

TOWN OF VERDIGRIS OKLAHOMA

SUBDIVISION & DIVISION OF LAND REGULATIONS

*DEVELOPMENT GUIDELINES,
DESIGN CRITERIA*

AND

CONSTRUCTION STANDARDS

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AUGUST 2011

TOWN OF VERDIGRIS OKLAHOMA

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Verdigris Planning and Zoning Commission

Eddy Greer	Chairman, Member
Zhuline Phillips	Vice-Chairman, Member
Teresa Dorsey	Member
Bryan Bradley	Member
Dean Dowden-Parrott	Member

Verdigris Board of Trustees

Keith Crawford	Mayor
Dennis "Rusty" Magiera	Trustee
Doug Goodhue	Trustee

Adopted August 2, 2011 Verdigris Planning Commission

Adopted August 9, 2011 Verdigris Town Board of Trustees

August 2011

PASSED AND APPROVED by the Verdigris Planning & Zoning Commission on this 2nd day of August, 2011.

DATED this _____ day of _____, 2011.

Verdigris Planning & Zoning Commission

ATTEST

Teresa Dorsey, Secretary

Eddy Greer, Chairman

PASSED AND APPROVED by the Verdigris Board of Trustees on this 9th day of August, 2011.

DATED this _____ day of _____, 2011.

Verdigris Town Board of Trustees

ATTEST

Susan Beck, Town Clerk

Keith Crawford, Mayor

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101 Purpose and Intent

These regulations are designed to promote the health, safety and general welfare of the community by establishing standards for the subdivision and development of all land in Verdigris. These regulations are designed, intended and should be administered according to the following purposes:

- A. To provide for the physical development in Verdigris in accordance with the Comprehensive Plan.
- B. To harmoniously relate the development of various tracts of land to the existing community and to facilitate the future development of adjoining tracts.
- C. To secure and provide for the proper arrangement of streets or other highways in relation to the existing or planned streets or highways or to the Comprehensive Plan or plans of the area; for the adequate and convenient open spaces for traffic, utilities, access for firefighting apparatus, parking lots, parks, playgrounds, light and air; for the avoidance of congestion of population; and to provide for the proper location and width of streets, easements and building lines.
- D. To establish a subdivision process that is expeditious, efficient and as cost effective as possible, while providing for the public health, safety and general welfare.
- E. To establish adequate and accurate records of land subdivision.

102 Short title

These regulations shall hereafter be known, cited and referred to as the Subdivision Regulations of The Town of Verdigris, Oklahoma.

103 Authority

These subdivision regulations and minimum standards for land development in Verdigris are adopted by ordinance passed under the authority granted under Title 11 of the Oklahoma Statutes, and subsequent amendments thereto.

104 Jurisdiction

These Subdivision Regulations and development standards shall apply to the following forms of land subdivision within the territorial jurisdiction of the Verdigris Planning & Zoning Commission:

- A. The division of land into two or more tracts, lots, sites or parcels, any part of which, when subdivided, shall contain less than ten (10) acres in area; or

- B. The division of land, previously subdivided or platted, into tracts, lots, sites or parcels, of less than ten (10) acres in area; or
- C. The dedication, vacation or reservation of any public or private easement through any tract of land regardless of the area involved, including those for use by public and private utility companies; or
- D. The dedication or vacation of any street or alley through any tract of land regardless of the area involved.

105 Platting Requirement

No plat or deed or other instrument of a subdivision of land within Verdigris shall be accepted for record in the office of the Clerk until it has been approved by the Verdigris Town Board of Trustees as being in accordance with the regulations and such approval endorsed on such instrument in writing. All Final Plats shall be filed within two (2) years of the date of Preliminary Plat approval by the Verdigris Town Board of Trustees, and no lots shall be sold from any plat until same shall have been recorded as herein provided. Failure to record the Final Plat within sixty (60) days of the Verdigris Town Board of Trustees approval shall void all approvals thereof.

No Building Permit or Certificate of Occupancy shall be issued on a previously platted lot or platted addition if such was previously platted under and/or in accordance to outdated zoning ordinances and subdivision regulations if the intent is to; adjust, remove, or add any lot lines and/or easements. Such lot or addition shall be subject to the platting process in its entirety.

No Building Permit or Certificate of Occupancy shall be issued on the above designated properties until that portion of the tract is included within a subdivision plat or re-plat. The platting of land, as set for in these Subdivision Regulations, shall be required in accordance with the Verdigris Zoning Code platting requirements in the following instances:

- A. For any land which has been rezoned to a zoning classification other than AG upon application by a private party, or
- B. For any land which has been granted a Special Exception by the Board of Adjustment.

106 Planned Unit Development

Where a Planned Unit Development (PUD) has been approved with the provisions of the Zoning Regulations, the plat or detailed site plans for development shall conform to the PUD Development Plan, other provisions of these Subdivision Regulations to the contrary notwithstanding.

The PUD Development Plan shall contain graphical and text information to provide the basis for the development within the approved PUD boundaries. Plats and

detailed site plans may contain minor adjustments from the PUD Development Plan that may be approved during the review and approval processes of these Subdivision Regulations. These minor adjustments may be considered minor amendments as defined in the Zoning Regulations.

107 Lot Split

The lot-split procedure may be applicable in lieu of a full subdivision plat when the subdivision of land meets the criteria as described in Section 400 of these regulations.

108 Waiver of Platting Requirement

The Verdigris Town Board of Trustees, upon a recommendation of the Planning Commission, may waive the platting requirement upon a determination that the purpose and intent of these Regulations has been met by previous platting or could not be achieved by a plat or re-plat.

109 Variances and Exceptions

Whenever it would be inadvisable to apply a provision of these Subdivision Regulations because a tract is of unusual size, shape or character and would render an extraordinary hardship not created or imposed by the owner or subdivider, the Planning Commission may modify such provisions only to provide that substantial justice may be done, the public interest secured, and the intent and spirit of these Subdivision Regulations fulfilled, provided in no event shall the requirements of procedure or improvements be waived. Such modifications thus granted shall be made at the written request of the subdivider stating the reasons for such modifications and shall be waived only by three-fourths (3/4) vote of the regular membership of the Planning Commission. Any such modifications thus granted shall be duly entered and recorded in the minutes of the Planning Commission, setting forth the reasons which justify the modifications.

110 Amendment

The Verdigris Town Board of Trustees may, from time to time, adopt, amend and make public rules and regulations for the administration of these regulations to the end that the public be informed and that approval of plats expedited. These Subdivision Regulations may be enlarged or amended by the Verdigris Town Board of Trustees after public hearing, due notice of which shall be given as required by law.

111 Validity

If any section, clause, paragraph, provision or portion of these Subdivision Regulations be held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, paragraph, provision or portion of these Subdivision Regulations.

112 Repeal

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

113 Violation and Penalty

No building permit shall be issued for any new structure, change, improvements, or alteration to any existing structure, on any tract of land, which does not comply with all the provisions of these Subdivision Regulations.

Any person, firm, or corporations which violates or refuses to comply with any of the provisions of these Subdivision Regulations shall be fined not less than Twenty-five Dollars (\$25.00) nor more than One Hundred Dollars (\$100.00), including costs, for each offense. Each day a violation is permitted to exist shall constitute a separate offense.

Suspension of building permits or construction of subdivision improvements, for a portion or the entirety of a subdivision, may be required and enforced at any time for just cause to correct construction or development issues. These issues include, but are not limited to, grading, paving, installation of drainage conveyances and placement of fill materials, erosion and sediment control corrective requirements prior to the establishment of permanent vegetation.

114 Saving Provision

These Subdivision Regulations shall not be construed as abating any action now pending under, or by virtue of, prior existing subdivisions regulations, or as discontinuing, abating, modifying or altering any penalty accruing to, about to accrue, or as affecting the liability of any person, firm, company, corporation or any other entity, at the time of the adoption of these regulations, or as vacating or annulling any rights obtained by any person, firm, company, corporation or any other entity, by lawful action of the Town, except as shall be expressly provided for in these regulations.

Section 200 Plat Approval Process

201 Pre-application, Sketch Plat Development (Optional)

Submittal of a sketch plat for review by the Planning Commission is optional by the sub-divider. A thorough investigation of all development and utility requirements by the sub-divider or sub-divider's agent is encouraged.

The sketch plat procedure is intended for the sub-divider and/or sub-divider's engineer to meet with the Planning Commission and other appropriate persons, including utility providers, regarding the development in consideration of the following at a minimum:

- A. Comprehensive Plan regarding the subject tract.
- B. Existing zoning and other related planning information.
- C. The availability and extension responsibility for utilities to serve the subdivision including water, sewer, gas, telephone and cable as available or required.
- D. The major street and highway plan and required right-of-way dedication for street classifications within and from the proposed development to abutting land.
- E. Preliminary investigations of soils, topography, slopes, drainage, oil or gas wells or other surface or sub-surface features that may affect development.

202 Preliminary Plat Application and Procedure

The preliminary plat is intended for the consideration of the development based on the detailed plat drawings of the sub-divider and the Planning Commission review of the plat and conceptual plans for the development. Subsequent to preliminary plat approval, the final construction plans shall be developed according to the standards in these subdivision regulations. Approval of the preliminary plat allows for the installation of the subdivision improvements prior to the request for approval of the final plat, but the developer acts at his/her or its own risk in installing improvements prior to final plat approval.

The sub-divider shall submit a sufficient number of copies of the preliminary plat with checklist (see Appendix) as required by the Planning Commission. The preliminary plat submittal shall be accompanied with conceptual plans and by an application and filing fee as established by the Planning Commission.

- A. The Planning Commission shall hold a hearing on the preliminary plat.

- B. The Planning Commission shall approve, conditionally approve, or disapprove the preliminary plat at such hearing, or within thirty (30) days after the date of the meeting of the Commission at which the issue of approval of the preliminary plat was considered including any adjourned date for such hearing. Failure to approve, conditionally approve, or disapprove the preliminary plat within the time frames set forth in this subsection shall be deemed a disapproval. The thirty (30) day time frame may be extended and/or waived by agreement between the applicant and the Planning Commission.
- C. The reasons for disapproval or approval with conditions shall be stated in written form and included in the minutes of the Planning Commission meeting. The reasons for disapproval or approval with conditions shall refer specifically to those parts of these Subdivision Regulations with which the plat does not conform.
- D. The preliminary plat and the Planning Commission recommendation shall be submitted to the Verdigris Town Board of Trustees for consideration at a scheduled meeting at which the preliminary plat may be approved, disapproved, or approved with conditions. The reasons for disapproval or approval with conditions shall be stated in written form and included in the minutes of the Town Board of Trustees meeting. The reasons for disapproval or approval with conditions shall refer specifically to those parts of these Subdivision Regulations with which the plat does not conform.
- E. One (1) copy of the proposed preliminary plat shall be retained in the Planning Department and one (1) copy shall be returned to the sub-divider. Each copy shall include the date of approval, conditional approval, or disapproval and the reasons therefore.
- F. The approval of a preliminary plat shall be effective for a period of two (2) years from the date of approval by the Verdigris Town Board of Trustees unless otherwise approved by the Board for an extended period of time. Any preliminary plat not receiving final plat approval within two (2) years, including any approved extensions by the Board, shall be null and void.
- G. Each preliminary plat shall conform to the adopted Subdivision Regulations at the time of approval of the preliminary plat unless modifications have been granted through the proper appeals process.
- H. Subsequent to preliminary plat approval, the sub-divider may commence construction of the public improvements in accordance with final construction plans approved by the Town after arranging for inspection of said improvements during construction by the appropriate public body.
- I. Any preliminary plat approval shall be revocable for cause by the Verdigris Town Board of Trustees, upon review and recommendation by the Planning Commission.

Deviations deemed material by the Commission from any preliminary plat shall require that the plat be resubmitted, as in the case of a new preliminary plat.

203 Conceptual/Preliminary Improvement Plans

The sub-divider shall submit at least three (3) copies of the conceptual/preliminary construction plans of the subdivision with the preliminary plat application and Conceptual Plans Checklist (see Appendix). The conceptual plans shall show improvements for streets, drainage, sidewalks, pedestrian ways, all utilities and all other improvements as required by these Subdivision Regulations and requested by the Planning Commission or Town Engineer. Review and comments by the Town on the Conceptual Improvement Plans shall be submitted to the sub-divider prior to the development of the Final Construction Plans. The Conceptual Improvement Plans and the initial submittal of the Final Construction Plans shall be clearly marked on each page "PRELIMINARY, NOT FOR CONSTRUCTION".

204 Final Construction Plans and Record Drawings

For the initial submittal and prior to any construction of subdivision improvements, the sub-divider shall submit a minimum of three (3) copies of the construction plans and applicable checklist for the proposed improvements. The initial submittal of Final Construction Plans shall have each page clearly stamped "PRELIMINARY, NOT FOR CONSTRUCTION". Final construction plans shall be submitted to the Planning Commission for review by the following:

- A. The Town Engineer shall review and approve the final construction plans for improvements regarding streets, drainage and storm sewers, erosion control, sidewalks and pedestrian ways in accordance with these Subdivision Regulations. Planning Commission may also review and make recommendations on the said final construction plans. The final construction plans must be approved by the Town before construction of the subdivision improvements may begin.
- B. The appropriate water and sewer authority shall review and approve sanitary sewer and water improvement plans.
- C. The ODEQ shall review and approve all final plans for public and private water and sewage disposal systems.

For the approval set of the Final Construction Plans, a minimum of six sealed (6) copies of the plan set must be submitted, with the "PRELIMINARY, NOT FOR CONSTRUCTION" stamp removed.

Following the completion and approval of all improvements as set forth in these Subdivision Regulations, final record drawings ("as-builts") for public utilities, drainage improvements, streets and any other required drawings shall be submitted. All information provided by the sub-divider's engineer or surveyor must be sealed. This shall include field survey information and hydrological performance verification of drainage and detention facilities as required by the Town Engineer.

Plat Approval Process

205 Final Plat Application and Procedure

The final plat is intended to provide for the final documentation and recording of the subdivided land including final dimensions, dedications and land restrictions. Approval of the final plat is the method for the acceptance of the public improvements and public ways by the governing body and the initiation of the warrantee period prior to the full acceptance of maintenance responsibilities of said improvements, unless otherwise agreed to in writing by the Town and sub-divider.

205.01 Review

The Planning Commission and Town Engineer shall review the final plat for compliance with the approved preliminary plat.

The Planning Commission and/or Town Engineer shall make a recommendation to the Planning Commission on whether:

- A. There has been compliance with all conditions, restrictions and requirements of these Regulations and with other applicable regulations or laws;
- B. There has been compliance with all conditions that have been attached to the approved preliminary plat;
- C. The Planning Commission should approve or disapprove the final subdivision plat.

205.02 Planning Commission Review – Requirements and Determination

The sub-divider shall file with the Planning Commission an application with checklist for approval by the Planning Commission of a subdivision final plat, which shall:

- A. Be made as prescribed in these Subdivision Regulations;
- B. Comply in all respects with the approved preliminary plat;
- C. Be accompanied by a sufficient number of copies of the final plat as required by the Planning Commission;
- D. Be accompanied by the final plat filing fee as established by the Town Board of Trustees;
- E. The final plat shall be submitted for final approval to the Planning Commission at a regularly or specially called meeting. The Planning Commission shall at such meeting, or within 30 days thereafter;
 - 1) Review the final plat and the report of the Planning Commission;

- 2) Recommend to approve the plat if the conditions of preliminary plat approval have been met, or disapprove the plat if the conditions of preliminary plat approval have not been met, or for any other reasons reasonable and within the powers of the Planning Commission, and state in detail in the record of its meeting any reasons for disapproval. Failure to make a determination within the time period prescribed shall be deemed a denial and shall commence any applicable period of limitations.

205.03 Review and Approval Requirements by the Town Board of Trustees

Following the approval by the Planning Commission of the final plat, the following items shall be completed and documented prior to the presentation of the final plat to the Town Board of Trustees. Copies of the final plat as required by the Planning Commission and documentation shall be provided which include:

- A. Electronic Copies of Final Plat and Covenants - Electronic files in accordance with the requirements of the Verdigris Planning Commission, Clerk's office, Assessor's office and any applicable E-911 or other dispatching or emergency entity or entities shall be provided, including a minimum of two (2) copies of a CD or DVD containing the Final Plat and Covenants in CAD file (DWG) format, and Portable Document Format (Adobe PDF). The Format of electronic files and media may be changed as required by the Verdigris Planning Commission.
- B. Utility Release Letters - The application shall include release letters (or similar documentation) from each applicable utility that the easement and utility extension requirements have been met. Utilities may include water, sewer, gas, and communications respectively as available to the subdivision.
- C. Roadway Release Letter - The application shall include a letter from the Town Engineer indicating that all road improvements have been constructed, inspected and approved as being constructed according to the subdivision plans, the improvements meet these Subdivision Regulations and erosion control measures are in place.
- D. Abstractor Ownership Affidavit – Current certification by a bonded abstractor, attorney or title insurance company of the last grantees of record owning the entire interest in the property being subdivided plus holders of mortgages and liens filed of record.
- E. Record Drawings – Record Drawings or “As-Built” of roadway improvements and detention facilities, sealed by the subdivider's surveyor or engineer, as outlined in Section 304.d.
- F. Infrastructure Improvements – All infrastructure improvements will be installed, inspected, and approved prior to submission to the Town Board of Trustees. Final Plats may be approved prior to installation of infrastructure improvements if so approved by the Town Board of Trustees only if adequate assurance by the

developer that the roads will be built according to the requirements. Those assurances shall include; bonds, letters of credit, or other items approved by the Town Board of Trustees.

G. Bonds – A maintenance surety bond as outlined in Section 602.

H. Lien Releases and Bill of Sale - The applicant shall provide to the Town of Verdigris lien releases and a bill of sale for all infrastructure improvements in the amount of said improvements, that are to be accepted by the Town, prior to final acceptance of the Town.

206 Final Approval, Endorsement and Official Recording

206.01 General

- A. No final approval shall be endorsed on the final plat until all requirements of plat approval have been met.
- B. The parties responsible for acknowledging acceptance by the Town and for endorsing approval on the plat shall be the Planning Commission and the Mayor, or any other party authorized, in writing or by authority of law, to sign for said persons.
- C. Approval shall not be endorsed on the plat until after all conditions of the approval have been satisfied and all improvements satisfactorily completed and accepted by the Town.
- D. Written evidence shall be submitted, including submission of Record Drawings as described in these Subdivision Regulations that the required improvements have been installed, and necessary dedications made, in a manner satisfactory to the Town as approved by the Town Engineer and/or Town Attorney as applicable.
- E. To partially defray to costs of notification and special studies, there shall be paid to the Planning Commission, at the time of submittal of the plats, a filing fee as established by the Town Board.

207 Review Fees

All applicable fees as defined by the Town of Verdigris Zoning Ordinances, Appendix F, or any amendments or modifications thereto shall, be paid as specified by those requirements.

There shall be a separate minimum fee payable to the Town of Verdigris for an engineering review. *Please refer to the Schedule of Fees* attached as Appendix F to the Town of Verdigris Zoning Ordinance.

Any fee above the fees set forth on the Schedule of Fees will be determined by the Town of Verdigris based upon the actual amount of engineering review necessary to determine if proposed plats, plans and/or reports meet the minimum regulations and

are suited for the proposed application. Any additional fee for each respective item is due and payable upon demand of the Town of Verdigris. This fee is subject to change with proper public notice and approval by the Town Board.

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Section 300 Specifications for Plat and Plan Documents

301 Platting Accuracy**301.01 Preliminary Plats**

Preliminary plats shall be drawn to scale as specified below with such accuracy as to determine the location of lot, block, property and boundary lines, utility and other facilities to the nearest one-hundredth (0.01) foot.

301.02 Final Plat

Final plats shall be prepared as specified below with third-order survey accuracy for both vertical and horizontal survey datum and also include the following information:

- A. Traverse data for the plat, including the coordinates of the boundary of the subdivision with the error of closure;
- B. The computation of all distances, angles, and courses that are shown on the final plat unless measured in the field; and
- C. All stakes, monuments or other evidence found on the ground in use to determine the boundaries of the plat.

302 Preliminary Plat**302.01 General**

The preliminary plat shall be prepared by a Registered Professional Land Surveyor. The application for preliminary plat approval must include the names and addresses of the owner/developer, and Registered Land Surveyor preparing the plat. The required number of copies should be submitted with the appropriate application fee. Additionally, any other information as required by the Town or Planning Commission for submission of the preliminary plat should be included.

302.02 Scale

The preliminary plat shall be drawn to a scale of not more than one inch equals one hundred feet (1"=100') for areas less than two hundred (200) acres. For areas greater than two hundred (200) acres a scale of one inch equals two hundred feet (1"=200') may be acceptable if the lots are two (2) acres or larger.

302.03 Required Information

The preliminary plat shall show or be accompanied by the following (see check list in Appendix):

- A. Name of the subdivision prefaced by "PRELIMINARY PLAT."

- B. The name and address of the owner or owners of the land to be subdivided, the name and address of the land surveyor, planner, engineer and the names of the abutting property owners.
- C. Date of preparation of the plat, north arrow and scale (written and graphic presentation).
- D. Key or location map showing the location of subdivisions within the mile section.
- E. An accurate legal description of the property.
- F. A listing of the utility service providers.
- G. A listing of the property zoning, setback, lot area and width requirements.
- H. Locations and dimensions of all boundary lines of the proposed subdivision to the nearest one-hundredth foot including property lines, County limits or County lines, and Town limits and/or lines.
- I. Names of all adjacent subdivisions and the names, locations, and widths of all existing and proposed streets, easements, drainage ways, and other public ways, adjacent to the property.
- J. Locations and widths of easements of all oil, gas, and petroleum product pipelines and any required setbacks.
- K. Location and width of easements for existing utilities on or adjacent to the property and any required setbacks.
- L. Location of every oil or gas well, either existing active or inactive wells, plugged or unplugged abandoned wells, as shown by the records of the Oklahoma Corporation Commission and by such other records as may be on file with the Planning Commission, or any planned future well sites.
- M. Location and description of all existing structures, water bodies and watercourses.
- N. Areas subject to flooding based upon the regulatory flood and the FIRM panel map number.
- O. Names, locations and widths of all proposed streets and all right-of-way dedications as required by street classification.
- P. Location and dimension of all proposed streets, drainage ways, detention facilities, pedestrian ways, bike paths, parks, playgrounds, public ways, or other public or private reservations.
- Q. All proposed lots consecutively numbered, their dimensions, and building setback lines shall be shown on the plat for each residential single-family lot.
- R. Blocks consecutively numbered.

- S. A topographic map of the subdivided area with contour lines having a maximum of two (2) foot contour intervals based on United States Coastal and Geodetic Survey datum.
- T. Preliminary Deed of Dedication and Subdivision Covenants.
- U. The preliminary plat shall show on its face, and in conjunction with the key map, a summary of the total acres platted, the number of lots and blocks, the number of reserve areas and other pertinent information as would be required to summarize the nature and character of the proposed development.
- V. Language shall be included on the face of the preliminary plat specifying “Acknowledgements” by the owner, surveyor, and engineer that the plat has been prepared in accordance with all of the regulations and requirements of Verdigris.
- W. Any other information as may be deemed by the Planning Commission as reasonably necessary for the full and proper consideration of the proposed subdivision.

303 Final Plat

303.01 General

The final plat shall be at the same scale or smaller as the preliminary plat, and be prepared by a registered land surveyor. The plat shall contain all information in accordance with all applicable Oklahoma and Town platting requirements.

The final plat shall be on a sheet of paper with a marginal line around the entire sheet one (1) inch from the edge of the sheet, with no plat lines, lettering, signatures, and seals within the marginal area. One (1) reproducible copy of the final plat shall be on Mylar, and the remaining copies shall be blue or black line on a good grade of paper.

303.02 Required Information

Information required on the final plat shall include the following (see checklist in Appendix):

- A. All applicable information from the preliminary plat (final plat does not include contours).
- B. Name of the subdivision prefaced by “Final Plat.”
- C. The name and address of the owner or owners of the land to be divided, the name and address of the sub-divider if other than the owner, and the name and address of the land surveyor.
- D. Date of preparation of the plat, north arrow and scale (written and graphic presentation).
- E. Key or location map showing the location of subdivisions within the mile section.

- F. An accurate legal description of the property.
- G. Total acres and total number of lots in the subdivision.
- H. Names of all adjacent subdivisions and the names, locations, and widths of all existing and proposed streets, easements, drainage ways, and other public ways, adjacent to the property.
- I. Boundary of the subdivided area, block boundary, street, and other right-of-way lines with distances, angles, and/or bearings. Subdivision boundary shall be tied to a section corner in the mile section. Where these lines follow a curve, the central angle, the radius, points of curvature, length of curve, chord bearing, chord length, and length of intermediate tangents shall be shown.
- J. The accurate dimensions of all property to be offered for dedication for public use, and all property reserved for the common use of the property owners within the subdivision with purpose indicated.
- K. The dimensions of all lots and lot lines, and the bearings of those lot lines not parallel or perpendicular to the street right-of-way line.
- L. Property zoning and setback requirements.
- M. Culvert sizes, recommended finished floor elevations and surveying benchmark.
- N. All existing easements and right-of-way with Book and Page number.
- O. Easements that serve the area being platted located outside of the boundaries of the plat and recorded reference shall be required for plat approval.
- P. Each final plat submitted to the Town for approval shall carry a deed of dedication consisting of all of the following, but not limited to; a designation of the subdivision name as an addition to The Town of Verdigris, Oklahoma, a legal description of the tract to be subdivided, dedication of right-of-way and easements, provisions and protections as desired by suppliers shall be defined for electric, telephone, natural gas and cable television services, supplier of water and sanitary sewer services shall be stated as necessary and provisions and protections as desired by said suppliers shall be defined, all drainage ways and reserve areas shall be defined and dedicated to appropriate ownership, driveway culvert types shall be defined and finish floors and culvert sizes shall be described as depicted on the plat. The Deed of Dedication cannot be changed by the Developer, Sub-divider or Home Owners Association without re-platting the subject property.
- Q. Any deed restrictions or subdivision covenants applicable to the subdivision shall be shown.

- R. Language shall be included on the face of the final plat specifying “Acknowledgements” by the owner, surveyor, and engineer that the plat has been prepared in accordance with all of the regulations and requirements of Verdigris.
- S. Language which provides for the subdivider to be responsible for all maintenance of all common areas and any privately owned facilities to include but not limited to drainage and detention areas, park areas, entry features and sidewalks; and which requires the formation of a homeowners or other owners association which shall be responsible for the maintenance of all common areas and aforementioned facilities when said association has been established as set forth by the plat.
- T. The location of every oil or gas well, either existing active or inactive wells, plugged or unplugged abandoned wells, as shown by the records of the Oklahoma Corporation Commission and by such other records as may be on file with the Planning Commission and the location of any planned future well sites.
- U. All proposed lots consecutively numbered, their dimensions, and building setback lines, and street addresses shall be designated on a copy of a plat for each residential single-family lot with the following notation:

Caveat/Disclaimer: Addresses shown on this plat are accurate at the time the plat was filed. Addresses are subject to change and should never be relied on in place of the legal description.
- V. Any other information as may be deemed by the Planning Commission as reasonably necessary for the full and proper consideration of the proposed subdivision.

303.03 Required Certifications

The following certifications (see sample Certificates in Appendix) shall be required on the Final Plat or within the Deed of Dedication:

- A. Certificate of Ownership – Certification signed and acknowledged by all parties having any title interest in the land subdivided, consenting to the preparation and recording of the plat as submitted.
- B. Certificate of Survey - Certification by the owner’s registered land surveyor who prepared the plat as to the accuracy of the survey and of the plat, and that the monuments and benchmarks are accurate as to location shown, which shall state that he or she has fully complied with the requirements of these Regulations and the subdivision laws of the State of Oklahoma governing surveying, dividing and mapping of land, that the plat is a correct representation of all of the exterior boundaries of the land surveyed and the subdivision of it, and that the plat represents a survey made by such surveyor.
- C. Certification of County Treasurer - Certification that the payment of ad valorem taxes on the property is current.

- D. Planning Commission Approval Statement - Certification that the plat was duly approved by the Planning Commission.
- E. ODEQ Approval Statement - Certification that the subdivision conforms to the applicable health regulations as may be required.
- F. Verdigris Town Board of Trustees Approval - Certification that the Board duly approved the plat and thereby accepts roads or other public improvements subject to the requirements and conditions of these Subdivision Regulations.

303.04 Required Supplemental Information

The following supplemental information shall be submitted with the final plat prior to Verdigris Town Board of Trustees approval:

- A. “As-Builts”, Maintenance Bond, all test results and all applicable fees.
- B. Current certification by a bonded abstractor, attorney or title insurance company of the last grantees of record owning the entire interest in the property being subdivided plus holders of mortgages and liens filed of record.
- C. The consent of all owners to the platting of the property.
- D. An electronic file for the Planning Commission and for the Rogers County Assessor of the final plat referenced to a section corner shall be submitted with the final plat in the proper format and media as requested by the Planning Commission (See Section 205.03.a).

304 Conceptual/Preliminary Improvement Plans

304.01 General

The conceptual roadway and drainage improvement plans shall be prepared by a registered professional engineer licensed to practice in the State of Oklahoma. They shall be submitted with the preliminary plat and be in accordance with the requirements and specifications of the department or agency having jurisdiction over the improvements. They shall be accompanied with, or show the following (see checklist in Appendix):

- A. The location and proposed width of each proposed street and right-of-way, sidewalk and pedestrian way.
- B. The location, size, dimensions and points of access as applicable for existing streets.
- C. The paving section and street drainage utilizing either borrow ditches or curb and gutter shall be shown.
- D. The location and size of all proposed easements.
- E. Proposed water layout, and sanitary sewer layout if applicable.

- F. Preliminary Drainage Plan.
- G. Preliminary culvert locations.
- H. The locations for proposed detention facilities.

305 Final Improvement Plans and Engineering Reports

305.01 Construction Plans

The final construction plans for improvements and reports shall be prepared by a registered professional engineer licensed to practice in the State of Oklahoma, shall be submitted in accordance with the requirements and specifications of the department or agency having jurisdiction over the improvements, and shall include the following:

- A. The design and utility information included in the conceptual plans as applicable.
- B. Existing and proposed ground profiles shall be shown along the centerline of each proposed street, with proposed grades and proposed elevations at a minimum of fifty (50) foot intervals.
- C. Typical cross-section of each proposed street, bicycle path, pedestrian way and sidewalk showing the type and width of pavement.
- D. Drainage plan showing all existing and proposed storm sewers, manholes, catch basins, retention or detention facilities, watercourses, culverts, and other drainage structures within the tract, or adjacent thereto, with pipe sizes, grades, and water openings.
- E. The proposed location, entrance and exit locations, and method of access for maintenance of detention or retention facilities.
- F. The drainage plan shall show the design calculations for all proposed borrow ditch sections, and shall show the following: type and size of culverts, minimum slope of culverts, type of end sections, capacity calculations and erosion protections (e.g., rock rip rap).
- G. If curb and gutter streets are utilized, design calculations for inlets, storms sewer, channels and street flow shall be provided including hydraulic grade lines and energy grade lines.
- H. Grading plans shall show, at a minimum, existing contours, minimum finished floor elevations, driveway culvert sizes for each lot, drainage flow directional arrows, and proposed contours as applicable (e.g. proposed swales and detention ponds).
- I. A typical plan set shall include, but not limited to, a Cover, Preliminary Plat, Drainage Area Map and Grading Plan, Roadway Plan, Special Culverts, Storm Water Pollution Prevention Plan sheet, and standard detail sheets.

305.02 Engineering Reports

Applicable engineering reports shall be submitted at a minimum to include Drainage and Detention Report, Storm Water Pollution Prevention Plan (SWPPP) and Report and Paving/Geo-technical Report.

- A. Drainage and Detention Report - This report shall include the drainage area map and all pre- and post- runoff calculations. Calculations regarding the sizing, layout and capacities of all structures, channels, ditches or other storm water facilities shall be included. The detention information shall include specific sizing with inflow and outflow structure details. HEC-HMS or other modeling inputs and results shall be included with hydrographs for all design storms.
- B. SWPPP and Report - All applicable regulations and requirements of ODEQ shall be met. The plan shall include sedimentation and erosion control measures to be utilized. The report shall include the Notice of Intent (NOI) and the General Permit OKR10 - *Storm water Discharges from Construction Activities within the State of Oklahoma* as issued by the Oklahoma Department of Environmental Quality.
- C. Paving/Geotechnical Report - This report is required to determine the subgrade treatment requirements and to evaluate the pavement section requirements. The street cross-section shall meet the minimum requirements shown in the Standard Drawings. An alternate paving section may be required or would be considered based upon the geotechnical report.

306 Monumentation Requirements

All Monumentation must meet the following requirements:

- A. Monuments set must be in sufficient number and durability so as not to be readily disturbed, to assure together with monuments already existing, the perpetuation or re-establishment of any point or line of the survey. Monuments shall be constructed of material capable of being detected with conventional instruments for finding ferrous or magnetic objects;
- B. Must be placed at each point in the boundary of the subdivision, which shall be a minimum of fifteen (15) inches in length with a minimum diameter of three eighths (3/8) inch iron pipe or bar;
- C. Monuments must be placed at each corner of each lot in the subdivision and shall be a minimum of fifteen (15) inches in length with a minimum diameter of three-eighths (3/8) inch iron pipe or bar;
- D. Monument must be placed along the centerline of each street within the subdivision at all street intersections, points of curve, points of tangent, points of compound curve, points of reverse curve, center of culs-de-sac and center of eyebrows which shall be a minimum of fifteen (15) inches in length with a

minimum diameter of three eighths (3/8) inch iron pipe or bar, chiseled marks in the concrete, or pK nails in asphalt;

- E. In such cases where the placement of a required monument at its proper location is impractical, a witness corner or reference monument must be placed, preferably on a line of survey, with the data given to show its location upon the ground in relation to the subdivision boundary or lot corner; and
- F. Any monument set by a Registered Professional Land Surveyor to mark or reference a point on a boundary, lot line, or lot corner must be permanently and visibly marked or tagged with a durable marker in accordance with State regulations.

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Section 400 Lot Split Procedures and Standards

401 Authority

The Planning Commission, pursuant to the powers and jurisdiction vested through Title 11, Oklahoma Statutes, and as required herein, does hereby exercise the power and authority to review, approve and disapprove transfers of land hereinafter referred to as lot-splits as defined within these Subdivision Regulations.

402 Intent and Purpose

The regulations contained in this Section are intended to establish reasonable standards as allowed by these Subdivision Regulations for residential lot-splits. Lot splits may only be allowable for commercial / industrial property when such subdivision of land does not involve any construction. A lot split may be applicable for a subdivision of land only when all of the following criteria are met, but if the criteria are not met the platting process must be followed:

- A. Lot Splits apply only when any of the resulting parcels of land are less than ten (10) acres.
- B. Does not contain more than three (3) total lots, parcels, or tracts including the lots to be split. Any remaining tract shall not be less than ten (10) acres. If this criteria cannot be met, the subdivision platting process applies.
- C. The lot fronts an existing street or lots are being added to a larger tract of land with appropriate frontage. Each respective lot frontage shall be a minimum of thirty (30) feet on a public maintained county road, or conform to the appropriate zoning designation frontage and access requirements.
- D. Does not involve a new street or alley.
- E. A closing or vacation of any street, alley, setback line, access control or easement is not required or proposed.
- F. Such action would not result in significant increases in service requirements or will not interfere with any existing service levels.
- G. All lots will have direct access to a street or maintained county road.
- H. A substandard sized lot or non-conforming lot or parcel will not be created.
- I. All of the lots shall be of sufficient area or shall be accessed properly to accommodate a suitable sewage disposal system as approved by the Oklahoma Department of Environmental Quality (ODEQ), and/or the Town of Verdigris.
- J. There is adequate easement access by utility companies unless appropriate easements are dedicated as approved by those respective companies.

- K. None of the lots have been the subject of a previous lot split under the Town's regulations.

403 Procedure

403.01 General

The applicant shall provide coordination and documentation that the appropriate approvals from all utility companies, Town Departments, or other agencies who are involved have been received. Thereafter, the Planning Commission shall recommend approval of the lot split by the Planning Commission and the Planning Commission shall consider the approval at their next meeting. All lot splits shall require full review and approval by the Planning Commission.

Lot Splits Requiring Waivers: For those lots splits that involve a waiver of any subdivision regulations or zoning requirements, the review procedure shall follow the guidelines listed in the appropriate section below. The Planning Commission shall approve or disapprove the application.

403.02 Application Form and Drawing

- A. Four (4) copies of a survey meeting the requirements of Oklahoma State Statutes and prepared by a land surveyor registered in the State of Oklahoma shall accompany the split. Where possible, the survey drawing should be placed in the space provided on the application form.
- B. Where review will include other agencies or companies in addition to the Planning Commission, additional copies shall be distributed by the applicant and documentation regarding the reviews will be provided to the Planning Commission.
- C. The survey drawing itself shall include a legal description of existing and proposed lots, all existing and future lot boundaries, all existing buildings and improvements and their distances from lot lines, utility and easement locations, flood plain information, adjacent streets and street right-of-way and paving widths, existing access limitations, a north arrow, scale and any other property information or features that may be applicable.
- D. In all cases where drawings are attached on separate sheets, the subdivider should limit the size of the drawing to eight and one half (8-1/2) inches by fourteen (14) inches.
- E. Where the applicant is requesting a waiver, said request shall be stated on the application form, including the reasons for such requests.
- F. The applicant should provide letters from any utility providers that serve the lots or other documentation regarding the accessibility to utilities and need for utility easements of each respective utility.

403.03 Planning Commission review

In its review of lot-splits, the Planning Commission shall:

- A. Require documentation and determine that utility access is available and require the applicant to provide any additional information required for such determination.
- B. Conduct field checks of the area being platted.
- C. Review the application for conformance with the Comprehensive Plan, and all applicable Zoning Ordinances, PUD conditions, Board of Adjustment actions, and these Subdivision Regulations.

403.04 Lot Split Requiring Waivers

For those lot-splits that involve a waiver of a provision of these Regulations, the procedure shall be as follows:

- A. A cut-off date shall be observed which coincides with that of the submission of subdivision plats.
- B. The Planning Commission shall present the application and waiver request including all applicable documentation such as utility letters and/or ODEQ approval to the Town Engineer for review and recommendation.
- C. The recommendation of the Town Engineer shall be compiled with the Planning's recommendation and the application shall be heard at the next Planning Commission meeting.
- D. The Planning Commission shall hold a hearing on the lot-split as follows:
 - 1) Notice of such hearing shall be required only on lot-splits requiring waivers and be given to the abutting property owners (including lot owners separated only by a residential street) by the mailing of a written notice ten (10) days prior to the hearing before the Planning Commission of the application for waiver and lot-split approval;
 - 2) The Planning Commission shall review the requested lot-split and either approve or disapprove the requested waiver;
 - 3) If approved, the lot-split approval may also be subject to the approval of the Board of Adjustment if a variance of a zoning requirement is involved;
 - 4) If the application is disapproved, the applicant may appeal the decision of the Planning Commission to the District Court; and
 - 5) Reasonable conditions may be imposed by the Planning Commission in the granting of a modification from these Subdivision Regulations.

404 Certificate of Approval

Approval shall be shown by certification on the instrument of transfer as required by Oklahoma State Statutes. The Chairperson or such other Officer of the Planning Commission as designated by such Chairperson shall sign the certification.

Upon affixing said written approval by the Planning Commission, the subdivider may then file the instrument with the County Clerk, the approval being an official document that will be contained in the abstract of the property being split.

405 Approval Guidelines

Approval or disapproval of lot-splits shall be based upon the following guidelines:

405.01 Lots

- A. Lot dimensions shall conform to the Zoning Ordinance including bulk and area requirements and shall meet the requirements set forth in the Planning and Design section of these Regulations.
- B. In the case of lots not served by public sanitary sewers and/or public water, such lots shall be of sufficient area to properly accommodate a suitable private sewage disposal system and otherwise meet the requirements of the ODEQ and the Town. Also see Section 510.
- C. Corner lots and double frontage lots should have such extra width and area beyond the minimum requirements for other lots as may be necessary to permit appropriate setbacks on both streets while insuring that adequate buildable space remains.

405.02 Easements and Utilities

There shall be adequate access to all utilities. Where a lot-split will result in a lot having inadequate access to utility easements, dedication of easements shall be required in accordance with the requirements of the applicable utility providers.

405.03 Access and Streets

Where a tract to be split is controlled by non-access provisions, no lot shall be approved where such provision will preclude access for said lot.

The splitting of land shall provide each lot with a minimum thirty (30) feet wide access to a public street or highway, in order to allow adequate services, utilities, garbage and waste removal, fire protection, public health, and safety.

Where land to be split contains within its boundaries areas designated for street right-of-way on the Major Street Plan, the split shall not be approved where street right-of-way fails to conform to said Plan except upon a finding that:

- A. All utilities are in place and the additional right-of-way is not required for utility placement; and

- B. The public has, by virtue of statutory easement or suitable roadway dedication, right-of-way sufficient to allow the placement of pavement of a width necessary to meet the standards of the Major Street Plan for the particular street involved; and
- C. Development made possible by the split itself will not measurably increase the burden of traffic on an adjacent street to such an extent that it would adversely affect the health, safety, and welfare of the public; or
- D. Existing structures lie in the right-of-way proposed by the Major Street Plan that precludes the construction of roadway improvements.

Should the Planning Commission and Town Engineer determine that the right-of-way requirements as designated in these Subdivision Regulations and on the Major Street Plan be required, a lot split procedure is not applicable for the property.

405.04 Water Supply and Wastewater Disposal

- A. Where a tract to be split abuts or is within 300 feet of a public sanitary sewer, no split shall be approved until or unless the approval of the other appropriate agency or entity is obtained. (See also Section 510.01)
- B. Lot sizes shall meet the requirements of ODEQ.

406 Commercial & Industrial Structures – Platting Requirement

Notwithstanding any other provision contained herein, any Commercial or Industrial structure requiring a building permit shall only be built in a platted subdivision.

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Section 500 Engineering Design Requirements

501 General

501.01 Lots

A. Configuration

Side lines of lots shall be perpendicular to the right of way, or radial to curved street lines where feasible. Double frontage or reverse front lots should be avoided except where their use will produce definite advantages in meeting special situations in relation to topography, features or will allow for proper land use.

B. Access

Except for gated communities, every lot shall have frontage on or about a public dedicated street. Lots in gated communities shall abut interior streets within the gated community.

C. Dimensions

Lot dimensions, yard, building setback lines, and lot area shall conform to the requirements of the Zoning Ordinance and shall conform to the Oklahoma Department of Environmental Quality (ODEQ) requirements for the intended water and sewer service systems.

D. Frontage Requirements for Cul-De-Sac Lots

1. The minimum lot frontage of a cul-de-sac lot shall be thirty five (35) feet at the right-of-way line.
2. The minimum lot frontage of a cul-de-sac lot, as required by the respective zoning classification, shall be measured, defined, and/or achieved by the length of the tangent line drawn at the midpoint of the front building line/setback arc. Said minimum frontage requirement shall be met at a front building line/setback that is no more than two (2) times the standard front building line/setback requirement as required by the respective zoning classification or as may be required by the Town Engineer.
3. The front building line/setback of a cul-de-sac lot shall be established and shall not extend more than two (2) times the standard front building line/setback requirement as required by the respective zoning classification if so adjusted to achieve the lot frontage requirement.
4. **Refer to Section 1014.05, Culs-de-sac**, the Cul-de-Sac Requirements Layout & Min. Lot Width Standard Detail.

E. Flag Lots

Flag lots are not allowed within a platted subdivision or lot split unless included in a specific variance request or approved through special exception by the Board of

Engineering Design Requirements

Adjustments. Flag lots may be allowed in certain circumstances where access is limited by topography or other circumstances where a hardship exists. Flag lots must meet the following requirements:

- A. The “pole” must have a minimum of thirty (30) feet of frontage on a dedicated public road or street.
- B. The acreage with the “flag” portion of the lot must meet the minimum lot size requirements without considering the “pole” area.
- C. Setback requirements for front setbacks must be counted only from the front edge of the “flag” portion without considering any of the “pole”. Front setback requirements may also be required by the Planning Commission from the “pole” or an extension of the alignment of the “pole”.

501.02 Easements

A. Utility Easements

- A. Utility easements shall be of a minimum width of twenty (20) feet, ten (10) feet on each side of all rear lot lines, or width as specified by the utility company, and when necessary on other lot lines, for poles, wires, conduits, sanitary sewers, gas, water, power, and other utility lines
- B. When an easement of twenty (20) feet in width is not provided, the minimum width of the easement shall be fifteen (15) feet, or as required by the Town Engineer.
- C. A minimum of twenty (20) feet utility easement shall be provided adjacent to public right-of-way dedication, or as required by the Town Engineer.
- D. A perimeter easement of seventeen and a half (17.5) feet shall be provided, or as required by the Town Engineer.
- E. Easements shall be maintained free of buildings, appurtenances, or other structures or improvements, which would prevent access for maintenance and service of utilities.

B. Drainage Easements

- A. Suitable drainage easements shall be provided and improved for all overland drainage flow in a manner adequate to accommodate a one hundred (100) year storm event.
- B. Drainage easements shall be maintained free of buildings, fences, appurtenances or structures. Subdivision covenants shall also contain these requirements.

- C. Public drainage easements shall be provided for all detention facilities and drainage ways. The covenants shall explicitly state who shall be responsible to maintain detention facilities. The Town of Verdigris will not maintain any detention facilities unless owned by the Town. All other detention facilities shall be adequately maintained by the owner(s) thereof. Failure to maintain such detention facilities and/or drainage ways shall be deemed a violation of these Regulations, enforceable by citation from a Code Enforcement Officer or Police Officer of the Town, and shall carry a fine not to exceed \$200, the passage of each day constituting a separate offense. The Town Board may, in addition to all other remedies available, upon 15 days notice by certified mail, return receipt requested, to the owner, hold a public hearing on the issue of whether or not the failure of maintenance should be abated and remedied, and may after a public hearing order the person to abate and remedy the failure; provided, however, if such person fails or refuses within 30 days to so abate or remedy the failure to maintain such facilities, the Town Board may order the abatement and remedy and may file a lien and/or lawsuit to seek reimbursement for funds expended by the Town. If the owner cannot be determined the Town may fulfill its notice requirements by posting a notice on the property at least 15 days prior to the public hearing.

501.03 Block Length Requirements

The length, width and shape of blocks shall be determined in accordance with the following:

- A. Zoning requirements applicable to lot sizes and dimensions.
- B. Needs for convenient access, circulation, control and safety of street traffic.
- C. Limitations and opportunities of topography and physical features within and adjacent to the development.
- D. Blocks for residential use shall not be longer than one thousand two hundred (1,200) feet, measured along the centerline of the abutting streets. When blocks exceed one thousand (1,000) feet in length, a perpendicular dedicated right-of-way not less than ten (10) feet in width and a paved crosswalk of not less than four (4) feet in width may be required.
- E. Blocks used for residential purposes should be of sufficient width to allow for two (2) tiers of lots of appropriate depth, except where adjacent to major streets, limited access highways, railroads, waterways, or when prevented by topographical conditions.
- F. Blocks intended for business and industrial use should be of a width and depth suitable for the intended use, with due allowance for off-street parking and loading facilities, and with due consideration for the probable types of volume and vehicles contemplated.

501.04 Building Lines

Building lines shall be shown on all plats for the intended use as follows:

- A. Where an official building setback line has been established by the Town Board of Trustees, the setback line on the plat shall not be in front of such line.
- B. Where a Planned Unit Development has been approved under the provisions of the Zoning Regulations, any setback lines established therein shall be recognized on the plat.
- C. A front yard setback shall be provided on every lot as required by the Zoning Regulations.
- D. All corner lots shall have building setback lines as required by the Zoning Regulations.
- E. All buildings shall be setback from interior side lot lines as required by the Zoning Regulations.
- F. Where the average natural slope of the first fifty (50) feet of any lot exceeds twenty (20) percent, the Planning Commission may appropriately reduce the building lines required under this section.

501.05 Driveways

Driveways shall conform to the following:

- A. Residential lots zoned for lots at least 30,000 square feet in size or smaller shall have an asphalt or concrete driveway.
- B. Commercial and industrial driveways and customer/public parking areas shall be asphalt or concrete or an approved hard surface consisting of dust free material.
- C. All existing improvements including sidewalks, curb, gutter and streets damaged or removed by the driveway construction shall be repaired or replaced to existing alignments and grades, or in a manner approved by the Town Engineer. All concrete or asphalt removal shall be saw cut.
- D. Driveways on the same property shall have a minimum separation of twenty five (25) feet.
- E. All driveway location and separation requirements are measured from the end of the radius returns.
- F. Residential driveways shall have a minimum width of twelve (12) feet and a maximum width of thirty (30) feet.
- G. No portion of a driveway shall be closer than two (2) feet to a property line for residential use or nine (9) feet for commercial use.
- H. Maximum industrial and commercial driveway width is forty (40) feet.

- I. Minimum driveway return radius is ten (10) feet for residential and fifteen (15) feet for commercial or industrial.
- J. In relation to nearby intersections, residential driveways shall have no portion of the driveway within twenty (20) feet of a residential or collector street or fifty (50) of an arterial street.
- K. In relation to nearby intersections, commercial and industrial driveways shall have no portion of a driveway within twenty-five (25) feet of a residential or collector street or seventy-five (75) feet of an arterial street.
- L. The edge of the driving lane of a driveway shall be no closer than five (5) feet from a utility pole, fire hydrant, and drainage inlet or any other above ground utility structure and shall be outside any water and sewer lines and appurtenances.
- M. One driveway may serve two (2) properties if the required joint access easement has been recorded. The minimum driveway width in this case is twenty (20) feet.

501.06 Alleys

Alleys, if required, shall conform to the following:

- A. Unless provisions are made for utility easements, emergency access and service access, alleys shall be provided in commercial and industrial districts at the rear of all lots regardless of frontage on a major street.
- B. Alleys serving commercial and industrial areas shall not be less than thirty (30) feet in width and shall be paved the full width.
- C. Alleys may be required in RM Zoned Multi-Family, after review and recommendation by the Planning Commission or Town Engineer for efficient solid waste collection, more effective police and fire protection or for more efficient provision of service access and maintenance of utilities. Alleys serving RM Zoned Multi-Family Districts shall not be less than twenty (20) feet in width and paved for the full width.
- D. Alleys are not required in RS Zoned Districts, but when provided shall not be less than twenty (20) feet in width and paved for the full width.
- E. Alley intersections and sharp changes in alignment shall be avoided, but where necessary, corners shall have a radius sufficient to permit safe vehicular movements as determined by the Town Engineer.
- F. Dead-end alleys shall be avoided where possible, but if unavoidable shall be provided with adequate turnaround facilities at the dead-end as determined by the Town Engineer.

501.07 Sidewalks

- a) Sidewalks shall be installed along both sides of all streets in all zoning categories except for industrial and residential subdivisions zoned for lots at least 30,000 square feet in size or larger.
- b) Sidewalks within residential developments shall be installed prior to occupancy of the respective lot under construction. Wheelchair ramps at all intersections and sidewalks within reserve areas or any area not abutting a lot shall be installed by the developer prior to final acceptance of the infrastructure improvements of the Town.

501.08 Street Lighting

- a) Standard street lights, procured from local utility provided, shall be installed by the developer at all street intersections and at a spacing not more than one thousand (1,000) feet apart in all industrial, commercial, and residential zoning categories zoned for lots at least 40,000 square feet in size or smaller.
- b) Ownership and maintenance of street lights shall be the responsibility of the owner or the property/homeowners association.

502 Street Design Criteria**502.01 General**

The general alignment of the streets shall discourage the use of local streets, excluding collectors, to through traffic. Streets shall be looped whenever possible.

The street alignments shall provide for the appropriate connection to existing streets and shall stub-out or project to surrounding undeveloped tracts of property. Stub outs shall be required, at the discretion of the Town.

A subdivision shall have two routes of access to a section line road, or one route of access with additional planned route(s) of access through future development as approved by the Planning Commission and Town Board of Trustees.

502.02 Street and Subdivision Names

- A. No street name shall be used which will duplicate or be confused with the name of existing streets.
- B. Street names and addresses shall be referred to the Rogers County 911 Addressing for recommendations and are subject to the approval of the Verdigris Town Board of Trustees.
- C. Subdivision names shall not duplicate existing subdivisions of record and shall be reviewed by the Planning Commission and are subject to the approval of the Verdigris Town Board of Trustees.

- D. Standard street signs indicating street names shall be in place at all intersections prior by the developer prior to final acceptance of the infrastructure improvements by the Town of Verdigris.

502.03 Access and Limits of No Access

- A. In commercial and industrial subdivisions, specifically designated “one-way turn only” access may be required in the direction of the adjacent lane at a minimum distance of three hundred (300) feet between major street intersections or a minimum distance of three hundred (300) feet between each access point.
- B. Commercial and industrial subdivisions should have access to a major or commercial street, and may have access to a collector street, if traffic conditions as determined by the Planning Commission warrant, but shall not have access to a residential street.
- C. To assure traffic safety, appropriate non-access provisions shall be designated and dimensioned along all abutting streets in all commercial and industrial subdivisions, and along all major streets in residential subdivisions. A description of such non-access provisions shall appear in the plat.
- D. Access to property occurring within the minimum distance prescribed for major street access, six hundred (600) feet, shall only be by the closest service road or frontage road entrance onto the major street.
- E. In residential subdivisions, individual driveways shall be located on each lot to avoid direct vehicular access to or from any expressway, thoroughfare, or major street. Driveways should be located to enable direct access primarily to or from a minor street, or, if necessary, to the collector streets which serve as feeders to or distributors from the major streets. Limits of non-access shall be designated on the plat.
- F. Additional Limits of No Access must be provided if requested by the Town.
- G. Multiple points of access into a development are encouraged and shall be achieved if possible.

502.04 Roadway Drainage System Determination

A. Curb and Gutter

Subdivisions in which the smallest lot width, excluding cul-de-sac lots, is less than one hundred and thirty (130) feet and/or zoned for lots at least 30,000 square feet in size or smaller shall utilize curb and gutter streets.

B. Borrow Ditch

Subdivisions with the lot widths equal to or in excess of one hundred and thirty (130) feet and/or zoned for lots at least 30,000 square feet in size or larger may utilize streets with borrow ditch drainage systems.

502.05 Right of Way Widths Dedication

The minimum street right-of-way requirements are as follows, and shall be dedicated as follows:

Primary/Principal Arterial	120 feet minimum
Secondary/Minor Arterial (Section Line Road)	100 feet minimum
Commercial/Residential Collector	80 feet minimum
Residential (Local Street)	60 feet minimum*

*This requirement may be reduced to fifty (50) feet for curb and gutter streets.

The right-of-way dedications shall include full width dedication for all streets with the exception of Primary and Secondary Arterials in which case half-width dedication to the Section Line is required when the development lies only within one particular Section of land.

If a Reserve Area falls within a right-of-way (e.g. Entrance Island), the Reserve Area must be contained in a roadway easement. The governing body shall have no liability for any damage to any private improvements occasioned by the maintenance or reconstruction of utilities or infrastructure located in the Reserve Area.

502.06 Design Speed

Speed shall be a minimum of twenty five (25) miles per hour on all residential streets, and thirty (35) miles per hour on all collector streets, or as otherwise approved by the Verdigris Town Board of Trustees.

502.07 Street Geometry

A) Minimum Centerline Radius

<u>Street Classification</u>	<u>Min. Centerline Radius</u>
Primary/Principal Arterial	500 feet
Secondary/Minor Arterial (Section Line Road)	500 feet
Commercial/Residential Collector	270 feet
Residential (Local Street)	150 feet

B) Minimum Centerline Tangent

<u>Street Classification</u>	<u>Min. Centerline Tangent</u>
Primary/Principal Arterial	200 feet
Secondary/Minor Arterial (Section Line Road)	200 feet
Commercial/Residential Collector	100 feet
Residential (Local Street)	100 feet

C) Minimum Intersection Return Radius

<u>Street Classification</u>	<u>Min. Intersection Return Radius</u>
Primary/Principal Arterial	40 feet
Secondary/Minor Arterial (Section Line Road)	40 feet
Commercial/Residential Collector	30 feet
Residential (Local Street)	25 feet

D) Curvilinear Streets

The subdivider is encouraged to consider curvilinear, cul-de-sac, and loop street designs where such use would result in a more functional layout and not necessarily adhere to a rigid rectangular gridiron street pattern.

- 1) All streets within a subdivision zoned for lots at least 30,000 square feet in size and smaller below shall be restricted to a maximum straight length of nine hundred (900) feet. The subdivider shall offset the centerline of straight roadways in excess of nine hundred (900) feet a minimum of twenty five (25) feet (left or right) while maintaining the minimum curves and tangents as stated above

502.08 Cul-De-Sac

The entrance to the cul-de-sac shall be considered the intersection leading into the cul-de-sac from an existing through street or planned through street as approved by the Planning Commission and Verdigris Town Board of Trustees. For zoning, for lots at least 30,000 square feet in size or larger, the cul-de-sac shall not exceed eight hundred (800) feet in length, for zoning less than 30,000 square feet in size or smaller, the maximum length shall not exceed five hundred (500) feet, as measured from the entrance to the center of the cul-de-sac. A cul-de-sac with borrow ditches shall have a minimum right-of-way radius at the property line of not less than sixty (60) feet, a cul-de-sac with curb and gutter shall have a minimum right-of-way radius at the property line of not less than fifty five (55) feet, and either type of cul-de-sac shall have a minimum paving radius not less than forty five (45) feet.

With a reserve island in the center of the cul-de sac, the paving radius shall be thirty (30) feet plus the radius of the island or the minimum paving radius as stated above, whichever is greater and the right-of-way radius shall be fifteen (15) feet plus the radius of the pavement or the minimum right-of-way radius as stated above, whichever is greater.

502.09 Intersections

- A. Streets shall be designed to intersect at right angles as permitted by topography or other limiting factors.
- B. Street intersections shall be as nearly at right angles as possible, and no intersection shall be at an angle of less than eighty (< 80) degrees. Detailed

designs of intersections may be required. Street offsets with center-line offsets of less than one hundred fifty (150) feet shall not be permitted.

- C. Sight Distance Triangles shall be considered and maintained in accordance with the Zoning Ordinance.
- D. No more than two (2) streets shall intersect at any one point.

502.10 Street Grades

- A. The minimum street grade for all streets shall be five tenths percent (0.5%) and the maximum street grade shall not exceed the following:

<u>Street Type</u>	<u>Grade</u>
Primary Arterial	5%
Secondary Arterial	7%
Local Residential	10%

- B. The maximum driveway grade, from the street right-of-way to the building line shall not exceed ten percent (10%).
- C. If the algebraic difference between two intersecting grades is greater than five tenths percent (0.5%), the change in grade shall be connected by vertical curves and designed for safe stopping sight distances as determined by the Town Engineer.
- D. The grade of a residential street when intersecting an arterial street shall not exceed three percent (3%) within a distance of fifty (50) feet measured from the radius points. The maximum grade of residential streets at intersections shall be four percent (4%) within a distance of fifty (50) feet measured from the radius points.
- E. Street grades shall be established in such a manner to avoid excessive grading or removal of tree growth, and shall otherwise be in accordance with these engineering design requirements.
- F. In those cases where topography or other physical features dictate, a modification of required street grades may be approved by the Town Engineer.

502.11 Paving Materials and Street Design

A geotechnical report is required to determine the sub-grade treatment requirements and to evaluate the pavement section requirements. The minimum compaction of the sub-grade and base shall be ninety five percent (95%) standard proctor density. The sub-grade shall have a minimum Plasticity Index (P.I.) greater than six (P.I. > 6) and a maximum Plasticity Index less than thirteen (P.I. < 13) or be modified as approved by the Town.

The street cross-section shall meet the minimum requirements as shown in the Standard Drawings Section 811. An alternate paving section may be required, or

would be considered upon request, based on a geotechnical engineering report of representative areas in the subdivision.

502.12 Sidewalk Design

- A) All sidewalks shall be of Class a Portland cement concrete (3,000 psi). Sidewalks shall include pedestrian bridges across creeks and streams where applicable.
- B) The finished thickness of Portland cement concrete sidewalks shall not be less than 4 inches and the width shall be not less than 4 feet. Sidewalks across driveways shall be 6 inches thick and reinforced with welded wire fabric. Surfaces shall be cured to retain moisture.
- C) In general, sidewalks shall be constructed within the dedicated right-of-way except at intersections or as required by the Town. In commercial areas, sidewalks shall be no less than 3 feet from the outside curb line of the street pavements except in unique situations where five-foot-wide or greater sidewalks may abut the outside curb line. Residential sidewalks shall be one foot from property line, except along arterial street frontage where utilities or other structures may require variations.
- D) Sidewalks must provide access for the safe and convenient movement across curbs of physically disabled persons, including those persons in wheelchairs. Wheelchair ramps shall be constructed in accordance with the Standard Details and the Americans with Disabilities Act (ADA).
- E) To accommodate wheelchair access, 5-foot wide “bumpouts” (5 feet long with 10foot long transitions) shall be provided every 200 feet in accordance with ADA. Driveways may be utilized as appropriate, provided that the cross-slope of the driveway on each side of the sidewalk does not exceed 2%.
- F) Transverse crack control joints shall be placed at 5-foot intervals. Joints shall be tooled or sawed to a depth of one inch.
- G) Expansion joints shall be placed at curbs, driveways, or abutting structures but shall not exceed 20 foot intervals.

503 Street Drainage and Storm Sewer Criteria

503.01 General

For the ten (10) year frequency storm with curb and gutter streets:

- A. Arterial Streets - shall have two driving lanes of traffic open and clear of water.
- B. Collector Streets - shall have one driving lane open and clear of water.

- C. Residential Streets - the depth of flow shall not exceed curb height and may spread to the crown of the street.

Where no curb exists, storm water encroachment from the one hundred (100) year storm shall not extend past the street right-of-way or adjacent drainage easement.

503.02 Paving Sump Locations

The water depth shall not extend twelve (12) inches above the top of the grate for the one hundred (100) year frequency storm. But in no case shall the one hundred (100) year flow extend past the right-of-way or adjacent drainage easement.

Where sump locations are used, a permanent overflow route shall be contained in a dedicated drainage easement providing an emergency bypass in case of blockage or overflow of the sump inlets.

503.03 Underground Storm Sewers

- A. The plans shall show the systems in plan and profile view. The plans must include flow-lines, pipe size and material, existing and proposed grade, pipe slope, energy grade line, hydraulic grade line, discharge and velocity for each segment of pipe.
- B. Storm sewers shall be constructed from reinforced concrete pipe (RCP), high-density polyethylene (HDPE) or coated metal alloy as approved by the Town. HDPE shall have a minimum of twenty four (24) inches of cover under streets.
- C. The minimum storm sewer size shall be fifteen (15) inches diameter.
- D. No storm sewer pipe shall be installed downstream having a diameter smaller than the storm sewer pipe it is receiving water from.
- E. The maximum inlet spacing shall be six hundred (600) feet.
- F. Storm sewer construction shall meet the latest edition of Oklahoma Department of Transportation (ODOT) specifications subject to the approval of the Town Engineer.

Structures (manholes, inlets, etc.) must be of concrete construction; masonry shall not be allowed.

504 Culverts and Borrow Ditches

504.01 Roadway Culverts

Material shall be smooth steel pipe, reinforced concrete pipe (RCP), reinforced concrete box (RCB) or High Density Polyethylene (HDPE). HDPE culverts may be used if there is at least twenty four (24) inches of cover.

All culverts shall have ODOT Standard Sloped Concrete End Sections or ODOT Standard Headwalls. Alternative headwalls and/or end sections must be submitted as

part of the construction plans, reviewed, and approved by the Town prior to installation. All roadway culverts shall be a minimum of fifteen (15) inch diameter. Energy dissipaters shall be provided as required.

The minimum design frequency storm for all culverts shall be the one hundred (100) year storm.

504.02 Driveway Culverts

Culverts shall consist of smooth steel pipes, RCP, or corrugated metal pipe (CGMP). Driveway culverts may be HDPE or PVC only with at least twelve (12) inches of cover or if the driveway is concrete and is at least four (4) inches thick.

All driveway culverts within a commercial development and/or a platted subdivision shall have ODOT Standard Sloped Concrete End Sections or ODOT Standard Headwalls. Alternative headwalls and/or end sections must be submitted as part of the construction plans, reviewed, and approved by the Town prior to installation. All driveway culverts shall be a minimum of twelve (12) inch diameter. Energy dissipaters shall be provided as required.

504.03 Borrow Ditches

Borrow ditches shall meet the following standards:

- A. Be a minimum of two (2) feet in depth measured from the top of the street subgrade to the bottom of the ditch.
- B. The velocity of the water in the ditch shall not exceed six (6) feet per second. If the velocity of the water in the ditch exceeds six (6) feet per second, the ditch shall be lined with concrete or other such materials to prevent erosion.
- C. Unlined ditches shall utilize the appropriate erosion and sediment control measures per these Subdivision Regulations.
- D. Where a private drive crosses a borrow ditch, the subdivider's engineer shall determine the minimum required diameter of the culvert which shall be shown on the face of the Preliminary Plat and recorded on the face of the Final Plat drawing. A minimum of a twelve (12) inch diameter culvert pipe shall be required for each such drive.
- E. Borrow ditches shall have a minimum fore-slope and back-slope of 4:1, shall be backfilled with a minimum of four (4) inches of topsoil, seeded or sodded. All roadway borrow ditches or curb and gutters shall be sodded with a minimum of a two foot (2') wide strip of sod adjacent to the pavement or gutter. At a minimum, the bottom of the bar ditch must be contained in the right-of-way dedication.

505 Drainage Design Requirements

505.01 General

- A. The storm water drainage system shall be designed to receive and pass the runoff from a one hundred (100) year frequency rainstorm within dedicated easements or public rights-of-way under full urbanization. The entire flow shall be contained in an approved storm water drainage system. The storm water drainage system shall consist of street flow, storm sewers, ditches, channels, drainage ways and detention facilities.
- B. The building pad elevation on every lot shall be a minimum of two (2) feet above the one hundred year (100) year floodplain elevation or the flood elevation due to any localized drainage or localized flooding. This elevation shall be the minimum elevation for the finished floor of any structure on the lot and this elevation shall be noted and labeled on each lot on the face of the subdivision drainage plans.
- C. Floodplain development must be in accordance with the Floodplain Development Permit as issued by the Floodplain Administrator and required by the Zoning Regulations.
- D. The development shall not increase the one hundred (100) year flood plain elevation or modify the existing flood plain boundaries that exist on the latest publication of the Flood Insurance Rate Map (FIRM) unless the appropriate map revisions/amendments are approved by FEMA (e.g. Letter of Map Revision LOMR, or Letter of Map Amendment, LOMA). The sub-divider shall have full responsibility for obtaining any such map revisions/amendments.
- E. The runoff rate and velocity from any development shall not exceed the pre-development condition which shall be demonstrated by analyzing the runoff from the two (2) year, five (5) year, ten (10) year, fifty (50) year and the one hundred (100) year rainfall frequency events. The post-development runoff shall incorporate detention facilities and drainage patterns in the calculations.
- F. The development shall not adversely impact adjacent properties in the modification of drainage patterns to and from adjacent properties. Protection of unprotected or adjacent property from incremental flows, changes in drainage patterns or point discharges shall be provided. Such flows shall not be directed across unprotected or adjacent properties unless the appropriate easements and proper storm water drainage systems are provided to convey flows to an adequate drainage conveyance system as approved by the Town Engineer.

505.02 Construction in the Regulatory Floodplain

- A. Any construction in the floodplain shall not increase the base flood elevation in the regulatory floodplain.

- B. The one hundred (100) year Base Flood Elevation (BFE) must be determined through backwater analysis. HEC-RAS or other FEMA approved model shall be utilized for the backwater analysis.
- C. The simulation results shall be submitted to the Town’s Floodplain Administrator to document the BFE and demonstrate the project has no adverse impact.
- D. Any floodplain modifications shall require approval by the Town’s Floodplain Administrator and the appropriate FIRM modifications by FEMA.

505.03 Storm Water Runoff Calculations

Approved methods of storm water runoff analysis are shown in Table 505.03-1. Methods of analysis other than the ones listed here may be utilized with approval by the Town Engineer.

Table 505.03-1 Approved Methods of Hydrologic Analysis

Method of Analysis	Application		Minimum Drainage Area	Maximum Drainage Area
	Peak Q	Volume Calculations		
Rational Method	Yes	No	~0	60
NRCS (SCS) Method	Yes	Yes	~0	2000

A. Rational Method

Rational Method may be used to determine required design flows for culverts or channels with drainage areas less than the maximum drainage area allowed in Section 505.03.

The recommended ranges of C values are shown in Table 505.03-2. Coefficient values selected from the range available shall be consistent with the urbanized percent imperviousness (i.e. minimum percent imperviousness requires minimum runoff coefficient value). Also, for flat slopes and permeable soils, use the lower values. For steep slopes and impermeable soils use the higher values.

Table 505.03-2 Runoff Coefficients

Land Use of Surface Characteristic	Percent Impervious	Runoff Coefficients
BUSINESS:		
Commercial Areas	70 to 95	0.70 to 0.95
Neighborhood Areas	60 to 80	0.60 to 0.80
RESIDENTIAL:		
Single Family	35 to 50	0.30 to 0.50
Multi-Unit (detached)	45 to 55	0.40 to 0.60
Multi-Unit (attached)	65 to 75	0.60 to 0.75
1/2 Acres or larger lot	30 to 45	0.25 to 0.40
Apartments	65 to 75	0.50 to 0.70
INDUSTRIAL:		
Light Uses	70 to 80	0.50 to 0.80
Heavy Uses	80 to 90	0.60 to 0.90
PARKS, CEMETERIES	4 to 8	0.10 to 0.25
PLAYGROUNDS	40 to 60	0.50 to 0.60
RAILROAD YARDS	35 to 45	0.20 to 0.35
Land Use of Surface Characteristic	Percent Impervious	Runoff Coefficients
UNDEVELOPED AREAS:		
Cultivated	30 to 70	0.35 to 0.60
Pasture	20 to 60	0.25 to 0.50
Woodland	5 to 40	0.10 to 0.40
Offsite flow analysis (land use not defined)	35 to 55	0.45 to 0.65
STREETS:		
Paved	90 to 100	0.80 to 0.90
Gravel	50 to 70	0.55 to 0.65
DRIVES AND WALKS	90 to 100	0.80 to 0.90
ROOFS	85 to 95	0.80 to 0.90
LAWNS:		
Sandy Soils	5 to 10	0.10 to 0.20
Clayey Soils	10 to 30	0.13 to 0.35

The intensity (I) is the average rainfall rate in inches per hour for the period of maximum rainfall of a given frequency having duration equal to the time of concentration. For a given time of concentration (T_c) in minutes, and design storm frequency and using parameters d, e, and f as defined in Table 505.03-3, the rainfall intensity can be obtained using the following equation:

$$Intensity \left(\frac{In}{hr} \right) = \frac{d}{(T_c + e)^f}$$

**Table 505.03-3 Rainfall Intensity Parameters
(Source: Drainage Design Manual, ODOT, February, 1988)**

Design Storm	d	e	f
2 Year	53.43	11.5	0.81
5 Year	72	15	0.80
10 Year	82	15	0.80
25 Year	95	15	0.80
50 Year	108	15	0.80
100 Year	120	15	0.80

B. NRCS (SCS) Unit Hydrograph Method

All drainage areas over sixty (60) acres and calculations for detention volume require a hydrograph method to determine peak runoff rates. The NRCS (SCS) Unit Hydrograph method is the preferred. Other hydrograph techniques can be utilized upon approval from the Town Engineer.

The Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS) method is presented in detail in Section 4 of the U.S. *Department of Agriculture Soil Conservation Service Engineering Handbook and Model Drainage Manual*, American Association of State Highway and Transportation Officials, 1991. The SCS computer program TR-20 or the U.S. Army Corps of Engineers computer program HEC-HMS are acceptable ways of utilizing the SCS methodology.

The NRCS/SCS publication Technical Release 55 (TR-55) *Urban Hydrology for Small Watersheds* should be used to establish the required precipitation runoff and time parameters. This includes the NRCS/SCS Runoff Curve Number and the Time of Concentration and Lag Time calculations.

Rainfall data to be used for projects in Verdigris is listed in Table 505.03-4. This data was compiled from the *U.S. Weather Bureau Technical Paper NO. 40* and *HYDRO-35*.

Table 505.03-4 Verdigris Rainfall Data

DURATION	Frequency (Return Period)						
	1-Year	2-Year	5-Year	10-Year	50-Year	100-Year	500-Year
5-Minute	0.40	0.48	0.56	0.62	0.79	0.86	1.01
10-Minute	0.71	0.84	0.99	1.11	1.41	1.54	1.83
15-Minute	0.84	1.01	1.20	1.34	1.70	1.86	2.23
30-Minute	1.14	1.40	1.73	1.96	2.55	2.81	3.39
1-Hour	1.44	1.81	2.28	2.60	3.44	3.80	4.58
2-Hour	1.70	2.13	2.80	3.30	4.44	5.00	6.12
3-Hour	1.87	2.28	3.13	3.63	4.83	5.43	6.60
6-Hour	2.19	2.71	3.64	4.30	5.71	6.4	7.80
12-Hour	2.63	3.23	4.31	5.10	6.71	7.55	9.20
24-Hour	3.00	3.75	5.15	5.88	7.78	8.75	10.68

506 Storm Water Detention Facilities

506.01 General

The runoff from any development shall not exceed the pre-development condition which shall be demonstrated by analyzing the runoff from the two (2) year, five (5) year, ten (10) year, fifty (50) year and the one hundred (100) year rainfall frequency events.

The pre-development condition is the runoff pattern, rate, and velocity prior to the construction of the development. The pre-development curve number is generally less than the post development curve number. Soil covers that produce a curve number that is higher in the pre-development condition must be approved by the Town Engineer. The post-development condition with detention is the runoff pattern, rate, and velocity after construction of the development, which includes incorporating any storm water detention facilities into the development.

506.02 Storm Water Detention Report

The report shall be submitted to the Town to explain and support how each item in these Criteria are met. The report shall be formatted to sequentially answer each Criteria item. Any deviation from the Criteria shall be noted on the plans and explained in the report.

All calculations for detention facilities shall be submitted for review by the Town. Submittals shall include hydrographs, outflow rate and velocity, and stage-discharge relationship through the facility. Detention facilities may not be located in the regulatory floodplain.

506.03 Hydrologic Analysis Criteria

- A. Precipitation - The precipitation model utilized should be based on the cumulative depths listed in Table 702.02-1. Alternatively, the total cumulative precipitation may be incrementally arranged using the NRCS Type II Rainfall Distribution Pattern.
- B. Infiltration/Excess Runoff - The excess precipitation/runoff will be calculated using the NRCS Curve Number Technique as described in the NRCS TR-55 Publication.
- C. Hydrograph Construction - The Hydrograph may be constructed using the NRCS Unit Hydrograph Method. Other methods may be utilized upon approval of the Town Engineer.
- D. Routing - Flows through detention ponds, both existing and proposed, should be routed using level pool or Modified Puls routing. Channel routing should generally be accomplished with Lag Routing or Kinematic Wave Routing. If there is sufficient floodplain storage to warrant, a diffusive routing technique may be utilized upon approval of the Town Engineer.

- E. Simulation – The Hydrologic Model must be simulated for a twenty four (24) hour storm duration event. The maximum time step is five (5) minutes or thirty percent (30%) of the shortest lag time in the model, whichever is less.

506.04 Additional Detention for Downstream Development

- A. Additional detention storage, in excess of the required storage for the development, may be required to satisfy the detention requirements for a tract of land downstream of the detention facility, as determined by the Town's Engineer. This detention will be allowed provided the detention facility is constructed prior to the development of the downstream tract.
- B. Additional detention storage, in excess of the required storage for the development, shall be required to compensate for the existing inadequacies of a downstream storm drain or drainage structure, as determined by the Town's Engineer.
- C. A map showing the specified tract of land included in the detention facility volume shall be submitted. This shall be clearly documented in the Storm Water Detention Report.

506.05 Access to Detention Facilities

An access way, a minimum of fifteen (15) feet wide, shall be provided to and into all detention facilities from a public right-of-way. Access may be provided by frontage on a right-of-way or by an access easement to the detention facility. The access road shall have a maximum grade of fifteen percent (15%).

506.06 Slope and Depth Requirements for Detention Facilities

- A. Side slopes on detention facilities shall not be steeper than four to one (4:1), horizontal run to vertical rise.
- B. The bottom slope of a dry detention facility shall have a minimum slope of one percent (1%) across grass surfaces and a minimum slope of five tenths percent (0.5%) across paved surfaces.
- C. The standing water depth of the permanent pool of a wet detention facility shall be a minimum of four (4) feet deep.

506.07 Outlet Structure

All detention facilities shall have a defined spillway. The spillway shall be designed to pass the five hundred (500) year flood event with a minimum of one (1) foot of freeboard.

The plan shall show the spillway elevation, the one hundred (100) year and five (500) year water surface elevation, and the minimum top of embankment.

506.08 Energy Dissipaters

Energy dissipation devices shall be installed at the outlet of the detention facility, and shall be detailed in the plans.

506.09 Erosion Protection and Sediment Control

All disturbed earth surfaces, including the detention facility, shall require the appropriate soil stabilization, erosion and sediment control methods in accordance with these Subdivision Regulations. These methods shall provide for the establishment or re-establishment of permanent vegetation on the detention facility.

506.10 Maintenance

Maintenance of the detention facility shall remain with the owner of the property as required by these Subdivision Regulations. The covenants shall explicitly state who shall be responsible to maintain detention facilities. The Town of Verdigris shall not maintain any detention facilities unless owned by the Town. All other detention facilities shall be adequately maintained by owner(s). All facilities shall be routinely inspected by a Code Enforcement Officer. If a violation is not immediately resolved, it shall result in a placement of lien(s) on the property in violation.

507 Open Channel Design Criteria**507.01 General**

Channels shall be designed in accordance with sound engineering principles. The design water surface elevation shall be contained in the channel bank section. All open channels shall be provided with a minimum of one (1) foot of freeboard above normal depth from a one hundred (100) year frequency rainstorm.

507.02 Lined Channels

- A. All engineered channels shall be lined. The lining may be grass, riprap or concreted.
- B. Trapezoidal channels shall have a minimum bottom width of two (2) feet. For sod or grass lined sections the side slopes shall not be steeper than 4 to 1. For concrete or rock lined sections a side slope of 2:1 is acceptable.
- C. Rectangular channels require approval of the Town Engineer. All rectangular channels will be concrete lined.
- D. Low flow or “trickle” channels will be provided when required or at the request of the Town Engineer.
- E. Concrete channels shall have a minimum longitudinal slope of two tenths percent (0.2%), and grass lined channels shall have a minimum longitudinal slope of five tenths percent (0.5%). The minimum velocity to avoid sedimentation must be considered as part of channel slope design. Concrete channels must maintain a minimum velocity of two and five tenths (2.5) feet per second.

- F. The velocity of the water in the channel shall not exceed six (6) feet per second. If the velocity of the water in the ditch exceeds six (6) feet per second, the channel shall be lined with concrete or other such materials to prevent erosion.
- G. Proper erosion and sediment control methods shall be used for all disturbed areas in accordance with these Subdivision Regulations. These methods shall provide for the establishment of permanent vegetation.

507.03 Manning’s Friction Factor Values

Manning’s equation for the calculations of channel characteristics is acceptable. The fiction factor (N) utilized for channel design is summarized in Table 507.03-1 for natural channels and Table 507.03-2 for lined channels. The source for this table is *Open Channel Hydraulics*, by V.T. Chow, published by McGraw-Hill Book Company in 1959. This reference provide picture to aid in the determination of the N value for natural channels.

For lined channels a high end value should be used for capacity determination. To estimate flow velocity, a low end Manning’s Value should be utilized. Additionally, the future growth, vegetation and natural maturation process of the channel should be anticipated.

Table 507.03-1 Manning's Fiction Factor for Natural Streams – Main Channels

Type of Channel and Description		Minimum	Normal	Maximum
Natural Streams				
1. Main Channels				
a.	Clean, straight, full, no rifts or deep pools	0.025	0.030	0.033
b.	Same as above, but more stones and weeds	0.030	0.035	0.040
c.	Clean, winding, some pools and shoals	0.033	0.040	0.045
d.	Same as above, but some weeds and stones	0.035	0.045	0.050
e.	Same as above, lower stages, more ineffective slopes and sections	0.040	0.048	0.055
f.	Same as "d" but more stones	0.045	0.050	0.060
g.	Sluggish reaches, weedy. deep pools	0.050	0.070	0.080
h.	Very weedy reaches, deep pools, or floodways with heavy stands of timber and brush	0.070	0.100	0.150

Table 507.03-2 Manning's Friction Factor for Natural Streams - Floodplains

2. Flood Plains		Minimum	Normal	Maximum
a.	Pasture no brush			
	1. Short grass	0.025	0.030	0.035
	2. High grass	0.030	0.035	0.050
b.	Cultivated areas			
	1. No crop	0.020	0.030	0.040
	2. Mature row crops	0.025	0.035	0.045
	3. Mature field crops	0.030	0.040	0.050
c.	Brush			
	1. Scattered brush, heavy weeds	0.035	0.050	0.070
	3. Light brush and trees	0.040	0.060	0.080
	5. Medium to dense brush	0.070	0.100	0.160
d.	Trees			
	1. Cleared land with tree stumps, no sprouts	0.030	0.040	0.050
	2. Heavy stand of timber, few down trees, little undergrowth, flow below branches	0.080	0.100	0.120
	3. Same as above, but with flow into branches	0.100	0.120	0.160
	4. Dense willows, summer, straight	0.110	0.150	0.200

Table 507.03-3 Manning's Friction Factor for Lined Channels

Type of Channel and Description	Minimum	Normal	Maximum
Lined or Built-Up Channels			
1. Concrete			
a. Trowel finish	0.011	0.013	0.015
b. Float Finish	0.013	0.015	0.016
c. Finished, with gravel bottom	0.015	0.017	0.020
d. Unfinished	0.014	0.017	0.020
e. Gunite, good section	0.016	0.019	0.023
f. Gunite, wavy section	0.018	0.022	0.025
g. On good excavated rock	0.017	0.020	
h. On irregular excavated rock	0.022	0.027	
2. Concrete bottom float finished with sides of:			
a. Dressed stone in mortar	0.015	0.017	0.020
b. Random stone in mortar	0.017	0.020	0.024
c. Cement rubble masonry, plastered	0.016	0.020	0.024
d. Cement rubble masonry	0.020	0.025	0.030
e. Dry rubble on riprap	0.020	0.030	0.035

507.04 Natural Channels

Natural channels shall be privately maintained and contained in a drainage easement or reserve area.

508 Erosion Protection and Sediment Control

508.01 General

In order to minimize erosion and sedimentation damage to properties, drainage facilities, or other improvements, the sub-divider shall provide appropriate soil stabilization and sediment control measures.

These measures shall allow for permanent vegetation to become established and shall prevent sediment deposition on adjacent properties or within the storm water drainage system.

The sub-divider shall be responsible to install and maintain all soil stabilization, erosion control and sedimentation control measures and shall remove and dispose of any deposited sediment or repair erosion damage as required by the Town.

Building permits for a portion or the entirety of a subdivision may be suspended for the enforcement and correction of erosion and sediment control measures.

The sub-divider is responsible for all applicable storm water discharge and wetlands permitting.

508.02 Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) and report shall be included in the submission of the construction plans. The Report shall include a copy of the Notice of Intent and General Permit OKR10 – “*Storm Water Discharges from Construction Activities within the State of Oklahoma*” as issued by the Oklahoma Department of Environmental Quality. Additionally, the report should address all aspects of pollution control as outlined in the OKR10 document. The specific soil stabilization, erosion control and sediment control methods to be utilized are inter-dependent and shall be approved by the Town Engineer on a project-specific basis.

508.03 Soil Stabilization Methods

Approved methods include sod placement, seeding, hydro-mulching, hydro-seeding, geo-textiles, erosion control blankets/mats or other methods as approved by the Town Engineer.

508.04 Sediment Control Methods

Approved methods include silt fence, sediment basin/trap, check dam, fiber rolls, gravel/sand bags, straw bale barriers, stabilized construction entrances, truck wash-down areas or other methods as approved by the Town Engineer.

508.05 Clean Water Act 404 Permits

Applicants are responsible to contact the U.S. Army Corps of Engineers regarding Section 404 of the Clean Waters Act.

509 Water Supply and Fire Protection

509.01 General

Water Supply Systems shall be approved by ODEQ and the water provider. Where applicable, water systems should meet the requirements of ODEQ standards for "systems that provide fire protection". Proposed residential and commercial plats should address fire protection for the proposed development.

510 Sewage and Wastewater Disposal

510.01 General

All subdivisions of land and individual projects, including lands subject to a lot split, shall be so designated and designed so as to provide sanitary sewer/wastewater disposal service to each lot, and such service shall be in compliance with and require the approval of ODEQ, the Town, and any utility provider providing service. Subject to additional requirements and regulations contained herein, On-Site treatment via the use of septic systems or aerobic systems shall be allowed in the Town of Verdigris only if: 1) A valid permit is issued by ODEQ; 2) the land is located more than three hundred feet (300') from the nearest public sanitary sewer/wastewater disposal system, and; 3) the sewer treatment is not a lagoon-type nor an open containment system. Any lands located three hundred feet (300') or closer to a public sanitary sewer/wastewater disposal system are required to be served by such public sanitary sewer/wastewater disposal system, and shall be so served pursuant to such entity's Bylaws and/or rules and regulations, and all applicable ODEQ rules and regulations. Notwithstanding any other provision contained herein, aerobic systems shall only be allowed if the property to be served by such aerobic system is one (1) acre or more.

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Section 600 Requirements for Improvements

601 Installation, Inspection and Testing of Improvements

601.01 General

Following the approval of the final construction plans, and prior to the final plat approval, the sub-divider shall complete all required improvements in a manner satisfactory to the Town, and said improvements shall be free and clear of all liens, claims and encumbrances.

601.02 Construction of Improvements

All construction shall be in accordance with the details provided in the construction plans, with the Verdigris Standards and Specifications and with the Oklahoma Department of Transportation Standard Details and Specifications.

Should any deviations be encountered in the existing materials, conditions or other basis of the approved design, modifications of the approved design may be required.

601.03 Inspection of Improvements

All roadways, drainage and other Town improvements are subject to inspection during construction at any time. The contractor shall be responsible to provide adequate notification, a minimum of 48 hours, to the Inspector to allow for inspection of all improvements. All inspections shall be made by the Town within two (2) working days from receipt of proper notification. Failure to provide adequate notice for inspection or failure to meet the Standards in these Subdivision Regulations may result in rejection of the improvements by the Town.

Any work done or materials used without inspection by the Town's inspector may be subject to; uncover, remove, replace, and restore any such work or items at the contractor's expense. The Verdigris Town Inspector will not be authorized to issue instructions contrary to the plans and specifications, or to act as foreman for the contractor.

Inspection fees will apply. There will be a separate fee payable to the Town of Verdigris for inspection of roadway and drainage infrastructure improvements.

601.04 Material Testing Requirements

The roadway contractor is responsible for testing costs and shall provide the Town with compaction test results and Plasticity Index (P.I.) testing and locations to be determined by the Town Engineer and/or the Town Inspector. The contractor shall utilize an approved licensed testing lab and coordinate all testing.

- A. All roadways shall be compacted to a minimum of ninety five percent (95%) standard proctor density.

- B. Sub-grade shall be constructed of material with a P.I. of greater than six (6) and less than thirteen (13). Sub-grade with a P.I. greater than thirteen (13) shall be modified with lime or in accordance with the project's geotechnical report, refer to section 502.11 Paving Materials and Street Design. Sub-grade shall be inspected, have acceptable P.I. results, and accepted density reports submitted and approved by the Town prior to placement of any base or sub-base materials.
- C. Base and sub-base materials shall have acceptable P.I and compaction testing results prior to the placement of further paving materials.
- D. Other material testing may be required as determined by the Town.
- E. Testing frequency shall meet the following at a minimum, or as directed by the Town Engineer and/or Town Inspector:
 - 1) Compaction – One (1) every two hundred (200) linear feet of street for sub-grade and aggregate base. Fill and trench backfill shall have compaction testing per specifications or as required by inspector to ensure compaction greater than (>) ninety five percent (95%) standard proctor density.
 - 2) Plasticity Index (P.I.). – Test shall be conducted at locations not separated by a distance greater than five hundred (500) feet, or as required by inspector for sub-grade to ensure P.I. is greater than six (6) and less than thirteen (13).
 - 3) Asphalt – Minimum of three (3) cut cored specimens of placed materials to determine final thickness and density testing. Target density is ninety four percent (94%) of Maximum Theoretical Specific Gravity and the acceptable density range is eighty eight point one to ninety seven percent (88.1% - 97%). Temperature of asphalt may be required to be monitored to insure conformance with specification requirements.

602 Maintenance Guarantee

Prior to acceptance of the subdivision improvements by the Verdigris Town Board of Trustees, the subdivider shall obtain a maintenance surety for the improvements. The guarantee shall cover roadway improvements (including but not limited to sub-grade, sub-base, base, surface material, barrow ditches, roadway culverts and end treatments), detention and drainage facilities

The surety shall be in the form the following:

- A. A maintenance bond from a surety bonding company authorized to do business in the State of Oklahoma.
- B. Upon approval by the Town Attorney and Town Board of Trustees, an irrevocable letter of credit from a financial institution regulated by the State Banking Department or United States Treasury Department.

Requirements for Improvements

The maintenance guarantee shall be effective on the date of acceptance of the improvements by the Town in the amount of fifty percent (50%) of the actual cost of the roadway improvements (including but not limited to sub-grade, sub-base, base, surface material, barrow ditches, culverts and end treatments), detention and drainage facilities. The duration of the bond shall be for a period not less than two (2) years.

603 Completion and Acceptance of Public Improvements

At such time as the subdivider has completed the installation and construction of all required public utilities and other public improvements, the subdivider may apply for acceptance of all such improvements by the Town or appropriate utility provider.

To be accepted by the Town, the individual or legal entity responsible for causing a public improvement to be constructed shall make written request through the Planning Commission. Upon receipt of such request, the Planning Commission, or its designee(s), shall make a final inspection to determine whether or not the work is completed in compliance with the approved plans and specifications. The Town Board and the Planning Commission may request a recommendation from the Town Engineer.

Upon receipt of the written recommendations and findings of the Planning Commission, and if applicable the Town Engineer, the Verdigris Town Board of Trustees may accept such improvements upon the finding that said improvements meet the requirements of these Regulations and all other conditions of approval have been satisfied (submission of maintenance bonds, etc.). The Town may also request dedication to the Verdigris Public Works Authority or any other public trust with the Town as its beneficiary; provided, however any such requested dedication would be subject to approval and acceptance by the public trust.

604 Maintenance of Improvements

Public improvements to be maintained by the Town must be accepted as required by these Subdivision Regulations.

When the subdivision contains sewers, sewage treatment plants, water supply systems, park areas or other physical facilities necessary or desirable for the welfare of the area or that are of common use or benefit which are not or cannot be satisfactorily maintained by any existing public agency, provision shall be made by trust agreement made a part of the deed restrictions, acceptable to any agency having jurisdiction over the location and improvements of such facilities, for the proper and continuous maintenance and supervision of such facilities.

All unoccupied lots, reserve areas and detention facilities shall be maintained (mowing and necessary maintenance) by the owner of said areas. A Homeowners Association shall be formed to assume the ownership and maintenance responsibilities of all; detention facilities, reserve and common areas, street lights, islands, and entrance features. Grass height within said facilities shall not exceed

twelve (12) inches and/or shall be mowed every four (4) to five (5) weeks. Noncompliance shall be considered a violation of the Town of Verdigris Ordinances and shall be checked by Code Enforcement.

605 Time Limit

All improvements shall be completed and the final plat approved within a period of time not to exceed two (2) year from the date of approval of the preliminary plat by the Town Board of Trustees. The Town Board of Trustees shall have the power to extend the deadline when necessary, and where the subdivider can present a valid reason for such extension.

606 Vacated Plats

Vacation of the plat or any part thereof as provided by Oklahoma State Statutes shall remove the obligation to construct such improvements.

Section 700 Private Streets & Gated Developments

701 General

- A. Private streets and roads, if permitted by the Verdigris Town Board of Trustees, shall be allowed only in a Planned Unit Development (PUD) and shall be designed, reviewed, constructed, and inspected in accordance with the Verdigris Subdivision Regulations, Development Guidelines, Design Criteria and Construction Standards
- B. All roadways, paving, curb & gutter, borrow ditches, sidewalks, signage, lighting, storm drain, detention facilities, culverts, and appurtenances that are privately maintained and/or behind a gated entrance shall be considered and deemed as a privately owned and shall not be maintained by Verdigris. All said infrastructure improvements must be designed, reviewed, approved, installed, constructed, inspected and “As-Built” provided in accordance with these Subdivision Regulations.
- C. All developments that are to be private, privately maintained and/or gated shall be in accordance with these Subdivision Regulation including, but not limited to, the following:
 - 1) Zoning, Preliminary Plat, and Final Plat process.
 - 2) Roadway, Drainage, and Detention design.
 - 3) Construction plan review process.
 - 4) Roadway, drainage, and detention installation and construction.
 - 5) Town inspection and approval of all improvements.
 - 6) Testing of all improvements.
 - 7) All other regulations governing developments.
- D. Platting requirements shall be in accordance with these Subdivision Regulation including but not limited to the following:
 - 1) Standard right-of-way widths.
 - 2) Utility and drainage easements.
 - 3) Lot and block configuration, cul-de-sac criteria, setbacks, and building.
 - 4) All other regulations governing the platting of a development.

- E. Roadway Right-of-ways shall be created as a Reserve Area and platted accordingly granting access to, but not limited to, the following:
- 1) Verdigris and their agents.
 - 2) Lot owners and their agents
 - 3) Developer and their agents.
 - 4) Utility providers and their agents.
 - 5) Emergency personnel; fire and ambulance providers and their agents.
 - 6) Mail and delivery services and their agents.
 - 7) School and public transportation services and their agents.
 - 8) Sanitation Services and their agents.
 - 9) Any Local, Municipal, County, State, and Federal regulatory agencies and their agents.
 - 10) Any other entities or personnel deemed necessary by the Developer and/or Verdigris.
- F. Utility Easements and Drainage Easements shall be created and platted as “Public Easements”.
- G. All private roads shall comply with the currently adopted requirements for roadway construction and no reduction in the Verdigris standards shall be permitted.
- H. All private roads shall be self-contained within the subdivision it serves and shall not serve as a through street.
- I. Private street or road subdivisions shall not be permitted if adjacent subdivision or undeveloped land have or require access to and from these streets. Private streets or roads shall not be permitted if access to an existing or future collector street is impeded or rendered impossible.
- J. The following notice shall be placed, clearly conspicuous, on the face of the Final Plat:
- “The streets and driveways within this subdivision have not been dedicated to the public, and said streets shall be maintained by private property owners within the subdivision, but said streets shall always be open to police, fire, utility providers, and other vehicles of all local, municipal, county, state, and federal agencies.”**
- K. Every deed shall also clearly acknowledge and include the following statement on the face of the Final Plat:

“Roadways within this development are private and shall not be maintained by Verdigris.”

- L. All proposed streets shown on the face of the Final Plat shall be labeled as “Privately Maintained” underneath or near the proposed street name.
- M. Prior to the sale of any parcel within said subdivision, a conspicuous sign shall be posted and maintained at all entrances to the said subdivision stating the following:

“Private roadway not maintained by Verdigris.”

- N. All applicable building setback lines shall be calculated from the property line abutting said reserve area containing the private street or road and shall be contiguous thereto.
- O. Dedication or creation of said reserve area shall not be dedicated to the public but may be reserved for future dedications. Until such future dedication, all private streets and drainage infrastructure shall be maintained by a owners association composed of all property owners within the subdivision.
- P. The Developer of a private or gated subdivision shall establish a property owners association at the onset of the development for the purpose of maintaining all private infrastructures. The Deed of Dedication of the Final Plat shall clearly state the responsibilities of the property owners association, the yearly mandatory association fees, and provisions for the association to enforce and collect such fees e.g. liens, assessments, etc. Yearly mandatory association fees shall be adequate to provide proper maintenance for all infrastructures.
- Q. Property owners association maintenance responsibilities shall include, but not limited, to the following:
 - 1) Roadway; paving, curb & gutter, striping, signage, and lighting.
 - 2) Drainage; borrow ditches, storm drains, culverts, headwalls, overland swales, and detention facilities.
 - 3) Ice and snow removal.
 - 4) Storm debris removal.
 - 5) Mowing and general upkeep of all reserve areas and drainage ways.
 - 6) Any other maintenance items deemed necessary by the developer and/or Verdigris.
- R. Property owner’s association shall establish provisions for accruing and maintaining sufficient funds for major infrastructure improvements, e.g. overlays, stripping, catastrophic emergency repairs, etc. The amount of funds to be held in reserve shall be quantified within the deed of dedication and said amount of

funds will be subject to review and approval by the Town of Verdigris, Board of Trustees.

702 Gated Entrance Requirements

- A) All private street entrances shall be on an arterial or collector streets only.
- B) All private street exits onto arterial streets shall have two lanes for outbound traffic and one lane for inbound traffic.
- C) All pedestrian access shall be provided near the main entrance and be part of the site plan.
- D) If private street entrances have a structure (or cover) over the driving lane, the vertical clearance shall be a minimum of fourteen (14) feet.
- E) Private streets intersecting with any public street shall have a turnaround before the gate entrance that provides a minimum of forty (40) feet from the entrance edge of pavement (or face of curb) at the control panel island to the edge of pavement (or face of curb) on the outside of the exit lane. The turnaround shall provide space between the control panel island and gate or gate island for at least a 'P' design vehicle (full size passenger vehicle) to make the turnaround in one fluid motion.
- F) Access to all emergency, service delivery, and utility providers vehicles shall be guaranteed at all entrances at all times by the property owners association. All current security codes, passwords/numbers, and devices necessary to allow instant access shall be provided to these vehicles including, but not limited to, the following agencies: police, fire, ambulance, Verdigris, utility providers (electric, gas, water, sewer, cable TV, telephone, etc.), refuse pickup, mail delivery, and other vehicles of all local, municipal, county, state, and federal agencies. The Developer and the property owners association shall provide insurance indemnification for any loss to any government vehicles.
- G) Guidelines for operational gates on private streets:
 - 1) Gates or any control device shall be allowed only on private streets and private streets shall only be permitted in a PUD subdivision.
 - 2) Maintenance of the gate shall be the responsibility of the property owners association and shall be established in the Deed of Dedication on the Final Plat.
 - 3) Maintenance contracts, to service and repair the gates, by a private contractor or a property owners association, shall require periodic inspections by private companies. These contracts and maintenance records shall be available to Verdigris upon request.

- 4) The PUD and the Deed of Dedication shall specify that the property owners association shall provide an access code number of all gates to Verdigris and all utility providers. Names of maintenance companies, groups or individuals involve in contracts shall be provided to Verdigris on an annual basis.

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Section 800 Building Permits

801 Building Permits

801.01 Plat Completion Requirement

Building permits shall not be issued within a platted subdivision and/or development until all improvements have been approved and accepted by the Town.

801.02 Residential Building Permit - Construction Plan Requirements

Applicants shall submit accurate and detailed building construction plans to the Town for review and approval in accordance to the Town of Verdigris building ordinances, prior to issuance of a building permit.

All building construction plans shall be in accordance with all local, state, and federal building codes.

801.03 Residential Building Permit Requirements – Site Plan Requirements

In addition to all building construction plan requirements the applicant shall include a site plan with:

- A. Location of all easements and existing utilities.
- B. Set-back lines.
- C. 100 year flood plain boundaries (if located on or adjacent to the property).
- D. Location and elevations of proposed and existing structures.
- E. Property drainage patterns.
- F. Proposed driveway material, location, dimensions and radii with culvert information (if applicable).
- G. Sidewalk location if streets are curb and gutter.

The Town may require additional items or waive individual items of these site requirements as applicable.

801.04 Residential Building Permit Requirements – Additional Requirements

- A. Applicant shall submit copy of the filed final plat or a portion of said filed final plat relative to the subject lot for which a building permit is desired.
- B. Applicant shall verify and/or confirm that all lot pins (boundary corners) of the subject lot have been set and are clearly visible prior to any construction.

801.05 Commercial/Industrial Building Permit

Construction Plan Requirements

Applicants shall submit all architectural building construction plans to the Town for review and approval in accordance with the Town of Verdigris building ordinances, prior to issuance of a building permit. Architectural building plans shall be prepared in accordance to the standards as set forth by the Oklahoma Board of Architects, Landscape Architects, and Interior Designers and consist of, but not limited to; floor plans, elevations, building construction details, etc.

Applicants shall submit all engineered building construction plans, prepared and stamped by a licensed engineer, licensed in the State of Oklahoma, by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors, to the Town for review and approval in accordance to the Town of Verdigris building ordinances, prior to issuance of a building permit. Engineered building construction plans shall be prepared in accordance to the standards as set forth by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors and consist of, but not limited to; civil plans, electrical plans, foundation plan, structural plans, HVAC plans, mechanical plans, etc.

All building construction plans shall be in accordance with all local, state, and federal building codes.

801.06 Commercial/Industrial Building Permit Requirements

Site Plan Requirements

In addition to all building construction plan requirements the applicant shall include a site plan, prepared and stamped by a licensed architect or civil engineer licensed in the State of Oklahoma:

- A. Property zoning information, land coverage, setback and parking requirements.
- B. Grading plan with existing and proposed drainage patterns.
- C. The one hundred (100) year floodplain boundaries (if applicable).
- D. Drainage report including documentation showing no net increase in post development flow rate and no adverse impact to adjacent properties.
- E. Location of all easements, existing utilities, pipelines and other relevant property information.
- F. Location and elevation of structure(s), existing and proposed.
- G. Fire lane locations.
- H. Copy of Notice of Intent.
- I. Proposed fence and screening fence location(s).

- J. Sidewalk location if streets are curb and gutter.
- K. Location of proposed business signs.
- L. Storm water Pollution Prevention Plan (SWPPP).
- M. Any additional information required by the Planning Commission.

The Town may require additional items or waive individual items of these site requirements as applicable.

801.07 Commercial/Industrial Building – Additional Requirements

- A. Applicant shall submit copy of the filed final plat or a portion of said filed final plat relative to the subject lot for which a building permit is desired.
- B. Applicant shall verify and/or confirm that all lot pins (boundary corners) of the subject lot have been set and are clearly visible prior to any construction.

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Section 900 Definitions and References

901 Definitions

For the purposes of these regulations, the words below shall be used as hereafter defined.

Abutting – For the purposes of providing notice, abutting shall mean contiguous or separated there from only by a non-arterial street.

Access Easement – A privately owned strip of land, dedicated as an easement, to provide vehicular access to the public right-of-way. Access easements shall not be named.

Alley – A minor right-of-way dedicated for public use which gives a secondary or inferior means of vehicular access to the back or side properties otherwise abutting a street, and which may be used for public utility purposes, but is not intended for general traffic circulation.

All-weather Material – A hard surface, dust-free material capable during ordinary use of withstanding normal weather conditions without substantial deterioration. Gravel, or screenings alone, without the use of a petroleum or cement binder, does not meet the definition of an all-weather dust-free material.

As-built Plans – See “Record Drawings”.

Block – A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, a railroad right-of-way, shoreline of a waterway, or boundary line of a subdivision, county or municipality.

Collector Street – A street intended to move traffic from local streets to arterial streets.

Comprehensive Plan – A master plan for the physical development of the Town prepared and adopted by the Planning Commission and approved by the Verdigris Town Board of Trustees pursuant to applicable state statutes and subsequent amendments thereto, and includes any part of such Plan.

Deed of Dedication – Each final plat submitted to the Town for approval shall carry a deed of dedication consisting of all of the following, but not limited to; a designation of the subdivision name as an addition to The Town of Verdigris, Oklahoma, a legal description of the tract to be subdivided, dedication of rights-of-way and easements, provisions and protections as desired by suppliers shall be defined for electric, telephone, natural gas and cable television services, suppliers of water and sanitary sewer services shall be stated as necessary and provisions and protections as desired by said suppliers shall be defined, all drainage ways and reserve areas shall be

defined and dedicated to appropriate ownership, driveway culvert types shall be defined and finish floors and culvert sizes shall be described as depicted on the plat. Any other items required to be contained on the plat by these Subdivision Regulations shall also be set forth thereon. The Deed of Dedication cannot be changed by the Developer, Sub-divider or Home Owners Association without replatting the subject property.

Easement – Authorization to use and access a defined area of a property for a specific purpose; with the property owner generally utilizing and maintaining said area subject to the easement area remaining unencumbered for the specified easement use.

Town Engineer – Shall mean the Engineer hired as an employee of, or independent contractor for, the Town of Verdigris, as the case may be.

Engineering Design Criteria – The criteria for engineering design and construction of infrastructure and other improvements related to the development of subdivisions adopted and included in these Subdivision Regulations and the Standard Drawings; and any additions thereto.

Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; or the unusual and rapid accumulation or runoff of surface waters from any source.

Floodplain or Flood-Prone Area – Any land area susceptible to being inundated by water from any source. See “Flood or Flooding”.

Frontage – The linear measurement of a lot boundary which abuts a public street.

Governing Body – The Town Board of Trustees of Verdigris, Oklahoma.

Grade – The slope of a road, street or other public way, specified in percent (%) of vertical to horizontal measurements.

Half-Mile-Line – The north-south or east-west line, which bisects a one square mile section of land.

Health Department – The Rogers County Health Department for Rogers County, Oklahoma.

Jurisdiction – See “Territorial Jurisdiction.”

Lot, Double Frontage – A lot which runs through a block from street to street and has frontage on two (2) or more streets, as distinguished from a corner lot.

Lot, Flag – A square parcel of land that is accessible only by a very long narrow strip of land leading from a main right-of-way (pole).

Lot, Key – A lot having a side lot line abutting the rear lot line of another lot.

Lot, Pole – A very long narrow strip of land, that fronts a main right-of-way, leading to a square parcel of land (flag).

Lot, Lot of Record – A lot which is part of a subdivision, the plat of which has been recorded in the office of the County Clerk of the County in which the lot is located or a parcel of land, the deed of which is recorded in the office of the County Clerk of the County in which the parcel is located.

Lot, Reverse Frontage – A corner lot of such size and shape that a building erected on might logically be designed to face on either adjoining street, thus causing it to rear on the side lot line of an abutting lot.

Lot-Split – Any subdivision of land containing not more than three (3) lots and fronting on an existing street, not involving any new street or road and not adversely affecting the remainder of the parcel or adjoining property, and not in conflict with any provision or portion of the Comprehensive Plan, Major Street Plan, Zoning Ordinance, or these Subdivision Regulations.

Major Street – See “Street, Major”.

Major Street Plan – The part of the Comprehensive Plan which relates to major streets and highways.

Minor Street – See “Street, Minor”.

ODEQ – The Oklahoma Department of Environmental Quality.

Open Space – Space on the ground, which is not built upon or otherwise improved to an impervious state (such as for buildings, drives or walkways) and which is maintained for active or passive recreational or buffer type uses.

Planned Unit Development (PUD) – A discretionary type of development for a tract of land under single ownership or control, based upon an approved development plan and Sketch Plat permitting flexibility of principal land uses, lot sizes and accessory uses not otherwise available under conventional zoning and the related development standards.

Planning Commission or Commission – The Verdigris Planning & Zoning Commission.

Plat, Final – A map or chart of land subdivision prepared in accordance with these Subdivision Regulations in a form suitable for filing in the office of the County Clerk, including necessary affidavits, dedications, and acceptances, and containing a complete engineering description including references to field markers sufficient to locate on the ground all streets, alleys, blocks, lots, and other elements of the subdivision.

Plat, Preliminary – A map or chart of a proposed land subdivision prepared in accordance with these Subdivision Regulations showing the concept, character, and general details of the proposed development.

Plat, Sketch – A map or chart of a proposed land division prepared after a pre-application conference in accordance with these Subdivision Regulations showing the

Definitions and References

general layout of streets and reservations of land, street improvements, drainage, water and sewerage, floodplains, the availability of existing utilities and other related information.

Public Improvements – An improvement dedicated to and accepted by the Town of Verdigris, a public trust whose beneficiary is the Town, or a public utility provider.

Quarter-Mile Line – A north-south or east-west line that bisects the north, south, east or west half of the section.

Record Drawings – The drawings as issued for construction on which the subdivider's engineer, upon completion of the work, has shown changes due to addenda or change orders and other information which said engineer considers significant based on record documents furnished by the contractor and/or inspector to said engineer and which were annotated by the contractor to show changes made during construction.

Restrictive Covenants – An agreement of public record that restricts the use or occupancy of real property and sets forth a formal binding agreement that runs with such land and binds future land owners, his or her successors, or assigns to such agreements.

Right-of-way – A tract of land purchased, sold, granted, and/or conveyed to the public by means of “fee simple” in that public holds title to said tract of land. A public strip of land occupied or intended to be occupied by a street, crosswalk, railroad, road, electrical and communication services, oil or gas pipeline, water main, sanitary or storm sewer main, or for other special use. The usage of the term “right-of-way” for purposes of other than the platting of land shall mean that every right-of-way thereafter established and shown on the final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimensions or areas of such lots or parcels. Right-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains, or otherwise involving construction or maintenance by a public agency shall be dedicated to the public use by the maker of the plat on which such right-of-way is established. All such dedications are subject to the final approval by the Town.

Right-of-way Easement – A tract of land purchased, sold, granted, and/or conveyed to the public by means of easement whereas the grantor retains ownership/title to said tract of land and the grantee retains explicit and certain rights and/or uses of said tract of land.

Road; Roadway – See Street.

Registered Engineer – A professional engineer registered and licensed to practice in the State of Oklahoma.

Registered Land Surveyor – A land surveyor registered and licensed to practice in the State of Oklahoma.

Required Improvement – An improvement required by the Planning Commission in accordance with these Subdivision Regulations as a condition for approval of the plat.

Reserve Area – An area or part of a plat identified on the face of the plat and set aside for park land, storm water detention or similar purposes which are specified on the face of the plat. The title ownership and responsibility for maintenance of Reserve Areas shall remain with the Sub-divider until or unless conveyed to a homeowners association or accepted by the governing body. The Sub-divider or owner shall grant to the governing body perpetual easements for drainage, utilities and other public purposes as specified in the covenants or deeds of dedication. If a Reserve Area falls within a right-of-way (e.g. Entrance Island), the Reserve Area must be contained in a roadway easement. The governing body shall have no liability for any damage to any private improvements occasioned by the maintenance or reconstruction of utilities or infrastructure located in the Reserve Area.

Reserve Strip – A strip of land typically created by the owner to be privately retained to prevent, restrict or otherwise control access to public utilities or streets. Such strips are not permitted under these Subdivision Regulations.

Secretary – The Secretary of the Planning Commission being the designee of the Planning Commission.

Setback – The distance, existing or planned, between a building and the nearest property line or a street right-of-way.

Standard Specifications for Construction – The specifications acting in conjunction with the Design Criteria adopted by the Town for regulating the nature, extent, dimensions, construction, and financing of improvements in subdivisions. These Specifications may also be referred to as the Construction Standards.

Street – A public right-of-way that affords the primary means of access to abutting property or serves as a thoroughfare for vehicular traffic or both, but excludes alleys. The following types of streets are recognized by the Comprehensive Plan and these Subdivision Regulations:

Street, Arterial – A thoroughfare designated on the Major Street Plan that carries a significant portion of interurban vehicle traffic at moderate speeds with some traffic stops. See also “Street, Primary/Major Arterial”, “Street Secondary/Minor Arterial”, “Street/Minor Arterial Alternate,” or “Street, Collector” in this section.

Street, Border – A street located adjacent to a railroad, drainage way, park, open space area or limited access highway.

Street, Collector – A thoroughfare designated on the Major Street Plan that is intended to move traffic from minor streets to arterial streets, including the principal entrance and circulation street or streets of a development.

Street, Commercial Collector/Industrial Collector – A category of traffic way that provides circulation to and from commercial and industrial areas to connect to major streets or highways.

Street, Commercial Business District – A category of traffic way that provides circulation within the Central Business District.

Street, Commercial/Industrial – A category of traffic way that provides circulation within commercial and industrial areas.

Street, Cul-de-sac – A minor street with only one outlet and having a terminus for the safe and convenient reversal of traffic movement including all emergency and service vehicles.

Street, Frontage or Service – A minor street auxiliary to and located on the side of a major street for service to abutting properties and adjacent areas and for control of access.

Street, Major – Highways, Arterials (primary/principal and secondary/minor), and Collector streets shown on the Major Street Plan.

Street, Minor (Local) – Any traffic way of limited length not classified on the Major Street Plan that provides direct access to abutting tracts of land and access to more heavily traveled streets, and that is designed in such a manner to discourage its use by through traffic.

Street, Primary/Principal Arterial – A thoroughfare designated on the Major Street Plan that carries a significant portion of interurban vehicular traffic at a moderate rate of speed.

Street, Secondary/Minor Arterial – A thoroughfare designated on the Major Street Plan that carries a significant portion of interurban vehicular traffic having some traffic stops.

Street, Through – A street with access in two directions to a primary or secondary arterial street; or such access existing in one direction and a planned access in a second direction as approved by the Planning Commission and Verdigris Town Board of Trustees.

Sub-divider (or Developer) – Any person, firm, partnership, corporation, or other entity, acting as a unit, subdividing or proposing to subdivide land as herein defined.

Subdividing – The dividing of land into two (2) or more lots, parcels, tracts, or areas, any one (1) of which when divided has an area of less than ten (10) acres, or any dividing of land involving the vacating or dedicating of right-of-way or the alignment of an existing or proposed street or highway or public utility easement, or the re-subdividing of land heretofore divided into lots, sites, or parcels, whether such dividing or re-subdividing is by means of a map or plat or metes-and-bounds descriptions.

Subdivision – A tract of land that has been subdivided or is proposed to be subdivided.

Subdivision Regulations – Subdivision Regulations for the Town of Verdigris, Oklahoma (these Subdivision Regulations).

Territorial Jurisdiction – All incorporated lands within the corporate limits of the Town of Verdigris, Oklahoma, as may be amended by annexation or de-annexation from time-to-time.

Town Board – Board of Trustees, Town Board of Trustees or Verdigris Town Board of Trustees: The Board of Trustees for the Town of Verdigris, Oklahoma.

Way – Any street, avenue, parkway, highway, boulevard, road, or alley reserved and/or dedicated for public or private use chiefly by vehicular or pedestrian traffic.

902 References

Town of Verdigris 2001 Subdivision Regulations, and amendments thereto.

Town of Verdigris 2001 Municipal Area Zoning Ordinance, and amendments thereto.

City of Claremore – Rogers County Metropolitan Area Planning Commission, “Subdivision Regulations, City of Claremore, Rogers County Metropolitan Planning Area.” Undated.

City of Claremore – Rogers County Metropolitan Area Planning Commission, “City of Claremore-Rogers County Metropolitan Planning Area Zoning Ordinance.” INCOG, Adopted September 6, 2000.

City of Owasso and Public Works Authority, “Engineering Design Criteria, Construction Standards and Standard Details.” May 2005.

Federal Highway Administration, “Manual on Uniform Traffic Control Devices (MUTCD) 2003 Edition with Revisions Number 1 and 2 Incorporated.” FHWA, December 2007.

Natural Resourced Conservation Service (NRCS), “Urban Hydrology for Small Watersheds, TR-55.” United States Department of Agriculture Technical Release 55, June 1986.

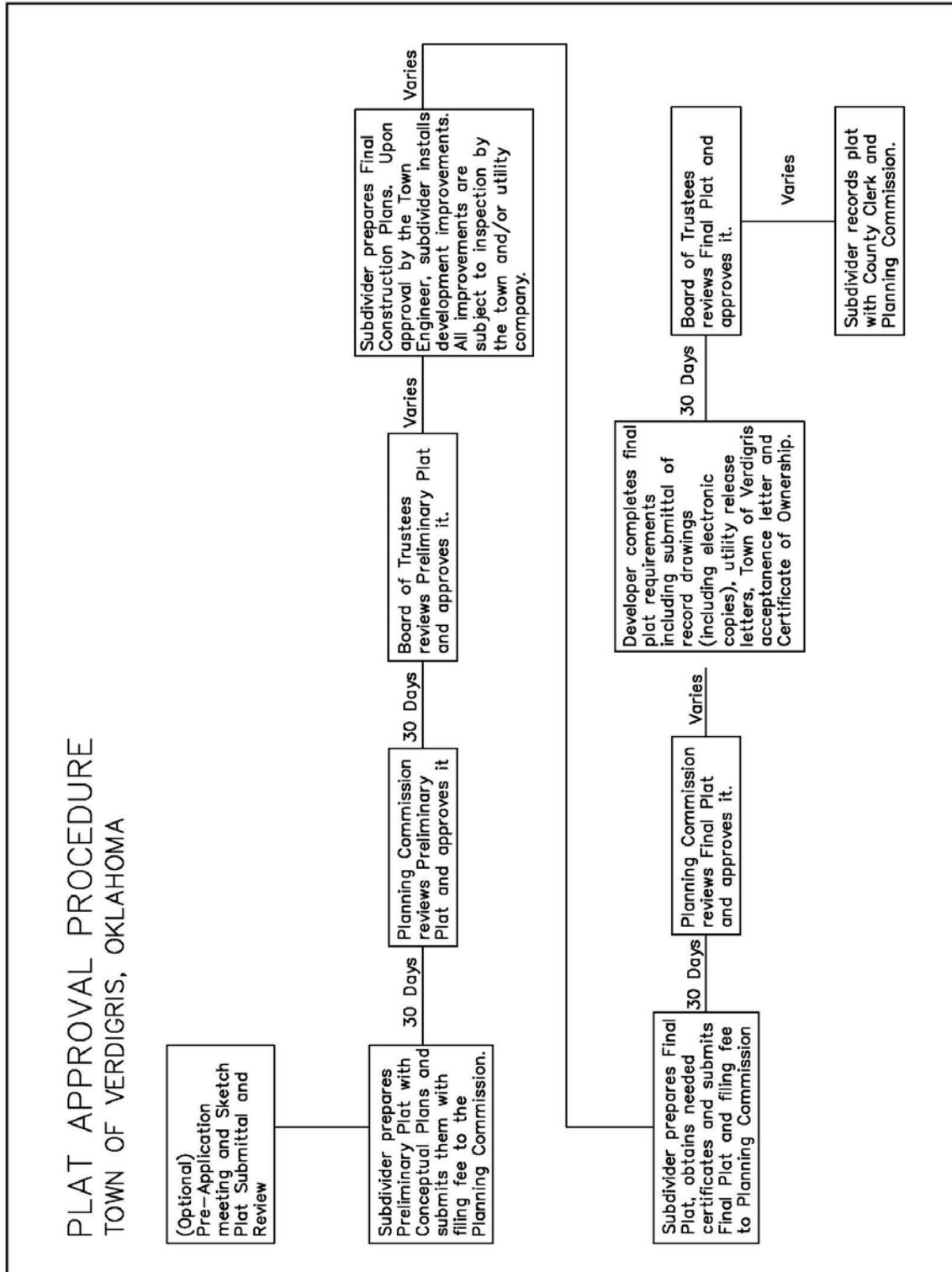
Oklahoma Department of Transportation, “State of Oklahoma County Roads Design Guidelines Manual.” ODOT, June 1991.

Oklahoma Department of Transportation, “1999 Standard Specifications for Highway Construction” ODOT, June 1999.

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Section 1000 Appendices

1001 Plat Approval Procedure Flowchart



1002 Conceptual Plan Checklist

	No.	Description	Comment
	1	The location and proposed width of each proposed street and right-of-way, sidewalk and pedestrian way.	
	2	The location, size, dimensions and points of access as applicable for existing streets.	
	3	The paving section and street drainage of borrow ditches or curb and gutter.	
	4	The location and size of all proposed easements.	
	5	Proposed water and sanitary sewer layout if applicable.	
	6	Preliminary Drainage Plan.	
	7	Preliminary Culvert Locations.	
	8	The locations for proposed detention facilities.	

1003 Preliminary Plat Checklist

No.	Description	Comment
1	____ Copies of Prelim. Plat; Application and Fee, ____ Copies of Conceptual Plans.	
2	Prepared by a Registered Professional Land Surveyor.	
3	Scale: Not more than 1"=100' or 1"=200' for large areas.	
4	Name of the subdivision prefaced by "Preliminary Plat."	
5	Name and address of owner(s), land surveyor, planner, engineer & abutting property owners.	
6	Date of preparation of plat, north arrow and scale (written and graphic presentation).	
7	Key or location map showing the location of subdivisions within the mile section.	
8	An accurate legal description of the property.	
9	A listing of service providers.	
10	A listing of property zoning, setback, lot area and width requirements.	
11	Locations and dimensions of all boundary lines of the proposed subdivision to the nearest one-hundredth foot including property lines, Town limits or County lines.	
12	Names of adjacent subdivisions and the names, locations, and widths of all existing streets, easements, drainage ways, and other public ways, on & adjacent to the property.	
13	Names, locations and widths of all proposed streets and all right-of-way dedications as required by street classification.	
14	Location and width of easements for existing utilities on or adjacent to the property and any required setbacks.	
15	Location of every oil or gas well, either existing active or inactive wells, plugged or unplugged abandoned wells, as shown by the records of the Oklahoma Corporation Commission and by such other records as may be on file with the Planning Department, or any planned future well sites.	
16	Locations and widths of easements of all oil, gas, and petroleum products pipelines and any required setbacks.	
17	Location and description of all existing structures, water bodies and watercourses.	
18	Areas subject to flooding based upon the regulatory flood and the FIRM panel map number.	
19	Location and dimension of all proposed streets, drainage ways, detention facilities, pedestrian ways, bike paths, parks, playgrounds, public ways, or other public or private reservations.	

	No.	Description	Comment
	20	All proposed lots consecutively numbered, their dimensions, and building setback lines shall be shown on the plat for each residential single-family lot; blocks are consecutively numbered.	
	21	A topographic map of the subdivided area with contour lines having a maximum of two (2) foot contour intervals based on United States Coastal and Geodetic Survey datum.	
	22	A summary of the total acres platted, the number of lots and blocks, the number of reserve areas and other pertinent information to summarize the proposed development.	
	23	Preliminary Deed of Dedication for right-of-ways and easements; subdivision covenants.	
	24	Language shall be included on the face of the preliminary plat specifying "Acknowledgements" by the surveyor or engineer that the plat has been prepared in accordance with all of the regulations and requirements of the Town of Verdigris.	

1004 Final Plat Checklist

No.	Description	Comment
1	_____ Copies of Final Plat; Application and Fee	
2	Complies with Preliminary Plat and Preliminary Plat Checklist as applicable.	
3	Name of the subdivision prefaced by "Final Plat."	
4	Electronic file in accordance with the requirements of the Town of Verdigris and reproducible mylar. Remaining copies in blue or black line on a good grade of paper. Marginal line around the entire sheet one (1) inch from the edge of the sheet, with no plat lines, lettering, signatures, and seals within the marginal area.	
5	Release letters from each applicable utility that the easement and utility extension requirements have been met. Utilities may include water, sewer, gas, telephone and cable respectively as available to the subdivision.	
6	Third-order survey accuracy for vertical and horizontal survey datum and: 1.Traverse data for the plat, including the coordinates of subdivision boundary with the error of closure; 2.The computation of all distances, angles, and courses that are shown on the final plat; 3. All stakes, monuments or other evidence found on the ground in use to determine the boundaries of the plat	
7	The name and address of the owner(s) of land to be divided, the name and address of the subdivider if other than the owner, and the name and address of the land surveyor and engineer	
8	Date of the plat, north arrow, zoning classification, and scale (written and graphic presentation);	
9	Key or location map showing the location of subdivisions within the mile section;	
10	An accurate legal description of the property;	
11	Total acres and total number of lots in the subdivision;	
12	Property Zoning and setback requirements;	
13	Recommended finished floor elevations and surveying benchmark;	
14	Names of all adjacent subdivisions and the names, locations, and widths of all existing and proposed streets, easements, drainage ways, and other public ways, adjacent to the property;	
15	Boundary of the subdivided area, block boundary, street, and other right-of-way lines with distances, angles, and/or bearings. Subdivision boundary shall be tied to a section corner in the mile section. Where these lines follow a curve, the central angle, the radius, points of curvature, length of curve, chord bearing, chord length, and length of intermediate tangents shall be shown.	

	No.	Description	Comment
	16	The accurate dimensions of all property to be offered for dedication for public use, and all property reserved for the common use of the property owners within the subdivision with purpose indicated;	
	17	The dimensions of all lots and lot lines, and the bearings of those lot lines not parallel or perpendicular to the street right-of-way line:	
	18	All easements shall be clearly identified, and if already on record, the recorded reference of such easements; the width of the easement with sufficient ties to locate it definitely with respect to the subdivision must also be shown;	
	19	Easements that serve the area being platted located outside of the boundaries of the plat and recorded reference	
	20	The location of every oil or gas well, either existing active or inactive wells, plugged or unplugged abandoned wells, as shown by the records of the Oklahoma Corporation Commission and by such other records as may be on file with the Planning Department and the location of any planned future well sites.	
	21	All proposed lots consecutively numbered, their dimensions, and building setback lines, and street addresses on plat for each residential single-family lot with the following notation:	
	22	Minimum finished floor elevation and minimum culvert size, if applicable, for each respective lot;	
	23	FEMA FIRM panel map number affecting the property and floodplain boundaries if applicable	
	24	Certification by the owner's registered land surveyor who prepared the plat as to the accuracy of the survey and of the plat, and that the monuments and benchmarks are accurate as to location shown, which shall state that he or she has fully complied with the requirements of these Regulations and the subdivision laws of the State of Oklahoma governing surveying, dividing and mapping of land, that the plat is a correct representation of all of the exterior boundaries of the land surveyed and the subdivision of it, and that the plat represents a survey made by such surveyor	
	25	Certification by the ODEQ that the subdivision conforms to the applicable health regulations as may be required	
	26	Certification by the appropriate authority that the subdivision conforms to all applicable regulations concerning public water supply and sanitary sewer facilities	
	27	Certification signed and acknowledged by all parties having any title interest in the land subdivided, consenting to the preparation and recording of the plat as submitted.	

No.	Description	Comment
28	The owner shall further acknowledge that all streets have been graded, base material applied and surfaces paved in accordance with the Subdivision Regulations of the Town of Verdigris to include, where applicable, curbs and gutters, street name signs in place, visual screens, utilities and street lights installed, and all drainage and detention facilities constructed in accordance with the approved plans on file with the Engineering Department, all at the owner's expense and in compliance with the requirements of the Town of Verdigris.	
29	Current certification by a bonded abstractor, attorney or title insurance company of the last grantees of record owning the entire interest in the property being subdivided plus holders of mortgages and liens filed of record	
30	The consent of all owners of the subject property to the platting of the property, and Certificate of notice as to the platting of the property to the holders of mortgages and liens	
31	Provision for the developer to be responsible for all maintenance of all common areas and any and detention areas, park areas, entry features, sidewalks, etc.; requirement for the formation of a homeowners or other owners association which shall be responsible for the maintenance of all common areas when association has been established	
32	Language on the face of the final plat specifying "Acknowledgements" by the owner, surveyor, and engineer that the plat has been prepared in accordance with the regulations and requirements of Town of Verdigris	

1005 Town Board Certification Checklist

	No.	Description	Comment
	1	Electronic Copies of Final Plat and Covenants	
	2	Utility Release Letters	
	3	Roadway Release Letter	
	4	Abstractor Ownership Affidavit	
	5	Record Drawings	
	6	Maintenance Bond	
	7	Certifications on Face of Plat	
	8	Deed of Dedication	

1006 Construction Plan Checklist

	No.	Description	Comment
	1	Contains the design and utility information included in the conceptual plans as applicable unless modified during the review process.	
	2	Certification by the registered professional engineer licensed to practice in the State of Oklahoma that the design of the required improvements is, or will be in conformance with the standards, requirements, and provisions of the applicable agency or department and these Regulations;	
	3	Applicable engineering reports are submitted to include Drainage Report, Storm Water Pollution Prevention Plan (SWPPP) & Report and Paving/Geotechnical Report.	
	4	Existing and proposed ground profiles shall be shown along the centerline of each proposed street, with proposed grades and proposed elevations at a minimum of fifty (50) foot intervals.	
	5	Cross-section of each proposed street, bicycle path, pedestrian way and sidewalk showing the type and width of pavement.	
	6	Plan of the proposed water distribution system shall show pipe sizes and the location of valves and fire hydrants	
	7	Drainage plan showing all existing and proposed storm sewers, manholes, catch basins, retention or detention facilities, watercourses, culverts, and other drainage structures within the tract, or adjacent thereto, with pipe sizes and grades.	
	8	The drainage plan shall show the design calculations for all proposed borrow ditch sections, and shall show the following: type of culverts, minimum slope of culverts, type of end sections, capacity calculations and erosion protections (e.g., rock rip rap)	
	9	If curb and gutter streets are utilized, design calculations for inlets, storms sewer, channels and street flow shall be provided.	
	10	Grading plans shall show, at a minimum, existing contours, minimum finished floor elevations, driveway culvert sizes for each lot, drainage flow directional arrows, and proposed contours as applicable (e.g. proposed swales and detention ponds).	
	11	A typical plan set shall include, but not limited to, a Cover, Preliminary Plat, Drainage Area Map and Grading Plan, Roadway Plan, Special Culverts, Storm water Pollution Prevention Plan sheet, and standard detail sheets.	

1007 Lot Split Application

LOT SPLIT APPLICATION

FEE: \$100.00

NOTE: Three copies of a sketch, plat of survey or other type of drawing that will accurately depict the proposed split MUST BE attached to this application.

APPLICATION NO.
S T R
RECEIPT NO.

THE FOLLOWING INFORMATION IS TO BE SUPPLIED BY APPLICANT			
NAME OF RECORD OWNER		WHAT IS THE PRESENT USE OF THE TRACT?	
LEGAL DESCRIPTION OF EXISTING UNDIVIDED TRACT, THAT YOU PROPOSE TO SPLIT, AS SHOWN ON THE RECORD OF THE COUNTY CLERK.			
FIRST TRACT TO BE CREATED	LEGAL DESCRIPTION OF PROPOSED TRACT	INST. RELEASED	SOURCE OF WATER SUPPLY FOR THIS TRACT CITY WELL OTHER
			TYPE OF SEWAGE DISPOSAL TO BE AVAILABLE FOR THIS TRACT SEWER SEPTIC OTHER
			STREET OR STREETS TRACT WILL FACE
		PROPOSED USE OF THIS TRACT	LOT SIZE OF PROPOSED TRACT FT. X FT.
SECOND TRACT TO BE CREATED	LEGAL DESCRIPTION OF PROPOSED TRACT	INST. RELEASED	SOURCE OF WATER SUPPLY FOR THIS TRACT CITY WELL OTHER
			TYPE OF SEWAGE DISPOSAL TO BE AVAILABLE FOR THIS TRACT SEWER SEPTIC OTHER
			STREET OR STREETS TRACT WILL FACE
		PROPOSED USE OF THIS TRACT	LOT SIZE OF PROPOSED TRACT FT. X FT.
THIRD TRACT TO BE CREATED	LEGAL DESCRIPTION OF PROPOSED TRACT	INST. RELEASED	SOURCE OF WATER SUPPLY FOR THIS TRACT CITY WELL OTHER
			TYPE OF SEWAGE DISPOSAL TO BE AVAILABLE FOR THIS TRACT SEWER SEPTIC OTHER
			STREET OR STREETS TRACT WILL FACE
		PROPOSED USE OF THIS TRACT	LOT SIZE OF PROPOSED TRACT FT. X FT.
FOURTH TRACT TO BE CREATED	LEGAL DESCRIPTION OF PROPOSED TRACT	INST. RELEASED	SOURCE OF WATER SUPPLY FOR THIS TRACT CITY WELL OTHER
			TYPE OF SEWAGE DISPOSAL TO BE AVAILABLE FOR THIS TRACT SEWER SEPTIC OTHER
			STREET OR STREETS TRACT WILL FACE
		PROPOSED USE OF THIS TRACT	LOT SIZE OF PROPOSED TRACT FT. X FT.
AS APPLICANT, WHAT IS YOUR INTEREST IN THIS PROPERTY? <input type="checkbox"/> PRESENT OWNER <input type="checkbox"/> PURCHASER <input type="checkbox"/> ATTORNEY FOR OWNER <input type="checkbox"/> OTHER			
If other than present owner, give name, address and phone number of present owner.		NAME	ADDRESS
		PHONE	
I certify that this information is true and correct.		NAME	ADDRESS
		PHONE	
FOR COMMISSION USE			
L. NO.	LOCATION CODE S. T. R.	SUBDIVISION NAME	
ZONING REQUIREMENT	MAJOR STREET PLAN REQUIREMENT	UTILITY EASEMENT NEEDS	HEALTH DEPT. NEEDS
ACTION RECOMMENDED TO THE PLANNING COMMISSION	ACTION TAKEN BY THE PLANNING COMMISSION	DATE	CONDITION:

1008 Lot Split Checklist

	No.	Description	Comment
	1	Application, fees and adequate number of plans submitted.	
	2	The lots front on an existing street. Refer to Section 402c	
	3	The lot split does not contain more than three (3) total lots including the lots to be split and any remaining tract. A ten (10) acre tract may be split into no more than a total of three (3) lots including any previous lot splits affecting that tract.	
	4	The lot split does not involve a new street or alley. There is no closing or vacation of a street, alley, setback line, access control or easement.	
	5	The lot split would not result in significant increases in service requirements or will not interfere with any existing service levels.	
	6	A substandard sized lot or non-conforming lot will not be created.	
	7	All of the lots shall be of sufficient area to properly accommodate a suitable sewage disposal system as approved by ODEQ and/or Town of Verdigris, if one is required.	
	8	There is adequate easement access by utility companies unless appropriate easements are dedicated as approved by those respective companies.	
	9	Applicant shall submit copy of the filed final plat or a portion of said filed final plat relative to the subject lot for which a building permit is desired	
	10	Applicant shall verify and/or confirm that all lot pins (boundary corners) of the subject lot have been set and are clearly visible prior to any construction.	

1009 Building Permit Application



Building Permit		Street Address:					
		Date:			No.		
Owner	Legal Desc.	Lot	Block	Addition		Permit Fees	
Contractor							Principal Building or use
Address		Section	TWP	Range	County		Accessory Building or Use
City & Zip		Phone				Use by Right	
Proposed Use:						Use by Interpretation	
						Use by Variance	
						Use By Special Exception	
Zoning District	District	Sup Dist.		Board of Adjustments No.			
Lot Information	Frontage	Ave. Depth	Lot Area	Commercial Permits	Parking Spaces	Loading Berths	
Use Conditions				Estimated Cost of Building			
Structure Set back	Front (From Center of Street)		Side (Ft)	Side (Ft)	Rear (Ft)	Livable Space	
Building Information	Width		Length	Height	Floor Area		
	NO. Dwelling Units		Floor	Ext. Walls	Int. Walls	Roof	
	Type of Construction		Easements				
Type of Work to be Done.	New Building	Enlarge Ex. Building	Repair No. Expansion	Int. Remodel	Occupancy	Accessory	
Zoning Officer	Applicant's Signature				Inspector		
Comments:				Fire Department			
				Electrical Contractor			
				Plumbing Contractor			
				Mechanical Contractor			
PLEASE NOTE: Residential Permit Review: 3 - 5 Business Days Commercial Permit Review: 10 - 15 Business Days				IMPORTANT: Please attach a drawing of the proposed Plot Plan and indicate the location and direction of all buildings on lot. Indicate type construction and use of each building.			

1010 Residential Building Permit Checklist

	No.	Description	Comment
	1	2 Full size copies and 1 smaller copy of the building construction plans.	
	2	2 Full size copies and 1 smaller copy of the Site Plan	
Site Plan Requirements:			
	3	Location of all easements and existing utilities.	
	4	Set-back lines.	
	5	100 year flood plain boundaries (if located on or adjacent to the property).	
	6	Location and elevations of proposed and existing structures.	
	7	Property drainage patterns.	
	8	Proposed driveway material, location, dimensions and radii with culvert information (if applicable).	
	9	Sidewalk location if streets are curb and gutter.	

1011 Commercial/Industrial Building Permit Checklist

No.	Description	Comment
1	2 Full size to scale copies and 1 smaller copy of the building construction plans, stamped by a licensed architect and licensed engineer, licensed in the State of Oklahoma.	
2	2 Full size to scale copies and 1 smaller copy of the Site Plan, prepared and stamped by an architect or civil engineer licensed in the State of Oklahoma.	
Site Plan Requirements:		
3	Property zoning information, land coverage, setback and parking requirements.	
4	Grading plan with existing and proposed drainage patterns.	
5	The one hundred (100) year floodplain boundaries (if applicable).	
6	Drainage report including documentation showing no net increase in post development flow rate and no adverse impact to adjacent properties.	
7	Location of all easements, existing utilities, pipelines and other relevant property information.	
8	Location and elevation of structure(s), existing and proposed.	
9	Fire lane locations.	
10	Copy of Notice of Intent.	
11	Proposed fence and screening fence location(s).	
12	Sidewalk location if streets are curb and gutter.	
13	Location of proposed business signs.	
14	Storm water Pollution Prevention Plan (SWPPP).	

1012 Participant Certifications

1012.01 Town Engineer and/or Town Inspector Inspection Block

TOWN OF VERDIGRIS ROAD INSPECTION			
		INSPECTION DATE:	SIGNATURE:
1.	SUB-GRADE & GRADING		
2.	CULVERTS AND HEADWALLS		
3.	UTILITY X-INGS & LOAD TEST		
4.	SUB-BASE AGGREGATE BASE		
<p>NOTE: THE ABOVE ITEMS OF WORK SHALL BE COMPLETED IN CONSECUTIVE ORDER AND EACH ITEM OF WORK MUST BE COMPLETED, INSPECTED, APPROVED, AND "SIGNED OFF ON" BY THE TOWN OF VERDIGRIS INSPECTOR PRIOR TO PROCEEDING TO THE NEXT ITEM OF WORK. FAILURE TO RECEIVE SEQUENTIAL APPROVAL OF THESE ITEMS OF WORK SHALL RESULT IN NON-ACCEPTANCE BY THE TOWN OF VERDIGRIS OF ALL ROADWAY IMPROVEMENTS.</p>			

1012.02 Owner’s Certificate and Dedication

Example Owner’s Certificate and Dedication

We, the undersigned, do hereby certify that we are the owners of and the only persons having any right, title or interest in the land shown on the Plat of: _____ and that the plat represents a correct survey of the above described property made with our consent, and that we hereby dedicate to the public use all streets as shown on the plat, that the easements as shown on the plat are created for the installation and maintenance of public utilities; that we hereby guarantee a clear title to all lands so dedicated from ourselves, our heirs, or assigns forever and have caused the same to be released from all encumbrances so the title is clear, except as shown in the abstracters certificate.

RESTRICTIONS (if any)

In witness thereof, _____ Names _____, being the owners of _____ Plat Name _____, hereby approves the foregoing Deed of Dedication.

This _____ day of _____, 20__.

Signatures

ACKNOWLEDGEMENT

Surveyor's Certificate

Example Surveyor's Certificate

I, Name , a duly registered land surveyor in the State of Oklahoma, hereby certify that I have carefully and accurately surveyed, subdivided and platted the tract of land described above, and that said plat designated herein as Plat Name , a subdivision in the Town of Verdigris, Rogers County, State of Oklahoma, is a true and correct representation of said survey.

Witness my hand and seal this _____ day of _____, 20____.

Signature and SEAL

ACKNOWLEDGEMENT

1012.03 County Treasurer's Certificate

County Treasurer's Certificate

I, Name , County Treasurer of Rogers County, Oklahoma, hereby certify that I have examined the records pertaining to ad valorem taxes on the tract described in the accompanying plat and find that all the ad valorem taxes have been paid to and including 20____.

Dated this _____ day of _____, 20____.

Signature and SEAL

ACKNOWLEDGEMENT

1012.04 Planning and Zoning Commission Certificate

Planning Commission Approval

I, Name , Chairman/Secretary of the Town of Verdigris Planning Commission, hereby certify that the commission approved the plat of Plat Name on the day of , 20 .

Chairman - Planning Commission

1012.05 Department of Environmental Quality Certificate

Department of Environmental Quality Approval

The Rogers County office of the Oklahoma Department of Environmental Quality has approved this plat for the use of water system and sewer system on the day of , 20 .

ODEQ Representative

1012.06 Town of Verdigris, Board of Trustees Certificate

Acceptance of Dedication by Board of Trustees

Be it resolved by the Board of Trustees for the Town of Verdigris, Oklahoma, that the dedication shown on the attached plat of Plat Name is hereby accepted and that the Board will assume maintenance of dedicated public roads providing all construction requirements are fulfilled prior to their acceptance of dedicated roads by the Board of Trustees. The Board of Trustees shall have adequate assurance by the developer that the roads will be built according to the requirements. Those assurances shall include bonds, letters of credit or other items approved by the Board of Trustees. The Board shall sign the plat and note on the plat that "roads will be maintained by the Town".

Approved by the Board of Trustees for the Town of Verdigris, Oklahoma, this _____ day of _____, 20____.

Chairman

Board of Trustees _____

Town Clerk

1013 Zoning Requirements

1013.01 Residential Lot Width and Area Requirements

District	Lot Width (feet)				Lot Area, Minimum (square feet)				
	Town-house Individual Lot*	All Other Dwellings			Townhouse Development	All Other Dwellings			
		One Family	Two Family	Three Family		Individual Lots	One Family	Two Family	Three or more Family
RS-60	-	165	-	-	-	-	60,000	-	-
RS-40	-	150	-	-	-	-	40,000	-	-
RS-30	-	130	-	-	-	-	30,000	-	-
RS-25	-	120	-	-	-	-	25,000	-	-
RS-20	-	100	-	-	-	-	20,000	-	-
RS-10	-	80	-	-	-	-	10,000	-	-
RS-6	-	60	-	-	-	-	6,000	-	-
RST-60	-	165	-	-	-	-	60,000	-	-
RST-40	-	150	-	-	-	-	40,000	-	-
RST-25	-	120	-	-	-	-	25,000	-	-
RST-20	-	100	-	-	-	-	20,000	-	-
RST-10	-	80	-	-	-	-	10,000	-	-
RST-6	-	60	-	-	-	-	6,000	-	-
RM-6	24	60	75	100	36,000	1,900	6,000	7,500	10,000
RM-7	24	60	75	100	24,000	1,900	6,000	7,500	10,000
RM-2.5	24	60	75	100	20,000	1,900	6,000	7,500	10,000
RM-1.5	20	60	75	100	16,000	1,900	6,000	7,500	10,000

* A Minimum of three (3) Townhouse lots are required for Townhouse Development.

1013.02 Residential Lot Area Requirements

District	Townhouse Developments		All Other Dwellings			Height, Maximum (feet) if no Additional Setback Provided	Additional height (feet) Permitted for each additional foot of side and rear setback
	Two or More Bedrooms	One or Fewer Bedrooms	Two or More Bedrooms	One Bedroom	No Bedroom		
RS-60	-	-	60,000	60,000	60,000	35	0.4
RS-40	-	-	40,000	40,000	40,000	35	0.5
RS-30	-	-	30,000	30,000	30,000	35	0.6
RS-25	-	-	25,000	25,000	25,000	35	0.6
RS-20	-	-	20,000	20,000	20,000	35	0.7
RS-10	-	-	10,000	10,000	10,000	35	0.8
RS-6	-	-	6,000	6,000	6,000	35	1.0
RST-60	-	-	60,000	60,000	60,000	20	0.4
RST-40	-	-	40,000	40,000	40,000	20	0.5
RST-25	-	-	25,000	25,000	25,000	20	0.6
RST-20	-	-	20,000	20,000	20,000	20	0.7
RST-10	-	-	10,000	10,000	10,000	20	0.8
RST-6	-	-	6,000	6,000	6,000	20	1.0
RM-6**	6,000	5,200	6,000	5,200	4,500	35	1.0
RM-7**	4,000	3,500	4,000	3,500	3,000	35	1.3
RM-2.5**	2,500	2,500	2,500	2,200	1,900	35	1.6
RM-1.5**	2,000	2,000	1,500	1,300	1,100	35	2.0

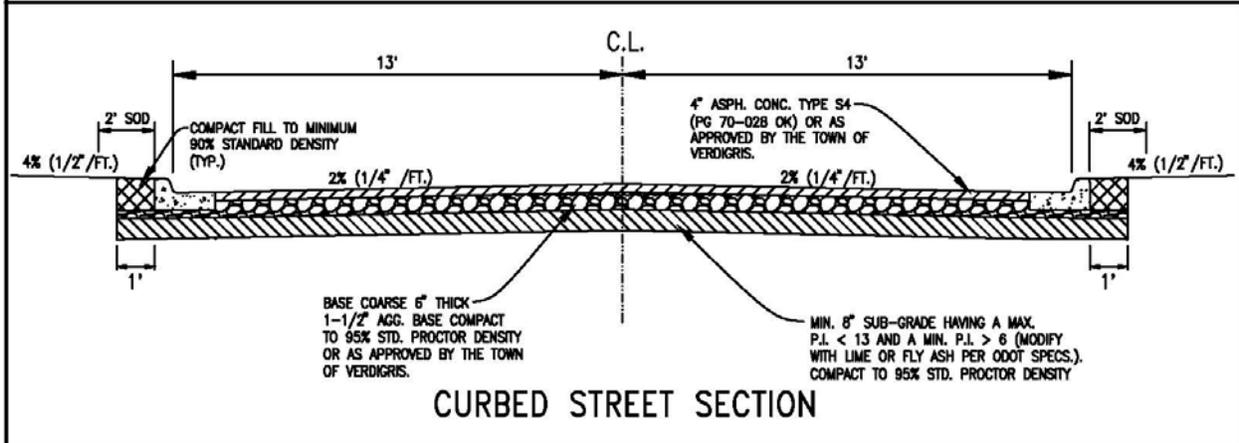
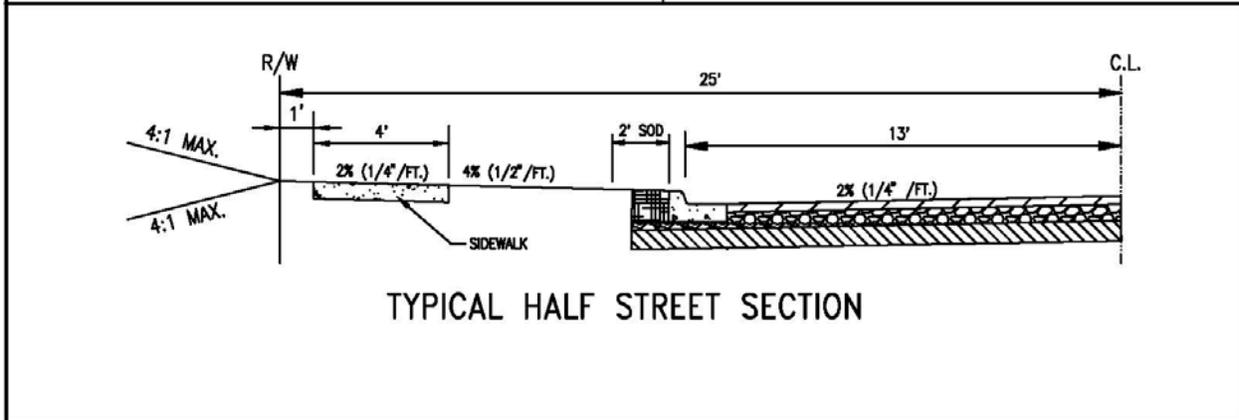
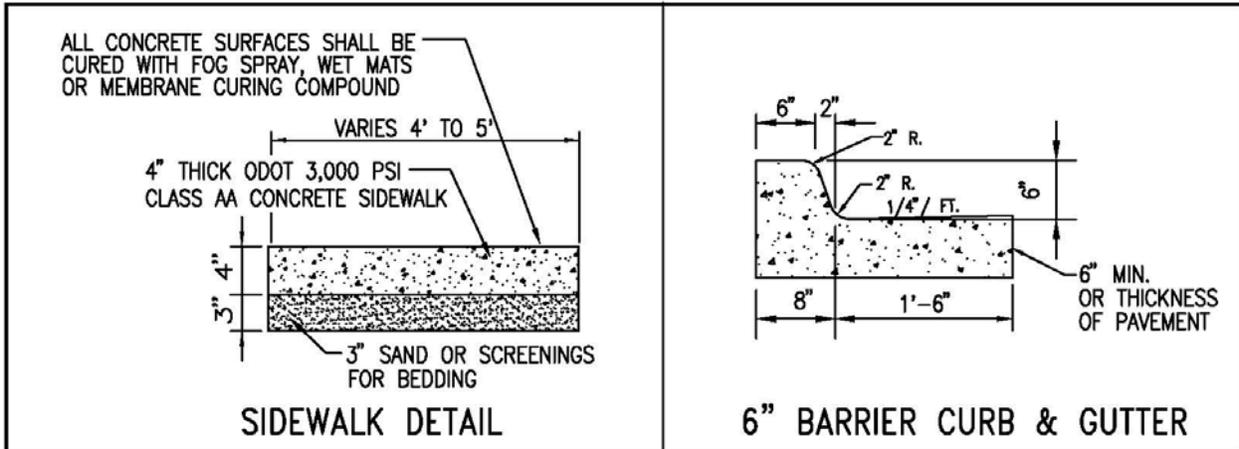
** In the case of multi-family dwellings in RM Districts, the area in abutting streets out to the centerline for a distance not to exceed 65 feet and in abutting public open spaces to the center thereof for a distance not exceeding 65 feet may be counted as part of the area of the lot in determining lot area per dwelling unit.

1013.03 Residential Yard Coverage Requirements

District	Yards* (feet) minimum								
	Interior Lots				Corner Lots			Lot Coverage Maximum (%)	
	Interior Lot			Interior Side yard	Exterior Side Yards		Rear Yard		
	Front Yard	One Yard	Other Yard		If Back-to-Back with another Corner Lot	If Not Back-to-Back with another Corner Lot		Interior Lot	Center Lot
RS-60	40	16	8	8	30	35	35	15	20
RS-40	40	16	8	8	30	35	35	15	20
RS-30	35	16	8	8	25	30	30	20	25
RS-25	35	14	7	7	25	30	30	20	25
RS-20	35	14	7	7	25	30	30	20	25
RS-10	30	12	6	6	20	25	25	25	30
RS-6	25	10	5	5	15	20	20	25	30
RST-60	40	16	8	8	30	35	35	15	20
RST-40	40	16	8	8	30	35	35	15	20
RST-25	35	14	7	7	25	30	30	20	25
RST-20	35	14	7	7	25	30	30	20	25
RST-10	30	12	6	6	20	25	25	25	30
RST-6	25	10	5	5	15	20	20	25	30
RM-6	25	10	5	5	15	20	20	25	30
RM-7	25	10	5	5	15	20	20	30	35
RM-2.5	15	10	5	5	10	20	10	30	35
RM-1.5	10	10	5	10	10	20	10	30	35

* Front Yards or any yard abutting a public street shall be measured from the centerline of the abutting street, adding to the distance shown in the preceding table one-half (1/2) the distance designated in the Major Street Plan (MSP)

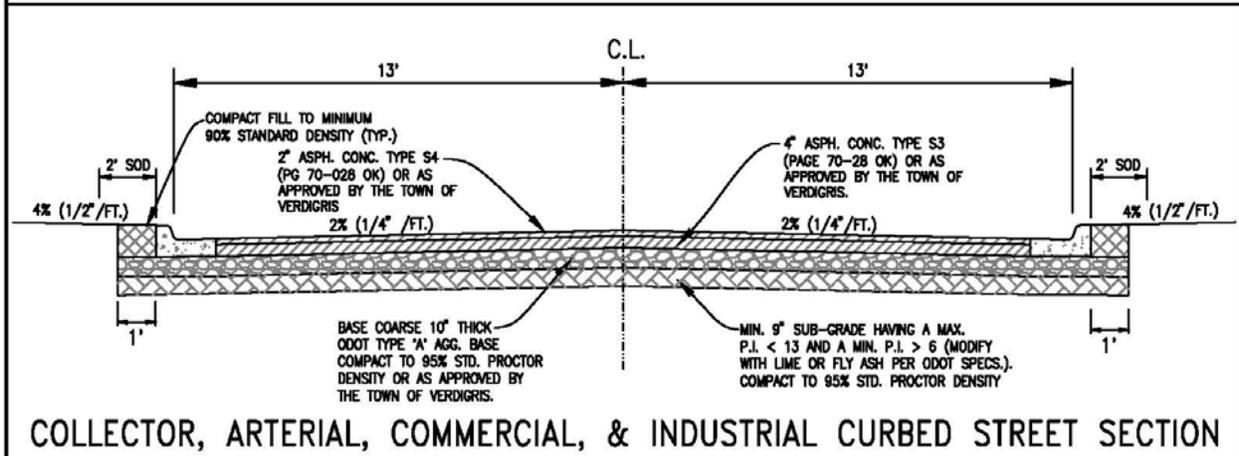
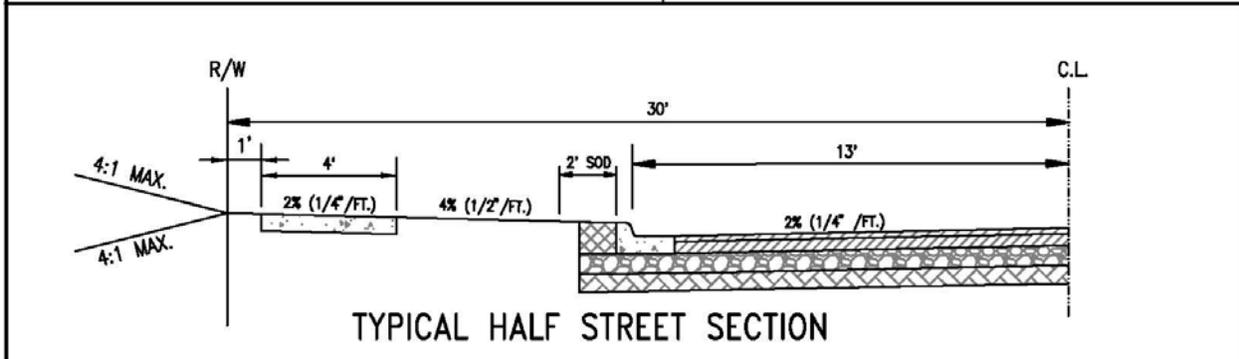
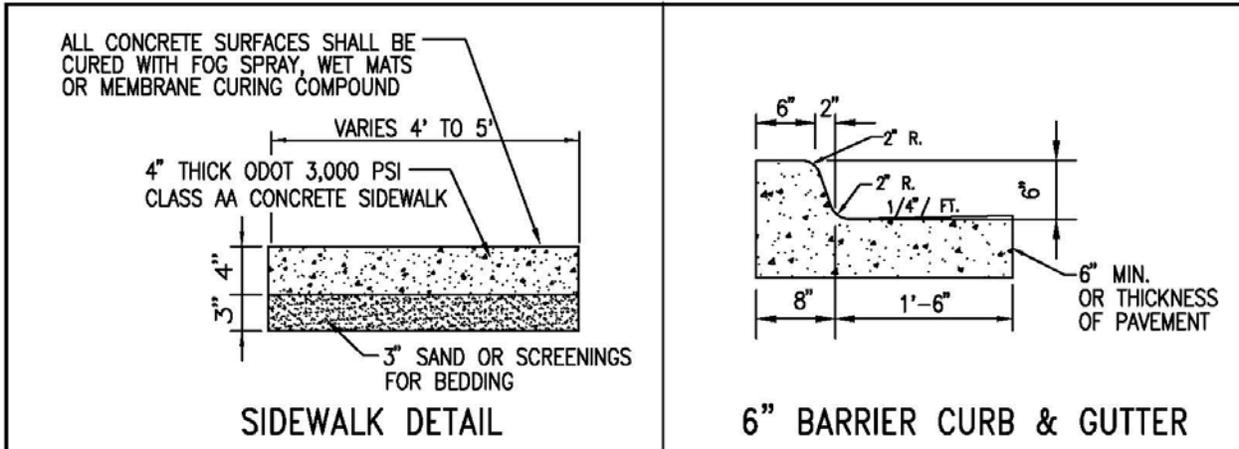
1014.02 Residential Streets w/ Curb and Gutter



1. PAVING SECTION IS THE MINIMUM ALLOWED. A GEOTECHNICAL REPORT IS REQUIRED TO DETERMINE SUB-GRADE TREATMENT REQUIREMENTS. AN ALTERNATE PAVING SECTION MAY BE REQUIRED OR APPROVED BY THE TOWN OF VERDIGRIS BASED UPON THE RECOMMENDATION IN THE GEOTECHNICAL REPORT.
2. MATERIAL SUBMITTALS SHALL BE MADE PRIOR TO CONSTRUCTION TO INCLUDE AT A MINIMUM ASPHALT MIX DESIGN, STANDARD PROCTOR TEST, AGGREGATE AND SUB-GRADE TREATMENT MATERIAL.
3. TESTING SHALL BE CONDUCTED INCLUDING FOR P.I., COMPACTION, ASPHALT DENSITY AND FINAL ASPHALT CORES BASED UPON THE REQUEST OF THE TOWN OF VERDIGRIS.
4. CONSTRUCTION, MATERIALS AND TESTING SHALL IN CONFORMANCE WITH ODOT SPECIFICATIONS.

REVISION	BY	DATE	RESIDENTIAL STREET WITH CONCRETE CURB & GUTTER STANDARD DETAILS	TOWN OF VERDIGRIS, OKLAHOMA	
				DATE: 08/11	STANDARD NO. 102-07

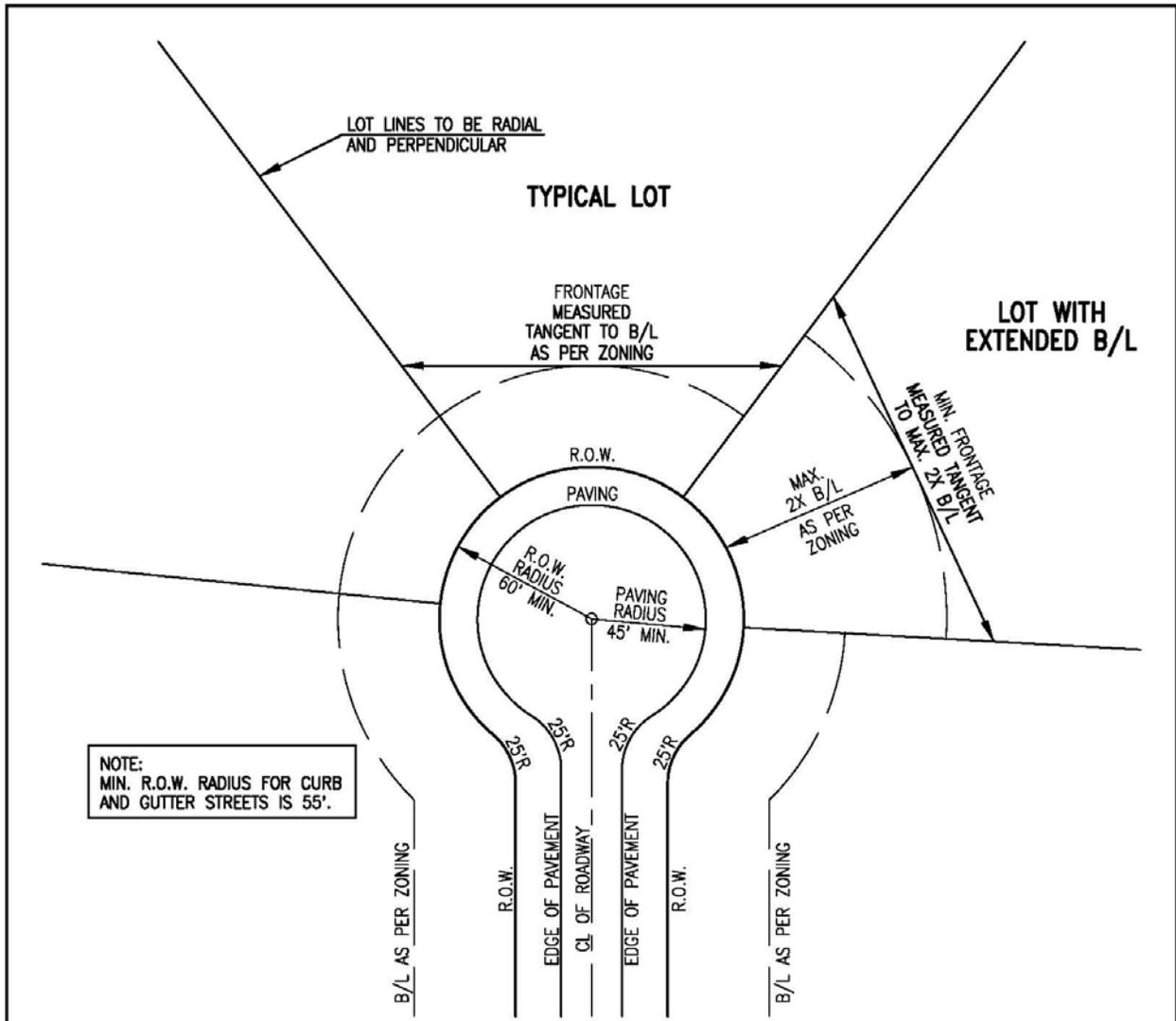
1014.04 Commercial Streets w/ Curb and Gutter



1. PAVING SECTION IS THE MINIMUM ALLOWED. A GEOTECHNICAL REPORT IS REQUIRED TO DETERMINE SUB-GRADE TREATMENT REQUIREMENTS. AN ALTERNATE PAVING SECTION MAY BE REQUIRED OR APPROVED BY THE TOWN OF VERDIGRIS BASED UPON THE RECOMMENDATION IN THE GEOTECHNICAL REPORT.
2. MATERIAL SUBMITTALS SHALL BE MADE PRIOR TO CONSTRUCTION TO INCLUDE AT A MINIMUM ASPHALT MIX DESIGN, STANDARD PROCTOR TEST, AGGREGATE AND SUB-GRADE TREATMENT MATERIAL.
3. TESTING SHALL BE CONDUCTED INCLUDING FOR P.I., COMPACTION, ASPHALT DENSITY AND FINAL ASPHALT CORES BASED UPON THE REQUEST OF THE TOWN OF VERDIGRIS.
4. CONSTRUCTION, MATERIALS AND TESTING SHALL IN CONFORMANCE WITH ODOT SPECIFICATIONS.

REVISION	BY	DATE	<p>COLLECTOR, ARTERIAL, COMMERCIAL & INDUSTRIAL ROADWAY SECTION WITH CONCRETE CURB & GUTTER</p> <p>STANDARD DETAILS</p>	TOWN OF VERDIGRIS, OKLAHOMA	
				DATE: 08/11	STANDARD NO. 104-07

1014.05 Cul-De-Sac Requirements



CUL-DE-SAC DESIGN REQUIREMENTS:

1. MINIMUM RIGHT-OF-WAY REQUIREMENT IS SIXTY (60) FOOT RADIUS. FIFTY-FIVE (55) FOOT MINIMUM RIGHT-OF-WAY FOR CURB AND GUTTER STREETS.
2. MINIMUM PAVING REQUIREMENT IS FORTY-FIVE (45) FOOT PAVED RADIUS.
3. MINIMUM RETURN RADIUS AT POINT WHERE STREET ENTERS CUL-DE-SAC IS TWENTY-FIVE (25) FOOT RADIUS.
4. WITH RESERVE ISLAND IN CENTER, THE PAVING RADIUS SHALL BE THIRTY (30) FEET PLUS THE RADIUS OF THE ISLAND OR THE MINIMUM PAVING RADIUS AS STATED ABOVE. WHICHEVER IS GREATER.
5. WITH RESERVE ISLAND IN CENTER, THE RIGHT-OF-WAY RADIUS SHALL BE FIFTEEN (15) FEET PLUS THE RADIUS OF THE PAVEMENT OR THE MINIMUM RIGHT-OF-WAY RADIUS AS STATED ABOVE. WHICHEVER IS GREATER.
6. THE MINIMUM LOT FRONTAGE OF A CUL-DE-SAC LOT SHALL BE THIRTY FIVE (35) FEET AT THE CUL-DE-SAC RIGHT-OF-WAY.
7. THE MINIMUM LOT FRONTAGE OF A CUL-DE-SAC LOT, AS REQUIRED BY THE RESPECTIVE ZONING CLASSIFICATION, SHALL BE MEASURED, DEFINED, AND/OR ACHIEVED BY THE LENGTH OF THE TANGENT LINE DRAWN AT THE MIDPOINT OF THE FRONT BUILDING LINE/SETBACK ARC. SAID MINIMUM FRONTAGE REQUIREMENT SHALL BE MET AT A FRONT BUILDING LINE/SETBACK THAT IS NO MORE THAN TWO (2) TIMES THE STANDARD FRONT BUILDING LINE/SETBACK REQUIREMENT AS REQUIRED BY THE RESPECTIVE ZONING CLASSIFICATION OR AS MAY BE REQUIRED BY THE TOWN ENGINEER.
8. THE FRONT BUILDING LINE/SETBACK OF A CUL-DE-SAC LOT SHALL BE ESTABLISHED AND SHALL NOT EXTEND MORE THAN TWO (2) TIMES THE STANDARD FRONT BUILDING LINE/SETBACK REQUIREMENT AS REQUIRED BY THE RESPECTIVE ZONING CLASSIFICATION IF SO ADJUSTED TO ACHIEVE THE LOT FRONTAGE REQUIREMENT.

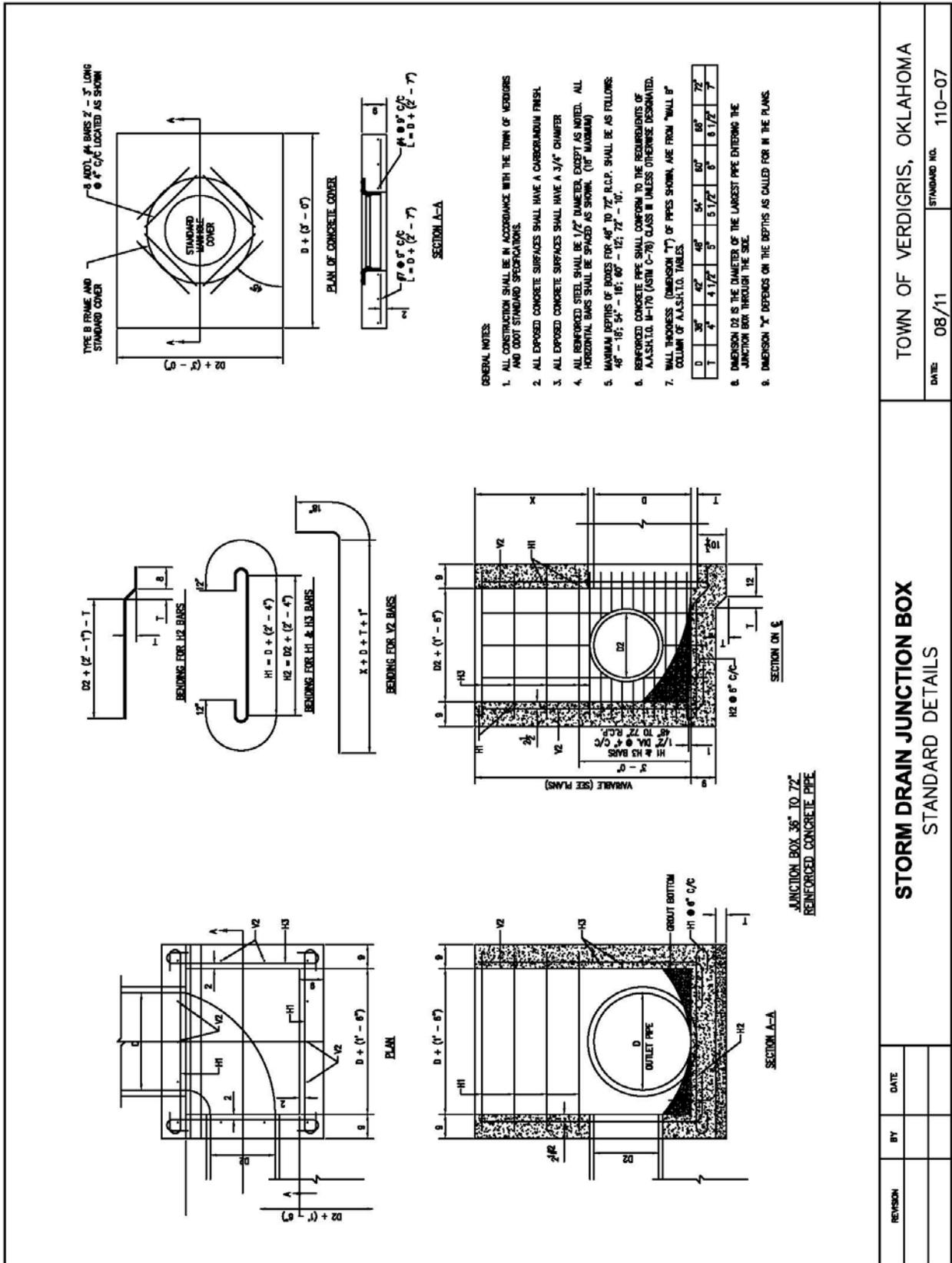
REVISION	BY	DATE	CUL-DE-SAC REQUIREMENTS LAYOUT & MIN. LOT WIDTH STANDARD DETAILS	TOWN OF VERDIGRIS, OKLAHOMA	
				DATE	08/11

1014.08 Flexible Pipe Installation

TABLE OF TRENCHING AND STANDARD BEDDING MATERIAL QUANTITIES

PIPE DIA. OR BEDDING EQUIV.	SINGLE PIPE INSTALLATION		DOUBLE PIPE INSTALLATION		TRIPLE PIPE INSTALLATION		CLEAR SPACE BETWEEN MATERIAL FITS	
	H	W	STANDARD MATERIAL	STANDARD MATERIAL	STANDARD MATERIAL	STANDARD MATERIAL		
IN.	FT.	FT.	C.V.A.F.	FT.	C.V.A.F.	FT.	INCHES	
18	3.10	3.20	0.28	6.10	0.52	9.00	1.00	14
24	3.60	4.00	0.39	7.70	0.73	11.40	1.50	17
30	4.20	4.80	0.51	9.30	0.97	13.80	2.15	20
36	4.75	5.50	0.63	10.80	1.23	16.20	2.85	23
42	5.30	7.00	0.92	13.20	1.67	19.20	3.80	26
48	5.90	8.00	1.03	14.75	2.00	21.70	4.70	27
54	6.50	9.00	1.15	16.20	2.35	24.20	5.60	28
60	6.75	9.50	1.40	17.60	2.75	25.90	6.50	35
66	7.20	10.00	1.70	18.80	3.10	27.70	7.35	38
72	7.80	11.00	2.00	20.00	3.50	29.50	8.20	41
78	8.40	12.00	2.30	21.20	3.90	31.30	9.05	44
84	9.00	13.00	2.60	22.40	4.30	33.10	9.90	47
90	9.60	14.00	2.90	23.60	4.70	34.90	10.75	50
96	10.20	15.00	3.20	24.80	5.10	36.70	11.60	53
102	10.80	16.00	3.50	26.00	5.50	38.50	12.45	56
108	11.40	17.00	3.80	27.20	5.90	40.30	13.30	59
114	12.00	18.00	4.10	28.40	6.30	42.10	14.15	62
120	12.60	19.00	4.40	29.60	6.70	43.90	15.00	65
126	13.20	20.00	4.70	30.80	7.10	45.70	15.85	68
132	13.80	21.00	5.00	32.00	7.50	47.50	16.70	71
138	14.40	22.00	5.30	33.20	7.90	49.30	17.55	74
144	15.00	23.00	5.60	34.40	8.30	51.10	18.40	77
150	15.60	24.00	5.90	35.60	8.70	52.90	19.25	80
156	16.20	25.00	6.20	36.80	9.10	54.70	20.10	83
162	16.80	26.00	6.50	38.00	9.50	56.50	20.95	86
168	17.40	27.00	6.80	39.20	9.90	58.30	21.80	89
174	18.00	28.00	7.10	40.40	10.30	60.10	22.65	92
180	18.60	29.00	7.40	41.60	10.70	61.90	23.50	95
186	19.20	30.00	7.70	42.80	11.10	63.70	24.35	98
192	19.80	31.00	8.00	44.00	11.50	65.50	25.20	101
198	20.40	32.00	8.30	45.20	11.90	67.30	26.05	104
204	21.00	33.00	8.60	46.40	12.30	69.10	26.90	107
210	21.60	34.00	8.90	47.60	12.70	70.90	27.75	110
216	22.20	35.00	9.20	48.80	13.10	72.70	28.60	113
222	22.80	36.00	9.50	50.00	13.50	74.50	29.45	116
228	23.40	37.00	9.80	51.20	13.90	76.30	30.30	119
234	24.00	38.00	10.10	52.40	14.30	78.10	31.15	122
240	24.60	39.00	10.40	53.60	14.70	79.90	32.00	125
246	25.20	40.00	10.70	54.80	15.10	81.70	32.85	128
252	25.80	41.00	11.00	56.00	15.50	83.50	33.70	131
258	26.40	42.00	11.30	57.20	15.90	85.30	34.55	134
264	27.00	43.00	11.60	58.40	16.30	87.10	35.40	137
270	27.60	44.00	11.90	59.60	16.70	88.90	36.25	140
276	28.20	45.00	12.20	60.80	17.10	90.70	37.10	143
282	28.80	46.00	12.50	62.00	17.50	92.50	37.95	146
288	29.40	47.00	12.80	63.20	17.90	94.30	38.80	149
294	30.00	48.00	13.10	64.40	18.30	96.10	39.65	152
300	30.60	49.00	13.40	65.60	18.70	97.90	40.50	155
306	31.20	50.00	13.70	66.80	19.10	99.70	41.35	158
312	31.80	51.00	14.00	68.00	19.50	101.50	42.20	161
318	32.40	52.00	14.30	69.20	19.90	103.30	43.05	164
324	33.00	53.00	14.60	70.40	20.30	105.10	43.90	167
330	33.60	54.00	14.90	71.60	20.70	106.90	44.75	170
336	34.20	55.00	15.20	72.80	21.10	108.70	45.60	173
342	34.80	56.00	15.50	74.00	21.50	110.50	46.45	176
348	35.40	57.00	15.80	75.20	21.90	112.30	47.30	179
354	36.00	58.00	16.10	76.40	22.30	114.10	48.15	182
360	36.60	59.00	16.40	77.60	22.70	115.90	49.00	185
366	37.20	60.00	16.70	78.80	23.10	117.70	49.85	188
372	37.80	61.00	17.00	80.00	23.50	119.50	50.70	191
378	38.40	62.00	17.30	81.20	23.90	121.30	51.55	194
384	39.00	63.00	17.60	82.40	24.30	123.10	52.40	197
390	39.60	64.00	17.90	83.60	24.70	124.90	53.25	200
396	40.20	65.00	18.20	84.80	25.10	126.70	54.10	203
402	40.80	66.00	18.50	86.00	25.50	128.50	54.95	206
408	41.40	67.00	18.80	87.20	25.90	130.30	55.80	209
414	42.00	68.00	19.10	88.40	26.30	132.10	56.65	212
420	42.60	69.00	19.40	89.60	26.70	133.90	57.50	215
426	43.20	70.00	19.70	90.80	27.10	135.70	58.35	218
432	43.80	71.00	20.00	92.00	27.50	137.50	59.20	221
438	44.40	72.00	20.30	93.20	27.90	139.30	60.05	224
444	45.00	73.00	20.60	94.40	28.30	141.10	60.90	227
450	45.60	74.00	20.90	95.60	28.70	142.90	61.75	230
456	46.20	75.00	21.20	96.80	29.10	144.70	62.60	233
462	46.80	76.00	21.50	98.00	29.50	146.50	63.45	236
468	47.40	77.00	21.80	99.20	29.90	148.30	64.30	239
474	48.00	78.00	22.10	100.40	30.30	150.10	65.15	242
480	48.60	79.00	22.40	101.60	30.70	151.90	66.00	245
486	49.20	80.00	22.70	102.80	31.10	153.70	66.85	248
492	49.80	81.00	23.00	104.00	31.50	155.50	67.70	251
498	50.40	82.00	23.30	105.20	31.90	157.30	68.55	254
504	51.00	83.00	23.60	106.40	32.30	159.10	69.40	257
510	51.60	84.00	23.90	107.60	32.70	160.90	70.25	260
516	52.20	85.00	24.20	108.80	33.10	162.70	71.10	263
522	52.80	86.00	24.50	110.00	33.50	164.50	71.95	266
528	53.40	87.00	24.80	111.20	33.90	166.30	72.80	269
534	54.00	88.00	25.10	112.40	34.30	168.10	73.65	272
540	54.60	89.00	25.40	113.60	34.70	169.90	74.50	275
546	55.20	90.00	25.70	114.80	35.10	171.70	75.35	278
552	55.80	91.00	26.00	116.00	35.50	173.50	76.20	281
558	56.40	92.00	26.30	117.20	35.90	175.30	77.05	284
564	57.00	93.00	26.60	118.40	36.30	177.10	77.90	287
570	57.60	94.00	26.90	119.60	36.70	178.90	78.75	290
576	58.20	95.00	27.20	120.80	37.10	180.70	79.60	293
582	58.80	96.00	27.50	122.00	37.50	182.50	80.45	296
588	59.40	97.00	27.80	123.20	37.90	184.30	81.30	299
594	60.00	98.00	28.10	124.40	38.30	186.10	82.15	302
600	60.60	99.00	28.40	125.60	38.70	187.90	83.00	305
606	61.20	100.00	28.70	126.80	39.10	189.70	83.85	308
612	61.80	101.00	29.00	128.00	39.50	191.50	84.70	311
618	62.40	102.00	29.30	129.20	39.90	193.30	85.55	314
624	63.00	103.00	29.60	130.40	40.30	195.10	86.40	317
630	63.60	104.00	29.90	131.60	40.70	196.90	87.25	320
636	64.20	105.00	30.20	132.80	41.10	198.70	88.10	323
642	64.80	106.00	30.50	134.00	41.50	200.50	88.95	326
648	65.40	107.00	30.80	135.20	41.90	202.30	89.80	329
654	66.00	108.00	31.10	136.40	42.30	204.10	90.65	332
660	66.60	109.00	31.40	137.60	42.70	205.90	91.50	335
666	67.20	110.00	31.70	138.80	43.10	207.70	92.35	338
672	67.80	111.00	32.00	140.00	43.50	209.50	93.20	341
678	68.40	112.00	32.30	141.20	43.90	211.30	94.05	344
684	69.00	113.00	32.60	142.40	44.30	213.10	94.90	347
690	69.60	114.00	32.90	143.60	44.70	214.90	95.75	350
696	70.20	115.00	33.20	144.80	45.10	216.70	96.60	353
702	70.80	116.00	33.50	146.00	45.50	218.50	97.45	356
708	71.40	117.00	33.80	147.20	45.90	220.30	98.30	359
714	72.00	118.00	34.10	148.40	46.30	222.10	99.15	362
720	72.60	119.00	34.40	149.60	46.70	223.90	100.00	365
726	73.20	120.00	34.70	150.80	47.10	225.70	100.85	368
732	73.80	121.00	35.00	152.00	47.50	227.50	101.70	371
738	74.40	122.00	35.30	153.20	47.90	229.30	102.55	374
744	75.00	123.00	35.60	154.40	48.30	231.10	103.40	377
750	75.60	124.00	35.90	155.60	48.70	232.90	104.25	380
756	76.20	125.00	36.20	156.80	49.10	234.70	105.10	383
762	76.80	126.00	36.50	158.00	49.50	236.50	105.95	386
768	77.40	127.00	36.80	159.20	49.90	238.30	106.80	389
774	78.00	128.00	37.10	160.40	50.30	240.10	107.65	392
780	78.60	129.00	37.40	161.60	50.70	241.90	108.50	395
786	79.20	130.00	37.70	162.80	51.10	243.70	109.35	398
792	79.80	131.00	38.00	164.00	51.50	245.50	110.20	401
798	80.40	132.00	38.30	165.20	51.90	247.		

1014.10 Storm Drain Junction Box

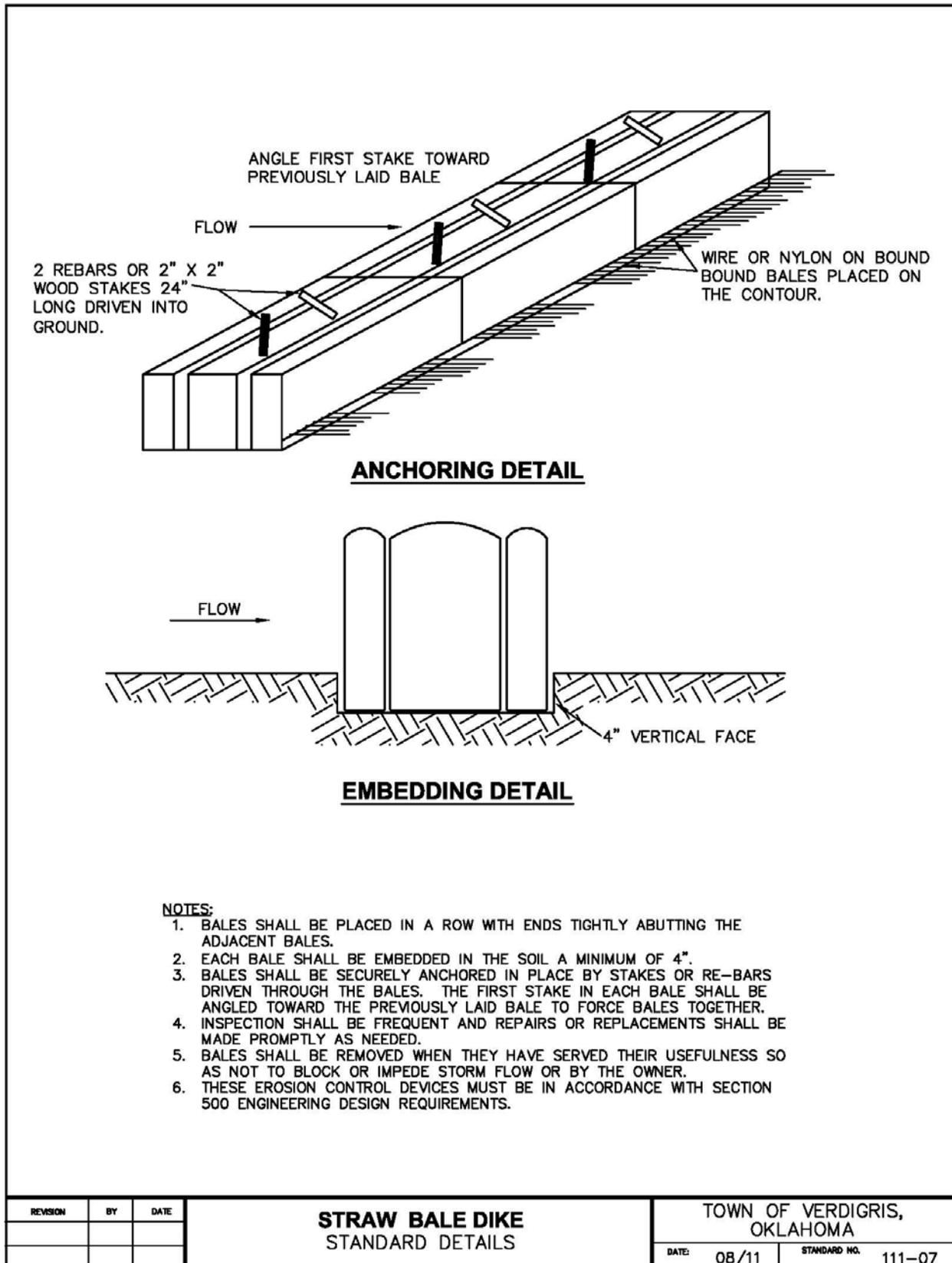


TOWN OF VERDIGRIS, OKLAHOMA
 DATE: 08/11
 STANDARD NO. 110-07

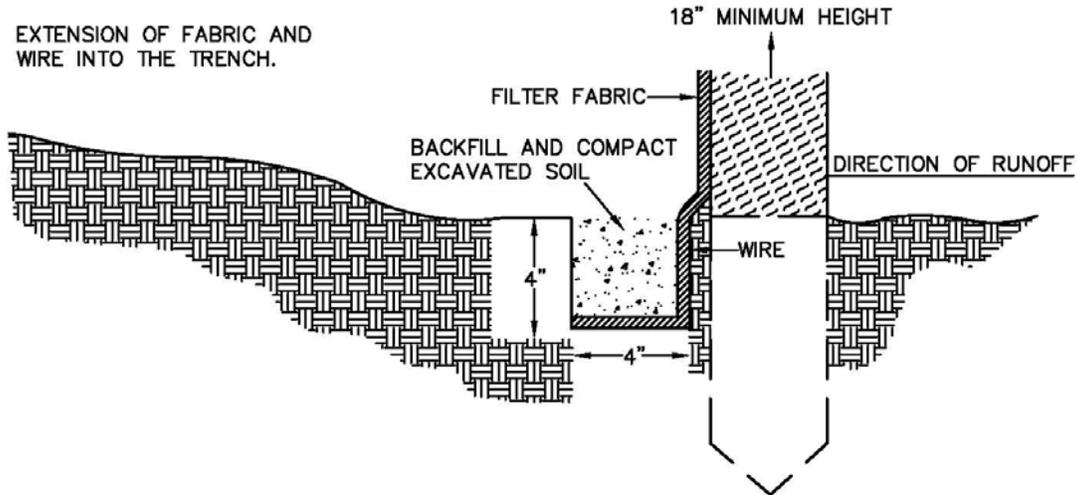
STORM DRAIN JUNCTION BOX
 STANDARD DETAILS

REVISION	BY	DATE

1014.11 Straw Bale Dike



1014.12 Silt Fence



INSTALLATION

1. SET POSTS AND EXCAVATE A 4" x 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. ATTACH THE FILTER FABRIC TO POSTS AND/OR THE WIRE FENCE AND EXTEND IT INTO THE TRENCH. BACKFILL AND COMPACT THE EXCAVATED SOIL.
3. SPLICES IN THE FILTER FABRIC ARE NOT RECOMMENDED. WHEN JOINTS ARE UNAVOIDABLE FILTER FABRIC SHALL BE SPLICED TOGETHER AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP.
4. IF A WIRE MESH SUPPORT FENCE IS USED, IT SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 18 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
5. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 18 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.

MAINTENANCE

1. SEDIMENT FENCES AND SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SEDIMENT FENCE OR SEDIMENT BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SILT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SILT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT FENCE OR SEDIMENT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, AND SEEDED OR SODDED IN CONFORMANCE WITH APPLICABLE VEGETATIVE SPECIFICATION.

REVISION	BY	DATE	SILT FENCE STANDARD DETAILS	TOWN OF VERDIGRIS, OKLAHOMA	
				DATE: 08/11	STANDARD NO. 112-07