CITY OF CORPUS CHRISTI

Engineering Services Department

INFRASTRUCTURE DESIGN MANUAL

Corpus Christi Engineering

COMMENTS AND RESPONSE

City Of Corpus Christi Infrastructure Design Manual Comments and Review

Reviewer:	Comments:	Response:
Brett Flint 2406 Leopard St. Corpus Christi State / Province: Texas Postal / Zip Code: 78469 Email BrettF@CCTexas.com (361) 826-3268	• **Overall Document Comments (Non-Specific):** Are there any updates required to the UDC to be consistent with the design document? Will the full manual include an abbreviation/acronym list? If not spell out on the first usage.	Updates may be required with the complete IDM if there is a conflict. The conflicts will be identified as the IDM is being put together. Yes the full manual will include abbreviation/acronym list
	• **Page 5 Comments:** Suggest including standards for local streets or adding a paragraph to address local street design and requirements.	Added to the IDM.
	• **Page 6 Comments:** Suggest some guidelines as to when the minimum design width is considered acceptable. Criteria for use of less than preferred width should be established, or minimum will become the standard. **6.01.2.b** Texas Accessibility Standards (TAS)	Acknowledged, will be discussed with Public Works
	• **Page 8 Comments: 6.01.07.a.iv** - easement dedications for sight distance- is an update to the UDC necessary to ensure dedications are recorded on new plats?	Yes
	• **Page 10 Comments**: Define "ESAL"	Defined in the IDM
	• **Page 11 Comments:** **a)** Paragraph d at the top, could be read to mean total number of lanes (both directions combined) or as number of lanes in each direction (4 + 4). **b)** Should paragraph iii be 8 lanes, or 8 or less? Nomenclature is not clear. Is the intent to address two and four lanes in the first paragraph, 6 in second, and 8 in the third? What if there are more than 8? **c)** Items that refer to "It must be documented with an explanation."	Revised

	Should these items be subject to acceptance/ approval by the City?	
	• **Page 12 Comments.** **a)** Drainage coefficient- "a lower coefficient is warranted" or "a lower coefficient shall be used"? Guidance on how much lower? **b)** Subgrade soil **c)** Should a minimum standard for number and depth of bore holes be established? **d)** Who determines if existing soil information is applicable and valid? Engineer of Record? City?	Acknowledged. Will be reviewed further. Both Engineer of record and the City
	• **Page 17 Comments:** First Sentence, second paragraph is not clear. Suggest "for sandy soils, such as the low PI Type B fine sandy soils found primarily in North Beach, Flour Bluff, and on Padre and Mustang Islands, Cement Stabilization of the roadway base is a requirement to avoid issues with localized collapses and deformations for both flexible and rigid pavements. Cement stabilization for a stable subgrade..."	Acknowledged. Will be reviewed further.
David Walker 6622 Sahara Dr. Corpus Christ State / Province: Texas Postal / Zip Code: 78412 Email david@davidlwalker.us (361) 443-3905	• **Overall Document Comments (Non-Specific):** These may be beyond the scope of your document, but they need to be addressed. Please consider my two concerns: **a)** Robust initial design is a great beginning. My concern is with the all-to-frequent patching required for utility connections, utility repairs, buried traffic controls, sub-soil movement due to gravity line failures, etc. We need a better method of maintaining the quality of the initial design. Both city crews and utility contractors fail to back-fill properly resulting in premature deterioration of our streets.	Acknowledged. This issue will be discussed with the Public Works.

	Suggest better training and inspection of work performed by city crews. For penetration by private-sector companies, suggest that for every penetration of new or existing city streets, a permit must be attained with precise location for penetration. A bond should be required guaranteeing the continued "flatness" of the penetration should be for a minimum of two years. In the event of a problem within the bonded area, the company should be given a limited opportunity to restore the area, or file on the bonding company. **b)** Many of the recently replaced major streets are concrete, which makes sense. However, the "flatness" is very poor. Every joint is a "hump" that tends to bounce vehicles. In my opinion, the city accepted inferior work.	Acknowledged. This issue will be discussed with the Public Works.
annikag Chapter 6; Street Design Requirements Review:	• **Table 6.2: Geometric Design Criteria: *Design Element Width; Standard Bike Lane; (Preferred and Minimum):*** **a)** I don't think the city is recommending Standard Bike lanes anymore, so should this be deleted? Standard bike lanes are not listed in the Bicycle Mobility Plan. However, "bicycle lanes" is still listed in Mobility CC on page 142. • **Table 6.2: Geometric Design Criteria (Pg. 44): *Design Element Width; Multi-Use Side Path (Preferred):*** **a)** Preferred width should be 12-14. Minimum width is 10. A width of 8 feet may be acceptable to provide short linkage between other, more	The information is provided if needed. 8 feet is not recommended for travel lanes

	robust facilities or where ROWs are severely constrained. **b)** ***Design Element Width; Multi-Use Side Path (Minimum):*** Minimum width is 10. A width of 8 feet may be acceptable to provide short linkage between other, more robust facilities or where ROWs are severely constrained. • **Table 6.2: Geometric Design Criteria (Pg. 44): *Design Element Width; Shared Use Path/Hike n Bike Trail; (Preferred):*** **a)** Preferred width should be 12-14. • **Table 6.2: Geometric Design Criteria (Pg. 44): *Landscape/Parking Buffer:*** **a)** In Consideration of the potential that residents will plant trees in this area, six foot minimum is recommended to improve the health of tress and reduce future hazard associated with unhealthy tress.	8 feet is not recommended for travel lanes Revised Acknowledged. This issue will be discussed with the Public Works.
	• **6.01.6 b.** **a)** Considering the number of speed humps installed citywide and from anecdotal evidence, I believe many residents may prefer a lower design speed particularly on local streets. Maybe 20 or 25 mph. Bicycle Boulevards, for example are recommended for streets with a 20-25 mph.	Minimum design speed is 25MPH
	• **Section 6.02.7 k i.** **a)** Misspelled (Urban) paragraph1. **b)** UTP “contained within”	Revised
	• **Section 6.02.7 b ix.** **a)** This appears to change the requirement for geogrids for City of Corpus Christi projects. Currently, the geogrid is required to be either Tensar TX5 or BaseLok BX3030.	

Keith Brooks 5800 Surrey Square Rd. Houston State / Province: Texas Postal / Zip Code: 77017 Email kbrooks@ind-fab.com (832) 998-0804		This section references TxDOT DMS6240 Type 2 geogrid, but also states that the geogrid shall be per City Standard Specifications Section 022040 Street Excavation. Is the City intending to change 022040? DMS 6240 and City Standard Specification 022040 contradict each other. Neither Tensar TX5 or BaseLok BX3030 are listed as approved products in the Material Producers List for Geogrids for TxDOT. Both Tensar TX5 and BaseLok BX3030 significantly outperform products listed under DMS 6240. If the requirement changes to DMS 6240 Type 2, this change in requirement will greatly reduce the benefits from geogrid because a much weaker product will inevitable be used. Regardless of how the city proceeds, referencing 2 public documents (DMS 6240 and City Standard Spec 022040) that have no overlap in products seems confusing because there are exactly ZERO products that meet both requirements. As a manufacturer of an approved product under 022040, I would simply submit BaseLok BX3030 to TxDOT and would argue that I have the only product approved by both the City Standard and TxDOT. My suggestion is to maintain the high-performance requirement that currently exists in the City of Corpus Standard Specification but open it up a bit to allow other high performing geogrids to participate. Industrial Fabrics has helped municipalities write quality specifications that maintain the integrity of their designs while allowing for adequate competition. Feel free to contact me for…	Acknowledged. The change has been recommended by Public Works. The City Standard Specifications are revised to reflect the change.

	• **<u>Section 6.02.7 k iii.</u>** **a)** Same comments as I have on page 13. The last sentence reference conflicting documents and clarity is needed regardless which one will govern and the other should be removed.	Acknowledged and revised.
Michael York 6468 Holly Rd. Corpus Christi State / Province: Texas Postal / Zip Code: 78412 Email michael@yorkeng.com (361) 245-9400	• **<u>Overall Document Comments:</u>** Do not see anything addressing on-street parking for pavement sections. Previous UTP classifications designated whether on-street parking was allowed on one or both sides of the street. This has been a hot item over the last few years with the requirements from the IFC growing larger and more restrictive. Additional guidance in this area may help avoid issues with developers (comment aimed at subdivision development)	Acknowledged. This issue will be discussed with the Public Works.
	• **<u>Table 6.1.</u>** **a)** Pavement widths seems to have been reduced form current standards (C1 shows 28' wide where it is currently 40' wide). Is this correct? **b)** Missing minor residential street classification.	Revised.
	• **<u>Section 6.01.2 a.</u>** **a)** Says sidewalks shall be minimum 5'. Does this include along minor residential streets where it is currently only 4''?	Revised and clarified.
	• **<u>Section 6.02.6.</u>** **a)** Requires a geotechnical report, but the **6.02.7** provides specific criteria, and **6.8.j.i** allows for use of standard pavement section on residential roads. Does this mean a Geotech report is not required on residential roads (question asked for subdivision projects)?	Pavement section can be designed based on the geo-technical recommendation or the standard pavement section can be used
	• **<u>Section 6.02.7 b iv.</u>** **a)** States lime shall not be less than 8%. Most geotechnical recommendations received over the last several years have recommended lime at 5% or 6%. If Geotech report is required,	Lime % shall be based on the geo-technical recommendation or the standard has to be followed

	will city standards dictate even when Geotech recommends less lime (question for residential subdivision streets).	