

**TWIN OAKS BOARD OF ALDERMEN
NOTICE OF WORK SESSION
TWIN OAKS CITY HALL
WEDNESDAY, FEBRUARY 15, 2023, 6:15 P.M.
TWIN OAKS, MO 63021**

TENTATIVE AGENDA

- 1) ROW Maintenance Policy
- 2) Crescent Avenue Sidewalk Project – ROW Acquisition
- 3) ADJOURNMENT

Frank Johnson
City Clerk/Administrator

POSTED: Feb. 13, 2023, 10 a.m.

Please note: Any person requiring physical or verbal accommodations should contact the city office 12 hours prior to meeting at 636-225-7873. Copies of public records for this agenda are available for public inspection before and at the time of the meeting.

SECOND DRAFT - 2/9/23

Nuisances related to Trees and ROW

- Repeal Chapter 155 in its entirety.
- Repeal Sections 135.070-135.130 and move to a new Chapter 216 for tree planning, preservation and maintenance. These substantive tree regulations should not be in the Chapter called “Boards, Commissions and Committees.”
- Combine Sections 215.100 and 215.110 about tall grass and weeds
- 215.120 can make hazardous trees a nuisance but should refer to the process of Chapter 215 article I and the extensive requirements of the tree regulations now located in new chapter 216
- Create a general ROW maintenance requirement (not just for trees but including trees) in Section 500.105 **Maintenance of Exterior of Structures and Premises; Maintenance of Abutting Right-of-Way.**
- Make sure this sufficiently addresses issues with hazardous trees/limbs that fall over the road, over lot lines, over roads, power lines, and lot lines

Article II

Weeds And Vegetation; Trees

Section 215.100 **Excessive Growth Of Weeds And Vegetation; Liability of Property Owner As To Weeds Or Trash.**

A. Tall Grass or Accumulation of Trash

1. No person shall cause or permit the growth of any grass, weeds, or rank vegetation to attain a height more than twelve (12) inches upon any property located within the City. Any owner who shall cause or permit any weeds or rank vegetation growth to attain a height more than twelve (12) inches shall be deemed to have committed a public nuisance.
2. No person shall cause or permit the trash to accumulate on any part of any lot or ground within the City. Any owner who shall cause or permit the accumulation of trash shall be deemed to have committed a public nuisance.

B. Notwithstanding the prohibition in Subsection (A)(1) above, grass and other non-noxious vegetation may exceed twelve (12) inches in height if the portion of the property with the growth more than twelve (12) inches is either:

1. A "Woodland" as defined in Section **135.080**, as determined by the Code Official in consultation with the City's Community Forest Manager; or
2. A native plant landscape in conformance with a landscape plan prepared by a landscape architect or designed in accordance with the Grow Native! Approach to Garden Design with Prairie Natives (published by the Missouri Prairie Foundation) as determined by the Code Official.

C. *Remedies.* In addition to the remedial provisions set forth in this Article and in order to protect, promote and preserve the public health and safety, it is hereby declared that any person owning any lot within the City

and permitting or suffering a growth of grass, weeds or rank vegetation thereon in excess of twelve (12) inches from the soil, except as provided in Subsection (B) above, or the accumulation of trash shall be deemed to be in violation of this Article and shall be punished upon conviction as provided in Section 100.220 of this Code.

- D. *Joint and Several Responsibility.* Whenever weeds or trash, in violation of this Chapter 215, Chapter 500 (Article VII, Property Maintenance Code) or any other Code Section, are allowed to grow or accumulate on any part of any lot or ground within the City, the owner of the ground, and any tenant, lessee, or occupant thereof, shall be jointly responsible and liable. In case of joint tenancy, tenancy by entireties or tenancy in common, each owner thereof shall be jointly and severally liable. In the case of lots where the occupant differs from the owner, each shall be jointly and severally liable.
- E. *Hearing; Notice; Order of Abatement.*
 - 1. For any violation of this Section, the Hearing Officer shall conduct a hearing upon four (4) days' written notice. Notice shall be made in one (1) of the following ways:
 - a. By personal delivery to the owner or owners, or the owner's agents;
 - b. By United States Mail, First Class, to the owner or owners, or the owner's agents; or
 - c. By posting the notice at the property line with the date of hearing and the owner listed on the sign.
 - 2. After holding the hearing and receiving evidence, the Hearing Officer may declare the weeds or trash to be a nuisance and order the same to be abated within five (5) business days after the date of the hearing. If the weeds or trash are not removed within the five (5) business days after the hearing, the City may have the weeds or trash removed, and shall certify the costs of same to the City Clerk.
- F. *Special Tax Bill.* Upon receiving the City's certified cost of abatement, the City Clerk shall cause a special tax bill against the property to be prepared and to be collected with other taxes assessed against the property. The special tax bill from the date of its issuance shall be a first lien on the property until paid and shall be prima facie evidence of the recitals therein and of its validity, and no mere clerical error or informality in the same, or in the proceedings leading up to the issuance, shall be a defense thereto. Each special tax bill shall be issued by the City Clerk and delivered to the Collector for St. Louis County on or before the first day of June of each year. Such tax bills if not paid when due shall bear interest at the rate of eight percent (8%) per annum. Costs for collecting the tax bill, including attorney fees, may be charged in the event a lawsuit is required to enforce a tax bill.
- G. *Repeat Violation In Same Growing Season/Calendar Year.* If weeds are allowed to grow, or if trash is allowed to accumulate, on the same property in violation of an ordinance more than once during the same growing season in the case of weeds, or more than once during a calendar year in the case of trash, the City may, without further notification, have the weeds or trash removed and the cost of the same billed in the manner described in Section 215.100(B) above. The provisions of this Subsection G do not apply to lands owned by a public utility and lands, rights-of-way, and easements appurtenant or incidental to lands controlled by any railroad.

Section 215.110 Reserved.

Section 215.120 **Nuisance Trees.**

- A. All dead, dying, hazardous, fallen, or decaying trees, or parts thereof, and all trees infected by a disease that is not promptly treated or that is not remediable, and that are within the fall zone of any property line, structure or utility, or which constitutes a danger to the health, safety, or welfare of the general public are

hereby declared to be a public nuisance and shall be promptly taken down and removed from the premises by the occupant, owner or owners of any tract of land on which the same is situated. The stump shall also be removed down to ground level.

- B. Trees shall be cared for as set forth in Chapter 216. Failure to do so constitutes a nuisance.
- C. In addition to the remedial provisions set forth in Article I of this Chapter 215. and in order to protect, promote and preserve the public health and safety, it is hereby declared that any person failing to comply with the provisions of this Section shall be deemed to be in violation of this Article and shall be punished upon conviction as provided in Section 100.220 of this Code.

Chapter 216

Tree Planting, Preservation, Maintenance, and Removal

Section 216.010 Tree Preservation.

A. *Purpose and Intent.* The citizens and elected officials of the City of Twin Oaks realize that trees and vegetation are important elements of the character and ambiance of our City. The planting, maintenance and preservation of trees and vegetation during land development has also been determined to be a significant issue affecting the public health, welfare and the City's physical and aesthetic environment. The planting, maintenance and preservation of trees and vegetation will have substantial position effects on storm water management, air quality, quality of water from non-point sources, erosion, flood control, wildlife habitat, noise pollution, energy conservation and property values. It will provide for significant positive aesthetic benefits consistent with the established character of the City of Twin Oaks. The planting, maintenance and preservation of trees has a significant impact to help moderate the effects of sun, cold and wind and the reduction of pollution and it has a beneficial impact on the general overall well-being of the City of Twin Oaks. Therefore, the mitigation standards as set out in this Chapter apply to all properties within the boundaries of the City of Twin Oaks.

B. *Street Tree Species To Be Planted.* The City of Twin Oaks shall maintain an extensive list of recommended trees for planting in public areas. The purpose of this listing will be to maintain diversity in the total tree population. This list shall be available to residents of the City upon request to aid in the selection of trees for private and public properties. The list of recommended trees shall be updated periodically by the Community Forest Manager or Arborist to reflect new developments or species that will affect the population of the community forest.

Section 216.020 Definitions.

As used in this Chapter, the following terms shall have these prescribed meanings:

CALIPER

The diameter of a tree six (6) inches above ground.

COMMUNITY FOREST MANAGER

Professional consultant retained by the City to advise staff on the care and maintenance of landscaping throughout the City as well as implementation of the Comprehensive Landscape Master Plan.

COMPREHENSIVE LANDSCAPE MASTER PLAN

A written document that guides the work of the Tree Board and Park Board. The plan was established in 2003 with extensive community input and provides short- and long-term landscaping recommendations throughout the City.

CONIFEROUS TREE

A tree that is typically evergreen such as pine, spruce, fir, or hemlock.

DBH

The diameter of a tree at breast height which shall be measured at four (4) feet above ground.

DECIDUOUS TREE

A tree that typically loses its leaves or needles in the fall (autumn).

DEVELOPMENT

The performance of any building activity or the making of any material change to any structure or natural surface of land to include activities that change or disturb the natural surface of the land such as clearing, excavating and filling; or any change in the use or appearance of any structure or land; or the division of land into two (2) or more parcels for the creation or termination of rights of access.

LANDMARK TREES

A tree in fair or better condition* which equals or exceeds these diameter sizes:

1. Large hardwoods (oaks, hickories, etc.) — twenty-four (24) inches DBH.**
2. Large hardwoods (pines, spruces, etc.) — twenty (20) inches DBH.**

**Fair or better condition* is defined as a tree having a normal life expectancy, a relatively sound and solid trunk with no extensive decay, no more than one (1) major and several minor dead limbs (hardwoods only) and no major insect or disease problems.

**A lesser-sized tree can be considered a landmark tree if it is a rare or unusual species, of exceptional quality or of historical significance. Landmark trees may be designated by the City of Twin Oaks Tree Board or the Community Forest Manager.

LARGE TREES

Trees attaining a mature height of forty-five (45) feet or more and/or a mature spread of thirty (30) feet or more.

LIMIT OF DISTURBANCE

A line as shown on the site plan and tree preservation plan that identifies the limit of construction, grading or excavation activity of any kind. This line will typically delineate the tree preservation area.

MAINTAIN

To plant, mulch, water, trim as necessary and remove if dead or diseased.

MEDIUM TREES

Trees attaining a mature height of thirty (30) to forty-five (45) feet and/or a mature spread of twenty (20) feet or more.

NATURAL WATERCOURSE

A channel formed in the existing surface topography of the earth prior to man-made changes.

PARK TREES

Trees located within City-owned public parks.

PRIVATE COMMUNITY FOREST

All trees within municipal boundaries but not owned by the City.

PRIVATE TREE

A tree located on privately owned property (i.e., not owned by the City of Twin Oaks).

PROPERTY OWNER

All owners, lessees, or occupants, and all managers, agents or representatives of such owners, lessees, or occupants of privately owned real property in the City.

PUBLIC COMMUNITY FOREST

All street and park trees and other trees owned by the City as a total resource.

RIGHT-OF-WAY or ROW

As defined in Section 515.020 of this Twin Oaks Municipal Code.

SMALL TREES

Trees attaining a mature height of up to thirty (30) feet and a mature spread of approximately twenty (20) feet or less.

STREET TREES

Trees located in the right-of-way.

TRACT

The total area of a parcel, site, lot or ownership of land upon which development or land disturbance is proposed irrespective of the actual limits or size of the proposed development or land disturbance activity.

TREE

A woody plant that grows mostly upright as a single stem (rarely multistem) that may eventually attain a height of fifteen (15) feet or more. "Tree" when used herein, includes tree limbs.

TREE CANOPY COVERAGE

The area in square feet of a tree's branch spread. Existing tree canopy is determined by measuring the ground surface area that is covered by the branch spread of a single tree or clump or grove of trees.

TREE TOPPING

The drastic removal or cutting back of large branches in mature trees leaving large, open wounds which subjects the tree to disease and decay. Topping causes immediate injury to the tree and ultimately results in early failure or death of the tree.

WATER BODY

An accumulation of water that is large enough to maintain ten thousand (10,000) square feet of surface area throughout the year.

WOODLAND

Any area over five thousand (5,000) square feet of tree canopy coverage having thirty percent (30%) or more of its trees two and one-half (2½) inches in diameter (DBH) or greater.

Section 216.030 Tree Planting Requirements—New Development/Redevelopment.

A. *Minimum Requirements.* Landscaping and tree planting are required in all new property developments. Required minimum landscaping and tree planting shall include the following:

1. Street Trees. Unless the Planning and Zoning Commission and the Tree Board determine a more appropriate way of providing required street trees, trees shall be planted along all streets, whether streets are existing or to be built as part of development and whether streets are, or are intended to be, public or private, at a ratio of at least one (1) two-and-one-half-inch-caliper deciduous tree for every forty (40) feet of street frontage.
2. Parking Lot Trees. Parking lots shall be landscaped with at least one (1) two-and-one-half-inch-caliper tree for every twenty-five (25) parking spaces. Trees planted in the landscaped planting areas shall be situated a minimum of three (3) feet from any curb. All compacted soil within the area to be landscaped shall be removed to a depth of not less than two (2) feet and shall be backfilled with topsoil. The configuration of the landscaped planting areas and the spacing of these trees shall be determined during the site plan review process and shall be arranged to maximize the amount of shaded areas within parking lots.
3. Screening and Transition Strip Requirements. Screening and transition strips as required for various developments are based on proposed land use and the land use of adjacent properties.
4. Landscaping Plan. A landscaping plan, demonstrating proposed compliance with the above requirements, is required for all new property developments. Whether residential or non-residential property, landscaping plan shall be submitted to and approved by the Planning and Zoning Commission and the Board of Aldermen. No landscape plan hereunder is necessary for the development or redevelopment of a standalone lot for a single-family residential structure.

B. *Compliance with Landscape Master Plan.* If a new development or redevelopment includes a focus area identified in the Comprehensive Landscape Master Plan, the developer shall comply with the Plan requirements unless modified by the Board of Aldermen upon recommendation of the Planning and Zoning Commission.

C. *Distance and Clearance Requirements.* Unless otherwise stipulated in this Chapter or approved through the zoning process, in all areas of the City, trees and shrubs must be planted at least four (4) feet from the curb, corners and fire hydrants.

Section 216.040 Tree Care and Maintenance.

- A. The City finds it necessary and proper to maintain streets, sidewalks, and rights-of-way free of overhanging, obstructive, or hazardous tree branches or other vegetation.
 1. Park trees shall be maintained by the City or its contractors upon verification of qualifications.
 2. Street trees shall be maintained by the adjoining property owner. If there is not an adjoining private property, then the street trees shall be maintained by the City. Any street tree identified as a nuisance tree may be designated by the City for removal at the adjoining property owner's expense.
 3. The City shall have the right to maintain trees on public property as may be necessary to ensure the public safety.

4. Nothing above shall prohibit the City, at its own expense, from planting, maintaining, pruning, or removing any street tree within the public right-of-way as deemed appropriate by the City to improve public infrastructure, for public safety or for other public purposes. The City's decisions as to planting, maintaining, pruning, or removing any street tree within the public right-of-way hereunder are not appealable.

B. Community Tree Standards.

1. All work on public and private trees will be consistent with American National Standard Institute A300, Standard Practices for Woody Plant Maintenance.
3. All growth over streets and travelled (vehicular and pedestrian) rights-of-way shall be trimmed to a height of fourteen (14) feet above and three (3) feet along roadways and streets.

C. Tree Topping. It shall be unlawful as a normal practice for any person, firm or City department to top any street tree, park tree or other tree on public property. Trees severely damaged by storms or other causes or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this Section at the determination of the Community Forest Manager or Tree Board.

D. Overhead Electric Lines. Unless danger against contact with high voltage overhead lines (as defined in Section 319.070 RSMo.) has been guarded against as provided in the Missouri Overhead Powerline Safety Act (Section 319.083 RSMo.), no person, individually or through an agent or employee, shall store, operate, erect, maintain, move or transport any tools, machinery, equipment, supplies or materials or any other device that conducts electricity, within ten (10) feet of any high voltage overhead line, or perform or require any other person to perform any function or activity, such as tree trimming or removal, upon any land, building, highway or other premises, if at any time during the performance thereof it could reasonably be expected that the person performing the function or activity could move or be placed within ten (10) feet of any high voltage overhead line.

Section 216.050 Duty of Property Owners — Decayed, Diseased or Hazardous Trees.

A. Standards. It shall be unlawful for the property owner of any lot or parcel of ground in the City to maintain or allow any private tree or tree limb to stand upon such lot or parcel of ground, or street tree or limb on the abutting right-of-way to such lot or parcel, which, due to a diseased, decayed or hazardous condition or for any other reason, endangers or is likely to injure any person or property in and upon a street, right-of-way, or any adjacent property in the City or is likely to cause damage to any tree of other landowners by the spread of a contagious disease.

B. Property Owner Responsibility. It shall be the duty of the property owner to properly cause such private trees, street trees, or tree limbs as are described in Subsection (A) of this Section to be cut down and no tree or tree limb in the City which has been cut down or which has fallen or been broken down shall be permitted to remain in or upon any sidewalk, street or adjacent property in the City or so near thereto as to endanger any person thereon and it shall be the duty of the property owner to cause the same to be promptly removed and it shall be unlawful for any such property owner to fail so to do as set forth in subsection E.

C. Nuisances. If street trees and private trees that cause obstructions, are in a hazardous condition, present insect or disease problem, or otherwise are determined to be a danger to public health or safety and declared a nuisance by the Community Forest Manager, then the City Clerk may order such to be pruned, removed or treated. This includes, but is not limited to, trees diagnosed with dutch elm disease, oak wilt, or emerald ash borers.

D. *Procedure.*

1. Notice to Prune, Remove or Treat. Should any property owner bordering on any street fail to prune, remove or treat street or private trees as herein provided, the City Clerk shall order such person, within ten (10) days after receipt of written notice, to so prune, remove or treat such trees.
2. Order Required. The order required herein shall be served by hand-delivering, emailing, or mailing a copy of the order to the last known address of the property owner by certified or registered mail.
3. Appeal. The property owner has the right to appeal the order to prune, remove or treat by appealing as provided in Section 215.060. The property owner may present any evidence or exhibits to support his/her position that the tree does not need to be pruned or removed or that the cost of the "order" is excessive. If the Hearing Officer upholds the order, the property owner has an additional seven (7) days (or a longer time as may be granted by the Hearing Officer) from the decision to complete the required pruning, removal or treatment.
4. Failure To Comply. When a person to whom an order is directed shall fail to comply within the specified time, it shall be lawful for the City to prune, remove or treat such trees and the cost thereof shall be assessed to the property owner as set forth in Section 215.060. Nothing herein shall limit the City's additional remedies as set forth in Section 100.220 and elsewhere.

E. *Emergencies.* Notwithstanding the procedures set forth in subsection D, the following procedure is applicable in emergency situations.

1. If a street tree or private tree, or portion thereof, falls or threatens to fall into, over, across, or upon the right-of-way causing a dangerous or impassable situation or otherwise causes an imminent threat to the health, safety, and welfare of the public, the City may, at its cost, cause the tree to be cut, moved, and/or removed immediately with or without prior notice to the responsible property owner. The City's ~~cost for such~~ emergency action shall not relieve the property owner from their responsibilities under Subsection B above, Section 215.120, or elsewhere in the Code for the remaining clean-up and removal of the tree, limbs, and debris on the right-of-way and private property ~~be assessed to the property owner as set forth in Section 215.060.~~
2. When an emergency has been declared by the Mayor, County or Governor, City property owners shall be allowed to collect and place trimmed greenery upon public rights-of-way adjacent to their property. Such privilege shall extend for a period of two (2) weeks following the declaration of an emergency and the City shall, at its expense, provide for the expedient removal of such materials during that time.
3. To address the need for emergency services in clearing streets and rights-of-way, the Board of Aldermen may maintain a contractual relationship with one (1) or more maintenance services dedicated to respond within twelve (12) hours following notice by the City Clerk or Mayor of an emergency.

Section 216.060 Obstructions In Sight Triangle and Right-of-Way.

A. It shall be unlawful for any person who owns, manages, or occupies any premises within the City to allow trees, shrubs, plants, or other vegetation to be planted or allowed to grow in such a manner as to materially obstruct vision in the sight triangle and right-of-way. Plantings and landscaping less than thirty (30) inches in height shall be exempt from these provisions unless declared a nuisance.

B. Property owners shall trim all vegetation that obstructs the view or passage on any street, sidewalk, or bike path. Street Tree or Private Tree limbs shall be pruned to fourteen (14) feet or more in height above the road elevation. Dead limbs shall be removed to prevent becoming a hazard to vehicular and pedestrian traffic. All vegetation shall be trimmed so it shall not obstruct any street or traffic sign.

Section 216.070 Damage to Street Trees and Landscaping.

Any person who causes damage to any street tree, shrub, park tree, etc., shall replace said tree or shrub with one of equal value.

Section 216.080. Violations and Penalties.

In addition to any abatement proceedings set forth herein, any person, firm, or corporation violating any provisions of this Chapter shall be subject to the general penalty provision of Section 100.220 of this Code.

Section 216.090. Review of Decisions; Appeal.

Any person aggrieved by a decision of the City or any official thereof pursuant to the authority in this Chapter, may file an appeal pursuant to Chapter 150 of the City Code to the extent subject to the scope therein; provided that nothing in such appeal shall limit the authority of the City to abate any nuisance pending such appeal.

Section 500.105 Maintenance of Exterior of Structures and Premises; Maintenance of Abutting Right-of-Way.

A. Property Maintenance. All existing residential and nonresidential structures and all existing premises shall be maintained in accordance with the Property Maintenance Code adopted in Section **500.090** (the "Property Maintenance Code") with the exterior of such structures being maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare as set forth in Chapter 3 of the Property Maintenance Code.

B. Right-of-Way Maintenance. The requirements of the Property Maintenance Code for the Exterior Property and Premises (as defined therein) expressly include and shall extend to the abutting right-of-way of each lot to the back of pavement, and shall additionally require:

- 1.** All property owners, lessees or occupants, and all agents or representatives of such owners, lessees or occupants ("Responsible Persons") shall be obligated and required to maintain, at their own expense, any and all physical objects, including, but not limited to, trees, shrubs, bushes, grass, ground cover, porticos, stoops, awnings, area ways, walls or other landscaping, structures or things of any kind, but excluding utilities (collectively referred to as "encroachments") that exist in or encroach upon the right-of-way ("ROW") adjoining their property or within any sight triangle (including encroachments that interfere with the use of any City street or sidewalk located in the ROW) so that the ROW is kept in a reasonably safe condition for use in the usual modes by day and night and with no obstruction or interference with its use by the City or the public. Responsible Persons shall be solely responsible for any damage or repairs to any encroachments placed in the ROW caused by the City's work in the right-of-way and neither the City nor any of its employees, agents or contractors shall be liable for any damage to any electric pet fence cables, lawn sprinkler lines, sprinkler heads or other encroachments located in the ROW.

2. Any physical object, including underground items such as electric pet fences, irrigation systems, or drainage piping, that encroach into, upon, over, or under a right-of-way and obstructs or interferes with the use of such right-of-way or makes the use of the right-of-way unsafe shall be deemed a nuisance and any Responsible Persons under Subsection B.1 of this Section shall be guilty of an ordinance violation. The City shall have the right to remove such nuisance in accordance with the provisions of the Nuisance Code (Chapter **215**) or immediately if in the determination of the City the nuisance causes an unsafe condition in the right-of-way requiring prompt attention.

3. The requirement to maintain the ROW and remove encroachments (or parts thereof) that obstruct or interfere with or affect the safety of the use of a right-of-way or affect sight distance shall apply regardless of the person responsible for creating, placing, or planting the object that obstructs, interferes with or affects the safety of the use of the right-of-way.

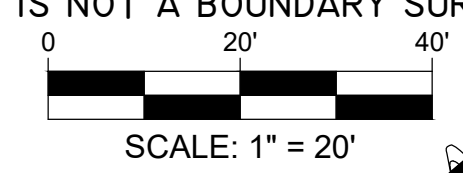
C. *Enforcement; Violation and Penalties.* Failure to comply with this Section is a violation of the Property Maintenance Code and subject to the abatement provisions of the Property Maintenance Code, as well as the penalty provision in Section 500.180, and is declared to be a nuisance pursuant to Chapter 215 and subject to the abatement and penalty provisions thereof.

SITE AND UTILITY NOTES:

- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
- Bearing referenced to Grid North of the Missouri Coordinate System 1983, East Zone per GPS observations utilizing the MDDOT VRS RTK Network.
- Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
Vertical datum used is NAVD 1988 per GPS observations utilizing MDDOT VRS RTK Network.
Temporary Benchmark No. 1-Concrete Monument
Elevation = 549.54
- This site scales within Zone X, as per Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 29189C0292K dated 2/4/2015.
- All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installation.
- Contractor to contact telephone, electric, gas, cable, and water companies to have underground utilities located on this site and adjacent to this site prior to doing any excavating.
- The sitework for this project shall meet or exceed the "Technical Specifications".
- All dimensions and radii are to the back of curb, unless otherwise shown.
- Contractor shall be responsible for all removals of and/or relocations, including but not limited to, utilities, storm drainage, signs, traffic signals and poles, etc as required. All work shall be done in accordance with governing authorities specifications and shall be approved by such. All costs shall be included in base bid.
- The Contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to Erosion and Sediment Control Plans throughout construction.
- All survey monuments disturbed during construction shall be replaced at the Contractors expense, by a surveyor licensed in the state in which this project is located, at the Contractors expense.
- The Contractor shall verify and perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the Contractor.
- Contractor shall notify utility authorities inspectors at least 72 hours before connecting to any existing line. Underground utilities shall be installed, inspected and approved prior to backfilling.
- Sanitary sewer pipe shall be VCP.
- Waterlines shall be PVC and shall have a minimum of 42" inches of cover below finish grade, unless otherwise indicated on plans.
- Contractor shall provide all waterline tees, valves, bends, tapping sleeves, meters, meter pits, fire hydrants, etc. necessary to construct the waterlines as shown on these plans. Thrust blocking shall be provided at all tees, bends and fire hydrants.
- All flared end sections shall be RCP or CMP. Flared end sections that are CPP will not be allowed. Connections must be soil tight.
- Contractor shall obtain and follow installation requirements for storm sewer from pipe manufacturers for each type of piping material.
- Contractor shall coordinate adjustments to existing utilities with appropriate utility company as work progresses. All costs shall be paid by the Contractor.
- Utility Contractor shall be responsible for all tapping and tie-in fees, as well as cost of service connections.
- Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify the BFA and appropriate modifications will be issued.
- Verify location of all existing utilities to be crossed and identify potential conflicts prior to starting construction.
- Location of site utilities shall be verified by General Contractor the proper utility company providing service.
- General Contractor will be responsible for all top and tie on fees required, as well as cost of underground service connections to the building.
- Electrical service to pad mounted transformer shall be run underground, from road right-of-way to transformer location, associated cost by General Contractor.
- Thrust blocks shall be provided at all bends, tees, and fire hydrants.
- Dimensions shown are to centerline of pipe, fitting or structure.
- All fire hydrants shall be provided with an approved gate valve meeting City requirements.
- All trenching, pipe laying, and backfilling shall be in accordance with federal OSHA Regulations.
- General Contractor shall have approval of all governing agencies having jurisdiction over this system prior to installation.
- Pylon sign shall be constructed by others. Contractor shall stub conduit and wiring to pylon sign location as part of the contract.

SITE / UTILITY PLAN

(THIS IS NOT A BOUNDARY SURVEY)

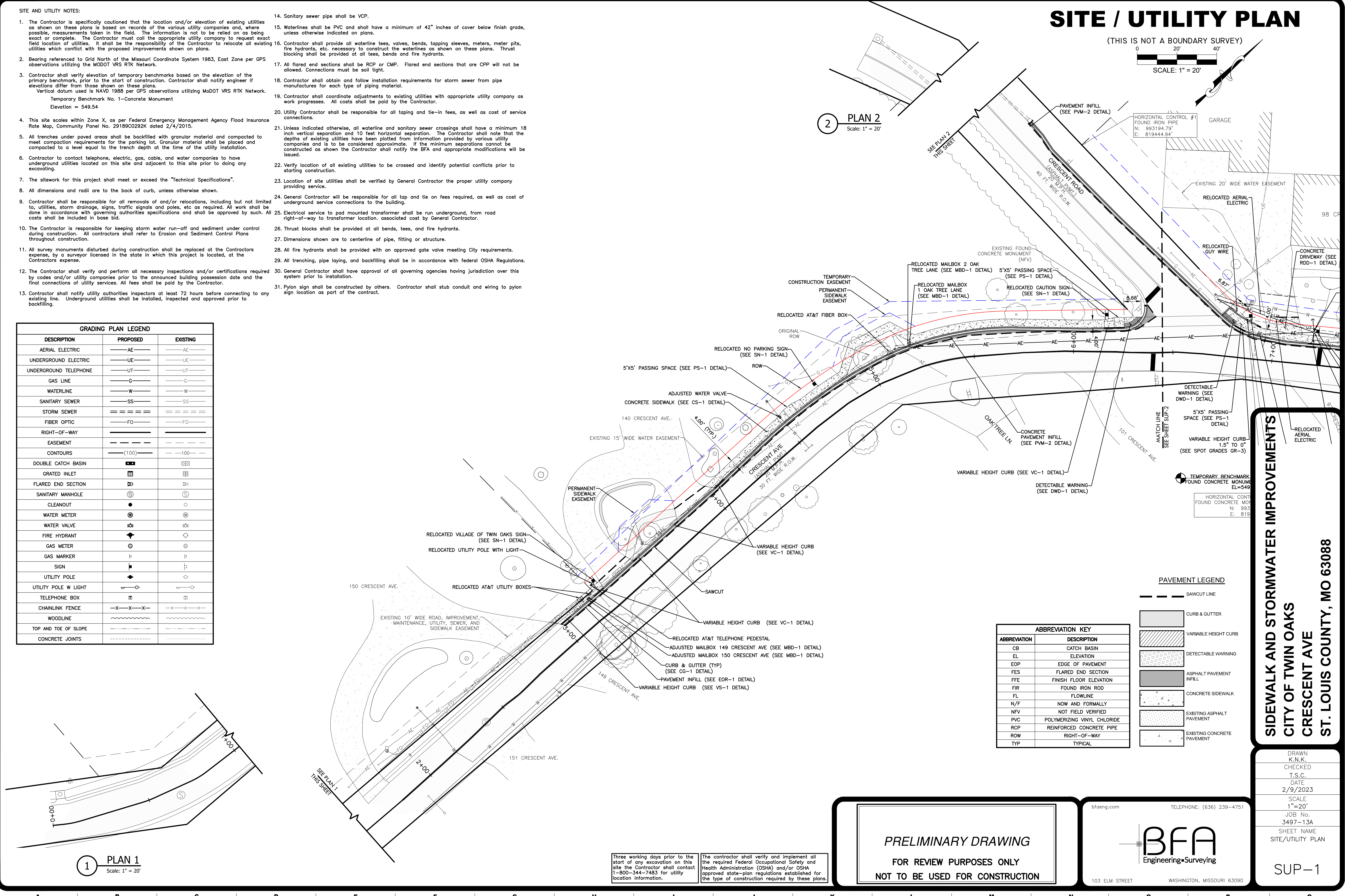


PLAN 2
Scale: 1" = 20'

GRADING PLAN LEGEND		
DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UNDERGROUND ELECTRIC	—UE—	—UE—
UNDERGROUND TELEPHONE	—UT—	—UT—
GAS LINE	—G—	—G—
WATERLINE	—W—	—W—
SANITARY SEWER	—SS—	—SS—
STORM SEWER	—SS—	—SS—
FIBER OPTIC	—FO—	—FO—
RIGHT-OF-WAY	—	—
EASEMENT	—	—
CONTOURS	—(100)—	—(100)—
DOUBLE CATCH BASIN	☐	☐
GRATED INLET	☐	☐
FLARED END SECTION	☐	☐
SANITARY MANHOLE	⊙	⊙
CLEANOUT	●	●
WATER METER	⊙	⊙
WATER VALVE	⊙	⊙
FIRE HYDRANT	⊙	⊙
GAS METER	⊙	⊙
GAS MARKER	⊙	⊙
SIGN	⊙	⊙
UTILITY POLE	⊙	⊙
UTILITY POLE W LIGHT	⊙	⊙
TELEPHONE BOX	⊙	⊙
CHAINLINK FENCE	—X—X—X—	—X—X—X—
WOODLINE	—	—
TOP AND TOE OF SLOPE	—	—
CONCRETE JOINTS	—	—

PLAN 1
Scale: 1" = 20'

P:\Vault\3497-13A Crescent Ave\3497-13A Plan Sheets\3497-13A Site Plan.dwg
2/9/2023 3:43 PM



ABBREVIATION	DESCRIPTION
CB	CATCH BASIN
EL	ELEVATION
EOP	EDGE OF PAVEMENT
FES	FLARED END SECTION
FEE	FINISH FLOOR ELEVATION
FIR	FOUND IRON ROD
FL	FLOWLINE
N/F	NOW AND FORMALLY
NFV	NOT FIELD VERIFIED
PVC	POLYMERIZING VINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
TYP	TYPICAL

PAVEMENT LEGEND	
—	SAWCUT LINE
☐	CURB & GUTTER
☐	VARIABLE HEIGHT CURB
☐	DETECTABLE WARNING
☐	ASPHALT PAVEMENT INFILL
☐	CONCRETE SIDEWALK
☐	EXISTING ASPHALT PAVEMENT
☐	EXISTING CONCRETE PAVEMENT

SIDEWALK AND STORMWATER IMPROVEMENTS
CITY OF TWIN OAKS
CRESCENT AVE
ST. LOUIS COUNTY, MO 63088

PRELIMINARY DRAWING
FOR REVIEW PURPOSES ONLY
NOT TO BE USED FOR CONSTRUCTION

bfaeng.com TELEPHONE: (636) 239-4751

BFA
Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

DRAWN
K.N.K.
CHECKED
T.S.C.
DATE
2/9/2023
SCALE
1"=20'
JOB No.
3497-13A
SHEET NAME
SITE/UTILITY PLAN
SUP-1

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-344-7483 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

EASEMENT & RIGHT-OF-WAY INFORMATION

ADDRESS	CONCEPT D - ROW (SF)	NEW - ROW (SF)	CONCEPT D - TCE (SF)	NEW - TCE (SF)	CONCEPT D - EASEMENTS (SF)	NEW - EASEMENTS (SF)
150 CRESCENT AVE	-	-	-	-	-	-
140 CRESCENT AVE	-	2856.93	-	5514.38	-	642.62
98 CRESCENT AVE	309	698.14	4946	3947.7	-	-
90 CRESCENT AVE	389	436.85	3037	6388.18	-	550.62
2 GOLDEN OAK CT	528	668.4	1156	1774.44	-	-