



DATE: July 13, 2021

TO: All Offerors'

FROM: City of Brookhaven Purchasing Department

RE: ITB No. 21-114 Murphey Candler Park – Community Green

Please see Addendum No. 1 for the above-referenced solicitation.



1. The following change has been made to the above-referenced solicitation.

Delete: Page 1

Add: REVISED (Extended Due Date) Page 1

Revised Bid Schedule

Additional/Revised Attachments

2. All other terms and conditions remain the same.

ADDENDUM NO. 1
Invitation to Bid, No. 21-114
Murphey Candler Park- Community Green
REVISED 7/13/2021

June 17, 2021

Mandatory Pre-Bid Conference
Thursday, June 24, 2021, at 10:00 a.m. EST
Onsite at the East end of Horseshoe Rd at Candler Lake East NE-
First pavilion inside the gate

BID DUE DATE:

Tuesday, July 27 ~~July 20, 2021~~, at 2:30 p.m. EST.

OPENING DATE:

Tuesday, July 27, ~~Tuesday, July 20 2021~~, at 2:45 p.m. EST.

Via Zoom- Meeting ID# 964 6355 6551

<https://zoom.us/j/96463556551> or 1-646-576-9923

Bids shall only be accepted online through the Bonfire Portal at:

<https://brookhavenga.bonfirehub.com/projects/view/46637>

Any bid submitted in any other format (email, paper, fax, mail, etc.) will not be accepted.

Instructions to Bidders:

1. All communications regarding this solicitation must be with the Purchasing Manager, Shakera Hall, shakera.hall@brookhavenga.gov.
2. All questions or requests for clarification must be sent via Bonfire under Message - Opportunity Q&A: <https://brookhavenga.bonfirehub.com/projects/view/46637>. Questions are due no later than **Wednesday, June 30, 2021 at 4:00 p.m. EST**. Questions received after this date and time may not be answered.
3. Questions and clarifications will be answered in the form of an addendum. Any addenda, schedule changes, and other important information regarding the solicitation related to this solicitation will be posted on Bonfire website at and it is the Offeror's responsibility to <https://brookhavenga.bonfirehub.com/projects/view/46637> check the Bonfire portal for any addendum or other communications related to this solicitation.
4. The City of Brookhaven reserves the right to reject all bids and to waive technicalities and informalities, and to make award in the best interest of the City of Brookhaven.
5. The City of Brookhaven is not responsible for any technical difficulties. It is highly recommended that all potential contractors submit their quotes prior to the due date of this solicitation.

ADDENDUM NO. 1
Invitation to Bid, No. 21-114
Murphey Candler Park- Community Green
Bid Schedule
REVISED 7/13/2021

Construction Items Bid Schedule

C	Community Green- Construction Items Bid Schedule						6/29/2021
#	Construction Items	Design QTY	Unit	Contract QTY	Unit \$	Total \$	Notes
1	Pre-Construction:						See C4 sheet Series
A	Mobilization	1	job		\$ -	\$ -	See specifications
B	Construction stakeout	1	job		\$ -	\$ -	See specifications
2	Demolition	1	job		\$ -	\$ -	See C3 sheet Series
3	Site Clearing & Tree Protection:						See C3 sheet Series
A	Tree Protection fence	1,300	lf		\$ -	\$ -	See sheet C3.2A B
B	Tree removal	1	ea.				17" Cherry. done by city
C	Grinding stumps down in turf area	14	ea.				See specs
D	Tree Pruning & Care for adjacent trees	1	Allow		\$ -	\$ 5,000.00	See specs
E	General site clearing & cleanup	1	job		\$ -	\$ -	See Specifications

4		Site Grading & Drainage:						See C5 sheet Series
	A	Community Green	20,500	sf		\$ -	\$ -	See sheet C5.2A
	B	Sidewalk Connection to parking	400	sf		\$ -	\$ -	See sheet C5.2A
	C	Excavation for reinforced sod area	9,138	sf		\$ -	\$ -	See Addendum #1
	D	Subsoil prep for reinforced sod area	9,138	sf		\$ -	\$ -	See Addendum #1
	E	Topsoil over subsoil for reinforced sod area	9,138	sf		\$ -	\$ -	See Addendum #1
	F	Gravel over topsoil - #57 stone washed	9,138	sf		\$ -	\$ -	See Addendum #1
	G	# 89 gravel washed choke layer	9,138	sf		\$ -	\$ -	See Addendum #1
	H	Ramp steps hand grading area	2,200	sf		\$ -	\$ -	See sheet C5.2B
	I	Sidewalk Connection to lake	1,100	sf		\$ -	\$ -	See sheet C5.2B
	J	French Drain on lawn	120	lf		\$ -	\$ -	See detail 2 / C8.2A
5		Erosion Control:						See sheet C7 series
	A	Construction entrance	1	ea.		\$ -	\$ -	See sheet C7.2A
	B	Construction entrance - maintenance	1	ea.		\$ -	\$ -	See Specs
	C	Silt sock	800	lf		\$ -	\$ -	See Detail Sd1-NS
	D	Silt sock - maintenance	1	Job		\$ -	\$ -	See Specs
	E	NPDES Monitoring	1	Job		\$ -	\$ -	See Addendum #1

6	Sidewalk Connections:							
A	Oval layout 5' concrete sidewalk	1,685	sf		\$ -	\$ -	-	See Detail 1 / C8-2A
B	5' concrete Sidewalk around the stage	600	sf		\$ -	\$ -	-	See Detail 1 / C8-2A
C	5' concrete sidewalk connection to parking	300	sf		\$ -	\$ -	-	See Detail 1 / C8-2A
D	5' concrete sidewalk to ramp steps	100	sf		\$ -	\$ -	-	See Detail 1 / C8-2A
E	5' sidewalk connections between ramp steps	375	sf		\$ -	\$ -	-	See Detail 1 / C8-2A
F	5' Ramp steps & framing 5' x 90'	90	lf		\$ -	\$ -	-	See Detail 9 / C8.2A
G	Ramp step landing 3' x 5' x 35 ea.	525	sf		\$ -	\$ -	-	See Detail 9 / C8.2A
H	6' Wooden Foot Bridge 6' x 12'	72	sf		\$ -	\$ -	-	See Detail 3A / C8.2B
	1. Bumper rail	24	lf		\$ -	\$ -	-	See Detail 3B / C8.2B
I	5' concrete sidewalk connection to lake	535	sf		\$ -	\$ -	-	See Detail 1 / C8.2A
J	5' concrete steps to Lake 15 ea. 5'	75	lf		\$ -	\$ -	-	See Detail 6 / C8.2A
K	Gravel over root zones for sidewalk	1,600	sf		\$ -	\$ -	-	See Detail 5 / C8.2A
7	Stage:							
A	Concrete pavement	710	sf		\$ -	\$ -	-	See Detail 1- C8.2A
B	Seat Wall w cap	65	lf		\$ -	\$ -	-	See Detail 2- C2.2B
8	Retaining / Seat Walls:							

	A	Seat Wall A	95	lf		\$ -	\$ -	See Detail 1 / C8.2B
	B	Seat wall B	85	lf		\$ -	\$ -	See Detail 1 / C8.2B
	C	Concrete Steps between walls 9 steps x 5' wide	45	lf		\$ -	\$ -	See Detail 6 / C8-2A
	D	8" wide cheek wall	30	lf		\$ -	\$ -	Similar Detail 1 / C8-2B
	E	4" wide granite border at toe of seatwalls A & B	180	lf		\$ -	\$ -	Similar Detail 1 / C8-2B
9		Sitting Area						
	A	Siting plaza Concrete pavement	1,020	sf		\$ -	\$ -	See Detail 4 / C8.2A
	A	Swing bench plaza	850	sf		\$ -	\$ -	See Detail 4 / C8.2A
10		Site Furniture:						
	A	Swing bench	2	ea.		\$ -	\$ -	See Detail 7 / C8.2B
	B	Bike rack	3	ea.		\$ -	\$ -	See Detail 6 / C8.2B
	C	Bench	2	ea.		\$ -	\$ -	See Detail 4 / C8.2B
	D	Trash receptacle	2	ea.		\$ -	\$ -	See Detail 5 / C8.2B
11		Site Signage						
	A	Park Rule sign	1	ea.		\$ -	\$ -	See Detail 7 / C8.2A
12		Site Electrical:						Sheet E1.0
	A	Coordinate w Ga Power/ connect to pole / meter	1	Job		\$ -	\$ -	See Detail 3 / E1.1

	B	Electrical service from meter to site	1	Job		\$ -	\$ -	See Addendum #1
	C	Duplex receptacle in stage seat wall	1	ea.		\$ -	\$ -	See Detail 1 / E1.1
	D	Food Truck outlet	1	ea.		\$ -	\$ -	See Detail 2 / E1.1
13		Irrigation						
	A	Irrigation	9,500	sf		\$ -	\$ -	See Sheet I1.1
	B	Tap, water meter, backflow connection	1	Job		\$ -	\$ -	See Sheet I1.1
	C	Tap Fee	1	Fee		\$ -	\$ -	Call for County Quote
	D	Water service line	200	lf		\$ -	\$ -	See Addendum #1
	E	Irrigation sleeves	4	ea.		\$ -	\$ -	See detail h / I1.2
14		Landscape:						See sheet C9.2A1 & 2
	A	Trees	11	ea.		\$ -	\$ -	See sheet C9.2A1 & 2
	B	Turf sod over reinforced gravel bed	9,128	sf		\$ -	\$ -	See sheet C9.2A1 & 2
15		Final Cleanup - Site	1	job		\$ -	\$ -	See Specs
16		Additional Items by Contractor:						See Section K-ITB
	A					\$ -	\$ -	
	B					\$ -	\$ -	

	C					\$	\$	-	
						-			
17		Allowance items - Unit Price							See Section K - ITB
	A	Rock excavation	10	cy		\$	\$	-	
						-			
	B	Unsatisfactory soil removal							Included in Unit price
		1. replace with satisfactory earth fill	50	cy		\$	\$	-	
						-			
		2. replace w GAB or #57 Stone	50	cy		\$	\$	-	
						-			
	C	additional Rramp step and frame section	30	lf		\$	\$	-	
						-			
	D	additional silt sock	100	lf		\$	\$	-	
						-			
	E	additional tree protection Fence	400	lf		\$	\$	-	
						-			
	F	additional french drain	50	lf		\$	\$	-	
						-			
	G	additional topsoil for critical root coverage	8	CY		\$	\$	-	
						-			
	H	additional 5' wide concrete sidewalk	400	sf		\$	\$	-	
						-			
	I	chainlink security fence, 6' tall	1800	lf		\$	\$	-	
						-			
		Sub - Total					\$	5,000.00	
		General Conditions	-	%					Establish a percent < 2%
		TOTAL							Lump Sum Bid

A		Bid Alternates						
	1	Pervious concrete at location 6 C	300	sf		\$	\$	- difference
	2	Pervious concrete at location 9 A	1020	sf		\$	\$	- difference

ADDENDUM NO. 1
Invitation to Bid, No. 21-114
Murphey Candler Park - Community Green
REVISED 7/13/2021

Additional/Revised Attachments

- **Revised ITB Exhibit B**
- **Updated sod detail**
- **Specification 02885 Ramp Steps**
- **Specification 02145 Trenching under trees**
- **Specification 02125 Erosion & Sedimentation update**
- **Specification 02125B NPDES Compliance update**
- **Wall detail update**
- **Tree planting detail**
- **Revised drawings C2.2A, Construction Items**
- **C3.2A, Demo and Tree Protection Plan**
- **Pre-Bid Meeting Notes**

NOTES:

Clarification from pre-bid meeting:

The TOTAL Lump Sum Bid from the Bid Schedule and Total Base Bid Amount should not include the pervious concrete Bid Alternates.

The bid alternates will be discussed with the contractor after the bid and contract award.

Note an Allowance Unit Price Item for 1800 linear feet of temporary, 6' chain link fence to install around the site along the LOD and around the Horseshoe Road laydown/equipment/parking area for security and public safety was added to the Construction Items Bid Schedule.

C Community Green- Construction Items Bid Schedule							6/29/2021
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14		Landscape:						See sheet C9.2A1 & 2
	A	Trees	11	ea.		\$ -	\$ -	See sheet C9.2A1 & 2
	B	Turf sod over reinforced gravel bed	9,128	sf		\$ -	\$ -	See sheet C9.2A1 & 2
15		Final Cleanup - Site	1	job		\$ -	\$ -	See Specs
16		Additional Items by Contractor:						See Section K- ITB
	A					\$ -	\$ -	
	B					\$ -	\$ -	
	C					\$ -	\$ -	
17		Allowance items - Unit Price						See Section K - ITB
	A	Rock excavation	10	cy		\$ -	\$ -	
	B	Unsatisfactory soil removal						Included in Unit price
		1. replace with satisfactory earth fill	50	cy		\$ -	\$ -	
		2. replace w GAB or #57 Stone	50	cy		\$ -	\$ -	
	C	additional Rramp step and frame section	30	lf		\$ -	\$ -	
	D	additional silt sock	100	lf		\$ -	\$ -	
	E	additional tree protection Fence	400	lf		\$ -	\$ -	
	F	additional french drain	50	lf		\$ -	\$ -	
	G	additional topsoil for critical root coverage	8	CY		\$ -	\$ -	
	H	additional 5' wide concrete sidewalk	400	sf		\$ -	\$ -	
	I	chainlink security fence, 6' tall	1800	lf		\$ -	\$ -	
		Sub - Total					\$ 5,000.00	
		General Conditions	-	%				Establish a percent < 2%

		TOTAL						Lump Sum Bid
A		Bid Alternates						
	1	Pervious concrete at location 6 C	300	sf		\$ -	\$ -	difference
	2	Pervious concrete at location 9 A	1020	sf		\$ -	\$ -	difference

EXHIBIT B

SCOPE OF WORK AND SPECIAL CONDITIONS

The proposed **Community Green** project is located in Murphey Candler Park, on N. Nancy Creek Road NE, in Brookhaven, GA, and includes, but is not limited to, the following:

- Construction Stakeout and field review and adjustment, if needed, with Owner.
- Installation and maintenance of Erosion controls and tree protection.
- Minor brush or undergrowth removal as needed
- Tree care for the remaining trees that are designated to remain.
- Grading in the proposed project area.
- Hand grading as required
- Concrete sidewalks
- Gravel over the root zones in required areas
- Wooden Ramp steps in the woods to be built by hand-grading and construction.
- A small wooden bridge with bumper rails.
- Building stone retaining and seat walls
- Grading and laying a foundation of gravel for the sod turf area.
- Planting trees and laying sod over the gravel.
- Installing irrigation plan for the lawn and trees and connecting to meter.
- Placing topsoil for the gravel / grass detail
- Installing electrical system and connecting to the existing meter, pole and box.
- Electrical power services to receptacles on the stage and food truck.
- Picking up permit **LDP20-00019** from the city after notice to proceed.
- Picking up the associated Building Permits from the City.

Specialty Items:

There are some conditions on this project that will require special considerations and somewhat unusual to typical site construction. Special specification sections have been written or amended for these items to aid the contractor in understanding the requirements.

1. **Pre-Award Meeting:** If the city determines a need to hold a pre-contract award meeting to clarify any issues in the bid submittal or qualifications of the Apparent Low Bidder, the city reserves the right to request such a meeting without additional compensation to the contractor or guarantee of final award.
2. **Gravel Grass Turf detail:** This detail has been developed to create a reinforced base under a turf that is highly used for activities other than active sports. Contractor

is admonished to read Section 02950 carefully before bidding the project to understand the conditions involved. A good place to see this installation in place is the Town Green in Duluth, Georgia.

3. **Ramp Steps:** These are steps coming down a slope in a wooded area. To avoid unnecessary damage to the trees to be save, this step system must be graded and constructed entirely by hand, with most of the installation being at just below or above grade. A special paragraph in Section 02523 has been written to explain the process and requirements for building these steps.
4. **Seat Retaining Walls ;** These walls are relatively common and easy to build. The contractor is admonished to be careful to ensure that the wall footing drains behind these walls are connected to an outfall to avoid buildup of irrigation water behind the walls that will damage the wall and kill the turf. **Also insure a 4' wide mower strip of granite is placed flush in front at the toe of each wall.**
5. **French Drains:** French drains are shown along the edges of the sidewalk on the lower end of the green. These drains work in tandem with the gravel under the turf to prevent water buildup and saturation along the edges of the sidewalk. **It is essential that these drains be installed in conjunction with the gravel turf.**
6. **Power and Irrigation Stakeout:** The electrical service is from an existing pole near the south gate and the water service is from a meter in the same area. The contractor is required to stake the route of the power and water service line to the first connection spot in the project with spray paint on the ground. These routes will be walked and reviewed by the owner's representative and adjusted as needed to ~~best~~ save the existing trees on site. **See section 02145 Trenching under Trees.**
7. **Stagging.** The Horseshoe may be closed at the south entrance to just past the Community Green for parking and staging. The pathway must be blocked with 6' chain-link fence panels and secured for public safety. No parking will be allowed at the adjacent playground parking lot. The first pavilion on Horseshoe may be used by the contractor as a field office. The pavilion must be cleaned at project completion and any damages repaired-

Bidders must meet the following required experience qualifications:

- A. Bidder shall have a minimum of five (5) years of experience on projects of similar size and scope and shall provide a list of three (3) or more projects completed within the past five (5) years evidencing such experience. Reference projects shall be submitted in Exhibit I.

- B. All subcontractors shall have a minimum of five (5) years of experience, and a state license or certificate in the technical specifications, in the respective trade for which they are contracted.
- C. City of Brookhaven reserves the right to confirm all information provided in Paragraphs III, IV & V of the Instructions to Bidders and obtain references from the project manager and/or architect for the specific projects identified. A poor reference may be grounds for disqualification from this project.
- D. The bidder must confirm all references are still available at the company, address, and phone number provided. If references are not available at the contact information provided, the proposer/bidder may be deemed unqualified.
- E. Bidder shall not be currently under indictment for criminal misconduct involving any local, state, or federal government entity.
- F. Bidder shall provide information on any contract termination (by Owner) or any contract disputes that ended in litigation for each project.
- G. If Bidder chooses to provide additional information on the three (3) projects, the additional information shall be limited to two (2) pages for each project.
- H. Attach copies of the following to this form:
 - Company Quality Control Program
 - Company Safety Program
 - OSHA Citations received in the past 5 years

I. Bidder acknowledges receipt of the following addenda:

Addendum No.	Date Received
_____	_____
_____	_____
_____	_____

Special Conditions:

In the event there are any discrepancies between the following provisions and other provisions in these documents, the following provisions shall prevail.

1. Work is expected to begin within **10 days** of approval of the contract and all work be

completed within **120** calendar days.

2. The Contractor shall have **120** calendar days from the notice to proceed to complete the project. Failure to complete the required construction as specified will result in the assessment of Liquidated Damages at the rate of \$500.00 per calendar day.
3. The construction will be performed while the remainder of the park remains open to the public. The public will be permitted to access areas not under construction including the parking lots and adjacent playground. All park areas not fenced off as construction zones will be fully open to the public per normal park hours during construction. Contractor shall take necessary precautions to secure the construction site and to maintain a safe environment for the public. Areas to be closed for work must be minimized to reduce impact to public access.

The contractor shall obtain approval for location of temporary work trailers before setting any trailers in the park or on the ROW of the local streets.

4. All references to "Engineer", "Landscape Architect", "Architect", or "owner" in General Conditions, drawings or in specifications are deemed to mean the Program Manager and/or "owner's representative", as designated by the City.
5. Work consists of all Labor, Materials and Equipment required for the construction of the designated project within Murphey Candler Park.
6. The City will contract with a firm that will provide construction material testing for soil, concrete, asphalt, and other materials requiring testing per the contract documents. It is the contractor's responsibility to schedule the testing with the designated firm as required. Completed work not inspected as required by any of the authorizing agencies or contract documents will be subject to rejection.
7. Individuals, firms and businesses seeking an award of a City of Brookhaven contract may not initiate or continue any verbal or written communications regarding a solicitation with any City official, employee or other City representative without permission of the Buyer of Record named in the solicitation between the date of the issuance of the solicitation and the date of the final contract award by the City. Violations will be reviewed by the acting Finance Director. If determined that such communication has compromised the competitive process, the offer submitted by the individual, firm or business may be disqualified from consideration for award.
8. No payment will be made for any portion of the project for which temporary erosion, sedimentation and pollution controls are not properly maintained. Any fines or delays for

non-compliance of erosion control measures levied by any agency will be the responsibility of the Contractor.

9. Contractor shall coordinate his work with the provider of all utilities located on the site that has the potential to have an impact on the work. Contractor shall ensure existing utilities are protected and not damaged by the construction. Contractor is responsible for advising the Owner if existing utilities are not located as shown on the plans. The contractor is responsible for calling for utility locations prior to the start of work.
10. Any item which must be removed to allow for the construction work to proceed and is not specially called for in the project documents shall be removed by the contractor at no additional cost to the Owner.
11. The City and contractor will conduct, at the project site, a pre-construction meeting after award of the contract.
12. The City of Brookhaven will not provide restroom facilities for use by the contractor, subcontractors, or any of their employees
13. The Contractor shall perform project housekeeping/clean-up on a daily basis. A 24-hour contact must be provided to the City of Brookhaven for all issues as needed in regard to the project for any safety, signage, or other emergency as needed.
14. All bidders must be licensed by the State of Georgia to be a General Contractor.
15. The Contractor is responsible for all construction layout and control for the project. Layouts of construction items must consider all elements of the Work adjacent and/or in close proximity. The Contractor shall proceed with construction layout in such a manner that discrepancies between construction items, existing built features and site conditions that are in conflict with the plans may be examined by the Owner's Representative prior to construction of items in conflict. Failure to notify the Owner's Representative of conflicts prior to constructing items will result in all remedial actions being paid for by the Contractor including but not limited to additional materials, re-inspection fees, professional service fees and survey cost by all parties to the project
16. Seeded and sodded lawns will be acceptable provided the conditions of the construction documents have been met, including maintenance, and a healthy, uniform, close stand of grass is established, free of bare spots in excess of 6 inches square and surface irregularities. Payment for sod will be paid at 50% of the sodded amount when placed. Payment will be increased to 100% for the amount of sod that has fully rooted to prevent lifting of the sod,

and all seams and bare spots have been rooted and grown in, to be able to be used as intended. Installation shall be properly scheduled for complete establishment during the growing season.

Payment for seeding, if applicable, will be paid at 50% of the total contract amount for seeding until germination and grow-in of permanent grassing has achieved 95% on all areas to be seeded. Payment will be increased to 90% after 95% grow-in has been achieved. Final payment, and payment of retainage, will be made only after 100% grow-in has been achieved. Permanent seeding may only take place seasonally as listed in the Manual for Erosion and Sediment control in Georgia tables for permanent seeding region M-L. If the permanent Bermuda grass seeding cannot be installed during the specified dates, the contractor, at no additional expense to the owner, shall install temporary seeding and maintain temporary cover until the next season for permanent seeding. In areas where seeding was installed at the proper time per the Manual for Erosion and Sediment Control in Georgia and less than full coverage is achieved per the requirements of the specifications, which would prevent the owner from opening the facility to the public before the next planting season, the contractor will sod all areas that do not have full coverage – at no cost to the owner. Temporary seeding in high pedestrian traffic areas will not be permitted for facilities that are to open before the next growing season. These areas must be sodded at no additional cost to the owner.

Final payment and release of retainage will not be made until establishment of permanent grass over 100% of the project is acceptable to the City.

17. Contractor, after award of the contract, shall submit a detailed Schedule of Values. The schedule of values shall include costs for all areas of the Work by specification divisions, such that progress payments can be easily evaluated, as determined by the City. The schedule of values shall be broken down in detail to facilitate thorough review. The schedule of values shall specifically include any unit price items identified in the contract. The completed and accepted Construction Items Bid Schedule provided during the bidding process can be used as the Schedule of Values.
18. All references to guarantee, warranty or payments that are commencing upon “Final Approval”, “Final Certificate for Payment”, or “Substantial Completion” or other similar wording shall commence upon acceptance of the Work by the City.
19. Contractor is responsible for all grading shown on the plans, unless noted otherwise. The Contractor shall conduct his **own** quantity take off based on the Bid Documents. Earthwork related quantities shown on the plans (if any) are provided for reference only and shall not be utilized for bidding purpose. Any haul off of excess materials or import of materials needed to complete the grading shall be by the Contractor. The Contractor is responsible for hauling the soil materials. Should the Contractor import materials from any another site, the Contractor shall provide sample(s) to the materials testing firm for testing and approval.
20. The Contractor shall record a Notice of Commencement with the Superior Court of

DeKalb County within 15 days after the contractor physically starts work on the property. A copy of the recorded Notice of Commencement shall be provided to the Owner.

21. The project duration shall be as stated elsewhere within the documents. Arbitrary assignment of a contract extension to minor change order requests will be rejected. All requests for contract duration extension due to a proposed change in work must include documentation that demonstrates the impact of the change on the critical path of the project.
22. The Service Provider shall schedule the work so that he can maintain a continuous flow of work being accomplished on the site. If unforeseen events or conditions inhibit the contractor in one area of the project, he shall proceed to execute work in another section of the park without incurring delays to the overall project schedule.
23. The City shall pay for materials stored on site upon verification of the delivery and by providing delivery documentation and invoices for the said materials.
24. The contractor is responsible for becoming familiar with the requirements of all construction documents, which includes drawings, bid and contract documents, specifications, and all addenda.

Letter prefixes for each drawing sheet indicating the engineering discipline are for convenience only. Information affecting the scope of work for all trades will be found throughout all documents and is not limited to only those documents with the appropriate letter prefix. The contractor is responsible for providing subcontractors all necessary information and drawings.

The drawings and specifications are complementary to each other and what is called for by one shall be binding as if called for by both. If a discrepancy exists between the drawings and specifications, the higher cost item shall be included in the scope, and the Owner notified of the discrepancy.

25. The following bad weather calendar days shall be anticipated and are included in the contractual time period given for project completion. The Contractor's request for additional time due to weather shall only be granted for days beyond those listed below, considering the full term of the contract. The burden of proof and documentation for such request for additional time shall rest solely upon the Contractor. Requests shall be submitted to the City on a monthly basis. Failure to submit documentation on a monthly basis may result in requests for weather day extensions to be rejected.

January	10 days	July	4 days
February	10 days	August	2 days
March	7 days	September	2 days
April	6 days	October	3 days
May	4 days	November	5 days

June 3 days

December 9 days

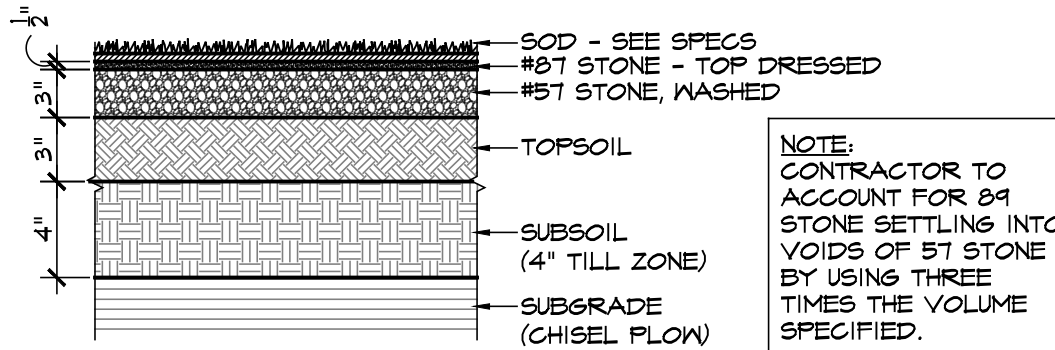
Data submitted in support of a request for contract extension due to inclement weather shall include, but not be limited to: documentation of impact on the critical path; daily high and low temperatures at the jobsite; daily rainfall amount at the jobsite; time that rainfall started and stopped; documented snow or ice accumulation; specific work impacted by inclement weather and date stamped photos of the impacted work or work area. A rain gauge and thermometer shall be placed at the jobsite to accurately record rainfall and temperature data.

Contractor shall maintain a Daily Record of weather conditions and their effect on the work progress. These daily records shall be used to verify any claim of weather delays.

End of Exhibit B.

SODDING PROCEDURE

1. ROUGH GRADE DOWN TO SUBSOIL SURFACE.
2. CHISEL FLOW 5" DEEP AND SMOOTH OUT.
3. PLACE 3" OF TOPSOIL.
4. BROADCAST FERTILIZER - SEE SPECS.
5. TILL SOIL 4" DEEP TO CUT INTO SUBSOIL.
6. LAY 57 STONE - 3" DEEP AND SMOOTH OUT.
7. LAY 89 STONE AS LEVEL COURSE - 1/2" DEEP AND SMOOTH OFF.
8. SOAK STONE UNTIL DAMP.
9. LAY SOD ON SURFACE OF ROCK.
10. KEEP DAMP UNTIL ROOTS TIE INTO TOPSOIL BASE (+/- 3 WEEKS).
11. DO NOT TOP DRESS WITH SAND UNTIL AFTER TURF IS LOCKED DOWN.



1

REINFORCED SOD

1-1/2"=1'-0"

SECTION 02885

RAMP STEPS CONSTRUCTION

PART 1 - GENERAL

All the General and Special Conditions of the contract shall apply to this section
See the following sections should be reference for this section.

- 02100 Site preparation
- 02112 Tree Protection,
- 02200 Earthwork
- 06100 Rough Carpentry

1.01 SCOPE:

- A. The process of building a ramp step and trail/sidewalk in the natural environment is a design – build interactive process between the contractor, landscape architect and owner.
- B. The objective is to carefully mold the steps and trail layout to carefully fit the natural conditions of the site topography and vegetation without doing an unnecessary damage to adjacent trees, roots and vegetation.
- C. The existing soil shall not be disturbed any more that is absolutely necessary.
- D. Site contractor shall field stake location of the ramp steps and trail/sidewalk before placing the tree protection fence or erosion control sock.
- E. Stake out shall include vertical and horizontal stakes for referencing the existing conditions.
- F. Layout shall be adjusted to fit slopes and elevations to avoid important trees and root plates.
- G. Contractor, Owners Representative, Landscape Architect, and site superintendent will walk the site out to make vertical and horizontal adjustments to the stake out.
- H. Final routing of the ramp/trail shall be approved in the field before construction begins.
- I. Tree fence and erosion sock shall be installed after the route of the steps/walk is approved.
- J. Interruption of the natural flow of storm runoff is to be avoided.
- K. Clearing and grading shall be done with handheld tools and small walk-behind equipment.

1.02 Quality Control:

- A. Contractor shall become familiar with this performance process prior to bidding the project.
- B. The contractor shall demonstrate access to adequate small-scale walk behind equipment to perform the work as herein specified.
- C. Contractor shall demonstrate adequate manpower to perform the hand labor as herein defined.
- D. Contractor shall provide a superintendent experienced in the process of design build of small woodland trail projects.
- E. Contractor and superintendent shall work in close contact with the Landscape Architect and Owners Representative during the execution of the work.
- F. Contractor shall arrange to have an orientation and demonstration on site for his superintendent and crew after the stake out has been adjusted and approved.

1.03 Description of Work:

- A. Field stakeout of the proposed ramp steps and trail/sidewalk location with reference grade elevation stakes.
- B. Field adjustment of the vertical and horizontal alignment of the ramp steps and trail/sidewalk.
- C. Hand raking and clearing of the proposed route using small rubber tire equipment.
- D. Construction of the ramp step frames to fit the slopes with minimal hand digging.
- E. Trail grading of the proposed route using small walk behind equipment
- F. Hand construction of form board along the trail/sidewalk route between the step frames.
- G. Construction of the small wooden bridge crossing the swale.
- H. In field adaptation of generic ramp step frame details as contained in the contract documents but improvised to fit site conditions as necessary.
- I. Installation of Sakcrete and surface materials and defined in the details on the drawings.

PART II PRODUCTS

2.01 Construction Performance Process:

- A. The initial route has been determined by the Site Layout Plan and is drawn over an existing topographic map of the site.
- B. The contractor shall rough stake the layout of the trail as best shown on the site plan by setting pin flags every 10 feet along the proposed trail/sidewalk route.
- C. Contractor shall set grade stakes at the top and bottom of each ramp step frame.
- D. Landscape Architect shall walk the stake-out and make horizontal and vertical field adjustments to set the steps and trail according to the proposed criteria of the design.
- E. Contractor, Owners Representative and Landscape Architect shall walk the adjusted layout to review and verify all the route and elevations of the ramp steps and trail/sidewalk and to finalize and adjustments.
- F. Landscape Architect and Contractor shall stakeout and adjust the location of the erosion control silt sock and tree protection fence.
- G. Contractor shall hand rake away the leaf mulch layer of the limits of disturbance to expose the soil below.
- H. Contractor shall proceed to construct the ramp step frames to fit the approved grades.
- I. Contractor shall proceed to do minimum construction grading of the trail placing fill material where needed and grading down areas too high. This work shall be done with walk behind machinery and push carts. No self-propelled motorized vehicles can be used.
- J. Contractor shall set the form boards for the trail/sidewalk connections between the ramp step frames and hand tamp compact the soil inside the trail and ramp step forms until the finished grade is 3.5 inches below the top of the form boards and step frame tops..
- K. Contractor shall dampen the soil before filling the spaces with dry Sakcrete up to the top of the form boards and step frames.
- L. Contractor shall contractor shall spray the surface of the walk and steps to ensure that the entire dry installation is fully saturated.
- M. Once the Sakcrete is full saturated, the contractor shall spread a thin layer of crushed slate over the surface and allow to dry.
- N. After installation is dry, contractor shall rake the removed leaf mulch around the outside edges of the ramp/walk to cover any barren or exposed areas.
- O. Allow three days to dry before walking on the surface.

2.02 Design Standards

A. Design Criteria

1. Slopes

- a. Overall downhill slope along the trail/sidewalk shall not exceed 5%
- b. Ramp steps downhill slope shall not exceed 2% along the step pad.
- c. Cross slopes shall not exceed 2 – 3 %
- d. Running slopes shall not exceed 5% at any given point on the trail.

2. Trail

- a. Width of trail shall be no less than 60". See set dimensions.
- b. Form boards shall be 1 x 4 ground contact lumber.
- c. Form boards to be left in place as edges after construction.
- d. Trail sub-surface shall be compacted natural soils.
- e. All tree roots protruding into the 4" walking surface shall be cut off and removed and covered with natural soil.
- f. All fill soil shall be hand tamped and compacted.
- g. Trail and step pad material shall be Sakcrete placed dry, and then soaked and allowed to harden.

3. Ramp Steps – Wooden

- a. Cut level benches into slope to set the wooden step frame.
- b. Step cuts shall go down to native soil to ensure stability.
- c. Compact the bottom of the bench cuts before installing the frame.
- d. Treads shall be level side to side.
- e. Full bench shall be cut into existing soil for back frame
- f. Step frames shall be constructed of ground contact lumber. See Rough Carpentry for details.
- g. Finished frames shall be backfilled with sand clay soil and compacted with a handheld motorized tamping machine to within 3.5 inches of the wood step surface.
- h. Surface void between compacted subgrade and surface of the wood steps shall be filled with dry Sakcrete to within ¼ inch of the surface of the wood frame edges and steps.
- i. Sakcrete shall be moistened until fully saturated.
- j. Once the Sakcrete is saturated, spread ¼ inch of crushed slate on top of the damp Sakcrete.

4. Edge Walls

- a. Edge wall shall be built as part of the ramp step frame as needed to hold in the fill material needed to fill the step frame.
- b. Edge walls may be used to save significant trees and root plates.
- c. Edge walls shall be built out of .60 below ground contact treated wood equal. See rough carpentry section.

B. Equipment

1. Contractor shall have the following equipment available for the project.
 - a. Small rubber tier "gator" or similar four-wheel ATV.
 - b. Small walk behind "dingo" or similar excavator.

- c. Drum rollers 3' wide like the type used for compacting sod.
- d. Motorized wheel barrels or similar small earth moving equipment
- e. Chain saws, pole saws and other tools for hand clearing and grading.

PART III EXECUTION

3.01 Staking

- A. The contractor shall stake the initial routing by setting pin flags every 10' along the proposed centerline of the trail/walkway.
- B. Contractor shall walk the stakeout with the landscape architect to review the field adjustments made by the landscape architect
- C. Contractor shall proceed to do a construction stakeout of the proposed ramp steps by placing wooden grade stakes at the center of each proposed step grade.
- D. Contractor shall walk the construction stakeout with the landscape architect, owner's representative and construction crew to be sure all parties understand the scope of the work
- E. Contractor shall conduct an on-site orientation for the construction crew with the landscape architect to building the first step frame and 10 feet of trail as a demonstration project.

3.02 Clearing

- A. Contractor shall proceed to clear the trail corridor by using hand labor.
- B. Corridor shall be cleared of all underbrush on either side of the trail width.
- C. Corridor to be cleared of all low hanging limbs up to 7' above the trail bed.
- D. Vegetative matter may be chipped and blown out into the adjacent woods.
- E. All mulch and vegetative matter along the surface of the trail bed shall be hand raked off the trail and thrown to either side of the trail bed.
- F. Logs, stumps, debris and rocks shall be removed.
- G. No large trees need to be removed.
- H. Tree fence and erosion sock to be installed after natural mulch is raked away.

3.03 Grading

- A. Upon completion on the clearing, grading operations may begin
- B. Contractor shall proceed to rough grade in the trail bed by using small walk behind and rubber tire equipment to prepare the trail bed or bring in fill material.
- C. Contractor shall construct step frames, edge walls, bridge, and form boards after the trail is rough graded.
- D. Upon completion of the frames, steps and edges, the contractor can fill the voids within these forms with a heavy sand clay soil to hand roll and compact.
- E. Upon completion of the trail, the contractor shall finish the trail by filling the void space with Sakcrete and broadcasting the top with crushed slate. .
- F. Once the installation is complete, contractor may hand rake the leaf mulch back to cover disturbed and barren areas.

3.04 Cleanup

- A. Upon completion of the construction, the contractor shall clean up the site.
- B. Contractor shall remove all left-over materials, loose soil, debris and lumber left on are near the finished trail.

END OF SECTION 02885

SECTION 02145

TRENCHING UNDER TREES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

Related Sections

02060 Demolition,
02125 Erosion and Sediment Control,
02112 Tree Protection and Tree Penalty Clause shall apply
02200 Earthwork.

1.2 SCOPE:

- A. This Section describes materials, equipment, and construction process to be utilized and requirements for their use in the installation of small utility lines by trenching under a stand of existing trees.
- B. Process: The work in this section shall conform to the performance specifications herein stated for staking, field adjusting, clearing, trenching and backfilling for the installation of a 2" water line and a direct burial power line.
- C. The Contractor shall furnish all materials, equipment, and labor necessary to complete the work. Precautionary measures that prevent damage to existing trees and other site features to remain are considered part of the Work. See section 02112 Tree Protection.
- C. Comply with applicable codes, ordinances, rules, regulations, and laws of local, municipal, state or federal authorities having jurisdiction. All required permits from the utility companies shall be obtained for construction operations by the Contractor.
- C. All ground disturbance shall conform to the required erosion control measures applicable to this site per the Project Manual.
- D. Construction Access shall conform to all erosion control specification requirements.
- E. Contractor shall not interfere with reasonable access to the park for use by the citizens.
- F. Contractor shall coordinate with the Owner's Representative to arrange for the required field adjustments and site walk through.

1.2 STAKING:

- A. The Contractor shall verify existing conditions on the site and examine all adjoining conditions which in any way may affect completion of the work. Report to the Landscape Architect or Owner's Representative in writing any condition which will prevent the proper performance of the proposed site construction work
- B. Contractor shall use the staking plan to identify the best route for the water line and the line separately. Proposed water line shall be a painted white line on the ground from the existing water meter and power shall be a red painted line from the existing power pole. These two lines have a minimum of 10 feet of separation.
- C. Contractor shall request an onsite meeting with the Owners Representative and consultant to review and adjust the stakeout location. The intention is to find a route through the trees that does the minimum damage to the root plate of the trees.
- D. Upon approval, the contractor shall repaint the line in the approved location and remove any remnants of the unapproved routing.

1.3 CLEARING MULCH LAYER:

- A. Upon approval of the painted stakeout lines, the contractor shall hand clear the surface leaf and straw mulch along the route by hand raking it 2' feet on each side. The intent is to find a route that does not remove any trees over 4" diameter.
- B. When the lines have been staked and the leaf mulch cleared, the contractor may install tree protection fence and erosion control as it has been schematically identified on the Drawings and adjusted in the field.
- C. Any construction activities, including trench excavation and fill compaction, which could detrimentally impact existing trees larger than 10-inch diameter (defined as DBH) or their root systems shall be reviewed by and coordinated with the Landscape Architect and City Arborist.
- D. All trees that are designated to be saved but the roots have been damaged shall have their exposed roots carefully cut using a hand-held saw. The exposed end of roots shall be coated with Orange Shellac and covered with pine straw mulch.
- D. Grubbing:
There is no need to do any grubbing within the LOD for these utility lines.
- F. Tree Protection fencing shall be kept in good order. See detail on drawings.

1.4 TRENCHING:

- A. Contractor shall trench the approved routes of the utility lines with a small walk behind trencher taking care to weave around the trees and not cut large roots.

- B. Roots: In the case where the trencher encounters large roots over 3-4 inches, the trencher shall skip over these large roots and continue along the route.
- C. Large roots left across the trench shall be hand dug under the large root to make the trench continuous.
- D. Inspection:
Upon completion of the trenching, the contactor and Owners Representative shall inspect the trenches to confirm that they have met the above requirements.

1.5 DEFINITIONS

Limits of Disturbance: (LOD) The boundary within which all construction, materials storage, grading, landscaping and related activities shall occur.

Limits of Work: (LOW) The boundary within only maintenance type of work can occur, no new construction shall occur within the LOW.

1.4 INSTALLATION

- A. Upon approval, the contractor may lay the wire and water line in their respective trenches and backfill with existing soils and tamped by hand.
- B. After backfilling the trenches, the existing leaf mulch that was raked of the route can be hand raked in place to cover the lines.
- C. Leave Tree protection fence and erosion control in place until project is finished

PART 2 - PRODUCTS

2.1 EQUIPMENT:

- A. Trencher: Small rubber tire walk-behind ditch witch or comparable.
- B. Rakes: Standard handheld leaf and garden rakes.
- C. Shovels: Standard handheld flat and pointed end shovels

PART 3 - EXECUTION

3.1 PREPARATION:

- A. Maintain staking lines until time for trench work to begin.
- B. Maintain tree protection fencing and erosion control fencing thought the duration of the project construction.

3.2 CLEARING:

- A. Clear only in areas designated for execution of the work. Trim back tree limbs that inhibit the space for the workmen to perform their work.
- B. Remove fallen branches and brush within the area to be cleared.

3.3 STAKING:

- A. The Contractor shall stake the entire route of both utility lines passing under the trees. This stakeout may be accurate or rough, depending on the Contractor's preference. See Paragraph 1.6 of Section 01010 Supplemental Conditions.
- C. The purpose of the staking, with inspection and adjustment by the Landscape Architect and Owners Representative is to adapt the design to the site rather than following the drawings as absolute. Staking is subject to various degrees of adaptation, which can only be determined by the existing conditions in the field.
- D. The variation in the route of the utility lines and the amount of adjustment is most often is determined by the existing trees, terrain, and soil conditions and other intangibles which are impractical to survey in absolute accuracy.
- C. The Contractor shall notify the Landscape Architect and Owners Representative at least three (3) working days before inspection of the stakeout must be made. During the inspection the Landscape Architect will adjust the stakeout as necessary to fit the trees, topography and all other objects and conditions on the site. At this time, the Landscape Architect will clearly mark the limits of disturbance and tree save area. This staking-inspection process must take place prior to any other work on the site.
- D. During the inspection, the Contractor shall be at the site along with the person who will superintend the work under this section.

3.4 INSTALLATION:

- A. No self-propelled motorized vehicles or machinery shall be used to execute the work.
- B. Adjacent vegetation shall be protected by the tree installation fence installed to follow the approved routes of the utility lines.
- C. Erosion control sock shall be laid after the routes of the utility lines have been determined. Erosion sock shall be installed only on the downhill side of the work area.
- D. Trenching shall be performed with small walk behind or hand pushed ditching machines to follow the approved routes. All work along the ditch line shall be by hand or small walk behind machines.

- E. Power lines and water lines shall be placed in the ditches by hand.
- F. Backfilling the open ditches shall be with handheld shovels and compacted with hand tamps and foot traffic.
- G. Re-mulching the disturbed area shall be done by hand rake spreading the existing mulch or bringing in additional pine straw to cover the barren areas. .

3.5 DISPOSAL OF REFUSE:

- A. The refuse resulting from the construction operation shall be removed and hauled to a disposal site secured by the Contractor.
- B. Excess leaf and straw mulch raked up during the operation shall be evenly spread across the disturbed area to cover the exposed ground.
- C. Contractor may not dispose of refuse by burning or burial on site. All refuse must be removed and properly disposed of offsite.
- D. This is an active park and the contractor shall take great care to not damage any of the site outside the construction limits nor dispose of refuse materials on the site.

3.6 STAGING AREA:

Several site locations may be available to the Contractor for use in staging and storage within the Park. These sites must be pre-approved by the Owner prior to utilization.

END OF SECTION 02145

SECTION 02125

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.01 SCOPE:

- A. Work described in this section includes the containment of sediment transport, control of erosion and treatment of pollutants prior to, during and throughout all construction operations; establishment of permanent vegetative cover and continued maintenance of said measures in accordance with Part III, paragraph 3.4 of this section.
- B. This Section also specifies removal of temporary erosion and sedimentation controls.
- C. Temporary and permanent erosion and sedimentation controls include grassing and mulching of disturbed areas and structural barriers at those locations, which will ensure that erosion during construction will be maintained within acceptable limits. Acceptable limits are as established by the Georgia Erosion and Sedimentation Control Act of 1975, as amended, Section 402 of the Federal Clean Water Act, and applicable codes, ordinances, rules, regulations and laws of local, state, and municipal authorities having jurisdiction. All fines imposed for improper erosion and sedimentation control shall be paid by the Contractor.
- D. Land disturbance activity shall not commence until a Land Disturbance Permit has been issued by governing authority and Contractor has obtained NOI coverage as a Secondary Permittee under the General Permit GAR100003 – Common Development for the Murphey Candler Park Projects.
- E. All control measures shown on the Drawings are to be considered the minimum required; additional measures may be required. Provide same as required.
- F. Contractor is solely responsible for protection of downstream properties from encroachment or damage from soil erosion and/or the discharge of pollutants by water or air to any areas off the Project site.
- G. Contractor shall stake the location of the erosion control fences prior to construction and approved by the Landscape Architect prior to construction.

1.02 SUBMITTALS:

- A. Four complete copies of engineering data, including shop drawings, for all products shall be submitted to the Landscape Architect and Engineer for approval.
- B. Schedule of operations: Submit schedule of exact dates operations including program of erosion, sediment and pollution control measures, maintenance of all said measures including control facilities, structures and devices and vegetative practices. Show anticipated starting and completion dates for land-disturbing activities including excavation, filling and rough grading, finished grading, construction of temporary and permanent control measures, and disposition of temporary erosion sediment and pollution control measures.

1.03 PROJECT CONDITIONS:

- A. Furnish and install all control measures prior to or concurrent with any land disturbance activity. The Contractor is responsible for the initial provision and installation of all control measures and then the continued provision and installation of all measures throughout all construction operations and all sequences of construction operations.
- B. Schedule grading operations to allow permanent erosion control to take place in the same construction season. Avoid or minimize exposure of soils to winter weather. Maintain all controls until vegetative cover has been established.
- C. Construct and maintain temporary control measures until such time as permanent measures are effective in control of erosion, sediment and pollution from the site. Extent of measures shall be responsibility of Contractor.
- D. Stop all erosion, sediment or pollution from leaving the site and encroaching on downstream or surrounding properties.
- E. Temporary grassing shall be applied to all disturbed areas left idle for 72 hours.
- F. Contractor is responsible for all quantities of all control measures regardless if shown on the Drawings. The extent of soil erosion control measures shown on the Drawings should be considered minimum.
- G. All expenses related to the removal, relocation, replacement and/or rerouting of any and all existing utilities or other built, stored, stockpiled items of any kind, surface or subsurface is the responsibility of the contractor and will be included in the Contract Sum.

1.04 QUALITY ASSURANCE:

- A. Procedures shall comply with "Manual for Erosion and Sediment Control in Georgia", latest edition published by the Georgia Soil and Water Conservation Committee." Contractor is required to keep a logbook on site documenting his inspection of all control devices (minimum once/week and within 24 hours of any storm event) and noting any corrections or modifications. General Contractor must also file a "Notice of Termination" when the site is finally stabilized, and all stormwater management systems have been constructed and have been proven to be functioning in accordance with the Design Concept(s).
- B. The temporary and permanent erosion and sedimentation control measures shown on the Drawings are minimum requirements. Any additional erosion and sedimentation control measures required by the Contractor's means, methods, techniques and sequence of operation will be installed by the Contractor at no additional cost to the Owner
- C. Reference the Drawings for any other procedural manuals, publications, permits or other field guidelines required for the Contractor to obtain, understand and utilize in the performance of his work. Be reference of same, said materials are made a part of these Specifications.

- D. The temporary and permanent erosion and sedimentation control measures shown on the Drawings are minimum requirements. Any additional erosion and sedimentation control measures required by the Contractor's means, methods, techniques and sequence of operation will be installed by the Contractor at no additional cost to the Owner.
- B. Perform all work under this Section in accordance with all pertinent rules and regulations including, but not necessarily limited to, those stated in these Specifications. Where provisions of pertinent rules and regulations conflict with these Specifications, the more stringent provisions shall govern.
- C. Provide all materials and promptly take all actions necessary to achieve effective erosion and sedimentation control in accordance with the Georgia Erosion and Sedimentation Control Act of 1975 as amended (OCGA §12-7-1, et. seq.), local ordinances, other permits, local enforcing agency guidelines and these Specifications.
- D. Basic Principles:
1. Coordinate the land disturbance activities to fit the topography, soil types and conditions.
 2. Minimize the disturbed area and the duration of exposure to erosive elements.
 3. Provide temporary or permanent stabilization to disturbed areas immediately after rough grading is complete.
 4. Safely convey run-off from the site to a stable outlet to prevent flooding and damage to downstream facilities resulting from increased runoff from the site.
 5. Retain sediment on-site that was generated on-site.
 6. Minimize encroachment upon watercourses.
- E. Implementation:
1. The Contractor is solely responsible for the control of erosion within the Project site and prevention of sedimentation from leaving the Project site or entering waterways.
 2. The Contractor shall install temporary and permanent erosion and sedimentation controls, which will ensure that runoff from the disturbed area of the Project site shall pass through a filter system before exiting the Project site.
 3. The Contractor shall provide temporary and permanent erosion and sedimentation control measures to prevent silt and sediment from entering any waterways and any designated wetland areas.
 4. The Contractor shall limit land disturbance activity to those areas shown on Drawings.
 5. The Contractor shall maintain erosion and sedimentation control measures within disturbed areas on the entire site at no additional cost to the Owner until the final acceptance of the Project. Maintenance shall include mulching, re-seeding, clean out of sediment barriers and sediment/detention ponds, replacement of washed-out or undermined rip rap and erosion control materials, to the satisfaction of the Owner and Landscape Architect.
 6. Trenching; Contractor shall not trench in areas the include root zones of trees to be saved. Trench lines can be adjusted in collaboration with the Landscape Architect.
 7. Contractor may go outside the construction limits to establish erosion control methods that may be more practical than the ones shown on the drawings. Contractor shall get permission from the Owner and Landscape Architect before implementing such plans.
 8. Existing dry swales and storm drainage structures may offer more effective opportunities to control silt runoff and erosion. Contractor is free to explore

alternative options on site for erosion control if the plans are approved by the Landscape Architect and Owner

PART 2 - PRODUCTS

2.01 SEDIMENT BARRIER:

- A. Silt Fence:
 - 1. Type A (NS - Non-Sensitive) silt fence shall meet the requirements of Section 171 of the Georgia Department of Transportation Standard Specifications, latest edition.
 - 2. Type C (S - Sensitive) Silt Fence is a combination of Type A silt Fence with woven wire reinforcement. Type C Silt Fence reinforcement shall meet the requirements of Section 171 of Georgia D.O.T. Specifications. Netting shall be ½ - inch, galvanized steel, chicken wire mesh.
 - 3. Silt fence fabric shall be an approved product on the Georgia DOT Qualified Product List No. 36, latest edition.
- B. Hay Bales: Hay bales shall be clean, seed-free cereal hay, rectangular in shape and contain five cubic feet or more of material.
- C. Concrete Blocks: Concrete blocks shall be hollow, non-load-bearing type.
- D. Plywood shall be 3/4-inch thick exterior type to lay over roots for access.
- E. Filter stone shall be crushed stone conforming to Georgia Dept. of Transportation Table 800.0IH, Size Number 3. Filter stone may be used to build check dams.
- F. Compost Filter socks to be used where tree roots should not be cut by silt fence trencher as shown on the construction documents.
- G. Surge stone may be used to create check dams where necessary to impede silt flow.

2.02 CONSTRUCTION EXIT STONE:

- A. Use sound, tough, durable stone resistant to the action of air and water. Slabby or shaley pieces will not be acceptable, aggregate size shall be in accordance with the National Stone Association Size R-2 (1.5 to 3.5-inch stone) or Type 3 riprap stone conforming to Section 805.01 of the Georgia Department of Transportation Standard Specifications.

2.03 CONCRETE:

- A. Concrete shall have a compressive strength of not less than 3,000 psi, with not less than 5.5 bags of cement per cubic yard and a slump between 3 and 5-inches. Ready-mixed concrete shall be mixed and transported in accordance with ASTM C94.

2.04 RIP RAP:

- A. Stone Rip Rap: Use sound, tough, durable stones resistant to the action of air and unless noted otherwise, stone riprap shall be per size indicated on the Plans and individually sized for each outfall.

1. Type 1 Rip Rap: Size and gradation shall conform to Section 805.01 of the Georgia DOT Standard Specification for Type 1 Stone Dumped Rip Rap.
2. Type 3 Rip Rap: size and gradation shall conform to Section 805.01 of the Georgia DOT Standard Specifications for Type 3 Stone Dumped Rip Rap.
3. River Stone: Where designated Contractor shall use river stone comparable to Type 1.
4. Rip Rap may be used to erect Check Dams on dry swales or existing storm structures.

2.05 PLASTIC FILTER FABRIC:

- A. All plastic filter fabric shall conform to the Georgia Department of Transportation Standard Specifications, Section 881.06 for non-woven filter fabrics on most applications for this project, except for underneath riprap areas or stone construction entrances.
- B. A plastic filter fabric shall be an approved product on the Georgia Department of Transportation Qualified Product List No. 28, latest edition.
- C. Filter fabric for silt fences shall be a 36" Georgia DOT approved pervious sheet of synthetic polymer filaments non-woven from continuous filaments with wire fence backing. Filter fabric shall be of type recommended by its manufacturer for the intended application. The filter fabric shall meet the following requirements:
 1. Listed on Georgia DOT QPL-36.
- D. Polymer shall be applied utilizing a hydro seeder mix of appropriate seed, fertilizer, lime and mulch for the same acre or without seed/fertilizer/lime/mulch mix.
- E. Follow all manufacturers' instructions and recommendations. Do not mechanically disturb treated areas after application. (This does not include foot traffic as necessary to install erosion control blanket).
- F. Contractor shall furnish and install as necessary a minimum 200 lbs. of erosion control polymer for incidental "touch-up" or "point source erosion areas".
- G. Furnish two forms of synthetic polymer:
 1. Emulsion polymer for hydro seeder application with 30% active strength.
 2. Powder polymer for hand spreading with an active strength of 95%.

2.06 GRASSING:

- A. Grassing materials shall meet the requirements of the following sections of the Georgia Department of Transportation Standard Specifications, latest edition:

Material	Section
Topsoil	893.01
Seed and Sod	890
Fertilizer	891.01
Agricultural Lime	882.02
Mulch	893.02
Inoculants	893.04

- B. Seed species shall be provided as shown on the Drawings.
- C. Mulch: Seeding (temporary and permanent) on all disturbed areas shall be held in place by the use of a mulch binder, as approved by the Project Landscape Architect. The mulch binder shall be non-toxic to plant and animal life and shall be approved by the Project Landscape Architect.
- D. Rolled Erosion Control Products (RECP): On all slopes exceeding 3 (horizontal) to 1 (vertical) shall be held in place by the use of a RECP blankets/matting, as approved by the Project Landscape Architect.
- E. Water: Water shall be free of excess and harmful chemicals, organisms and substances, which may be harmful to plant growth or obnoxious to traffic. Salt or brackish water shall not be used. Water shall be furnished by the Contractor.

PART 3 - EXECUTION

3.01 GENERAL:

- A. Temporary and permanent erosion and sedimentation control measures shall prevent erosion and sediment from exiting the site. If, in the opinion of the Owner or Project Landscape Architect, the Contractor's temporary erosion and sedimentation control measures are inadequate, Contractor shall provide additional maintenance for existing measures or additional devices to control erosion and sedimentation at no additional cost to Owner.
- B. All erosion and sedimentation control devices and structures shall be inspected by the Contractor at least once a week and immediately after to each rainfall occurrence. Any device or structure found to be damaged shall be repaired or replaced by the end of the day.
- C. All erosion and sedimentation control measures and devices shall be constructed and maintained as indicated on the Drawings or specified herein until adequate permanent disturbed area stabilization has been provided and accepted by the Project Landscape Architect. Once adequate permanent stabilization has been provided and accepted by the Project Landscape Architect, all temporary erosion and sedimentation control structures and devices shall be removed.

3.02 TEMPORARY EROSION CONTROL DEVICES:

- A. Construct temporary sediment barriers of silt fence at all points where surface water flows from construction area bypassing a temporary sediment traps if the area is subject to soil erosion; or as otherwise indicated on Drawings or as deemed necessary by inspectors.
- B. Install temporary sediment traps and temporary sediment basins in accordance with the location and details shown on the Drawings. Remove accumulated sediment when they are one-third full of silt continually until permanent vegetative cover is established.
- C. Install construction exit as indicated on Drawings. Maintain to prevent tracking and flow of mud onto public roads.

- D. Construct diversion berms, dikes (2'-0" wide x 1'-6" tall) or ditches at the tops of all slopes or otherwise indicated on the Drawings. Machine compact these elements and plant temporary seed until permanent vegetative cover can be established.
- E. Maintain temporary barriers until permanent erosion control measures are established. Repair and replace barriers damaged or displaced by construction activity

3.03 SEDIMENT CONTROL:

- A. Construction Exit:
 - 1. Construction exit(s) shall be placed as shown on the Drawings and as directed by the Project Landscape Architect. A construction exit shall be located at any point traffic will be leaving a disturbed area to a public right-of-way, street, alley, sidewalk, or parking area.
 - 2. Placement of Construction Exit Material: The ground surface upon which the construction exit material is to be placed shall be prepared to a smooth condition free from obstructions, depressions or debris. The plastic filter fabric shall be placed to provide a minimum number of overlaps and a minimum width of one foot of overlap at each joint. The stone shall be placed with its top elevation conforming to the surrounding roadway elevations. The stone shall be dropped no more than three feet during construction.
 - 3. Construction Exit Maintenance: The Contractor shall regularly maintain the exit with the top dressing of stone to prevent tracking or flow of soil onto public rights-of-way and paved surfaces as directed by the Project Landscape Architect.
 - 4. Construction Exit Removal: Construction exit(s) shall be removed and properly disposed of when the disturbed area has been properly stabilized, the tracking or flow of soil onto public rights-of-way or paved surfaces has ceased and as directed by the Project Landscape Architect.
- B. Sediment Barriers:
 - 1. Sediment barriers shall include, but are not necessarily limited to, silt fences, hay bales, and any device, which prevents sediment from exiting the disturbed area.
 - 2. Silt fences and hay bales shall not be used in any flowing stream, creek or river.
 - 3. Sediment barriers shall be installed as shown on the Drawings and as directed by the Owner or Project Landscape Architect.
 - 5. Sediment barriers shall be maintained to ensure the depth of impounded sediment is no more than one-half of the original height of the barrier or as directed by the Project Landscape Architect. Torn, damaged, destroyed or washed-out barriers shall be repaired, reinforced or replaced with new material and installed as shown on the Drawings and as directed by the Owner or Project Landscape Architect.
 - 5. Sediment Barrier Removal:
 - a. Sediment barrier shall be removed once the disturbed area has been stabilized with a permanent vegetative cover and the sediment barrier is no longer required as directed by the Project Landscape Architect.
 - b. Accumulated sediment shall be removed from the barrier and replaced and stabilized on site as directed by the Owner or Project Landscape Architect.
 - c. All non-biodegradable parts of the barrier shall be disposed of properly.
 - d. The disturbed area created by barrier removal shall be permanently stabilized.

- F. Inlet Protection: All storm inlets shall be covered with sediment boxes during grading operations and shall remain so covered until all open areas are permanently stabilized against erosion.

3.4 GROUND COVER

- A. Protect all exposed soils with mulching (temporary measure) and vegetative ground cover (permanent measure).
- B. Ground cover consists of temporary seeding on all graded areas which will not receive final grading or permanent planting within three (3) days.
- C. All grassing, or planting operations shall include mulching as stabilization until ground cover by planting is effective.
- D. Reseed as required until full vegetative coverage is established.

3.5 MAINTENANCE

- A. Inspect all control elements after each rainfall event and a minimum of every two (2) weeks when no rainfall event(s) occur. Clear all debris and accumulated sediment from behind barriers when half full so their functional capacity is not reduced. Repair and replace any and all damaged measures of any kind.
- B. Contractor is expected to maintain the erosion control compliance in accordance with NPDES Standards. See Section 02125B of this Project Manual.
- B. Maintain all erosion, sedimentation, pollution control measures until the site has reached complete stabilization as described in Part VI.A. Termination of Coverage in the General NPDES Permit.

3.6 REMOVAL OF TEMPORARY EROSION CONTROL DEVICES

- A. Remove all debris resulting from temporary erosion control from Project site.
- B. Control dust from disturbed areas by means of mulching, irrigation, calcium chloride or other method subject to the Engineer's review.

3.07 CLEAN-UP:

- A. Dispose of all excess erosion and sedimentation control materials in a manner satisfactory to the Owner and Landscape Architect.
- B. Final clean up shall be performed in accordance with the requirements of these Specifications and to the satisfaction of the Owner and Landscape Architect.

END OF SECTION 02125

SECTION 02125B

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) COMPLIANCE**

PART 1 - GENERAL

1.01 SCOPE

- A. The work specified in this Section consists of the following under the requirements for Authorization to Discharge under the National Pollutant Discharge Elimination System (NPDES), Storm Water Discharges Associated with Construction Activities, under the State of Georgia, Department of Natural Resources, Environmental Protection Division (EPD).
- Notice of Intent (N.O.I.) – Electronic submittal to EPD by Owner
 - Updates to the Erosion, Sedimentation, and Pollution Control (ES&PC) Plan – By Landscape Architect
 - Comprehensive Monitoring Plan (CMP) – By Landscape Architect
 - Compliance Inspections and Monitoring – By Contractor
 - Notice of Termination (N.O.T.) – By Owner after appraisal of site by Landscape Architect.

1.03 QUALITY ASSURANCE

- A. Perform all work under this Section in accordance with all pertinent rules and regulations including, but not necessarily limited to, those stated in these Specifications. Where provisions of pertinent rules and regulations conflict with these Specifications, the more stringent provisions shall govern.
- B. Provide all materials and promptly take all actions necessary to monitor, document and achieve effective erosion and sedimentation control in accordance with the National Pollutant Discharge Elimination System (NPDES), Storm Water Discharges Associated with Construction Activities, under the State of Georgia, Department of Natural Resources, Environmental Protection Division (EPD) and these Specifications.
- C. The temporary and permanent erosion and sedimentation control measures shown on the Erosion, Sedimentation, and Pollution Control (ES&PC) Plan are minimum requirements. Any additional erosion and sedimentation control measures required by the Contractor's means, methods, techniques and sequence of operation shall be updated on the ES&PC Plan and submitted to the Designer for approval by the Contractor at no additional cost to the Owner.

PART 2 - EXECUTION

2.01 NOTICE OF INTENT

- A. The contractor shall obtain coverage as a Secondary Permittee under the General Permit GAR1000003– Common Development for the Murphey Candler Park projects. Contractor shall coordinate with the City of Brookhaven Public Works Director to be added as a Plan Preparer in the GEOS system to complete this paperwork.

2.02 EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN UPDATES

- A. Project Civil Engineer has prepared the ES&PC Plan for the Murphey Candler Park Improvements in accordance with Georgia’s NPDES Permit for Storm Water Discharges Associated with Construction Activities. To meet the requirements of the permit, the Project Civil Engineer that prepared the ES&PC Plan has provided the required Engineer’s certification on the plans.
- B. Upon direction from the Owner’s Representative, the Project Civil Engineer will conduct the initial inspection of the Best Management Practices (BMPs) for the construction site. The permit requires that the Engineer certifying the ES&PC Plan must also perform the initial BMP inspection.
- C. Per the NPDES regulations, the ES&PC Plan is a dynamic document. The project Civil Engineer is responsible for updating the ES&PC Plan if needed. Major changes and amendments to the ES&PC Plan must be certified by a licensed professional engineer, including changes in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to waters of the state. Appropriate Certification of the ES&PC Plan site change updates shall be the responsibility of the General Contractor and the project Civil Engineer.

2.03 COMPREHENSIVE MONITORING PLAN

- A. The Contractor shall prepare the Comprehensive Monitoring Plan (CMP), as required under the NPDES permit. The purpose of the CMP is to define the methods used to monitor performance of on-site BMPs and storm water runoff. The plan shall include sampling strategies and monitoring locations for the site, along with details of the record keeping and reporting requirements applicable to the site. The plan shall also include example record keeping and reporting forms to assist with the documentation necessary to maintain compliance under the permit. The CMP shall be provided in an oversized 3-ring binder, and all records and inspection logs kept in a central on-site location.
- B. Per the NPDES regulations, the CMP is a dynamic document and major changes and amendments to the Plan, such as changing sampling locations, must be certified by a licensed professional. The Contractor who prepared the CMP will be responsible for updating and certifying the CMP.

2.04 ON-SITE COMPLIANCE INSPECTIONS AND MONITORING

- A. The Contractor shall provide daily, weekly, monthly, and rainfall dependent BMP inspections and associated storm water monitoring, as required under the permit. According to the permit, inspections and monitoring shall be conducted by "Qualified Personnel" under the supervision of the Primary Permittee. For this project, the Contractor is the Operator and shall perform all daily inspections and BMP maintenance. A summary of inspections required under the permit, are as follows.
- B. Daily - Daily inspections must be conducted of petroleum storage usage and handling areas and construction entrances/exits by "Qualified Personnel". In addition, daily rainfall data must be recorded.
- C. Weekly - Qualified personnel shall inspect site BMPs at least once every 7 calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater.
- D. Monthly - Inspections are required monthly until a N.O.T. is submitted for areas that have undergone final stabilization.
- E. Qualifying Rainfall Event - Sampling after each qualifying rainfall event is required until the N.O.T. is submitted with the final sampling data. Qualifying sampling events as measured by the on-site rain gauges provided by the Contractor and monitored by the Owner, are defined under Section 6, subsection d.3. of the General NPDES Permit No. GAR100003, effective August 1, 2018.
- F. All monitoring results will be recorded onto appropriate forms and provided in the CMP binder, so all records and inspection logs can be kept in a central on-site location. All monitoring results shall also be submitted monthly to Georgia Environmental Protection Division (EPD) as required under the permit.

2.05 NOTICE OF TERMINATION

- A. At completion of construction, the Contractor is responsible for preparing and submitting the N.O.T. form. The N.O.T must be approved by the Designer/Landscape Architect before submittal. Final acceptance of this project by the City of Brookhaven will not be issued until the N.O.T. requirements have been satisfied.

END OF SECTION 02125B

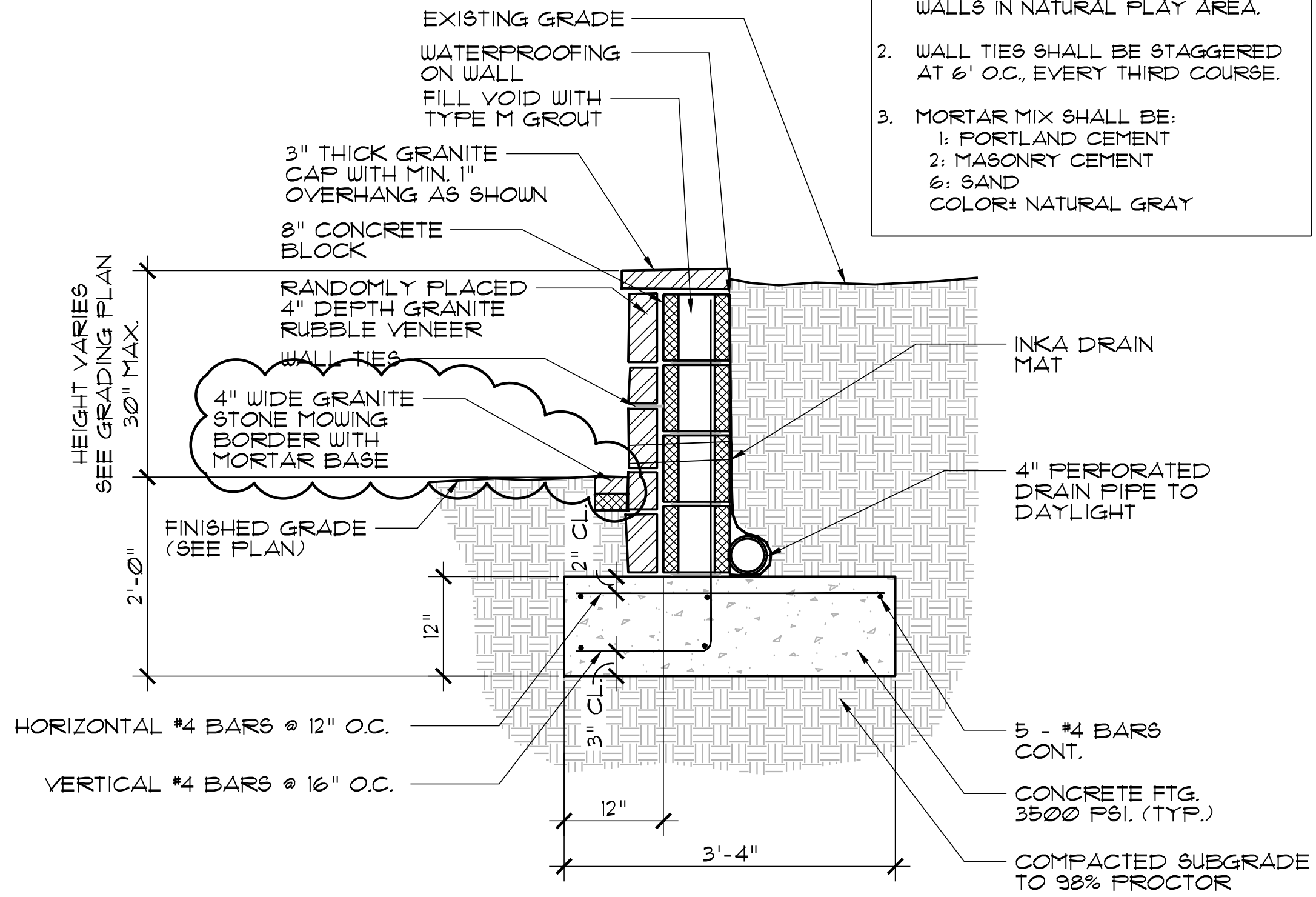
1

RETAINING WALL

NTS

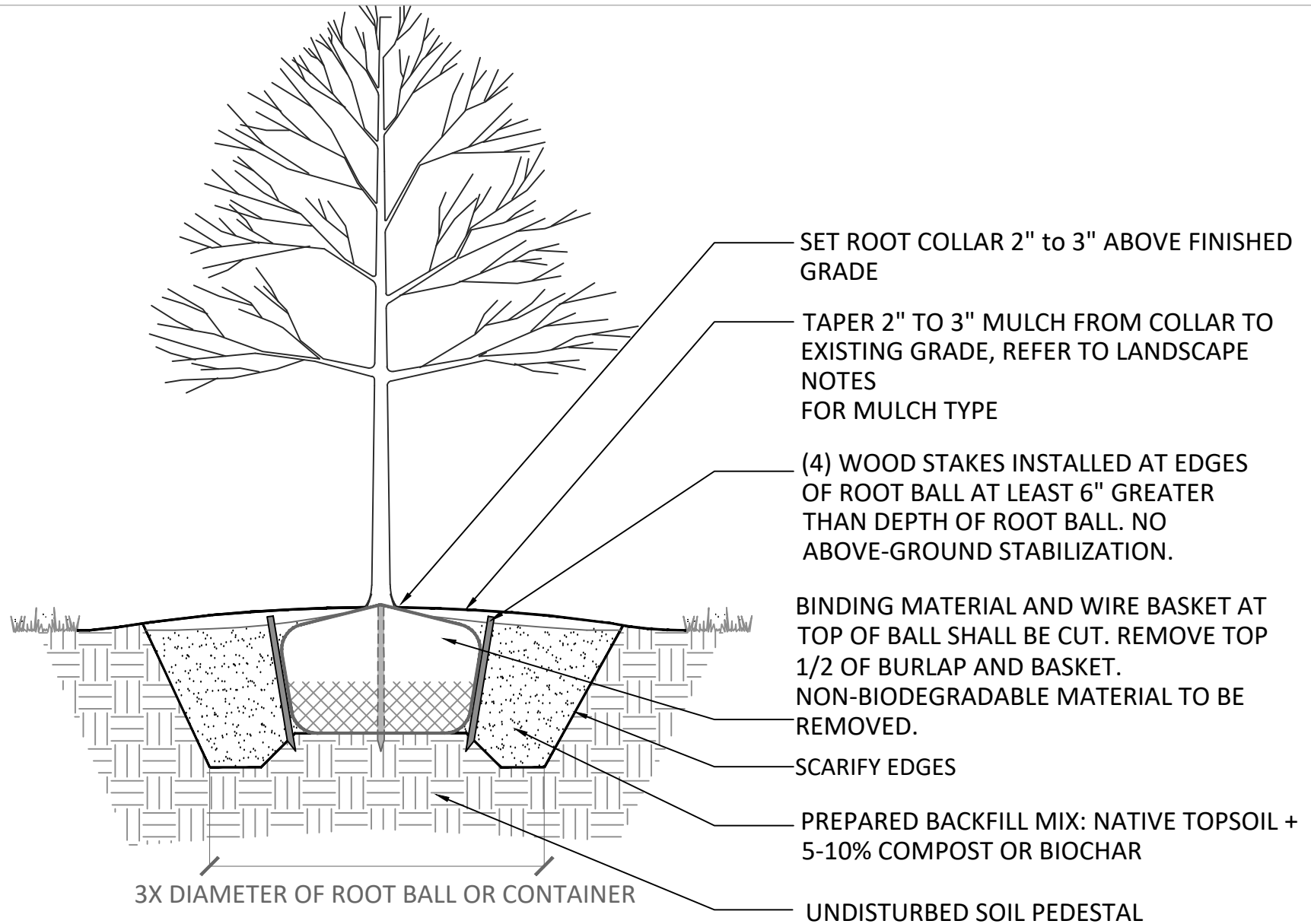
NOTES:

1. STONE SIZE AND CHARACTER SHALL MATCH EXISTING RETAINING WALLS IN NATURAL PLAY AREA.
2. WALL TIES SHALL BE STAGGERED AT 6' O.C., EVERY THIRD COURSE.
3. MORTAR MIX SHALL BE:
 - 1: PORTLAND CEMENT
 - 2: MASONRY CEMENT
 - 6: SAND
 - COLOR± NATURAL GRAY



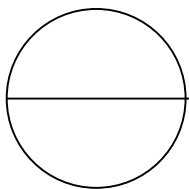
MURPHEY CANDLER PARK
 CITY OF BROOKHAVEN
 1551 W. NANCY CREEK DRIVE NE
 BROOKHAVEN, GEORGIA 30319

DATE	DRAWN GZ	CHECKED MC	PROJECT NUMBER 15092.00
SCALE NTS			DRAWING NUMBER C8.2B2 Addendum #1
SHEET TITLE COMMUNITY GREEN SITE DETAILS			



TREE PLANTING DETAIL

SCALE: 3/4" = 1'-0"



TREE PROTECTION NOTES:

- NO PARKING, STORAGE OR OTHER CONSTRUCTION ACTIVITIES ARE ALLOWED WITHIN TREE PROTECTION AREAS.
- ONLY FILL IS ALLOWED INSIDE CRITICAL ROOT ZONE (CRZ). NO CUT IS PERMITTED. NO TRENCHING THROUGH CRITICAL ROOT ZONE. ALL FILL MATERIAL WITHIN DRIP LINES MUST BE TOPSOIL.
- TREES IDENTIFIED TO BE PRESERVED AND COUNTED TOWARD THE TREE DENSITY REQUIREMENTS SHALL HAVE FOUR FOOT ORANGE TREE PROTECTION FENCING AND STAKED HAY BALES INSTALLED AT OR BEYOND THE CRITICAL ROOT ZONE.
- TREE SAVE FENCE REQUIRED AROUND ALL TREE ROOT ZONES WITHIN THE LIMIT OF DISTURBANCE. TREE FENCE CAN BE REMOVED ONLY WHEN WORKING IN THE IMMEDIATE AREA. TREE FENCE MUST BE RESET AT COMPLETION OF WORK. PLACE ON THE FENCING STATING "KEEP OUT."
- A TWO-INCH LAYER OF MULCH AND MYCORRHIZAE FUNGI SHALL BE APPLIED OVER THE CRITICAL ROOT ZONE PRIOR TO CONSTRUCTION.
- ALL TREE PROTECTION FENCE TO BE INSPECTED DAILY.
- TREE DENSITY: BASED ON CITY ARBORIST, EXISTING PARK SITE DENSITY EXCEEDS MIN. REQUIRED FULL TREE DENSITY CALCULATION IS EXEMPTED FOR THIS PARK.
- GRIND STUMPS TO EXISTING GRADE BEFORE GRADING WORK BEGINS. PROVIDE MINIMUM COVER OF 1" FOR FINISH GRADE.
- GENERAL CONTRACTOR TO COORDINATE PRESCRIPTIVE MEASURES WITH CITY CONTRACTED ARBORIST/TREE SERVICE COMPANY.
- ROOT BRIDGE IS REQUIRED FOR ALL WORK WITHIN ROOT ZONE.
- TRAIL TO BE STAKED AND REVIEWED FOR POSSIBLE ADJUSTMENT BEFORE CONSTRUCTION.

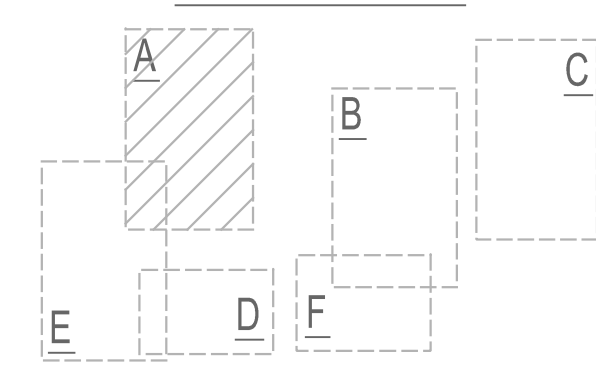
GENERAL SITE DEBRIS & FINE GRADING NOTE:
THERE ARE VARIOUS SMALL ITEMS ON THE SITE THAT WILL BE AFFECTED BY DEMOLITION AND CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO PROTECT PERMANENT ITEMS AND WORK AROUND OR REMOVE OTHER ITEMS AS NEEDED. THE FINAL SITE TO BE LEFT CLEAN AND FINE-GRADED. THE CONTRACTOR IS TO REMOVE ANY DIPS, GULLIES, PITS OR OTHER IRREGULARITIES WITHIN THE WORK LIMITS OF THE PROJECT.

SITE VISIT:
CONTRACTOR SHALL VISIT THE SITE TO VALIDATE ALL DEMOLITION ITEMS AND VERIFY QUANTITIES.

DEMOLITION NOTES:

- CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES WITHOUT INTERFERING WITH VEHICLE AND PEDESTRIAN TRAFFIC IN ADJACENT AREAS.
- CONTRACTOR SHALL PROTECT UTILITIES AND BENCHMARKS NOT SCHEDULED FOR DEMOLITION FROM DAMAGE. AT NO ADDITIONAL COST TO OWNER, THE CONTRACTOR SHALL REPLACE OR REPAIR ITEMS DAMAGED BEYOND THE LIMITS OF THE DEMOLITION SHOWN.
- DISCONNECT AND SEAL OFF ABANDONED UTILITIES TO BE REMOVED PRIOR TO THE START OF ANY DEMOLITION ACTIVITIES. UTILITIES SHALL BE DISCONNECTED BELOW EXISTING GRADE LEVEL, OR OUTSIDE OF CONTRACT LIMITS BY REPRESENTATIVES OF THE PUBLIC UTILITY BEING DISCONNECTED. MAINTAIN UTILITY SERVICE TO FACILITIES IN USE.
- EXCEPT FOR ITEMS DESIGNATED TO BE REMOVED OR REUSED IN THE WORK, ALL MATERIALS RESULTING FROM THIS WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE PROMPTLY REMOVED FROM THE SITE. STORAGE OR SALE OF REMOVED MATERIALS WILL NOT BE PERMITTED ON PROJECT SITE.
- REMOVE ALL DEBRIS, RUBBISH, AND WASTE MATERIALS FROM THE SITE. DO NOT STOCKPILE DEBRIS ON SITE.
- ALL MATERIALS SHALL BE DISPOSED OF IN A LEGAL MANNER.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY THE GOVERNING AGENCY HAVING JURISDICTION.
- ALL LAND DISTURBANCE TO BE STABILIZED WITH VEGETATION UPON COMPLETION OF DEMOLITION PER THE EROSION AND CONTROL PLANS.
- ALL TREES TO REMAIN SHALL HAVE PROPER PROTECTION UNLESS APPROVED PLANS INDICATES OTHERWISE.
- DUMPSTERS AND/OR TEMPORARY SANITARY FACILITIES SHALL NOT BE LOCATED IN THE STREET AND TREE PROTECTION AREA.
- SAWCUT PAVEMENTS, CURBS, AND/OR WALLS WHOLE TO PROVIDE SMOOTH TRANSITION BETWEEN IMPROVEMENTS TO REMAIN & NEW IMPROVEMENTS.

SHEET KEY



DRAWINGS SCHEDULE

No.	Date	Description
31	04/29	Multi-use Trail as Shown - Preboard Review
32	05/05	UGP - Community Green - City Commission
33	05/14	UGP - Community Green - City Commission
34	05/28	UGP - Community Green - City Commission



CITY OF BROOKHAVEN
MURPHEY CANDLER PARK
1551 W. NANCY CREEK DRIVE NE
BROOKHAVEN, GEORGIA 30319

DATE	DRAWN	CHECKED
03/03/21	GZ	MC

SCALE
SHEET TITLE
DEMO AND TREE PROTECTION PLAN - COMMUNITY GREEN

PROJECT NUMBER 15092.00
C3.2A
DRAWING NUMBER

Park Bond Project Tree Preservation Form

Park Name Murphey Candler Park
Project: COMMUNITY GREEN
Jan. 20, 2020

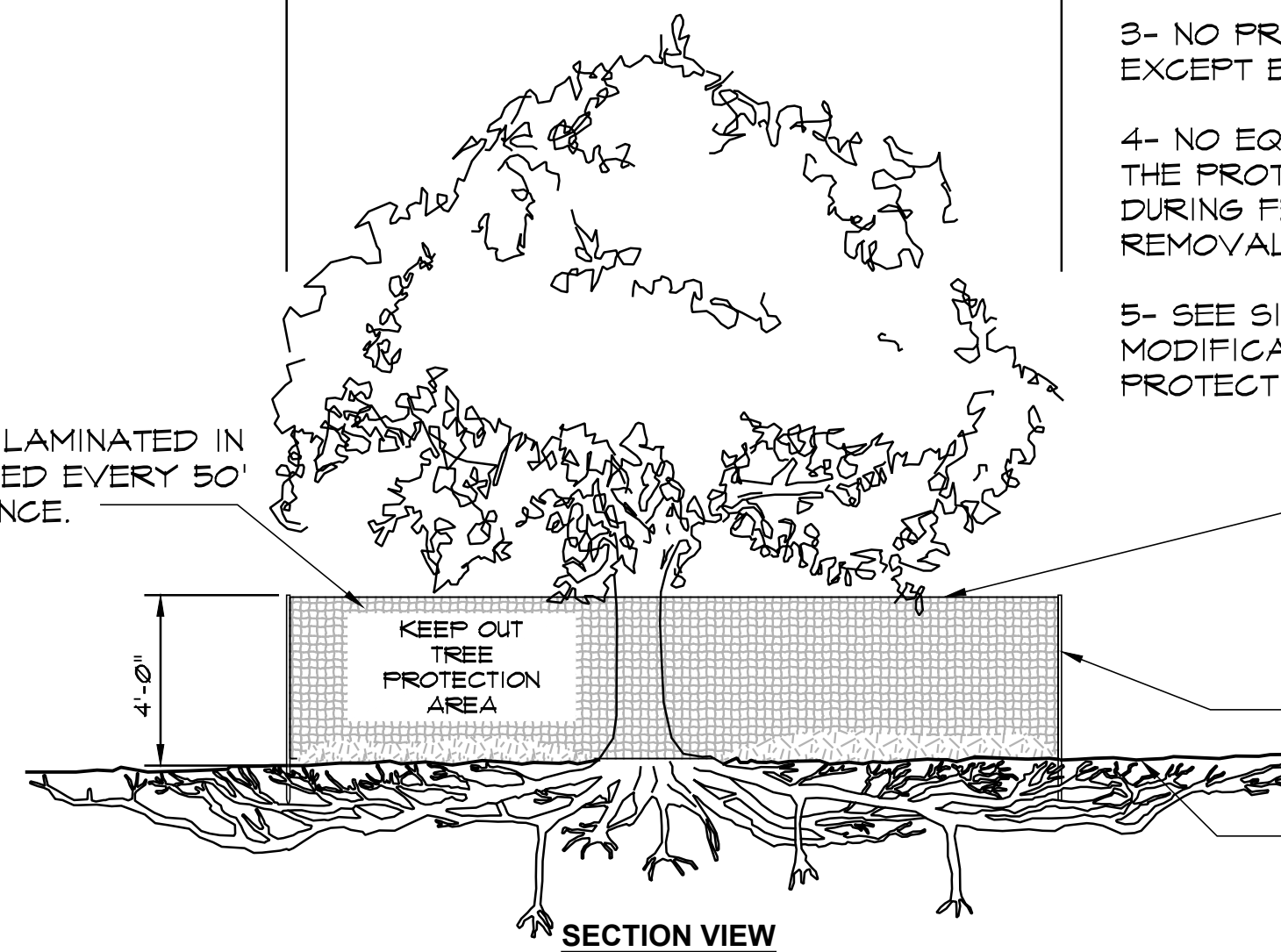


Proposed Trees Removed

ID	Species	Size (Inches DBH)	Condition	Status	Reason for Removal	Quantity
1	LOBLOLLY PINE	25			ADA Route	1
2	SWEETGUM	10			ADA Route	1
3	LOBLOLLY PINE	26			ADA Route	1
4	LOBLOLLY PINE	25			Safety Concern	1
5	LOBLOLLY PINE	23			Safety Concern	1
6	LOBLOLLY PINE	25			Safety Concern	1
7	CHERRY TREE	10	8		Lawn Area	1
8	DOGWOOD	8			Lawn Area	1
9	LOBLOLLY PINE	14			Safety Concern	1
10	LOBLOLLY PINE	13			Safety Concern	1
11	LOBLOLLY PINE	13			Safety Concern	1
12	LOBLOLLY PINE	18			Safety Concern	1
13	LOBLOLLY PINE	27			Safety Concern	1
14	LOBLOLLY PINE	38			Safety Concern	1
Total Inches Removed		283			Total Number of Trees Removed	14

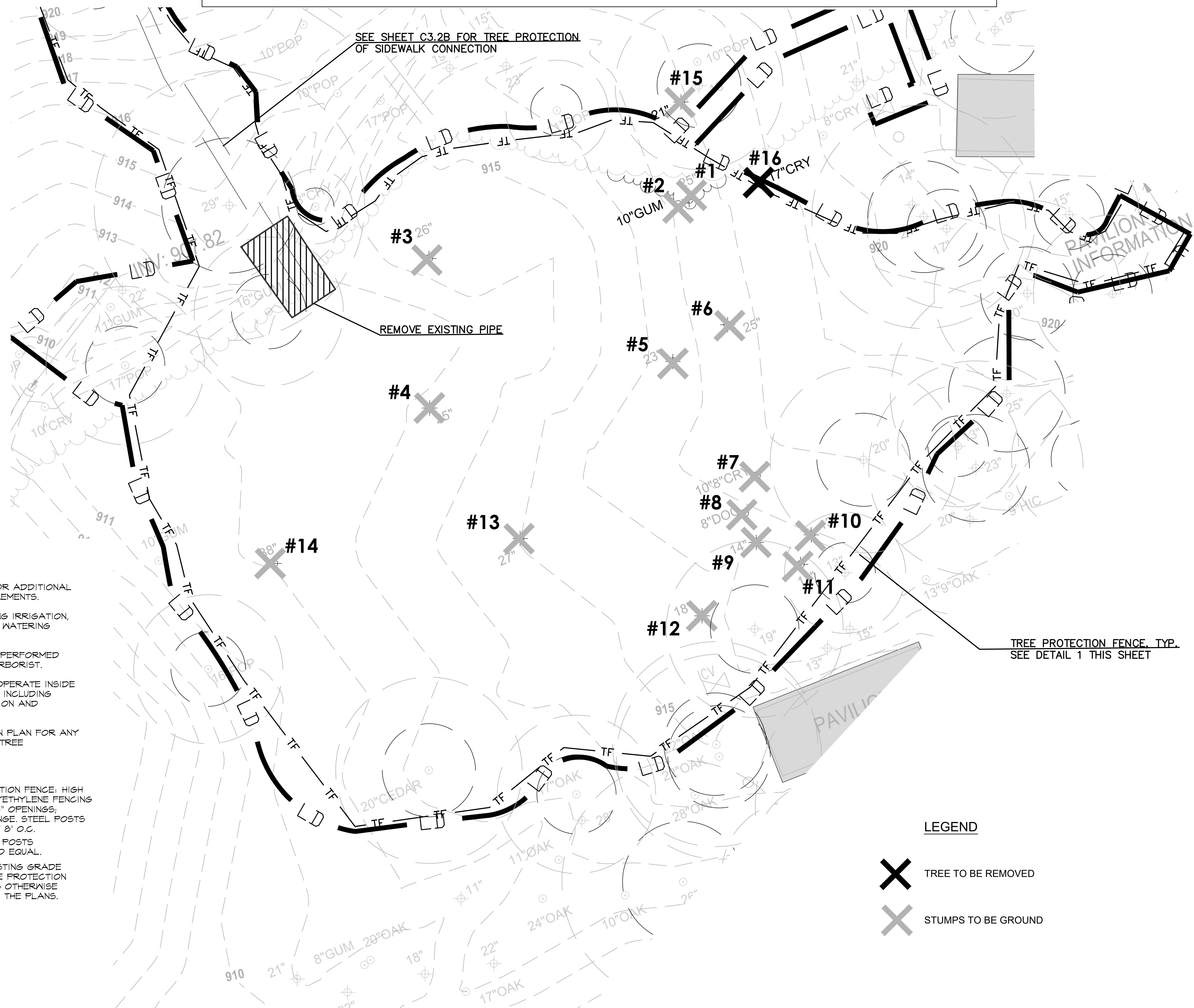
- NOTES:**
- SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
 - IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
 - NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
 - NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
 - SEE SITE PREPARATION PLAN FOR ANY MODIFICATIONS WITH THE TREE PROTECTION AREA.

CROWN DRIP LINE OR OTHER LIMIT OF TREE PROTECTION AREA. SEE TREE PRESERVATION PLAN FOR FENCE ALIGNMENT.



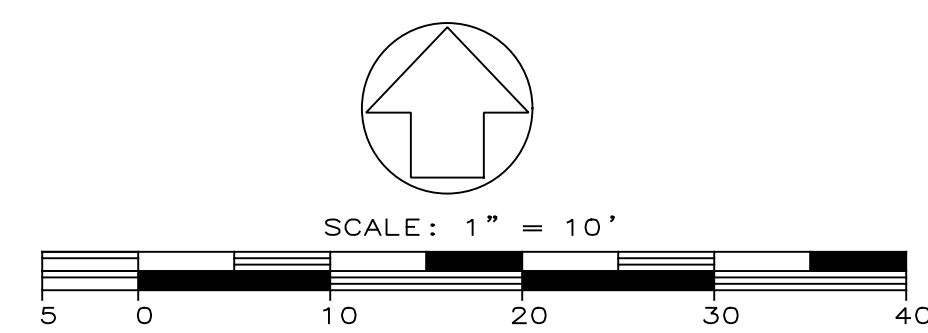
1 TREE PROTECTION FENCE
1/4" = 1'-0"

TREE PROTECTION FENCE: HIGH DENSITY POLYETHYLENE FENCING WITH 3.5" X 1.5" OPENINGS; COLOR- ORANGE. STEEL POSTS INSTALLED AT 8' O.C.
2" X 6" STEEL POSTS OR APPROVED EQUAL.
MAINTAIN EXISTING GRADE WITH THE TREE PROTECTION FENCE UNLESS OTHERWISE INDICATED ON THE PLANS.



LEGEND

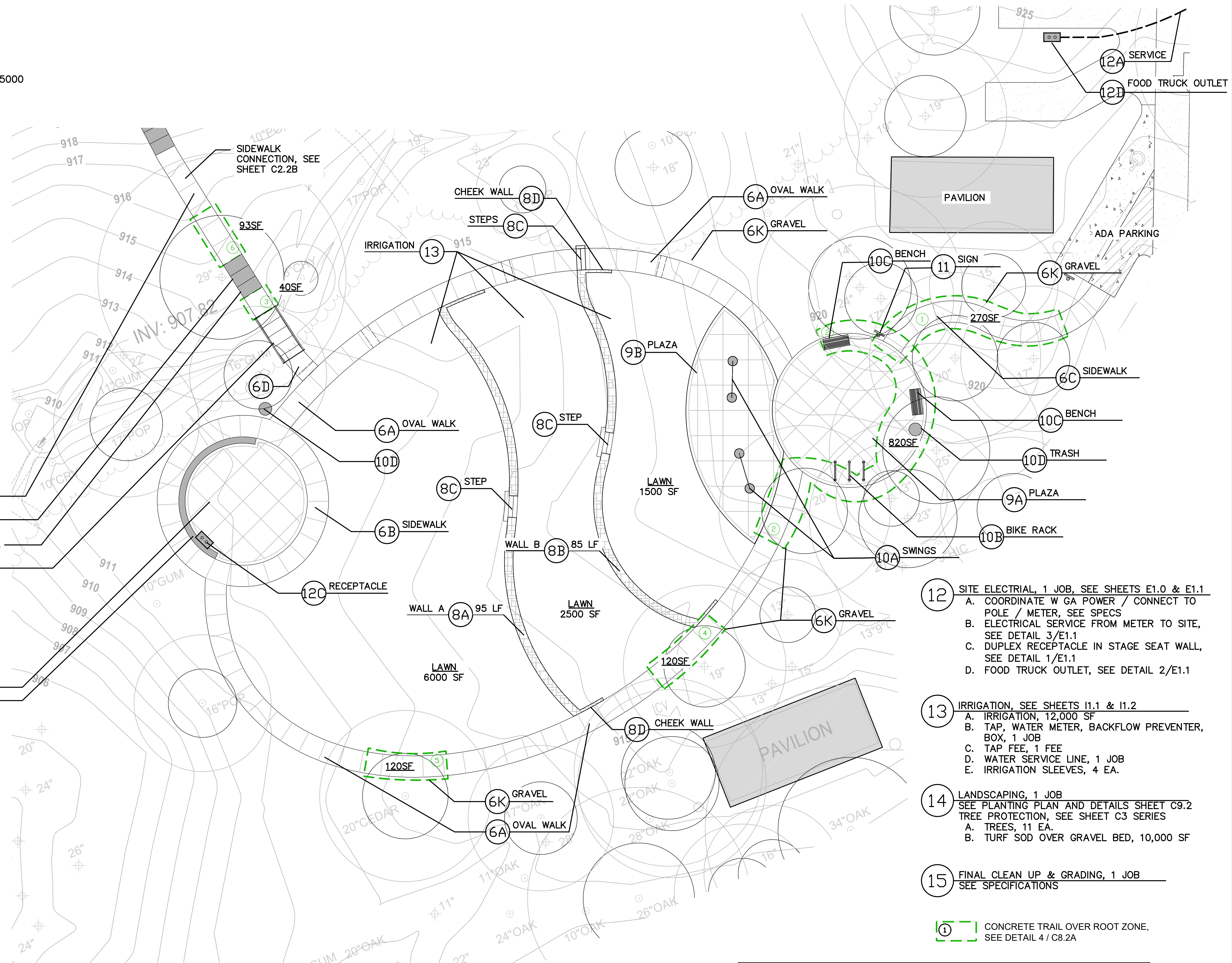
- X TREE TO BE REMOVED
- X STUMPS TO BE GROUND



2021 SMALL TREE LOCATION
CPL LEAD DESIGNER FIELD LOCATED THE SMALL TREES ON SITE BY VISIT
2016 SURVEY & 2019 UPDATED TREE SURVEY
TERRAMARK LAND SURVEYING, INC.
1396 BELLS FERRY ROAD
MARIETTA, GEORGIA 30066
PHONE NO. (770) 421-1927
FAX NO. (770) 421-0552
WWW.TERRAMARK.COM
C. O. A. # LSF000810

NOTE: THE WRESTED VEGETATION AND 80% CONTOUR WERE SURVEYED IN BY TERRAMARK ON FEB. 4, 2021

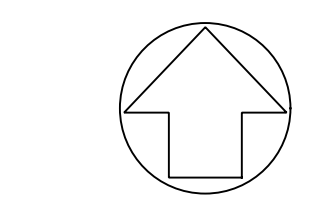
- 1 PRECONSTRUCTION, SEE SHEET C4 SERIES
 - A. MOBILIZATION, 1 JOB
 - B. CONSTRUCTION STAKEOUT, 1 JOB
- 2 DEMOLITION, 1 JOB - SEE SHEET C3 SERIES
- 3 SITE CLEARING & GRUBBING, 1 JOB - SEE SHEET C3 SERIES
 - A. TREE PROTECTION FENCE 1300 LF SEE DETAIL 4, C8.2A
 - B. TREE REMOVAL - ONE TO BE REMOVED - 17" CHERRY
 - C. GRINDING STUMPS - 14
 - D. TREE PRUNING & CARE FOR ADJACENT TREES ALLOWANCE \$5000
 - E. GENERAL SITE CLEARING, 1 JOB, SEE SPECIFICATIONS
- 4 GRADING, DRAINAGE, AND UTILITIES, 1 JOB, SEE SHEET C5 SERIES
 - A. COMMUNITY GREEN SPACE, 20,500 SF
 - B. SIDEWALK CONNECTION TO PARKING LOT, 400 SF
 - C. GRADING AND TOPSOIL FOR GRAVEL GRASS AREA, 10,000 SF
 - D. GRAVEL UNDER TURF - #57 STONE WASHED, 9,857 SF
 - E. RAMP STEPS HAND GRADING - 2,200 SF
 - F. SIDEWALK CONNECTION TO LAKE - 1,100 SF
 - G. STORM DRAIN - 120 LF
 - H. STORM OUTLETS
 - I. STORM PIPES
- 5 EROSION CONTROL, 1 JOB, SEE SHEET C7 SERIES AND GSWCC APPROVED PLANS.
 - A. CONSTRUCTION ENTRANCE, 1EA
 - B. CONSTRUCTION ENTRANCE - MAINTENANCE, 1JOB
 - C. SILT SOCK 1050 LF
 - D. SILT SOCK - MAINTENANCE, 1 JOB
 - E. SILT FENCE XXX LF
 - F. SILT FENCE - MAINTENANCE, 1 JOB
- 6 SIDEWALK CONNECTIONS
 - A. OVAL LAYOUT 5' CONCRETE SIDEWALK, 1,685 SF, SEE DETAIL 1/C8.2A
 - B. 5' CONCRETE SIDEWALK AROUND THE STAGE, 600 SF, SEE DETAIL 1/C8.2A
 - C. 5' CONCRETE SIDEWALK CONNECTION TO PARKING, 300 SF, SEE DETAIL 1/C8.2A (BID ALTERNATE - PERVIOUS CONCRETE, SEE DETAIL 4B/C8.2A)
 - D. 5' CONCRETE SIDEWALK TO RAMP STEPS, 100 SF, SEE DETAIL 1/C8.2A
 - E. 5' SIDEWALK CONNECTIONS BETWEEN RAMP STEPS, 375 SF, SEE DETAIL 1/C8.2A
 - F. 5' RAMP STEPS & WOODEN FRAMING 5' X 90', 90 LF, SEE DETAIL 9/C8.2A
 - G. RAMP STEP LANDING 3' X 5' X 35 EA. 525 SF, SEE DETAIL 9/C8.2A
 - H. 6' WOODEN FOOT BRIDGE 6' X 12', 72 SF, SEE DETAIL 3A/C8.2B
 - I. BUMPER RAIL, 24 LF, SEE DETAIL 3B/C8.2B
 - J. 5' CONCRETE SIDEWALK CONNECTION TO LAKE, 535 SF, SEE DETAIL 1/C8.2A
 - K. 5' CONCRETE STEPS TO LAKE 15 EA., 75 LF, SEE DETAIL 6/C8.2A
 - L. GRAVEL OVER ROOT ZONES FOR SIDEWALK, 1,567 SF, SEE DETAIL 5/C8.2A
- 7 STAGE
 - A. CONCRETE PAVEMENT - 710 SF, SEE DETAIL 1, C8.2A
 - B. SEAT WALL WITH CAP - 40 LF, SEE DETAIL 2, C8.2B
- 8 RETAINING WALLS
 - A. SEAT WALL A - 95 LF, SEE DETAIL 1/C8.2B
 - B. SEAT WALL B - 85 LF, SEE DETAIL 1/C8.2B
 - C. CONCRETE STEPS 9 STEPS X 5' WIDE - 45 LF, SEE DETAIL 6/C8.2A
 - D. 8" WIDE CHEEKWALLS 30 LF, SIMILAR DETAIL 1/C8.2B
- 9 SITTING AREA
 - A. SITTING PLAZA CONCRETE PAVEMENT - 1020 SF, SEE DETAIL 4/C8.2A (BID ALTERNATE - PERVIOUS CONCRETE, SEE DETAIL 4B/C8.2A)
 - B. SWING BENCH PLAZA - 850 SF, SEE DETAIL 4/C8.2A
- 10 SITE FURNITURE
 - A. SWING BENCH - 2 EACH, SEE DETAIL 7/C8.2B
 - B. BIKE RACK - 3 EACH, SEE DETAIL 6/C8.2B
 - C. BENCH - 2 EACH, SEE DETAIL 4/C8.2B
 - D. TRASH CAN - 2 EACH, SEE DETAIL 5/C8.2B
- 11 SITE SIGNAGE
 - A. PARK RULE SIGN - 1 JOB



- 12 SITE ELECTRICAL, 1 JOB, SEE SHEETS E1.0 & E1.1
 - A. COORDINATE W GA POWER / CONNECT TO POLE / METER, SEE SPECS
 - B. ELECTRICAL SERVICE FROM METER TO SITE, SEE DETAIL 3/E1.1
 - C. DUPLEX RECEPTACLE IN STAGE SEAT WALL, SEE DETAIL 1/E1.1
 - D. FOOD TRUCK OUTLET, SEE DETAIL 2/E1.1
- 13 IRRIGATION, SEE SHEETS I1.1 & I1.2
 - A. IRRIGATION, 12,000 SF
 - B. TAP, WATER METER, BACKFLOW PREVENTER, BOX, 1 JOB
 - C. TAP FEE, 1 FEE
 - D. WATER SERVICE LINE, 1 JOB
 - E. IRRIGATION SLEEVES, 4 EA.
- 14 LANDSCAPING, 1 JOB
 - A. SEE PLANTING PLAN AND DETAILS SHEET C9.2
 - B. TREE PROTECTION, SEE SHEET C3 SERIES
 - A. TREES, 11 EA.
 - B. TURF SOD OVER GRAVEL BED, 10,000 SF
- 15 FINAL CLEAN UP & GRADING, 1 JOB
 - A. SEE SPECIFICATIONS

① CONCRETE TRAIL OVER ROOT ZONE, SEE DETAIL 4 / C8.2A

QUANTITY NOTE:
 QUANTITIES ARE GIVEN ONLY FOR CONVENIENCE TO THE CONTRACTORS FOR CLARIFICATION OF THE CONSTRUCTION ITEMS. LANDSCAPE ARCHITECT ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE QUANTITIES. CONTRACTORS SHALL TAKE THEIR OWN QUANTITIES AS PART OF THEIR BID WORK.



SCALE: 1"=10'

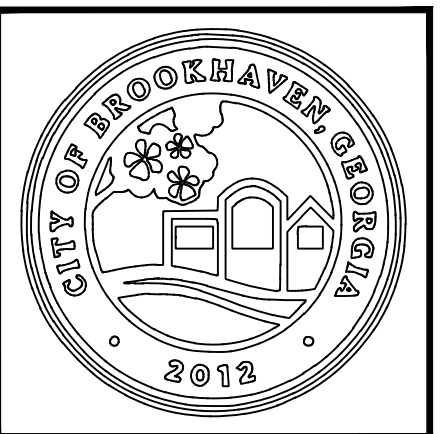
GEORGIA811
 Utilities Protection Center, Inc.
 1-800-282-7411
 Know what's below.
 Call before you dig.

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 CPL LEAD DESIGNER FIELD LOCATED THE SMALL TREES ON SITE BY VISIT

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ARCHITECTURE
 ENGINEERING
 PLANNING
 CPlTeam.com



DRAWINGS SCHEDULE

No.	Date	Description
31	04/29	Multi-use Trail as Shown - Production Review
32	05/05	UP - Community Green - City Council #1
33	05/14	UP - Irrigation - City Council #1
34	05/28	UP - Community Green - City Council #1



CITY OF BROOKHAVEN
 MURPHY Candler PARK
 1551 W. NANCY CREEK DRIVE NE
 BROOKHAVEN, GEORGIA 30319

DATE	DRAWN	CHECKED
03/03/21	GZ	MC

SCALE

SHEET TITLE

CONSTRUCTION ITEMS
 COMMUNITY GREEN

PROJECT NUMBER
 15092.00

C2.2A

DRAWING NUMBER



Murphey Candler Park- Community Green
 Mandatory Pre-Bid Meeting
 June 24, 2021 10:00 a.m.

	Name	Company Name	Phone #	email address
1	Lee Croy	Jacobs/City of Brookhaven	678-576-9846	Lee.Croy@brookhavenga.gov
2	TEID ANDERSON	TRAVIS PRUITT + ASS.	678-618-1440	TANDERSON@TRAVISPRUITT.COM
3	Melissa Guy	JHC Corporation	770-487-3258	Melissa@jhc-corp.com
4	Carl Sharp	TRISEAPS	770 880 6632	CN1@TRISEAPS.COM
5	Mark Holloway	ICAN	770-883-2103	Mholloway@ICAN.com
6	Mack Cain	CPL	678-296-9898	Mcain@cplteam.com
7	ERIC GUTH	JACOBS	509-808-1674	eric.guth@jacobs.com
8	Jeffrey Cohen	MCNA	776-331-4752	jcohen ⁸⁴³ @yahoo.com
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