WYOMING PLANNING COMMISSION
AGENDA ITEM
NO. 3

DATE DISTRIBUTED: July 8, 2019

PLANNING COMMISSION DATE: July 16, 2019

ACTION REQUESTED: Approve Subdivision Design Standards (July 2019)

REQUESTED BY: Staff

REPORT PREPARED BY: Nicole Hofert, City Planner

GENERAL BACKGOUND:

These subdivision design standards are referred to in the City Code, particularly in sections 70-126 and 74-121. At times, they refer to other standards such as city construction specifications that are also available on the city's website or by contacting the city engineer.

PURPOSE FOR SUBDIVISION DESIGN STANDARDS:

These standards provide greater procedural and technical specificity than do City Code provisions, express the city's expectations for subdivision development, provide criteria for review of subdivision plans by the city engineer, and provide property owners and developers certainty regarding city requirements. They advance public interests by providing predictable, consistent standards for the development of city and utility infrastructure. Current and future owners of lots in plats can be assured of the dimensions and quality of developed infrastructure and that provision has been made for the completion of that infrastructure. Developers can be assured that the standards applied to their development are the same standards applied to previous developments and that will be applied to future developments.

PLANNING COMMISSION ACTION:

The Development Review Team recommends that Planning Commission approve the attached Subdivision Design Standards dated July 2019.

DEVELOPMENT REVIEW TEAM:

Megan Sall, Assistant City Manager
Rebecca Rynbrandt, Director of Community Services
William Dooley, Director of Public Works
Devin Waclawski, Building Official
Kimberly Koster, Director of Public Safety
Nicole Hofert, City Planner

SUBDIVISION DESIGN STANDARDS

July 2019

Division 1
Background, Purpose, and Adoption

1.1 Background. These subdivision design standards are referred to in the City Code, particularly in sections 70-126 and 74-121. At times, they refer to other standards such as city construction specifications that are also available on the city's website or by contacting the city engineer.

1.2 Purpose. These standards provide greater procedural and technical specificity than do City Code provisions, express the city's expectations for subdivision development, provide criteria for review of subdivision plans by the city engineer, and provide property owners and developers certainty regarding city requirements. They advance public interests by providing predictable, consistent standards for the development of city and utility infrastructure. Current and future owners of lots in plats can be assured of the dimensions and quality of developed infrastructure and that provision has been made for the completion of that infrastructure. Developers can be assured that the standards applied to their development are the same standards applied to previous developments and that will be applied to future developments.

1.3 Adoption. These standards were approved by the planning commission at a public meeting held on _____, 2019. Any modification or amendment will require similar approval by the city's planning commission.

Division 2
Definitions and Interpretation

2.1 Definitions. The following definitions shall apply to the acronyms, terms and phrases used in these standards unless the context clearly indicates otherwise.

2.1.1 *AASHTO* means American Association of State Highway and Transportation Officials.

2.1.2 *ANSI* means American National Standard.

2.1.3 *ASTM* means American Society for Testing Materials.

2.1.4 *AWWA* means American Water Works Association.

2.1.5 *City* means City of Wyoming, Michigan.

2.1.6 *City attorney* means the person appointed by the city council as the city attorney or that person's designee(s).

2.1.7 *City Code* means the Code of Ordinances, City of Wyoming, Michigan.

2.1.8 *City construction specifications* means the then most current city construction specifications available on the City's website or from the city engineer.[1i]

2.1.9 *City council* means the City Council of the city.

2.1.10 *City engineer* means an individual designated by the city manager or DPW director as the city engineer and that individual's designee(s) and superiors.

2.1.11 *City manager* means the individual appointed as the city manager by the city council, that individual's designee(s), and any individual duly authorized to act in that individual's stead.

2.1.12 *City planner* means the individual appointed as the city planner by the city manager.

2.1.13 *City zoning* approvals means any approvals granted pursuant to the city's zoning ordinance including, without limitation approvals of conditional rezoning, planned unit development, special land use, uses permitted after special approval, site plan, or variance.

2.1.14 *County* means Kent County, Michigan.

2.1.15 *Developer* means the person seeking approval of a subdivision plat and responsible for constructing that plat.

2.1.16 *DPW* means the city's department of public works and any successor agency.

2.1.17 *DPW director* means the individual appointed by the city manager to be the director of the DPW or that individual's designee(s) and superiors.

2.1.18 *Drain commissioner* means the county drain commissioner or that individual's designee(s).

2.1.19 *Land Division Act* means the Michigan Land Division Act, 1967 PA 288, MCL 560.101 *et seq*. or any replacement statute.

2.1.20 *LARA* means the Michigan Department of Licensing and Regulatory Affairs, Office of Land Survey and Remonumentation or any successor agency.

2.1.21 *MDEGLE* means the Michigan Department of Environment, Great Lakes, and Energy or any successor agency.

2.1.22 *MDOT* means the Michigan Department of transportation and any successor agency.

2.1.23 *Performance guarantee* means a cash deposit, irrevocable standby letter of credit, performance bond or other security in a form and substance approved by the city manager, city engineer and city attorney and in an amount determined by the city engineer sufficient to ensure completion of the construction and installation of all public improvements and filing of required record drawings if the developer fails to complete them.

2.1.24 *Person* means an individual or entity (*i.e*., association, corporation, limited liability company, partnership, trust or other legally established entity or group).

2.1.25 *Planning commission* means the city's Planning Commission established under the City Code, the members of which are appointed by the city council.

2.1.26 *Plat* means a subdivision plat as that term is defined in the Land Division Act.

2.1.27 *Plat approval conditions* means any conditions accompanying any approval of the preliminary or final plat imposed by the city council, planning commission or any other governmental agency or official of competent jurisdiction whose approval of the plat is required.

2.1.28 *Private utilities* means all the required lines, pipes, wires, cable, poles, drops, antennas, cabinets, meters, boxes, converters, transformers, transmitters and other devices, facilities and improvements needed within a plat to provide electric, natural gas, telecommunications, or other utility or telecommunications services that are owned and operated by entities other than governmental entities or authorities to all lots within the plat.

2.1.29 *Property corner marking* means the marking of property corners in accordance with the Land Division Act and any LARA requirements.

2.1.30 *Public improvements* means private utilities, public utilities, street and sidewalk system and property corner markings.

2.1.31 *Public utilities* means all the pipe, ducts, meters, wires, mains, chambers, manholes, catch basins, pumps, valves, lift stations, outlets and other devices, facilities and improvements needed within a plat to provide public water, public sanitary sewer and public stormwater utilities or systems owned and operated by any governmental entity or authority that serve the area in which the plat is located, including, without limitation, the city's water system, sanitary sewer system and regional stormwater system, to all lots within the plat.

2.1.32 *Street and sidewalk system* means all street and sidewalk improvements within the plat or that are to be undertaken by the developer in conjunction with the plat including, without limitation, curbs, gutters, sidewalks, paved portions of the street, street lighting, traffic signals, signage, pavement markings, crosswalks, landscaping within boulevards, curb-cuts to common amenities, non-motorized pathways and any other improvements needed or anticipated as part of the plat development for vehicular or pedestrian ingress to, egress from, or travel within the plat.

2.1.33 *Ten States Standards* means the Recommended Standards for Wastewater Facilities: Policies for the Design, Review, and Approval of Plans and Specifications for Wastewater Collection and Treatment Facilities, Report of the Wastewater Committee of the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 2014 or more current edition.

2.2 Other words. Acronyms, terms and phrases not defined in section 2.1 shall have the meanings provided by applicable City Code or state statutory provisions, or, if not defined in applicable ordinances or statutes, their ordinary meanings.

2.3 Interpretation. If there is an irreconcilable conflict between these standards and a City Code provision or state law, the City Code provision or state law will apply.

Division 3
General Requirements

3.1 Developer responsible. The developer must, without cost to the city (except as may otherwise be agreed by a contract with the city), must submit for the city engineer's review and approval plans and specifications for and must construct and install all public improvements within any plat.

3.2 Plan submission and approval. The developer must submit to the city engineer for the city engineer's review and approval, a complete set of construction plans for all public improvements to be constructed or installed in the plat.

3.2.1 Those construction plans must:

3.2.1.1 Comply with these standards, city construction specifications, other requirements of the City Code, zoning approvals, plat approval conditions, requirements of other governmental officers or agencies of competent jurisdiction, and requirements of any private utilities providers;

3.2.1.2 Be prepared and sealed by a registered engineer licensed to practice in Michigan;

3.2.1.3 Include profiles, cross-sections, intersection grading details, specifications, and other supporting data; and

3.2.1.4 Be based on the preliminary plat and on preliminary plans approved with the preliminary plat and shall be prepared in conjunction with the final plat;

3.2.1.5 Meet all LARA requirements; and

3.2.1.6 Meet all plat approval conditions.

3.2.2 Construction plans are also subject to approval by and must comply with the requirements of:

3.2.2.1 Any private utilities that will be serving lots within the plat; and

3.2.2.2 The drain commissioner and any other governmental official or agency of competent jurisdiction.

3.2.3 If the city engineer reasonably believes the proposed construction plans will not meet the requirements of subsection 3.2.2, the city engineer may refrain from giving the city engineer's approval until the developer has obtained the approvals required by subsection 3.2.2.

3.2.4 The city engineer must not approve any construction plans unless they meet the requirements of this section.

3.2.5 Unless otherwise provided as part of the approval with a corresponding term of any performance guarantee, an approval pursuant to this section 3.2 must require completion of the construction and installation of the public improvements and filing of related record drawings as required in these standards within 1 year of the date of the approval.

3.3 Permits and other approvals. The developer must obtain and meet all requirements of all permits and other approvals needed to construct and install the public improvements from any other persons, including without limitation, any city or other governmental agencies or officials of competent jurisdiction.

3.4 Construction.

3.4.1 Construction and installation of all public improvements must be either:

3.4.1.1 Fully completed before final plat approval, or

3.4.1.2 Secured by a performance guarantee.

3.4.2 Construction and installation of all public improvements must be in accordance with:

3.4.2.1 The construction plans and specifications approved by the City engineer,

3.4.2.2 Any city zoning approvals,

3.4.2.3 Approvals and conditions by any other governmental officials or agencies of competent jurisdiction,

3.4.2.4 Approvals and conditions of any private utilities whose approval was required, and

3.4.2.5 Any other requirements of the City Code.

3.4.3 The city engineer may inspect the construction and installation of all public improvements to ensure compliance with the requirements in this section 3.4. The developer shall ensure that any contractor or other person constructing and installing public improvements allows for such inspection and does not cover any work pending such inspection unless otherwise approved by the city engineer.

3.4.4 Compliance with the requirements of this section 3.4 is a condition of any approval given by the city engineer or any other city body or official for the construction and installation of the public improvements.

3.4.4.1 The city engineer may revoke any permits or other approvals and issue a stop work order if the construction or installation fails to comply with the requirements of this section 3.4.

3.4.4.2 An appeal of any such action may be made to the city council in accordance with section 1-29 of the City Code.

3.4.5 Failure to construct and install the public improvements in accordance with this section 3.4 is also a violation of section 74-121 of the City Code, punishable in the manner provided for such violations.

3.4.6 Except as provided in the next sentence, no building or occupancy permits will be issued for any homes or other buildings or improvements on any lot within a plat until the public improvements are completed and record drawings filed as required by these standards. Building permits may be issued for up to 3 model homes within the plat without completion of all the public improvements providing the following criteria are met:

3.4.6.1 The model home is within 300 feet of a completed public street.

3.4.6.2 The city fire department determines that the home will be accessible by fire department equipment and personnel during and after construction and a sufficient water supply will be available to fight a fire.

3.4.6.3 Electric, natural gas, storm sewer, water, and sanitary sewer service connections are available for the model home and will be functioning prior to completion of the model home.

3.4.6.4 The developer acknowledges in writing that the model home will not be sold, no sales or other contract for its sale or occupancy will be entered into, and no overnight use or other occupancy as a residence will occur until the public improvements are completed as required by these standards, record drawings are filed as required by these standards, and final plat approval is obtained.

3.5 As-built plans/record drawings. Within 60 days after the completion of the construction and installation of the public improvements and before the City grants final approval of plat construction or the release of any performance guarantee, the developer must

3.5.1 Locate all underground utilities in response to all Miss-Dig requests, and then

3.5.2 File with the city engineer, a mylar copy of as-built engineering plans for all the public improvements along with a digital AutoCAD record file with as-built measurements.

Failure to provide the necessary record drawings may result in a discontinuance of building permits and site inspections.

3.6 Performance guarantee. Unless all construction of public improvements are complete, a performance guarantee that is sufficient to ensure completion of all uncomplete public improvements must be provided to the city before final plat approval is considered. No reductions in a performance guarantee will be allowed unless it is a cash deposit. If the public improvements are not completed as required by these standard by the completion date specified in these standards or within the approval of the construction plans, the city shall have the right to complete the work or otherwise avail itself of remedies in the performance guarantee. The city may engage its own personnel, outside contractors, or both city personnel and outside contractors to complete the public improvements and may draw upon the performance guarantee for payment. No building or occupancy permits shall be issued by the city until all work is completed and approved by the city, except that up to three building permits may be issued for model homes.

3.7 Easements. The developer must convey to the city before constructing any public utilities or at another time agree upon by the developer, city engineer and city manager all necessary easements for any public utilities outside of the proposed city right-of-way. The easements must be in a form and substance acceptable to the city engineer and city attorney and convey rights to access and maintain the system(s) without the need to remove, reconstruct, shore or brace any structures. Easements must be 30 feet or greater in width depending upon utility depth or other conditions.

3.8 Engineering inspection fees. Before starting construction or installation of any public improvements the developer must file a certified check or money order in the amount of 4.0% of the reasonably calculated contract construction cost of the street and sidewalk system and the public utilities within the plat for engineering services performed by the city shall be deposited with the city treasurer.

Division 4
Streets, Sidewalks, and Other Rights-of-Way

4.1 Lots adjoining thoroughfares. Where the subdivision abuts or contains an existing or proposed major thoroughfare, the planning commission may require the construction of marginal access streets, reverse frontage lots with provision for screen planting contained in a non-access reservation along the rear property lines with a minimum width of 15 feet or with side lot lines parallel to major thoroughfares, deep lots with rear-service alleys or other treatment which the planning commission considers essential for adequate protection of residential lots and for separation of through and local traffic.

4.2 Half-streets. Half-streets are not permitted where a subdivision adjoins undeveloped property, except for such major thoroughfares over 60 feet in right-of-way width as may be recommended in the city's master plan. They may be permitted only when the planning commission considers the use of a half-street essential to the reasonable development of the subdivision in accordance with the intent of these regulations and where the planning commission finds its practicable to require the dedication of the other half of the right-of-way when the adjoining property is subdivided. Whenever there already exists a dedicated and recorded half-street on an adjoining plat, the other half must be dedicated on the proposed plat to make the street complete.

4.3 Cul-de-sacs.

4.3.1 The maximum permissible length of cul-de-sacs must be 500 feet measured from the right-of-way line of the nearest intersecting street to the farthest point on the right-of-way line of the cul-de-sac.

4.3.1.1 Each residential cul-de-sac must be provided at its closed end with a turn-around having a diameter at the outside of the roadway pavement of at least 70 feet and a property line diameter of at least 100 feet. The remaining portion of the cul-de-sac must have a right-of-way width of at

least 60 feet. The straight portion of the right-of-way must be joined to the circular portion of the right-of-way by circular curve with radii not less than 50 feet.

4.3.1.2 Each industrial cul-de-sac must be provided at its closed end with a turn-around having a diameter at the outside of the roadway pavement of at least 90 feet and a property line diameter of at least 110 feet. The remaining portion of the cul-de-sac must have a right-of-way width of at least 66 feet. The straight portion of the right-of-way must be joined to the circular portion of the right-of-way by circular curve with radii not less than 50 feet.

4.3.2 The planning commission may allow a longer cul-de-sac, up to 1,000 feet, where it deems that there are topographic, boundary, or other circumstances unique to the property or lands surrounding it.

4.3.3 Dead end streets must be constructed within the limits of the proposed development if the adjoining property is owned by someone other than the developer. If the development terminates the dead-end road within the limits of the developer's property, the temporary turnaround must be completed outside the limit of the proposed development. The requirement to construct a dead end street may be waived if the street has fewer than 3 adjoining lots. The temporary turnaround must be constructed with 3 or more adjoining lots.

4.4 Basic design requirements. Public street and sidewalk systems shall be designed and constructed in accordance with the following:

4.4.1 Current *AASHTO Policy on Geometric Design of Highway and Streets*.

4.4.2 Other applicable AASHTO policies.

4.4.3 Current MDOT Standard Specifications for Construction.

4.4.4 Current city construction specifications.

4.4.5. Minimum right-of-way width must be 60 feet. The planning commission may require greater right-of-way widths for major thoroughfares in accordance with the city's thoroughfare plan.

4.5 Specific street requirements.

4.5.1 Street names must not cause confusion with names of existing streets in or near the city or within the 9-1-1 coverage area. Streets that will be continuations of existing streets must have the same names of the existing streets. Names may include a maximum of 13 characters, including spaces.

4.5.1 The centerline of pavement must coincide with the centerline of the right-of-way, except for irregular right-of-way widths.

4.5.3 Profiles are required on all streets. The minimum gradient allowed must not be less than 1 percent and not greater than 5 percent for major thoroughfares or 6 percent for local streets except as approved by the city engineer.

4.5.4 Horizontal curvature measured along the street centerline must have a minimum radius of 300 feet for major streets, 150 feet for local streets, and 30 feet for local street cul-de-sacs which have a length of 300 feet or less, measured along the street centerline from the curve midpoint to the end of the cul-de-sac.

4.5.5 Design speeds must be a minimum of 25 mph for local streets and 40 mph for major streets.

4.5.6 The minimum length for all vertical curves must be 100 feet.

4.5.7 Standard street cross-sections must be as shown in city construction specifications.

4.5.7 Intersections.

4.5.7.1 The centerline of streets must intersect at 90 degrees plus or minus 5 degrees. Approaches to street intersections must be straight for a distance of at least 100 feet from the centerline of the street intersected.

4.5.7.2 No street intersection may be located closer to another intersection than 200 feet, measured from centerline to centerline.

4.5.7.3 The intersections must be provided with a minimum slope to facilitate drainage. This minimum slope must be carried back 150 feet each way from the intersection, measured from the centerline of the intersected street. An allowance of 3% maximum intersection grade will be permitted for local streets and 1% maximum for major streets.

4.5.8 Vision clearance shall be provided on all corner lots based upon the following:

4.5.8.1 *Vision clearance corner* means any lot bordering 2 intersecting streets. The corner must be a triangle, 2 sides of which are the street lot lines measured from the intersection of the street lot lines to points 13 feet away and the third side connecting those points. If either abutting street is more than 66 feet wide, 25 feet must be used instead of 13 feet. If the street lot lines do not intersect, the measurement must be along the tangents of the street lot lines as extended.

4.5.8.2 Within the vision clearance corner, the following shall apply:

4.5.8.2.1 Any shrubbery, structure, wall, fence, sign, or other device shall not exceed 2 ½ feet in height above the adjoining street level.

4.5.8.2.2 A sign with a post no larger than one foot in diameter shall be allowed if no part of the sign is lower than 10 feet from the adjoining street level.

4.5.8.2.3 Tree branches shall be a minimum of 10 feet above the adjoining street level within the vision clearance corner.

4.5.9 Driveways must meet all applicable state construction code standards. Residential drive approaches shall be constructed to meet all applicable city construction standards and must not exceed a maximum width as measured at the front of walk based upon the following policy:

4.5.9.1 No garage	20 feet maximum
4.5.9.2 One or two car garage	20 feet maximum
4.5.9.3 Three or more car garage	30 feet maximum

4.5.10 The following requirements apply to by-pass lanes on two-lane streets:

4.5.10.1 All street and drive entrances into plats, planned unit developments, and individual site developments abutting two-lane streets, shall be evaluated concerning the need for by-pass lanes. That evaluation must employ the criteria identified in the current edition of the *AASHTO Policy of Geometric Design of Highways and Streets* and must be based on the following traffic projections and the existing geometric configuration:

4.5.10.1.1 Existing street:	City thoroughfare plan ADTs
4.5.10.1.2 Proposed street/drive:	Ultimate development ADT

4.5.10.2 The following by-pass lanes must be constructed for single owner developments:

4.5.10.2.1 Single Site:	Construct with site improvements
4.5.10.2.2 Single-phase plat/PUD:	Construct with public improvements
4.5.10.2.3 Multi-phase plat/PUD:	An agreement between the developer and city is required to construct with a specific future phase of the development and to provide a performance guarantee.

4.5.10.3 Necessary by-pass lanes shall be implemented as follows for multi-phase, multi-owner developments:

4.5.10.3.1 If a single-phase is adjacent to an existing two-lane street and independently meets the criteria for a by-pass lane, then a by-pass lane must be constructed as above for a single-phase plat/PUD.

4.5.10.3.1 All other situations will be addressed by the city and developer in an agreement acceptable to the city manager, city engineer and city planner.

4.6 Sidewalks. Sidewalks must be constructed on both sides of the street except in instances and locations where the city council waives this requirement owing to special conditions of the property.

4.6.1 A developer may file a written request with the city planner for an exemption from this requirement on the basis of existing and proposed land uses, transportation modes, including pedestrian and bicycle pathways, topographical features, contour elevations, trees, natural vegetation, and general natural characteristics of the land that sidewalks would be substantially detrimental to the characteristics and that sidewalks do not promote the safety, welfare, and convenience of the public. The city council will act upon the request following a recommendation from the planning commission.

4.6.2 Sidewalks must be constructed before final plat approval unless all of the following apply:

4.6.2.1 The plat includes restrictive covenant requiring the construction of the adjoining sidewalk before an occupancy permit is issued for any home or other building built on any lot.

4.6.2.2 Sidewalks adjacent to all common amenities and open spaces are constructed prior to final plat approval or, with a performance guarantee and an agreement between the city and the developer specifying a date certain when they will be completed.

4.6.2.3 Unless otherwise provided in an agreement with the city accompanied by a performance guarantee, all sidewalks shall be completed within 3-years of final plat approval.

4.7 Pedestrian ways. The planning commission may require the construction of pedestrian ways to obtain convenient public circulation in designated right-of-way easement areas situated in residential neighborhoods or public properties. The right-of-way shall be at least 14 feet wide for a 10 foot wide path with two 2 foot shoulders for the entire length.

4.8 Street lights. The developer shall provide street lights throughout the development in a number, spacing and arrangement approved by the city engineer.

4.8.1 After preliminary plat approval is given for a plat, the developer must submit a written request to the city engineer to submit a request to the local power company to prepare street lighting plans for all public streets in the plat and agree to pay for the design and installation of said street lights.

4.8.1.1 The request letter shall be on Developer's company letterhead and signed by the developer.

4.8.1.2 The letter shall formally request the City seek a design from the electric utility company for the installation of street lights throughout the plat.

4.8.1.3 The letter shall state that the developer will pay the City in advance for 100 percent of the cost of the design and installation of the street light system throughout the plat.

4.8.2 The power company will prepare a design for installation of street lights and determine the estimated cost of installation.

4.8.3 The City shall notify the owner of the plat and the developer shall send to the city engineer a check payable to the city to cover the cost of said street lighting.

4.8.4 After receipt of the check, the city Council shall authorize the local power company to install the street lights in construction with the construction of the street improvements.

Division 5
Utilities

5.1 Public water system.

5.1.1 Public water systems must be designed and constructed in accordance with the following:

5.1.1.1 All applicable AWWA standards.

5.1.1.2 Current city construction specifications.

5.1.1.3 Any applicable MDEGLE or other state requirements.

5.1.2 The developer must install water mains including a water service for each lot in all streets.

5.1.3 The maximum distance between fire hydrants shall be 400 feet.

5.1.4 The minimum water main size for single-family residential plats is 8-inches diameter. The minimum water main size for commercial-industrial lots is 12-inches diameter.

5.1.5 All water mains must be ductile iron and all water services less than or equal to 2-inches shall be copper.

5.2 Public sanitary sewer system.

5.2.1 Public sanitary sewer systems must be designed and constructed in accordance with the following:

5.2.1.1 Ten State Standards.

5.2.1.2 Current city construction specifications.

5.2.1.3 Any applicable MDEGLE or other state requirements.

5.2.2 The developer must install sanitary sewers including a sanitary lateral for each lot in all streets.

5.2.3 The maximum distance between manholes shall be 300 feet and a manhole shall be placed at all grade changes, or horizontal angles.

5.2.4 The minimum sanitary sewer main size for single-family residential plats is 8-inches diameter. The sanitary sewer main minimum size for commercial-industrial lots is 12-inches diameter.

5.2.5 If any sanitary sewer serves an industrial zones area, the sewer shall be constructed of clay pipe, unless otherwise approved by the city engineer.

5.3 Public stormwater system. Public stormwater systems shall be designed and constructed in accordance with the following:

5.3.1 City Code chapter 71.

5.3.2 Current city construction specifications.

5.3.3 Any applicable MDEGLE or other state requirements.

5.4 Private utilities.

5.4.1 Private utilities must be planned and constructed in accordance with current city construction specifications and any requirements of the private utility.

5.4.2 All private utilities must be constructed underground.

5.4.3 All private utility street crossings shall be completed prior to the construction of street improvements. Private utility companies shall design their systems to minimize the number of street crossings. As necessary, each private utility company shall schedule the placement of casings, for future street crossings, prior to the start of the street improvements.

[i1] Website: https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications. Currently, the following are listed. They may be updated or modified by the city engineer when the city engineer deems it necessary or advisable to do so.

Construction Specifications

Division 01 General Conditions
Division 02 Clear & Grub & Tree Rem
Division 03 Removals
Division 04 Street Grading
Division 05 Subgrade
Division 06 Sub-base Material
Division 07 Concrete
Division 08 Reinforced Concrete Structures
Division 09 Concrete Curb & Gutter
Division 10 Concrete Sidewalk & Drives
Division 11 Aggregate Base
Division 12 Bituminous Pavements
Division 13 Excavation & Backfill
Division 14 Sewers
Division 15 Watermains
Division 15 Watermain Testing Procedure
Division 16 MHs, CBs, Valve Chambers
Division 17 Force mains
Division 18 Restoration
Division 19 Bore and Jacking

Details

I-21 Rural Cross Section
I-22 Utility Cross Section
I-23A 31ft Street Cross Section
I-23B 25ft Traffic Calming Cross Section
I-23C 33ft Street Cross Section - Residential Plat
I-23D 37ft Residential Collector - 66ft ROW
I-23E 53ft Four Lane Cross Section
I-23F 60ft Five Lane Cross Section
I-23G 71ft Six Lane Cross Section
I-24 35ft Radius Cul-de-sac
I-25A Rolled (Mountable) Combined Curb and Gutter
I-25B 18in Concrete Island Curb and Gutter
I-25C Concrete Rumble Strip Detail
I-25D Concrete Collar
I-25E 30in Vertical Face Curb
I-26 Residential Drive Approach
I-27A Commercial-Industrial Drive Approach
I-27B Commercial-Industrial Drive Approach
I-28A Depressed Sidewalk-Drive Approach
I-28B Depressed Sidewalk-Drive Approach
I-28C Sidewalk with Integral Curb
I-29A Concrete Step
I-29B Grouted Broken Concrete Retaining Wall
I-29C Treated Timber Wall
I-30A Sidewalk Ramp Type I
I-30B Sidewalk Ramp Type I
I-30C Sidewalk Ramp Type II
I-30D Sidewalk Ramp Type II Case I
I-30E Sidewalk Ramp Type II Case II
I-31 Sidewalk Ramp Type I
I-32A Tree Planting Detail
I-32B Urban Tree Planting
I-33 Guard Post for Temporary Streets
S-01 Standard Alley Grate Basin
S-02 Standard Catch Basin
S-03 Standard Mini Catch Basin
S-04 Standard Double Catch Basin
S-05A 2ft Standard Drop Inlet
S-05B 4ft Standard Drop Inlet
S-05C Standard Leeching Basin
S-06 Wyoming Standard Manhole Cover and Flange
S-06A Standard Manhole Cover and Base Flange
S-06B Revised Special Lettered Cover
S-07 Precast Sanitary Sewer Manhole
S-07A 4ft Drainage Structure
S-07B 5ft Drainage Structure
S-07C 6ft Drainage Structure
S-07D 7ft Drainage Structure
S-07E 8ft Drainage Structure
S-08 Standard Manhole for Large Diameter Sewer
S-09 The Manhole for 48in to 60in Diameter Sewer
S-10 Riser Detail
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