roposed	LCUASS Modifica	ations		Last updated: 6/22/20
Chapter 1	Page Number Page 1-18	Section Section 1.9.2.B.2	Proposed Changes Edit language for On-Site Criteria and Off-Site Criteria to be easier to read	Technical Revision or Policy Relate Technical Revision
2	Page 2-1 Page 2-2	Section 2.1.2 Section 2.2.2	Contradiguage for On-Sine Citeria and On-Sine Citeria to De leasher to read Move "Construction Traffic Control Plans" to Section 2.2.6 for more appropriate chapter location Change title from Public Improvement Construction Plans to Civil Construction Plans. More discussion needed	Technical Revision Technical Revision Technical Revision
2	Page 2-2	Section 2.2.3	Revise Section B to indicate "Landscape Plans to comply with Local Entity's current requirements"	Technical Revision
2	Page 2-3 Page 2-4	Section 2.2.11 Section 2.2.12 Section 2.3.2	Mylar Requirements. "Refer to each Local Entity for the specific mylar requirements" Minor Field Change Request Form. Other jurisdictions may use. More discussion needed.	Technical Revision Technical Revision
3	Page 2-6 Page 3-1	Section 3.1.2	Text removed and instead reference Loveland Municipal Code Title 18 Change "Final Mylar Drawings" to "Final Drawings" and update to keep up with technology updates. More discussion on electronic scan of mylars needed	Technical Revision Technical Revision
3	Page 3-1 Page 3-1	Section 3.1.3 Section 3.1.4	Vertical Datum. Change to "Local Entity's Vertical Datum" Expiration of Plan Set - Change title to be consistent with what title is decided for Section 2.2.2	Technical Revision Technical Revision
3	Page 3-2 Page 3-3	Section 3.2.2 Section 3.2.6	22"x34" Plans as an option so 11"x17" can be true half-size Remove "wet stamped" plan requirements & allow electronic PE stamps per Colorado Board of Registration requirements	Technical Revision Technical Revision
3	Page 3-4 Page 3-4	Section 3.2.7 Section 3.2.7	Instead of 1"=30" for all Signing & Striping Plans. "Plans should be legible as determined by the Local Entity Engineer" Remove scale requirements for Key Map & Vicinity Map. Instead Key Map & Vicinity Map shall be legible	Technical Revision Technical Revision
3	Page 3-4 Page 3-5	Section 3.2.12 Section 3.3.1	Legend of Symbols. Each symbol & linetype should be on the cover sheet or each sheet Idemnification Statement. For Loveland, use signature block instead	Technical Revision Technical Revision
3	Page 3-5 Page 3-9	Section 3.3.1.F Section 3.3.4.A.7	Preamble (Project Title) - Layout doesn't follow what FC uses for Utility Plans. Does FC need their own section? More discussion needed Add language "Shall conform to local, state, and federal requirements including S818-167"	Technical Revision Technical Revision
3	Page 3-9 Page 5-2	Section 3.3.4.D Section 5.2.1.C	Cross-Sections - Two sections (e. and f.) should be COL only. Lower values to have a liquid limit greater than 30 and a plasticity index greater than 15 for higher quality fill for ROW grading. Fort Collins only	Technical Revision Technical Revision?
5	Page 5-4 Page 5-5	Section 5.4.1 Section 5.5.1	Fix reference error and reference Table 5.1 change PICPs to "Civil Construction Plans"	Technical Revision Technical Revision
5	Page 5-6 Page 5-7	Section 5.6.1.B Section 5.6.2.A	The requested waiver shall be signed and stamped by a Colorado Professional Engineer Remove low impact development systems from #5 and add to #6. Add low impact development systems, over-watering lawns, subsurface irrigation, etc.	Technical Revision Technical Revision
5	Page 5-7 Page 6-1	Section 5.6.2.A.9.b Section 6.1.1.E	Loveland will check the third third is a construction of the const	Technical Revision Technical Revision?
6	Page 6-2	Section 6.1.1.F Section 6.1.1.I	Hazardous Materials. Changed wording to "All moving of hazardous materials must be permitted through the State of Colorado"	Technical Revision
6	Page 6-2 Page 6-2	Section 6.1.2	Delete section I Add language that indicates Blasting Permits are to be acquired through the local Fire Authority	Technical Revision Technical Revision
6	Page 6-4 Page 6-4	Section 6.1.7.A.6 Section 6.1.7.A.11	Add language to Refer to Chapter 25, Reconstruction and Repair for additional information Change notification from 24 hours to 48 hours. Fort Collins to check	Technical Revision Technical Revision
6	Page 6-5 Page 6-5	Section 6.1.7.B.1 Section 6.1.7.B.3	"Plan" changed to "Traffic Control Plan (Plan)" "Engineer" changed to "Local Entity Engineer"	Technical Revision Technical Revision
6	Page 6-5 Page 6-6	Section 6.1.7.B.4.b Section 6.1.7.B.7	Change text from "One Call" to "Colorado 811" "Engineer" changed to "Local Entity Engineer"	Technical Revision Technical Revision
6	Page 6-6 Page 6-7	Section 6.1.7.B.8 Section 6.1.8.A	"faxing" changed to "emailing" Stop work fine changed from a specific dollar amount to "Per the Local Entity's requirements"	Technical Revision Technical Revision
6	Page 6-7 Page 6-8	Section 6.1.8.B Section 6.1.9.A	Title changed to "Mitigation Expenses for Unsafe or Untimely Performance" Text changed to "Developer is responsible to provide insurance prior to any work"	Technical Revision Technical Revision
6	Page 6-9 Page 6-10	Section 6.1.10 Section 6.2.1	Loveland to be included in Licensing. "Licensing in Fort Collins and Loveland (City Limits)" Delete Appendix E-6 reference	Technical Revision Technical Revision
6	Page 6-11 Page 6-11	Section 6.2.2.4 Section 6.2.3	Public Improvements Opinion of Cost are to be signed and stamped by a P.E. Separate preconstruction meetings for utilities, if needed, are the responsibility of the Developer to coordinate	Technical Revision Technical Revision
6	Page 6-11	Section 6.2.3.B Section 6.2.4	Text changed to "For the items required prior to the DCP meeting, contact the Local Entity Engineer"	Technical Revision
6	Page 6-12 Page 6-13 Page 6-13	Section 6.2.4	Delete 1-4. Already taken care of through the routing process Added "DCP" text to 11 and 12 (i.e. "Applicant's signature on the DCP") Wording Anaped to improve grammar. "("DCP" at also used integral of "permit"	Technical Revision Technical Revision Technical Revision
6	Page 6-13 Page 6-14 Page 6-14	Section 6.2.6.B Section 6.2.6.C	Wording changed to improve grammar. "DCP" text also used instead of "permit" Reference surety agreement Reduction of the surety based on the level of completion of the project	Technical Revision Technical Revision Technical Revision
6	Page 6-14	Section 6.2.6.C.3	"Engineering Division" changed to "Local Entity Engineer"	Technical Revision Technical Revision Technical Revision
6	Page 6-15 Page 6-15	Section 6.3.1 Section 6.3.2	"Public Improvement Construction Plans" changed to "Civil Construction Plans" Text changed to "The permit application and information is available on the Local Entity's website"	Technical Revision
6	Page 6-17 Page 6-17	Section 6.4 Section 6.5.1	Removed text and instead reference to contract the local entity for the revocable encroachment permit application Refer to local entity for permit requirements	Technical Revision Technical Revision
6	Page 6-18 Page 6-19	Section 6.5.2.A Section 6.5.2.B	Notification of house move changed from 24 hours to 72 hours. Also applicant required to obtain all necessary permits Text added. Pemits are issued for a single move, which can contain multiple structures.	Technical Revision Technical Revision
6	Page 6-20 Page 6-20	Section 6.6 Section 6.6.A	Permit for house numbers on curbs text deleted "floggers" changed to "flaggers"	Technical Revision Technical Revision
6	Page 6-21 Page 6-22	Section 6.6.B Section 6.7	Stockpilling Permit text removed. Instead refer to Local Entity for permit application and requirements Deleted text on fees. Instead refer to Local Entity for current requirements and fees	Technical Revision Technical Revision
7	Page 7-ii Page 7-1	Section 7.5.1.I Section 7.2.1	Landscaping - Adding language on Waterwise Landscape Signs shall be placed at the end of roads planned for future road extensions	Technical Revision Technical Revision
7	Page 7-3 Page 7-4	Section 7.2.3.B Section 7.4.1.A.2	No direct access to residential driveways from Collector Streets (Loveland only) Minimum Tangent Length. In constrained or re-development areas allowed some flexibility on the minimum tangent length (see text)	Technical Revision? Technical Revision
7	Page 7-7 Page 7-7	Table 7-2 Table 7-2	Table 7-2 Loveland. Detached sidewalks required for all streets other than alleys. 28' wide F1-16 primary access alleys Restrict direct access on Minor Collector Streets for residential driveways	Policy Revision? Technical Revision?
7	Page 7-8 Page 7-8	Table 7-3 Table 7-3	Table 7-3 Fort Collins. Use current AASHTO numers for Stopping Sight Distance Table 7-3 Fort Collins. Use current AASHTO K values for vertical curves	Technical Revision Technical Revision
7	Page 7-10 Page 7-11	Table 7-3 Table 7-4 Table 7-5	Table 7-3 FOR COMING. USE CONTENT ACKNOOL ON VARIOUS TO VERTICAL CONTENT Table 7-4 Loveland to us current AASHTO (Xalues? Min. Arc Length for Lanes and primary access alleys = 100'	Technical Revision Technical Revision Technical Revision
7	Page 7-12	Section 7.4.1.B.2 Section 7.4.1.B.3	Minimum Flowline Grades. Minimum FL grade of cul-de-sacs shall be 1.0 percent	Technical Revision
7	Page 7-12 Page 7-12	Section 7.4.1.B.6	Grade Breaks. Change from 0.4 perecent to 0.5 percent Vertical Clearance. Minimum vertical clearance changed from 13.5 feet o 16.5 feet	Technical Revision Technical Revision
7	Page 7-13 Page 7-13	Section 7.4.1.C.1 Table 7-6	Stopping sight distance changed to be consistent with latest AASHTO requirements Stopping and Passing sight distance changed to be consistent with latest AASHTO requirements All barder upth shall be full death and one full death up days uptone chapsing a prompt but the Local English	Technical Revision Technical Revision
7	Page 7-16 Page-7-19	Section 7.5.1.D Section 7.6.4.C	All barrier curb shall be full depth and not glue down unless otherwise approved by the Local Entity Engineer Temporary turnarounds shall be paved or an all-weather recycled asphalt surface as approved by the Local Entity Engineer	Technical Revision Technical Revision
7	Page 7-20 Page 7-20	Section 7.7.3.B Section 7.7.3.C.1.k	Subdrains systems must be owned and maintained by a private party other than the Local Entity Subdrain designer required to show locations of proposed subbdrain and plan to avoid conflicts (i.e. Tree roots, etc.)	Technical Revision Technical Revision
7	Page 7-23 Figure 7-1F	Section 7.8.4 Figure 7-1F	Vertical Clearance. Change from 13.5 feet to 14.0 feet. Added striped buffered bike lane and protected bike lane options	Technical Revision Policy Revision?
7	Figure 7-2F Figure 7-2.5F	Figure 7-2F Figure 7-2.5F	Added striped buffered bike lane and protected bike lane options Added striped buffered bike lane and protected bike lane options	Policy Revision? Policy Revision?
7	Figure 7-3F Figure 7-4F	Figure 7-3F Figure 7-4F	Added striped buffered blke lane and protected blke lane options Added Buffered blke lanes	Policy Revision? Policy Revision?
7	Figure 7-5F Figure 7-6F	Figure 7-5F Figure 7-6F	Added Buffered bike lanes Added Buffered bike lanes. Added 5' (min.) sidewalk width and 8' (min.) parkway width	Policy Revision? Policy Revision?
7	Figure 7-7F Figure 7-8F	Figure 7-7F Figure 7-8F	Added 5' (min.) sidewalk width and 8' (min.) parkway width Added 5' (min.) sidewalk width and 8' (min.) parkway width Added 5' (min.) sidewalk width and 8' (min.) parkway width	Policy Revision? Policy Revision?
7 8	Figure 7-9F Page 8-2	Figure 7-9F Section 8.2.5	Added 5 (min.) sidewan would nit of Amin. pankway wutui Added 5 (min.) sidewalk width Added definition of yph to "Definitions of Terms" in Section 1.7	Policy Revision? Technical Revision
8	Page 8-3 Page 8-3	Section 8.2.6.C Section 8.2.7.B	Modified text in Section C to further describe Figure 8-19 Modified text in Section F from "want" to "recommend"	Technical Revision Technical Revision Technical Revision
8	Page 8-4	Section 8.2.8.B Section 8.2.8.C	Refer to Local Entity Engineer for which Bus turning template to use	Technical Revision Technical Revision Technical Revision
8	Page 8-4 Page 8-6	Section 8.2.10.B.3	Refer to LCUASS Appendix I for roundabout turning template requirements Gluedown Curb. Change text from "left-turn lane" to "awailiany Jane" to Jeave possibilities open	Technical Revision
8	Page 8-7 Page 8-8	Section 8.2.14.B Section 8.2.16	Reworded text to read better Roadway Narrowing may not be used on Major Collectors or Arterials without a Formal Variance per Section 1.9.4	Technical Revision Technical Revision
9	Page 8-8 Page 9-iii	Section 8.2.17 Figure 9-1	Roundabouts shall be designed in accordance with LCUASS Appendix I Figure 9-1 Access Spacing is mssing from the on-line version (Section 2012) (Figure 201	Technical Revision Technical Revision
9	Page 9-7 Page 9-8	Section 9.3.3 Section 9.3.7.E	Section 9.3.3 Sight Distance - reference the latest AASHTO criteria Maximum cross slope per latest ADA requirements	Technical Revision Technical Revision
9	Page 9-9 Page 9-10	Section 9.3.7.H Section 9.4.6.A	In Loveland, garage doors that face an alley shall not be in an area that is between 5 feet and 20 feet from the edge of pavement of the alley Driveways shall be concrete pavement within the public right-of-way	Technical Revision Technical Revision
9 10	Page 9-11 Page 10-1	Section 9.4.10 Section 10.1.2	Change in use updated to be consistant with CDOT State Highway Access Code (SHAC) criteria (20% or 100 total daily trips) Update to reference latest AASHTO. Also added "Mechanistic Empirical" design procedures may be substituted	Technical Revision Technical Revision
10 10	Page 10-3 Page 10-6	Table 10-1 Section 10.4.2	Added a note 7 to to the Min. Structural Number in Table 10-1 Referenced 10-1 and deleted alternate composite section text	Technical Revision Technical Revision
10	Page 10-7 Page 10-9	Section 10.4.2.A.1 Section 10.5.1.B.3	Changes 1/2" to 0.5 inch (Typical) Referenced latest edition of the CDOT Pavement Design Manual	Technical Revision Technical Revision
11	Page 11-1 Page 11-2	Section 11.1.1 Section 11.1.3.A	Remove old AASHTO structural standards from list Working Stress Design (WSD) text modified	Technical Revision Technical Revision
11	Page 11-2 Page 11-3	Section 11.2.1 Section 11.2.4.B.3	Working Stress Design (W.S.D) (ext. Industried Text modified to clarify for spans greater than 20 feet Pedestrian load reduced from 85 psf to 75 psf per AASHTO Manual	Technical Revision Technical Revision
11 11	Page 11-5	Section 11.2.5.B.2 Section 11.3.2	Design live loads per AASHTO	Technical Revision Technical Revision Technical Revision
11 12 12	Page 11-8 Page 12-1	Section 11.3.2 Section 12.1 Section 12.2.1	Railings per AASHTO City of Fort Collins is looking to revise this graphic showing utilities Add sentence for I oveland see the Water and Machawater Development Standards latest edition	Technical Revision Technical Revision Technical Revision
12	Page 12-1 Page 12-1	Section 12.2.3.A	Add sentence for Loveland see the Water and Wastewater Development Standards latest edition Add language to adjust 1/4 inch below the finished surface per Darawing 20101 Add language facilities located within the identification with ADA computer.	Technical Revision
12 12 12	Page 12-1 Page 12-2	Section 12.2.3.B Section 12.2.5.A	Add language facilities located within the sidewalk should be ADA compliant Add language indicating PVC sleeves should extend from ROW to ROW District willing the JML be cartied of the notified PMC sleeves should extend from ROW to ROW	Technical Revision Technical Revision
12	Page 12-2 Page 12-3	Section 12.2.5.D Section 12.2.6	Private utilities shall be outside of the public ROW unless otherwise approved by the Local Entity Engineer Delete Sections A and B since they just refer to other sections Mousthis certion to "Intersections"	Technical Revision Technical Revision Technical Revision
12	Page 12-3 Page 12-4	Section 12.2.6.C Section 12.3.2.A	Move this section to "Intersections" Refer to Local Entity's regulations for other systems (Cable TV, telephone, Broadband, Fiber Optic, Wireless Communications, etc.)	Technical Revision Technical Revision
12	Page 12-4 Page 12-5	Section 12.3.2.C Section 12.3.3	Pole and sign locations shall conform to the MUTCD and AASHTO requirements Include fiber optics, broadband, wireless communications, etc.	Technical Revision Technical Revision
13	Page 13-1 Page 13-1	Section 13.2.1 Section 13.2.2	Update website link address Update website link address	Technical Revision Technical Revision
13 13	Page 13-1 Page 13-2	Section 13.2.3 Table 13-1	Include Fort Collins website link address Change title to "Standardization of Road Naming Criteria"	Technical Revision Technical Revision
14 14	Page 14-ii Page 14-3	List of Figures Section 14.2.1.B2	Update List of Figures to contain figures referenced in the text Streetlight fixtures as approved by the Local Entity	Technical Revision Technical Revision
14 14	Page 14-4 Page 14-5	Section 14.2.1.B11 Section 14.3.1.F	Ped buttons per ADA Standards Signs shall comply with the MUTCD	Technical Revision Technical Revision
14	Page 14-7 Page 14-9	Section 14.3.2.B Section 14.3.3.E	Add text to include detached sidewalk Also reference CDOT guide	Technical Revision Technical Revision
14 15	Page 14-11 Page 15-1	Section 14.4.2.G Section 15.1.2	Coordinate with Appendix I to match roundabout signing and striping standards Replaced "\$300 design electrical deposit" with "required electrical design deposit"	Technical Revision Technical Revision
16 16	Page 16-1 Page 16-2	Section 16.1.2 Section 16.2.1.D	Added Standards for Transportation Facilities as Published by the US Access Board and the Guidance on the 2010 Standards for Accessible Design Loveland to remove Industrial areas exception for sidewalk upgrades and replace with unless otherwise approved by the Local Entity Engineer	Technical Revision Technical Revision
16 16	Page 16-2 Page 16-2	Section 16.2.1.G Section 16.2.1.H	Change sidewalk thickness to finding in This was missed in the previous update. Change sidewalk thickness to finding in This was missed in the previous update. Change 1/4 inch per foot cross slope to less than or equal to 2%	Technical Revision Technical Revision
16 16	Page 16-3 Page 16-3	Section 16.2.1.H.3 Section 16.3.1.A.2	added "ramp" to text for clarify	Technical Revision Technical Revision Technical Revision
16	Page 16-5	Section 16.6.2	Added text "Driveways shall be positioned as to not preclude the necessary mid-block ramp" Added accessible paths to the text Included MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO_MICEO	Technical Revision
17	Page 17-1 Page 17-1	Section 17.1.1 Section 17.1.6	Included MUTCD and NACTO "Urban Bikeway Design Guide" in references Replace "utility" with "requirements and"	Technical Revision Technical Revision
17	Page 17-2 Page 17-3	Section 17.2.1 Section 17.2.4	Included protected bike lanes on arterial roadways in Fort Collins Added bicycle detection text	Technical Revision Technical Revision
17 17	Page 17-3 Page 17-4	Section 17.2.5 Section 17.3.1.B	Text revisions for bike facilites at intersections Changed text to be consistent with Figure 7-14	Technical Revision Technical Revision
17	Page 17-4 Page 17-4	Section 17.3.2.A Section 17.3.2.C	Added text bike paths shall be routed to avoid the removal of any significant trees. Where possible bike paths should be a min. of 4' from trees Add text that clarifies that vegetative material to be removed does not include significant trees	Technical Revision Technical Revision
17	Page 17-4 Page 17-6 Page 17-7	Section 17.3.2.C Section 17.3.9.A Section 17.3.10.C	Auto text that clarines that vegetative inaction to be removed ones not include significant trees replace "utilities department" with "requirements and standards" Removed text indicating slopes greater than 6 percent	Technical Revision Technical Revision
17	Page 17-8	Section 17.3.11B	Revised text on Pedestrian and Bicycle Crossings to be consistent with current practices	Technical Revision Technical Revision Technical Revision
17	Page 17-10	Section 17.3.15.A Section 17.4.1.B	Added text that curb ramps shall meet ADA requirements For private blike parking facilities refer to LMC (Loveland only) All textificacy language shall be presented but the large flight supposition.	Technical Revision
18	Page 18-1 Page 18-1	Section 18.1 Section 18.1.3	All traffic calming shall be approved by the local fire authority Added Appendix I reference for roundabouts	Technical Revision Technical Revision
18 19	Page 18-3 entire chapter	Section 18.3.4 all sections	Added Appendix I reference for mini roundabouts Misc. formatting identions and text alignment to be consistent	Technical Revision Technical Revision
	Page 20-1 Page 22-9	Section 20.2 Section 22.2.3.D	Remove opinion of cost items and reference form Flash fill may be used if approved by the City Engineer on a case-by-case basis	Technical Revision Technical Revision
20	Page 22-9	Section 22.2.3.E Section 22.4.4.B	Reference each local entity's specific bedding requirements Reference Chapter 25 for borings	Technical Revision Technical Revision
	Page 22-26		Renaming PLOPs as Civil Construction Plan	Technical Revision
22 22	Page 22-26 Page 25-1	Section 25.1.6.A		Technical Revision
22 22 22 25	Page 22-26		Flow fill will be required on soft surface portholing red be discettion of the Local Entity If there are multiple bore holes within an area, the Local Entity may require the area to be sawcut, removed and patched Temporary concrete patch may be used for winter patching of street cuts when the imperatures are below requirements for asphalt patching	Technical Revision Technical Revision Technical Revision