

**Texas Department of Transportation  
Book 2 – Technical Provisions**

**IH 35E Managed Lanes Project**

**Attachment 6-1  
Utility Forms**

## **Utility Forms**

- PUA – Developer Managed
- PUA Owner Managed
- IH 35E – UAA – Developer Managed
- IH 35E – UAA – Owner Managed

**PROJECT UTILITY ADJUSTMENT AGREEMENT**  
**(Developer Managed)**  
Agreement No.: -U-

**THIS AGREEMENT**, by and between \_\_\_\_\_, hereinafter identified as the "**Developer**", and \_\_\_\_\_, hereinafter identified as the "**Owner**", is as follows:

**WITNESSETH**

**WHEREAS**, the STATE OF TEXAS, acting by and through the Texas Department of Transportation, hereinafter identified as "TxDOT", is authorized to design, construct, operate, maintain, and improve turnpike projects as part of the state highway system throughout the State of Texas, all in conformance with the provisions of Chapters 201, 203, 222, 223, 224, and 228 Texas Transportation Code, as amended; and

**WHEREAS**, the TxDOT proposes to construct a toll project identified as \_\_\_\_\_ (the "Project"); and

**WHEREAS**, pursuant to that certain Comprehensive Development Agreement by and between TxDOT and the Developer with respect to the Project (the "CDA"), the Developer has undertaken the obligation to design, construct, finance, operate and maintain the Project and adhere to all requirements in the CDA; and

**WHEREAS**, the Developer's duties pursuant to the CDA include causing the relocation, removal or other necessary adjustment of existing utilities impacted by the Project (collectively, "Adjustment"), subject to the provisions herein; and

**WHEREAS**, the Project may receive Federal funding, financing and/or credit assistance; and

**WHEREAS**, the Developer has notified the Owner that certain of its facilities and appurtenances (the "Owner Utilities") are in locational conflict with the Project (and/or with the "Ultimate Configuration" of the Project), and the Owner has requested that the Developer undertake the Adjustment of the Owner Utilities as necessary to accommodate the Project (and the Ultimate Configuration) and Owner agrees that the "Project" will be constructed in accordance with §203.092, Texas Transportation Code, as amended, Rule 21.23 of Title 43 Tex. Admin. Code, and 23 CFR 645 Subpart A (Utility Relocations, Adjustments and Reimbursement); and

**WHEREAS**, the Owner Utilities and the proposed Adjustment of the Owner Utilities are described as follows [*insert below a description of the affected facilities (by type, size and location) as well as a brief description of the nature of the Adjustment work to be performed (e.g., "adjust 12" waterline from approximately Highway Station 100+00 to approximately Highway Station 200+00)*]:  
\_\_\_\_\_; and

**WHEREAS**, the Owner recognizes that time is of the essence in completing the work contemplated herein; and

**WHEREAS**, the Developer and the Owner desire to implement the Adjustment of the Owner Utilities by entering into this Agreement.

## AGREEMENT

NOW, THEREFORE, in consideration of these premises and of the mutual covenants and agreements of the parties hereto and other good and valuable consideration, the receipt and sufficiency of which being hereby acknowledged, the Developer and the Owner agree as follows:

1. **Preparation of Plans.** [Check one box that applies:]

- The Developer has hired engineering firm(s) acceptable to the Owner to perform all engineering services needed for the preparation of plans, required specifications, and cost estimates, attached hereto as Exhibit A (collectively, the “Plans”), for the proposed Adjustment of the Owner Utilities. The Developer represents and warrants that the Plans conform to the most recent Utility Accommodation Rules issued by the Texas Department of Transportation (“TxDOT”), set forth in 43 Tex. Admin. Code Part 1, Chapter 21, Subchapter C *et seq.*, (the “UAR”). By its execution of this Agreement or by the signing of the Plans, the Owner hereby approves the Plans and confirms that the Plans are in compliance with the “standards” described in Paragraph 3(a)(4).
- The Owner has provided plans, required specifications and cost estimates, attached hereto as Exhibit A (collectively, the “Plans”), for the proposed Adjustment of the Owner Utilities. The Owner represents and warrants that the Plans conform to the UAR. By its execution of this Agreement, the Developer and the Owner hereby approve the Plans. The Owner also has provided to the Developer a utility plan view map illustrating the location of existing and proposed utility facilities on the Developer’s right of way map of the Project. With regard to its preparation of the Plans, the Owner represents as follows [*check one box that applies*]:
  - The Owner’s employees were utilized to prepare the Plans, and the charges therefore do not exceed the Owner’s typical costs for such work.
  - The Owner utilized consulting engineers to prepare the Plans, and the fees for such work are not based upon a percentage of construction costs. Further, such fees encompass only the work necessary to prepare the Plans for Adjustment of the Owner Utilities described herein, and do not include fees for work done on any other project. The fees of the consulting engineers are reasonable and are comparable to the fees typically charged by consulting engineers in the locale of the Project for comparable work for the Owner.

2. **Review by TxDOT.** The parties hereto acknowledge and agree as follows:

- (a) Upon execution of this Agreement by the Developer and the Owner, the Developer will submit this Agreement, together with the attached Plans, to TxDOT for its review and approval as part of a package referred to as a “Utility Assembly”. The parties agree to cooperate in good faith to modify this Agreement and/or the Plans, as necessary and mutually acceptable to all parties, to respond to any comments made by TxDOT thereon. Without limiting the generality of the foregoing, (i) the Owner agrees to respond (with comment and/or acceptance) to any modified Plans and/or Agreement prepared by the Developer in response to TxDOT comments within **fourteen (14) business days** after receipt of such modifications; and (ii) if the Owner originally prepared the Plans, the Owner agrees to modify the Plans in response to TxDOT comments and to submit such modified Plans to the Developer for its comment and/or approval (and re-submittal to

TxDOT for its comment and/or approval) within **fourteen (14) business days** after receipt of TxDOT's comments. The Owner's failure to timely respond to any modified Plans submitted by the Developer pursuant to this paragraph shall be deemed the Owner's approval of same. If the Owner fails to timely prepare modified Plans which are its responsibility hereunder, then the Developer shall have the right to modify the Plans for the Owner's approval as if the Developer had originally prepared the Plans. The process set forth in this paragraph will be repeated until the Owner, Developer and TxDOT have all approved this Agreement and accepted the Plans.

- (b) The parties hereto acknowledge and agree that TxDOT's review, comments, and/or approval of a Utility Assembly or any component thereof shall constitute TxDOT's approval of the location and manner in which a Utility Assembly will be installed, adjusted, or relocated within the state highway right of way (the "ROW"), subject to the Developer's and Owner's satisfactory performance of the Adjustment work in accordance with the approved Plans. TxDOT has no duty to review Owner Facilities or components for their quality or adequacy to provide the intended utility service.

3. **Design and Construction Standards.**

- (a) All design and construction performed for the Adjustment work which is the subject of this Agreement shall comply with and conform to the following:
  - (1) All applicable local and state laws, regulations, decrees, ordinances and policies, including the UAR, the Utility Manual issued by TxDOT (to the extent its requirements are mandatory for the Adjustment necessitated by the Project, as communicated to the Owner by the Developer, or TxDOT), the requirements of the CDA, and the policies of TxDOT;
  - (2) All Federal laws, regulations, decrees, ordinances and policies applicable to projects receiving Federal funding, financing and/or credit assistance, including without limitation 23 CFR 645 Subparts A and B;
  - (3) The terms of all governmental permits or other approvals, as well as any private approvals of third parties necessary for such work; and
  - (4) The standard specifications, standards of practice, and construction methods (collectively, "standards") which the Owner customarily applies to utility facilities comparable to the Owner Utilities that are constructed by the Owner or for the Owner by its contractors at the Owner's expense, which standards are current at the time this Agreement is signed by the Owner, and which the Owner has submitted to the Developer in writing.
  - (5) Owner agrees that all service meters must be placed outside of the State ROW.
- (b) Such design and construction also shall be consistent and compatible with (i) the Developer's current design and construction of the Project, (ii) the "Ultimate Configuration" for the Project, and (iii) any other utilities being installed in the same vicinity. The Owner acknowledges receipt from the Developer of Project plans and Ultimate Configuration documents as necessary to comply with the foregoing. In case of

any inconsistency among any of the standards referenced in this Agreement, the most stringent standard shall apply.

- (c) The plans, specifications, and cost estimates contained in Exhibit A shall identify and detail all utility facilities that the Owner intends to abandon in place rather than remove, including material type, quantity, size, age, and condition. No facilities containing hazardous or contaminated materials may be abandoned, but shall be specifically identified and removed in accordance with the requirements of subparagraph (a). It is understood and agreed that the Developer shall not pay for the assessment and remediation or other corrective action relating to soil and ground water contamination caused by the utility facility prior to the removal.

4. **Responsibility for Costs of Adjustment Work.** With the exception of any Betterment (hereinafter defined), the parties shall allocate the cost of any Adjustment between themselves as identified in Exhibit A and in accordance with § 203.092, Texas Transportation Code. An allocation percentage may be determined by application of an eligibility ratio, if appropriate, as detailed in Exhibit A.

5. **Construction by the Developer.**

- (a) The Owner hereby requests that the Developer perform the construction necessary to adjust the Owner Utilities and the Developer hereby agrees to perform such construction. All construction work hereunder shall be performed in a good and workmanlike manner, and in accordance with the Plans (except as modified pursuant to Paragraph 16).
- (b) The Developer shall retain such contractor or contractors as are necessary to adjust the Owner Utilities.
- (c) The Developer shall obtain all permits necessary for the construction to be performed by the Developer hereunder, and the Owner shall cooperate in that process as needed.

6. **Reimbursement of Owner's Indirect Costs.**

- (a) Developer agrees to reimburse the Owner its share of the Owner's indirect costs (e.g., engineering, inspection, testing, ROW) as identified in Exhibit A. When requested by the Owner, monthly progress payments will be made. The monthly payment will not exceed 80% of the estimated indirect work done to date. Once the indirect work is complete, final payment of the eligible indirect costs will be made. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.

- (b) The Owner's indirect costs associated with Adjustment of the Owner Utilities shall be developed pursuant to the method checked and described below [*check only one box*]:

(1) Actual related indirect costs accumulated in accordance with (i) a work order accounting procedure prescribed by the applicable Federal or State regulatory body, or (ii) established accounting procedure developed by the Owner and which the Owner uses in its regular operations (either (i) or (ii) referred to as "Actual Cost") or,

(2) The agreed sum of \$\_\_\_\_\_ ("Agreed Sum") as supported by the analysis of the Owner's estimated costs attached hereto as part of Exhibit A.

- (c) All indirect costs charged to the Developer by the Owner shall be reasonable and shall be computed using rates and schedules not exceeding those applicable to similar work performed by or for the Owner at the Owner's expense. Developer's performance of the Adjustment work hereunder and payment of the Developer's share of the Owner's costs pursuant to this Agreement, if applicable, shall be full compensation to the Owner for all costs incurred by the Owner in Adjusting the Owner Utilities (including without limitation costs of relinquishing and/or acquiring right of way).

7. **Advancement of Funds by Owner for Construction Costs.**

- (a) Advancement of Owner's share, if any, of estimated costs

Exhibit A shall identify all estimated engineering and construction-related costs, including labor, material, equipment and other miscellaneous construction items. Exhibit A shall also identify the Owner's and Developer's respective shares of the estimated costs.

The Owner shall advance to the Developer its allocated share, if any, of the estimated costs for construction and engineering work to be performed by the Developer, in accordance with the following terms:

- The adjustment of the Owner's Utilities does not require advancement of funds.
- The adjustment of the Owner's Utilities does require advancement of funds and the terms agreed to between the Developer and Owner are listed below.

*[Insert terms of advance funding to be agreed between Developer and Owner.]*

- (b) Adjustment Based on Actual Costs or Agreed Sum

*[Check the one appropriate provision, if advancement of funds is required]:*

- The Owner is responsible for its share of the Developer's actual cost for the Adjustment, including the identified Betterment. Accordingly, upon completion of all Adjustment work to be performed by both parties pursuant to this Amendment, (i) the Owner shall pay to the Developers the amount, if any, by which the actual cost of the Betterment (as determined in Paragraph 9(b)) plus the actual cost of Owner's share of the Adjustment (based on the allocation set forth in Exhibit A) exceeds the estimated cost advanced by the Owner, or (ii) the Developer shall refund to the Owner the amount, if any, by which such advance exceeds such actual cost, as applicable.
- The Agreed Sum is the agreed and final amount due for the Adjustment, including any Betterment, under this Amendment. Accordingly, no adjustment (either up or down) of such amount shall be made based on actual costs.

8. **Invoices.** On invoices prepared by either the Owner or the Developer, all costs developed using the "Actual Cost" method described in Section 6(b)(1) shall be itemized in a format allowing for comparisons to the approved estimates, including listing each of the services performed, the amount of time spent and the date on which the service was performed. The original and three (3) copies of each invoice, together with (1) such supporting information to substantiate all invoices as reasonably requested, and (2) such waivers and releases of liens as the other party may reasonably require, shall be submitted to the other party at the address for notices stated in Paragraph 22, unless otherwise directed pursuant to Paragraph 22. The Owner and the Developer shall make commercially reasonable efforts to submit final invoices not later than one hundred twenty (120) days after completion of work. The Owner and the Developer hereby acknowledge

and agree that any costs not submitted to the other party within eighteen months following completion of all Adjustment work to be performed by the parties pursuant to this Agreement shall be deemed to have been abandoned and waived.

9. **Betterment and Salvage**

(a) For purposes of this Agreement, the term “Betterment” means any upgrading of an Owner Utility being adjusted that is not attributable to the construction of the Project and is made solely for the benefit of and at the election of the Owner, including but not limited to an increase in the capacity, capability, efficiency or function of the adjusted Utility over that provided by the existing Utility facility or an expansion of the existing Utility facility; provided, however, that the following are not considered Betterments:

- (i) any upgrading which is required for accommodation of the Project;
- (ii) replacement devices or materials that are of equivalent standards although not identical;
- (iii) replacement of devices or materials no longer regularly manufactured with the next highest grade or size;
- (iv) any upgrading required by applicable laws, regulations or ordinances;
- (v) replacement devices or materials which are used for reasons of economy (e.g., non-stocked items may be uneconomical to purchase); or
- (vi) any upgrading required by the Owner’s written “standards” meeting the requirements of Paragraph 3(d).

*[Include the following for fiber optic Owner Utilities only:]* Extension of an Adjustment to the nearest splice boxes shall not be considered a Betterment if required by the Owner in order to maintain its written telephony standards.

Any upgrading required by the Owner’s written “standards” meeting the requirements of Paragraph 3(a)(4) shall be deemed to be of direct benefit to the Project.

(b) It is understood and agreed that the Developer shall not pay for any Betterments and that the Owner shall be solely responsible therefor. No Betterment may be performed hereunder which is incompatible with the Project or the Ultimate Configuration or which cannot be performed within the other constraints of applicable law, any applicable governmental approvals, including without limitation the scheduling requirements thereunder. Accordingly, the parties agree as follows *[check one box that applies, and complete if appropriate]*:

- The Adjustment of the Owner Utilities pursuant to the Plans does not include any Betterment.
- The Adjustment of the Owner Utilities pursuant to the Plans includes Betterment to the Owner Utilities by reason of *[insert explanation, e.g. “replacing 12” pipe with 24” pipe]*: \_\_\_\_\_. The Developer has provided to the Owner comparative estimates for (i) all work to be performed by the Developer pursuant to this Agreement, including work attributable to the Betterment, and (ii) the cost to

perform such work without the Betterment, which estimates are hereby approved by the Owner. The estimated cost of the Developer's work hereunder which is attributable to Betterment is \$\_\_\_\_\_, calculated by subtracting (ii) from (i). The percentage of the total cost of the Developer's work hereunder which is attributable to Betterment is \_\_\_\_\_%, calculated by subtracting (ii) from (i), which remainder is divided by (i).

- (c) If Paragraph 9(b) identifies Betterment, the Owner shall advance to the Developer, at least **fourteen (14) business days** prior to the date scheduled for commencement of construction for Adjustment of the Owner Utilities, the estimated cost attributable to Betterment as set forth in Paragraph 9(b). Should the Owner fail to advance payment to the Developer fourteen (14) business days prior to commencement of the Adjustment construction, the Developer shall have the option of commencing and completing (without delay) the Adjustment work without installation of the applicable Betterment. *[If Paragraph 9(b) identifies Betterment, check the one appropriate provision]:*

The estimated cost stated in Paragraph 9(b) is the agreed and final amount due for Betterment hereunder, and accordingly no adjustment (either up or down) of such amount shall be made based on actual costs.

The Owner is responsible for the Developer's actual cost for the identified Betterment. Accordingly, upon completion of all Adjustment work to be performed by both parties pursuant to this Agreement, (i) the Owner shall pay to the Developer the amount, if any, by which the actual cost of the Betterment (determined as provided below in this paragraph) exceeds the estimated cost advanced by the Owner, or (ii) the Developer shall refund to the Owner the amount, if any, by which such advance exceeds such actual cost, as applicable. Any additional payment by the Owner shall be due within **sixty (60) calendar days** after the Owner's receipt of the Developer's invoice therefor, together with supporting documentation; any refund shall be due within **sixty (60) calendar days** after completion of the Adjustment work hereunder. The actual cost of Betterment incurred by the Developer shall be calculated by multiplying (i) the Betterment percentage stated in Paragraph 9(b), by (ii) the actual cost of all work performed by the Developer pursuant to this Agreement (including work attributable to the Betterment), as invoiced by the Developer to the Owner.

- (d) If Paragraph 9(b) identifies Betterment, the amount allocable to Betterment in Owner's indirect costs shall be determined by applying the percentage of the Betterment calculated in Paragraph 9(b) to the Owner's indirect costs. The Owner's invoice to the Developer for the Developer's share of the Owner's indirect costs shall credit the Developer with any Betterment amount determined pursuant to this Paragraph 9(d).

- (e) For any Adjustment from which the Owner recovers any materials and/or parts and retains or sells the same, after application of any applicable Betterment credit, the Owner's invoice to the Developer for its costs shall credit the Developer with the salvage value for such materials and/or parts..

- (f) The determinations and calculations of Betterment described in this Paragraph 9 shall exclude right of way acquisition costs. Betterment in connection with right-of-way acquisition is addressed in Paragraph 15.

10. **Management of the Adjustment Work.** The Developer will provide project management during the Adjustment of the Owner Utilities.
11. **Utility Investigations.** At the Developer's request, the Owner shall assist the Developer in locating any Utilities (including appurtenances) which are owned and/or operated by Owner and may be impacted by the Project. Without limiting the generality of the foregoing, in order to help assure that neither the adjusted Owner Utilities nor existing, unadjusted utilities owned or operated by the Owner are damaged during construction of the Project, the Owner shall mark in the field the location of all such utilities horizontally on the ground in advance of Project construction in the immediate area of such utilities.
12. **Inspection and Acceptance by the Owner.**
  - (a) Throughout the Adjustment construction hereunder, the Owner shall provide adequate inspectors for such construction. The work shall be inspected by the Owner's inspector(s) at least once each working day, and more often if such inspections are deemed necessary by Owner. Further, upon request by the Developer or its contractors, the Owner shall furnish an inspector at any reasonable time in which construction is underway pursuant to this Agreement, including occasions when construction is underway in excess of the usual forty (40) hour work week and at such other times as reasonably required. The Owner agrees to promptly notify the Developer of any concerns resulting from any such inspection.
  - (b) The Owner shall perform a final inspection of the adjusted Owner Utilities, including conducting any tests as are necessary or appropriate, within **five (5) business days** after completion of construction hereunder. The Owner shall accept such construction if it is consistent with the performance standards described in Paragraph 3, by giving written notice of such acceptance to the Developer within said **five (5) day** period. If the Owner does not accept the construction, then the Owner shall, not later than the expiration of said **five (5) day** period, notify the Developer in writing of its grounds for non-acceptance and suggestions for correcting the problem, and if the suggested corrections are justified, the Developer will comply. The Owner shall re-inspect any revised construction (and re-test if appropriate) and give notice of acceptance, not later than **five (5) business days** after completion of corrective work. The Owner's failure to inspect and/or to give any required notice of acceptance or non-acceptance within the specified time period shall be deemed acceptance.
  - (c) From and after the Owner's acceptance (or deemed acceptance) of an adjusted Owner Utility, the Owner agrees to accept ownership of, and full operation and maintenance responsibility for, such Owner Utility.
13. **Design Changes.** The Developer will be responsible for additional Adjustment design and construction costs necessitated by design changes to the Project, upon the terms specified herein.
14. **Field Modifications.** The Developer shall provide the Owner with documentation of any field modifications, including Utility Adjustment Field Modifications as well as minor changes described in Paragraph 16(b), occurring in the Adjustment of the Owner Utilities.
15. **Real Property Interests.**
  - (a) The Owner has provided, or upon execution of this Agreement shall promptly provide to the Developer, documentation acceptable to TxDOT indicating any right, title or interest

in real property claimed by the Owner with respect to the Owner Utilities in their existing location(s). Such claims are subject to TxDOT's approval as part of its review of the Developer Utility Assembly as described in Paragraph 2. Claims approved by TxDOT as to rights or interests are referred to herein as "Existing Interests".

- (b) If acquisition of any new easement or other interest in real property ("New Interest") is necessary for the Adjustment of any Owner Utilities, then the Owner shall be responsible for undertaking such acquisition. The Owner shall implement each acquisition hereunder expeditiously so that related Adjustment construction can proceed in accordance with the Developer's Project schedules. The Developer shall be responsible for its share (as specified in Paragraph 4) of the actual and reasonable acquisition costs of any such New Interest (including without limitation the Owner's reasonable overhead charges and reasonable legal costs as well as compensation paid to the landowner), excluding any costs attributable to Betterment as described in Paragraph 15(c), and subject to the provisions of Paragraph 15(e); provided, however, that all acquisition costs shall be subject to the Developer's prior written approval. Eligible acquisition costs shall be segregated from other costs on the Owner's estimates and invoices. Any such New Interest shall have a written valuation and shall be acquired in accordance with applicable law.
- (c) The Developer shall pay its share only for a replacement in kind of an Existing Interest (e.g., in width and type), unless a New Interest exceeding such standard (i) is required in order to accommodate the Project or by compliance with applicable law, or (ii) is called for by the Developer in the interest of overall Project economy. Any New Interest which is not the Developer's responsibility pursuant to the preceding sentence shall be considered a Betterment to the extent that it upgrades the Existing Interest which it replaces, or in its entirety if the related Owner Utility was not installed pursuant to an Existing Interest. Betterment costs shall be solely the Owner's responsibility.
- (d) For each Existing Interest located within the final Project right of way, upon completion of the related Adjustment work and its acceptance by the Owner, the Owner agrees to execute a quitclaim deed or other appropriate documentation relinquishing such Existing Interest to TxDOT, unless the affected Owner Utility is remaining in its original location or is being reinstalled in a new location within the area subject to such Existing Interest. All quitclaim deeds or other relinquishment documents shall be subject to TxDOT's approval as part of its review of the Utility Assembly as described in Paragraph 2. For each such Existing Interest relinquished by the Owner, the Developer shall do one of the following to compensate the Owner for such Existing Interest, as appropriate:
  - (e) (i) If the Owner acquires a New Interest for the affected Owner Utility, the Developer shall reimburse the Owner for the Developer's share of the Owner's actual and reasonable acquisition costs in accordance with Paragraph 15(b), subject to Paragraph 15(c); or
  - (ii) If the Owner does not acquire a New Interest for the affected Owner Utility, the Developer shall compensate the Owner for the Developer's share of the fair market value of such relinquished Existing Interest, as mutually agreed between the Owner and the Developer and supported by a written valuation.

The compensation provided to the Owner pursuant to either subparagraph (i) or subparagraph (ii) above shall constitute complete compensation to the Owner for the relinquished Existing Interest and any New Interest, and no further compensation shall be

due to the Owner from the Developer or TxDOT on account of such Existing Interest or New Interest(s).

- (f) The Owner shall execute a Utility Joint Use Acknowledgment (TxDOT-U-80A) for each Adjustment where required pursuant to TxDOT policies. All Utility Joint Use Acknowledgments shall be subject to TxDOT approval as part of its review of the Utility Assembly as described in Paragraph 2.

16. **Amendments and Modifications.** This Agreement may be amended or modified only by a written instrument executed by the parties hereto, in accordance with Paragraph 16(a) or Paragraph 16(b) below.

- (a) Except as otherwise provided in Paragraph 16(b), any amendment or modification to this Agreement or the Plans attached hereto shall be implemented by a Utility Adjustment Agreement Amendment (“UAAA”) in the form of Exhibit B hereto (TxDOT-CDA-U-35A-DM). The UAAA form can be used for a new scope of work with concurrence of the Developer and TxDOT as long as the design and construction responsibilities have not changed. Each UAAA is subject to the review and approval of TxDOT, prior to its becoming effective for any purpose and prior to any work being initiated thereunder. The Owner agrees to keep and track costs for each UAAA separately from other work being performed.
- (b) For purposes of this Paragraph 16(b), "Utility Adjustment Field Modification" shall mean any horizontal or vertical design change from the Plans included in a Utility Assembly previously approved by TxDOT, due either to design of the Project or to conditions not accurately reflected in the approved Utility Assembly (e.g., shifting the alignment of an 8 in. water line to miss a modified or new roadway drainage structure). A Utility Adjustment Field Modification agreed upon by the Developer and Owner does not require a UAAA, provided that the modified Plans have been submitted to TxDOT for its review and comment. A minor change (e.g., an additional water valve, an added utility marker at a ROW line, a change in vertical bend, etc.) will not be considered a Utility Adjustment Field Modification and will not require a UAAA, but shall be shown in the documentation required pursuant to Paragraph 14.
- (c) This Agreement does not alter and shall not be construed in any way to alter the obligations, responsibilities, benefits, rights, remedies, and claims between the Developer and TxDOT to design and construct the Project, including the Adjustment.

17. **Entire Agreement.** This Agreement embodies the entire agreement between the parties and there are no oral or written agreements between the parties or any representations made which are not expressly set forth herein.

18. **Assignment; Binding Effect; TxDOT as Third Party Beneficiary.** Neither the Owner or the Developer may assign any of its rights or delegate any of its duties under this Agreement without the prior written consent of the other party and of TxDOT, which consent may not be unreasonably withheld or delayed; provided, however, that the Developer may assign any of its rights and/or delegate any of its duties to TxDOT or to any other entity engaged by TxDOT to fulfill the Developer’s obligations, at any time without the prior consent of the Owner.

This Agreement shall bind the Owner, the Developer and their successors and permitted assigns, and nothing in this Agreement nor in any approval subsequently provided by any party hereto shall be construed as giving any benefits, rights, remedies, or claims to any other person, firm,

corporation or other entity, including, without limitation, any contractor or other party retained for the Adjustment work or the public in general; provided, however, that the Owner and the Developer agree that although TxDOT is not a party to this Agreement, TxDOT is intended to be a third-party beneficiary to this Agreement.

19. **Breach by the Parties.**

(a) If the Owner claims that the Developer has breached any of its obligations under this Agreement, the Owner will notify the Developer and TxDOT in writing of such breach, and the Developer shall have 30 days following receipt of such notice in which to cure such breach, before the Owner may invoke any remedies which may be available to it as a result of such breach; provided, however, that both during and after such period TxDOT shall have the right, but not the obligation, to cure any breach by the Developer. Without limiting the generality of the foregoing, (a) TxDOT shall have no liability to the Owner for any act or omission committed by the Developer in connection with this Agreement, including without limitation any claimed defect in any design or construction work supplied by the Developer or by its contractors, and (b) in no event shall TxDOT be responsible for any repairs or maintenance to the Owner Utilities Adjusted pursuant to this Agreement.

(b) If the Developer claims that the Owner has breached any of its obligations under this Agreement, the Developer will notify the Owner and TxDOT in writing of such breach, and the Owner shall have 30 days following receipt of such notice in which to cure such breach, before the Developer may invoke any remedies which may be available to it as a result of such breach.

20. **Traffic Control.** The Developer shall provide traffic control or shall reimburse the Owner for the Developer's share (if any, as specified in Paragraph 4) of the costs for traffic control made necessary by the Adjustment work performed by either the Developer or the Owner pursuant to this Agreement, in compliance with the requirements of the Texas Manual on Uniform Traffic Control Devices. Betterment percentages calculated in Paragraph 9 shall also apply to traffic control costs.

21. **Notices.** Except as otherwise expressly provided in this Agreement, all notices or communications pursuant to this Agreement shall be sent or delivered to the following:

The Owner:

Phone:  
Fax:

The Developer:

Phone:  
Fax:

A party sending a notice of default of this Agreement to another party shall also send a copy of such notice to TxDOT and the CDA Utility Manager at the following addresses:

TxDOT: TxDOT Department of Transportation

Attention: Donald C. Toner, Jr., SR/WA  
125 E. 11<sup>th</sup> Street  
Austin, Texas 78701-2483  
Phone: (512) 936-0980

CDA Utility Manager:

Any notice or demand required herein shall be given (a) personally, (b) by certified or registered mail, postage prepaid, return receipt requested, or (c) by reliable messenger or overnight courier to the appropriate address set forth above. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable messenger or overnight courier shall be deemed delivered on the date of receipt as shown on the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier. Any party may from time to time designate any other address for this purpose by written notice to all other parties; TxDOT may designate another address by written notice to all parties.

22. **Approvals.** Any acceptance, approval, or any other like action (collectively "Approval") required or permitted to be given by either the Developer, , the Owner or TxDOT pursuant to this Agreement:

- (a) Must be in writing to be effective (except if deemed granted pursuant hereto),
- (b) Shall not be unreasonably withheld or delayed; and if Approval is withheld, such withholding shall be in writing and shall state with specificity the reason for withholding such Approval, and every effort shall be made to identify with as much detail as possible what changes are required for Approval, and
- (c) Except for approvals by TxDOT, and except as may be specifically provided otherwise in this Agreement, shall be deemed granted if no response is provided to the party requesting an Approval within the time period prescribed by this Agreement (or if no time period is prescribed, then fourteen (14) calendar days), commencing upon actual receipt by the party from which an Approval is requested or required, of a request for Approval from the requesting party. All requests for Approval shall be sent out by the requesting party to the other party in accordance with Paragraph 21.

23. **Time.**

- (a) Time is of the essence in the performance of this Agreement.
- (b) All references to "days" herein shall be construed to refer to calendar days, unless otherwise stated.
- (c) No party shall be liable to another party for any delay in performance under this Agreement from any cause beyond its control and without its fault or negligence ("Force Majeure"), such as acts of God, acts of civil or military authority, fire, earthquake, strike, unusually severe weather, floods or power blackouts.

24. **Continuing Performance.** In the event of a dispute, the Owner and the Developer agree to continue their respective performance hereunder to the extent feasible in light of the dispute,

including paying billings, and such continuation of efforts and payment of billings shall not be construed as a waiver of any legal right.

25. **Equitable Relief.** The Developer and the Owner acknowledge and agree that delays in Adjustment of the Owner Utilities will impact the public convenience, safety and welfare, and that (without limiting the parties' remedies hereunder) monetary damages would be inadequate to compensate for delays in the construction of the Project. Consequently, the parties hereto (and TxDOT as well, as a third party beneficiary) shall be entitled to specific performance or other equitable relief in the event of any breach of this Agreement which threatens to delay construction of the Project; provided, however, that the fact that specific performance or other equitable relief may be granted shall not prejudice any claims for payment or otherwise related to performance of the Adjustment work hereunder.
26. **Authority.** The Owner and the Developer each represent and warrant to the other party that the warranting party possesses the legal authority to enter into this Agreement and that it has taken all actions necessary to exercise that authority and to lawfully authorize its undersigned signatory to execute this Agreement and to bind such party to its terms. Each person executing this Agreement on behalf of a party warrants that he or she is duly authorized to enter into this Agreement on behalf of such party and to bind it to the terms hereof.
27. **Cooperation.** The parties acknowledge that the timely completion of the Project will be influenced by the ability of the Owner (and its contractors) and the Developer to coordinate their activities, communicate with each other, and respond promptly to reasonable requests. Subject to the terms and conditions of this Agreement, the Owner and the Developer agree to take all steps reasonably required to coordinate their respective duties hereunder in a manner consistent with the Developer's current and future construction schedules for the Project.
28. **Termination.** If the Project is canceled or modified so as to eliminate the necessity of the Adjustment work described herein, then the Developer shall notify the Owner in writing and the Developer reserves the right to thereupon terminate this Agreement. Upon such termination, the parties shall negotiate in good faith an amendment that shall provide mutually acceptable terms and conditions for handling the respective rights and liabilities of the parties relating to such termination.
29. **Nondiscrimination.** Each party hereto agrees, with respect to the work performed by such party pursuant to this Agreement, that such party shall not discriminate on the grounds of race, color, sex, national origin or disability in the selection and/or retention of contractors and consultants, including procurement of materials and leases of equipment.
30. **Applicable Law, Jurisdiction and Venue.** This Agreement shall be governed by the laws of the State of Texas, without regard to the conflict of laws principles thereof. Venue for any action brought to enforce this Agreement or relating to the relationship between any of the parties shall be the District Court of Travis County, Texas or the United States District Court for the Western District of Texas (Austin).
31. **Waiver of Consequential Damages.** No party hereto shall be liable to any other party to this Agreement, whether in contract, tort, equity, or otherwise (including negligence, warranty, indemnity, strict liability, or otherwise,) for any punitive, exemplary, special, indirect, incidental, or consequential damages, including, without limitation, loss of profits or revenues, loss of use, claims of customers, or loss of business opportunity.

- 32. **Captions.** The captions and headings of the various paragraphs of this Agreement are for convenience and identification only, and shall not be deemed to limit or define the content of their respective paragraphs.
- 33. **Counterparts.** This Agreement may be executed in any number of counterparts. Each such counterpart hereof shall be deemed to be an original instrument but all such counterparts together shall constitute one and the same instrument.
- 34. **Effective Date.** This Agreement shall become effective upon the later of (a) the date of signing by the last party (either the Owner or Developer) signing this Agreement, and (b) the date of TxDOT's approval as indicated by the signature of TxDOT's representative, below.

APPROVED BY:  
**TEXAS DEPARTMENT OF  
TRANSPORTATION**

**OWNER**

\_\_\_\_\_  
[Print Owner Name]

By: \_\_\_\_\_  
Authorized Signature

By: \_\_\_\_\_  
Duly Authorized Representative

Printed  
Name: Donald C. Toner, Jr., SR/WA

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

Strategic Projects Division

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

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

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

**DEVELOPER**

By: \_\_\_\_\_  
Duly Authorized Representative

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

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

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

County:  
ROW CSJ No.:  
Const. CSJ No.:  
Highway:  
Limits:  
Fed. Proj. No.:

**EXHIBIT A**

**PLANS, SPECIFICATIONS, COST ESTIMATES AND ALLOCATION**

County:  
ROW CSJ No.:  
Const. CSJ No.:  
Highway:  
Limits:  
Fed. Proj. No.:

**EXHIBIT B**

**UTILITY ADJUSTMENT AGREEMENT AMENDMENT  
(TxDOT-CDA-U-35A-DM)**

County:  
ROW CSJ No.:

Const. CSJ No.:

Highway:  
Limits:  
Fed. Proj. No.:

**PROJECT UTILITY ADJUSTMENT AGREEMENT**  
**(Owner Managed)**  
Agreement No.: -U-\_\_\_\_\_

**THIS AGREEMENT**, by and between \_\_\_\_\_, hereinafter identified as the "**Developer**", and \_\_\_\_\_, hereinafter identified as the "**Owner**", is as follows:

**WITNESSETH**

**WHEREAS**, the STATE OF TEXAS, acting by and through the Texas Department of Transportation, hereinafter identified as "TxDOT", is authorized to design, construct, operate, maintain, and improve turnpike projects as part of the state highway system throughout the State of Texas, all in conformance with the provisions of Chapters 201, 203, 222, 223, 224 and 228, Texas Transportation Code, as amended; and

**WHEREAS**, TxDOT proposes to construct a toll project identified as the \_\_\_\_\_ Project (the "Project"); and

**WHEREAS**, pursuant to that certain Comprehensive Development Agreement by and between TxDOT and the Developer with respect to the Project (the "CDA"), the Developer has undertaken the obligation to design, construct, finance, operate and maintain the Project and adhere to all requirements in the CDA; and

**WHEREAS**, the Developer's duties pursuant to the CDA include causing the relocation, removal, or other necessary adjustment of existing utilities impacted by the Project (collectively, "Adjustment"), subject to the provisions herein; and

**WHEREAS**, the Project may receive Federal funding, financing and/or credit assistance; and

**WHEREAS**, the Developer has notified the Owner that certain of its facilities and appurtenances (the "Owner Utilities") are in locational conflict with the Project (and/or the "Ultimate Configuration" of the Project), and the Owner has decided to undertake the Adjustment of the Owner Utilities and agrees that the "Project" will be constructed in accordance with §203.092, Texas Transportation Code, as amended, Rule 21.23 of Title 43 Tex. Admin. Code, and 23 CFR 645A (Utility Relocations, Adjustments and Reimbursement); and

**WHEREAS**, the Owner Utilities and the proposed Adjustment of the Owner Utilities are described as follows *[insert below a description of the affected facilities (by type, size and location) as well as a brief description of the nature of the Adjustment work to be performed (e.g., "adjust 12" waterline from approximately Highway Station 100+00 to approximately Highway Station 200+00")]*:

\_\_\_\_; and

**WHEREAS**, the Owner recognizes that time is of the essence in completing the work contemplated herein; and

**WHEREAS**, the Developer and the Owner desire to implement the Adjustment of the Owner Utilities by entering into this Agreement.

### **AGREEMENT**

**NOW, THEREFORE**, in consideration of these premises and of the mutual covenants and agreements of the parties hereto and other good and valuable consideration, the receipt and sufficiency of which being hereby acknowledged, the Developer and the Owner agree as follows:

1. **Preparation of Plans.** *[Check one box that applies:]*

- The Developer has hired engineering firm(s) acceptable to the Owner to perform all engineering services needed for the preparation of plans, required specifications, and cost estimates, attached hereto as Exhibit A (collectively, the “Plans”), for the proposed Adjustment of the Owner Utilities. The Developer represents and warrants that the Plans conform to the most recent Utility Accommodation Rules issued by the Texas Department of Transportation (“TxDOT”), set forth in 43 Tex. Admin. Code, Part 1, Chapter 21, Subchapter C, *et seq.* (the “UAR”). By its execution of this Agreement or by the signing of the Plans, Owner hereby approves and confirms that the Plans are in compliance with the “standards” described in Paragraph 3(d).
  
- The Owner has provided plans, required specifications and cost estimates, attached hereto as Exhibit A (collectively, the “Plans”), for the proposed Adjustment of the Owner Utilities. The Owner represents and warrants that the Plans conform to the UAR. By its execution of this Agreement the Developer hereby approves the Plans. The Owner also has provided to the Developer a utility plan view map illustrating the location of existing and proposed utility facilities on the Developer’s right of way map of the Project. With regard to its preparation of the Plans, Owner represents as follows *[check one box that applies]*:
  - The Owner’s employees were utilized to prepare the Plans, and the charges therefore do not exceed the Owner’s typical costs for such work.
  
  - The Owner utilized consulting engineers to prepare the Plans, and the fees for such work are not based upon a percentage of construction costs. Further, such fees encompass only the work necessary to prepare the Plans for Adjustment of the Owner Utilities described herein, and do not include fees for work done on any other project. The fees of the consulting engineers are reasonable and are comparable to the fees typically charged by consulting engineers in the locale of the Project for comparable work for the Owner.

2. **Review by TxDOT.** The parties hereto acknowledge and agree as follows:

- (a) Upon execution of this Agreement by the Developer and the Owner, the Developer will submit this Agreement, together with the attached Plans, to TxDOT for its review and approval as part of a package referred to as a “Utility Assembly”. The parties agree to cooperate in good faith to modify this Agreement and/or the Plans, as necessary and

mutually acceptable to all parties, to respond to any comments made by TxDOT thereon. Without limiting the generality of the foregoing, (i) the Owner agrees to respond (with comment and/or acceptance) to any modified Plans and/or Agreement prepared by the Developer in response to TxDOT comments within **fourteen (14) business days** after receipt of such modifications; and (ii) if the Owner originally prepared the Plans, the Owner agrees to modify the Plans in response to TxDOT comments and to submit such modified Plans to the Developer for its comment and/or approval (and re-submittal to TxDOT for its comment and/or approval) within **fourteen (14) business days** after receipt of TxDOT's comments. The Owner's failure to timely respond to any modified Plans submitted by the Developer pursuant to this paragraph shall be deemed the Owner's approval of same. If the Owner fails to timely prepare modified Plans which are its responsibility hereunder, then the Developer shall have the right to modify the Plans for the Owner's approval as if the Developer had originally prepared the Plans. The Developer shall be responsible for providing Plans to and obtaining comments on and approval of the Plans from the Developer. The process set forth in this paragraph will be repeated until the Owner, the Developer and TxDOT have all approved this Agreement and the Plans.

- (b) The parties hereto acknowledge and agree that TxDOT's review, comments, and/or approval of a Utility Assembly or any component thereof shall constitute TxDOT's approval of the location and manner in which a Utility Assembly will be installed, adjusted, or relocated within the state highway right of way, subject to the Developer's and Owner's satisfactory performance of the Adjustment work in accordance with the approved Plans. TxDOT has no duty to review Owner facilities or components for their quality or adequacy to provide the intended utility service.

### 3. **Design and Construction Standards.**

- (a) All design and construction performed for the Adjustment work which is the subject of this Agreement shall comply with and conform to the following:
  - (1) All applicable local and state laws, regulations, decrees, ordinances and policies, including the UAR, the Utility Manual issued by TxDOT (to the extent its requirements are mandatory for Utility Adjustments necessitated by the Project, communicated to the Owner by the Developer or TxDOT), the requirements of the CDA, and the policies of TxDOT;
  - (2) All Federal laws, regulations, decrees, ordinances and policies applicable to projects receiving Federal funding, financing and/or credit assistance, including without limitation 23 CFR 645 Subparts A and B;
  - (3) The terms of all governmental permits or other approvals, as well as any private approvals of third parties necessary for such work; and
  - (4) The standard specifications, standards of practice, and construction methods (collectively, "standards") which the Owner customarily applies to facilities comparable to the Owner Utilities that are constructed by the Owner or for the Owner by its contractors at the Owner's expense, which standards are current at the time this Agreement is signed by the Owner, and which the Owner has submitted to the Developer in writing.

- (5) Owner agrees that all service meters must be placed outside of the State ROW.
- (b) Such design and construction also shall be consistent and compatible with (i) the Developer's current design and construction of the Project, (ii) the "Ultimate Configuration" for the Project, and (iii) any other utilities being installed in the same vicinity. The Owner acknowledges receipt from the Developer of Project plans and Ultimate Configuration documents as necessary to comply with the foregoing. In case of any inconsistency among any of the standards referenced in this Agreement, the most stringent standard shall apply.
- (c) The plans, specifications, and cost estimates contained in Exhibit A shall identify and detail all utility facilities that the Owner intends to abandon in place rather than remove, including material type, quantity, size, age, and condition. No facilities containing hazardous or contaminated materials may be abandoned, but shall be specifically identified and removed in accordance with the requirements of subparagraph (a). It is understood and agreed that the Developer shall not pay for the assessment and remediation or other corrective action relating to soil and ground water contamination caused by the utility facility prior to the removal.

4. **Construction by the Owner; Scheduling.**

- (a) The Owner hereby agrees to perform the construction necessary to adjust the Owner Utilities. All construction work hereunder shall be performed in a good and workmanlike manner, and in accordance with the Plans (except as modified pursuant to Paragraph 17). The Owner agrees that during the Adjustment of the Owner Utilities, the Owner and its contractors will coordinate their work with the Developer so as not to interfere with the performance of work on the Project by the Developer or by any other party. "Interfere" means any action or inaction that interrupts, interferes, delays or damages Project work.
- (b) The Owner may utilize its own employees or may retain such contractor or contractors as are necessary to adjust the Owner Utilities, through the procedures set forth in Form TxDOT-U-48 "Statement Covering Contract Work" attached hereto as Exhibit C. If the Owner utilizes its own employees for the Construction work portion of the Adjustment of Owner Utilities, a Form TxDOT-U-48 is not required. If the Adjustment of the Owner Utilities is undertaken by the Owner's contractor under a competitive bidding process, all bidding and contracting shall be conducted in accordance with all federal and state laws and regulations applicable to the Owner and the Project.
- (c) The Owner shall obtain all permits necessary for the construction to be performed by the Owner hereunder, and the Developer shall cooperate in that process as needed. The Owner shall submit a traffic control plan to the Developer as required for Adjustment work to be performed on existing road rights of way.

- (d) The Owner shall commence its construction for Adjustment of each Owner Utility hereunder promptly after (i) receiving written notice to proceed therewith from the Developer, and (ii) any Project right of way necessary for such Adjustment has been acquired either by Developer (for adjusted facilities to be located within the Project right of way) or by the Owner (for adjusted facilities to be located outside of the Project right of way), or a right-of-entry permitting Owner's construction has been obtained from the landowner by the Developer or by the Owner with the Developer's prior approval. The Owner shall notify the Developer at least 72 hours prior to commencing construction for the Adjustment of each Owner Utility hereunder.
- (e) The Owner shall expeditiously stake the survey of the proposed locations of the Owner Utilities being adjusted, on the basis of the final approved Plans. The Developer shall verify that the Owner's Utilities, whether moving to a new location or remaining in place, clear the planned construction of the Project as staked in the field as well as the Ultimate Configuration.
- (f) The Owner shall complete all of the Utility reconstruction and relocation work, including final testing and acceptance thereof *[check one box that applies]*:
- on or before \_\_\_\_\_, 20\_\_\_\_.
- a duration not to exceed \_\_\_\_\_ calendar days upon notice to proceed by the Developer.
- (g) The amount of reimbursement due to the Owner pursuant to this Agreement for the affected Adjustment(s) shall be reduced by ten percent (10%) for each 30-day period (and by a pro rata amount of said ten percent (10%) for any portion of a 30-day period) by which the final completion and acceptance date for the affected Adjustment(s) exceeds the applicable deadline. The provisions of this Paragraph 4(g) shall not limit any other remedy available to the Developer at law or in equity as a result of the Owner's failure to meet any deadline hereunder.

The above reduction applies except to the extent due to (i) Force Majeure as described in Paragraph 24(c), (ii) any act or omission of the Developer, if the Owner fails to meet any deadline established pursuant to Paragraph 4(f), or (iii) if the Developer and/or TxDOT determine, in their sole discretion, that a delay in the relocation work is the result of circumstances beyond the control of the Owner or Owner's contractor and the Developer will not reduce the reimbursement.

5. **Costs of the Work.**

- (a) The Owner's costs for Adjustment of each Owner Utility shall be derived from (i) the accumulated total of costs incurred by the Owner for design and construction of such Adjustment, plus (ii) the Owner's other related costs to the extent permitted pursuant to Paragraph 5(c) (including without limitation the eligible engineering costs incurred by the Owner for design prior to execution of this Agreement), plus (iii) the Owner's right of way acquisition costs, if any, which are reimbursable pursuant to Paragraph 16.
- (b) The Owner's costs associated with Adjustment of the Owner Utilities shall be developed pursuant to the method checked and described below *[check only one box]*:

- (1) Actual costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body ("Actual Cost"); or
- (2) Actual costs accumulated in accordance with an established accounting procedure developed by the Owner and which the Owner uses in its regular operations ("Actual Cost"); or
- (3) The agreed sum of \$ \_\_\_\_\_ ("Agreed Sum"), as supported by the analysis of estimated costs attached hereto as part of Exhibit A.

6. **Responsibility for Costs of Adjustment Work.**

The Agreed Sum or Actual Cost, as applicable, of all work to be performed pursuant to this Agreement shall be allocated between the Developer and the Owner as identified in Exhibit A and in accordance with §203.092, Texas Transportation Code. An allocation percentage may be determined by application of an eligibility ratio, if appropriate, as detailed in Exhibit A; provided, however, that any portion of an Agreed Sum or Actual Cost attributable to Betterment shall be allocated 100% to the Owner in accordance with Paragraph 10. All costs charged to the Developer by the Owner shall be reasonable and shall be computed using rates and schedules not exceeding those applicable to similar work performed by or for the Owner at the Owner's expense. Payment of the costs allocated to the Developer pursuant to this Agreement (if any) shall be full compensation to the Owner for all costs incurred by the Owner in Adjusting the Owner Utilities (including without limitation costs of relinquishing and/or acquiring right of way).

7. **Billing, Payment, Records and Audits: Actual Cost Method.** The following provisions apply if the Owner's costs are developed under procedure (1) or (2) described in Paragraph 5(b):

- (a) After (i) completion of all Adjustment work to be performed pursuant to this Agreement, (ii) the Developer's final inspection of the Adjustment work by Owner hereunder (and resolution of any deficiencies found), and (iii) receipt of an invoice complying with the applicable requirements of Paragraph 9, the Developer shall pay to the Owner an amount equal to ninety percent (90%) of the Developer's share of the Owner's costs as shown in such final invoice (less amounts previously paid, and applicable credits). After completion of the Developer's audit referenced in Paragraph 7(c) and the parties' mutual determination of any necessary adjustment to the final invoice resulting therefrom, the Developer shall make any final payment due so that total payments will equal the total amount of the Developer's share reflected on such final invoice (as adjusted, if applicable).
- (b) When requested by the Owner and properly invoiced in accordance with Paragraph 9, the Developer shall make intermediate payments to the Owner based upon the progress of the work completed at not more than monthly intervals, and such payments shall not exceed eighty percent (80%) of the Developer's share of the Owner's eligible costs as shown in each such invoice (less applicable credits). Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.
- (c) The Owner shall maintain complete and accurate cost records for all work performed pursuant to this Agreement. The Owner shall maintain such records for four (4) years after receipt of final payment hereunder. The Developer and their respective representatives shall be allowed to audit such records during the Owner's regular business hours. Unsupported charges will not be considered eligible for reimbursement.

The parties shall mutually agree upon (and shall promptly implement by payment or refund, as applicable) any financial adjustment found necessary by the Developer's audit. TxDOT, the Federal Highway Administration, and their respective representatives also shall be allowed to audit such records upon reasonable notice to the Owner, during the Owner's regular business hours.

8. **Billing and Payment: Agreed Sum Method.** If the Owner's costs are developed under procedure (3) described in Paragraph 5(b), then the Developer shall pay its share of the Agreed Sum to the Owner after (a) completion of all Adjustment work to be performed pursuant to this Agreement, (b) the Developer's final inspection of the Adjustment work by Owner hereunder (and resolution of any deficiencies found), and (c) receipt of an invoice complying with the applicable requirements of Paragraph 9.
9. **Invoices.** If the Owner's costs are developed under procedure (1) or (2) described in Paragraph 5(b), then Owner shall list each of the services performed, the amount of time spent and the date on which the service was performed. The original and three (3) copies of each invoice shall be submitted to the Developer at the address for notices stated in Paragraph 22, unless otherwise directed by the Developer pursuant to Paragraph 22, together with (1) such supporting information to substantiate all invoices as reasonably requested by the Developer, and (2) such waivers or releases of liens as the Developer may reasonably require. The Owner shall make commercially reasonable efforts to submit final invoices not later than one hundred twenty (120) days after completion of work. Final invoices shall include any necessary quitclaim deeds pursuant to Paragraph 16, and all applicable record drawings accurately representing the Adjustment as installed. The Owner hereby acknowledges and agrees that any right it may have for reimbursement of any of its costs not submitted to the Developer within eighteen months following completion of all Adjustment work to be performed by both parties pursuant to this Agreement shall be deemed to have been abandoned and waived. Invoices shall clearly delineate total costs, and those costs that are reimbursable pursuant to the terms of this Agreement.
10. **Betterment.**
  - (a) For purposes of this Agreement, the term "Betterment" means any upgrading of an Owner Utility being adjusted that is not attributable to the construction of the Project and is made solely for the benefit of and at the election of the Owner, including but not limited to an increase in the capacity, capability, efficiency or function of the adjusted Utility over that provided by the existing Utility facility or an expansion of the existing Utility facility; provided, however, that the following are not considered Betterments:
    - (i) any upgrading which is required for accommodation of the Project;
    - (ii) replacement devices or materials that are of equivalent standards although not identical;
    - (iii) replacement of devices or materials no longer regularly manufactured with the next highest grade or size;
    - (iv) any upgrading required by applicable laws, regulations or ordinances;
    - (v) replacement devices or materials which are used for reasons of economy (e.g., non-stocked items may be uneconomical to purchase); or

- (vi) any upgrading required by the Owner's written "standards" meeting the requirements of Paragraph 3(a)(4).

*[Include the following for fiber optic Owner Utilities only:]* Extension of an Adjustment to the nearest splice boxes shall not be considered a Betterment if required by the Owner in order to maintain its written telephony standards.

Any upgrading required by the Owner's written "standards" meeting the requirements of Paragraph 3(a)(4) shall be deemed to be of direct benefit to the Project.

- (b) It is understood and agreed that the Developer will not pay for any Betterments and that the Owner shall not be entitled to payment therefor. No Betterment may be performed in connection with the Adjustment of the Owner Utilities which is incompatible with the Project or the Ultimate Configuration or which cannot be performed within the other constraints of applicable law, any applicable governmental approvals, including without limitation the scheduling requirements thereunder. Accordingly, the parties agree as follows *[check the one box that applies, and complete if appropriate]*:

(i) The Adjustment of the Owner Utilities pursuant to the Plans does not include any Betterment.

The Adjustment of the Owner Utilities pursuant to the Plans includes Betterment to the Owner Utilities by reason of *[insert explanation, e.g. "replacing 12" pipe with 24" pipe]*: \_\_\_\_\_. The Owner has provided to the Developer comparative estimates for (i) all costs for work to be performed by the Owner pursuant to this Agreement, including work attributable to the Betterment, and (ii) the cost to perform such work without the Betterment, which estimates are hereby approved by the Developer. The estimated amount of the Owner's costs for work hereunder which is attributable to Betterment is \$\_\_\_\_\_, calculated by subtracting (ii) from (i). The percentage of the total cost of the Owner's work hereunder which is attributable to Betterment is \_\_\_\_\_%, calculated by subtracting (ii) from (i), which remainder shall be divided by (i).

- (c) If Paragraph 10(b) identifies Betterment, then the following shall apply:

- (i) If the Owner's costs are developed under procedure (3) described in Paragraph 5(b), then the Agreed Sum stated in that Paragraph includes any credits due to the Developer on account of the identified Betterment, and no further adjustment shall be made on account of same.

- (ii) If the Owner's costs are developed under procedure (1) or (2) described in Paragraph 5(b), the parties agree as follows *[If Paragraph 10(b) identifies Betterment and the Owner's costs are developed under procedure (1) or (2), check the one appropriate provision]*:

The estimated cost stated in Paragraph 10(b) is the agreed and final amount due for Betterment hereunder. Accordingly, each intermediate invoice submitted pursuant to Paragraph 7(b) shall include a credit for an appropriate percentage of the agreed Betterment amount, proportionate to the percentage of completion reflected in such invoice. The final invoice submitted pursuant to Paragraph 7(a) shall reflect the full amount of the agreed Betterment credit. For each invoice described in this paragraph, the credit for Betterment shall be applied before calculating the Developer's share (pursuant to Paragraph 6) of the cost of the Adjustment work. No other

adjustment (either up or down) shall be made based on actual Betterment costs.

- The Owner is responsible for the actual cost of the identified Betterment, determined by multiplying (a) the Betterment percentage stated in Paragraph 10(b), by (b) the actual cost of all work performed by the Owner pursuant to this Agreement (including work attributable to the Betterment), as invoiced by the Owner to the Developer. Accordingly, each invoice submitted pursuant to either Paragraph 7(a) or Paragraph 7(b) shall credit the Developer with an amount calculated by multiplying (x) the Betterment percentage stated in Paragraph 10(b), by (y) the amount billed on such invoice.

- (d) The determinations and calculations of Betterment described in this Paragraph 10 shall exclude right of way acquisition costs. Betterment in connection with right-of-way acquisition is addressed in Paragraph 16.
11. **Salvage.** For any Adjustment from which the Owner recovers any materials and/or parts and retains or sells the same, after application of any applicable Betterment credit, the Developer is entitled to a credit for the salvage value of such materials and/or parts. If the Owner's costs are developed under procedure (1) or (2) described in Paragraph 5(b), then the final invoice submitted pursuant to Paragraph 7(a) shall credit the Developer with the full salvage value. If the Owner's costs are developed under procedure (3) described in Paragraph 5(b), then the Agreed Sum includes any credit due to the Developer on account of salvage.
12. **Utility Investigations.** At the Developer's request, the Owner shall assist the Developer in locating any Utilities (including appurtenances) which are owned and/or operated by Owner and may be impacted by the Project. Without limiting the generality of the foregoing, in order to help assure that neither the adjusted Owner Utilities nor existing, unadjusted utilities owned or operated by the Owner are damaged during construction of the Project, the Owner shall mark in the field the location of all such utilities horizontally on the ground in advance of Project construction in the immediate area of such utilities.
13. **Inspection and Ownership of Owner Utilities.**
- (a) The Developer shall have the right, at its own expense, to inspect the Adjustment work performed by the Owner or its contractors, during and upon completion of construction. All inspections of work shall be completed and any comment provided within **five (5) business days** after request for inspection is received.
- (b) The Owner shall accept full responsibility for all future repairs and maintenance of said Owner Utilities. In no event shall the Developer or TxDOT become responsible for making any repairs or maintenance, or for discharging the cost of same. The provisions of this Paragraph 13(b) shall not limit any rights which the Owner may have against the Developer if either party respectively damages any Owner Utility as a result of its respective Project activities.
14. **Design Changes.** The Developer will be responsible for additional Adjustment design and responsible for additional construction costs necessitated by design changes to the Project made after approval of the Plans, upon the terms specified herein.
15. **Field Modifications.** The Owner shall provide the Developer with documentation of any field modifications, including Utility Adjustment Field Modifications as well as minor changes as described in Paragraph 17(b), occurring in the Adjustment of the Owner Utilities.

16. **Real Property Interests.**

- (a) The Owner has provided, or upon execution of this Agreement shall promptly provide to the Developer, documentation acceptable to TxDOT indicating any right, title or interest in real property claimed by the Owner with respect to the Owner Utilities in their existing location(s). Such claims are subject to TxDOT's approval as part of its review of the Developer's Utility Assembly as described in Paragraph 2. Claims approved by TxDOT as to rights or interests are referred to herein as "Existing Interests".
- (b) If acquisition of any new easement or other interest in real property ("New Interest") is necessary for the Adjustment of any Owner Utilities, then the Owner shall be responsible for undertaking such acquisition. The Owner shall implement each acquisition hereunder expeditiously so that related Adjustment construction can proceed in accordance with the Developer's Project schedules. The Developer shall be responsible for its share (if any, as specified in Paragraph 6) of the actual and reasonable acquisition costs of any such New Interest (including without limitation the Owner's reasonable overhead charges and reasonable legal costs as well as compensation paid to the landowner), excluding any costs attributable to Betterment as described in Paragraph 16(c), and subject to the provisions of Paragraph 16(e); provided, however, that all acquisition costs shall be subject to the Developer's prior written approval. Eligible acquisition costs shall be segregated from other costs on the Owner's estimates and invoices. Any such New Interest shall have a written valuation and shall be acquired in accordance with applicable law.
- (c) The Developer shall pay its share only for a replacement in kind of an Existing Interest (e.g., in width and type), unless a New Interest exceeding such standard (i) is required in order to accommodate the Project or by compliance with applicable law, or (ii) is called for by the Developer in the interest of overall Project economy. Any New Interest which is not the Developer's cost responsibility pursuant to the preceding sentence shall be considered a Betterment to the extent that it upgrades the Existing Interest which it replaces, or in its entirety if the related Owner Utility was not installed pursuant to an Existing Interest. Betterment costs shall be solely the Owner's responsibility.
- (d) For each Existing Interest located within the final Project right of way, upon completion of the related Adjustment work and its acceptance by the Owner, the Owner agrees to execute a quitclaim deed or other appropriate documentation relinquishing such Existing Interest to TxDOT, unless the affected Owner Utility is remaining in its original location or is being reinstalled in a new location within the area subject to such Existing Interest. All quitclaim deeds or other relinquishment documents shall be subject to TxDOT's approval as part of its review of the Utility Assembly as described in Paragraph 2. For each such Existing Interest relinquished by the Owner, the Developer shall do one of the following to compensate the Owner for such Existing Interest, as appropriate:
  - (i) If the Owner acquires a New Interest for the affected Owner Utility, the Developer shall reimburse the Owner for the Developer's share of the Owner's actual and reasonable acquisition costs in accordance with Paragraph 16(b) and subject to Paragraph 16(c); or
  - (ii) If the Owner does not acquire a New Interest for the affected Owner Utility, the Developer shall compensate the Owner for the Developer's share of the fair market value of such relinquished Existing Interest, as mutually agreed between the Owner and the Developer and supported by a written valuation.

The compensation, if any, provided to the Owner pursuant to either subparagraph (i) or subparagraph (ii) above shall constitute complete compensation to the Owner for the relinquished Existing Interest and any New Interest, and no further compensation shall be due to the Owner from the Developer or TxDOT on account of such Existing Interest or New Interest(s).

- (e) The Owner shall execute a Utility Joint Use Acknowledgment (TxDOT-U-80A) for each Adjustment where required pursuant to TxDOT policies. All Utility Joint Use Acknowledgments shall be subject to TxDOT approval as part of its review of the Utility Assembly as described in Paragraph 2.

17. **Amendments and Modifications.** This Agreement may be amended or modified only by a written instrument executed by the parties hereto, in accordance with Paragraph 17(a) or Paragraph 17(b) below.

- (a) Except as otherwise provided in Paragraph 17(b), any amendment or modification to this Agreement or the Plans attached hereto shall be implemented by a Utility Adjustment Agreement Amendment ("UAAA") in the form of Exhibit B hereto (TxDOT-CDA-U-35A-OM). The UAAA form can be used for a new scope of work with concurrence of the Developer and TxDOT as long as the Design and Construction responsibilities have not changed. Each UAAA is subject to the review and approval of TxDOT, prior to its becoming effective for any purpose and prior to any work being initiated thereunder. The Owner agrees to keep and track costs for each UAAA separately from other work being performed.
- (b) For purposes of this Paragraph 17(b), "Utility Adjustment Field Modification" shall mean any horizontal or vertical design change from the Plans included in a Utility Assembly previously approved by TxDOT, due either to design of the Project or to conditions not accurately reflected in the approved Utility Assembly (e.g., shifting the alignment of an 8 in. water line to miss a modified or new roadway drainage structure). A Utility Adjustment Field Modification agreed upon by the Developer and the Owner does not require a UAAA, provided that the modified Plans have been submitted to TxDOT for its review and comment. A minor change (e.g., an additional water valve, an added Utility marker at a ROW line, a change in vertical bend, etc.) will not be considered a Utility Adjustment Field Modification and will not require a UAAA, but shall be shown in the documentation required pursuant to Paragraph 15.

18. **Entire Agreement.** This Agreement embodies the entire agreement between the parties and there are no oral or written agreements between the parties or any representations made which are not expressly set forth herein.

19. **Assignment; Binding Effect; TxDOT as Third Party Beneficiary.** The Owner and the Developer may not assign any of its rights or delegate any of its duties under this Agreement without the prior written consent of the other parties and of TxDOT, which consent may not be unreasonably withheld or delayed; provided, however, that the Developer may assign any of its rights and/or delegate any of its duties to TxDOT or to any other entity with which TxDOT contracts to fulfill the Developer's obligations at any time without the prior consent of the Owner.

This Agreement shall bind the Owner, the Developer and their successors and permitted assigns, and nothing in this Agreement nor in any approval subsequently provided by any party hereto shall be construed as giving any benefits, rights, remedies, or claims to any other person, firm, corporation or other entity, including, without limitation, any contractor or other party retained for the Adjustment work or the public in general; provided, however, that the Owner and the

Developer agree that although TxDOT is not a party to this Agreement, TxDOT is intended to be a third-party beneficiary to this Agreement.

20. **Breach by the Parties.**

- (a) If the Owner claims that the Developer has breached any of its obligations under this Agreement, the Owner will notify the Developer and TxDOT in writing of such breach, and the Developer shall have 30 days following receipt of such notice in which to cure such breach, before the Owner may invoke any remedies which may be available to it as a result of such breach; provided, however, that both during and after such period TxDOT shall have the right, but not the obligation, to cure any breach by the Developer. Without limiting the generality of the foregoing, (a) TxDOT shall have no liability to the Owner for any act or omission committed by the Developer in connection with this Agreement, and (b) in no event shall TxDOT be responsible for any repairs or maintenance to the Owner Utilities adjusted pursuant to this Agreement.
- (b) If the Developer claims that the Owner has breached any of its obligations under this Agreement, the Developer will notify the Owner and TxDOT in writing of such breach, and the Owner shall have 30 days following receipt of such notice in which to cure such breach, before the Developer or the Developer may invoke any remedies which may be available to it as a result of such breach.

21. **Traffic Control.** The Developer shall provide traffic control or shall reimburse the Owner for the Developer's share (if any, as specified in Paragraph 6) of the costs for traffic control made necessary by the Adjustment work performed by either the Developer or the Owner pursuant to this Agreement, in compliance with the requirements of the Texas Manual on Uniform Traffic Control Devices. Betterment percentages calculated in Paragraph 10 shall also apply to the traffic control costs.

22. **Notices.** Except as otherwise expressly provided in this Agreement, all notices or communications pursuant to this Agreement shall be sent or delivered to the following:

The Owner:

Phone:

Fax:

The Developer:

Phone:

Fax:

A party sending a notice of default of this Agreement to another party shall also send a copy of such notice to TxDOT and to the CDA Utility Manager at the following addresses:

TxDOT:

TxDOT Department of Transportation  
Attention: Donald C. Toner, Jr., SR/WA  
125 E. 11<sup>th</sup> Street  
Austin, Texas 78701-2483  
Phone: (512) 936-0980

CDA Utility Manager

Any notice or demand required herein shall be given (a) personally, (b) by certified or registered mail, postage prepaid, return receipt requested, or (c) by reliable messenger or overnight courier to the appropriate address set forth above. Any notice served personally shall be deemed delivered upon receipt and served by certified or registered mail or by reliable messenger or overnight courier shall be deemed delivered on the date of receipt as shown on the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier. Any party may from time to time designate any other address for this purpose by written notice to all other parties; TxDOT may designate another address by written notice to all parties.

23. **Approvals.** Any acceptance, approval, or any other like action (collectively "Approval") required or permitted to be given by either the Developer or the Owner pursuant to this Agreement:

- (a) Must be in writing to be effective (except if deemed granted pursuant hereto),
- (b) Shall not be unreasonably withheld or delayed; and if Approval is withheld, such withholding shall be in writing and shall state with specificity the reason for withholding such Approval, and every effort shall be made to identify with as much detail as possible what changes are required for Approval, and
- (c) Except for approvals by TxDOT, and except as may be specifically provided otherwise in this Agreement, shall be deemed granted if no response is provided to the party requesting an Approval within the time period prescribed by this Agreement (or if no time period is prescribed, then fourteen (14) calendar days), commencing upon actual receipt by the party from which an Approval is requested or required, of a request for Approval from the requesting party. All requests for Approval shall be sent out by the requesting party to the other party in accordance with Paragraph 22.

24. **Time; Force Majeure.**

- (a) Time is of the essence in the performance of this Agreement.
- (b) All references to "days" herein shall be construed to refer to calendar days, unless otherwise stated.
- (c) No party shall be liable to another party for any delay in performance under this Agreement from any cause beyond its control and without its fault or negligence ("Force Majeure"), such as acts of God, acts of civil or military authority, fire, earthquake, strike, unusually severe weather, floods or power blackouts. If any such event of Force Majeure occurs, the Owner agrees, if requested by the Developer, to accelerate its efforts hereunder if reasonably feasible in order to regain lost time, so long as the Developer agrees to reimburse the Owner for the reasonable and actual costs of such efforts.

25. **Continuing Performance.** In the event of a dispute, the Owner and the Developer agree to continue their respective performance hereunder to the extent feasible in light of the dispute, including paying billings, and such continuation of efforts and payment of billings shall not be construed as a waiver of any legal right.

26. **Equitable Relief.** The Developer and the Owner acknowledge and agree that delays in Adjustment of the Owner Utilities will impact the public convenience, safety and welfare, and that (without limiting the parties' remedies hereunder) monetary damages would be inadequate to compensate for delays in the construction of the Project. Consequently, the parties hereto (and TxDOT as well, as a third party beneficiary) shall be entitled to specific performance or other equitable relief in the event of any breach of this Agreement which threatens to delay construction of the Project; provided, however, that the fact that specific performance or other equitable relief may be granted shall not prejudice any claims for payment or otherwise related to performance of the Adjustment work hereunder.
27. **Authority.** The Owner and the Developer each represent and warrant to the other party that the warranting party possesses the legal authority to enter into this Agreement and that it has taken all actions necessary to exercise that authority and to lawfully authorize its undersigned signatory to execute this Agreement and to bind such party to its terms. Each person executing this Agreement on behalf of a party warrants that he or she is duly authorized to enter into this Agreement on behalf of such party and to bind it to the terms hereof.
28. **Cooperation.** The parties acknowledge that the timely completion of the Project will be influenced by the ability of the Owner (and its contractors) and the Developer to coordinate their activities, communicate with each other, and respond promptly to reasonable requests. Subject to the terms and conditions of this Agreement, the Owner and the Developer agree to take all steps reasonably required to coordinate their respective duties hereunder in a manner consistent with the Developer's current and future construction schedules for the Project. The Owner further agrees to require its contractors to coordinate their respective work hereunder with the Developer.
29. **Termination.** If the Project is canceled or modified so as to eliminate the necessity of the Adjustment work described herein, then the Developer shall notify the Owner in writing and the Developer reserves the right to thereupon terminate this Agreement. Upon such termination, the parties shall negotiate in good faith an amendment that shall provide mutually acceptable terms and conditions for handling the respective rights and liabilities of the parties relating to such termination.
30. **Nondiscrimination.** Each party hereto agrees, with respect to the work performed by such party pursuant to this Agreement, that such party shall not discriminate on the grounds of race, color, sex, national origin or disability in the selection and/or retention of contractors and consultants, including procurement of materials and leases of equipment.
31. **Applicable Law, Jurisdiction and Venue.** This Agreement shall be governed by the laws of the State of Texas, without regard to the conflict of laws principles thereof. Venue for any action brought to enforce this Agreement or relating to the relationship between any of the parties shall be the District Court of Travis County, Texas or the United States District Court for the Western District of Texas (Austin).
32. **Waiver of Consequential Damages.** No party hereto shall be liable to any other party to this Agreement, whether in contract, tort, equity, or otherwise (including negligence, warranty, indemnity, strict liability, or otherwise), for any punitive, exemplary, special, indirect, incidental, or consequential damages, including, without limitation, loss of profits or revenues, loss of use, claims of customers, or loss of business opportunity.

33. **Captions.** The captions and headings of the various paragraphs of this Agreement are for convenience and identification only, and shall not be deemed to limit or define the content of their respective paragraphs.
34. **Counterparts.** This Agreement may be executed in any number of counterparts. Each such counterpart hereof shall be deemed to be an original instrument but all such counterparts together shall constitute one and the same instrument.
35. **Effective Date.** This Agreement shall become effective upon the later of (a) the date of signing by the last party (either the Owner or the Developer) signing this Agreement, and (b) the date of TxDOT's approval as indicated by the signature of TxDOT's representative, below.

APPROVED BY:  
**TEXAS DEPARTMENT OF  
TRANSPORTATION**

**OWNER**

\_\_\_\_\_  
[Print Owner Name]

By: \_\_\_\_\_  
Authorized Signature

By: \_\_\_\_\_  
Duly Authorized Representative

Printed  
Name: Donald C. Toner, Jr., SR/WA

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

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

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

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

**DEVELOPER**

By: \_\_\_\_\_  
Duly Authorized Representative

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

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

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

County:  
ROW CSJ No.:

Const. CSJ No.:

Highway:  
Limits:  
Fed. Proj. No.:

**EXHIBIT A**

**PLANS, SPECIFICATIONS, COST ESTIMATES AND ALLOCATION**

County:  
ROW CSJ No.:

Const. CSJ No.:

Highway:  
Limits:  
Fed. Proj. No.:

**EXHIBIT B**

**UTILITY ADJUSTMENT AGREEMENT AMENDMENT  
(TxDOT-CDA-U-35A-OM)**

County:  
ROW CSJ No.:

Const. CSJ No.:

Highway:  
Limits:  
Fed. Proj. No.:

**EXHIBIT C**

**STATEMENT COVERING CONTRACT WORK  
(TxDOT-U-48)**

County:  
Highway:  
Limits:  
Fed. Proj. No.:  
ROW CSJ No.:  
Const. CSJ No.:

**UTILITY ADJUSTMENT AGREEMENT AMENDMENT (Developer Managed)**

(Amendment No. \_\_\_\_\_ to Agreement No.: -U-\_\_\_\_)

**THIS AMENDMENT TO PROJECT UTILITY ADJUSTMENT AGREEMENT** (this “Amendment”), by and between \_\_\_\_\_, hereinafter identified as the “**Developer**”, and \_\_\_\_\_, hereinafter identified as the “**Owner**”, is as follows:

**WITNESSETH**

**WHEREAS**, the STATE of TEXAS, acting by and through the Texas Department of Transportation, hereinafter identified as “TxDOT”, proposes to construct the toll project identified above (the “Project”, as more particularly described in the “Original Agreement”, defined below); and

**WHEREAS**, pursuant to that certain Comprehensive Development Agreement (“CDA”) by and between TxDOT and the Developer with respect to the Project, the Developer has undertaken the obligation to design, construct, and potentially maintain the Project, including causing the removal, relocation, or other necessary adjustment of existing utilities impacted by the Project (collectively, “Adjustment”); and

**WHEREAS**, the Owner and Developer are parties to that certain executed Project Utility Adjustment Agreement designated by the “Agreement No.” indicated above, as amended by previous amendments, if any (the “Original Agreement”), which provides for the adjustment of certain utilities owned and/or operated by the Owner (the “Utilities”); and

**WHEREAS**, the parties are required to utilize this Amendment form in order to modify the Original Agreement to add the adjustment of Owner facilities not covered by the Original Agreement; and

**WHEREAS**, the parties desire to amend the Original Agreement to add additional Owner utility facility(ies), on the terms and conditions hereinafter set forth.

**NOW, THEREFORE**, in consideration of the agreements contained herein, the parties hereto agree as follows:

1. **Amendment.** The Original Agreement is hereby amended as follows:

1.1 **Plans.**

- (a) The description of the Owner Utilities and the proposed Adjustment of the Owner Utilities in the Original Agreement is hereby amended to add the following utility facility(ies) (“Additional Owner Utilities”) and proposed Adjustment(s) to the Owner Utilities described in the Original Agreement [*insert below a description of the affected facilities (by type, size and location) as well as a brief description of the nature of the Adjustment work to be performed (e.g., “adjust 12” waterline from approximately Highway Station 100+00 to approximately Highway Station 200+00)*]; and

- (b) The Plans, as defined in Paragraph 1 of the Original Agreement, are hereby amended to add thereto the plans, specifications and cost estimates attached hereto as Exhibit A.
- (c) The Plans attached hereto as Exhibit A, along with this Amendment, shall be submitted upon execution to TxDOT in accordance with Paragraph 2 of the Original Agreement, and Paragraph 2 shall apply to this Amendment and the Plans attached hereto in the same manner as if this Amendment were the Original Agreement. If the Owner claims an Existing Interest for any of the Additional Owner Utilities, documentation with respect to such claim shall be submitted to TxDOT as part of this Amendment and the attached Plans, in accordance with Paragraph 15(a) of the Original Agreement.

1.2 **Reimbursement of Owner's Indirect Costs.** For purposes of Paragraph 6 of the Original Agreement, the following terms apply to the Additional Owner Utilities and proposed Adjustment:

- (a) Developer agrees to reimburse the Owner its share of the Owner's indirect costs (e.g., engineering, inspection, testing, ROW) as identified in Exhibit A. When requested by the Owner, monthly progress payments will be made. The monthly payment will not exceed 80% of the estimated indirect work done to date. Once the indirect work is complete, final payment of the eligible indirect costs will be made. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.
- (b) The Owner's indirect costs associated with Adjustment of the Owner Utilities shall be developed pursuant to the method checked and described below [*check only one box*]:
  - (1) Actual related indirect costs accumulated in accordance with (i) a work order accounting procedure prescribed by the applicable Federal or State regulatory body, or (ii) established accounting procedure developed by the Owner and which the Owner uses in its regular operations (either (i) or (ii) referred to as "Actual Cost") or,
  - (2) The agreed sum of \$\_\_\_\_\_ ("Agreed Sum") as supported by the analysis of the Owner's estimated costs attached hereto as part of Exhibit A.

1.3 **Advancement of Funds by Owner for Construction Costs.**

- (a) Advancement of Owner's Share, if any, of Estimated Costs

Exhibit A shall identify all estimated engineering and construction-related costs, including labor, material, equipment and other miscellaneous construction items. Exhibit A shall also identify the Owner's and Developer's respective shares of the estimated costs.

The Owner shall advance to the Developer its allocated share, if any, of the estimated costs for construction and engineering work to be performed by Developer, in accordance with the following terms:

- The adjustment of the Owner's Utilities does not require advancement of funds.
- The adjustment of the Owner's Utilities does require advancement of funds and the terms agreed to between the Developer and Owner are listed below.

*[Insert terms of advance funding to be agreed between Developer and Owner.]*

(b) Adjustment Based on Actual Costs or Agreed Sum

*[Check the one appropriate provision, if advancement of funds is required]:*

- The Owner is responsible for its share of the Developer actual cost for the Adjustment, including the identified Betterment. Accordingly, upon completion of all Adjustment work to be performed by both parties pursuant to this Amendment, (i) the Owner shall pay to the Developer the amount, if any, by which the actual cost of the Betterment (as determined in Paragraph 9(b)) plus the actual cost of Owner's share of the Adjustment (based on the allocation set forth in Exhibit A) exceeds the estimated cost advanced by the Owner, or (ii) the Developer shall refund to the Owner the amount, if any, by which such advance exceeds such actual cost, as applicable.
- The Agreed Sum is the agreed and final amount due for the Adjustment, including any Betterment, under this Amendment. Accordingly, no adjustment (either up or down) of such amount shall be made based on actual costs.

1.4 **Reimbursement of Owner's Indirect Costs.** For purposes of Paragraph 6 of the Original Agreement, the following terms apply to the Additional Owner Utilities and proposed Adjustment:

- (a) Developer agrees to reimburse the Owner its share of the Owner's indirect costs (e.g., engineering, inspection, testing, ROW) as identified in Exhibit A. When requested by the Owner, monthly progress payments will be made. The monthly payment will not exceed 80% of the estimated indirect work done to date. Once the indirect work is complete, final payment of the eligible indirect costs will be made. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.
- (b) The Owner's indirect costs associated with Adjustment of the Owner Utilities shall be developed pursuant to the method checked and described below *[check only one box]*:
  - (1) Actual related indirect costs accumulated in accordance with (i) a work order accounting procedure prescribed by the applicable Federal or State regulatory body, or (ii) established accounting procedure developed by the Owner and which the Owner uses in its regular operations (either (i) or (ii) referred to as "Actual Cost") or,

- (2) The agreed sum of \$\_\_\_\_\_ (“Agreed Sum”) as supported by the analysis of the Owner’s estimated costs attached hereto as part of Exhibit A.

1.5 **Responsibility for Costs of Adjustment Work.** For purposes of Paragraph 4 of the Original Agreement, responsibility for the Agreed Sum or Actual Cost, as applicable, of all Adjustment work to be performed pursuant to this Amendment shall be allocated between the Developer and the Owner as identified in Exhibit A hereto and in accordance with §203.092, Texas Transportation Code. An allocation percentage may be determined by application of an Eligibility Ratio, if appropriate, as detailed in Exhibit A, provided however, that any portion of an Agreed Sum or Actual Cost attributable to Betterment shall be allocated 100% to the Owner in accordance with Paragraph 9 of the Original Agreement.

1.6 **Betterment.**

(a) Paragraph 9(b) (Betterment and Salvage) of the Original Agreement is hereby amended to add the following [*Check the one box that applies, and complete if appropriate*]:

- The Adjustment of the Additional Owner Utilities, pursuant to the Plans as amended herein, does not include any Betterment.
- The Adjustment of the Additional Owner Utilities, pursuant to the Plans as amended herein, includes Betterment to the Additional Owner Utilities by reason of [*insert explanation, e.g. “replacing 12” pipe with 24” pipe*]: \_\_\_\_\_. The Developer has provided to the Owner comparative estimates for (i) all work to be performed by the Developer pursuant to this Amendment, including work attributable to the Betterment, and (ii) the cost to perform such work without the Betterment, which estimates are hereby approved by the Owner. The estimated cost of the Developer work under this Amendment which is attributable to Betterment is \$\_\_\_\_\_, calculated by subtracting (ii) from (i). The percentage of the total cost of the Developer work under this Amendment which is attributable to Betterment is \_\_\_\_\_%, calculated by subtracting (ii) from (i), which remainder is divided by (i).

(b) If the above Paragraph 1.6(a) identifies Betterment, the Owner shall advance to the Developer, at least **fourteen (14) days** prior to the date scheduled for commencement of construction for Adjustment of the Additional Owner Utilities, the estimated cost attributable to Betterment as set forth in Paragraph 1.6(a) of this Amendment. If the Owner fails to advance payment to the Developer on or before the foregoing deadline, the Developer shall have the option of commencing and completing (without delay) the Adjustment work without installation of the applicable Betterment. [*Check the one appropriate provision*]:

- The estimated cost stated in Paragraph 1.6(a) of this Amendment is the agreed and final amount due for Betterment under this Amendment, and accordingly no adjustment (either up or down) of such amount shall be made based on actual costs.
- The Owner is responsible for the Developer Actual Cost for the identified Betterment. Accordingly, upon completion of all Adjustment work to be performed by both parties pursuant to this Amendment, (i) the Owner shall pay to the Developer the amount, if any, by which the actual cost of the Betterment (determined as provided below in this paragraph) exceeds the estimated cost

advanced by the Owner, or (ii) the Developer shall refund to the Owner the amount, if any, by which such advance exceeds such actual cost, as applicable. Any additional payment by the Owner shall be due within **sixty (60) days** after the Owner's receipt of the Developer's invoice therefor, together with supporting documentation; any refund shall be due within **sixty (60) days** after completion of the Adjustment work under this Amendment. The Actual Cost of Betterment incurred by the Developer shall be calculated by multiplying (i) the Betterment percentage stated in Paragraph 1.6(a) of this Amendment, by (ii) the Actual Cost of all work performed by the Developer pursuant to this Amendment (including work attributable to the Betterment), as invoiced by the Developer to the Owner.

- (c) The determinations and calculations of Betterment described in this Amendment shall exclude right-of-way acquisition costs. Betterment in connection with right-of-way acquisition is addressed in Paragraph 15 of the Original Agreement.

1.7 **Miscellaneous.**

- (a) Owner and Developer agree to refer to this Amendment, designated by the "Amendment No." and "Agreement Number" indicated on page 1 above, on all future correspondence regarding the Adjustment work that is the subject of this Amendment and to track separately all costs relating to this Amendment and the Adjustment work described herein.
- (b) *[Include any other proposed amendments allowed by applicable law.]*



2. **General.**

- (a) All capitalized terms used in this Amendment shall have the meanings assigned to them in the Original Agreement, except as otherwise stated herein.
- (b) This Amendment may be executed in any number of counterparts. Each such counterpart hereof shall be deemed to be an original instrument but all such counterparts together shall constitute one and the same instrument.
- (c) Except as amended hereby, the Original Agreement shall remain in full force and effect. In no event shall the responsibility, as between the Owner and the Developer, for the preparation of the Plans and the Adjustment of the Owner Utilities be deemed to be amended hereby.
- (d) This Amendment shall become effective upon the later of (a) the date of signing by the last party (either the Owner or the Developer) signing this Amendment, and (b) the completion of TxDOT's review and approval as indicated by the signature of TxDOT's representative, below.

APPROVED BY:

**TEXAS DEPARTMENT OF  
TRANSPORTATION**

**OWNER**

\_\_\_\_\_  
[Print Owner Name]

By: \_\_\_\_\_  
Authorized Signature

By: \_\_\_\_\_  
Duly Authorized Representative

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

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

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

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

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

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

**DEVELOPER**

By: \_\_\_\_\_  
Duly Authorized Representative

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

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

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



- (b) The Plans, as defined in Paragraph 1 of the Original Agreement, are hereby amended to add thereto the plans, specifications and cost estimates attached hereto as Exhibit A.
- (c) The Plans attached hereto as Exhibit A, along with this Amendment, shall be submitted upon execution to TxDOT in accordance with Paragraph 2 of the Original Agreement, and Paragraph 2 shall apply to this Amendment and the Plans attached hereto in the same manner as if this Amendment were the Original Agreement. If the Owner claims an Existing Interest for any of the Additional Owner Utilities, documentation with respect to such claim shall be submitted to TxDOT as part of this Amendment and the attached Plans, in accordance with Paragraph 16(a) of the Original Agreement.
- (d) Paragraph 4(f) of the Original Agreement is hereby amended to add the following deadline for the Adjustment of the Additional Owner Utilities *[check one box that applies]*:
- Owner shall complete all of the utility reconstruction and relocation work, including final testing and acceptance thereof, on or before \_\_\_\_\_, 20\_\_\_\_.
- Owner shall complete all of the utility reconstruction and relocation work, including final testing and acceptance thereof, within \_\_\_\_\_ calendar days after delivery to Owner of a notice to proceed by Developer.
- (e) For purposes of Paragraph 5(b) of the Original Agreement, the Owner's costs associated with Adjustment of the Additional Owner Utilities shall be developed pursuant to the method checked and described below, *[check only one box]*:
- (1) Actual costs accumulated in accordance with a work order accounting procedure prescribed by the applicable Federal or State regulatory body ("Actual Cost"); or
- (2) Actual costs accumulated in accordance with an established accounting procedure developed by the Owner and which the Owner uses in its regular operations ("Actual Cost"); or
- (3) The agreed sum of \$\_\_\_\_("Agreed Sum"), as supported by the analysis of estimated costs attached hereto as part of Exhibit A
- (f) For purposes of Paragraph 6 of the Original Agreement, responsibility for the Agreed Sum or Actual Cost, as applicable, of all Adjustment work to be performed pursuant to this Amendment shall be allocated between the Developer and the Owner as identified in Exhibit A and in accordance with §203.092 of the Texas Transportation Code. An allocation percentage may be determined by application of an **Eligibility Ratio**, if appropriate, as detailed in Exhibit A; provided, however, that any portion of an Agreed Sum or Actual Cost attributable to Betterment shall be allocated 100% to the Owner in accordance with Paragraph 10 of the Original Agreement.
- (g) Paragraph 10(b) of the Original Agreement is hereby amended to add the following *[Check the one box that applies]*:
- The Adjustment of the Additional Owner Utilities, pursuant to the Plans as amended herein, does not include any Betterment.

- The Adjustment of the Additional Owner Utilities, pursuant to the Plans as amended herein, includes Betterment to the Additional Owner Utilities by reason of *[insert explanation, e.g. "replacing 12" pipe with 24" pipe]*: \_\_\_\_\_. The Owner has provided to the Developer comparative estimates for (i) all costs for work to be performed by the Owner pursuant to this Amendment, including work attributable to the Betterment, and (ii) the cost to perform such work without the Betterment, which estimates are hereby approved by the Developer. The estimated amount of the Owner's costs for work under this Agreement which is attributable to Betterment is \$\_\_\_\_\_, calculated by subtracting (ii) from (i). The percentage of the total cost of the Owner's work hereunder which is attributable to Betterment is \_\_\_\_\_%, calculated by subtracting (ii) from (i) which remainder shall be divided by (i).
- (h) The following shall apply to any Betterment described in Paragraph 1(g) of this Amendment:
- (i) If the Owner's costs are developed under procedure (3) described in Paragraph 1(e) of this Amendment, then the agreed sum stated in that Paragraph includes any credits due to the Developer on account of the identified Betterment, and no further adjustment shall be made on account of same.
- (ii) If the Owner's costs are developed under procedure (1) or (2) described in Paragraph 1(e) of this Amendment, the parties agree as follows *[check the one appropriate provision]*:
- The estimated cost stated in Paragraph 1(g) of this Amendment is the agreed and final amount due for Betterment under this Amendment. Accordingly, each intermediate invoice submitted for Adjustment(s) of the Additional Owner Utilities pursuant to Paragraph 7(b) of the Original Agreement shall credit the Developer with an appropriate amount of the agreed Betterment amount, proportionate to the percentage of completion reflected in such invoice. The final invoice submitted for Adjustment(s) of the Additional Owner Utilities pursuant to Paragraph 7(a) of the Original Agreement shall reflect the full amount of the agreed Betterment credit. For each invoice described in this paragraph, the credit for Betterment shall be applied before calculating the Developer's share (pursuant to Paragraph 1(e) of this Amendment) of the cost of the Adjustment work. No other adjustment (either up or down) shall be made based on actual Betterment costs.
- The Owner is responsible for the actual cost of the identified Betterment, determined by multiplying (a) the Betterment percentage stated in Paragraph 1(g) of this Amendment, by (b) the actual cost of all work performed by the Owner pursuant to this Amendment (including work attributable to the Betterment), as invoiced by the Owner to the Developer. Accordingly, each invoice submitted for Adjustment of the Additional Owner Utilities pursuant to either Paragraph 7(a) or Paragraph 7(b) of the Original Agreement shall credit the Developer with an amount calculated by multiplying (x) the Betterment percentage stated in Paragraph 1(g) of this Amendment, by (y) the amount billed on such invoice.
- (i) The determinations and calculations of Betterment described in this Amendment shall exclude right-of-way acquisition costs. Betterment in connection with right-of-way acquisition is addressed in Paragraph 16 of the Original Agreement.

- (j) Owner and the Developer agree to refer to this Amendment, designated by the “Amendment No.” and “Agreement number” indicated on page 1 above, on all future correspondence regarding the Adjustment work that is the subject of this Amendment and to track separately all costs relating to this Amendment and the Adjustment work described herein.
- (k) *[Include any other proposed amendments in compliance with the applicable law.]*

2. **General.**

- (a) All capitalized terms used in this Amendment shall have the meanings assigned to them in the Original Agreement, except as otherwise stated herein.
- (b) This Amendment may be executed in any number of counterparts. Each such counterpart hereof shall be deemed to be an original instrument but all such counterparts together shall constitute one and the same instrument.
- (c) Except as amended hereby, the Original Agreement shall remain in full force and effect. In no event shall the responsibility, as between the Owner and the Developer, for the preparation of the Plans and the Adjustment of the Owner Utilities be deemed to be amended hereby.
- (d) This Amendment shall become effective upon the later of (a) the date of signing by the last party (either the Owner or the Developer) signing this Amendment, and (b) the completion of TxDOT’s review and approval as indicated by the signature of TxDOT’s representative, below.

APPROVED BY:

**TEXAS DEPARTMENT OF  
TRANSPORTATION**

By: \_\_\_\_\_  
Authorized Signature

Printed

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

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

**OWNER**

\_\_\_\_\_  
[Print Owner Name]

By: \_\_\_\_\_  
Duly Authorized Representative

Printed

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

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

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

**DEVELOPER**

By: \_\_\_\_\_  
Duly Authorized Representative

Printed

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

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

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

**Texas Department of Transportation  
Book 2 - Technical Provisions**

**IH 35E Managed Lanes Project**

**Attachment 8-1**

**ESALs and Traffic Data**

**IH 35E Managed Lanes Project  
ESALs and Traffic Data**

**Frontage Roads - 20 yrs**

Location	Average Daily Traffic		Base Year		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 20 Year Period (2012 to 2032)				
			Percent Truck				Flexible Pavement	S N	Rigid Pavement	SLAB	
	2012	2032	ADT	DHV							
<u>I-35E Frontage Roads Only</u> <u>Section 1</u>											
From I-635 to Belt Line Road	43,600	58,100	8.8	6.6	17,500	40	13,197,000	3	17,052,000	8"	
Dallas County									17,500,000	10"	
									17,719,000	12"	

**Data for Use in Air & Noise Analysis**

Vehicle Class	Base Year	
	% of ADT	% of DHV
Light Duty	91.2	93.4
Medium Duty	2.3	1.7
Heavy Duty	6.5	4.9

**Frontage Roads - 30 yrs**

Location	Average Daily Traffic		Base Year		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 30 Year Period (2012 to 2042)				
			Percent Truck				Flexible Pavement	S N	Rigid Pavement	SLAB	
	2012	2042	ADT	DHV							
<u>I-35E Frontage Roads Only</u> <u>Section 1</u>											
From I-635 to Belt Line Road	43,600	65,100	8.8	6.6	17,600	40	21,158,000	3	27,339,000	8"	
Dallas County									28,057,000	10"	
									28,409,000	12"	







**IH 35E Managed Lanes Project  
ESALs and Traffic Data**

**Mainlane Roads - 20 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 20 Year Period (2010 to 2030)			
	2010	2030	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	<u>I-35E Mainlanes Only Section 2</u>  From Belt Line Road To Valley Ridge  Dallas & Denton Counties	200,300	288,000	6.3			2.8	16,400	30	54,599,000

**Data for Use in Air & Noise Analysis**

Vehicle Class	Base Year	
	% of ADT	% of DHV
Light Duty	93.7	97.2
Medium Duty	1.8	0.8
Heavy Duty	4.5	2

**Mainlane Roads - 30 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 30 Year Period (2010 to 2040)			
	2010	2040	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	<u>I-35E Mainlanes Only Section 2</u>  From Belt Line Road To Valley Ridge  Dallas & Denton Counties	200,300	312,000	6.3			2.8	16,400	30	85,926,000

**IH 35E Managed Lanes Project  
ESALs and Traffic Data**

**Mainlane Roads - 20 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 20 Year Period (2010 to 2030)			
	2010	2030	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	I-35E Mainlanes Only Section 3 From Valley Ridge To US 377  Denton County	166,000	242,100	6.7			3.0	16,200	40	48,499,000

**Data for Use in Air & Noise Analysis**

Vehicle Class	Base Year	
	% of ADT	% of DHV
Light Duty	93.3	97
Medium Duty	1.9	0.9
Heavy Duty	4.8	2.1

**Mainlane Roads - 30 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 30 Year Period (2010 to 2040)			
	2010	2040	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	I-35E Mainlanes Only Section 3 From Valley Ridge To US 377  Denton County	166,000	262,900	6.7			3.0	16,300	40	76,459,000

**IH 35E Managed Lanes Project  
ESALs and Traffic Data**

**Mainlane Roads - 20 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 20 Year Period (2010 to 2030)			
	2010	2030	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	<u>I-35E Mainlanes Only Section 4</u>  From US 377 to US 380  Denton County	115,700	170,200	7.7			3.5	15,900	40	38,999,000

**Data for Use in Air & Noise Analysis**

Vehicle Class	Base Year	
	% of ADT	% of DHV
Light Duty	92.3	96.5
Medium Duty	2.2	1
Heavy Duty	5.5	2.5

**Mainlane Roads - 30 yrs**

Location	Average Daily Traffic		Base Year Percent Truck		ATHWLD	% Tandem Axles in ATHWLD	Total # of 18K ESAL Applications in One Direction Expected for a 30 Year Period (2010 to 2040)			
	2010	2040	ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	<u>I-35E Mainlanes Only Section 4</u>  From US 377 to US 380  Denton County	115,700	185,000	7.7			3.5	15,900	40	61,531,000

**Texas Department of Transportation**  
**Book 2 – Technical Provisions**

**IH 35E Managed Lanes Project**

**Attachment 11-1**  
**Roadway Design Criteria**

**Table 1: Geometric Design Criteria**

	MAINLANES	Managed Lanes	FRONTAGE ROADS	RAMPS (Tollway)	RAMPS (Freeway)	DIRECT CONNECTORS	CROSSING STREETS
<b>General</b>							
Roadway Classification	Urban Freeway or Tollway	Urban Freeway or Tollway	Low Speed Urban Street	Tollway	Freeway	Urban Freeway or Tollway	Low Speed Urban Street
Design Speed	70 mph / 65 mph <sup>6</sup> / 50 mph <sup>5</sup>	70 mph / 65 mph <sup>6</sup> / 50 mph <sup>5</sup>	40 mph / 35 mph <sup>6</sup> / 15 mph <sup>6</sup>	70 mph	40 mph / 35 mph <sup>6</sup> / 25 mph <sup>6</sup>	50 mph	40mph/ 35 mph <sup>6</sup> / 30 mph <sup>6</sup>
Stopping sight distance	730' / 645' / 425'	730' / 645' / 425'	305'/ 250' / 80'	730'	305' / 250' / 155'	425'	305' / 250' / 200'
Maximum super-elevation rate	6%	6%	4%	6%	6%	6%	N/A
Min. Radius of Curvature	2050' / 1660' / 835'	2050' / 1660' / 835'	490' / 345' / 40'	2050'	510' / 380' / 185'	835'	675' / 465' / 300'
<b>Vertical Alignment</b>							
Minimum Grade	0.3%	0.3%	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %
Maximum grade	3.0 % / 3.0 % / 6%	3.0 % / 3.0 % / 6%	7.0 %	3.0 %	7.0 %	6 %	7.0 %
Crest (Min. K-Value)	247 / 193 / 84	247 / 193 / 84	44 / 29 / 3	247	44 / 29 / 12	84	44 / 29 / 19
Sag (Min. K-Value)	181 / 157 / 96	181 / 157 / 96	64 / 49 / 10	181	64 / 49 / 26	96	64 / 49 / 37

**Table 1: Geometric Design Criteria**

	MAINLANES	Managed Lanes	FRONTAGE ROADS	RAMPS (Tollway)	RAMPS (Freeway)	DIRECT CONNECTORS	CROSSING STREETS
<b>Cross Section</b>							
Lane width	11'	12'	11' inside lanes 14' outside lane (includes 3' shared use lane)	14'	14'	14'	12'
Shoulder Width (min.)							
Inside Shoulder	2'	14' and 2' (see Draft Interim Schematic)	NA (curbed)	4' <sup>4</sup>	4' <sup>4</sup>	4' <sup>4</sup>	Curb / none
Outside Shoulder	10'	14' and 2' (see Draft Interim Schematic)	NA (curbed)	8' <sup>4</sup>	8' <sup>4</sup>	8' <sup>4</sup>	Curb / none
Curb offset	N/A	N/A	2' outside 1' inside	N/A	N/A	N/A	N/A
Cross-slope (typical)	2.5 %	2.5 %					
Managed Lanes	2.5 %	2.5 %					
General Purpose Ln							
- Inside 2 lanes	2.5 %	2.5 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
- Outside lanes	2.5 %	2.5 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
-Shoulders	2.5 %	2.5 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
<b>Clear Zone</b>							
Distance from edge of travel lane unless noted otherwise	30'	30'	3' (measured from face of curb)	16'	16'	N/A	Refer to notes 2 and 3
Side slopes:							
-within clear zone	6:1 usual (4:1 Max)	6:1 usual (4:1 Max)	6:1 (4:1 Max)	6:1 (4:1 Max)	6:1 (4:1 Max)	6:1 (4:1 Max)	6:1 (4:1 Max)
- outside clear zone	3:1 max	3:1 max	3:1 max	3:1 max	3:1 max	3:1 max	3:1 max

**Table 1: Geometric Design Criteria**

	MAINLANES	Managed Lanes	FRONTAGE ROADS	RAMPS (Tollway)	RAMPS (Freeway)	DIRECT CONNECTORS	CROSSING STREETS
Over Roadway	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.
Over Streets	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.	16'-6" Desirable 14'-6" Min.
Over Railroad	23'-0"	23'-0"	23'-0"	23'-0"	23'-0"	23'-0"	23'-0"
Over electrified light Rail	26'	26'	26'	26'	26'	26'	26'
Overhead Signs							
Pedestrian	17'-6" 17'-6"	17'-6" 17'-6"	17'-6" 17'-6"	17'-6"	17'-6"	17'-6"	17'-6"
Design Vehicles	WB-62	WB-62	WB-62	WB-62	WB-62	WB-62	As noted in Attachment 11-1, Table 2
Driveway Radius	N/A	N/A	30' min commercial, 15' min. residential	NA	NA	NA	30' min commercial, 15' min. residential

Notes:

1. Design criteria lower than shown above will not be allowed without TxDOT approval
2. See Attachment 11-1, Table 2 for crossing street functional classification
3. The face of the new bridge columns shall be located 6 feet or more from the face of curb
4. To mitigate restrictions on the design imposed by sight distance, it is acceptable to position the 8-foot the inside of the curve and the 4-foot shoulder on the outside of the curve.
5. TxDOT will allow the reduction of the Design Speed for the Mainlanes and Managed Lanes for the station ranges listed in Table 1A: Design Speed for Mainlanes and Managed Lanes. No Design Speed reductions will be allowed for other station ranges without TxDOT approval.
6. These design speeds / criteria correspond to the vertical alignment design exceptions listed in 11.2.2

<b>Table 1A: Design Speed for Mainlanes and Managed Lanes</b>		
<b>STATION</b>	<b>STATION</b>	<b>DESIGN SPEED</b>
550+00	728+00	50 mph
728+00	780+00	70 mph
780+00	1253+00	50 mph
1253+00	1524+75	70 mph
1524+75	1625+00	50 mph
1625+00	1656+75	70 mph
1656+75	1683+75	50 mph
1683+75	1703+25	70 mph
1703+25	1980+00	50 mph
1980+00	2007+00	70 mph
2007+00	2120+00	50 mph

**Table 2: Crossing Street Function Classification**

Intersecting Street	Jurisdiction	Function Classification / Roadway Classification	Design Speed (MPH)	Position (over / under)	Design Vehicle	SBNB U-Turn	Sidewalk & Min. Usable Width <sup>3</sup>	Curb and Gutter	WB Offsets to face of curb	WB thru lanes	Turn lanes	EB thru lanes	EB Offsets to face of curb	Curb and Gutter	Sidewalk & Min. Usable Width <sup>3</sup>	Clear Zone for Cross Street Thru Lanes	NBSB U Turn	Bike / Ped. Accommodation?	Pedestrian Rail protection barrier?
<b>4<sup>th</sup> St.</b>	Carrollton	Collector Urban	40	Under	WB-62	N	N	Curb, no gutter	0	1 (15')	NA	1 (15')	NA	Curb, no gutter	N	3' From face of curb	N	N	N
<b>Main W.</b>	Carrollton	Collector Urban	40	Under	WB-62	N	N	Curb, no gutter	0	1 (12')	NA	1 (12')	NA	Curb, no gutter	N	2.5' From face of curb	N	N	N
<b>Belt Line Road</b>	Carrollton	Arterial Urban	40	Under	WB-62	Y	Y (6.5') (5' at Walls)	Y	0'-2'	4 (11')	median with turn bays	4 (11')	0'-2'	Y	Y (6.5') (5' at Walls)	3' From face of curb	Y	N	N
<b>N. Broadway St.</b>	Carrollton	Arterial Urban	40	Over	WB-62	N	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	Match Existing	N	N	N
<b>Dickerson Pkwy.</b>	Carrollton	Arterial Urban	35	Over	WB-62	N	Y (5.5') (WB Only)	Y (WB Only)	2'	3 (12')	Yes	3 (12')	2'	N	N	3' From face of curb	N	N	N
<b>Round Grove Rd. (FM3040)</b>	Lewisville	Arterial Urban	40	Over	WB-62	N	Y (6')	Y	2'	2 (12') 1 (14')	2 (12') with curbed median	2 (12') 1 (14')	2'	Y	Y (6')	3' From face of curb	N	N	N
<b>Corporate Dr.</b>	Lewisville	Arterial Urban	35	Under	WB-62	N	Y (Variable)	Y	2'	2 (12') 1 (14')	4 (12') with curbed median	2 (12') 1 (14')	2'	Y	Y (Variable)	3' From face of curb	N	N	N

**Table 2: Crossing Street Function Classification**

Intersecting Street	Jurisdiction	Function Classification / Roadway Classification	Design Speed (MPH)	Position (over / under)	Design Vehicle	SBNB U-Turn	Sidewalk & Min. Usable Width <sup>3</sup>	Curb and Gutter	WB Offsets to face of curb	WB thru lanes	Turn lanes	EB thru lanes	EB Offsets to face of curb	Curb and Gutter	Sidewalk & Min. Usable Width <sup>3</sup>	Clear Zone for Cross Street Thru Lanes	NBSB U Turn	Bike / Ped. Accommodation?	Pedestrian Rail protection barrier?
<b>Fox Ave.</b>	Lewisville	Collector Urban	35	Over	WB-62	N	Y (Variable)	Y	0'-1'	2 (11')	NA	2 (11')	0'-1'	N	Y (Variable)	3' From face of curb	N	N	N
<b>FM 1171 / Main St.</b>	Lewisville	Arterial Urban	40	Over	WB-62	N	Y (4')	Y	0'	2 (11') 1 (10')	2 (11') with curbed median	2 (11')	0'	Y	Y (4')	3' From face of curb	N	N	N
<b>FM 407 / Lake Park Rd. (Construction to be completed by others)</b>	Lewisville	Arterial Urban	35 / 30	Under	WB-62	Y	Y (Variable)	Y	0'	2 (12')	4 (12') with curbed median	2 (12')	0'	Y	Y (Variable)	3' From face of curb	Y	N	N
<b>Garden Ridge Blvd.</b>	Lewisville	Collector Urban	40	Under	WB-62	N	Y (Variable)	Y	0'	2 (12')	2 (12') with curbed median	2 (12')	0'	Y	Y (Variable)	3' From face of curb	N	N	N
<b>Highland Village</b>	Lewisville	Collector Urban	35 / 30	N/A	WB-62	N	Y (Variable)	Y	0'	2 (12')	N/A	N/A	0'	Y	Y (Variable)	3' From face of curb	N	N	N
<b>County Ln. / Denton Dr.</b>	Lake Dallas	Collector Urban	35 / 30	Under	WB-62	N	Y (Variable)	Y	0'	2 (12')	2 (12') with curbed median	2 (12')	0'	Y	Y (Variable)	3' From face of curb	N	N	N

**Table 2: Crossing Street Function Classification**

Intersecting Street	Jurisdiction	Function Classification / Roadway Classification	Design Speed (MPH)	Position (over / under)	Design Vehicle	SBNB U-Turn	Sidewalk & Min. Usable Width <sup>3</sup>	Curb and Gutter	WB Offsets to face of curb	WB thru lanes	Turn lanes	EB thru lanes	EB Offsets to face of curb	Curb and Gutter	Sidewalk & Min. Usable Width <sup>3</sup>	Clear Zone for Cross Street Thru Lanes	NBSB U Turn	Bike / Ped. Accommodation?	Pedestrian Rail protection barrier?
<b>Turbeville Rd. / Hurley Dr.</b>	Lake Dallas	Collector Urban	30	Over	WB-62	N	N	N	2'	1 (12')	NA	1 (12')	2'	N	N	N/A	N	N	N
<b>Corinth Pkwy.</b>	Corinth	Collector Urban	40	Under	WB-62	N	Y (6')	Y	2'	2 (12') 1 (14')	4 (11')	2 (12')	2'	Y	Y (6')	3' From face of curb	N	N	N
<b>Post Oak</b>	Corinth	Arterial Urban	40	Under	WB-62	N	Y (Variable)	Y	2'	2 (12')	4 (11')	1 (12') 1 (14')	2'	Y	Y (Variable)	3' From face of curb	N	N	N
<b>N. Texas Blvd.</b>	Denton	Collector Urban	30	Under	WB-62	N	Y (Variable)	Y	0'	2 (12')	4 (11')	1 (12') 1 (14')	2'	Y	Y (15')	3' From face of curb	Y	N	N

Notes:

1. Bridge columns shall be 6' (min.) from face of curb
2. Crossing streets not indicated to include sidewalks shall be laid out (including structural elements) to not preclude sidewalk construction in the future
3. Sidewalks shall be designed in accordance with applicable standards and Section 20.3.2

**Texas Department of Transportation  
Book 2 - Technical Provisions**

**IH 35E Managed Lanes Project**

**Attachment 12-1**

**Drainage Report for Major Stream Crossings  
Guidelines**

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

I. Cover Sheet

The cover sheet shall contain the following items:

- Highway and stream name
- Project CSJ
- County name
- TxDOT name and logo
- Consultant company name and firm number (if applicable)
- Responsible engineer's seal, signature and date

II. Table of Contents

The Table of Contents shall be:

- List of topics by page number
- List of tables
- List of figures
- List of Appendix items

III. Report Topics

A. Purpose

- Describe the site location
- Describe the type of roadway facility
- Provide an explanation in general terms of what improvements are proposed for the project, why a hydraulic study is being performed, and describe what is happening to the existing structure (rehabilitation or replacement).
- Describe the design frequency being used for the proposed structure. If the design frequency is different from what is recommended in the Hydraulic Manual (i.e., a city requests a higher frequency design and is providing additional funding for the structure), then it must be discussed in this section of the report.

B. Existing Conditions

The following discussion items must be included about the structure(s) to be replaced, if applicable:

- Existing structure type - bridge (concrete beam spans, steel truss, etc.), multiple box culvert, etc.
- Existing structure width, number of lanes, shoulder widths, etc.
- The current and projected future average daily traffic (ADT)
- Existing structure span lengths
- Skew of existing structure

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

- Existing type of rail
- Structural condition and sufficiency rating for the existing structure
- Low chord of existing structure (bridges)
- Headwater and tailwater elevations (culverts) for the design and 100-year discharge
- Discussion of existing hydraulic conditions (i.e., frequency of overtopping, field evidence of overtopping, debris blockage, etc.)
- FEMA – Whether in a Special Flood Hazard Area (SFHA) or not. If in an SFHA, the zone (A, AE, AO, AH, V, VE) and its implications
- Any discussions, information, or requests from the local Floodplain Administrator (FPA)

C. Discharges

For studied SFHAs:

- Describe the FIS data format and how the data was acquired
- Describe all assumptions, conversions, and corrections
- Describe any benchmark or datum used
- If the FEMA discharges need to be corrected, fully explain why
- If the FEMA discharges are not used, fully explain why not

For non-studied drainage basins, provide the following:

- Drainage area size (square miles or acres)
- Describe the type of watershed in the report (uncontrolled or controlled by reservoirs/dams, etc.). If a dam is located upstream, provide documentation concerning data provided by the owner.
- Description of land use (agricultural, pasture, single family subdivisions, commercial, etc.) and type of terrain
- Soil types within the watershed
- Stream gauge information, if applicable (very rare for most projects)
- Discharges from previous studies, if available
- Runoff method used for design and comparison (regression equations, NRCS, etc.). The regression equations are good to use as a check for other methods.
- Computer model used for runoff calculations (spreadsheet, HEC-HMS, Win TR-55, etc.)
- Parameters used for the model (time of concentration, runoff curve numbers, etc.)
- Tabulation of the results of the calculations for each method (minimum of two methods for comparison)
- State the basis for the method selected for design frequency or AEP

Water Surface Profiles and Velocity Data

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

- Describe the computer software, including the version number, used for the analysis (HEC-RAS, HY-8, etc.). HEC-RAS should be must for crossings that involve FEMA detailed studies and for culverts with high flow over the road. FEMA considers HY-8 and other culvert programs to be approximate methods.
- Document the basis of the starting water surface profile or boundary conditions (i.e., the slope/area method was used assuming normal depth, etc.).
- Provide the vertical datum that is used for project elevations.
- Document any weir flow over the roadway (if applicable), for existing and proposed conditions.
- Document assumptions concerning Manning's n value for the channel and overbanks.
- The cross sections must be located far enough upstream and downstream from the site to show that water surface profiles for proposed conditions will match (or come close to matching) the existing profile.
- For SFHA's, document the use of the official FEMA model. Discuss any necessity for a corrected model. Provide a table of corrected water surface elevations (WSELs) compared to the current effective WSELs, as well as published FIS WSELs (if different from current effective),
- If the FEMA discharges were corrected, include a table comparing the WSELs using both the FIS and the corrected discharges.

**D. Proposed Conditions**

The discussion about the proposed structure must include the following items:

- Proposed structure type (TX prestressed concrete girders, box beams, slab-spans, multiple box culvert, etc.)
- Proposed structure width, number of lanes, offset to rail, etc.
- Proposed structure span length configuration
- Proposed skew of abutments and bents, or skew of culvert
- Proposed rail type
- Proposed low chord (bridges)
- Type of proposed wingwall (culverts)
- Freeboard based on the design storm (bridges) and why it should be necessary
- Basis for the allowable headwater and through-bridge velocity
- Proposed velocity/scour control measures (i.e., concrete riprap, etc.)
- Proposed upstream or downstream channel grading, if applicable

**Water Surface Profiles and Velocity Data**

- Include a table comparing existing and proposed (or corrected existing and proposed) WSELs and channel velocities for the channel cross sections used in the analysis.
- For studied zones with a floodway, include a table comparing existing and proposed floodway WSELs. Also include floodway widths.

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

- Provide a discussion of the tabulated results and describe if there are any adverse impacts to properties upstream or downstream of the site due to proposed construction.

E. Corridor Development Certificate (CDC) (if applicable)

The CDC permit applies to bridge construction on the West Fork, Elm Fork, or Main Stem of the Trinity River, as well as tributaries that experience backwater effects from these rivers. Refer to the current CDC manual and certificate form for details and requirements. This information is available on NCTCOG's web page at the following location:

<http://www.nctcog.org/envir/SEEsafe/fpm/cdc/index.asp>

- Tabulate current effective CDC model results (existing conditions) for 100-year flow and Standard Project Flood (SPF). If the current effective CDC model does not accurately depict actual existing conditions at your site (based on survey), then you will need to create a corrected effective CDC model with updated cross sections.
- Tabulate the CDC model results with proposed bridge and cross sections for 100-year flow and SPF.
- Tabulate the results of the valley storage analysis and determine if valley storage mitigation is required based on CDC requirements.
- Provide a discussion of the CDC analysis (i.e., was CDC criteria met?).

F. Scour Analysis and Stream Stability (if applicable)

This must be done in accordance with Bridge Division, Geotechnical Section guidance.

G. Coordination with Local Floodplain Administrator

- Document phone conversations, emails, or written correspondence with the local floodplain administrator concerning the proposed bridge or culvert. Include the date that the report and hydraulic data sheets were submitted to the local FPA in the report and on a note on the hydraulic data sheets.

J. Conclusion

- Include a discussion about how the proposed structure will meet the design requirements and why the chosen structure is the best alternative.

IV. Figures

The following items should be included in the list of Figures:

- Project location map (to scale with a north arrow)

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

- Drainage area map (to scale with a north arrow)
- Soils map(s) for the drainage basin
- A copy of the current FEMA FIRM for the site (if applicable)
- Proposed structure layout(s) and core boring sheets
- Proposed typical sections
- Roadway plan & profile sheets at the stream crossing
- A copy of the hydraulic data sheets to be submitted with the PS&E. One of these sheets should be a plan view drawing (to scale) showing location of channel cross sections used in the analysis. Preferably, this drawing should show topography and ground contours in the background.

V. Appendix

- Site photographs (in color)
- Runoff calculations (spread sheets, TR-55 output, HEC-HMS output, etc.)
- A copy of the current FIS for the stream reach (if applicable).
- Hydraulic calculation input and output (HECRAS, HEC-2, etc.) for existing and proposed conditions (include FEMA data, if applicable). Include the list of error messages generated by the software.
- Channel cross section plots
- Water surface profile plots
- HEC-RAS scour output and scour envelope plots (or spreadsheet calculations)
- CDC hydraulic calculations, valley storage calculations and completed CDC permit form (if applicable)
- Any other miscellaneous supporting data

VI. Submittals

- The number of hard copies will depend on District preference. Electronic copies shall contain the hydraulic report document (in Word or PDF format) as well as all appendices and hydrologic and hydraulic computer models for the project.

Notes:

1. Any drawing included as a figure or in the Appendix should be easy to read and preferably drawn to scale, with a north arrow when applicable. If USGS maps are used in the background of drainage area maps, the contours should be legible.
2. The latest version of software (HEC-HMS, TR-55, HEC-RAS, etc.) that is available at the time of preparing the report should be used. Beta versions of software shall not be used for TxDOT projects.
3. Many of the FEMA FIS computer models extend for miles upstream and downstream from the site. In that case, the Designer only needs to use the relevant portion of the model required for the design, based on engineering

**ATTACHMENT 12-1**  
**Drainage Report for Major Stream Crossings Guidelines**

judgment, which will reduce the size of the files the designer is working with, along with the paper output.

4. If hard copy reports are prepared, they should be bound using a three-ring or spiral binder, with labeled tabs used for Appendix dividers.
5. In general, the guidelines listed above are intended to apply to new location bridge class structures, replacement of existing bridge class structures, or modifications to existing structures that could potentially impact the design and 1% AEP (100-year) water surface profiles at stream crossings. Engineering judgment should be applied in each case.

**Texas Department of Transportation  
Book 2 - Technical Provisions**

**IH 35E Managed Lanes Project**

**Attachment 21-1**

**Toll Systems Responsibility Matrix**

## ATTACHMENT 21- 1

Texas Department of Transportation

Toll Systems Responsibility Matrix

LEGEND		Work Description		
Primary Responsibility	A	1	2	3
Support Responsibility	B	Design	Procure	Install and/or Construct
Coordination Responsibility Only	C			
No Responsibility	D			

Element/Task/Component/ Sub-system	D/B CDA Developer (D/B)			System Integrator (SI)			Comments Other Responsibility/Information
	1	2	3	1	2	3	
<b>FACILITIES</b>							
Toll Plaza Layout	A	A	A	B	D	D	SI to provide system design. D/B to incorporate into Project Design. Preliminary plaza locations provided in existing schematics.
Metered power service to roadside equipment cabinet	A	A	A	B	D	C	SI to provide power requirements and special requirement for construction of utilities near toll collection point.
Complete backup power systems: generators, automatic transfer switches, and fuel tanks	C	D	B	A	A	A	
Foundation and conduits for backup power systems	A	A	A	B	D	C	D/B to provide foundations and conduits between foundations. SI will ensure foundations and conduits are adequate.
Uniform Uninterruptible Power Supplies	C	C	C	A	A	A	
Lightning Protection & Grounding	A	A	A	B	C	C	
Duct Bank	A	A	A	B	D	C	D/B to install conduit Duct Bank complete with pull strings
Fiber Optic cables in Duct Bank for Toll Systems	A	A	A	B	D	C	
Data/Communication service to roadside equipment cabinet	A	A	A	B	D	C	SI to provide power and communication/data requirements. D/B to install up to the roadside equipment cabinet.
Data/Communication wire/fiber from roadside equipment cabinet to toll systems equipment	C	C	C	A	A	A	SI to install from roadside equipment cabinet to toll systems equipment.

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Texas Department of Transportation

Toll Systems Responsibility Matrix

LEGEND		Work Description		
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Coordination Responsibility Only	C			
No Responsibility	D			

Element/Task/Component/ Sub-system	D/B CDA Developer (D/B)			System Integrator (SI)			Comments Other Responsibility/Information
	1	2	3	1	2	3	
Pavement, inclusive of special nonferrous zones and conduit stub outs for in pavement sensors	A	A	A	B	D	C	SI to provide any special requirements for pavement design
Pavement sensors	C	C	C	A	A	A	SI to saw cut and install pavement sensors
Gantries including special framing for equipment mounts	A	A	A	B	D	C	SI to provide requirements for specific equipment mounts, conduits, J boxes, power and data wiring. D/B to incorporate into structural design
Toll Equipment mounts on Gantries	B	D	C	A	A	A	SI to install any required equipment mounts on gantries. SI to coordinate with D/B during the design phase to incorporate any required framing to support equipment mounts.
Roadside equipment cabinet slabs	A	A	A	B	D	C	SI to provide requirements for size of slab needed.
Roadside equipment cabinets (including HVAC systems)	B	D	C	A	A	A	SI to install complete
Lane Controller Hardware	D	D	C	A	A	A	D/B will coordinate access to roadway for installations.
Communication Equipment	D	D	C	A	A	A	D/B will coordinate access to roadway for installations.
<b>ELECTRONIC TOLL COLLECTION SUB-SYSTEMS (ETC)</b>							
Installation/Electrical Design and Plans	C	D	C	A	A	A	
Automatic Vehicle Classification System and Image Capturing System (ICS) Hardware	C	C	C	A	A	A	
Roadside Equipment Cabinets	D	D	C	A	A	A	D/B will coordinate access to roadway for installations.

## ATTACHMENT 21- 1

Texas Department of Transportation

Toll Systems Responsibility Matrix

LEGEND		Work Description		
Primary Responsibility	A	1	2	3
Support Responsibility	B	Design	Procure	Install and/or Construct
Coordination Responsibility Only	C			
No Responsibility	D			

Element/Task/Component/ Sub-system	D/B CDA Developer (D/B)			System Integrator (SI)			Comments Other Responsibility/Information
	1	2	3	1	2	3	
Computer rack system, routers, hubs, switches, firewalls, VPN, modems, patch/distribution panels,	D	D	C	A	A	A	D/B will coordinate access to roadway for installations.
Toll Plaza Host Computer	D	D	C	A	A	A	
Back-up Host Computer	D	D	D	A	A	A	
Support equipment at TxDOT or NTTA Customer Service Center	D	D	D	A	A	A	
Workstations/Printers	D	D	D	A	A	A	
Commissioning and Operational Testing	D	D	C	A	A	A	
Lane controller software	D	D	D	A	A	A	
Plaza Computer Software	D	D	D	A	A	A	
Host Computer Software	D	D	D	A	A	A	
Toll Collection System Application Software	D	D	D	A	A	A	
Security Access System Software	D	D	D	A	A	A	
Maintenance Online Management System Software	D	D	D	A	A	A	
Factory Acceptance Test	D	D	C	A	A	A	D/B will coordinate access to roadway for testing.
Project Acceptance Test	D	D	C	A	A	A	D/B will coordinate access to roadway for testing.
Training	D	D	D	A	A	A	
Documentation	D	D	D	A	A	A	
FCC Licenses/Regulations as applies to toll systems	D	D	D	A	A	A	
Tolling location phone service	A	A	A	B	C	C	