Elwood Town, Utah
Title 11—Subdivisions

Chapter 11.10
Development Standards

11.10.010 General Improvements
11.10.020 Lot Improvements
11.10.030 Streets
11.10.040 Storm Drainage
11.10.050 Subsurface Drainage
11.10.060 Water Facilities
11.10.070 Secondary Water System
11.10.080 Sewerage Facilities
11.10.090 Sidewalks
11.10.100 Curb and Gutter
11.10.110 Utilities
11.10.120 Public Uses
11.10.130 Irrigation Water
11.10.140 Preservation of Natural Features and Amenities
11.10.150 Non-Residential Subdivision

11.10.010 General Improvements:

A. Conformance to Applicable Rules and Regulations.

In addition to the requirements established herein, all subdivision plats shall comply with the following laws, rules, and regulations:

1. All applicable statutory provisions;

2. The Town Zoning Ordinance, building and housing codes, and all other applicable laws of the Town;

3. The General Plan, Official Street Map, and Capital Facilities Plan of the Town (as may be applicable), including all streets, drainage systems and parks shown on the Official Street Map or General Plan as adopted;

4. The special requirements of these regulations and any rules of the Health Department and/or appropriate state agencies;

5. The rules of the State Highway Department if the subdivision or any lot contained therein abuts a state highway;

6. The Town of Elwood Public Works Standards and Technical Specifications; and

7. The Town of Elwood Culinary Water System Standards and Specifications.

B. Monuments.

1. The developer shall place permanent reference monuments in the subdivision as required herein and as approved by the Town Engineer.

2. Monuments shall be located on street right-of-way center lines, at street intersections, and at such other points as determined necessary by the Town Engineer.

3. All monuments shall be set in an approved ground box as specified in the public works standards for the Town.

4. All monuments shall be properly set in the ground by the developer and approved by the Town Engineer prior to the time the Town Council grants conditional acceptance of the subdivision.

C. Character of the Land.

Land which the Planning Commission finds to be unsuitable for subdivision or development due to flooding, wetlands, improper drainage, steep slopes, rock formations, adverse earth formations or topography, utility easements or other such features which will be reasonably harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas, shall not be laid out or platted or developed unless adequate methods are formulated by the developer and approved by the Planning Commission and Town Council, upon recommendation of the Town Engineer, to solve the problems created by the unsuitable land conditions. Such land shall be set aside for uses as shall not involve such a danger.

D. Soil Conditions.

1. Buildings or structures shall not be situated on soft or unsuitable soils, as determined by the Town Engineer, where there is a high water table, or a site subject to flooding as noted on the Town's Flood Plain Map, or on uncompacted fill in accordance with the Town of Elwood Public Works Standards.

2. A geotechnical study may be required of the developer/land owner to assist the Town and Town Engineer in making a determination of suitability for development.

E. Subdivision Name.

The proposed name of the subdivision shall not duplicate or too closely approximate phonetically the name of any other subdivision in Box Elder County.

11.10.020 Lot Improvements:

A. Lot Arrangement.

The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits to build on all lots in compliance with the Zoning Ordinance and Health Regulations and in providing driveway access to building on such lots from an approved street.

B. Lot Dimensions.

1. Lot dimensions shall comply with the minimum standards of the Zoning Ordinance.

2. Where lots are more than double the minimum required area for the zoning district, the Planning Commission may require that such lots be arranged so as to allow further subdivision and the opening of future streets where they would be necessary to serve such potential lots, all in compliance with the Zoning Ordinance and these regulations.

3. In general, side lot lines shall be at right angles to street lines (or radial to curving street lines) unless variation from this rule will make a better lot to allow for the erection of buildings, observing the minimum front-yard and side setbacks from both streets.

4. Depth and width of properties reserved or laid out for business, commercial, or industrial purposes shall be adequate to provide for the off-street parking and loading facilities required for the type of use and development contemplated, as established in the Zoning Ordinance.

5. All property located within a subdivision shall be included within the boundaries of a road, lot, or other improved area such that no parts or parcels of land therein remain unusable.

C. Double/Reversed Frontage Lots and Access to Lots.

1. Double Frontage Lots.

Double frontage and reversed frontage lots shall be avoided except where necessary to provide separation of residential development from streets or

to overcome specific disadvantages of topography and orientation, as determined by the Planning Commission.

2. Access from Arterial and Collector Streets

   a. Definitions of Arterial and Collector Streets – See Section 11.10.030.

   b. Lots should not, in general, derive access exclusively from an arterial street.

      1. The sole arterial classified street within Elwood Town limits is State Highway 13 and any proposed new driveway accessing this street requires an access permit granted by UDOT.

   b. Where driveway access from a primary or secondary arterial street may be necessary for several adjoining lots, the Planning Commission may require that such lots be served by a combined access drive in order to limit possible traffic hazard on such street; however, UDOT approval of such driveway configuration is required.

   c. Where possible, driveways should be designed and arranged so as to avoid requiring vehicles to back into traffic on collector streets.

D. Restricted or "R" Lot.

1. Restricted lots shall be noted with an "R" designation on the platted lot along with the applicable restrictions and conditions clearly identified on the recorded subdivision plat in a format acceptable to the Town.

2. The "R" designation along with the restrictions and conditions noted on the final plat is to serve as notice to potential lot purchasers of the existence of limitations and conditions imposed upon development of such lots within a subdivision development.

E. Flag Lots.

The Town does not allow flag lots except as permitted by the Town Council in the form of a Variance to the Subdivision Ordinance.

F. Debris and Waste.

1. No cut trees, timber, debris, earth, rocks, stones, soil junk, rubbish, or other waste materials of any kind shall be buried on any land, or left or

deposited on any lot or street at the time of conditional acceptance of the subdivision by the Town Council and removal of the same shall be required prior to final acceptance by the Town Council.

2. Acceptable Exception.

   a. Most, if not all, new roads or streets within a subdivision will require stripping of top soil from the roadway area as part of the road construction. A developer may deposit and evenly spread out the topsoil on the lots within the subdivision, and this would be an acceptable exception to this requirement.

G. Fencing.

1. Each developer shall be required to furnish and install fences wherever the Planning Commission determines that a hazardous condition or incompatibilities in land use may exist on a lot.

2. The fences shall be constructed in accordance with any fencing requirements specified in Town of Elwood ordinances and shall be noted as to height and material on the final construction plans.

3. No certificate of occupancy shall be issued until said fence improvements have been duly installed.

H. Staking of Lots.

1. Permanent corner markers shall be placed at all rear lot corners to completely identify the lot boundaries on the ground.

2. Front lot corners, where curb and gutter is required and/or provided, shall be identified with permanent reference plugs or nails in the concrete curb at an offset which is perpendicular to the curb and gutter from the actual lot corner location.

3. All lot corner markers must be in place prior to the issuance of building permits and after the completion of all subdivision improvements. All lot corners shall be established and monumented in accordance with State/County survey laws.

I. Frontage on Freeways or State Highways.

Where a subdivision abuts a Freeway or State Highway, a frontage road may be required by the Land Use Authority who is responsible for the Subdivision Application approval.

11.10.030 Streets:

A. Definitions.

1. Local Street: A thoroughfare dedicated to the public and accepted by proper public authority, or a thoroughfare of standard width which has become a public thoroughfare by right of use and which affords the principal access to the abutting property.

2. Collector Street: A street, existing or proposed, of considerable continuity which is a primary means of access to the major street system, and is designated a collector street on the Town Transportation System Master Street Plan.

3. Arterial Street: A street existing or proposed, which serves or is intended to serve as a major traffic-way and is designated on the Town Transportation System Master Street Plan, may be classified as a controlled access highway, major street, parkway or other equivalent term to identify those streets comprising the basic structure of the Town Transportation System Master Street Plan.

B. Street Sections - Drawings.

1. The following five different drawings of various categories of streets that coincides with the effort to describe and detail the construction standard requirements for different streets in the Town are attached at the end of Chapter 11.10:

a. ***Sheet 1*** is a standard street section for Local Streets - 60 feet wide ROW with no proposed curb and gutter or sidewalk. This applies to lot sizes of one acre and greater.

b. ***Sheet 2*** is a standard street section for Collector Streets - 66-foot wide ROW and no sidewalk.

c. ***Sheet 3*** is the standard street section for Collector Streets - 66-foot wide ROW with sidewalk.

d. ***Sheet 4*** represents the standard street section for Local and Collector Streets - 60 feet and 66 feet wide respectively - with full improvements including curb and gutter and sidewalk. This applies to lot sizes of any lots less than an acre.

e. ***Sheet 5*** is the standard street section for Arterial Streets - 80-foot ROW with sidewalks.

C. General Requirements.

1. Frontage on Improved Streets.

   a. No subdivision shall be approved unless the area to be laid out and platted shall have frontage on and access from an improved and dedicated Town street, unless the street is an existing state highway.

   b. Wherever the area to be laid out and platted utilizes existing street frontage, such street shall be fully improved as required by the Public Works Standards unless otherwise provided for by the Town Council.

   c. Access to subdivisions must be from an existing, maintained public roadway of sufficient width and improvement to meet minimum requirements for the assurance of public safety as determined by the Town Engineer, Police, and Fire Departments.

2. Grading and Improvement Plan.

   Streets shall be graded and improved and conform to the Town of Elwood Public Works Standards and shall be approved as to design and specifications by the Town Engineer, in accordance with the construction plans required to be submitted prior to final plat approval.

D. Topography and Arrangement.

1. Streets shall be related appropriately to the topography.

2. All streets shall be arranged so as to obtain as many as possible building sites at or above the grades of the streets.

3. Grades of streets shall conform as closely as possible to the original topography.

4. A combination of steep grades and curves shall be avoided and at no time shall the grade be greater than 12% (twelve percent).

5. Specific standards are contained in the Public Works Standards of The Town of Elwood.

E. Integrated Streets.

1. All streets shall be properly integrated with the existing and proposed system of thoroughfares and dedicated rights-of-way established in the Transportation Circulation Plan of the General Plan.

2. Such integration shall take topographical conditions into consideration.

3. The street arrangements shall not cause unnecessary hardship to owners of adjoining property when they plat their own land and seek to provide convenient access to it.

4. Half streets proposed along a subdivision boundary or within any part of a subdivision shall not be permitted.

5. Standard residential streets shall approach the arterial or collector streets at an angle of not less than ninety (90) degrees.

6. All streets shall be properly related to special traffic generators such as:

   a. Industries, business districts, schools, churches, and shopping centers;

   b. Population density; and

   c. The pattern of existing and proposed land uses.

F. Local streets.

1. Local streets shall be laid out to conform as much as possible to the topography, to discourage use by through traffic, to permit efficient drainage and utility systems, and to require the minimum number of streets necessary to provide convenient and safe access to property.

2. Proposed streets shall be extended to the boundary lines of the subdivision.

3. All streets extended beyond the boundary lines of the subdivision as part of phased development, and where such extension is upon property owned by the developer, the street shall be properly terminated with a temporary turn-around which shall have a minimum radius of fifty (50) feet and shall have a structural section of at least six (6) inches of compacted and stabilized untreated base course over a minimum of twelve (12) inches of compacted imported granular borrow on a prepared and stabilized sub-grade and shall have sufficient stability to support snow plows, emergency vehicles, school busses, and trash collection trucks.

a. Said temporary turnaround shall be provided with a temporary turnaround easement with a 55-foot radius granted to the Town of Elwood which is automatically abandoned in the future by a condition provided in the OWNERS DEDICATION on the Final Plat as follows: "If the turn-around is to be placed within the limits of the proposed development but is intended to be extended by others for future development(s), it shall be a fully improved circular turnaround in conformance with the Elwood Town Public Works Standards with a temporary turnaround easement(s) for that part of the paved circular turnaround which extends beyond the street right-of-way line(s) upon the lot areas.

b. If a terminal stub street extends no more than the length of one lot beyond the intersection, the Town Council may wave the turn-around requirement as stated herein.

G. In commercial, business, and industrial developments, the streets and other access ways shall be planned in connection with the grouping of buildings; and the provision for alleys, truck loading and maneuvering areas, walks, and parking areas shall be planned so as to minimize conflict or movement between the various types of traffic, including pedestrian.

1. Paved streets and street right-of-way width requirements may be increased for these developments by the Town in order to appropriately accommodate anticipated traffic from larger vehicles.

H. All streets in subdivisions within the Town boundaries shall be dedicated to the Town, except that private streets may be approved under special circumstances as determined by the Planning Commission.

I. Arterial, collector and/or local streets shall conform to the width designated on the Transportation Circulation Plan of the General Plan whenever a subdivision falls in an area for which a Transportation System Master Street Plan has been adopted.

1. For territory where such street plan has not been completed at the time the preliminary plat is submitted to the Planning Commission, arterial or collector streets shall be provided as required by the Town of Elwood Public Works Standards.

J. Residential Streets.

1. Elwood's Transportation System Master Street Plan lists the following road types: Arterial (which is the UDOT highway), Collector, Future Collector, and Local.

2. Street Right-of-Way Widths:

   a. Arterial – 80 feet

   b. Collector – 66 feet

   c. Local– 60 feet

K. Cul-de-sacs.

1. Cul-de-sacs shall be not longer than six hundred and fifty (650) feet to the beginning of the turn-around, from the centerline of the intersecting street.

2. Single access cul-de-sac length is limited to thirty (30) single family residential units per the International Fire Code Appendix D, Section D107.

   a. The point of commencement for the single access is that location where a driver can exit in two directions.

   b. For developments that create a situation involving more than 30 units on a single access, an additional access is required.

      i. An additional access can be either an emergency access road, a 'secondary' access road, or a full Town street - such is to be determined by the Fire Marshal, Town Public Works Director and Town Engineer with the ultimate decision authority by the Town Council.

      ii. Applicant must enter into a binding agreement for year-round maintenance of secondary access with practical physical implementation.

3. Each Cul-de-sac must be terminated by a turnaround of not less than fifty-five (55) feet radius.

4. If surface water drainage is directed into the turnaround, due to the grade of the street, a storm drain pipe system complete with catch basins shall collect and divert the collected surface water to discharge into an appropriate and approved drainage facility.

L. Utility and Drainage Easements.

Utility and drainage easements shall be dedicated to a minimum width of fifteen (15) feet inside the front property lines of the lots adjacent to the streets, new or existing, unless specified otherwise by the Town or the Town Engineer.

M. Standard street sections and all proposed streets, whether public or private, shall conform to the Elwood Public Works Construction Standards as recommended by the Town Engineer and adopted by the Town Council.

N. Streets with Numerical Address or Assigned Name.

Where possible and reasonable, all streets shall have a numerical address number assigned to them, unless the Planning Commission determines, based upon topography and alignment and other like considerations, that streets should be assigned names because of the non-conformance of the street(s) to follow a reasonable east-west and/or north-south grid pattern.

O. Blocks.

1. Blocks shall have sufficient width to provide for two (2) tiers of lots of appropriate depths. Exceptions to this prescribed block width may be permitted in blocks adjacent to major streets, waterways, or topography concerns.

2. The lengths, widths, and shapes of blocks shall be such as are appropriate for the locality and the type of development contemplated, but block lengths in residential areas shall not exceed one thousand three hundred twenty (1,320) feet or twelve (12) times the minimum lot width required in the zoning district, whichever is less, nor be less than four hundred (400) feet in length.

3. Wherever practicable, blocks along major streets and collector streets shall be not less than six hundred sixty (660) feet in length.

4. In long blocks, the Planning Commission may require the reservation of an easement through the block to accommodate utilities, drainage facilities, or pedestrian traffic.

5. Pedestrian ways or crosswalks, not less than six (6) feet wide, may be required by the Planning Commission through the center of blocks more than eight hundred (800) feet long where deemed essential to provide circulation or access to schools, playgrounds, shopping centers, transportation, or other community facilities.

P. Access to Major Streets.

Where a subdivision borders on or contains an existing or proposed major street, the Planning Commission may require that access to such streets be limited by one of the following means:

1. The subdivision of lots so as to back onto the street and front onto a parallel local street;

2. No access shall be provided from the street in the rear, and screening shall be provided in a strip of land no less than five (5) feet in width along the rear property line of such lots.

3. A marginal access or service road, separated from the street by a planting or grass strip and having access thereto at suitable points.

Q. Traffic Control Devices and Street Regulatory Signs.

1. All proposed traffic control devices and street regulatory signs shall conform to the standards of the Manual of Uniform Traffic Control Devices (MUTCD).

2. The developer shall deposit to The Town of Elwood, at the time of final subdivision approval, a sum determined by the Director of Public Works or the Town Engineer for each sign required by the Town.

3. The Town shall install all street signs before issuance of certificates of occupancy for any residence on the streets approved.

4. Street signs are to be placed at all intersections within or abutting the subdivision, the type and location of which shall be approved by the Town Engineer.

R. Design Standards.

1. General.

In order to provide for streets of suitable location, width, and improvement to accommodate prospective traffic and afford satisfactory access to police, fire fighting, snow removal, sanitation, and street maintenance equipment, and to coordinate streets so as to compose a convenient system and avoid undue hardships to adjoining properties, design standards for street sections shall be as outlined in the Town of Elwood Public Works Construction Standards or as otherwise approved by the Town Engineer.

2. Road Surfacing and Improvements.

a. After pipes, lines and related facilities pertaining to sewer, water, gas, cable TV, electricity, and like utility services, where required or available, have been installed by the developer, the developer shall construct curbs and gutters, where required by Elwood Town, and shall surface or cause to be surfaced roadways to the widths

prescribed in these regulations or as specified in the Elwood Town Public Works Construction Standards.

b. Road surfacing shall be in accordance with the Town of Elwood Public Works Construction Standards.

c. Adequate provision shall be made for culverts, drains, and bridges.

d. Driveway approaches shall not be installed at the time of placement of curb and gutter unless approval for a building permit has been issued by the Town.

3. Intersections.

a. Streets shall be laid out so as to intersect as nearly as possible at right angles.

b. A proposed intersection of two (2) new streets at an angle of less than ninety (90) degrees shall not be acceptable.

c. An oblique street shall be curved approaching an intersection and should be approximately at right angles for at least one hundred (100) feet therefrom.

d. Not more than two (2) streets shall intersect at any one point unless specifically approved by the Planning Commission.

e. 3-way intersections are an intersection of two-streets in a "tee" configuration and 4-way streets are an intersection of two streets in a "cross" configuration both are permissible if at 90-degree angles.

f. Proposed new intersections along one side of an existing street shall, wherever practicable, coincide with any existing intersections on the opposite side of such street.

g. Street jogs with center-line offsets of less than one hundred fifty (150) feet shall not be permitted, except where the intersected street has separated dual drives without median breaks at either intersection.

h. Where streets intersect major streets, their alignment shall be continuous on both sides of the major street.

i. Intersection of major streets shall be at least six hundred (600) feet apart, which is Utah Department of Transportation's standard.

j. Driveway accesses near intersections shall be given careful consideration as to location, traffic volumes, and any impacts on the flow of traffic at or near the intersection.

k. Elwood Town may require a developer or property owner to have a traffic study performed by a qualified traffic engineer for any proposed driveway access locations which might hinder, restrict, or interfere with reasonable traffic flow and which may impose a safety hazard to the traveling public.

l. Any proposed new street or individual driveway access which will intersect a Utah Department of Transportation (UDOT) highway shall require an access permit from UDOT's Region One Headquarters permitting officer.

m. Where any street intersection will involve earth banks or existing vegetation inside any lot corner that would create a traffic hazard by limiting visibility, the developer shall cut such ground and/or vegetation (including trees) in connection with the grading of the public right-of-way to the extent deemed necessary to provide an adequate sight distance as determined by the Town of Elwood Public Works Department.

4. Street Dedications and Reservations

a. New Perimeter Streets.

1. Street systems in new subdivisions shall be laid out so as to eliminate or avoid new perimeter half-streets.

2. Where an existing half-street is adjacent to a new subdivision, the other half of the street shall be improved and dedicated by the developer.

3. The Town Council, with or without recommendation by the Planning Commission, may authorize a new perimeter street where the developer improves and dedicates the entire required street right-of-way width within his own subdivision boundaries.

(a) At the discretion of the Town Council, after recommendation of the Planning Commission, and in accordance with all Town Ordinances, the developer may retain a protection strip of one foot in width between the street and adjacent property.

(b) An agreement with the Town, approved by the Town Attorney, shall be made by the developer contracting to dedicate the one foot protection strip free of charge to the Town for street purposes upon payment by the present owners of the contiguous property to the developer of a consideration named in the agreement.

(c) Such consideration is to be equal to the cost, at the time of the agreement, of the street improvements, including utility lines properly chargeable to the contiguous property, plus the value of the land from the right-of-way line to the center line of the street at the time of the agreement together with interest computed at the then statutory rate.

(d) Interest shall accrue only from the time of agreement until the time of subdivision of such contiguous property or ten years from the date of the agreement whichever is less.

(e) All charges to be associated with the protection strip, as well as the interest rate, shall be reviewed and approved by the Town Engineer and shall be recorded as part of the aforementioned agreement.

(f) All property owned by the developer shall be included on both preliminary and final plat.

b. Where the developer is required to improve the full width of an existing Town owned right-of-way on the perimeter of his subdivisions, the Town Council may enter into a similar agreement as outlined above.

(g) In this agreement, the developer will not own a one foot protection strip and the consideration named in the agreement will not include the value of the land or any utilities installed in the right-of-way prior to the agreement.

(h) The agreement will stipulate that before approval is given to the development on the adjacent property abutting the street, the adjacent property owners will reimburse the aforementioned developer as outlined in the agreement.

5. Widening and Realignment of Existing Streets.

a. Where a subdivision borders an existing narrow street or when the General Plan, Official Map, zoning set back regulations or Public Works Standards indicate plans for the realignment or widening of a street that would require use of some of the land in the subdivision, the developer shall be required to improve and dedicate, at his expense, such areas for widening or realignment of such streets.

b. Such frontage streets shall be improved and dedicated by the developer at his own expense to the full width as required by these subdivision regulations.

c. Land reserved for any street purposes may not be counted in satisfying yard or area requirements of the Zoning Ordinance whether the land is to be dedicated to the municipality in fees simple or an easement is granted to the Town.

6. Easement Standards.

a. Utility and drainage easements shall be a minimum of ten (10) feet wide on both sides of every other side lot line of the subdivision lots, fifteen (15) feet wide inside the perimeter of the subdivision, fifteen (15) feet wide inside the front property lines of the lots, and at such other locations as deemed necessary and as directed by the Town.

b. In some cases, larger size easements may be required as directed by the Town or Town Engineer.

c. Proper coordination shall be established between the developer and the applicable utility company for the establishment of off-site utility easements on adjoining properties for the purpose of extending utilities to the subdivision property.

d. All required subdivision easements shall be located and designed to provide efficient installation and maintenance of all utilities and subdivision features. Special guying easements at corners may be required.

e. Public utility installations shall be so located to permit multiple installations within all easements.

f. The subdivision's final grades shall be established prior to any public utility installations.

11.10.040 Drainage and Storm Sewers:

A. Storm water - General Requirements.

1. Subdivisions, commercial projects, site plans and development projects shall make adequate provision for storm water conductance and storm water storage for the increased runoff due to development.

    a. The Town Engineer shall make the determination of adequate provision.

2. Storm water systems shall be designed by a State of Utah licensed professional engineer.

3. The Town Engineer may approve justified and substantiated approaches and designs for storm water in compelling situations.

    a. The Rational Method is an approved methodology – other types of analysis are acceptable as approved by the Town Engineer.

B. Rainfall Hydrology.

Rainfall data shall be based on NOAA Atlas 14 precipitation data in the vicinity of the project.

C. Conveyance Elements.

1. Storm water conveyance facilities (i.e. piping, ditches, culverts, etc.) shall be based on the 10-year storm event for post-development conditions.

2. Structures are to be above 100-year flow/flooding conditions.

3. Maximum flow in streets with curb and gutter conditions shall be based on flows being within eight feet of spread from the curb, and per inlet capacity conditions, but not to exceed 500 (five hundred) feet before interception by curb inlets or catch basins.

4. The designer shall demonstrate that ditch or swale erosion will not be excessive.

    a. Velocities are to be kept to less than 4 fps – piping systems may have higher velocities.

    b. Piping shall be designed to have a flowing full velocity of at least 2 fps.

5. Minimum curb and gutter slopes shall be 0.5%; vertical curves shall not be utilized on slopes less than 1%; and minimum asphalt slopes shall be 1.2% with 1.5% being preferable.

6. Outfall locations shall have adequate provision for erosion control.

7. A primary matter to be determined upfront in the subdivision development process is whether storm drainage facilities shall be privately-maintained or Town-maintained.

    a. In general, facilities in public street rights-of-way will be publicly maintained and those across private property will be privately-maintained, which must have appropriate, perpetual access.

    b. Access shall be a minimum of 15 (fifteen) feet in width with an all-weather, year-round maintained surface – 20 (twenty) feet is preferable.

8. Storm drain lines that are considered part of the Town's storm drain system shall be reinforced concrete pipe (RCP), of appropriate class.

    a. Other types of pipe are only allowed on a case-by-case basis per approval by Town Engineer.
    b. The minimum size for storm drain mains shall be 15-inch diameter.

    c. Public storm drain pipes shall not be curved.

    d. Storm drain lines shall have cleanout boxes, inlets, or manholes installed at all changes in grade or alignment, with a maximum distance of 500 (five hundred) feet between accesses.

    e. Curb inlets with throat openings are preferred over grated-inlet-only appurtenances.

    f. Detailed plans, calculations, and specifications shall be submitted for approval by the Town Engineer for all storm drainage appurtenances.

9. Runoff coefficients shall generally be C=0.95 for impervious hardscape and C=0.15 for flat area softscape.

    a. Values from published sources are permitted as approved by the Town Engineer.

b. Commercial site plans shall be based on 85% hardscape and 15% softscape unless demonstrated otherwise.

10. Projects shall have responsibility to route existing or encountered ditch, irrigation, spring water, or tile drain flows in an acceptable manner through or around projects.

D. Storm Water Storage.

1. Subdivision, commercial projects and site plans shall store on-site (or an approved alternative location) the increased runoff due to development.

2. Historical upstream flows are permitted to be conducted through a project without detainage.

3. Projects shall clearly and distinctly identify the downstream outlet.

   a. Where a major water course is located downstream, projects may pipe directly to such a course and not be required to do on-site storage.

   b. The basic premise is that projects may not unduly impact downstream intervening properties between the site and water course.

   c. Permission must be secured by the appropriate entity one is discharging to.

4. In general, storm waters shall not be conveyed in irrigation ditches, and irrigation waters shall not be conveyed in storm drain systems.

   a. Where historical storm flows have entered irrigation ditches, such may be considered and analyzed for strictly historical-only flow perpetuation by Town Engineer, project engineer, and irrigation entity.

5. Storm drainage basins are required for all development; however, residential developments of less than one (1) acre are not required to have detention or retention, except when determined by the Town Engineer.

6. "Detention facilities" are those storm facilities that have an approved outlet; "Retention facilities" are those storm facilities that do not have an approved outlet.

   a. Percolation is not considered an acceptable outlet, nor can be included in storm water storage calculations.

E. Basin Property, Easement, and Access.

1. In general, the Town does not assume responsibility for the ownership and maintenance of storm water drainage basins for private development.

    a. In unique cases where a public basin is to be adopted and implemented, the public basin shall be located on a separate parcel dedicated to the Town with an approved permanent access.

2. Private basin ownership and maintenance shall be clearly delineated in a development agreement with the Town, with well delineated and understood parameters including enforcement provisions.

    a. Typically, private basins serving multiple lots shall be owned and maintained by a home-owners' or land-owners' association.

    b. If deemed appropriate, a basin may be located on a private parcel with an appropriate easement with maintenance responsibilities delineated.

    c. Basins shall be constructed with sufficient, all-weather, drivable access to all structures, with an appropriate turnaround.

    d. Actual ownership and responsibility shall be specifically defined in the Owner's Dedication, Certificates, Development Agreements, Long-Term Storm water Maintenance Agreements, or by Deed.

3. Sumps are not allowed except as approved by the Town Engineer on a case-by-case basis.

F. Basin Volume.

1. Detention basins shall be minimally based on the 10-year storm event with an allowable release rate of 0.1 cfs/acre.

2. Retention basins are based on the 100-year, 2-hour storm event.

3. Percolation is not considered in basin volume calculations.

4. All basin designs and calculations shall be included in a stamped/signed drainage report submitted to and approved by the Town Engineer.

5. Volume shall be measured to the internal (overflow) spillway elevation.

6. Volume in roadside ditches or swales shall not be considered in the volume calculation for detention or retention basins.

7. Required storage of water shall not be allowed to surface in parking lots except in extreme and compelling circumstances, generally involving existing developed situations.

8. Calculations shall be based on the total acreage of development draining to the basin.

9. Pass-through of off-site drainage through the development must be considered and will be allowed.

G. Basin Characteristics.

1. Basin side slopes shall not be steeper than 4:1 (horizontal to vertical).

2. It is preferable to have a bottom of basin minimum slope of 2%.

3. It is preferable to have piping that allows base low-flow, historical flows to be directly discharged through basin structures rather than by necessity having to pass through the basin causing wet, soggy, or unstable conditions.

4. Fencing of basins is to be determined on a case-by-case basis.

5. Basins must be landscaped or have sufficient long-term vegetation, ground cover, or hardscape (cobble).

   a. A long-term weed-free environment is mandated.

   b. Public and private basin landscaping shall be included in an escrow or other financial agreement with the Town, which shall extend through the one-year warranty period.

   c. Basin landscaping must be demonstrated to be permanently established for release of warranty monies, regardless of time period (i.e. it may be longer than one-year).

6. One foot of freeboard above spillway is required, and spillway is to be designed for 100-year event.

7. Underground chambers are allowed on a case-by-case basis. Proper separation from groundwater and seasonal groundwater rise and fluctuation must be accounted for in the design.

8. LID matters will necessitate implementation as required by State mandates.

H. Flood Plain Areas.

1. The Town Council may, when it deems it necessary for the health, safety, or welfare of the present and future population of the area and necessary to the conservation of water, drainage, and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the flood plain of any stream or drainage course.

2. These flood plain areas shall be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, or stumps, except at the discretion of the Planning Commission.

I. Dedication of Drainage Easements.

1. General Requirements.

a. Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse, and of such width and construction or both as will be adequate for the purpose of high flow conveyance.

2. Drainage Easements.

a. Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within road rights-of-way, perpetual unobstructed easements at least fifteen (15) feet in width for such drainage facilities shall be provided across the property outside the road lines and with satisfactory access to the road. Easements shall be so indicated on the plat.

b. Drainage easements shall be carried from the road to a natural water course or to other drainage facilities.

c. Depending upon the size and type of drainage facilities, a wider easement drainage easement may be required per the Town Engineer.

d. When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights or easements must be secured and indicated on the plat.

e. The developer shall dedicate, either in fee or by drainage or conservation easement, land on both sides of existing watercourses, to a distance to be determined by the Planning

Commission. All said easements shall be deemed rights-of-way for lawful municipal purposes.

11.10.050 Subsurface Drainage:

A. The developer is required to provide the design and installation of a subsurface drainage system when determined to be necessary by the Town Engineer or as specified necessary in the project specific geotechnical report.

B. Design and construction of the sub-surface drainage system shall conform to the recommendations by the project geotechnical engineer.

C. Subsurface drainage systems shall not be combined or connected with a storm drain pipe system and shall discharge into an approved drainage in which the developer has acquired drainage rights or has been appropriately permitted to do so.

D. The developer shall maintain all pre-existing subsurface drainage in all of its forms, including drain lines and drain tiles.

1. If the developer discovers a pre-existing subsurface drainage system after the start of excavation that were unknown (i.e. not identified on the developer's subsurface drainage system plan) at the time of the design and approval of the developer's subsurface drainage system, the developer shall cease all excavation and shall immediately consult with the Town Engineer and Town Public Works Director to ensure that there was no damage to the pre-existing subsurface drainage because of the excavation and to ensure that the developer's subsurface drainage system will still work while maintaining the pre-existing subsurface drainage system.

2. The developer shall not be allowed to move forward with excavation or installation of their previously approved subsurface drainage system, until the Town Engineer has approved the developer's amended subsurface drainage system.

3. If during excavation, a developer discovers an unknown pre-existing subsurface drainage system and does not notify the Town Engineer and/or reburies the system before the Town Engineer can inspect it, the developer shall be responsible for all costs required to unbury the pre-existing subsurface drainage system and repair the system if needed or any other associated costs to remedy the situation so that the subsurface drainage system operates properly.

11.10.060 Water Facilities:

A. General Requirements.

1. The owner/developer of any land proposed to be developed as a subdivision shall at his expense be required to comply with all regulations of the current Town of Elwood Culinary Water System Standards and Specifications.

2. The developer shall be required to install adequate water facilities, including fire hydrants.

3. All water lines must be extended across the entire frontage of all existing streets and to the boundary of the subdivision on all existing or proposed streets.

4. Main valves and other appurtenances shall be installed in accordance with Town of Elwood Culinary Water System Standards and Specifications or as otherwise required by the Town Engineer.

B. Fire Hydrants.

1. Fire hydrants shall be required for all subdivisions.

2. Fire hydrants shall be located no more than five hundred (500) feet apart and within two hundred fifty (250) feet of any structure and shall be approved by the Town of Elwood Fire Department.

3. To eliminate future street openings, all underground utilities for fire hydrants, together with the fire hydrants themselves and all other supply improvements, shall be installed before any final paving of a street shown on the subdivision plat.

11.10.070 Secondary Water System:

1. The developer is required to install a pressurized secondary water system to each lot in the subdivision as a condition of approval. The design of the system is to meet the Town secondary water construction standard and approval of the Town Engineer, for current or future use.

2. The developer shall provide water shares to the Town as required by Elwood ordinances for each lot, prior to recordation.

11.10.080 Sewerage Facilities:

A. General Requirements.

1. The developer shall install sanitary sewer facilities in a manner prescribed by the Town of Elwood Public Works Standards and the Bear River Health Department.

2. Sanitary sewer facilities in a subdivision development located within the sewer service area shall connect to the public sanitary sewer system as required by the Elwood Wastewater System Ordinance.

3. Sewers shall be installed to serve each lot and to grades and sizes required by the State of Utah's Department of Environmental Quality.

4. All sewer lines must be extended across the entire frontage of all existing streets and to the boundary of the subdivision (if applicable) on all existing or proposed Town streets unless determined otherwise by the Town.

5. Sewer grinder pump stations and force main sewer lines may be required to connect the development/subdivision to the existing Elwood Town sewer system.

6. Sewer pump stations intended to a serve a community subdivision area(s)within the Elwood Town sewer service area shall also be furnished with backup emergency power (electrical generator) approved by the Town Engineer.

11.10.090 Sidewalks:

A. Sidewalks shall be required for reasons of safety and public welfare, unless in the opinion of the Planning Commission and Town Council that they would not accomplish the goal of safety and public welfare, would not be in the public's best interests, or that they should be installed at a later date when further development has occurred in the area.

B. The Town of Elwood will not waive sidewalk requirements on state highways unless the Utah State Department of Transportation has waived the sidewalk requirement.

C. Drawings of different sidewalk and street constructions are attached to the end of Chapter 11.10.

11.10.100 Curb and Gutter:

A. Curb and gutter shall be installed on existing and proposed streets by the developer, where in the opinion of the Planning Commission and the Town Council they will be necessary to remove surface water to promote safety or other justifiable reasons as determined by the Planning Commission or Town Council.

B. Curb and Gutter shall be installed by the developer in subdivisions along the abutting Utah State Highways if required by Utah State Department of Transportation.

11.10.110 Utilities:

A. Location.

1. The developer is required to provide for the installation of all dry utility facilities, including but not limited to natural gas, electric power, along with all other dry utilities which are willing to serve the development including telephone and CATV cables, which shall be located underground through the subdivision.

2. Wherever existing utility facilities are located above ground, except where existing on public roads and rights -of-way, developer shall cause facilities to be removed and placed underground upon request by the Town.

3. Underground service connections to the street property line of each platted lot shall be installed at the developer's expense.

11.10.120 Public Uses.

A. Recreation.

1. Recreation Sites.

a. Land reserved for recreation purposes shall be of a character and location suitable for use as a playground, or for other recreation purposes, and shall be relatively level and dry; and shall be improved by the developer to the standards required by the Town Council, which improvements shall be included in the performance bond or escrow.

b. All land to be reserved for dedication to the Town for park purposes shall have prior approval of the Town Council and shall be shown marked on the plat "Reserved for Park and/or Recreation Purpose."

2. Other Recreation Reservations.

a. The provisions of this section are minimum standards.

b. None of the paragraphs above shall be construed as prohibiting a Developer from reserving other land for recreation purposes in addition to the requirements of this section

B. Other Public Uses.

1. Plat to Provide for Public Uses.

a. Except when an developer utilizes planned unit development or density zoning in which land is set aside by the developer as required by the provision of the Zoning Ordinance, whenever the subdivision includes a school, recreation use or other public use as indicated on the General Plan or any portion thereof, such space shall be suitably incorporated by the developer into his preliminary plan.

b. After proper determination of its necessity by the Planning Commission and the appropriate Town Officials or other public agency involved in the acquisition and use of each such site and a determination has been made to acquire the site by the public agency, the site shall be suitably incorporated by the developer into the final plats.

C. Referral to Public Body.

1. The Planning Commission shall refer the plat to the public body concerned with acquisition for its consideration and report.

2. The Planning Commission may propose alternate areas for such acquisitions and shall allow the public body or agency thirty (30) days for reply.
3. The agency's recommendation, if affirmative, shall include a map showing the boundaries and area of the parcel to be acquired and an estimate of the time required to complete the acquisition.

D. Notice of Property Owner.

Upon receipt of an affirmative report, the Planning Commission shall notify the property owner and shall designate on the preliminary and final plats that area proposed to be acquired by the public body.

E. Duration of Land Reservation.

1. The acquisition of land reserved by a public agency on the final plat shall be initiated within twelve (12) months of notification, in writing, from the owner that he intends to develop the land.

2. Such letter of intent shall be accompanied by a plat of the proposed development and a tentative schedule of construction.

3. Failure on the part of the public agency to initiate acquisition within the prescribed twelve (12) months shall result in the removal of the "reserved" designation from the property involved and the freeing of the property for development in accordance with these regulations.

11.10.130 Irrigation Water:

A. No open irrigation or drainage ditches shall be permitted within the boundary of a subdivision.

B. All necessary irrigation ditches, whether used for the purpose of transporting irrigation or waste flow water, that must be maintained within a subdivision shall be replaced with a pipe culvert.

1. This pipe culvert shall be at least eighteen (18) inch diameter concrete pipe and be of satisfactory size and design to satisfy the irrigation company.

C. The developer of a subdivision must provide for maintaining the existing rights of all irrigation users, both upstream and downstream of the proposed development.

D. A solid board, chain-link, or other non-climbable fence not less than 6 feet in height shall be installed on the side of an existing open canal, irrigation or drainage ditch adjacent to (within 5 (five) feet of the subdivision boundary to nearest centerline) the subdivision, and which is not piped in accordance with the foregoing section.

1. Like fencing shall be constructed where the subdivision borders upon open reservoirs, non-access streets, and adjoining schools, churches, and park sites, except where the Town Council determines that said areas shall remain open and unfenced.

2. All such fences shall be maintained and kept in good repair by the owner of property contiguous to or upon which said fence is erected.

11.10.140 Preservation of Natural Features and Amenities:

A. General.

1. Existing features which would add value to a residential development or to the Town as a whole, such as trees, historic spots, and similar irreplaceable assets, are encouraged to be preserved in the design of the subdivision.

2. Such existing features shall not be removed from any subdivision nor any change of grade of the land affected until approval of the preliminary plan has been granted.

B. Water Rights.

All water or water rights used upon, appurtenant to, or running with any land located within a proposed subdivision shall be offered to the Town for purchase at the market value existing at the time the preliminary plan is submitted for approval.

11.10.150 Non-Residential Subdivision:

A. General.

1. If a proposed subdivision includes land that is zoned for commercial or industrial purposes, the layout of the subdivision with respect to such land shall make such provisions as the Planning Commission may require.

2. A nonresidential subdivision shall also be subject to all the requirements of site plan approval set forth in the Zoning Ordinance.

3. Site plan approval and nonresidential subdivision plat approval may proceed simultaneously at the discretion of the Planning Commission.

4. A nonresidential subdivision shall be subject to all the requirements of these regulations, as well as such additional standards required by the Planning Commission, and shall conform to the proposed land use and standards established in the General Plan, Official Map, and Zoning Ordinance.

B. Standards.

1. In addition to the principles and standards in these regulations, which are appropriate to the planning of all subdivisions, the developer shall demonstrate to the satisfaction of the Planning Commission that the street, parcel, and block pattern proposed are specifically adapted to the uses anticipated and take into account other uses in the vicinity.

2. The following principles and standards shall be observed:

a. Proposed industrial parcels shall be suitable in area and dimensions to the types of industrial development anticipated.

b. Street right-of-way and pavement shall be adequate to accommodate the type and volume of traffic anticipated to be generated thereupon.

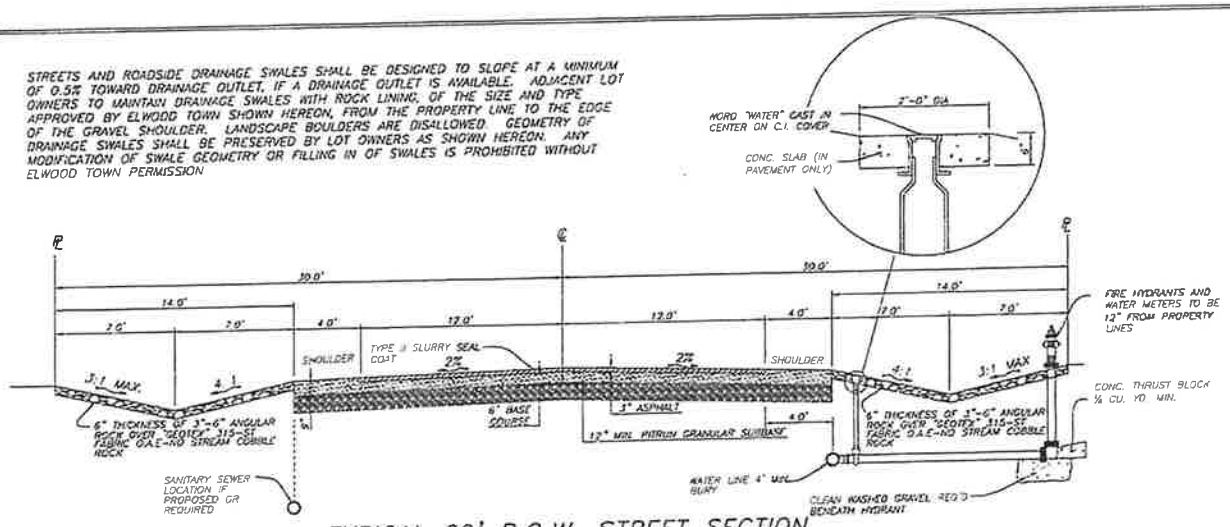
c. Special requirements may be imposed by the Town with respect to street, curb, gutter, and sidewalk design and construction.

d. Special requirements may be imposed by the Town with respect to the installation of public utilities, including but not limited to, water, sewer, and storm water drainage.

e. Every effort shall be made to protect adjacent residential areas from potential nuisance from a proposed commercial or industrial subdivision. These efforts include the provision of extra depth in parcels backing upon existing or potential residential development, and provisions for a fence or other barrier or a permanently landscaped buffer strip, when necessary.

f. Streets carrying nonresidential traffic, especially truck traffic, shall not normally be extended to the boundaries of adjacent existing or potential residential areas

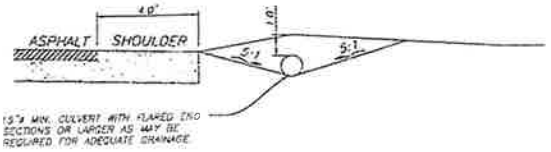
STREETS AND ROADSIDE DRAINAGE SWALES SHALL BE DESIGNED TO SLOPE AT A MINIMUM OF 0.5% TOWARD DRAINAGE OUTLET. IF A DRAINAGE OUTLET IS AVAILABLE. ADJACENT LOT OWNERS TO MAINTAIN DRAINAGE SWALES WITH ROCK LINING, OF THE SIZE AND TYPE APPROVED BY ELWOOD TOWN SHOWN HEREON, FROM THE PROPERTY LINE TO THE EDGE OF THE GRAVEL SHOULDER. LANDSCAPE BOULDERS ARE DISALLOWED. GEOMETRY OF DRAINAGE SWALES SHALL BE PRESERVED BY LOT OWNERS AS SHOWN HEREON. ANY MODIFICATION OF SWALE GEOMETRY OR FILLING IN OF SWALES IS PROHIBITED WITHOUT ELWOOD TOWN PERMISSION



TYPICAL 60' R.O.W. STREET SECTION

NOTE:

- THIS DRAWING IS NOT TO VERTICAL SCALE. VERTICAL FEATURES ARE EXAGGERATED FOR DRAWING CLARITY.
- ALL WATER VALVES ARE TO BE FINISHED WITH CONCRETE COLLARS AT THE SURFACE.
- THE PITRUN IMPORTED GRANULAR SUBBASE, CRUSHED GRAVEL AND ASPHALT THICKNESSES SHOWN ARE CONSIDERED AS TOWN MINIMUM STANDARDS AND MAY BE INCREASED AS DETERMINED BY THE TOWN ENGINEER. WHEN A GREATER DEPTH IS NECESSARY TO PROVIDE SUFFICIENT STABILITY, THE TOWN RESERVES THE RIGHT TO REQUIRE A DEVELOPER TO HAVE A GEOTECHNICAL INVESTIGATION MADE OF THE SOILS IN THE DEVELOPMENT AND A REPORT SUBMITTED TO DETERMINE IF ADDITIONAL THICKNESSES ARE REQUIRED.



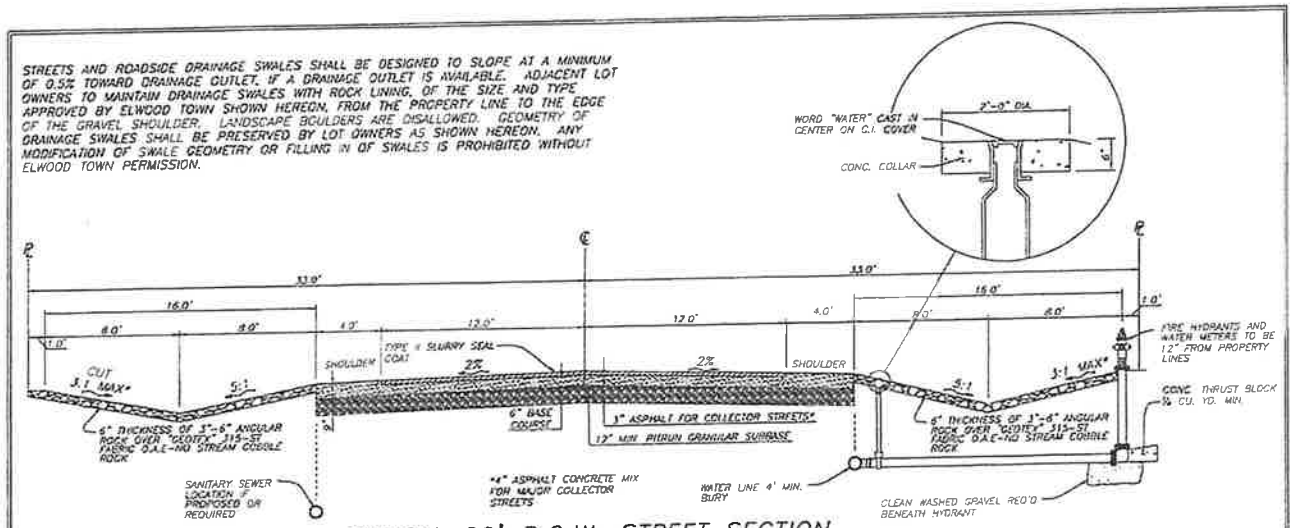
TYPICAL DRIVEWAY DETAIL

CONSTRUCTION REQUIREMENTS:
WHERE APPLICABLE, AND UNLESS OTHERWISE SPECIFIED, CONSTRUCTION OF PUBLIC WORKS FACILITIES AND INFRASTRUCTURE SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN PUBLIC ASSOCIATION MANUAL OF STANDARD SPECIFICATIONS WHICH ARE ADOPTED BY REFERENCE AS A COMPANION DOCUMENT TO THESE DRAWINGS. RESOLUTION OF ANY INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE ADOPTED SPECIFICATIONS WILL BE MADE BY THE TOWN ENGINEER.

LICENSED PROFESSIONAL ENGINEER
V.E.F.
James B. Flint
7606324-2202
STATE OF UTAH

TOWN CONSULTING ENGINEER DATE	APPROVED ELWOOD TOWN MAYOR DATE	HANSEN & ASSOCIATES, INC. Consulting Engineers and Land Surveyors 558 North Main Brigham City, Utah 84302 Brigham City 723-3481 Ogden 399-8225 Logan 752-8272	REVISION DATE: DATE: 11/10/20 DATE: 2/16/05 SCALE: 1" = 5'	Town of Elwood Public Works Construction Standards STREET IMPROVEMENT DETAILS LOCAL ROADS - 60' R.O.W. Where C&G and Sidewalk Not Proposed or Req'd.	SHEET 1 OF 17 SHEETS

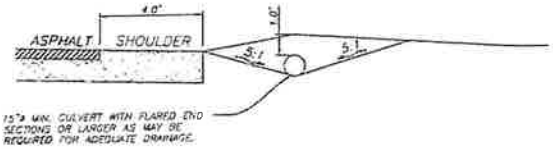
STREETS AND ROADSIDE DRAINAGE SWALES SHALL BE DESIGNED TO SLOPE AT A MINIMUM OF 0.5% TOWARD DRAINAGE OUTLET. IF A DRAINAGE OUTLET IS AVAILABLE, ADJACENT LOT OWNERS TO MAINTAIN DRAINAGE SWALES WITH ROCK LINING, OF THE SIZE AND TYPE APPROVED BY ELWOOD TOWN SHOWN HEREON, FROM THE PROPERTY LINE TO THE EDGE OF THE GRAVEL SHOULDER. LANDSCAPE BOULDERS ARE DISALLOWED. GEOMETRY OF DRAINAGE SWALES SHALL BE PRESERVED BY LOT OWNERS AS SHOWN HEREON. ANY MODIFICATION OF SWALE GEOMETRY OR FILLING IN OF SWALES IS PROHIBITED WITHOUT ELWOOD TOWN PERMISSION.



TYPICAL 66' R.O.W. STREET SECTION

NOTE:

- THIS DRAWING IS NOT TO VERTICAL SCALE. VERTICAL FEATURES ARE EXAGGERATED FOR DRAWING CLARITY.
- ALL WATER VALVES, SEWER MANHOLES, STORM DRAIN MANHOLES AND JUNCTION BOXES WITHIN THE ASPHALT PAVEMENT ARE TO BE FINISHED WITH CONCRETE COLLARS AT THE SURFACE PER OTHER DETAILS FOUND IN THE ELWOOD PUBLIC WORKS STANDARDS.
- THE CRUSHED GRAVEL AND ASPHALT THICKNESSES SHOWN ARE CONSIDERED AS ELWOOD TOWN MINIMUM STANDARDS UNLESS SPECIFIED OTHERWISE BY A SITE SPECIFIC GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED BY THE TOWN ENGINEER AS APPLICABLE TO THE PROJECT SITE.



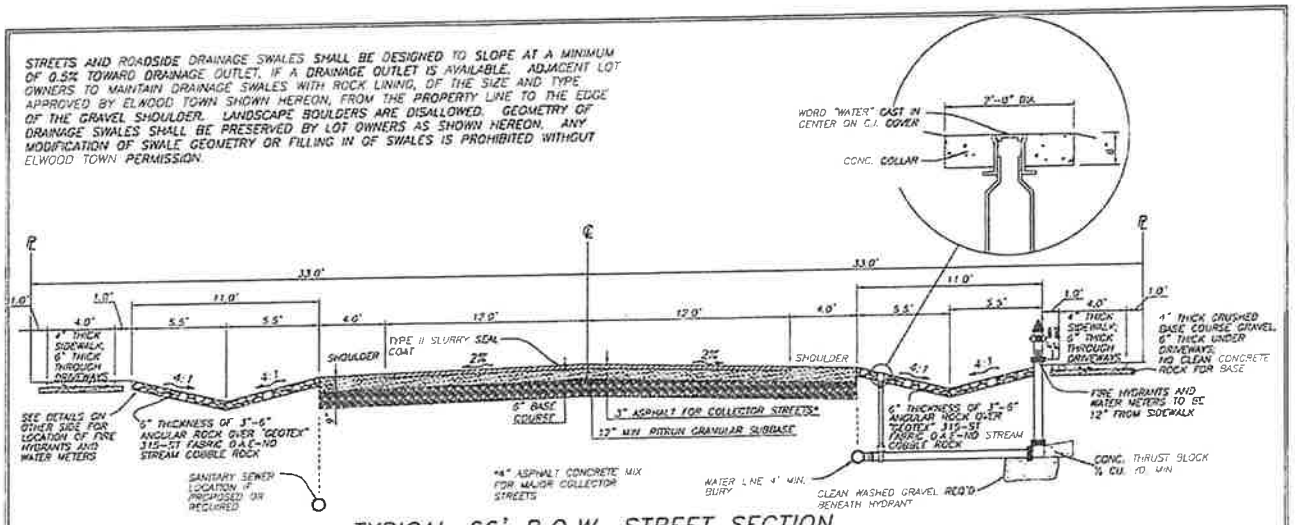
TYPICAL DRIVEWAY DETAIL

CONSTRUCTION REQUIREMENTS:
WHERE APPLICABLE, AND UNLESS OTHERWISE SPECIFIED, CONSTRUCTION OF PUBLIC WORKS FACILITIES AND INFRASTRUCTURE SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN PUBLIC ASSOCIATION MANUAL OF STANDARD SPECIFICATIONS WHICH ARE ADOPTED BY REFERENCE AS A COMPANION DOCUMENT TO THESE DRAWINGS. RESOLUTION OF ANY INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE ADOPTED SPECIFICATIONS WILL BE MADE BY THE TOWN ENGINEER.

LICENSED PROFESSIONAL ENGINEER
James B. Flint
7605224-2202
STATE OF UTAH

TOWN CONSULTING ENGINEER DATE	APPROVED ELWOOD TOWN MAYOR DATE	HANSEN & ASSOCIATES, INC. Consulting Engineers and Land Surveyors 338 North 46th Brigham City, Utah 84302 Brigham City 723-3481 Ogden 399-4905 Logan 753-8272	REVISION DATE: DATE: 12/04/20 DATE: 2/15/05 SCALE: 1" = 5'	Town of Elwood Public Works Construction Standards STREET IMPROVEMENT DETAILS COLLECTOR STREETS Without Sidewalk	SHEET 2 OF 17 SHEETS

STREETS AND ROADSIDE DRAINAGE SWALES SHALL BE DESIGNED TO SLOPE AT A MINIMUM OF 0.5% TOWARD DRAINAGE OUTLET. IF A DRAINAGE OUTLET IS AVAILABLE, ADJACENT LOT OWNERS TO MAINTAIN DRAINAGE SWALES WITH ROCK LINING, OF THE SIZE AND TYPE APPROVED BY ELWOOD TOWN SHOWN HEREON, FROM THE PROPERTY LINE TO THE EDGE OF THE GRAVEL SHOULDER. LANDSCAPE BOULDERS ARE DISALLOWED. GEOMETRY OF DRAINAGE SWALES SHALL BE PRESERVED BY LOT OWNERS AS SHOWN HEREON. ANY MODIFICATION OF SWALE GEOMETRY OR FILLING IN OF SWALES IS PROHIBITED WITHOUT ELWOOD TOWN PERMISSION.



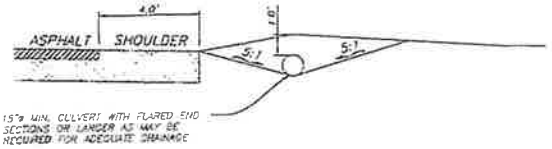
TYPICAL 66' R.O.W. STREET SECTION

With Sidewalk Proposed or Req'd.

NOTE

- THIS DRAWING IS NOT TO VERTICAL SCALE. VERTICAL FEATURES ARE EXAGGERATED FOR DRAWING CLARITY.
- ALL WATER VALVES, SEWER MANHOLES, STORM DRAIN MANHOLES AND JUNCTION BOXES WITHIN THE ASPHALT PAVEMENT ARE TO BE FINISHED WITH CONCRETE COLLARS AT THE SURFACE PER OTHER DETAILS FOUND IN THE ELWOOD PUBLIC WORKS STANDARDS
- THE CRUSHED GRAVEL AND ASPHALT THICKNESSES SHOWN ARE CONSIDERED AS ELWOOD TOWN MINIMUM STANDARDS UNLESS SPECIFIED OTHERWISE BY A SITE SPECIFIC GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED BY THE TOWN ENGINEER AS APPLICABLE TO THE PROJECT SITE.

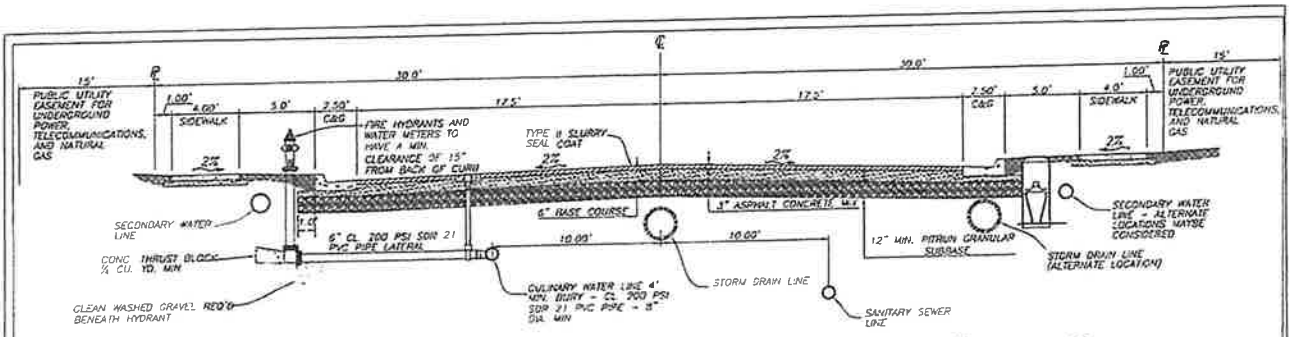
CONSTRUCTION REQUIREMENTS
WHERE APPLICABLE, AND UNLESS OTHERWISE SPECIFIED, CONSTRUCTION OF PUBLIC WORKS FACILITIES AND INFRASTRUCTURE SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN PUBLIC ASSOCIATION MANUAL OF STANDARD SPECIFICATIONS WHICH ARE ADOPTED BY REFERENCE AS A COMPANION DOCUMENT TO THESE DRAWINGS. RESOLUTION OF ANY INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE ADOPTED SPECIFICATIONS WILL BE MADE BY THE TOWN ENGINEER.



TYPICAL DRIVEWAY DETAIL

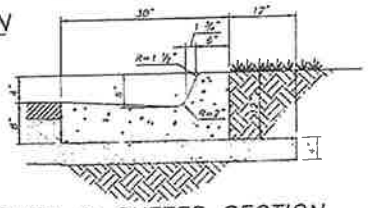
LICENSED PROFESSIONAL ENGINEER
James D. Flint
STATE OF UTAH

TOWN CONSULTING ENGINEER DATE	APPROVED ELWOOD TOWN MAYOR DATE	HANSEN & ASSOCIATES, INC. Consulting Engineers and Land Surveyors	REVISION DATE DATE: 12/04/20 DATE: 2/15/05 SCALE: 1" = 5'	Town of Elwood Public Works Construction Standards STREET IMPROVEMENT DETAILS MAJOR COLLECTOR STREETS With Sidewalk Proposed or Req'd.	SHEET 3 OF 17 SHEETS



TYPICAL STREET SECTION

5' PARK STRIP FOR LOCAL STREETS AND 8' PARK STRIP FOR COLLECTOR STREETS



CURB & GUTTER SECTION

NOT TO SCALE

NOTE:

- THIS DRAWING IS NOT TO VERTICAL SCALE. VERTICAL FEATURES ARE EXAGGERATED FOR DRAWING CLARITY.
- ALL WATER VALVES, SEWER MANHOLES, STORM DRAIN MANHOLES AND JUNCTION BOXES WITHIN THE ASPHALT PAVEMENT ARE TO BE FINISHED WITH CONCRETE COLLARS AT THE SURFACE PER OTHER DETAILS FOUND IN THE ELWOOD PUBLIC WORKS STANDARDS.
- THE CRUSHED GRAVEL AND ASPHALT THICKNESSES SHOWN ARE CONSIDERED AS COUNTY MINIMUM STANDARDS UNLESS SPECIFIED OTHERWISE BY A SITE SPECIFIC GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED BY THE TOWN ENGINEER AS APPLICABLE TO THE PROJECT SITE
- MINIMUM CURB & GUTTER SLOPE TO BE 0.4%

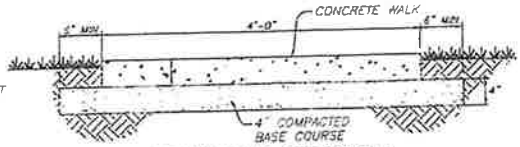
CONSTRUCTION REQUIREMENTS:
WHERE APPLICABLE, AND UNLESS OTHERWISE SPECIFIED, CONSTRUCTION OF PUBLIC WORKS FACILITIES AND INFRASTRUCTURE SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN PUBLIC ASSOCIATION MANUAL OF STANDARD SPECIFICATIONS WHICH ARE ADOPTED BY REFERENCE AS A COMPANION DOCUMENT TO THESE DRAWINGS. RESOLUTION OF ANY INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE ADOPTED SPECIFICATIONS WILL BE MADE BY THE TOWN ENGINEER

NOTE:

CONTRACTION JOINT EVERY 10' FEET

CONCRETE SHALL BE 6" THICKNESS THROUGH DRIVEWAYS

EXPANSION MATERIAL REQ'D AT CONSTRUCTION JOINTS



SIDEWALK SECTION

NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
James B. Flint
7806324-2202
STATE OF UTAH

TOWN CONSULTING ENGINEER DATE

APPROVED

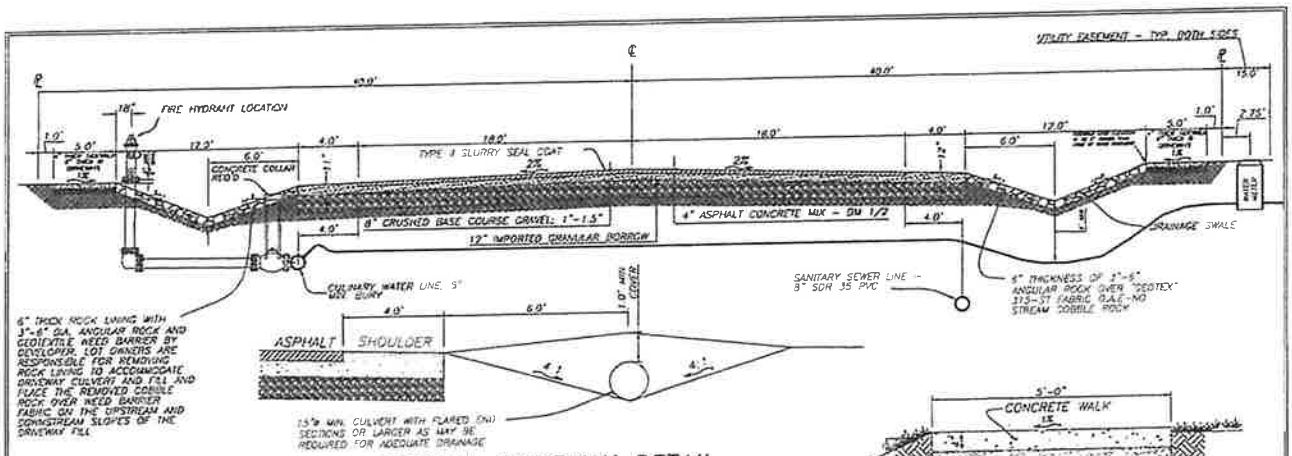
Elwood Town Mayor DATE

HANSEN & ASSOCIATES, INC.
Consulting Engineers and Land Surveyors
528 North Main Brigham City, Utah 84302
Brigham City 723-3481 Ogden 399-4000 Logan 753-6372

REVISION DATE:
DATE: 12/04/20
DATE: 11/10/20
SCALE: 1" = 5'

Elwood Town
Public Works Construction Standards
STREET IMPROVEMENT DETAILS
LOCAL STREETS
Where C&G and Sidewalk Proposed or Req'd.

SHEET: 4 OF 17 SHEETS



TYPICAL DRIVEWAY DETAIL

NOTE:

- THIS DRAWING IS NOT TO VERTICAL SCALE. VERTICAL FEATURES ARE EXAGGERATED FOR DRAWING CLARITY.
- ALL WATER VALVES, SEWER MANHOLES, STORM DRAIN MANHOLES AND JUNCTION BOXES WITHIN THE ASPHALT PAVEMENT ARE TO BE FINISHED WITH CONCRETE COLLARS AT THE SURFACE PER OTHER DETAILS FOUND IN THE ELWOOD PUBLIC WORKS STANDARDS.
- THE CRUSHED GRAVEL AND ASPHALT THICKNESSES SHOWN ARE CONSIDERED AS ELWOOD TOWN MINIMUM STANDARDS UNLESS SPECIFIED OTHERWISE BY A SITE SPECIFIC GEOTECHNICAL REPORT WHICH HAS BEEN ACCEPTED BY THE TOWN ENGINEER AS APPLICABLE TO THE PROJECT SITE.
- STREETS AND ROADSIDE DRAINAGE SWALES SHALL BE DESIGNED TO SLOPE AT A MINIMUM OF 0.5% TOWARD DRAINAGE OUTLET, IF A DRAINAGE OUTLET IS AVAILABLE. ADJACENT LOT OWNERS TO MAINTAIN DRAINAGE SWALES WITH ROCK LINING, OF THE SIZE AND TYPE APPROVED BY ELWOOD TOWN SHOWN HEREON, FROM THE PROPERTY LINE TO THE EDGE OF THE GRAVEL SHOULDER. LANDSCAPE BOULDERS ARE DISALLOWED. GEOMETRY OF DRAINAGE SWALES SHALL BE PRESERVED BY LOT OWNERS AS SHOWN HEREON. ANY MODIFICATION OF SWALE GEOMETRY OR FILLING IN OF SWALES IS PROHIBITED WITHOUT ELWOOD TOWN PERMISSION OR UDOT PERMISSION WHERE APPLICABLE.
- UDOT MAY RESERVE THE RIGHT TO ALSO REQUIRE CURB AND GUTTER AND ADDITIONAL ASPHALT WIDTH ON STATE ROAD 13

SIDEWALK DETAIL

NOT TO SCALE

NOTE

1. CONTRACTION JOINT EVERY 10' FEET
2. CONCRETE SHALL BE 4" THICKNESS THROUGH DRIVEWAYS WITH 6" OF CRUSHED BASE COURSE.
3. GRAVEL BASE COURSE SHALL BE CRUSHED UNTREATED BASE COURSE PER APWA STANDARD SPECIFICATIONS. WASHED CONCRETE ROCK IS PROHIBITED UNDER SIDEWALKS AND DRIVE APPROACHES.
4. EXPANSION MATERIAL REQ'D AT CONSTRUCTION JOINTS AND OTHER LOCATIONS SPECIFIED ELSEWHERE IN THESE STANDARD DRAWINGS.
5. FINISH GRADE OF SIDEWALK SHALL NEAREST THE ROAD SHALL BE 2" ABOVE THE FINISH EDGE OF PAVEMENT UNLESS APPROVED OTHERWISE BY TOWN ENGINEER OR OTHER O UDOT ON STATE HIGHWAY 13.

STREETS WHERE THIS STREET SECTION TO BE USED:

ROAD OR STREET	SIDEWALK WEST SIDE	SIDEWALK EAST SIDE	SIDEWALK ON BOTH SIDES
ARTERIAL STREETS	N/A	N/A	YES
STATE ROAD 13 IMPROVEMENTS	NO	YES	NO

LICENSED PROFESSIONAL ENGINEER — James B. Flint — 7606324-2202 — STATE OF UTAH

TOWN CONSULTING ENGINEER — DATE

APPROVED

ELWOOD TOWN MAYOR — DATE

HANSEN & ASSOCIATES, INC. Consulting Engineers and Land Surveyors
Brigham City — Logan

REVISION DATE:
DATE: 11/19/20
DATE: 2/16/05
SCALE: 1" = 5'

Town of Elwood
Public Works Construction Standards
STREET IMPROVEMENT DETAILS
ARTERIAL STREETS
With Sidewalk

SHEET: 5 OF 17 SHEETS