

RESOLUTION NO. 1832

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF GLOBE, ARIZONA, DECLARING AS A PUBLIC RECORD THAT CERTAIN DOCUMENT FILED WITH THE CITY CLERK AND ENTITLED "ARTICLE 12-4 GRADING AND DRAINAGE" OF THE CITY CODE FOR PURPOSES OF ADOPTION BY REFERENCE.

RECITALS:

WHEREAS, Arizona Revised Statutes §9-802 provides for the adoption of a code or public record by reference; and

WHEREAS, it is the purpose of this Resolution to declare the proposed amendment to the Globe City Code, "Article 12-4 Grading and Drainage" to be a public record for the purpose of adoption by reference.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Globe, Arizona:

THAT certain document entitled "Article 12-4 Grading and Drainage" attached hereto as Exhibit A is hereby declared to be a public record for the purpose of adoption by reference, three copies of which are on file with the City Clerk, and said copies are hereby ordered to remain on file with the City Clerk.

PASSED AND ADOPTED this 27th day of April, 2021 by the Mayor and Council of the City of Globe, Arizona.

Al Gameros, Mayor

ATTEST:

APPROVED AS TO FORM:

Shelly Salazar, City Clerk CMC

William Sims, City Attorney

ARTICLE 12-4 GRADING

12-4 INTRODUCTION

Sec 12-4-1 Purpose

- A. The purpose of this Article is to promote health, safety, and public welfare by establishing minimum requirements for regulating grading activities. This Article provides standards, guidelines and design criteria for the design and construction of grading, drainage and site restoration projects within the City of Globe. Article 12-4 sets forth rules and regulations to control earthwork construction, including excavation embankments.
- B. This Article is complimentary to the Globe City Code, the Globe Zoning Code, the Globe Subdivision Code, and Article 12-6.

Sec 12-4-2 Applicability

- A. The standards and guidelines of this Article shall apply to any moving, relocating, cutting or filling of earth within the City of Globe. A grading and drainage plan and permit are required under the following circumstances:
 - 1. For any cut and/or fill of dirt that exceeds fifty (50) cubic yards (CY), or clearing and grubbing of more than ten thousand (10,000) square feet (SF)
 - 2. A grading permit may also be required for grading which is less than fifty (50) CY, if the work impact's drainage on adjacent upstream and/or downstream properties, and/or for a structure
- B. The guidelines of this section shall not apply to the following development activities:
 - 1. Selective thinning of vegetation for fire control as approved by the Fire Department
 - 2. Individual single-family home construction may be exempt, where slopes are less than twenty (20%) percent or where the site will not be subject to mass grading if meeting the requirements above

Sec 12-4-3 Design Standards & Guidelines

A civil engineer registered in the State of Arizona shall analyze, design and seal all grading and drainage plans or associated analysis for projects that meet the requirements noted above.

Sec 12-4-4 State Regulations

- A. Permits issued under the requirements of this Article shall not relieve the permittee of the responsibility for securing required permits for work to be done that is regulated by any other ordinance, department, or division of the City of Globe or other governing agency.

- B. All grading work is subject to the requirements of the National Pollution Discharge Elimination System (NPDES) and Arizona Pollution Discharge Elimination System (AZPDES). Refer to EDSM.
 - 1. Before a grading permit is issued, the developer shall submit to the City Engineer a Notice of Intent (NOI), issued by the Arizona Department of Environmental Quality (ADEQ).

Sec 12-4-5 General Information

- A. The issuance of a permit or the approval of construction documents and specification shall not be construed to be a permit for, nor an approval of any violation of or deviation from the provisions of this Article or any other ordinance, law, rule or regulation.
- B. No clearing and/or grubbing of a site shall occur without first receiving a grading permit. When clearing and/or grubbing has commenced, the site shall be continuously worked until all infrastructure is completed and all erosion control measures and slope stabilization have been completed.
- C. Fees for permits are set by City Council and are included in the City Fee Schedule.

Sec 12-4-6 Grading Standards and Criteria

- A. Portions of the site or lot to be disturbed shall be clearly identified on the grading plans as the “disturbed area(s)” or “disturbed area envelope”. Grubbing, grading, and clearing may only occur within the disturbed area(s) identified on the approved grading plan. Portions of the site or lot not identified as disturbed area(s) may not be used for stockpiling materials.
 - 1. All corners of the proposed site shall be clearly staked by a Registered Land Surveyor before any clearing, grubbing or grading begins.
 - 2. For larger areas of development, where grading will not occur within two hundred (200’) feet of the property boundary, an alteration or modification, may be requested.
- B. Drainage shall be directed away from all structures per the International Building Code.
- C. All residential development shall comply with the following requirements:
 - 1. The maximum height of an exposed vertical cut or fill shall not exceed thirty-five (35’) feet and will require a design and certification from a Registered Geotechnical Engineer.
 - 2. The maximum length of an exposed vertical cut or fill shall not exceed one hundred fifty (150’) feet.
- D. Commercial development shall not be restricted in terms of height of cut or fill, subject to the soil stability analysis and scarring mitigation.
- E. All fills shall be compacted to not less than the minimum densities as listed below and as determined in accordance with ASTM D698. ASTM D1556 or D6398 shall determine Field density.

TABLE 2-1: FILL COMPACTION

LOCATION	MINIMUM DENSITY*
Within the Building Envelope	95%
Parking Lots, Driveways, Roads & Sidewalks	95%
Yards & Open Space	75%

*Unless a modification is indicated based on a geotechnical report, sealed by a Registered Geotechnical Engineer.

- F. The area over which fills are to be placed shall be cleared of all trash, trees, stumps, timber, debris or other material not suitable as a foundation for fill.
- G. Edges of cuts and fills shall conform to the natural topography of the land by reshaping.
- H. Cuts and fills on slopes that encroach into a local drainage tributary (i.e. non-FEMA stream) shall be identified and armored to protect against a 100-year storm event.
- I. Excess material shall be handled per the City approved grading plan, or removed to a City approved off-site disposal area.
- J. All site re-vegetation shall be completed within ninety (90) days of completion of grading work, or prior to release of Financial Assurances or issuance of a certificate of occupancy, whichever occurs first.
- K. Where natural areas or preserved vegetation is designated on a site or lot, temporary fencing shall be installed where they abut construction areas in order to prevent site disturbance of natural areas.
- L. Cut and fill slopes shall be shown on the plans. Slopes steeper than two to one (2:1) (horizontal to vertical) shall require a slope stability analysis prepared by a Registered Geotechnical Engineer. Additionally, slope stability analysis for slopes flatter than two to one (2:1) may be required at the discretion of the City Engineer.
- M. The top of cut slopes shall be located a minimum of five (5') feet inside the subject property boundary. Buildings located at the bottom of a cut slope shall be located a minimum of five (5') feet away from the hinge point of the cut slope and shall be sloped a minimum of six (6") inches per ten (10') feet (6":10') away from the building. Refer to Exhibit, No 1.

- b. A Landscape Architect or Licensed Landscaper shall prepare stabilization plans for banks greater than eight (8') feet, visible from streets and shall submit such plans for City approval. Where structural designs are required, a registrant shall design and seal the plan.

2. Bank Stabilization Options:

- a. Re-vegetated banks are required where practical and may include combination of reseeded/seed mats, trees, shrubs, groundcover, rock and riprap. Plant type, size and coverage shall be sufficient to stabilize and begin restoring within three (3) years.
- b. Temporary automatic irrigation is required to establish plants and permanent drip may be required for highly visible planted banks. Planted surfaces shall be amended with topsoil a minimum of three to six (3" – 6") inches deep, and shall be sufficiently laid back to support plantings.
 - i. A minimum of two to one (2:1) (horizontal to vertical) north facing, two and one half to one (2.5:1) (horizontal to vertical) east facing and three to one (3:1) (horizontal to vertical) south and west facing to permit terracing with steeper faces between planted platforms.
- c. Manufactured banks greater than eight (8') feet high, visible from nearby streets or neighborhoods, shall be formed to create a more natural appearance (e.g. a combination of rough-cut, undulating, and/or rounded toe and top of slope), and terraced where possible to improve plant establishment.
- d. Retaining walls, where visible from streets or nearby neighborhoods, shall be terraced or treated to blend into the natural landscape (e.g. tinted concrete, rock facing, slump block, railroad ties, and/or plantings). Unfinished poured concrete and unfinished concrete block walls are not permitted where visible from streets and nearby neighborhoods.

Unplanted banks are permitted for exposed bedrock cuts, or where the building will effectively screen the cut and/or fill bank in a timely manner. Where bedrock cuts higher than eight (8') feet are visible from streets or neighborhoods, they shall be formed to create a more natural appearance (e.g. a combination of rough-cut, undulating, and/or rounded toe and top of slope). Additional treatment of cut faces may be required to stabilize soil and reduce scarring effects, based on proven effective technologies and products.

- i. All bedrock cuts higher than eight (8') feet must be included in a geotechnical report, including soil loading calculations, and sealed by a Registered Geotechnical Engineer.
- U. All material placed, as fill shall be bladed and graded to a uniform surface.
- V. Fills in non-hillside areas that are made for yard purposes and which do not exceed eighteen (18')

inches in depth are not required to be compacted.

- W. The material used for fill shall be approved by a Registered Geotechnical Engineer prior to use when the fill is to support foundations of structures. No organic material shall be permitted in fills. When the fill material includes large rocky or hard lumps, such as hardpan or cemented gravel, which cannot be broken readily, such material shall be well distributed throughout the fill. Sufficient earth or other fine material shall be placed around the larger material as it is deposited to fill the interstices and produce a dense, compact fill. However, such material shall not be placed within two (2') feet of the finished grade of the fill.
- X. Fills greater than ten (10') feet will require benching, per an analysis and design performed by a Registered Geotechnical Engineer.

Sec 12-4-7 Plan Submittals

- A. The applicant shall complete a grading permit application.
- B. Three (3) copies of grading and drainage plan, a minimum of twenty-two by thirty-four (22" x 34") inches in size, on bond paper in accordance with approved City of Globe CADD standards. The plans shall include the following:
 - 1. Existing contours at a maximum interval of two (2') feet with elevation labels at ten (10') foot intervals, which extend at least one hundred (100') feet beyond the perimeter of the property.
 - a. Spot elevations shall be shown where the contours do not clearly depict the slope direction of drainage flow.
 - b. The City Engineer may modify this requirement, based on the existing topography or scope of the project.
 - 2. Location of all existing structures, walls (either free standing or retaining), curbs, gutters, sidewalks, streets, all utilities, wells, culverts, channels or other drainage improvements.
 - 3. Property lines and all existing recorded easements.
 - 4. City/County jurisdictional lines.
 - 5. The 1 percent annual chance (100-year) Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Area (SFHA) limits shall be delineated.
 - 6. Proposed culverts, including location and dimensions of detention basin(s), and drainage structures or improvements.
 - 7. Finish pad and finish floor elevations, "hinge point" elevations and invert elevations for culverts, channels and/or drainage swales.
 - 8. Profile for all culverts, manholes and inlet structures, showing both existing ground and proposed finished ground/grade profile, for the entire length of the culvert.
 - 9. Inlet and outlet elevations for all culverts, manholes and inlet structures.

10. All proposed cut and fill slopes with (horizontal to vertical) slope.
 11. A profile depicting the existing and proposed grading, with all proposed slopes, clearly labeled.
 12. Walls, both free standing and retaining shall have elevations for top of footing and top of wall:
 - a. Walls and footings shall be installed entirely within the property on which they are permitted.
 - b. Wall and footings on lots located entirely within a subdivision development that is under ownership of the developer, may be on the shared property line of the subject parcel(s).
 13. Estimate the cubic yards of material to be moved on the project including both import and export.
- C. Drainage Analysis (Refer to Engineering Design Standards Manual (EDSM), Article 3, Stormwater Management).
 - D. A Notice of Intent (NOI) issued by ADEQ.
 - E. A Geotechnical Report. The report shall identify structural soil properties and recommendations for compaction. A minimum ninety-five (95%) percent of maximum density and structural fill is required. If the site requires import, the Geotechnical Report must provide recommendations for compaction and structural fill of the import material.
 - F. Project, which disturb one (1) acre or more or are a part of a larger common plan of development, or subdivision that would result in the accumulated disturbance of one (1) acre or more will require a complete Storm Water Pollution Prevention Plan (SWPPP) binder in conformance with the Arizona Department of Environmental Quality (ADEQ). The SWPPP shall include a Notice of Intent (NOI) from ADEQ and a Sediment and Erosion Control Plan, which includes permanent stabilization and/or landscape plans.
 - G. The Engineer of Record (EOR) shall provide the location of any site, which is providing import to the project, or any site to which export is taken. A grading plan or stockpile plan including a SWPPP to control erosion at the off-site location shall be provided for all off-site import/export locations. For some projects, the EOR may not have this information at time of plan submittal. In this cast, the grading contractor shall provide this information prior to a permit being issued.
 - H. Any other items deemed necessary by the City Engineer.

12-4-8 Sec Preliminary Grading

- A. An "At-Risk Grading Permit" is defined as a grading permit that is issued:
 1. Prior to recording of the Final Plat
 2. Prior to issuance of a permit for approved civil improvement plans
 3. Prior to issuance of a permit for approved building permit
- B. The City of Globe may consider request for an "At-Risk" grading permit, on a case-by-case basis,

under specific conditions as follows:

1. Each request will be considered independently on its own merit. In no case shall an At-Risk grading permit be guaranteed for every project.
 2. If the applicant has met the requirements of this code and the issuance of an At-Risk grading permit will not be detrimental to surrounding property owners the City Engineer may, at his discretion, issue a preliminary grading permit.
- C. Application for an At-Risk grading permit shall include all items outlined in Section 12-4-5.

12-4-9 Sec Grading Permit

- A. The Grading Permit may be issued when a complete submittal per EDSM, Sections 12-4-5 and 12-4-6 have been submitted, reviewed and approved by the City Engineer. The issuance of a grading permit shall constitute an authorization to do only that work which is described or illustrated on the permit application, plans and specifications.
- B. Financial Assurances are required at the time of the permit issuance in an amount equal to one hundred and ten (110%) percent of the engineer's estimate of cost for grading and one hundred and twenty (120%) percent of the engineer's estimate of cost for slope stabilization, as stated in the City of Globe Subdivision Code Chapter 13. The City Engineer has the ability to waive the financial assurances on small projects.
- C. Grading Permits are valid for a period of six (6) months from the date of issuance. If the work has not commenced within six (6) months of the issuance date, or the work has been discontinued for more than six (6) months from the last "Approved" inspection, the permit will expire.
 1. If the permittee is unable to complete the work within the specified time, a request may be made prior to the expiration of the permit in writing, to the City Engineer for an extension of time. The letter shall set forth the reasons for the requested extension. If, in the opinion of the City Engineer, such an extension is warranted, he may grant additional time for the completion of the work.
 2. If a permit expires, the permit must be re-submitted for review and approval prior to any work commencing. Expired plans and permits shall adhere to the most currently adopted Globe Municipal Code, Globe Zoning Code, Standard Details, Specifications and fees.
- D. In granting any permit under this Article, the City Engineer may attach such conditions as may be reasonably necessary to prevent the creation of a nuisance or hazard to public or private property. Such conditions may include, but shall not be limited to:
 1. Requirements for fencing of excavations or fills, which would otherwise be hazardous.
 2. Improvement of any existing site condition to bring it up to the standards of this Article.
 3. Temporary fencing of protected hillside and desert preservation areas, prior to

commencing grading operations.

- E. Neither the issuance of a permit under the provisions of this Article nor the compliance with the provisions hereof, or with any conditions imposed in the permit issued hereunder, shall relieve any person from responsibility for damage to other persons or property, nor impose any liability upon the City for damage to other persons or property.

12-4-10 Sec Blasting

No blasting shall occur within the City Limits without a Permit first being issued from the City Engineer. Additional restrictions and City Council approval may be required.