

Summary of Proposed Revisions to the City of Longmont Public Improvement Design Standards and Construction Specifications

Section 100 – General: Section 100 contains the general requirements of design and construction of public improvements.

- General updates were made to the definitions in Section 101.02
- Changes were made to text referring to Public Works and Water/Wastewater to reflect the reorganization of the Public Works and Water Utilities Department
- At various locations the term “bike path” which refers to the 8 foot concrete path on arterial streets is changed to “concrete trails” to avoid confusion with on-street bicycle lanes that are now required on arterial streets.
- Section numbers are updated to reflect changes.
- Section 104.02 -
 - Development plans to include existing and proposed underdrain systems
 - Electronic design files required with submittals to help with updates to City GIS
- Section 104.03
 - Development Plat to include at least 2 horizontal control points with State Plane coordinates labeled on the Plat
 - Development plans showing vertical elevations shall now be on the NAVD 1988 Datum
- Section 105.03a
 - Requirements for Storm Water Management Plan moved to Section 105.06
- Section 105.05
 - Electronic design files required with initial submittal of initiate electric utility design by LPC
- Section 105.06
 - Storm Water Management Plan required – see NEW section 113 for details
- Section 106.01
 - Changes to reflect the reorganization of the Construction Inspection Group from Public Works and Water Utilities into one combined work unit
- Section 106.02
 - Change “bike path” that refers to the 8 foot sidewalk on arterial streets to “concrete trail”
- Section 107.01
 - Update to the requirements for electronic plan submittals to reflect current practices
- Section 107.02
 - Requirement for final plan approval and financial security prior to pre-construction conference
 - Landscaping/Irrigation pre-construction conference to be required
- Section 107.03
 - If construction does not start within six months of plan approval, LPC has ability to update design or fees
- Section 107.15
 - Update to certification statement on record drawings

- Section 111.01
 - Added section requiring the Developer to provide utility locates during construction and clarifying utility locate requirements for private utilities
- Section 113.00
 - Added section detailing Storm Water Quality requirements. These were relocated from the Storm Drainage Section as they relate to general construction work and are not limited to storm drainage improvements

Section 200 - Streets

- At various locations the term “bike path” which refers to the 8 foot concrete path on arterial streets is changed to “concrete trails” to avoid confusion with on-street bicycle lanes that are now required on arterial streets.
- Section 200.01.3
 - New General criteria for design of streets to try and minimize adverse traffic impacts on residential neighborhoods
- Section 201.01 -
 - Paragraph 2 - Requirement for offset walks and planting strip on local and collector streets and on-street parking requirements
 - Paragraphs 2 through 7 include items relocated from deleted sections in 201.02
- Section 201.02
 - Sets design requirements for various lane components of street and eliminated standardized design criteria to require site specific design and eliminate un-needed street width
- Section 202.01
 - Requirement for “slow points” at 500 foot spacing
- Section 202.02
 - Horizontal alignment changes based on reduced design speeds
- Section 203.02
 - Vertical alignment changes based on reduced design speeds
- Section 205.02
 - Reference to revised detail drawings for curb ramps
- Section 207.02
 - Design speed changes
- Section 216.15
 - New section to address new ADA requirements for curb ramps including truncated domes
- Section 217.00
 - Addition of a new section for Sign Construction and Installation

Section 300 – Storm Drainage

- Section 301.02.3
 - Eliminated use of neoprene gaskets
- Section 301.17
 - Requirement for video camera inspection prior to acceptance by the City

- Section 302
 - Water quality and NPDES requirements moved to Section 100

Section 400 – Wastewater Collection

- Section 435.00
 - Requirement for 48 hour notification to the City for sanitary sewer service rehabilitation work and inspection.

Section 500 – Water Distribution

- Section 530.04
 - Meters for irrigation taps receiving a waiver for parks, arterial streets, and primary greenway irrigation will be installed in a 60 inch diameter vault for service lines 2 inch and less.
 - Water meter vaults larger than 60 inches in diameter shall have a sump pit.
 - Inside meter installations, 3 inch and larger shall have a telephone line dedicated for off site meter reading.

Section 600 – Parks and Forestry

- Section 600 - General
 - Grammatical, verbiage, clarifying intent throughout
 - Change reference from 'bike path' to concrete path throughout
 - Requirement to follow the Ken Pratt Boulevard Landscape Guidelines for projects along Hwy 119 east of Main Street.
 - Variance on landscape requirements if water saving is proposed – financial assistance available.
 - Requirement for raw water irrigation systems when feasible per Raw Water Master plan.
 - Clarification on plan note requirements and floodplain delineation.
 - Clarifying what applies to City Capital projects vs. Developer projects
 - Change of references for plan review and inspector – plan review for non-City maintained areas is now being done by Planning Services; inspection of those areas will be done by Public Works inspectors or others. Inspector to be clarified at Pre-Construction conference.
 - Utilities installation requirement to be in advance of landscape and irrigation.
 - Securities required for extended warranties
 - Irrigation plans for Homeowner Association owned areas to be included with Public Improvement Plan submittals, including required plan notes and certification from designer that system is designed to meet City Standards.
 - Irrigation as-builts for Homeowner Association owned areas to be provided before Final Acceptance is granted for a project, including certifications from the design and the installer confirming that the system was constructed to meet City Standards. The City will hold the digital as-builts as a resource for the Homeowners Associations.

- Section 601 – Concrete Paths, Bridges and Underpasses
 - Rumble strip use and construction clarified.
 - AASHTO standards and revised ADA guidelines referenced.
 - Width of tree lawns increased to 8' with variance process noted.
 - Requirement for bridge safety railing on approaches.
 - Requirement for bridge plate covering gap at abutment wall.
 - Underpasses clearance height increase recommendation.
 - Underpass striping requirement at entries.
 - Underpasses with limited sight distance –warning strobe light required.
 - Signage clarified and additional signs required. Clarification on which signs have design copy to be provided by the City and installation requirements.
 - Clarification on lighting installation
 - Requirement for some site furnishings.
 - Concrete placement during weather conditions restrictions.
 - Expansion joint installation clarification.
 - Concrete finish sample panel allowed.
- Section 602 - Grading
 - Grades on berms requirements to assist with mowing operations.
 - Access route requirement into detention ponds for maintenance.
 - Road delineators required where there is no curb and gutter and interim drainage swale.
 - Weed control clarification.
- Section 603 - Irrigation
 - Requirement for raw water source where available – info on pump station, storage pond, backup system, equipment color coding and additional requirements. Information provided on basic system components.
 - Allowance for Water wastewater Division to rescind tap waiver if water misuse occurs.
 - Signage for raw water in use
 - Materials – allow ductile iron for mainlines above 4" in size
 - Requirement to prohibit cold weather glue.
 - Satellite controller – extra stations required.
 - Wire gage size for longer length systems
 - Size of meter vaults clarification with backflow preventers now above ground
 - Installation clarification for flow meters and drip pipe.
 - Irrigation testing process clarification.
 - As-builts change in format requirement and new requirement to obtain as-builts for non-City maintained areas (to be turned over to Home Owners Association).
- Section 604 - Seeding
 - City Capital projects clarification on where seeding is allowed.
 - Reformatting – moved seed mixes to Approved Materials list to allow easier means to add new mixes.
 - Mow band requirement on fences for areas to be maintained by the City of Longmont.
 - Road delineators for areas without curb and gutter.
 - Name change for turf types – Dry land to Native, Irrigated to Turf grass.

- Rock removal clarification for turf grass seed areas vs. native grass seed areas.
- Maintenance requirements including fertilizer clarification.
- Section 605 - Sodding
 - Reformatting – move sod mixes to Approved Materials list to allow easier means to add new mixes.
 - Mow band requirement on fences for areas to be maintained by the City of Longmont.
 - Rock size allowance clarification.
 - Weed control requirements.
- Section 606 – Trees, Plants and Groundcover
 - Change of tree spacing from 30' to 40' for large canopy trees, and 12' to 15' for small trees to assist with long term tree health.
 - Clarification on the increase size of tree lawn areas and limitation on trees used in tree lawns where approved by variance request.
 - Shrub height restriction for City Capital projects to address safety issues. Also shrub type restriction where damage can occur from Magnesium Chloride use in snow removal operations.
 - Prohibitive trees general clause – now prohibited if classified as noxious or invasive.
 - Russian Olive and Siberian Elm removal requirement to address invasive species issues.
 - Beaver protection near waterways – clarification on where needed and installation requirements.
 - Prairie Dog – inventory of PD's, requirement and management techniques reference to Wildlife Management plan.
 - Clarification on locates refreshed prior to tree layout inspection.
 - Clarification on City Capital projects where some may allow hand cut edging instead of steel edging.
 - Planting installation clarification on locates, height of rootball, mulch tree ring extents and wire basket removal.

Section 700 – Longmont Power & Communications

- General updates to clarify verbiage and grammatical changes.
- Section 700.02
 - Provided clarity that access to LPC easements is required for maintenance and operation of the utility.
- Section 700.03
 - Provided clarification and standards for clearance requirements around electrical equipment when adjacent to drivable surfaces; bollard requirements payable by the developer or owner.
 - Private Sector Committee Members requested staff to provide a minimum clearance; this was addressed and added to the standards.
 - Created a statement that repairs made by LPC to damaged electric facilities that occur during the development and construction process are invoiced directly to the Developer for payment.
- Section 705.00

- Provided clarification for residential electric services greater than 200 amps, the maintenance and ownership of the service line remains with the homeowner. Clarified in the standard the City's point of delivery and where private ownership begins.
- Private Sector Committee Members asked why LPC maintains the electric service line for residential customers served from a junction box in subdivisions. LPC's previous design incorporated service pedestals which isolated a problem on one customer's service from other customers. The change to junction boxes was in response to developer requests. LPC ownership of the service line expedites any repairs and restores power more quickly. LPC believed this decision was best from a customer service perspective.
- With the introduction of larger homes in the City of Longmont, LPC has provided specifications for residential electric services greater than a typical 200 amp service. The Private Sector Committee Members asked why the City takes care of services less than 200 amps and not services greater than 200 amps. LPC's response is services 200 amps and less use typical electric conductor and has minimal equipment to maintain. Electric services greater than 200 amps have many options available for conductor type and quantity as well as equipment type installed on the residence. LPC does not have the inventory required to provide maintenance for the many options available to large residential customers.
- Provided clarification of warranty and repair requirements for residential service laterals 200 amps or less with the builder.
- Inspection and warranty period for service lines. As stated above, LPC accepts ownership and maintenance of residential service lines 200 amps or less after a one year warranty period measured from the date of Certificate of Occupancy. Private Sector Committee Members asked why LPC would inspect the service lines if our standards and original inspection was thorough. LPC believes that builders and contractors provide a one year warranty to the home buyer; it is prudent for LPC to inspect a product that will become our responsibility and confirms the integrity of the electric service from a safety perspective.
- Section 706.00
 - Revised the requirement for single phase services to include the addition of self contained 400 amp metering requested by electricians and homeowners.
 - Residential electric meter locations are now required to be in direct line of site of LPC's equipment. Additionally, the meter is required to be located in the front ¼ of the home or a remote read meter will be installed at the builder or homeowner's expense. This standard minimizes problems for the homeowner and LPC when future cable replacements are required.
 - Made modifications to metering equipment dimensions.

Appendix

- IV Construction Plan Requirements – MOAPI (Memorandum of Public Improvements) to PIA (Public Improvements Agreement) and added requirement for irrigation tap information
- VI Grading Plan Requirements – Change “bikepath” to “concrete trails”
- VII Standard Details – Change in numbering
- IX Electric Requirements – Added in section on Electric Requirements
- Power & Communications General Notes – Updated notes to address construction phasing
- Power & Communications Electric Service Request – Updated the Electric Service Request
- Public Improvement Plan Submittal for Development Review – Added LPC to the Public Improvement Plan Set list

Standard Drawings

- Section 200 Streets
 - 200-11 through 200-13 have been revised to address new ADA requirements for curb ramps including truncated domes
 - 200-14A and 200-14B are updates to curb ramp details to reflect new ADA requirements for curb ramp grades
 - 200-15A is a new detail for a mid-block neck-down
 - 200-15B is a new detail for a speed table
 - 200-16 is a new traffic circle detail
 - 200-17 is a new standard drawing to address new ADA requirements for curb ramps including truncated domes
 - 200-27 is a new standard drawing to specify pothole patch-back on public streets
 - The numbering of other details has been revised to make them group together for better access
- Section 600 Parks and Forestry
 - 603.01 – Backflow Preventor, Meter Pit and Downstream Assemblies detail revised to reflect new requirements for above ground backflow. Clarification on location of all equipment based on size of tap.
- Section 700 Standard Drawings
 - 700-01 – Electronic File Submittal Requirements – replaced with update to the General Section 100 electronic file submittal requirements. (Removed)
 - 700-02B – Updated clearances
 - 700-09 – Updated clearances
 - 700-10 – Three phase transformer concrete pad requirements; updated clearances
 - 700-11 – Updated clearances
 - 700-12 -- Updated clearances
 - 700-14 – Street Light Base Installation (revision)
 - 700-16 – Single family metering (revision)
 - 700-17 – Metering Phone Line Installation (revision)
 - 700-18 – Bollard Installation Detail (addition)