# Interim Transition with SH 114

The Project includes the development of an interim facility for the transition with SH 114, east of the SH 114/SH 121/Internatuional Parkway Interchange, as well as certain design and right of way acquisition services for the Schematic facility to be constructed in the future.

## TxDOT Preliminary Plan Package

The Schematic Design and interim SH 114 configuration (<u>Attachment 1-1</u>) have been developed to a limited level and are generally conceptual in nature. Regardless of whether an entirely new plan, or an adaptation of the above referenced preliminary design information, is proposed, Developer is responsible for ensuring that interim SH 114 configuration and Schematic Design satisfies the requirements of the CDA Documents. If the above referenced preliminary design information is utilized, Developer shall diligently review, and verify the accuracy and applicability of, the information prior to use. Deviations from, and/or changes to, the preliminary design information that are necessary in order to satisfy the requirements of the CDA Documents are the responsibility of Developer and any related costs shall be included in the Price.

#### Accommodation of Schematic Design for SH 114 Interim Transition

Developer shall provide for a smooth transition from the Project's interim SH 114 configuration to the Project's Schematic Design condition. Developer shall endeavor to minimize "throw-away" costs to TxDOT associated with improving the interim SH 114 configuration to meet the requirements of the future Schematic Design configuration. The Development Work shall provide for minimal disruption to traffic during the Schematic Design construction phase. Additionally, Developer shall minimize the cost associated with the future Schematic Design construction to the extent that Developer costs to construct the interim SH 114 configuration does not unreasonably increased. The Development Work, as a minimum, shall accommodate the Schematic Design configuration as described below:

#### Roadway

The interim SH 114 transition shall be designed and constructed coincident with the Schematic Design horizontal and vertical alignments to the maximum extent practicable. Developer shall provide for a smooth transition from the Project's interim SH 114 configuration to the Project's Schematic Design condition.

Developer shall also have the flexibility to propose revisions to the horizontal alignment and vertical profile of the interim SH 114 configuration and/or Schematic Design that do not modify the design criteria contained herein; however, any horizontal or vertical modifications that cause a change in the Schematic ROW will require prior consent from TxDOT. Developer shall revise the Schematic Design configuration as necessary to reflect any changes to horizontal and vertical alignments. Furthermore, any changes to the Schematic ROW, due to horizontal and/or vertical modifications of the alignment, may affect environmental approval, permitting or right of way parcels maps.

Deviations from these criteria may require revisions to, or re-issuance of, the Environmental Approvals and/or Governmental Approvals, which shall be performed solely at the responsibility and cost of Developer. Developer shall not be entitled to any time extension or additional compensation in connection with such revisions or re-issuances.

#### Drainage

The drainage systems shall be designed and constructed to accommodate the Schematic Design with minimal throwaway work. Where coincident with the Schematic Design geometry, ditch sections and closed drainage systems (i.e. pipes and inlets) shall be designed and constructed to accommodate the Interim SH 114 configuration or Schematic

Design, whichever controls. The physical location of inlet structures shall accommodate the Schematic Design. Cross drainage structures (i.e. culverts) shall be designed, sized and constructed to satisfy Schematic Design requirements. Developer shall construct culverts to the length required to accommodate the Schematic Design.

At a minimum, the drainage system must meet the following requirements:

A) The analysis, design and construction of all drainage structures and appurtenances shall address the interim SH 114 configuration and Schematic Design improvements.

B) Provide drainage for the interim SH 114 configuration design and Schematic Design to protect the roadway, subsurface and highway structures from water damage.

C) Design and construction of drainage system shall accommodate the interim SH 114 configuration and Schematic Design configuration. Consideration shall be given to, but not limited to, pipe, inlet locations, capacity, culvert inlet and outlet structures locations, and junction/manhole structure locations.

D) Only bridges and bridge-class culverts are shown on the Schematic Design. It is Developer's responsibility to determine the location and appropriate size for all other culverts needed to address the Schematic Design configuration for the Project.

E) The water quality measures shall be designed for the interim SH 114 configuration and Schematic Design conditions.

F) Developer shall perform hydrologic analyses for the design of drainage features for the interim SH 114 configuration and Schematic Design.

# Paving

In locations where the interim SH 114 configuration is coincident with the Schematic Design, pavement shall be designed and constructed to Schematic Design requirements. Paving limits shall satisfy the requirements of the interim SH 114 configuration. In determining limits of paving in the interim SH 114 configuration, Developer shall give ample consideration to the Schematic Design geometry and strive to minimize future impact on traffic operations.

#### Bridges & Walls

Developer shall design and construct bridge structures required for the interim SH 114 configuration to the total length and span arrangement required for the Schematic Design, including spanning future lanes that will be constructed below the structure as a part of the Schematic Design. With the exception of direct-connect flyover structures, Developer shall design and construct bridge structures to the width required to satisfy the requirements of the interim SH 114 configuration. Direct-connect flyover structures shall be designed and built to the width required to satisfy the Schematic Design, striping shall accommodate the interim SH 114 configuration requirements. In locations where the interim SH 114 configuration does not call for the construction of the direct-connect structures, Developer shall make provisions to accommodate the future construction. Reasonable care shall be taken in the Developer design to ensure that bridges constructed for the interim SH 114 configuration can be widened to the Schematic Design width at a later date with minimal impact to aesthetics and minimal impact to traffic. Developer shall, if necessary, construct portions of the Schematic Design (e.g., footings, ducts, bents, etc.) to ensure future impacts are minimized. At bridges with wrap-around MSE wall supported abutments, the MSE wall shall be designed and constructed to the length required to satisfy the interim SH 114 configuration or Schematic Design, whichever governs. The Developer shall design and construct abutments behind MSE walls to the Schematic Design width, or provide specific accommodations for future widening. All retaining walls within the limits of interim SH 114 configuration construction shall be designed and constructed to meet the requirements of the Schematic Design.

Bridges carrying local roads over the Schematic Design shall, at a minimum, be of a type of construction to accommodate the Schematic Design and any planned expansion or update of each facility by its respective owner while still maintaining the required horizontal and vertical clearances. Each submittal shall also include horizontal and vertical clearance provisions for interim SH 114 configuration and Schematic Design build-out improvements. Fencing shall be required along some bridges, pedestrian overpasses and Schematic ROW of the Schematic Design.

#### Sign Structures

Where feasible, sign structures shall be located to accommodate the Schematic Design. Sign bridges located within the interim SH 114 configuration construction limits shall span the greater of the Schematic Design or interim SH 114 configuration.

Developer shall take into account the Schematic Design configuration, including potential widening of the Project, in its design of overhead and cantilever sign supports.

## Lighting

Lighting shall be designed and constructed to accommodate the Schematic Design or interim SH 114 configuration, whichever governs. The location of high-mast lighting within the interim SH 114 construction limits shall satisfy the Schematic Design.

#### Landscaping

Where the interim SH 114 configuration is coincident with the Schematic Design, landscaping shall be designed and constructed to meet Schematic Design requirements. In locations where the interim SH 114 configuration does not coincide with the Schematic Design, Developer shall provide additional landscaping to achieve the desired aesthetic affect.

#### Utilities

Developer shall provide sleeves, for future utility services, under roadway paving consistent with the Schematic Design. Developer shall ensure that the design and construction of all Utility Adjustments are compatible with the Schematic Design and that all such Utilities are compatible with and interface properly with the Project. Developer shall be responsible for verifying that all design plans for Utility Adjustment Work, whether furnished by Developer or by the Utility Owner, are consistent and compatible with the Schematic Design.

With written approval by TxDOT, Utilities may remain in their existing location if (a) the requirements of the UAP are met, (b) the existing location will not adversely affect the Development Work, the future operation of the Project or the Schematic Design, and (c) the Utility Owner's standards of practice are met.

Continuous steel casings shall be provided for all water and pressurized sanitary sewer line crossings under center medians and from center of ditch to center of ditch for cut sections, five (5) feet beyond the toe of slope for fill sections, or five (5) feet beyond the face of curb, based on the Schematic Design.

Developer shall be responsible for Protecting in Place (or causing to be Protected in Place by the Utility Owner at Developer's expense) all Utilities impacted by the Project or projected to be impacted by the Schematic Design (including any Utilities remaining in place and any Utilities newly reinstalled as part of the Utility Adjustment Work or the Early Adjustment Work), as necessary to ensure their continued safe operation and structural integrity and in accordance with the requirements described in the Technical Provisions.

Developer is fully responsible for coordinating its efforts with Utility Owners and for addressing requests by Utility Owners that Developer design and/or construct Utility Enhancements. Under no circumstances shall Developer proceed with any Utility Enhancement which is incompatible with the Project or the Schematic Design or which cannot be performed within the other constraints of applicable Law, the Governmental Approvals and the CDA Documents, including the Completion Deadlines.

Developer shall be required to provide supporting design information and cost information, satisfactory to TxDOT, to ensure that the above requirements have been met. Developer, to the satisfaction of TxDOT, shall provide documentation supporting the feasibility of the Schematic Design with respect to the Developer proposed interim SH 114 configuration. TxDOT shall have no obligation to accept the Schematic Design for any element of the Development Work until TxDOT has determined that Developer has achieved the above requirements.