RESPONSE TO DEVELOPMENT COMMUNITY COMMENTS OF THE

Draft Transportation Design Criteria Manual 2/14/2018

| Item | Page | Section | Comments | Responses |
|------|------|----------|---|---|
| 1 | 3 | Overview | Glad to see Complete Street and context sensisative design approach in manual | Everyone agrees. Gives more flexibility |
| 2 | 3 | Overview | Content - CIP/Maintenance/scheduling. Second to last paragraph "full responsibility and liability" When does liability for design engineer take over? | Yes there are requirements but the Engineer of record has to take those requirements and use his engineering judgement during the course of design. |
| 3 | 4 | 1.1 | Concerns about impacts on infill projects. Streets are being classified based on land use and not traffic volumes. Traffic Engineer discretion/Surprises | The TCM is going toward a more TIA driven basis so that road systems are classified more frequently by current and projected future traffic conditions. This should help with infill projects. |
| 4 | 5 | 1.3 | Streets in Denton are over classified. Not sufficient streets w/parking | The TCM has reduced the amount of street classification and has incorporated the Complete Street and Context Sensitive methods of design. This should help in both cases. |
| 5 | 6 | 1.31 | Map of City Wide "determined" pedestrian/bike and Senior Mobility paths is needed (Motorized carts) | There is an effort to develop a thoroughfare plan and a separate bike/path plan so that the Complete Street/Context Sensitive approach can be effectively implemented. |
| 6 | 7 | 1.3.1 | Concerned about infill projects and arbitrarily designating bike lane requirements. | There is an effort to develop a thoroughfare plan and a separate bike/path plan so that the Complete Street/Context Sensitive approach can be effectively implemented. The context sensitive approach should help infill projects develop a well thought out plan with the engineer of record and the city staff. |
| 7 | 7 | 1.3.1 | Figure 1.3.1 Two Lane Collector. Why not have it 37' back of curb to back of curb. 20' lanes, 16' parking, 1' C&G | Collectors require more travel lane width for traffic flow. |
| 8 | 9 | 1.3.3 | 600' length for Cul-De-Sac seems short. | The 600' length is used so that beyond this length travel circulation is produced. This aids in emergency services and the overall travel flow pattern within a development. |
| 9 | 11 | 1.3.4 | Where does Ride Quality Apply? Ride Quality needs to be a topic in the Pre-development meeting because development contractors will not know to do this and it will be a surprise to them. Comma sparation on 1,000 | The City of Denton requires ride quality testing on all streets that it constructs and wants the same standard for developments. A note will be put here that it needs to be discussed in the Pre-development meeting and which type testing will be required. Comma will be added. |
| 10 | 12 | 1.4.1 | Should return radius be tied to # of lanes as well? Consider return radius when a right turn is involved and when a double right turn lane. Is vision clearance area the same as Right-of-Way Clip. | We will add a foot note to say "Curb Return Radius is for single lane design. Multi-lane and special consideration for truck turning radius requires turn radius analysis as required by the City Traffic Engineer. The right-of-way corner clip is a vision clearance minimum, but does not taken into other considerations for traffic movement shown on Figure 1.4.2.1 |

| 11 | 14 | 1.4.3 | Difficult to apply in redevelopment and infill areas. This along with most other infill items justify a special meeting (at pre-design) to establish design parameters for a particular street, i.e. Janie Street. | This is why the TCM is going to a more traffic related design using a TIA process, and considering the context. |
|----|----|-------|--|---|
| 12 | 17 | 1.4.7 | Raided or Raised? Bicycle Crossing | Word should be raised. Bicycles are considered a part of the traffic flow elements. Figures are just showing the general configurations. |
| 13 | 19 | 1.4.7 | As indicated previously, a special transportation design parameter meeting is needed. It could occur immediately after the pre-design meeting (in another room). Try not to stretch out the development schedule, ie. Justice Plaza. | Agree. This will be added to the TCM |
| 14 | 20 | 1.5 | Not fond of Except on long stretch of road much >1200 If. Are stop signs traffic calming? | Traffic calming is used to control traffic flow (speeds) for thru traffic conditions. Stops signs are not traffic calming devices. |
| 15 | 23 | 1.6 | Commercial/Downtown needs parking; University area need parking; consider local downtown/ University section. 8' shown on sections | There is a Downtown development plan that addresses street section items. Other items noted. Note will be added about 8' parking depth. |
| 16 | 25 | 1.8 | Why 25' min width. It appears to be focused on getting the developer to pay for city improvements and not on a proper street. CIP should be considered. Avoid a patchwork section, design life, and remaining life. Impact Fee credits are a cost to developer(lost opportunity). Complete street and context principles should be applied in conjunction with CIP/Maintenance/Remaining Life/Infills/etc. Sometimes an overlay with widening may be more life efficient. | This section was previously approved by council and inserted into the TCM. Using the complete street and context sensitive approach as well as a TIA focused design will help the process of evaluating the pavement needs. |
| 17 | 28 | 1.9 | Provide COD Traffic Model to developer and establish a reasonable level of effort to provide data that can be used to update model. TIA meeting folded in with Predevelopment meeting/transportation meeting. No stretching out developer schedule. CIP required, any access to TxDOT roadway- limit. Who provides the current zoning ETU's. Where can they be found? Observed conditions seem arbitrary. However TIA will establish LOS. | City will provide model data to Engineer so that he can use his own model. The City's model needs to be updated. TCM will state that a separate TIA meeting be held in conjunction with the pre-development meeting. The TCM states that the City Traffic Engineer can determine if a TIA is warranted. This applies to access to TxDOT roadway also based upon adequate information from the developer. The City current model may not incorporate sufficient data that emulates the current observed conditions. Observed conditions are not arbitrary. It is additional information in areas where models have not been fine tuned. Correct, the localized TIA will determine the LOS. The observed conditions is just one means for determining the need for a TIA. |
| 18 | 29 | 1.9.3 | Are specific requirements absolute or can they be modified for site specific situations. | TIA requirements are not absolutes and can be customized for the specific situation as required by the City Transportation Engineer. The TIA initial meeting should be the time that this is worked out. The developer will have to provide sufficient information to make decision on requirements. If there is not sufficient information provided then the requirements provided would apply. |

| 19 | 30 | 1.9.3 | On track synchronize with Pre- | It is the intent of the TCM to coordinate TIA |
|----|----|-------|---|---|
| 25 | | 2.5.0 | development/Zoning/Preliminary Plat/Final Plat etc. | requirements at the Pre-development stage. During rezoning it is not completely understood what is going to be proposed for the development. |
| 20 | 31 | 2 | Should this be an introduction or does it apply to this section? | This is a section on drive approaches. Each section points the user to the DDC at the beginning so that if he is only looking in this specific section he does not miss that important point. |
| 21 | 32 | 2.2.1 | Many situations where 24; is sufficient, ie Doctor Office, Professional Office, Etc. please include a 24' min. for site not requiring tractor trailer access. Coordinate with fire lane radius. Typically City street exceeds 20' min. fire lane. | A note will be added for review by the City Transportation Engineer for 24' min. on commercial driveway. Autoturn requirements will have to be demonstrated for emergency vehicles as well as no chance for larger vehicle access. |
| 22 | 33 | 2.2.1 | Not all commercial sites really need a stop sign. Consider omitting for single site approach w/ less that 50 parking spaces. Graphic is for a commercial drive less than 30'. | Agree, stop signs within a private development is not enforced by the City of Denton. Figure will be change to show where applicable. Note will be changed about driveway width. |
| 23 | 34 | 2.2.1 | Note is greater than 38' | Note will be modified to correlate with table. |
| 24 | 35 | 2.2.2 | When is permission determined? Only assured drives are alley and flag lots. This will be a standard question on all future Pre-development application from AEG | Cannot make a blanket permission for collector streets. Some Residential streets will have alley access and will not permit drive approaches onto the street. Arterial label will be modified. Pre-development will be the time to asked the question. |
| 25 | 38 | 2.2.3 | See stop sign comment. Consider 1 drive/ < 100 spaces. How does this work with sidewalks. | See our response to stop signs. Should not affect sidewalks. Sidewalks are typically within the right-ofway. |
| 26 | 39 | 2.3.4 | S.E. should not affect developer's ability to meet right design requirements. Landscape- Street, trees,etc; Curb Ramps on Commercial; How will home builders know? | The distance for the easement is shown on the City's approved standard drawings. It is for sidewalk installation and maintenance purposes. Since the additional 2' is easement for installation and maintenance it should not affect landscape calculations. Curb ramps are not shown for clarity. Curb Ramps are as required by the standard drawings and ADA requirements. Home builders have to use the City of Denton Standard drawings which describe the requirement. |
| 27 | 40 | 2.6 | This should be an overriding objective of DDC/TIA's.ETJ- Denton County issues permits | Noted. |
| 28 | 41 | 2.6 | Some TxDot roads are more like commercial collectors, etc. Table says access is not permitted. | Noted. Foot note will be added to table to refer to access management section. |
| 29 | 42 | 2.6 | Comma separator on 1,000 | Will change |

| 30 | 43 | 2.6.3 | What is a variance versus a Director of Engineering determination? Table says no access unless permitted. Does this require variance for all drives or a Director of Engineering determination? This sounds like zoning. Needs more thought. | The Director of Engineering can make engineering judgments based upon the guidelines of the TCM as it relates to a proposed access. Variances are required for proposed accesses that do not meet the Denton Development Code. The variance procedure was developed by City staff. The variance process for Criteria manuals is in the review and development stage to cover all the manuals. Once the variance process is completed, this section will be revised. |
|----|----|-------|--|---|
| 31 | 45 | 3 | Word area should be "are". Makes sense for new complete sections of pavement from intersection to intersection or stretches > 1200 LF. Does not make sense for a piece meal approach to road reconstruction. | The context sensitive approach and the TIA process will provide more guidance to these type of situations. These two processes will provide the need and a better look at the timeframe for the need for any given situation. The standards shown in the tables are the basis for the fully developed section and must be the point of reference. |
| 32 | 46 | 3.1.1 | Can we use a geotech to determine street pavement section and subgrade treatment? Is geotech required no matter what? Can we use standard section and not do geotech? Is the geogrid included in the design of the street section? | A geotech can be used to determine the site specific requirements for the street paving and subgrade but must use the geotech criteria described in the manual. A geotech is required to determine at a minimum the subgrade treatment method to be used. You can use the standard section and not use a geotech for section determination. The geogrid performance is not included in the section design. It is an additional element include in addition to the design requirement. |
| 33 | 47 | 4 | Why not have the sidewalk easement taken be the same distance as required for location in the right-of-way? How will this effect landscape requirements? These plans should guide decisions regarding Ped/Bike. Don't forget FHA. | The distance for the easement is shown on the City's approved standard drawings. It is for sidewalk installation and maintenance purposes. Since the additional 2' is easement for installation and maintenance it should not affect landscape calculations. The complete street and context sensitive approach to design will include the Ped/Bike. FHA will be included. |
| 34 | 48 | 4.5 | Developer should only be responsible for improvements directly in front of his site or proportional to impact, impact fee eligible. Bicycle parking required - DDC; Bicycle Parking #/Stds etcTCM, Parking credits? Where do benches come in? Bus Stops? Not recreational. There needs to be site standards. This may require unusable sidewalk easements. What is impact on site design requirements? | Correct, developer should only be responsible for pedestrian access in front of his property unless otherwise associated with perimeter street improvements, but it needs to meet complete street and context sensitive conditions. The reference to the DDC will be taken out. Benches are amenities considered to be a part of the overall pedestrian plan. Site development design work in conjunction with pedestrian plans for frontage. |
| 35 | 49 | 4.5 | Development on one side of street. What if screening wall is adjacent to ROW? This could mean giving up another 2 feet of property. | If a project is constructing a bridge, the complete bridge system would be required including the sidewalk on the other side of the street. Normally there will be enough parkway to accommodate the additional 2 feet. Case by case basis. |

| 36 | 50 | 5 | Bus stops typically serve a much larger area than the development. Bus stops may require additional ROW from the developer for other public impacts such as DME, etc | The City is working on developing a better mobility plan that addresses bus routes in conjunction with DCTA. If a development is on a bus route then it will need to be addressed as a part of the complete street and context sensitive approach to design. |
|----|----|---|--|--|
| 37 | 51 | 5 | Is this where benches should be addressed? | Benches would need to be address in both sections as a part of the complete street and context sensitive approach to design. |



MEMORANDUM

Date: 02/14/2018
To: Todd Estes, P.E.

From: Denton Community Development Alliance

RE: Comments Regarding the Second Draft - Water and Wastewater Design

Criteria Manual Major Proposed Amendments

Mr. Estes.

The Denton Community Development Alliance (DCDA) extends our sincere appreciation to the City staff for their efforts to correct, update and improve the development standards for the City of Denton. We certainly hope that such improvements will facilitate quality development and quality of life for all residing, working and visiting Denton.

We have reviewed the recent revisions and have the few remaining comments.

Comments

Page 3

- 1 Content CIP/Maintenance/Scheduling
- 2 When does "liability" for design engineer take over?

Page 4

- 3 Streets are being classified based upon land use (apartments 12 units) and not traffic volumes
- 4 City traffic engineer discretion/surprises

Page 5

5 - Streets in Denton are over classified. Not sufficient streets w/ parking

Page 6

6 - Map of City Wide "determined" pedestrian/bike and Senior Mobility paths is needed (Motorized carts)

Page 7

6a - 20' Lanes/16' Parking/1' C&G = 37'

Page 9

7 - Too short - Pick min of 600 feet or fire code

Page 11

- 8 Where does Ride Quality apply?
- 9 Comma separators on 1,000

Page 12

- 10 Should return radius be tied to # of lanes as well?
 - Consider return radius when a right turn is involved
 - Radius when double right turn lane

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10a – Is vision clearance area the same as Right of Way clip?

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- 11 Difficult to apply in redevelopment and infill areas
- 12 This along with most other infill items justify a special meeting (at pre-design) to establish design parameters for a particular street, i.e. Jannie Street.

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- 13 Raided or Raised?
- 14 Bicycle Crossing

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- 17 Commercial/Downtown needs parking; Universities need parking; consider a local downtown/university section
- 18 8' shown on sections

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- 19 25' min. is appropriate for necessary _____ on vacant property
- 25' on existing pavement is inequitable. It appears to be focused on getting developer to pay for city improvements and not on a proper street.
- CIP should be considered. Avoid a patchwork quilt of sections, deign life, remaining life
 - Impact Fee Credits are a cost to developer (lost opportunity)
- Complete street and context principles should be applied in conjunction with CIP/Maintenance/Remaining Life/Infills/etc. Sometimes an overly with widening may be more life ___ efficient.

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- 41a Should be are not area
- 42 Makes sense for new complete sections of pavement from intersection to intersection or stretches > 1,200 LF.; Does not make sense for a piece meal approach to road reconstruction.

Page 46

- 43 Can Geotech ______ SN for _____and filter fabric when determining SN for full pavement depth??
 - 44 Is Geotech required N.M.W? Use standard sections w/o Geotech?

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- 45 Why not same as from ROW? Consider LS/Street Trees/etc.
- 46 These plans should guide decisions regarding Ped/Bike
- 47 Do not forget FHA.

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- 48 Developer should only be responsible for improvements directly in front of his site or proportional to impact, Impact Fee eligible
- 49 Bicycle Parking Required DDC; Bicycle Parking #/Stds, etc. TCM; Parking Credits?
- 50 Where do Benches come in? Bus Stops? Not recreational
- 51 DME needs to provide site standards. This may require unusable sidewalk easements. What is impact on site design requirements?

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52 – Development on one side of street?

53 - What if screening wall is adjacent to ROW? This could mean giving up another 2 feet of property

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54 – Bus stops typically serve a much larger area than the development. Bus Stops may require additional ROW from developer for other public impacts such as DME, __, SW, etc.

Page 51

55 – Is this where benches should be addressed?

Thank you

Lee Allison, P.E., FNSPE DCDA