks provided in the fee template are not a substitute for a well-documented scope document to accompany the fee proposal. All links and formulas contained in the template spreadsheet are included for convenience only, the Consultant is responsible to ensure all information is accurate prior to submittal to the P-PM. The Consultant shall strictly follow the instructions in the provided fee template and shall not modify any formulas without coordination and approval of the P-PM.

4.4. Contract Execution

There are two main procedures for processing design service contracts based on the size of the fee. Contracts for \$50,000 or greater (cumulatively) must receive authorization from the Metropolitan Council (Metro Council) for the Mayor-President to enter into the agreement, and the Mayor must sign if granted authorization from the Metro Council. This process is somewhat time consuming since it must be placed on a Metro Council agenda to be introduced at one meeting and then be heard for public comment at a second meeting, generally two weeks later.

Contracts less than \$50,000 do not require authorization from the Metro Council and can be signed by the Purchasing Director rather than the Mayor-President.

Once a scope and fee have been agreed to, a services agreement will be drafted and forwarded to the consulting firm for review of terms and partial execution. Upon agreement to the terms, the Consultant shall sign the agreement and return partially executed agreement to the P-PM along with:

- a. a signed and notarized Affidavit,
- b. corporate authorization granting representative authorization to sign on behalf of the corporation (corporate resolution), and

- c. certificates of insurance (see example contract for insurance requirements).

If the Consultant has not previously registered with the C-P Purchasing Department's Vendor Self Service (VSS) portal, they should do so prior to submitting the partially executed contract. More information regarding VSS can be found at the following website: <https://www.brla.gov/437/Vendor-Information>.

Upon receiving a fully executed contract from the C-P, the P-PM will contact the Consultant to discuss and agree on a date to issue the formal Notice to Proceed (NTP). Once the date is agreed to a NTP will be drafted and forwarded along with a copy of the fully executed contract to the Consultant. The P-PM will then follow up with the Consultant on scheduling a date for the Design Kickoff meeting.

5 Invoicing Requirements

5.1. General

The Consultant shall prepare and submit monthly invoices for services completed in accordance with the executed contract. A monthly invoice is required for each project under an active contract even if the amount is \$0.00. A standardized invoice template was developed to aid the Consultant in preparing the monthly invoices. This template will be provided to the Consultant by the P-PM for each project. The invoice will be accompanied by backup documentation described below.

As explained in Section 3.2, to assist the C-P in its efforts to track the small minority and local business participation on its professional services contracts, the Consultant will include a "Contract Activity Report" with each monthly invoice. This report is included in the invoice template. Engineer shall complete and submit a Contract Activity Report as an attachment to each monthly invoice.

A progress report and updated schedule shall be submitted to the P-PM along with each monthly invoice. The progress report shall be in a format and arrangement approved by the P-PM; it should show actual progress in comparison to the original project schedule and summarize major tasks completed since the last report. A progress report template is included in the invoice template file. Any invoice that does not include the required backup documentation will be rejected for resubmittal. Consultant shall not invoice more than 90% of a specific milestone until the corresponding deliverable has been reviewed by the PMT, all review comments have been discussed, resolved, documented, and approval to begin the next milestone phase has been authorized.

Each invoice must reconcile with the previous invoice. Therefore, subsequent invoices will not be processed until the previous invoice is deemed correct. The invoice template file should be kept on the MOVEBR SharePoint project folder, checked out to modify monthly, and checked back in once complete. The Cover Letter, Invoice, Contract Reporting, and Progress Report tabs should be printed in PDF format and posted to the SharePoint site with notification to your P-PM for your monthly invoice. **To assure prompt review and payment Consultants should not send invoices (or even a copy) directly to the DTD or Department of Finance.** This will only cause confusion and delay payment.

Payments to the Consultant on undisputed amounts for services invoiced by the Consultant shall be paid in accordance with the contract.

For projects along state routes, the invoice template should match the standard LADOTD invoice template and formatting. The MOVEBR Contract Activity Report information will be added to the LADOTD standard invoice along with the progress report and updated schedule.

6 Standard Scope of Services

6.1. General

The Consultant shall provide engineering services for the C-P, as described by the specific scope of services required for each project. Projects along state routes will have to follow the standard scope of services for LADOTD requirements and submittals. The following section provides a general scope of services that will be required for most MOVEBR Program projects.

The Consultant shall perform all design activities under the supervision of the PMT in accordance with the following standards and criteria:

- a. MOVEBR Consultant Services Manual
- b. MOVEBR Design Guidelines
- c. MOVEBR CAD Templates
- d. MOVEBR Right of Way Map Checklist
- e. MOVEBR Design Deliverables Checklists (Note that the checklists contain the minimum requirements for each submittal and the Consultant shall submit information in addition to the items included in the checklists as requested by the P-PM)
- f. C-P Standard Specifications and Standard Details (SS&D)

The PMT shall furnish the Consultant electronic copies of the title sheet template, plan sheet border template, and standard details for consistency in plan preparation. Ownership of the drawing templates and details is transferred to the Consultant upon receipt. Professional responsibility as Engineer of Record (EOR) for the Contract Documents belongs to those individuals who apply their seals to the Contract Documents. The PMT may issue additional details during the project. The Consultant shall be responsible for the preparation of project-specific details and specifications and verifying the appropriateness of the standard specifications and details provided by the PMT or C-P.

6.1.1. Health and Safety

The Consultant is solely responsible for the health and safety of its employees and subconsultants.

6.2. Design Kick-off Meeting

The Consultant shall attend a kick-off meeting scheduled by the P-PM to identify key personnel, define responsibilities and discuss procedures, standards, schedules, and program guidelines to be followed for:

- a. Development of the preliminary engineering Design Study
- b. Review of existing project site and/or community context specific issues
- c. Review of project-specific technical issues
- d. Review of project-specific land acquisition, permitting and utility conflict issues, and permit application requirements
- e. Discussion of alternative solutions to be evaluated

The Consultant shall prepare the agenda, a draft memorandum of decisions and action items resulting from the meeting and distribute to all meeting participants within one week after the meeting. Comments from meeting participants will be addressed in a final record memorandum and distributed to all meeting participants within two weeks after the draft memorandum submittal.

6.3. Planning, Scheduling, and Project Management

The Consultant shall provide project management and coordination activities during all phases of the Project. Specific requirements are as detailed below.

6.3.1. Project Correspondence

The Consultant shall reference the C-P project title and C-P project number on all correspondence and submittals. All project correspondence shall be addressed and transmitted to the P-PM for proper tracking and distribution to the C-P.

The Consultant shall communicate with the P-PM through a single point of contact identified as the Consultant's Project Manager (PM). The P-PM will in turn communicate with the C-P and communications to the Consultant shall be addressed through the PM. Prior to the start of each project the name and address of the point of contact for each party for that project shall be established.

6.3.2. Work Planning and Coordination

The Consultant shall provide the following project management activities:

- a. Establish a Project Work Plan for the preliminary engineering Design Study, final design, and bidding of the project.
 - i. Submit the Work Plan to the P-PM for review within 30 days of the Notice to Proceed (NTP) and prior to submission of the Consultant's first invoice. No payments will be made to the Consultant until the Work Plan is reviewed and accepted by the P-PM.
 - ii. The project Work Plan shall include project organization/staffing chart, project schedule, Minority/Disadvantaged business participation, QMP, health and safety considerations, change management, and other project management requirements. The Project Work Plan shall include the proposed project schedule which shall show the proposed dates for design milestones as outlined in the Contract. The project Work Plan shall be kept up-to-date, and changes to the Work Plan shall be submitted to P-PM with the monthly invoice.
- b. Plan and monitor project fee budgets and delivery schedules.
- c. Monitor quality and conformance to the MOVEBR Design Guidelines.
- d. Coordinate with third-party consulting firms under contract with the C-P to perform services related to and in support of the Consultant's project.
- e. Coordinate the design with other ongoing infrastructure work including State project, other MOVEBR Program projects, and other C-P projects such as road rehabilitation or wastewater projects.
- f. Maintain project documents.
- g. Notify the P-PM immediately if the Consultant believes that action required by directions, clarifications, or other communication from the DTD and/or PMT will cause the Consultant to deviate from the Scope of Engineering Services, fees, or schedule agreed to herein.

6.3.3. Project Schedule and Progress Reports

The Consultant shall prepare and submit a detailed project schedule and submit it to the P-PM for comment and approval in a mutually agreed upon format (see example in Appendix E). The schedule shall show dates for:

- a. NTP for phase of work
- b. Design meetings including milestone, coordination and progress meetings
- c. Design milestones
- d. PMT/DTD review and MTC Stage Gate approvals
- e. Permit application submittals and approvals
- f. Bid advertisement (Construction letting)

The project schedule shall be kept up-to-date, and changes shall be submitted to the P-PM with the monthly progress report and invoice.

Progress reports shall include:

- a. The current status and percent complete of each activity noted in the Contract including work by subconsultants
- b. Activities and deliverables completed in the current reporting month
- c. Activities and deliverables planned for next month
- d. Any anticipated variances from the project schedule
- e. Any ROW related issues/concerns
- f. Any utility related issues/concerns
- g. Any agency coordination needs or issues of concern
- h. Any other risks/issues of concern

Progress reports will be used by the P-PM to determine percent complete of work by the Consultant as a basis for payment. Therefore, they shall include adequate detail for the P-PM to confirm that the invoice amount is commensurate with the work completed. Any variances from the project schedule identified in the progress reports shall be addressed in writing by the Consultant, noting a recovery schedule plan, additional staffing needs, or proposed schedule modifications.

6.4. Project Meetings

Project meeting type and frequency with the DTD and PMT shall be as outlined below. The Consultant will be responsible for preparing and delivering a record memorandum of decisions and action items to the meeting attendees within three days after each progress meeting. Comments from meeting participants will be addressed in a final record memorandum and distributed to all meeting participants within one week after the draft memorandum submittal.

The Consultant shall notify the P-PM immediately if the Consultant believes that action required by directions, clarifications or other communications from the DTD and/or PMT will cause the Consultant to deviate from the Scope of Engineering Services, fees, or schedule agreed to herein.

6.4.1. Design Milestone Meetings

Following a typical two-week review period by the DTD and PMT of the Design Study, 30, 50 (if applicable), 60, and 90 percent deliverables, design milestone meetings may be held, if necessary, between the Consultant, DTD, and PMT to discuss the design packages and receive and resolve comments. If a design milestone meeting is necessary, it will take the place of the next scheduled Design Progress Meeting (see below). Within one week after a milestone meeting, the Consultant will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.

6.4.2. Design Coordination Meetings

Consultant shall participate in coordination meetings as necessary with the DTD, PMT, and possibly other jurisdictional agencies to discuss and coordinate technical elements of the design and scope of services, design criteria, design alternatives, site issues and other relevant topics.

6.4.3. Design Progress Meetings

Review of the project will also occur with the DTD and PMT during the course of design in bi-weekly progress meetings. The Consultant will prepare an agenda and submit it to the P-PM prior to each meeting. The following items, at a minimum, shall be discussed at each bi-weekly meeting:

- a. Anticipated variances from the project schedule, reasons for variance and recovery schedule plan
- b. Anticipated variance from the Scope of Engineering Services and reasons for variance
- c. Status of land acquisition activities as performed by the PMT

- d. Status of necessary permit applications and approvals
- e. Status of coordination with utilities

Within one week after each meeting, the Consultant will prepare and deliver a record memorandum of decisions and action items to the meeting attendees.

6.4.4. Public Meetings

The Consultant may be expected to attend public meeting(s), assist with meeting setup and take down. If attending, the Consultant will attend the meetings with an appropriate number of personnel to assist the C-P and PMT.

The Consultant will prepare the necessary materials for use in public meetings. Prepare exhibits for the meeting, appropriate to the meeting format, and generally providing the following information:

- a. Project's purpose, needs, goals, and any local urban planning
- b. Project alternatives and major design features
- c. ROW acquisition process
- d. The established procedures for receiving written and oral statements

The Consultant may also be asked to prepare a summary of the public meeting that includes all copies of all materials shown or provided at the public meeting. The summary should also include a listing of all written comments made during or after the meeting and responses to those written comments. In general, most projects will have two public meetings; one meeting during the Design Study phase and the final meeting prior to construction.

6.4.5. Other Agency Meetings

In addition to scheduled public meetings the Consultant may be required to participate in meetings with local, state, federal governing authorities. The Consultant's participation may include, but not be limited to, presentations during the meeting, note taking, and summarizing the meeting in a memo to the file.

6.5. Design Services and Milestones

The applicable design services and milestones are listed in the "Compensation and Payment" section of the Contract, and the designation of fees associated with each design milestone shall serve as the basis for invoicing by the Consultant. A description of

the activities and required deliverables associated with each design milestone is included herein. All work is to be performed based on the specific Project Scope and as directed by the DTD and PMT.

No design milestone phase is considered complete until all previous review comments have been discussed, resolved, documented, and approval to begin the next milestone phase has been authorized by the PMT or DTD. This does not necessarily mean comments have to be incorporated into the deliverable and resubmitted prior to moving toward next milestone, unless such comments are deemed by the PMT or DTD to affect completeness of the milestone. In general comments are incorporated into the next design milestone submittal.

6.5.1. Preliminary Engineering Services

6.5.1.1. Design Study

Under the Preliminary Engineering Phase, the Consultant shall prepare a Design Study. The purpose of the Design Study is to provide a conceptual design, quantify the right-of-way (ROW) requirements, and establish a preliminary construction cost estimate for the project. For some projects (Corridor Enhancement Projects) the Design Study phase will include development and evaluation of several design alternative concepts with input from public meetings, C-P, and PMT. It also includes the results of environmental, geotechnical, traffic studies and other considerations to determine the most feasible project design.

In addition to the Design Study, the MOVEBR Project Design Report (PDR) as described in the *MOVEBR Design Guidelines* will be prepared and finalized during the Preliminary Engineering Phase. The PDR will document selection and approval of design criteria values and design element implementation decisions for the project. As dictated in the Design Guidelines, the Preliminary PDR will be prepared and submitted as an intermediate (30%) submittal during the Preliminary Engineering Phase. The Final PDR will be submitted with the final Design Study deliverable.

The Design Study shall be prepared in an 11" x 17" format and at a minimum include the following parts:

Cover Sheet - A cover sheet that includes the project title, project number, date, design speed, roadway context and functional classification, and layout map showing the location and limits of the proposed project.

Narrative - A narrative section containing the following:

- a. Project Description
- b. Listing of the Existing Data

- c. Summary of the Traffic Design Report
- d. Summary of the Environmental Studies
- e. Typical Section and Roadway Alignment Description
- f. Preliminary Drainage Analysis (including potential stormwater mitigation opportunities and fill mitigation requirements).
- g. Pond Siting Analysis– If a stormwater detention pond is determined to be appropriate, a Pond Siting Analysis shall be required as part of the Design Study submittal. Consultant shall evaluate pond sites using a preliminary hydrologic analysis.
- h. Bridge Type, Size and Location
- i. Bridge preliminary hydraulic study and scour analysis
- j. Preliminary Opinion of Probable Construction Cost

Earthwork Model - The typical section template shall be applied to the existing digital terrain model, based on LIDAR data, to determine the proposed roadway surface and approximate limits of construction.

Figures and Exhibits -

- a. Typical Section(s) – The proposed preliminary typical section(s) and a template created for the earthwork model.
- b. Project Layout – Layout sheet(s) showing the overall plan-profile sheet sequence (mainline and crossroads).
- c. Plan and Profile Sheets – Plan and profile sheets shall be provided on aerial background at a scale of 1"=20' (unless otherwise approved) on 22"x 34" sheet size. Drawings are to be prepared so they are readable at 50% reduction (11X17" sheet size). The plan and profile sheets shall include the following information.
 - i Any existing topographic features that may have been surveyed under preliminary limited scope up to this point
 - ii Name of roadway and intersecting roadways
 - iii Roadway and median dimensions

- iv Median openings
 - v Transition locations and lengths
 - vi Horizontal alignment and curve data (including stationing)
 - vii Approximate limits of construction
 - viii Apparent Existing R/W and preliminary required R/W
 - ix Existing ground line (from LIDAR data)
 - x Profile grade line and vertical curve data
 - xi Design flood stage with design frequency
 - xii Proposed bridge limits
- d. Existing Drainage Map – The existing drainage map shall include the drainage boundaries, drainage area sizes, direction of flow, and the sizes of existing drainage structures if available.
- e. Green Infrastructure Planning Level Analysis (refer to Design Guidelines for requirements)

Deliverables:

- a. Electronic copy of the Preliminary PDR in pdf format submitted separately at approximately 30% Design Study progress
- b. Electronic copy of the Design Study in pdf format
- c. Electronic copy of the Final PDR in pdf format

6.5.1.2. Preliminary Environmental Studies

Environmental review needs will be determined on a project by project basis but could include the following as outlined in the *MOVEBR Design Guidelines*:

- a. Wetland delineation and permitting
- b. Phase I Environmental Site Assessment (ESA)

Required studies will be addressed in the Pre-proposal meeting. In most cases all projects will require a draft Phase I ESA Report and wetland delineation report. The Phase I ESA shall follow the procedures described in the *MOVEBR Design Guidelines*. These may be acquired through third party contracted services and provided to the PMT and Consultant by the C-P. Reports shall be submitted in PDF format.

The PMT will review the Draft Environmental Studies (as required) and provide comments subject to resolution by the Consultant. Resolution of the comments shall be incorporated in the Final Environmental Study or Report.

Should recognized environmental condition(s) be identified during the Phase I ESA, the Consultant shall prepare and submit to the P-PM a Technical Memorandum and cost proposal noting specifics of the identification of the recognized environmental condition(s) and including recommendations that a Phase II ESA be performed.

6.5.1.3. Corridor Survey

Control surveys and topographic surveys shall comply with the *MOVEBR Design Guidelines*, and DOTD's Location and Survey Manual and shall include all topographic information and the location of all surface features necessary for the detailed design of the project. This work shall include, for the control of field survey and later use, the establishment of reference points along the project to define the proposed alignment and of a reference system of benchmarks. The Surveyor shall make sufficient field ties to existing property corners to approximate the location of existing ROW and servitudes. The Consultant shall coordinate with LA One Call and all utility services to identify and mark all utilities that may be affected by construction. Specific submittal requirements and deliverables for field survey are described in the *MOVEBR Design Guidelines*.

6.5.2. Final Plan Services

6.5.2.1. 30% Final Design

Prior to or performed concurrently with the 30% final design phase, the Consultant shall coordinate with the P-PM to finalize the topographic survey and geotechnical investigation as it relates to the approved project alternative and the Green Infrastructure design.

The Consultant shall prepare and submit for review 30% final design drawings in electronic pdf format as outlined below. The submittal shall be prepared in accordance with the *MOVEBR Design Guidelines*, Final PDR, and the Project Scope, and shall also include incorporated comments from the Design Study review. The Consultant shall review the conceptual Green Infrastructure opportunity areas identified in the design study/planning phase and modify the designs, as needed, based on the topographic survey and geotechnical investigation.

The 30% final design submittal shall consist of, as applicable, the following items:

30% Design Deliverable Checklist (signed by Consultant PM and QA Manager)

Road Design:

- a. Title Sheet
- b. Typical Section(s)
- c. Plan and Profile Sheets
 - i All previously required information as shown in the Design Study but updated to include the items below:
 - 1 Any station equation notes
 - 2 All TBMs and reference points
 - 3 All existing topographic features and callouts
 - 4 Symbolology legend
 - 5 Utility locations and notes (include LA One Call tickets with submittal)
- d. Geometric layout
- e. Existing Drainage Map (completed)
- f. Preliminary cross-sections and required ROW
- g. Potential utility conflicts and utility relocations that may be necessary

Bridge Design

- a. General Bridge Notes
- b. General plan
- c. Foundation Layout (if necessary)
- d. Deep borings locations

- e. Typical bridge sections

A design milestone meeting may be held, if determined needed, and within one week after the milestone meeting, the Consultant will prepare and deliver a record memorandum of decisions and list of action items to the meeting attendees. The Consultant shall provide responses to comments in Excel format at this time.

Deliverables:

- a. Electronic copy of 30% design drawings in pdf format
- b. 30% Final Opinion of Probable Construction Cost
- c. Specific items listed on the 30% design checklist
- d. Electronic scanned copy of completed and signed 30% design checklists in pdf format
- e. CAD design files (AutoCad .dwg or MicroStation .dgn files)

6.5.2.2. 50% Hydraulic Submittal

If directed, the Consultant shall prepare and submit for review 50% hydraulic design drawings, computations, and analysis as outlined below. Otherwise, the information described for the 50% Hydraulic Submittal will be included with the 60% Final Design submittal.

The 50% submittal shall be prepared in accordance with the MOVEBR Design Guidelines, Final PDR, and the Project Scope, and shall also include incorporated comments from the 30% final design review. The Consultant shall review the conceptual Green Infrastructure opportunity areas identified in the design study/planning phase and modify the designs, as needed, based on the topographic survey and geotechnical investigation.

The 50% hydraulic design submittal shall consist of, as applicable, the following items:

50% Design Deliverable Checklist (signed by Consultant PM and QA Manager)

Road Design (applicable to drainage design):

- a. Title Sheet
- b. Plan and Profile Sheets

- i All previously required information
 - ii Major drainage structures in plan and profile views, unless Drainage Plan and Profile Sheets are provided.
 - iii Roadside ditches
- c. Drainage Plan and Profile Sheets (when required for subsurface drainage)
 - i All required information from plan and profile sheets
 - ii All drainage structures (catch basins, inlets, and pipes/boxes) shown and labeled with structure number, station, type, inverts, and size
 - iii Roadside ditches
 - iv Utility locations
- d. Existing Drainage Map (completed)
- e. Design Drainage Map (completed)
- f. Utility Space Allocation Plan

Hydrologic and Hydraulic Analysis & Computation Notebook

- a. Document hydrologic design based on requirements described in the *MOVEBR Design Guidelines*.
- b. Cross drain design - Analyze and document the hydraulic design and performance of proposed cross drains, including outfall tailwater conditions. If existing cross drains are proposed to remain, check existing cross drains to determine if they are structurally sound and have adequate hydraulic capacity for the proposed conditions.
- c. Roadside ditch analysis (if applicable) - Design roadway conveyance and outfall ditches. Include capacity calculations, longitudinal grade adjustments, flow changes, additional adjustments for ditch convergences, selection of suitable channel lining (if required), and design of side drain pipes.
- d. Subsurface drainage system (if applicable) - Analyze and document the hydraulic design of the subsurface piping system and inlet spacing calculations. Include analysis of selected inlet capacity. Document computation of outfall tailwater conditions for subsurface system starting water surface.

- e. Stormwater Detention Facility (if applicable) - Design stormwater management facilities to provide stormwater mitigation and aesthetics. Develop proposed pond layout (contributing drainage basin, shape, contours, slopes, volumes, tie-ins, aesthetics, etc.), perform routing analysis, and design the outlet control structure.
- f. Design of Floodplain Mitigation (if applicable) - Determine floodplain encroachments, coordinate with regulatory agencies, and develop proposed compensation area layout (shape, contours, slopes, volumes, etc.).

Green Infrastructure

- a. Green Infrastructure Site Plan
- b. Green Infrastructure coordinated on Utility Space Allocation Plan and Design Drainage Map
- c. Design calculations including drainage area, system footprint, loading ratio, storage volume, and storm size managed
- d. Schematic-level estimate of construction costs for the Green Infrastructure practice and associated site work

Utility Coordination

- a. Utility Space Allocation Plan
- b. Utility Conflict Matrix

A design milestone meeting will be held, and within one week after the milestone meeting, the Consultant will prepare and deliver a record memorandum of decisions and list of action items to the meeting attendees. The Consultant shall provide responses to comments in Excel format at this time.

Deliverables:

- a. Electronic copy of 50% design drawings in pdf format
- b. Electronic scanned copy of completed and signed 50% design checklists in pdf format
- c. Specific items listed on the 50% design checklist

- d. Electronic copy of Hydrologic and Hydraulic Analysis & Computation Notebook in pdf format
- e. CAD design files (AutoCad .dwg or MicroStation .dgn files)

6.5.2.3. 60% Final Design

The Consultant shall prepare and submit for review the 60% design documents as outlined below. The submittal shall be prepared in accordance with the *MOVEBR Design Guidelines* and Project Scope.

The 60% final design submittal shall consist of, as applicable, the following items:

60% Design Deliverable Checklist (signed by Consultant PM and QA Manager)

Road Design:

- a. Title Sheet
- b. Summary of Quantities
- c. Typical Section(s) with pavement design and grading section
- d. Plan and Profile Sheets
- e. Drainage Plan and Profile Sheets
- f. Existing Drainage Map (completed)
- g. Design Drainage Map (completed)
- h. Cross-sections and required ROW
- i. Potential utility conflicts and utility relocations that may be necessary due to drainage system
- j. Any revisions to required right-of-way taking lines due to drainage system and/or utility conflicts
- k. Preliminary Sequence of Construction and TTC plan

Bridge Design

Any updates to 30% bridge plan submittal including changes incorporated from review comments.

- a. All previously required information
- b. Preliminary pile loads
- c. Preliminary bent details (without reinforcing)
- d. Preliminary span details (without reinforcing)
- e. Preliminary girder and framing details
- f. Preliminary summary of estimated quantities and cost estimate

Green Infrastructure

- a. Green Infrastructure Site Plan (updated)
- b. Green Infrastructure coordinated with Utility Space Allocation Plan and Design Drainage Map (updated)
- c. Grading Plan shall document existing and proposed spot elevations at all critical points
- d. Autoturn Analysis shall document existing and proposed surface design features
- e. Landscape Plan shall document the proposed planting schedule
- f. Construction Details for the Green Infrastructure construction and landscape design
- g. Design calculations (complete)
- h. Opinion of Probable Construction Cost for the Green Infrastructure practice and associated site work
- i. Special provisions for Green Infrastructure system

Utility Coordination

- a. Traffic Signal Pole Layout
- b. Street Lighting Layout

Within one week after the milestone meeting, the Consultant will prepare and deliver a record memorandum of decisions and list of action items to the meeting attendees. At this time, the Consultant shall provide responses to comments in Excel format.

As part of the 60% design submittal, the Consultant shall prepare estimates of construction quantities based on the 60% design documents. The Consultant will also prepare an opinion of probable construction cost based on the quantities developed at this phase.

Deliverables:

- a. Electronic copy of the construction quantities in Excel format
- b. Electronic copy of 60% drawings in pdf format
- c. 60% Final Opinion of Probable Construction Cost
- d. Specific items listed on the 60% design checklist
- e. Electronic scanned copy of completed and signed 60% design checklists in pdf format
- f. CAD design files (AutoCad .dwg or MicroStation .dgn files)

6.5.2.4. Plan-in-Hand (PIH) Review

As part of the 60% design submittal review, the Consultant will perform a PIH review in the field with the DTD, PMT, and utility companies. The PMT will notify the DTD and the Consultant as well as any affected jurisdictional agencies and utility companies two weeks in advance of the review. The Consultant will discuss with the PMT the results of the field review within one week after the review has been completed. The PMT will review the project for constructability and identification of land, utility and permitting issues with the DTD following the PIH review.

6.5.2.5. 90% Final Design

The 90% Design shall be complete with all special provisions, details, and drawings fully coordinated, and shall be ready for bidding subject to final review by the DTD and PMT. The Consultant will develop and coordinate the schedule of unit price work with the

standard specifications and requirements of the project. The submittal shall include the 90% Design Deliverable Checklist (signed by Consultant PM and QC Manager).

Standard specifications have been prepared by the C-P to include the requirements, features, materials of construction, and related items desired by the C-P based on their experience and needs. The Consultant shall review each standard specification and prepare special provisions as necessary to address project-specific requirements. Special provisions shall be prepared in accordance with the format adopted by the C-P. Electronic versions of the standard specifications are available on the Program website. Additional special provisions may be issued by the PMT during the project. Special provision sections shall be substantially complete and submitted along with a complete table of contents of the specifications and special provisions to be used for the project.

The Consultant will prepare the required documents to obtain approval of applicable governmental authorities having jurisdiction over the design and/or operation of the project and public and private utilities affected by this project. The Consultant shall update the Utility Conflict Matrix identifying all known possible utility conflicts and resolutions. The final Utility Space Allocation Plan shall be submitted for review and discussion to ensure all conflicts have been addressed and resolution determined.

The 90% final design submittal shall consist of, as applicable, all plan sheets required from previous milestone, plus the following items:

Road Design

- a. Incorporation of any changes from 60% design submittal review and PIH meeting.
- b. Sequence of Construction and TTC plan (completed)
- c. Joint Layout and Graphical Grades
- d. Permanent Pavement Markings and Signage
- e. Traffic Signal Plans
- f. Street Lighting Plans
- g. Any project specific detail drawings

Bridge Design

- a. Complete Bridge Plans and Design

The Consultant shall prepare final estimates of construction quantities for all aspects of the project. The PMT will prepare an updated construction cost estimate based on the information provided by the Consultant.

The PMT and DTD will review the 90% design submittal and provide review comments to the Consultant prior to the design milestone meeting. The Consultant shall attend the design milestone meeting with the DTD and PMT in accordance with design meeting requirements outlined above to discuss and agree on all review comments. The Consultant shall revise plans and specifications based upon the agreed upon review comments.

Within one week after the milestone meeting, the Consultant will prepare and deliver a list of action items to the meeting attendees. At this time, the Consultant shall provide responses to comments in Excel format. The Consultant shall note whether any comments were not incorporated. Any comments not incorporated shall have a complete justification provided.

Deliverables:

- a. Electronic copy of the specification and special provisions table of contents, and draft special provisions and specifications in Microsoft Word format
- b. Electronic copy of the construction pay items and quantities in Excel format
- c. Electronic copy of 90% drawings in pdf format
- d. 90% Final Opinion of Probable Construction Cost
- e. Specific items listed on the 90% design checklist
- f. Electronic scanned copy of the completed and signed 90% design checklists in pdf format
- g. CAD design files (AutoCad .dwg or MicroStation .dgn files)

6.5.2.6. 100% Final Design

The Consultant shall then modify the 90% drawings and required special provisions solely based on the resolution of all review comments from the 90% submittal. The Consultant shall not make any other changes to the documents unless those changes are specifically reviewed with the PMT and agreed to by the PMT.

The Consultant shall seal, sign and date all of the Plans as Engineer of Record in the State of Louisiana in accordance with current state law. The Consultant will be directed in writing by the C-P or P-PM to proceed with bid phase services.

Deliverables:

- a. One (1) full size (22" x 34") Title Sheet
- b. One (1) set of original full size (22" x 34") ROW drawings, as applicable
- c. One (1) set of full size (22" x 34") copy of the drawings
- d. AutoCad design files (If MicroStation was used, Consultant must convert files to AutoCad for Final electronic deliverable)
- e. One (1) un-bound copy of the required special provisions (if applicable)
- f. Electronic copy of the final construction quantities and Opinion of Probable Construction Cost in Excel format.
- g. Electronic copy of final stamped drawings in pdf format
- h. Electronic copy of the special provisions including specifications in Microsoft Word format. Electronic copy of signed and sealed special provisions in pdf format.
- i. Specific items listed on the Final Plan design checklist
- j. Electronic scanned copy of the completed and signed Final Plan design checklists in pdf format
- k. One original, three (3) hard copies and electronic copy in pdf format of all permit applications

6.5.3. Other Services

6.5.3.1. Traffic Analysis

A traffic analysis in the form of a Traffic Design Report may be performed to verify or modify conceptual intersection geometry (i.e. number of turn lanes and storage requirements) and to develop signal timing plans for signalized intersections within the project. The Traffic Design Report will follow the *MOVEBR Design Guidelines*. The Traffic Design Report shall be provided as part of the Design Study prepared for the project.

Specific submittal requirements and deliverables for the Traffic Design Report are described in the *MOVEBR Design Guidelines*.

6.5.3.2. Geotechnical Investigation

The Consultant shall prepare and submit for review a Geotechnical Report, in accordance with the *MOVEBR Design Guidelines*. If it is not feasible to complete the Geotechnical Report prior to completion of the 30% design, a specific schedule for completion shall be included in the project schedule as part of the initial Project Work Plan. The PMT will review the report and provide comments to the Consultant.

6.5.3.3. NEPA Analysis and Compliance

Projects that will, or may receive FHWA funds, or require improvements to a federal highway or intersection (e.g., US 61, US 190) will require compliance with FHWA's National Environmental Policy Act (NEPA) guidelines and LADOTD Stage 1 Planning/Environmental Manual of Standard Practice. Projects that receive federal funding from non-FHWA sources, regardless of ROW ownership, will require compliance with NEPA regulations of the federal funding entity. Further guidance on submittal requirements and deliverables for the NEPA Compliance are described in the *MOVEBR Design Guidelines*. The Consultant should meet with the P-PM at the onset to discuss the context of the project and confirm the analysis scope and federal entity NEPA compliance expectations.

6.5.3.4. Subsurface Utility Engineering (SUE) Services

Generally, SUE Quality Level (QL) D and QL C tasks are performed under Corridor Survey Services, therefore the primary services anticipated to be rendered hereunder are QL B and QL A mapping. If pertinent utility information to the design of the project is not available through QL D and QL C services, the Consultant may request SUE QL B and QL A services and discuss with the P-PM and MOVEBR Utility Coordinator to validate that it is a good candidate for these SUE services. In addition, QL B and QL A engineering will be required at all signalized intersections including 50' in each roadway direction where modifications to the signals are required by the traffic engineering study.

Except as may be modified or specified within the scope, or otherwise approved by the PMT or DTD, the collection and depiction of information, and any required submittals, shall conform to the applicable provisions of CI/ASCE 38-02, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data." Quality Level B SUE generally includes: determining the existence and approximate horizontal position through the application of appropriate surface geophysical methods. Quality Level A SUE generally includes: determining the precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point.

SUE Consultant general requirements include:

- a. Assist PMT in developing scope of work by assessing project SUE needs.
- b. Develop and submit a detailed work plan and schedule of activities showing conformance to the work requirements and time constraints imposed by the task scope and obtain PMT/DTD approval of said work plan prior to commencing work.
- c. Whenever the work will affect the movement of traffic or traffic safety, provide traffic control. Any traffic control devices shall be in conformance with the MUTCD and C-P Traffic Control Standard Plans or LADOTD requirements as applicable.
- d. Obtain all necessary permits from LADOTD and/or other governing jurisdictional agencies to allow work within public rights-of-way.
- e. If work must be performed on private property, obtain written permission from property owner for SUE Consultant and DTD to enter premises, including names and telephone numbers of contact persons should notification prior to entry be necessary. Consultant shall be responsible for restoration of the property to the satisfaction of the property owner.
- f. Coordination with Survey Consultant that performed project Corridor Survey for previously established Horizontal and Vertical survey control. SUE Consultant shall ensure that SUE survey information shall be collected based on same established control as previous project survey information.
- g. Coordination with PMT and/or Survey Consultant to acquire QL D or C services information already collected for the project. If none is available, PMT may require these services of the SUE Consultant also.

Deliverables shall include all required reports, documentation, studies, field notes and sketches, plan drawings, and electronic CAD files. Plan drawings shall include, at a minimum, the depiction of attributes such as line type, size, material type, condition, ownership, status (e.g., in-service, out-of-service, active, abandoned), number of conduits or direct buried cables, or other required information. The Consultant's Professional Engineer or Professional Land Surveyor in responsible charge of the work shall perform a final review of, seal, and sign all applicable submittals, including but not limited to original field notes and sketches, hard copies of electronic data, and plan drawings.

6.5.3.5. Street Lighting

Street lighting is an integral part of enhancing the safety for pedestrians, bicyclists and all users of the roadway and the aesthetic appearance of the corridor. The general scope would include the following tasks and phases:

Phase I should occur during the **Design Study** phase. These first tasks included should begin before a roadway alternative is selected:

- a. Existing Lighting Analysis
- b. Utility Conflict Analysis (subsurface drainage, existing underground & overhead utilities)
- c. Potential Power Source Identification
- d. Typical Lighting Fixture Cut Sheet(s)

This second list of tasks should begin once a roadway alternative is selected:

- a. Preliminary Photometric Analysis
- b. Preliminary Voltage Drop Calcs
- c. Preliminary Lighting Pole Layout (can be shown on plan/profile sheets, because the Photometric Layout will be a "layout" in its own right)
- d. Preliminary Opinion of Probable Construction Cost.

Phase II should occur during the **Final Plan** phase and includes the following:

- a. Detailed Lighting Plan Sheets (Independent of Plan/Profile sheets)
- b. Final Lighting Adjustments/Photometric updates
- c. Final Lighting Calculations
- d. Final Specifications
- e. Utility Coordination (Power Source Identification)
- f. Removal of Existing Lighting System Plans (Demolition)
- g. Final Specifications/Special Provisions/Cut Sheets/Etc.
- h. Final Opinion of Probable Construction Cost

The Final Plan phase shall include at least two plan submittals:

- a. Plan-in-Hand (60%) Submittal

b. Construction Plans (100%) Submittal

All street lighting analysis will be in accordance with the *MOVEBR Design Guidelines*.

6.5.3.6. Landscaping

Landscaping needs will be determined on a project by project basis but generally include the following as outlined in the *MOVEBR Design Guidelines*:

- a. Trees and shrubbery within medians and roadsides as part of complete streets concept to provide vertical sight friction as traffic calming measure, perceived barrier to encourage pedestrian use, and shade and canopy cover from weather elements.
- b. Plantings such as shrubbery and grasses associated with the Green Infrastructure practices incorporated into a project.
- c. Generally, no additional planting and landscaping will be incorporated beyond what is needed to address water quality and traffic calming needs.

Landscaping plans will need to be closely coordinated with traffic analysis for sight distance issues, traffic signal locations, street lighting conflicts, planned Green Infrastructure practices, and utility relocations. All plantings utilized should require little to no maintenance beyond establishment period and be appropriate for the type of installation (ie – water tolerant for placement within rain gardens or bioswale). Plantings will be generally selected from a plantings schedule provided by DTD and the PMT and plans must be stamped by a professional Landscape Architect registered in the State of Louisiana.

6.5.3.7. Property Surveys, Title Work, and ROW Maps

If land acquisition is required for the project, the C-P may authorize the Consultant by Supplemental Agreement to perform services required for the completion of ROW surveys and maps for the project in accordance with the *MOVEBR Design Guidelines*, *Right-of-way Map Checklist*, and this manual. Typically, these services include the following:

- a. Title research reports (may be provided by C-P)
- b. Property survey
- c. Preparation of Base ROW Maps
- d. Title report updates (if necessary) (may be provided by C-P)

e. Preparation of Final ROW Maps (Acquisition Set and Recordation Set)

The C-P may elect to augment some or all of these services through third-party contracts in which case the Consultant would be required to coordinate with the third-party consultant for incorporation of their work into the project package.

The Consultant shall provide the "Base Set" of ROW maps, listed above, to the PMT in accordance with the ROW Map Checklist. This set will first be submitted with all required items including the graphical taking lines and excluding the metes and bounds call outs for review by the PMT. Once the graphical taking lines have been approved, the surveyor can proceed with completing the ROW "Acquisition Set", which includes the metes and bounds computations.

The "Acquisition Set" contains much more information than is typically included in a set of ROW maps, such as an aerial background. The purpose of this information is to provide tangible measuring points or references for the appraisers and agents to use in completing their respective work. The "Acquisition Set" also includes information from the construction plans regarding the roadway geometry and features for reference purposes while in the field so that the agents and appraisers do not have to carry both maps and construction plans to the field.

At the completion of the ROW mapping process, the surveyor will deliver the "Recordation Set" of ROW maps to the PMT in accordance with the ROW Map Deliverable Checklist. The purpose of the "Recordation Set" is to provide a permanent record in the courthouse that is consistent with the standards followed by other agencies. If the "Acquisition Set" were to be recorded, it may be difficult to read and understand due to the large volume of information it contains.

6.6. Additional Support Services

The C-P may authorize the Consultant by Supplemental Agreement to perform additional support services during the bidding and/or construction phases.

6.6.1. Bid Phase Services

The PMT will take the lead in performing bid phase services. If authorized, the Consultant may provide assistance with the following:

- a. Attend the Pre-Bid Conference if required and assist the PMT in conducting the conference. The PMT will prepare the Pre-Bid Conference meeting minutes.
- b. The PMT will be the primary point of contact during bid phase services and will receive contractor questions. The Consultant may be asked to prepare written responses to contractor questions and other required changes in addendum

- format to interpret, clarify, and amend the Contract Documents in accordance with current state law. The PMT will prepare final addendums.
- c. The PMT will tabulate and evaluate bids and prepare a written recommendation on award of Contract to the C-P in accordance with current state law.
 - d. The Consultant shall submit to the PMT any plan sheets needing revisions due to changes made by addenda during the bid process. Please note that any revisions required due to design errors, omissions, or incompleteness will not be reimbursable under this phase.
 - e. The PMT will prepare the Conformed Documents (Contract Drawings and required Special Provisions, with addenda and formalized contract incorporated into the original documents with changes noted) for use during Construction in accordance with current state law.

Deliverables:

- a. Electronic copy of revised drawing(s) in pdf format (22"x34" size plot)
- b. Electronic copy of revised drawing(s) in AutoCAD (.dwg files)
- c. Electronic copy of any revised special provisions in Microsoft Word format

6.6.2. Construction Phase Services

If requested by the DTD and authorized under Supplemental Agreement, the Consultant shall provide engineering services during the construction phase, which may include the following:

- a. Attend the Pre-Construction meeting and provide Consultant's input at the meeting.
- b. Review shop-drawings as needed
- c. Provide responses to design-related Contractor requests for information (RFIs)
- d. Develop design changes as required and as requested by PMT or DTD
- e. Develop Record Drawings per Section 6.6.3

6.6.3. Record Drawings

If requested by the DTD, the Consultant shall develop Record Drawings from Contractor's construction drawing mark-ups, inspector's notes/logs and/or Consultant's site reviews as follows:

- a. Use the original Conformed plan set as the base for the Record Drawings and retain all features of the original drawings
- b. Mark through objects on plan set that were not constructed as shown, using X's to mark through the objects
- c. Modify the original plan set by drawing objects as they were actually constructed
 - i. Modify the drawings that show the constructed conditions most fully and accurately
 - ii. Depict concealed elements that would be difficult to measure or record at a later date
 - iii. Note related change-order numbers where applicable
- d. Label each drawing with the words "Record Drawings"
- e. Engineer of Record shall follow rules under Louisiana Administrative Code, Title 46, Part LXI, Chapter 27 in regard to the preparation of compiled engineering as-built record drawings.

Deliverables

- a. One (1) set of full size (22" x 34") original Record Drawings to PMT
- b. Electronic copy of Record Drawings in pdf format to PMT

6.7. Services to be Performed by C-P and PMT

The DTD or the PMT shall furnish the Consultant without charge the following services and data:

- a. Available information that the DTD and PMT have in their files as to survey plans and studies within the area of the project that may be useful to Consultant in carrying out this work, as well as assistance in securing data from others to the extent available.

- b. Any previously completed soil investigations and analysis, including core drillings and borings with laboratory reports, as may be necessary for the design of the project.
- c. Examples of any standard form plan sheets, such as Title Sheet, and prints of typical construction and ROW plans for use by Engineer as a guide.
- d. PDF files of standard plans where available. Upon determination of the standard plans to be used for the final contract plans, the DTD shall furnish the standard plans required for use in the final set of drawings.
- e. Prepare Contract Documents and advertise and receive bids on the project.
- f. Services described in Section 2.5.

7 Roadway Plan Preparation

7.1. General

7.1.1. Plan Size

The MOVEBR Program shall generally use either full size or half size plan sets. The following requirements apply to plan set submittals:

- a. Full Size Submittal: Full size submittal sheets shall have an outside edge measuring 22"x34". Provide a 0.50" margin on the top, bottom, and right-hand side of the sheet and a 2" margin on the left-hand side of the sheet.
- b. Half Size Submittal: Half size submittal sheets shall have an outside edge measuring 11"x17". Drawings shall be an exact 50% reduction of the full-size scale drawing. Provide a 0.25" margin on the top, bottom, and right-hand side of the sheet and a 1" margin on the left-hand side of the sheet.

When preparing pdf file plan set deliverables, Consultant shall create pdf plot scale to the above setting for each size submittal so when printed from file, plan sets will print appropriately.

7.1.2. Plan Sheet Organization

Plan sheets will normally be included and numbered in the order shown in Section 7.2. Plan sheet are numbered and arranged in a standard manner for conformity in compiling plan set packages and the convenience of all users. Green Infrastructure/Landscaping Plans, Traffic Signal Plans, Lighting Plans, Right-of-Way Maps, Bridge Plans, Cross Sections, and Standard Plans will usually be numbered with each section beginning with the next available 100 numbers.

7.2. Plan Set Content

A standard set of roadway plans for the MOVEBR Program shall typically include the following sheet types:

- a. Title Sheet and Layout Map (sheet 1)
- b. Index to Sheets and General Notes (sheet 1a)

- c. Summary of Estimated Quantities (first sheet is 2; remainder are numbered 2a, 2b, etc.)
- d. Typical Section(s) (first sheet is 3; remainder are numbered 3a, 3b, etc.)
- e. Plan and Profile Sheets (first sheet is 4; remainder are numbered 5, 6, etc.)

Remainder of sheets through the Green Infrastructure/Landscaping Plans follow Plan and Profiles in sheet number sequence, as required.

- f. Drainage Plan and Profile Sheets
- g. Existing Drainage Map
- h. Design Drainage Map
- i. Miscellaneous Details
- j. Geometric Layout
- k. Geometric Details (Turnouts and Intersections)
- l. Joint Layout and Graphical Grades
- m. Permanent Pavement Marking Layout
- n. Sequence of Construction and TTC
- o. Utility Relocation Plan
- p. Green Infrastructure / Landscaping Plans
- q. Traffic Signal Plans
- r. Lighting Plans
- s. Right-of-Way Maps
- t. Bridge Plans
- u. Cross Sections

v. Standard Plans


Specific content to be included on each type of plan sheet listed above shall be as follows:

- a. Title Sheet, Typical Sections, Plan and Profile Sheets, Drainage Plan and Profile Sheets, Existing Drainage and Design Drainage Maps, Geometric Layout, Geometric Details, Joint Layout and Graphical Grades, Permanent Pavement Marking Layouts, and Cross Sections should generally include similar content as described in the relative portions of Section 8.2 of the LADOTD *Roadway Design Procedures and Details Manual* and the *MOVEBR Design Deliverable Checklists*.
- b. The remaining sheets should include content as described in the *MOVEBR Design Guidelines*

7.3. Plan Modifications

Until the Chief Engineer signs the final plans and the project has been advertised for construction, changes can be made to the plan sheets as needed. Once the design Engineer of Record places his/her stamp on the sheet and signs it, any changes made to the sheets must be either approved by the EOR whose stamp appears on the sheet, or if approved by an engineer other than the one who stamped the sheet originally, the second engineer must also stamp the sheet and note what changes were made. These changes shall be closely coordinated with the P-PM to ensure the latest version of plans are advertised.

Plan revisions are modifications to the construction plans made after the Chief Engineer signs the plans and the project is advertised for bidding, but prior to bid opening. Plan revisions shall be coordinated through the P-PM and conform to the following procedure:

- a. In order to differentiate the revision number from other numbers on the plan sheets, the bug symbol () shall be used with the revision number shown inside. This symbol, including the revision number, is placed on each revised plan sheet, next to the revised item and next to the revision block.
- b. A description of the revisions, initials of the person who approved the revisions, and the date the revisions were made are noted in the revision block on each of the revised sheets. All sheets involved in the revision must have the same numerical bug and date.
- c. On the title sheet, the revision symbol is placed adjacent to a line in the Schedule of Revisions block, which will contain the revised sheet numbers and the revision date.

- d. Once the revision has been drafted on the plans, the revised sheets are sent to the P-PM in pdf file format for review and to update the construction proposal as necessary.

Plan modifications made after bids are opened are considered Change Orders and usually occur while the project is under construction. Change orders are typically made at the request of DTD or the P-PM. The Consultant, under Construction Phase Services, may be requested to prepare new plan sheets denoting the necessary modifications.

These Change Orders shall be coordinated through the P-PM and conform to the following procedure:

- a. New sheets are created and all changes to the plans should be noted by placing the bug symbol Δ and a change order letter (A, B, etc.) inside the symbol next to each revised item. The symbol and change order letter shall also be noted in an available open space in the revision block or above the revision block (if space is not available).
- b. A description of the change, initials of the person who approved the change, and the date the changes were made are noted next to the change order symbol on each of the change order sheets. Each change order sheet is also stamped "Change Order and/or Special Agreement."
- c. Since change order sheets are new plan sheets, an alternate numbering system is used to distinguish change order sheets from original plan sheets. For the first change order, an "A" suffix is added to the sheet numbers for the modified sheets.
- d. The index sheet is not revised to indicate the sheets added by change order. No changes are made to the title sheet, unless the change order is to revise the title sheet specifically.
- e. Once the change order sheets are completed, copies of the new plan sheets are submitted to the P-PM, along with a cover letter explaining the change order. The cover letter may also contain revised quantities, if applicable.
- f. The P-PM shall submit new plan sheets and quantities to the contractor, construction manager, and inspectors with a transmittal letter explaining the change order and listing all of the original plan sheets which are now considered void.

Attachment A

Design Deliverable Checklists



CORRIDOR SURVEY CHECK LIST

Control Survey:

1. Horizontal Control sketch and Vertical Control report submitted to MOVEBR P-PM
YES NO NA _____
2. Submittal of level notes to all control points and TBMs
YES NO NA _____
3. Control point monuments shall be 18"x ½" iron rods with plastic caps that are set in 4" PVC sleeves filled and encased in concrete or permanent marking (scribed "X") in existing stable concrete pavement or structure.
YES NO NA _____
4. Elevations shall be referenced to the North American Vertical Datum of 1988 (NAVD 88) and the most current geoid
YES NO NA _____
5. A TBM shall be set approximately every 500 feet
YES NO NA _____
6. A line of levels shall begin and end on a published USGS or NGS benchmark of 3rd order or on Primary Control Points with NAVD88 elevations derived from GPS observations
YES NO NA _____
7. All PC, PT, and PI labeled with Northing and Easting
YES NO NA _____
8. Show bearings along alignment between all PC, PT, and PI
YES NO NA _____
9. BOP and EOP labeled with Northing and Easting
YES NO NA _____

Topographical Survey:

1. Topographical survey location map previously provided?

YES NO NA _____

2. Survey location map in 11"x17" in PDF format?

YES NO NA _____

3. Map shall include at minimum:

a. North arrow YES NO NA _____

b. Approximate plan scale YES NO NA _____

c. Aerial photography YES NO NA _____

d. Street names YES NO NA _____

e. Dimensions from nearest intersecting streets

YES NO NA _____

f. Proposed ROW lines (including Complete Streets)

YES NO NA _____

g. Proposed green infrastructure improvements

YES NO NA _____

h. Initial proposed ROW limits YES NO NA _____

4. Cross sections at a max of 100 feet perpendicular to the centerline?

YES NO NA _____

5. Cross sections extend at least 50 feet beyond proposed ROW?

YES NO NA _____

6. Cross sections should include at minimum:

a. Building and/or property line

YES NO NA _____

b. Top of Curb YES NO NA _____

c. Bottom of Curb YES NO NA _____

d. Edge of parking lane YES NO NA _____

e. Centerline spot elevations YES NO NA _____

f. Additional spot elevations to document breaks in grade on the side of the street where the green infrastructure practice is located

YES NO NA _____

7. Cross section frequency:
- a. At every 100 feet YES NO NA _____
 - b. At extent of driveway and turnout construction
 YES NO NA _____
 - c. At ADA related work YES NO NA _____
 - d. At drainage improvements YES NO NA _____

Utilities:

- 1. All known utilities shown in survey?
 YES NO NA _____
- 2. Any utilities noted as approximated from record drawings?
 YES NO NA _____
- 3. LA One Call ticket numbers listed in notes?
 YES NO NA _____

Deliverables:

- 1. Point list in PNEZD or PNZDA format (point, number, northing, easting, elevation, description and attribute) as a csv file (comma separated values)
 YES NO NA _____
- 2. Raw survey data files
 YES NO NA _____
- 3. Utility contract information and LA One Call tickets numbers
 YES NO NA _____
- 4. Field roll or plan/profiles broken into 22"x34" sheets with a symbology legend (on first sheet) and all headwalls, and drainage structures labeled with material type, size, and inverts in pdf format. Vertical profiles showing the existing centerline ground surface, drainage pipes, pipeline crossings, utilities, ditch centerlines, and other critical information
 YES NO NA _____
- 5. AutoCAD or Microstation electronic drawing file showing all collected data in three dimensional coordinates along with the required pen setting files

	YES	NO	NA _____
6. Control Drawing	YES	NO	NA _____
7. Level Notes to ALL control and TBMs			
	YES	NO	NA _____
8. Alignment on plans	YES	NO	NA _____
9. Show all TBMs on plans	YES	NO	NA _____
10. Raw Data	YES	NO	NA _____

Consultant Project Manager

Consultant Quality Manager

This signature confirms I have reviewed the MOVEBR design guidelines and all requirements are included, with a completed checklist.



RIGHT-OF-WAY MAP CHECK LIST

The Right-of-Way Mapping Consultant shall produce two sets of Right-of-Way Maps. These sets shall be identified as the Right-of-Way Recordation Set and the Acquisition Set.

- I. **THE RIGHT-OF-WAY RECORDATION SET:** shall conform to all standards set out in the LADOTD publication "Addendum "A" to the Location and Survey Manual – Property Surveys & Right of Way Maps" dated January 2014 as amended by the following check list:

Enter YES, NO or N/A (not applicable) Only.

Title Page:

- _____ Vicinity Map
- _____ Location Map (including scale and North Arrow)
- _____ Project Number (s)
- _____ Project Name
- _____ Identify participating authorities (City/Parish, LADOTD, FHWA)
- _____ Station Number at start and end of Project (Phase)
- _____ Date
- _____ Sheet Index (only if not indexed in Construction Plans)
- _____ Title Block (including)
 - _____ Revision Block
 - _____ Firm Logo
 - _____ Firm Address
 - _____ Project Title, Number and Route Number (If Applicable)
 - _____ Project File Block (including)
 - _____ Parish
 - _____ Project Number
 - _____ Sheet Number
 - _____ File Number

Individual Right-of-Way sheets:

Title Block:

_____ City/Parish Project Number
_____ State Project Number (if applicable)
_____ Project Name
_____ Parish
_____ State Highway Number (if applicable)
_____ Date
_____ Scale
_____ Drawn by
_____ Computed by
_____ Sheet Number
_____ Field Book No
_____ Project File Block (upper right corner)
 _____ Project Number
 _____ Parish
 _____ Sheet No
_____ File Number

General:

_____ Map Dimensions 22" x 34"- Bond and PDF copies
_____ Map Scale 1" = 100', 1" = 50', 1" = 30' or 1" = 20' (1"=40' shall not be used)
_____ Produce 1/2 scale (11" x 17") Right-of-Way maps for recording purposes.
 _____ Map legible at 1/2 scale.
_____ Caption (including)
 _____ Land District
 _____ Township/Range
 _____ Section Number(s)
_____ Section Line(s) Shown/Labeled
_____ Property Lines Shown
_____ Servitude Lines, recorded and apparent, shown/labeled

Maps:

_____ Legend for all lines and symbols

- _____ Found or set Pipes/Iron Rods/Monuments identified
- _____ Centerline Line Shown/Labeled
- _____ North Arrow
- _____ Bearing Base
- _____ State Plane Scale Factor and Theda Angle
- _____ Right-of-Way Lines Shown/Labeled
- _____ Construction Limits Shown/Labeled
- _____ State Plane Coordinates at Match Lines
- _____ Major Station Numbers, Normally every 500 feet, PCs, PTs, and PIs
- _____ Major Station Ticks on Center Line every 500 feet
- _____ Minor Station Ticks on centerline every 100'
- _____ Monuments/Pipes/Rods labeled "found" or "set" or "re-set"
- _____ Curve Data Shown
 - _____ PI Station (Centerline Only)
 - _____ Delta Angle
 - _____ Degree of Curvature (For Main Centerline Curve Data)
 - _____ Tangent Length
 - _____ Length of Curve
 - _____ Radius of Curve
 - _____ Chord Bearing and Chord Distances on Curves (Along Parcel Lines Only)
- _____ Station Ties
 - _____ All Property Corners
 - _____ Leader Lines for all PCs, PT, & PIs
- _____ Property Owners
- _____ Residual Areas (in acres & Square Feet) based upon deed computations
- _____ Legend for all features shown
- _____ Subdivision Name(s)
 - _____ Square/Block Identifier
 - _____ Lot Identifier
- _____ Intersecting Streets
 - _____ Right(s)-of-Way Intersection Station & Offset
- _____ Surveyor's Seal, Signature & Date
- _____ Parcel Numbering sequence. (As described in Section 2-5, *Parcel Identification* of the LADOTD "Addendum "A" to the Location & Survey Manual)

_____ All Parcels tied to the corner of a Lot, Square, Subdivision, Tract, Section, or Quarter Corner

_____ Acquisition Block

_____ Parcel Number

_____ Owner's Name

_____ Acquisition (date)-Original & Bundle

_____ Areas in Acres (If greater than 0.75 Acres) & Sq. Ft. (If less than 0.75 Acres)

_____ Railroad crossings tied to Railroad Mile Posts

Supplemental Residual Maps (large residual areas) typical 1"=1000' scale

_____ Centerline of proposed Roadway

_____ Property Line (If entire Parcel is not shown on the body or individual ROW Map)

_____ Ownerships of Parcels where remaining areas are shown on the residual

_____ Approximate area of residual and method of determination

_____ Station Number every 1000 feet (closer for short projects)

_____ Section, Township & Range

_____ Appropriate Land District(s)

_____ 22" x 34"- Bond and PDF copies

_____ LADOTD Standard line types and layers

_____ City-Parish Standard Border

NOTE:

Special Maps may be 8 ½" x 14" "Legal" Size where isolated and special conditions warrant.

II. THE RIGHT-OF-WAY ACQUISITION SET: shall include all information on the Recordation Set and the following information:

_____ Title Page prominently identified as "ACQUISITION SET"

Existing Features:

_____ Distances from Proposed Right-of-Way to existing structures

_____ Offsets to existing ROW & proposed ROW tied to EXISTING roadway centerline.

_____ Superimpose maps on aerial photography

_____ Depict and fully describe all existing structures, paving and topographic features within 100 feet of required Right-of-Way (may be amended to 50 feet for urban conditions)

Proposed Features:

- ☐ Edge of roadway (back of curb)
- ☐ Median Cuts
- ☐ Controlled access or barrier curbing
- ☐ Driveways
- ☐ Traffic striping/markers/controls
- ☐ Utility relocations
- ☐ Drainage inlet/ditches
- ☐ Sidewalks
- ☐ Depict severe grade changes

All "NO" entries must be corrected or justified in detail.

Consultant Project Manager

Consultant Quality Manager



30% FINAL PLANS - (GEOMETRIC SUBMITTAL) CHECK LIST

Design Consultant shall provide a 30% Final Plan Submittal in electronic format at half-scale at 11" x 17" size. Please note that scales shown below are for full size drawings (22" x 34"). The purpose of the submittal is to present the proposed horizontal and vertical geometry and preliminary right of way requirements. For projects on State Routes to remain under the jurisdiction and ownership of LADOTD, please refer to the LADOTD Road Design Manual and related guidance for additional checklist information at each stage submittal.

Title Sheet – Standard DPW Title Sheet

- ___ Project Location Map
- ___ Project Limits
- ___ Design Speed
- ___ Roadway Classification (if applicable)
- ___ Type of Construction
- ___ Survey Information
- ___ Horizontal Datum used
- ___ Vertical Datum Used

Typical Section Sheets

- ___ Number of Lanes
- ___ Lane widths and slopes
- ___ Shoulder widths and slopes
- ___ Median widths
- ___ Curb width and type
- ___ Sidewalk width and location
- ___ Foreslope and backslope rates
- ___ Clear zone / Lateral offset
- ___ Right of way
- ___ Ditch width
- ___ Superelevation table
- ___ Runoff and runout details
- ___ Recommended pavement section requested

Plan and Profile Sheets (1"=20' Scale)

- ___ Various design elements and stationing adequately covered by typical sections
- ___ Limits of proposed construction

- ___ Roadway and intersecting street names
- ___ Symbolology Legend
- ___ Dimensions at begin/end of sheets
- ___ Roadway
- ___ Shoulder
- ___ Curb
- ___ Existing and required R/W
- ___ Horizontal curve data and callouts
- ___ TBMs and Reference Points
- ___ Transition lengths
- ___ Offset distances
- ___ Median lengths
- ___ Median openings
- ___ Turnout geometry (radii)
- ___ Profile grade line
- ___ Vertical curve data and controls
- ___ Equations
- ___ Profiles of intersecting streets
- ___ Bridge ends
- ___ Vertical and horizontal clearances
- ___ Limits of construction

Geometric Layouts

- ___ Centerline geometry
- ___ Geometric Soundness (Curve Data agrees with PCs, PT, Bearings, etc.) and bearing labeled properly
- ___ Intersection Details (If 1"=20' not used for plan/profile sheets or if not able to label on plan/profile sheets)

Existing Drainage Map

- ___ North Arrow, Legend
- ___ Drainage areas with size, shape, & direction of flow
- ___ Size of existing drainage structures
- ___ Drainage areas for cross drains
- ___ Aerial image, contours, existing topo, quad map, or some other method to help depict the location of the limits of the drainage areas

Bridge Plans

- ___ TS & L
- ___ Design Criteria
- ___ Typical section

Cross Sections

- ___ Existing ground
- ___ Existing roadway
- ___ Proposed roadway
- ___ Existing & Required R/W

Digital Files – Utility Space Allocation

- ___ Design and topographic CAD files

Interdisciplinary Agreement

- ___ Project Stationing agrees across all applicable design discipline sheets

General

- ___ Comments addressed from Design Study
- ___ Callouts are legible and no spelling errors
- ___ 30% Probable Construction Cost

Consultant Project Manager

Consultant Quality Manager



50% FINAL PLANS (HYDRAULIC SUBMITTAL) CHECK LIST

Design Consultant shall provide a 50% Hydraulic Final Plan Submittal in electronic format (pdf) at half-scale at 11" x 17" size. Please note that scales shown below are for full size drawings (22" x 34"). The submittal shall include the following items and any others as necessary for proper hydraulic review. For projects on State Routes to remain under the jurisdiction and ownership of LADOTD, please refer to the LADOTD Road Design Manual and related guidance for additional checklist information at each stage submittal.

Title Sheet – Standard DPW Title Sheet

- ☐ Project Location Map
- ☐ Project Limits
- ☐ Design Speed
- ☐ Roadway Classification (if applicable)
- ☐ Index with proposed standard plans
- ☐ Type of Construction
- ☐ Specification Note
- ☐ Survey Information
- ☐ Horizontal Datum used
- ☐ Vertical Datum Used

Typical Section Sheets

- ☐ Number of Lanes
- ☐ Lane widths and slopes
- ☐ Shoulder widths and slopes
- ☐ Median widths
- ☐ Curb width and type
- ☐ Sidewalk width and location
- ☐ Foreslope and backslope rates
- ☐ Clear zone / Lateral Offset
- ☐ Right of way
- ☐ Ditch width
- ☐ Superelevation table
- ☐ Runoff and runout details
- ☐ Grading section
- ☐ Recommended pavement section requested

Drainage Plan & Profile (If necessary) (1"=20' Scale)

Plan View (Structures Drawn to Scale)

- ☐ North Arrow, Legend
- ☐ Drainage Structures in Plan
- ☐ Structure number and station
- ☐ Size and material type
- ☐ Length & flow line

Profile View

- ☐ Drainage Structures in Profile
- ☐ Structure number
- ☐ Flow line elevation
- ☐ Pipe diameter
- ☐ Length and percent grade
- ☐ Hydraulic grade line
- ☐ Existing and Proposed sanitary sewer
- ☐ Other utilities affecting drainage

Existing Drainage Map

- ☐ North Arrow, Legend
- ☐ Drainage areas with size, shape, & direction of flow
- ☐ Size of existing drainage structures
- ☐ Drainage areas for cross drains & bridge structures
- ☐ Aerial image, contours, existing topo, quad map, or some other method to help depict the location of the limits of the drainage areas

Design Drainage Map

- ___ North Arrow, Legend
- ___ Drainage system on geometric layout
- ___ Drainage boundaries with area, and discharge
- ___ Drainage ridge line for over the curb drainage (used for inlet spacing calculations)
- ___ Drainage design criteria
- ___ Aerial image, contours, topo of buildings, quad map, or some other method to help depict the location of the limits of the drainage areas
- ___ Proposed Drainage Information (Str. No., Station, Q, A, C, Type / Size x Length)

Design Calculations

- ___ Drainage Calculations
- ___ Runoff Calculations
- ___ Inlet Spacing calculations*
- ___ Subsurface drainage calculations*
- ___ Fill Mitigation calculations (if applicable)
- ___ Stormwater detention calculations* (if applicable)
- ___ HEC RAS Analysis*
- ___ Bridge Hydraulics & Scour Analysis*
- ___ Brief narrative describing what calculations are provided, how items were analyzed, and what assumptions (e.g. design stages / water surface elevations) were made

* Program files also submitted electronically

Utility Space Allocation Plan (1"=20' Scale)

- ___ Plan view
- ___ Topographic survey features (roadway edge lines / curb lines, hardscape features, overhead and subsurface utilities)
- ___ Proposed roadway features (curb, sidewalks / multi-use paths, traffic signal poles, lighting poles,

- electrical conduit, bridge foundations, bridge piles, etc.)
- ___ All proposed drainage features
- ___ Limits of Construction
- ___ Req'd Right-of-Way lines
- ___ Utility company contact information
- ___ General Notes

Bridge Plans

- ___ Bridge Index
- ___ General Notes
- ___ Summary of Estimated Quantities
- ___ General Plan
- ___ Typical sections
- ___ Foundation Pile Layout
- ___ Bridge Drainage Details
- ___ Detour Bridge Details (if applicable)
- ___ Revetment Details
- ___ Misc. Details

Cross Sections (for drainage purposes)

- ___ Existing ground
- ___ Proposed roadway
- ___ Existing & Required R/W, Servitudes (if required)

General

- ___ Comments addressed from 30% Final Plans
- ___ Callouts are legible and no spelling errors
- ___ Utility Conflict Matrix
- ___ Intersection Autoturn Analysis
- ___ 50% Probable Construction Cost (Roadway and Drainage Included)

Green Infrastructure / Landscape Plan Sheets (if applicable to project)

a. General

- ___ Green Infrastructure comments addressed from Design Study

b. Site Plan Sheet(s) (1"=40' Max.)

- ___ Preliminary layout and materials for green infrastructure system(s)
- ___ Horizontal offsets from existing surface features

c. Design/Utility Plan(s) (1"=20' Max.)

- ___ Existing and Proposed utilities
- ___ Preliminary layout of green infrastructure system(s)
- ___ Horizontal offsets from existing utilities
- ___ Callout with system footprint, depth, and underdrain connection elevation
- ___ Consistent with Utility Allocation Plan

d. Design GI Drainage Map (1"=40' Max.)

- ___ Preliminary layout of green infrastructure system(s)
- ___ Delineation of drainage area to practice
- ___ Callout with drainage area, system footprint, and loading ratio
- ___ Consistent & coordinated with Roadway Design Drainage Map

e. Autoturn Analysis (For curb extension design only)

- ___ Proposed design features, intersection controls, striping
- ___ Proposed design speed, critical design vehicle
- ___ Turning movements at proposed curb extension location(s)

f. Report

- ___ Design footprint
- ___ Drainage area
- ___ Loading ratio
- ___ Storage volume
- ___ Storm size managed
- ___ Calculation of drain-down time
- ___ Probable Green Infrastructure cost

Consultant Project Manager

Consultant Quality Manager



60% FINAL PLANS (PIH SUBMITTAL) CHECK LIST

Design Consultant shall provide a Plan in Hand - 60% Final Plan Submittal in electronic format (pdf) at half-scale at 11" x 17" size. Please note that scales shown below are for full size drawings (22" x 34"). The purpose of the submittal is to present the proposed construction for review in the field. The submittal shall include the following items and any others as necessary for proper Plan in Hand review. For projects on State Routes to remain under the jurisdiction and ownership of LADOTD, please refer to the LADOTD Road Design Manual and related guidance for additional checklist information at each stage submittal.

Title Sheet – Standard DPW Title Sheet

- ___ Project Location Map
- ___ Project Limits
- ___ Design Speed
- ___ Roadway Classification (if applicable)
- ___ Index with proposed standard plans
- ___ Type of Construction
- ___ Specification Note
- ___ Survey Information
- ___ Horizontal Datum used
- ___ Vertical Datum Used

Summary of Quantities

- ___ Listing of Bid Items
- ___ Approximate Quantities
- ___ All pay items properly accounted for

Typical Section Sheets

- ___ Number of Lanes
- ___ Lane widths and slopes
- ___ Shoulder widths and slopes
- ___ Median widths
- ___ Curb width and type
- ___ Sidewalk width and location
- ___ Foreslope and backslope rates
- ___ Clear zone / Lateral Offset

- ___ Right of way
- ___ Ditch width
- ___ Superelevation table
- ___ Runoff and runout details
- ___ Grading section
- ___ Pavement section

Plan & Profile Sheets (1"=20' Scale)

- ___ North Arrow, Legend
- ___ Various design elements and stationing adequately covered by typical sections
- ___ Limits of proposed construction
- ___ Roadway and intersecting street names
- ___ Dimensions at the beginning
- ___ Roadway
- ___ Shoulder
- ___ Curb
- ___ Existing and required R/W
- ___ Horizontal curve data and callouts
- ___ Equations
- ___ Transition lengths
- ___ Offset distances
- ___ Median lengths
- ___ Median openings
- ___ Turnout geometry (radii)
- ___ Profile grade line
- ___ Vertical curve data and controls
- ___ Equations
- ___ Profiles of intersecting streets

- ___ Bridge ends
- ___ Vertical and horizontal clearances
- ___ Limits of construction
- ___ Construction notes
- ___ ROW monuments (DOTD Routes)

Drainage Plan & Profile (If necessary)

Plan View (Structures Drawn to Scale)

- ___ North Arrow, Legend
- ___ Drainage Structures in Plan
- ___ Structure number and Station
- ___ Size and material type
- ___ Length & flow line

Profile View

- ___ Drainage Structures in Profile
- ___ Structure number
- ___ Flow line elevation
- ___ Pipe diameter
- ___ Length and percent grade
- ___ Hydraulic grade line
- ___ Existing and Proposed sanitary sewer
- ___ Other utilities affecting drainage

Existing Drainage Map

- ___ North Arrow, Legend
- ___ Drainage areas with size, shape, & direction of flow
- ___ Size of existing drainage structures
- ___ Drainage areas for cross drains
- ___ Aerial image, contours, existing topo, quad map, or some other method to help depict the location of the limits of the drainage areas

Design Drainage Map

- ___ North Arrow, Legend
- ___ Drainage system on geometric layout
- ___ Drainage boundaries with area, and discharge
- ___ Drainage ridge line for over the curb drainage (used for inlet spacing calculations)
- ___ Drainage design criteria
- ___ Aerial image, contours, topo of buildings, quad map, or some other

method to help depict the location of the limits of the drainage areas

Proposed Drainage Information (Str. No., Station, Q, A, C, Type / Size x Length)

Geometric Layouts

- ___ Centerline geometry
- ___ Geometric Soundness (Curve Data agrees with PCs, PT, Bearings, etc.) and bearing labeled properly
- ___ Intersection Details (If 1"=20' not used for plan/profile sheets or if not able to label on plan/profile sheets)

Sequence of Construction (Joint Layout superimposed on sheets if applicable)

- ___ General Construction Notes
- ___ Sequence of operation (phases)
- ___ Construction to be performed
- ___ Location of traffic
- ___ Typical section(s) (if required for clarity of intent)
- ___ Construction Signing

Traffic Signal Plans

- ___ Signal layout sheet (See Traffic Signal Design Checklist)
- ___ Signal configuration agrees with proposed striping layout

Bridge Plans

- ___ Bridge Index
- ___ General Notes
- ___ Summary of Estimated Quantities
- ___ General Plan
- ___ Typical sections
- ___ Superelevation Diagram
- ___ Construction Phasing Details
- ___ Foundation Pile Layout
- ___ Pile Loads / Details
- ___ Pile Data Tables
- ___ Bent Details
- ___ Girder Details

- ___ Span Details
- ___ Joint Details
- ___ Bearing Details
- ___ Approach Slab Details
- ___ Guardrail Details
- ___ Bridge Barrier / Railing Details
- ___ Bridge Drainage Details
- ___ Detour Bridge Details (if applicable)
- ___ Revetment Details
- ___ Year Plate
- ___ Rebar Support
- ___ Misc. Details

Cross Sections

- ___ Existing ground
- ___ Proposed roadway
- ___ Existing & Required R/W, Servitudes (if required)
- ___ Earthwork volume between stations

Design Calculations

- ___ Drainage Calculations
- ___ Runoff Calculations
- ___ Inlet Spacing calculations*
- ___ Subsurface drainage calculations*
- ___ Fill Mitigation calculations (if applicable)
- ___ Stormwater detention calculations* (if applicable)
- ___ HEC RAS Analysis*
- ___ Bridge Hydraulics & Scour Analysis*
- ___ Brief narrative describing what calculations are provided, how items were analyzed, and what assumptions (e.g. design stages / water surface elevations) were made
- ___ 60% Engineer's Opinion of Probable Construction Cost

* Program files also submitted electronically

Utility Space Allocation Plan (1"=20' Scale)

- ___ Plan view
- ___ Topographic survey features (roadway edge lines / curb lines,

- hardscape features, overhead and subsurface utilities)
- ___ Proposed roadway features (curb, sidewalks / multi-use paths, traffic signal poles, lighting poles, electrical conduit, bridge foundations, bridge piles, etc.)
- ___ All proposed drainage features
- ___ Limits of Construction
- ___ Req'd Right-of-Way lines
- ___ Utility company contact information
- ___ General Notes

Interdisciplinary Agreement

- ___ Project Stationing agrees across all applicable design discipline sheets
- ___ Proposed design elements do not conflict with one another where applicable (drainage, signal poles, lighting, structures, etc.)
- ___ Potential and apparent utility conflicts identified for all proposed design elements (subsurface drainage, ditches, signal poles, lighting, bridge substructure, etc.)

General

- ___ Comments addressed from 30% (or 50%, if applicable) Final Plans
- ___ Callouts are legible and no spelling errors
- ___ Intersection Autoturn Analysis
- ___ All proposed work has pay items properly assigned

Green Infrastructure / Landscape Plan Sheets (if applicable to project)

a. General

- ___ Green Infrastructure comments addressed from 50% Final Plan Review

b. Site Plan Sheet(s) (1"=40' Max.)

- ___ Preliminary layout and materials for green infrastructure system(s)
- ___ Horizontal offsets from existing surface features

- ___ Proposed design speed, critical design vehicle
- ___ Turning movements at proposed curb extension location(s)

c. Design/Utility Plan(s) (1"=20' Max.)

- ___ Existing and proposed utilities
- ___ Preliminary layout of green infrastructure system(s)
- ___ Horizontal offsets from existing utilities
- ___ Callout with system footprint, depth, and underdrain connection elevation
- ___ Consistent with Utility Allocation Plan
- ___ Cross-sections – Scale 1/4" = 1'

i. Report

- ___ Design footprint
- ___ Drainage area
- ___ Loading ratio
- ___ Storage volume
- ___ Storm size managed
- ___ Calculation of drain-down time
- ___ Probable Green Infrastructure cost

d. Grading Plan(s) (1"=10' Max.)

- ___ Existing and proposed spot elevations at critical points

e. Landscape Plan(s) (1"=8' Max.)

- ___ Proposed planting schedule, plan view
- ___ Proposed planting schedule, tabulation format

f. Details – Not to Scale

- ___ Green infrastructure details
- ___ Planting details

g. Design GI Drainage Map (1"=40' Max.)

- ___ Layout of green infrastructure system(s)
- ___ Delineation of drainage area to practice
- ___ Callout with drainage area, system footprint, and loading ratio

Consultant Project Manager

Consultant Quality Manager

h. Autoturn Analysis (For curb extension design only)

- ___ Proposed design features, intersection controls, striping



90% FINAL PLANS (PS&E SUBMITTAL) CHECK LIST

Design Consultant shall provide a 90% Final Plan Submittal in electronic format at half-scale at 11" x 17" size. Please note that scales shown below are for full size drawings (22" x 34"). The purpose of the submittal is to present the near final proposed construction plans, specifications, and cost estimate for review prior to submitting final stamped and sealed drawings. The submittal should include the following items and others as necessary for complete construction of the project. For projects on State Routes to remain under the jurisdiction and ownership of LADOTD, please refer to the LADOTD Road Design Manual and related guidance for additional checklist information at each stage submittal.

Title Sheet – Standard DPW Title Sheet

- ☐ Project Location Map
- ☐ Project Limits
- ☐ Design Speed
- ☐ Roadway Classification (if applicable)
- ☐ Index with proposed standard plans and R/W Maps
- ☐ Type of Construction
- ☐ Specification Note
- ☐ Survey Information
- ☐ Horizontal Datum used
- ☐ Vertical Datum Used
- ☐ Set Number with Project Title vertically along the right border

Summary of Quantities

- ☐ Listing of Bid Items
- ☐ Final Quantities
- ☐ All pay items properly accounted for

Typical Section Sheets

- ☐ Number of Lanes
- ☐ Lane widths and slopes
- ☐ Shoulder widths and slopes
- ☐ Median widths
- ☐ Curb width and type
- ☐ Sidewalk width and location

- ☐ Foreslope and backslope rates
- ☐ Clear zone
- ☐ Right of way
- ☐ Ditch width
- ☐ Superelevation table
- ☐ Runoff and runoff details
- ☐ Grading section
- ☐ Pavement section

Plan and Profile Sheets

- ☐ North Arrow, Legend
- ☐ Various design elements and stationing adequately covered by typical sections
- ☐ Limits of proposed construction
- ☐ Roadway and intersecting street names
- ☐ Reference points with ties and TBM's
- ☐ Dimensions at the beginning
- ☐ Roadway
- ☐ Shoulder
- ☐ Curb
- ☐ Existing and required R/W
- ☐ Horizontal curve data and callouts
- ☐ Equations
- ☐ Transition lengths
- ☐ Offset distances
- ☐ Median lengths
- ☐ Median openings
- ☐ Turnout geometry (radii)

- ___ Profile grade line
- ___ Vertical curve data and controls
- ___ Equations
- ___ Profiles of intersecting streets
- ___ Bridge ends
- ___ Vertical and horizontal clearances
- ___ Limits of construction
- ___ Construction notes

Drainage Plan and Profile (If necessary)

Plan View

- ___ North Arrow, Legend
- ___ Drainage Structures in Plan
- ___ Structure number and Station
- ___ Size and material type
- ___ Length & flow line
- ___ Profile View
- ___ Drainage Structures in Profile
- ___ Structure number
- ___ Flow line elevation
- ___ Pipe diameter
- ___ Length and percent grade
- ___ Existing and Proposed sanitary sewer
- ___ Other utilities affecting drainage

Existing Drainage Map

- ___ North Arrow, Legend
- ___ Drainage areas with size, shape, & direction of flow
- ___ Size of existing drainage structures
- ___ Drainage areas for cross drains
- ___ Aerial image, contours, existing topo, quad map, or some other method to help depict the location of the limits of the drainage areas

Design Drainage Map

- ___ North Arrow, Legend
- ___ Drainage system on geometric layout
- ___ Drainage boundaries with area, and discharge

- ___ Drainage ridge line for over the curb drainage (used for inlet spacing calculations)
- ___ Drainage design criteria
- ___ Aerial image, contours, topo of buildings, quad map, or some other method to help depict the location of the limits of the drainage areas
- ___ Proposed Drainage Information (Str. No., Station, Q, A, C, Type / Size x Length)

Geometric Layouts

- ___ Centerline geometry
- ___ Geometric Soundness (Curve Data agrees with PCs, PT, Bearings, etc.) and bearing labeled properly
- ___ Intersection Details (If 1"=20' not used for plan/profile sheets)

Joint Layout Sheets (if concrete construction)

- ___ North Arrow, Legend
- ___ Joint locations for entire project
- ___ Joint type
- ___ Elevation at each joint intersection

Graphical Grade Layout (Asphalt Roadways)*

- ___ Finished pavement elevations

* Graphical grades may be required where pavement slope transitions cannot be clearly covered by superelevation diagrams, complex intersection geometry locations, or where cross slope break locations with transitions are required

Pavement Marking Layout

- ___ North Arrow, Legend
- ___ Size and color of lane and edge lines
- ___ Legends and symbols
- ___ Pavement markers

Sequence of Construction (Joint Layout superimposed on sheets if applicable)

- ___ General Construction Notes
- ___ Sequence of operation (phases)
- ___ Construction to be performed
- ___ Location of traffic
- ___ Typical section(s) (if required for clarity of intent)
- ___ Construction Signing

Subgrade Soil Survey

- ___ Boring locations w/north arrow, horizontal survey control information, and coordinates of borings
- ___ Classification and characteristics of soil layers

Traffic Signal Plans

- ___ Final traffic signal plans (See Traffic Signal Design Checklist)
- ___ Signal configuration agrees with proposed striping layout
- ___ CD with CADD copy of final signal plans (PM will forward to DPW)

Permanent Signs

- ___ Location
- ___ Type with MUTCD designation

Cross Sections

- ___ Existing ground
- ___ Proposed roadway
- ___ Existing & Required R/W, Servitudes (if required)
- ___ Earthwork volume between stations
- ___ Existing ground
- ___ Station and Existing Centerline Elev.
- ___ Proposed roadway
- ___ Profile Grade Elevation
- ___ Existing & Required R/W
- ___ Earthwork volume between stations

- ___ Scale of 1"=5' or 1"=10' as appropriate both horizontal and vertical

Utility Space Allocation Plan (1"=20' Max.)

- ___ Plan view
- ___ Topographic survey features (roadway edge lines / curb lines, hardscape features, overhead and subsurface utilities)
- ___ Proposed roadway features (curb, sidewalks / multi-use paths, traffic signal poles, lighting poles, electrical conduit, bridge foundations, bridge piles, etc.)
- ___ All proposed drainage features
- ___ Limits of Construction
- ___ Req'd Right-of-Way lines
- ___ Utility company contact information
- ___ General Notes

Interdisciplinary Agreement

- ___ Project Stationing agrees across all applicable design discipline sheets
- ___ Proposed design elements do not conflict with one another where applicable (drainage, signal poles, lighting, structures, etc.)
- ___ Potential and apparent utility conflicts identified for all proposed design elements (subsurface drainage, ditches, signal poles, lighting, bridge substructure, etc.)

Bridge Plans

- ___ Bridge Index
- ___ General Notes
- ___ Summary of Estimated Quantities
- ___ General Plan
- ___ Typical sections
- ___ Superelevation Diagram
- ___ Construction Phasing Details
- ___ Foundation Pile Layout
- ___ Pile Loads / Details

- ___ Pile Data Tables
- ___ Bent Details
- ___ Girder Details
- ___ Span Details
- ___ Joint Details
- ___ Bearing Details
- ___ Approach Slab Details
- ___ Guardrail Details
- ___ Bridge Barrier / Railing Details
- ___ Bridge Drainage Details
- ___ Detour Bridge Details (if applicable)
- ___ Revetment Details
- ___ Year Plate
- ___ Rebar Support
- ___ Misc. Details
- ___ Final Design Calculations

General

- ___ Plans are legible and no spelling errors
- ___ All proposed work has pay items properly assigned
- ___ All applicable Construction Documents, Reports, Special Provisions are finalized and ready for sealing
- ___ All applicable Standard plans accounted for in the plans
- ___ All applicable Special Details accounted for in the plans

Green Infrastructure/Landscape Design (if applicable to project)

a. General

- ___ Green Infrastructure comments addressed from 60% PIH review

b. Site Plan Sheet(s) (1"=40' Max.)

- ___ Preliminary layout and materials for green infrastructure system(s)
- ___ Horizontal offsets from existing surface features

c. Design/Utility Plan(s) (1"=20' Max.)

- ___ Existing and proposed utilities
- ___ Preliminary layout of green infrastructure system(s)
- ___ Horizontal offsets from existing utilities
- ___ Callout with system footprint, depth, and underdrain connection elevation
- ___ Consistent with Utility Allocation Plan
- ___ Cross-sections – Scale 1/4" = 1'

d. Grading Plan(s) (1"=10' Max.)

- ___ Existing and proposed spot elevations at critical points

e. Landscape Plan(s) (1"=8' Max.)

- ___ Proposed planting schedule, plan view
- ___ Proposed planting schedule, tabulation format

f. Details – Not to Scale

- ___ Green infrastructure details
- ___ Planting details

g. Design GI Drainage Map (1"=40' Max.)

- ___ Layout of green infrastructure system(s)
- ___ Delineation of drainage area to practice
- ___ Callout with drainage area, system footprint, and loading ratio

h. Autoturn Analysis (For curb extension design only)

- ___ Proposed design features, intersection controls, striping
- ___ Proposed design speed, critical design vehicle
- ___ Turning movements at proposed curb extension location(s)

i. Report

- ___ Design footprint
- ___ Drainage area
- ___ Loading ratio
- ___ Storage volume
- ___ Storm size managed
- ___ Calculation of drain-down time
- ___ Probable Green Infrastructure cost

Consultant Project Manager

Consultant Quality Manager



100% FINAL PLANS CHECK LIST

Design Consultant shall provide a 100% Final Plan Submittal in electronic format at full-scale at 22" x 34" size. The purpose of the submittal is to present the final proposed construction for review just prior to final stamped and sealed drawings. The submittal should include the following items and others as necessary for complete construction of the project. For projects on State Routes to remain under the jurisdiction and ownership of LADOTD, please refer to the LADOTD Road Design Manual and related guidance for additional checklist information at each stage submittal.

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- ☐ Type of Construction
- ☐ Specification Note
- ☐ Survey Information
- ☐ Horizontal Datum used
- ☐ Vertical Datum Used
- ☐ Set Number with Project Title vertically along the right border

Summary of Quantities

- ☐ Listing of Bid Items
- ☐ Final Quantities
- ☐ All pay items properly accounted for

Typical Section Sheets

- ☐ Number of Lanes
- ☐ Lane widths and slopes
- ☐ Shoulder widths and slopes
- ☐ Median widths
- ☐ Curb width and type
- ☐ Sidewalk width and location
- ☐ Foreslope and backslope rates
- ☐ Clear zone

- ☐ Right of way
- ☐ Ditch width
- ☐ Superelevation table
- ☐ Runoff and runout details
- ☐ Grading section
- ☐ Pavement section

Plan and Profile Sheets

- ☐ North Arrow, Legend
- ☐ Various design elements and stationing adequately covered by typical sections
- ☐ Limits of proposed construction
- ☐ Roadway and intersecting street names
- ☐ Reference points with ties and TBM's
- ☐ Dimensions at the beginning
- ☐ Roadway
- ☐ Shoulder
- ☐ Curb
- ☐ Existing and required R/W
- ☐ Horizontal curve data and callouts
- ☐ Equations
- ☐ Transition lengths
- ☐ Offset distances
- ☐ Median lengths
- ☐ Median openings
- ☐ Turnout geometry (radii)
- ☐ Profile grade line
- ☐ Vertical curve data and controls
- ☐ Equations

- ___ Profiles of intersecting streets
- ___ Bridge ends
- ___ Vertical and horizontal clearances
- ___ Limits of construction
- ___ Construction notes

Drainage Plan and Profile (If necessary)

Plan View

- ___ North Arrow, Legend
- ___ Drainage Structures in Plan
- ___ Structure number and Station
- ___ Size and material type
- ___ Length & flow line

Profile View

- ___ Drainage Structures in Profile
- ___ Structure number
- ___ Flow line elevation
- ___ Pipe diameter
- ___ Length and percent grade
- ___ Existing and Proposed sanitary sewer
- ___ Other utilities affecting drainage

Existing Drainage Map

- ___ North Arrow, Legend
- ___ Drainage areas with size, shape, & direction of flow
- ___ Size of existing drainage structures
- ___ Drainage areas for cross drains
- ___ Aerial image, contours, existing topo, quad map, or some other method to help depict the location of the limits of the drainage areas

Design Drainage Map

- ___ North Arrow, Legend
- ___ Drainage system on geometric layout
- ___ Drainage boundaries with area, and discharge
- ___ Drainage ridge line for over the curb drainage(used for inlet spacing calculations)
- ___ Drainage design criteria

- ___ Aerial image, contours, topo of buildings, quad map, or some other method to help depict the location of the limits of the drainage areas
- ___ Proposed Drainage Information (Str. No., Station, Q, A, C, Type / Size x Length)

Geometric Layouts

- ___ Centerline geometry
- ___ Geometric Soundness (Curve Data agrees with PCs, PT, Bearings, etc.) and bearing labeled properly
- ___ Intersection Details (If 1"=20' not used for plan/profile sheets)

Joint Layout Sheets (if concrete construction)

- ___ North Arrow, Legend
- ___ Joint locations for entire project
- ___ Joint type
- ___ Elevation at each joint intersection

Graphical Grade Layout (Asphalt Roadways)*

- ___ Finished pavement elevations

* Graphical grades may be required where pavement slope transitions cannot be clearly covered by superelevation diagrams, complex intersection geometry locations, or where cross slope break locations with transitions are required

Pavement Marking Layout

- ___ North Arrow, Legend
- ___ Size and color of lane and edge lines
- ___ Legends and symbols
- ___ Pavement markers

Sequence of Construction (Joint Layout superimposed on sheets if applicable)

- ___ General Construction Notes
- ___ Sequence of operation (phases)
- ___ Construction to be performed
- ___ Location of traffic
- ___ Typical section(s) (if required for clarity of intent)
- ___ Construction Signing

Subgrade Soil Survey

- ___ Boring locations w/north arrow, horizontal survey control information, and coordinates of borings
- ___ Classification and characteristics of soil layers

Traffic Signal Plans

- ___ Final traffic signal plans (See Traffic Signal Design Checklist)
- ___ Signal configuration agrees with proposed striping layout
- ___ CD with CADD copy of final signal plans (PM will forward to DPW)

Permanent Signs

- ___ Location
- ___ Type with MUTCD designation

Cross Sections

- ___ Existing ground
- ___ Proposed roadway
- ___ Existing & Required R/W, Servitudes (if required)
- ___ Earthwork volume between stations
- ___ Existing ground
- ___ Station and Existing Centerline Elev.
- ___ Proposed roadway
- ___ Profile Grade Elevation
- ___ Existing & Required R/W
- ___ Earthwork volume between stations

- ___ Scale of 1"=5' or 1"=10' as appropriate both horizontal and vertical

Utility Space Allocation Plan

- ___ Plan view
- ___ Topographic survey features (roadway edge lines / curb lines, hardscape features, overhead and subsurface utilities)
- ___ Proposed roadway features (curb, sidewalks / multi-use paths, traffic signal poles, lighting poles, electrical conduit, bridge foundations, bridge piles, etc.)
- ___ All proposed drainage features
- ___ Limits of Construction
- ___ Req'd Right-of-Way lines
- ___ Utility company contact information
- ___ General Notes

Interdisciplinary Agreement

- ___ Project Stationing agrees across all applicable design discipline sheets
- ___ Proposed design elements do not conflict with one another where applicable (drainage, signal poles, lighting, structures, etc.)
- ___ Potential and apparent utility conflicts identified for all proposed design elements (subsurface drainage, ditches, signal poles, lighting, bridge substructure, etc.)

Bridge Plans

- ___ Bridge Index
- ___ General Notes
- ___ Summary of Estimated Quantities
- ___ General Plan
- ___ Typical sections
- ___ Superelevation Diagram
- ___ Construction Phasing Details
- ___ Foundation Pile Layout
- ___ Pile Loads / Details
- ___ Pile Data Tables

- ___ Bent Details
- ___ Girder Details
- ___ Span Details
- ___ Joint Details
- ___ Bearing Details
- ___ Approach Slab Details
- ___ Guardrail Details
- ___ Bridge Barrier / Railing Details
- ___ Bridge Drainage Details
- ___ Detour Bridge Details (if applicable)
- ___ Revetment Details
- ___ Year Plate
- ___ Rebar Support
- ___ Misc. Details

Final Computation Notebook (sealed by EOR or responsible charge)

- ___ Final Drainage Calculations
- ___ Final Fill Mitigation Calculations (if applicable)
- ___ Final Quantity Calculations
- ___ Final Bridge Design Calculations

General

- ___ Plans are legible and no spelling errors
- ___ All proposed work has pay items properly assigned
- ___ All applicable Construction Documents, Reports, Special Provisions are sealed by EOR or responsible charge
- ___ All applicable Standard plans accounted for in the plans
- ___ All applicable Special Details accounted for in the plans

Green Infrastructure/Landscape Design

a. General

- ___ Green Infrastructure comments addressed from 60% PIH review

b. Site Plan Sheet(s)

- ___ Preliminary layout and materials for green infrastructure system(s)
- ___ Horizontal offsets from existing surface features

c. Design/Utility Plan(s)

- ___ Existing and proposed utilities
- ___ Preliminary layout of green infrastructure system(s)
- ___ Horizontal offsets from existing utilities
- ___ Callout with system footprint, depth, and underdrain connection elevation
- ___ Consistent with Utility Space Allocation Plan

d. Grading Plan(s)

- ___ Existing and proposed spot elevations at critical points

e. Landscape Plan(s)

- ___ Proposed planting schedule, plan view
- ___ Proposed planting schedule, tabulation format

f. Details

- ___ Green infrastructure details
- ___ Planting details

g. Design GI Drainage Map

- ___ Layout of green infrastructure system(s)
- ___ Delineation of drainage area to practice
- ___ Callout with drainage area, system footprint, and loading ratio

h. Autoturn Analysis (For curb extension design only)

- ___ Proposed design features, intersection controls, striping
- ___ Proposed design speed, critical design vehicle
- ___ Turning movements at proposed curb extension location(s)

i. Report (sealed by EOR or responsible charge)

- ___ Design footprint
- ___ Drainage area
- ___ Loading ratio
- ___ Storage volume
- ___ Storm size managed
- ___ Calculation of drain-down time
- ___ Probable Green Infrastructure cost

Consultant Project Manager

Consultant Quality Manager

Attachment B

MOVEBR Quality Review Form



STATUS DEFINITIONS	COMMENT TYPE
<p>1. Open - Initial status of all comments.</p> <p>2. Accepted - EOR has accepted and incorporated comments. Comment is considered closed.</p> <p>3. Clarify - Clarification is required, see comments in columns K & L.</p> <p>4. Exception - EOR has not incorporated comments, see columns K & L.</p> <p>5. No Comment - Reviewer has reviewed set and acknowledges No Comments required.</p>	<p>1. Potentially serious quality issue (Engineer must discuss with QA/QC reviewer and agree on resolution)</p> <p>2. Minor comment that can be readily addressed or potential improvement to deliverable</p> <p>3. Comment is editorial or otherwise minor in nature with little effort to implement.</p>

[illegible]

Attachment C

MOVEBR Fee Proposal Template & Example Computation of Hourly Rate

DESIGN FEE PROPOSAL
FOR
Prime Name



Program Type

PROJECT NAME
Project Name

PROJECT NUMBER
C-P Project No. XX-XX-XX-XXXX

CITY OF BATON ROUGE, PARISH OF EAST BATON ROUGE
DEPARTMENT OF TRANSPORTATION AND DRAINAGE

Date

INPUT CELLS ARE IN BOLD BLUE TEXT; ALL OTHER CELLS ARE CALCULATED VALUES

The following instructions and guidelines are meant to aide in the completion of your fee estimate.

- 1 The tasks provided in the fee template are not a substitute for a well-documented scope document.
- 2 All links and formulas contained in this workbook are included for convenience only. It is the consultant's responsibility to ensure all information is accurate prior to submittal.
- 3 Tasks can be bundled within a tab under a summary heading, but all tasks should be included for all work to be performed.
- 4 The invoice template will use the same task titles for invoicing. All work will roll-up to these main headings for invoicing purposes.

How to use the Fee Template

Key Tab:

Enter the name of the Prime and each Subconsultant, this will carry throughout the file.
Enter the OH percentage for the Prime and each subconsultant, this will carry throughout the file.
Enter the Classification titles to be used on this project. Enter the raw, average rate to be used for each company for each classification.
Notes: it is understood that not all companies will use all the same classifications. This will carry throughout the file.

Cover Sheet:

Use the drop down box to select the program type for your project, this is in bold blue.

Summary Sheet:

On the Summary Sheet enter the information required at the top in Blue. This information will carry throughout the file.
No other information should be entered on this page.
This sheet will provide a summary for all hours, by firm, by task. The tasks are represented by individual tabs within the file.
The subconsultant mark-up is included as a calculation internal to this tab.
The "Hide Extra Sub Columns" and "Unhide Extra Sub Columns" buttons can be used to reduce the number of reporting subs to be appropriate to your proposal.

Overall Task Tab information:

Generally the task tabs align with the types of work required in the MOVEBR Design Guidelines as well as with the Consultant Services Manual
If the Prime or another sub-consultant has coordination hours or will provide input to a specific task but are not the main provider, hours should appear in the correct task tab.
The "Hide Blank Rows" and "Unhide Blank Rows" buttons can be used to reduce the number of lines that you see for tasks internal to each tab.
Add additional rows as needed, confirming that formulas remain intact.
The "Hide SubConsultants with no hours" and "Unhide Subconsultants" buttons can be used to reduce the number of subconsultant sections in each tab.
QA/QC should be included within each tab as appropriate.

Corridor Survey

Enter all work to be completed for topographic survey as either part of the design study and or full contract. Use subheadings as necessary.

Design Study

Enter all work to be completed for the design study report and documentation.
Environmental activities required as part of the design study should be included on this tab.

Utility and SUE

Enter tasks and hours in this tab for utility coordination, space allocation plans, etc in this tab.
If SUE efforts are included, enter tasks and hours in this tab.

Full NEPA Process

This tab should be used for projects which involve NEPA related environmental work.

Geotechnical

This tab should be used for task and hours associated with geotechnical investigation and analysis, if required.
The direct costs can be expanded to include costs for drilling etc.

Traffic

Enter tasks and hours for any traffic related services required. This may include counting, analysis, reports, etc.

Roadway

This tab should be separated in to the milestone deliverables per the requirements of MOVEBR.
This tab would include: H&H work, green infrastructure (associated with water quality) and any other plan components not included elsewhere.

Bridge

Enter the tasks and hours associated with bridge related design and plans. Enter based on the milestone deliverables per the requirements of MOVEBR.

Sewer

Enter tasks and hours associated with any sewer work required per the MOVEBR requirements.
This may include work requested and coordinated with the CP Department of Environmental Services.

Landscaping

Enter the tasks and hours associated with non-water quality improvements required per the MOVEBR requirements.

Street Lighting

Enter tasks and hours for street lighting design in this tab if it is required as part of the project.
This tab should be separated in to the appropriate milestone deliverables per the requirements of MOVEBR.

ROW Survey & Mapping

Enter the tasks and hours for ROW Survey and Mapping.
This may include: recent owner deed abstracts, survey time, map time etc.

Signal Design

Enter tasks and hours for signal design per the MOVEBR requirements.

Comparison Summary

This is for the PMT use only.

Classification	Name	OH Percentage	Profit	Local	State	MBE	WBE	VBE	Project Length	Program Type
Prime	Prime Name	156.00%	15.00%						1,500 Feet	MOVEBR ENHANCEMENT & PROGRAM
Subconsultant 1	Subconsultant 1	156.00%	15.00%							MOVEBR NEW CAPACITY PROGRAM
Subconsultant 2	Subconsultant 2	156.00%	15.00%							
Subconsultant 3	Subconsultant 3	156.00%	15.00%							
Subconsultant 4	Subconsultant 4	156.00%	15.00%							
Subconsultant 5	Subconsultant 5	156.00%	15.00%							
Subconsultant 6	Subconsultant 6	156.00%	15.00%							
Subconsultant 7	Subconsultant 7	156.00%	15.00%							
Subconsultant 8	Subconsultant 8	156.00%	15.00%							

Place an X in the box above for each consultant based on the definitions ---->.

“Minority Business Enterprise” (MBE) – means a business which is at least fifty-one percent (51%) owned by African Americans, American Indians, Asians, Filipinos, and/or Latinos and whose management and daily operation is controlled by one or more

“Women Business Enterprise” (WBE) – means a business which is at least fifty-one percent (51%) owned by one or more women and whose management and daily operation is controlled by the qualifying parties .

“Veteran Business Enterprise” (VBE) – means a business which is at least fifty-one percent (51%) owned by one or more Veterans and whose management and daily operation is controlled by the qualifying parties.

Local – means a business that has a permanent address within the Parish of East Baton Rouge for a period of at least 12 months prior to the date of this contract. Temporary construction offices or Post office boxes do not constitute a business location under this

State - means a business that has a permanent address within the State of Louisiana for a period of at least12 months. Temporary construction offices or Post office boxes do not constitute a business location under this definition

Rates	Classifications																						
Prime Name	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	Class 16	Class 17	Class 18	Class 19	Class 20	Class 21	Class 22	Class 23
Subconsultant 1																							
Subconsultant 2																							
Subconsultant 3																							
Subconsultant 4																							
Subconsultant 5																							
Subconsultant 6																							
Subconsultant 7																							
Subconsultant 8																							

INPUT CELLS ARE IN BOLD BLUE TEXT; ALL OTHER CELLS ARE CALCULATED VALUES

Fee Template V4

Project Name
MOVEBR Project Type
C-P Project No. XX-XX-XX-XXXX
Prime Name
Date

Hide Extra Sub
Columns

Unhide Extra

Summary	Prime Consultant Man-Hours	Sub-Consultant Man-Hours	Total Man-Hours	Total Salary Cost	Total Overhead	Total Labor Cost	Total Direct Cost	Total Profit	Prime Name Sub- Total	Prime Name Contract %	Subconsultant Markup	Total Cost	Total Percent By Phase
Preliminary Engineering Services				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%	\$0.00	\$0.00	0%
Corridor Survey										0%			0%
Design Study										0%			0%
Final Plan Services				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%	\$0.00	\$0.00	0%
Roadway										0%			0%
Bridge										0%			0%
Sewer										0%			0%
Signal Design										0%			0%
Other Services				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%	\$0.00	\$0.00	0%
Utility and SUE										0%			0%
Full NEPA Services										0%			0%
Geotechnical										0%			0%
Traffic										0%			0%
Landscaping										0%			0%
Street Lighting										0%			0%
ROW Survey/Mapping										0%			0%
Project Total				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%	\$0.00	\$0.00	0%

EXAMPLE COMPUTATION OF HOURLY RATES

FOR LUMP SUM FEES

Draftsmen	Hourly Rate	Adjustment for Distribution of Workload	Weighted Rate		Rate per Proposal
		*			
Bill Brown	\$26.00	4	104.00		
Cleve Smith	\$23.71	5	118.55		
Bob Green	\$24.32	1	24.32		
			246.87	÷ 10 =	\$ 24.69

*Note: The adjustment is based on Mr. Brown performing 40% of the hours, Mr. Smith 50%, and Mr. Green 10%.

Notes:

1. The above schedule is intended as a guide. The C-P acknowledges the fact that there may be other valid considerations in determining hourly rates.
2. If it is not known which employees will be utilized in the project, then all employees within a particular classification should be given equal weight in calculating the rate.

Attachment D

MOVEBR Invoice Template

This file is meant to be a rolling file for the life of your contract. It is to reside on the Sharepoint site and be placed there every month with new information. It is important NOT to rename this file, as it will ensure your version is always up to date. Follow the directions below for monthly updates and submittals.

Each month, the "Monthly Entry" tab will be filled out, and the rest of the tabs will populate based on information provided in the "Monthly Entry" tab. An invoice MUST be submitted each month, even if it is \$0.00.

Using Each Tab

1. Monthly Entry: This is the tab where the input of information occurs

- * The cells needing input are colored either light blue or red
- * The column where percent completes will be entered in conjunction with the month, will be highlighted light green
- * **Consultant Details Section (THIS INFORMATION ENTERED BY MOVEBR PMT)**
 - Please populate the following fields with the Prime's information. Filling out this section will also populate the other tabs of the workbook, where necessary, avoiding the need for duplicate entry
 - * Firm Name
 - * Project Manager
 - * PM Phone
 - * PM Email
 - * Contract Type
 - * C.P Project Number
 - * Project Name
 - * Notice to Proceed
 - * Contract Expiration
 - * Contract Number
 - * Consultant Project Number
- * **Invoice Information**
 - The only cell needing selection in this section is the 'Invoice For:' cell.
 - This selection is the current month the invoice is being prepared for. Use the dropdown (highlighted red) to select the month for which the services took place
 - As the month in the dropdown is changed, the column highlighted green will shift. This allows easier visibility to where the percent completes should be input
- * **Additional Firm Name(s) (THIS INFORMATION ENTERED BY MOVEBR PMT)**
 - Please fill out as needed with the subconsultants on the team
 - These fields will also populate other cells in this worksheet and throughout the workbook
- * **Invoice Number**
 - This number represents the consultants invoice numbering system and has no restrictions.
 - Row 17, highlighted red, is where the invoice number will be input
 - Place the invoice number in row 17 that corresponds with the column for the current month
- * **Month Information**
 - No data entry is required in this section.
- * **Details Section - There is a details section for each for each 'firm'. An individual section will be associated with each firm name that was entered previously in the "additional firm name" section. (THIS IS INITIALLY ENTERED BY THE MOVEBR PMT)**
 - Task Name
 - * The tasks associated with the scope will be selected here
 - * The task names will not be modified from this list unless a special service is added. This is the same list as utilized during fee development.
 - * This will be filled out prior to sending this file to the Consultant.
 - * The tasks selected populate additional fields throughout the workbook and require budget numbers.
 - Description
 - * This field can be utilized to add a few notes about the task being completed or to represent a supplement number.
 - Original and Supplement Fields
 - * The budgets associated with the task will be populated here
 - * Each task row will either have an original budget or a supplement budget
 - * When a supplement is executed, the MOVEBR PMT will modify the details section to reflect the new budget information. A new task line will be added and the fee information should be entered in the "Supplement" column.
- * **Filling out the JTD % Complete section**
 - * Each month, the JTD percent complete column needs to be filled out where there is a budget, and for each firm
 - * The highlighted green column will represent the current month based on the selection made previously in the "Invoice Information" section
 - * If there is nothing to be invoiced for a particular task for the month, the % complete from the previous month needs to be carried over
 - * This is a cumulative percent complete, so leaving the column blank will not work correctly
- * **Local / State / MBE / WBE / VBE (THIS WILL BE ENTERED BY THE MOVEBR PMT)**
 - Starting in column X, there are spaces to signify the classification of each firm on the team as it relates to either Local / State / MBE / WBE / VBE
 - Place an X in each that applies, for each firm on the team

2 Progress Report

- * Complete all fields of the progress report as appropriate for your invoice. The project information at the top will utilize information you entered on other tabs.
- * Provide all progress here for all members of the Team.

3 Once the information above is filled out completely, each month, the rest of the tabs will automatically populate, creating the invoice

- * The four tabs, mentioned below, should be printed in PDF format and submitted to your Sharepoint folder as one file with notice to the PM by E-mail for your monthly invoice.
- * Cover Letter
 - Please verify the cover letter populated as expected before providing a signature
- * Invoice Worksheet
 - This worksheet will summarize all the original and supplemental items from the monthly entry tab
 - The Consultant PM must sign (electronically is acceptable) the bottom of this worksheet page.
 - **After review of this sheet for accuracy, please select 'keep' in the dropdown located in Cell M18**
 - This will clean up the worksheet to only show the rows where there is a budget for printing purposes.
- * Class Tracking
 - This worksheet will summarize, by firm/team, the effort provided by Local / State / MBE / WBE / VBE
- * Progress Report

4 e-Builder Import Template

- * Do not modify any data on this tab. This will be for use only by the PMT.

Consultant Details			Additional Firm Name(s)		
Firm Name:		Notice To Proceed:			
Project Manager:		Contract Expiration:			
PM Phone:		Contract Number:			
PM Email:		Consultant Project #:			
Contract Type:		Invoice For:	December 2020		
C.P. Project Number:		Previous Month	November 2020		
Project Name:		Period	2012		

Note:
When selecting the task names (Column C), please make sure there is a unique description in the column to the right (Column D). This will keep the workbook formulas from duplicating, and provide better accuracy to detailed numbers, and ensure accurate representation of amounts invoiced.

Invoice Number	
----------------	--

JTD/ETC	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020
Month								
Month End Date	1/31/2020	2/28/2020	3/27/2020	4/24/2020	5/29/2020	6/26/2020	7/31/2020	8/28/2020

Prime Name	0
------------	---

Sub 1	0
-------	---

Sub 2	0
-------	---

[illegible]

January 30, 2021

MOVEBR PM, By Email

Re:

Project Name: 0
C.P. Project Number: 0
Contract Type: 0
Contract No.: 0
Invoice Number: 0

Enclosed please find the invoice for professional services in connection with the above referenced project.

We trust you will find this invoice in proper order and place in line for processing.

If any further information is necessary to process this invoice for payment, please use the information below to contact me.

Consultant Project Manager:	0
Consultant PM Phone:	0
Consultant PM Email:	0

Project Manager

Contract Type: 0 Invoice Number: 0
 C.P. Project Number: 0 Date: 1/30/2021
 Contract No.: 0 Consultant's Project #: 0
 Project Name: 0
 Consultant Name: 0 Maximum Lump Sum Limitation = \$ -
 Notice to Proceed: 1/0/1900 Period: 2012
 Contract Expiration: 1/0/1900

For Professional Engineering Services rendered for the period 12-01-2020 through 12-31-2020



Supplemental Agreement(s) in place: No

Original Contract:

Task	Fee	% Complete	Amount Earned To Date	Current Period
Preliminary Engineering Services	\$ -		\$ -	\$ -
Corridor Survey	\$ -		\$ -	\$ -
Design Study	\$ -		\$ -	\$ -
Final Plan Services	\$ -		\$ -	\$ -
Roadway	\$ -		\$ -	\$ -
Bridge	\$ -		\$ -	\$ -
Sewer	\$ -		\$ -	\$ -
Signal Design	\$ -		\$ -	\$ -
Other Services	\$ -		\$ -	\$ -
Utility and SUE	\$ -		\$ -	\$ -
Full NEPA Services	\$ -		\$ -	\$ -
Geotechnical	\$ -		\$ -	\$ -
Traffic	\$ -		\$ -	\$ -
Landscaping	\$ -		\$ -	\$ -
Street Lighting	\$ -		\$ -	\$ -
ROW Survey / Mapping	\$ -		\$ -	\$ -
Preliminary Plans - SW Project	\$ -		\$ -	\$ -
Final Plans - SW Project	\$ -		\$ -	\$ -
TBD 3	\$ -		\$ -	\$ -
TBD 4	\$ -		\$ -	\$ -
TBD 5	\$ -		\$ -	\$ -
Total - Original	\$ -		\$ -	\$ -

Supplement:

Task	Fee	% Complete	Amount Earned To Date	Current Period
Preliminary Engineering Services	\$ -		\$ -	\$ -
Corridor Survey	\$ -		\$ -	\$ -
Design Study	\$ -		\$ -	\$ -
Final Plan Services	\$ -		\$ -	\$ -
Roadway	\$ -		\$ -	\$ -
Bridge	\$ -		\$ -	\$ -
Sewer	\$ -		\$ -	\$ -
Signal Design	\$ -		\$ -	\$ -
Other Services	\$ -		\$ -	\$ -
Utility and SUE	\$ -		\$ -	\$ -
Full NEPA Services	\$ -		\$ -	\$ -
Geotechnical	\$ -		\$ -	\$ -
Traffic	\$ -		\$ -	\$ -
Landscaping	\$ -		\$ -	\$ -
Street Lighting	\$ -		\$ -	\$ -
ROW Survey / Mapping	\$ -		\$ -	\$ -
Preliminary Plans - SW Project	\$ -		\$ -	\$ -
Final Plans - SW Project	\$ -		\$ -	\$ -
TBD 3	\$ -		\$ -	\$ -
TBD 4	\$ -		\$ -	\$ -
TBD 5	\$ -		\$ -	\$ -
Supplement Total	\$ -		\$ -	\$ -

Total Invoiced to Date (Combined) \$ -
 Less Previously Invoiced to Date (Combined) \$ -

Total Amount Due This Invoice \$ -

Certified Correct by:

Project Manager's Signature

Recommend payment of this invoice based on the monitored work effort and deliverables received.

MOVEBR Program Management Team

Contact Information Regarding Invoicing Questions:

Name: 0

Phone: 0
Email: 0



Company:	0
Contract Number:	0
Project Number:	0
Project Name:	:
Invoice Period:	12-01-2020 through 12-31-2020

Type X to note applicable classification(s).

Table 1		Type X to note applicable classification(s).				Classification		
Company	Invoiced This Period	Invoiced To Date	Local	State	MBE	WBE	VBE	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
0	\$ -	\$ -	0	0	0	0	0	
TOTAL	\$ -	\$ -						

Category in Dollars	Invoiced This Period	Invoiced To Date
LOCAL DOLLARS	\$ -	\$ -
STATE DOLLARS	\$ -	\$ -
MBE/WBE/VBE DOLLARS	\$ -	\$ -
MBE DOLLARS	\$ -	\$ -
WBE DOLLARS	\$ -	\$ -
VBE DOLLARS	\$ -	\$ -

<--Classification dollars are for companies that meet at least one of the categories (MBE, WBE, VBE).

Category in Percentage	Invoiced This Period	Invoiced To Date
LOCAL DOLLARS	0%	0%
STATE DOLLARS	0%	0%
MBE/WBE/VBE DOLLARS	0%	0%
MBE DOLLARS	0%	0%
WBE DOLLARS	0%	0%
VBE DOLLARS	0%	0%

<--Classification % are for companies that meet at least one of the categories (MBE, WBE, VBE).

Notes

Definitions

"Minority Business Enterprise" (MBE) – means a business which is at least fifty-one percent (51%) owned by African Americans, American Indians, Asians, Filipinos, and/or Latinos and whose management and daily operation is controlled by one or more members of the identified ethnic groups.

"Women Business Enterprise" (WBE) – means a business which is at least fifty-one percent (51%) owned by one or more women and whose management and daily operation is controlled by the qualifying parties .

"Veteran Business Enterprise" (VBE) – means a business which is at least fifty-one percent (51%) owned by one or more Veterans and whose management and daily operation is controlled by the qualifying parties.

Local – means a business that has a permanent address within the Parish of East Baton Rouge for a period of at least 12 months prior to the date of this contract. Temporary construction offices or Post office boxes do not constitute a business location under this definition

State - means a business that has a permanent address within the State of Louisiana for a period of at least 12 months. Temporary construction offices or Post office boxes do not constitute a business location under this definition

"Invoiced to Date" is to include "Invoiced this Period" dollars.

**Invoiced Totals Need to Match the Correct Category Chosen for the Companies Identified Above.
Excel Spreadsheet will automatically calculate total based on if "X" is noted in Table 1**



Progress Report

Date:

Company Name:

0

Project Name:

0

City-Parish Project No.:

0

For Period:

12-01-2020 through 12-31-2020

Work in Progress:

1		6	
2		7	
3		8	
4		9	
5		10	

Work Completed:

Upcoming Submittals:

Problems/Concerns:

Action Items:

Other:

Schedule (See Attached)

--	--

Attachment E

Sample Project Schedule
