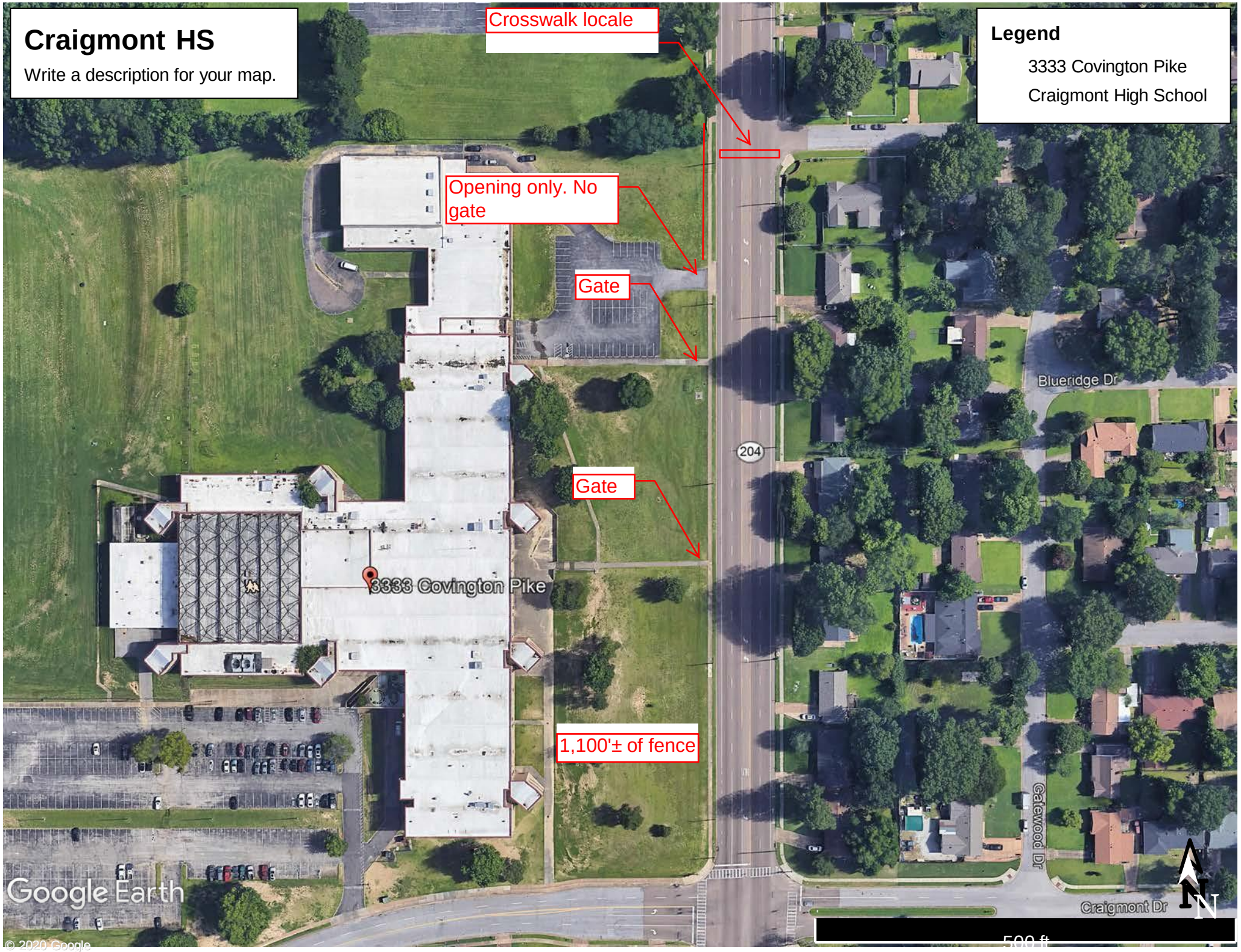
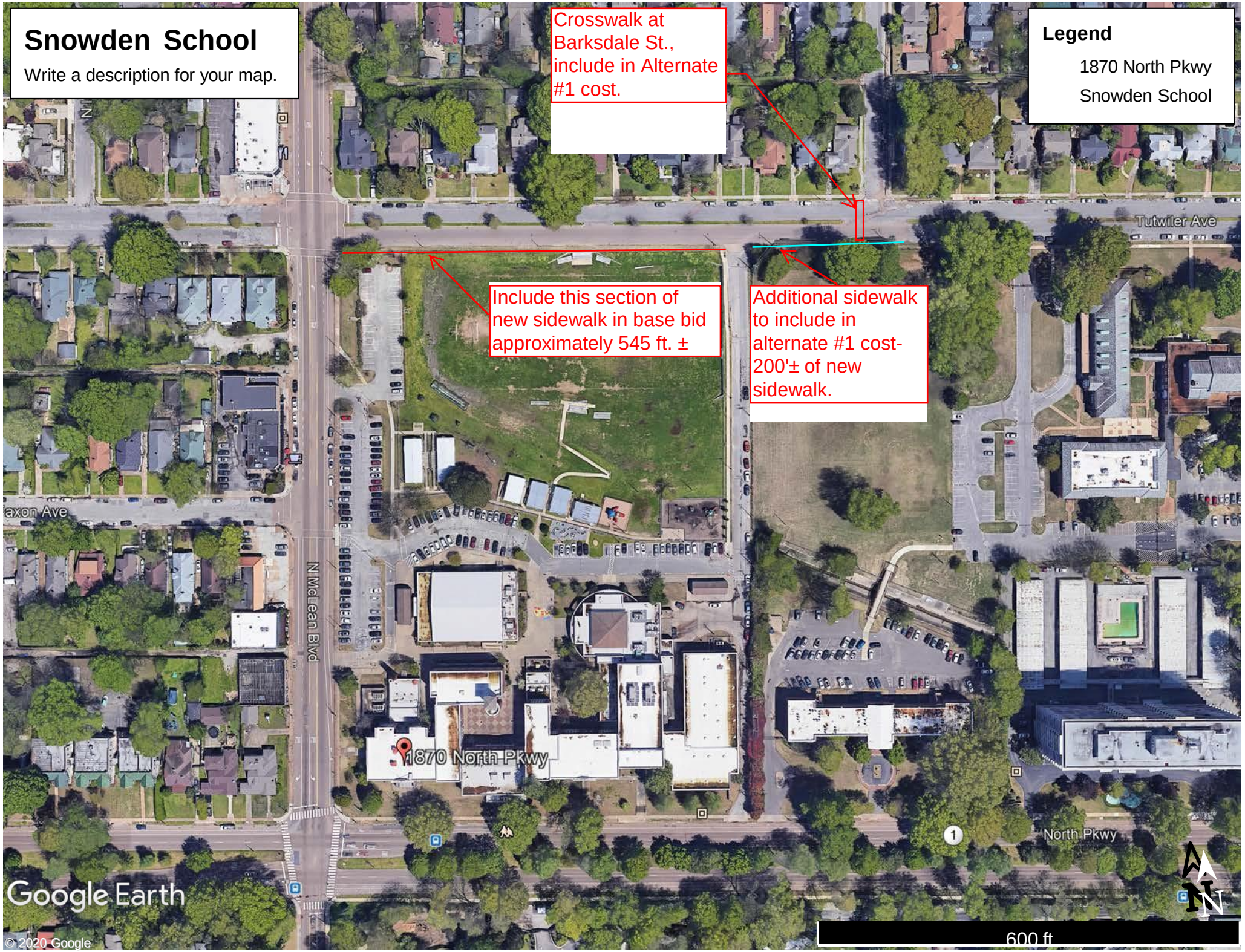
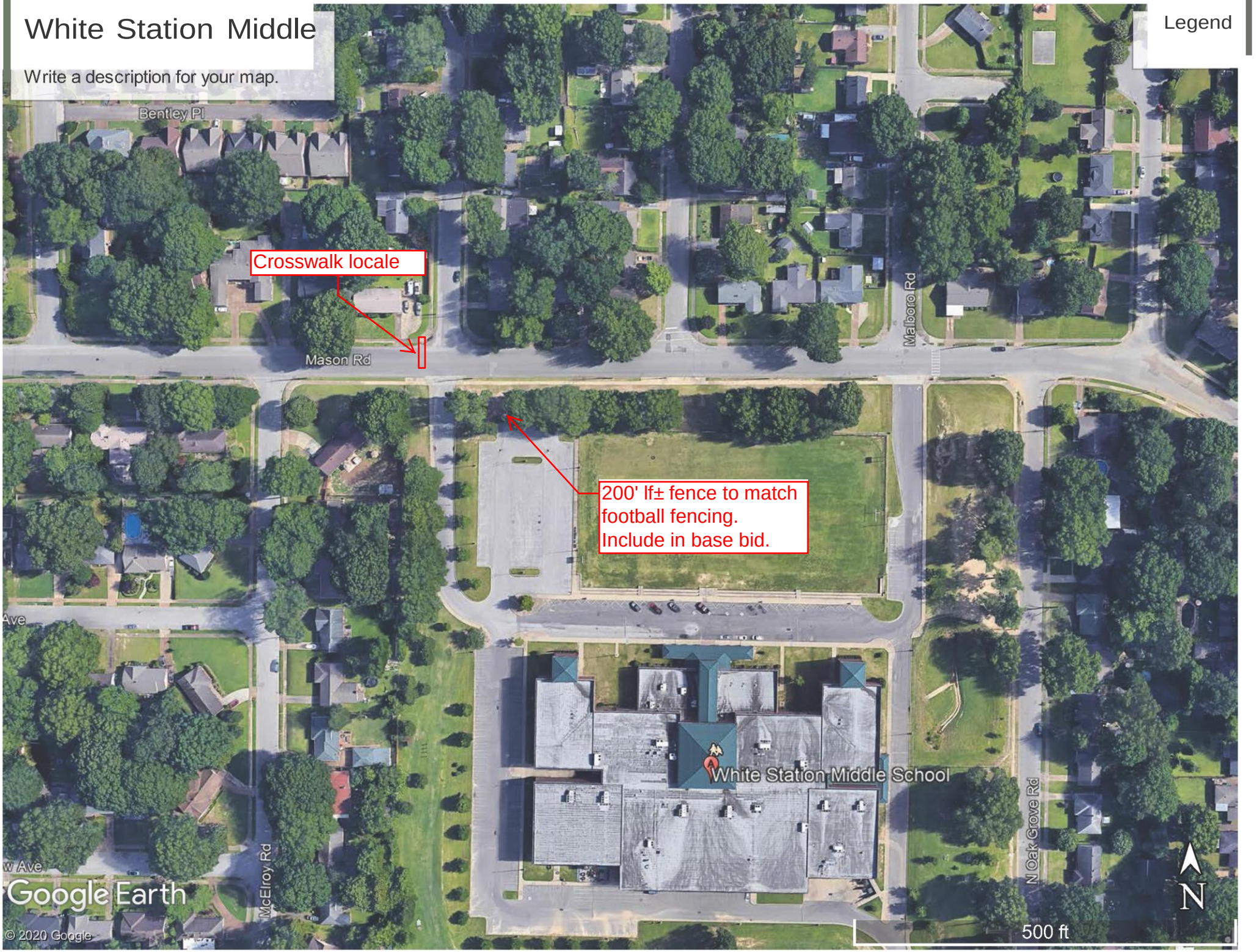

Craigmont HS
Write a description for your map.
Crosswalk locale
Opening only. No gate
Gate
Gate
1,100'± of fence
3333 Covington Pike
Legend
3333 Covington Pike
Craigmont High School
Blueridge Dr
204
Gatewood Dr
Craigmont Dr
Google Earth
© 2020 Google
500 ft


Snowden School
Write a description for your map.
Crosswalk at Barksdale St., include in Alternate #1 cost.
Legend
1870 North Pkwy
Snowden School
Tutwiler Ave
Include this section of new sidewalk in base bid approximately 545 ft. ±
Additional sidewalk to include in alternate #1 cost- 200'± of new sidewalk.
N McLean Blvd
1870 North Pkwy
North Pkwy
Google Earth
© 2020 Google
600 ft


White Station Middle
Write a description for your map.
Legend
Bentley Pl
Crosswalk locale
Mason Rd
Malboro Rd
200' lf± fence to match
football fencing.
Include in base bid.
White Station Middle School
N Oak Grove Rd
McElroy Rd
Google Earth
© 2020 Google
500 ft
N

SECTION 614 - VINYL COATED CHAIN-LINK FENCING

614.1 DESCRIPTION

This Section describes the work included for all labor, materials and equipment necessary for the furnishing, fabrication, placing and installation of the pvc-coated chain-link fence including all gates, posts, fabric, hardware, accessories, excavation and concrete foundation for posts.

614.2 SUBMITTALS

A. Action Submittals:
1. Product Data: Provide data on fabric, posts, accessories, fittings and hardware.
2. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.

614.3 MATERIALS

Provide materials as specified:

Fabric:

1. 6 gauge finish, 9 gauge core vinyl coated chain link fencing.
2. Zinc coated steel fabric shall be galvanized after weaving and conform to ASTM-A-392. Galvanizing shall be 2.0 oz./s.f. minimum.
3. Aluminized coated steel fabric shall conform to ASTM-A-491 and be .40 ounces per square foot minimum.
4. Fabric to be woven in 2-inch mesh with the top selvage knuckled and bottom selvage knuckled.
5. Fabric height shall be 48".
6. Fence fabric shall be PVC-coated to meet the requirements of ASTM F668 for Class 2b chain link fabric. Thickness of the fusion bonded vinyl coating shall be 7-10mils, color to be black.
7. The vinyl coating shall be evenly applied and free of blisters. The bond between the vinyl coating and the steel fabric to be equal or greater than the cohesive strength of the vinyl.
8. There shall be no splices in the fabric between posts.

Tension wire:
Black PVC coated #7 gauge, attach all fabric with hog rings at intervals of no more than 24".

Tension bars:
Tension bars shall be provided at each end, corner and gate post as required per the number of stretch connections.

Ties:
Attach ties to all line posts at intervals of no more than 24" when attaching fabric to the rails.

Bands:
Bands of galvanized steel shall be provided in sufficient numbers fo attaching the fabric and tension bars to all terminal posts at intervals not to exceed 15 ". Attachment used for this shall be 5/16 x 1/14" galvanized bolts with nuts.

Posts:

1. Black vinyl covered Hot-dipped galvanized Schedule 40 pipe conforming to ASTM-F1083.
2. Black vinyl covered post caps shall be installed on all posts to prevent water intrusion.
3. All posts shall be in concrete footings 36" deep x 10" in diameter. The concrete shall be 3000 lbs. p.s.i strength. All footings shall extend ½" above grade and sloped to facilitate water run-off.

Post caps:
Weathertight caps shall be supplied and installed for each post. Caps shall be made be galvanized, cast steel or malleable iron. Caps shall have a loop to receive top rail.

Line Posts:

1. 2-1/2 inches o.d. black vinyl covered Schedule 40 pipe weighing 4.10 pounds per lineal feet.
2. 2-1/2 inches o.d. SS-40 weighing 3.117 pounds per lineal feet.
3. All intermediate posts shall be evenly spaced in the fence line, maximum 10 feet on centers.

Terminal Posts:

1. End corner and pull posts black vinyl covered 3 inch o.d. Schedule 40 pipe weighing 5.79 pounds per lineal feet.
2. 3 inch o.d. SS-40 pipe weighing 4.64 pounds per lineal feet.
3. Stretch fabric between terminal posts or at intervals of 100' maximum.
4. A pull post shall also be placed at each point

Gate Posts:

1. Single gates to be installed at Craigmont HS where indicated on addendum aerial photograph.
a. 3 inch o.d. black vinyl covered Schedule 40 pipe weighing 5.79 pounds per lineal feet.
b. Gate construction shall match fencing.
2. Must meet all applicable fencing and metal standards.
a. Contractor is responsible for all field measurements and getting all utilities located prior to the start of work.
3. Fencing shall be installed in a neat and workmanlike manner.

Braces:

1. 1-5/8 inches o.d. Schedule 40 pipe weighing pounds per lineal feet.
2. SS-40 pipe weighing 184 pounds per lineal feet.
3. Install midway between toprail and bottom of fabric on fence heights of 6 feet or more. Extend from terminal post to first adjacent post.

Gates:

1. Gate posts shall be 3,500-inch (59mm) outside diameter, schedule40 galvanized steel pipe.
a. Gate frame 2 inches o.d. Schedule 40 pipe weighing 2.72 pounds per lineal feet.
b. SS-40 pipe weighing 2.28 pounds per lineal feet.
2. Gates to be securely welded or riveted, braced and trussed to prevent sagging and be complete with necessary fittings, hinges, backstops, center domes, and a positive type latch device with means for padlocking.

Toprail:

1. 1-5/8 inches o.d. Schedule 40 pipe weighing 2.27 pounds per lineal feet.
2. SS-40 pipe weighing 1.84 pounds per lineal feet.
3.
4.

Vinyl Coated Framework and Fittings:

1. In accordance with ASTM F 1043, PVC shall be applied to all pipe and framework by the fusion bonding process (thermally fused and adhered to a primer that is thermally cured to the galvanized steel) to produce a vinyl thickness of 10-14 mils. Test for adhesion shall be bond of vinyl coating to substrate will be greater than cohesive strength of vinyl itself. Color black.
2. In accordance with ASTM A153, fittings shall be galvanized coated fittings. In addition to above metallic coatings, provide a 10 mil minimum polyvinyl chloride (PVC) plastic resin finish to exterior surfaces**.**

614.4 CONSTRUCTION

The Contractor shall coordinate and receive approval on all submittals with the Owner's representative prior to installation of the fencing.

1. Install fencing in accordance with ASTM F567

BID 07292020 ADDENDUM #1 SIDEWALK SPECIFICATIONS

2. Contractor shall remove any dirt from the premises caused from the digging process. Upon approval from the Owners representative, the Contractor may be allowed to move the excavated dirt to a low spot on-site.

3. Daily clean-up shall be required and all safety measures shall be implemented during the installation process.

4. Contractor shall fill any ruts on-site caused from the installation process and install sod on disturbed areas.

PART 1 – SCOPE

1.01 This work shall consist of constructing sidewalks and wheelchair ramps of portland cement concrete on a prepared subgrade, in accordance with these Specifications and in conformity with City of Memphis Design standards.

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PART 2 – MATERIALS AND EQUIPMENT

2.00 MATERIALS

A. Concrete Materials: Concrete materials shall meet the requirements of City of Memphis, Specification Section 03050, Portland Cement Concrete for Class A concrete.

B. Curing Materials: Curing materials shall conform to the applicable provisions of City of Memphis, Specification Section 02750 Paragraph 2.01 C.

C. Preformed Joint Fillers: Preformed joint fillers shall be of the bituminous type and shall conform to the requirements of AASHTO M 213 and shall not be more than 1 inch or less than 1/2 inch in thickness. Their width shall be at least equal to the full thickness of the slab, and their length shall be sufficient to eliminate any splicing.

2.01 EQUIPMENT

A. Forms shall be of wood, metal, or other suitable material and shall be true to line, free from warp, and of sufficient strength to resist springing out of shape during placing, consolidating, and finishing the concrete. Curved forms of proper radius or flexible forms acceptable to the Owner shall be used on all radial sections.

B. Satisfactory floats, templates, straightedges, edgers, spades, tamps, and all other equipment necessary for the satisfactory performance of this construction shall be on the Project and approved before work will be permitted to begin.

PART 3 – CONSTRUCTION REQUIREMENTS

Subgrade preparation for sidewalks and driveways shall be made to the required configuration to conform to a slab thickness of 4”. The subgrade shall be shaped and compacted in conformance with Specification Section 02335 Paragraph 3.03 and to a width that will permit satisfactory installation and bracing of forms. Density requirements may be waived if approved by the Owner. The finished sidewalk shall be no more than 1/2" above the existing turf.

A. This work shall consist of the final preparation of the roadbed to receive the immediate construction of a base or pavement, curb and gutter, driveways, or sidewalks thereon.

B. Subgrade preparation in fill sections shall consist of the compaction of the top six (6) inches below subgrade elevation in paved areas only to a density of 100 percent as determined in accordance with City of Memphis standards.

C. Areas in cut sections where required density cannot be obtained may be undercut and backfilled with suitable excavation material, stabilized with gravel or portland cement, or undercut and backfilled with gravel as directed by the Owner, who shall be the sole judge as to the method to be used. Special attention shall be given to areas such as utility trenches and manhole backfill areas. Payment will be made only for the gravel or portland cement used, and no additional compensation will be paid the Contractor for the work.

D. The Contractor shall be held responsible for the proper maintenance of subgrade acceptable to the Owner, and no additional compensation shall be paid to the Contractor to restore any subgrade after preliminary acceptance. The Contractor shall also take all precautions necessary to protect the acceptable subgrade from damage, and hauling over the finished subgrade shall be limited to that which is essential for construction purposes. The Contractor shall be responsible for clearing and degrubbing site to receive new sidewalk and/ or backfilling depressions that may be necessary to achieve a uniform installation.

3.2 FORMS

Forms shall be well staked or otherwise held to the established lines and grades, and their grade shall be such that finished sidewalks shall have one-quarter of tan inch per foot fall toward the curb for drainage unless directed by the Owner.

3.3 JOINTS

A. Unless otherwise indicated on the Plans or directed by the Owner, preformed expansion joint filler, 1/2 inch in thickness, shall be placed in sidewalks at the locations of and in line with expansion joints in the adjoining pavement, curb, or curb and gutter, but at spacing not to exceed 25 feet. When expansion joints have not been installed in the adjoining pavement or gutter, a 1/2-inch preformed expansion joint filler shall be placed transversely at intervals of not over 25 feet. Preformed expansion joint filler shall be placed at all abutting concrete such as driveways, buildings, or walls. Transverse expansion joints with 1/2-inch preformed expansion joint filler shall be placed to match existing joints in abutting facilities but not to exceed 25 feet between joints. Preformed expansion joint filler shall be placed at each intersection of sidewalk and street curb, longitudinally between sidewalks and street curb, and at such other points as may be shown on the Plans or directed by the Owner. Preformed expansion joint filler, 1-inch in thickness, shall be placed around all appurtenances such as manholes, valve, utility poles, fire hydrants, and signs extending into or through the sidewalk or driveway area, forming an isolated square or rectangular slab around the appurtenance with a minimum of 4 inches' clearance of the appurtenance.

B. The surface of sidewalks shall be divided into blocks by use of a grooving tool. The grooves shall be spaced approximately 5 feet apart and the blocks shall be rectangular unless otherwise ordered by the Owner. The grooves shall be cut to a depth of 1/2 inch. The edges of the grooves shall be edged with an edging tool having a radius of 1/4 inch.

C. Expansion joint filler material shall not be placed at sidewalk drains. Driveway joints shall be placed as shown on the Design Standards.

3.4 PLACING AND FINISHING CONCRETE

A. Concrete shall be placed only on a moist subgrade and shall not be placed unless the ambient temperature is 35^{o} F and rising. In no case shall concrete be placed on a frozen or frosty subgrade. After the concrete is placed in the forms, it shall be spaded along the forms (including cross forms for joints), tamped, and struck off in an approved manner to required section and grade and shall be finished with floats and straightedges until the surface requirements have been obtained. When the surface of the concrete is free from water and just before the concrete obtains its initial set, it shall be finished with a wooden float and swept lightly at right angles to the street centerline to produce a sandy texture. The longitudinal surface variations shall not be more than 1/4 inch under a 12-foot straightedge nor more than 1/8 inch on a 5-foot transverse section, or as approved by the Owner.

B. The edges of sidewalks and driveways shall be carefully finished and rounded with an eging tool have a 1/2-inch radius. An edge having a 1/4-inch radius shall be placed adjacent to and on both sides of all intermediate transverse expansion joints in sidewalks, and all marks caused by the edging tool shall be removed with a wetted brush or wooden float. The top of all expansion joint material shall be cleaned of all concrete, and the expansion joint material shall be trimmed if necessary as to be left slightly below the surface of the concrete.

3.5 TESTING CONCRETE

Concrete for sidewalks and driveways shall be tested by test specimens made and cured in accordance with AASHTO Designation T 23. The frequency and specific test method will be determined by the Owner. The Contractor shall furnish the concrete necessary for casting test specimens in the field. The City will supply all molds and labor necessary to cast and test the specimens.

3.6 CURING AND PROTECTION

A. Curing and cold weather protection shall be performed as provided for under Specification Section 02750 Paragraph 3.11 "Curing".

B. Forms may be removed and the slab backfilled at any time that removal will not damage the concrete. Pedestrians will not be allowed upon sidewalks or driveways until 72 hours' after finishing the concrete, and no vehicles or loads shall be permitted on any sidewalk or driveway

until the Owner has determined that the concrete has attained sufficient strength for such loads. The Contractor shall construct and place such barricades and protection devices as are necessary to protect the concrete. Any sidewalk or driveway damaged prior to final acceptance of the work shall be removed within joint or groove limits and replaced with concrete of the type and finish of the original construction.

3.7 RAMPS

Where applicable, ramps shall be installed where designated on bid drawings and shall meet City of Memphis standards and all codes having jurisdiction requirements.

3.8 THICKNESS

Thickness of sidewalks and driveways shall be 4" complete with a slip resistant broom finish.

PART 4 – OTHER REQUIREMENTS

1. The Contractor shall implement all Code required safety measures once the sidewalk installation begins taking into consideration school pedestrian traffic and arrival and dismissal times of the school.

2. Upon completion, the Contractor shall remove from site any construction debris including, degrubbed material, excess dirt, formwork or concrete splatter. The surrounding work site shall be free of any construction debris.