

6. TPV 22-010 COM-PRJ-APP21-39803985 – Brackenridge Park Bond Project Variance Request Variance Request to mitigate for removal of significant trees in excess of the 80% tree preservation requirements and below 100% preservation of heritage trees within the Floodplain & Environmentally Sensitive Areas in place under the 2010 Tree Preservation Ordinance

**DEPARTMENT:** Development Services

**DEPARTMENT HEAD:** Michael Shannon

**COUNCIL DISTRICTS IMPCTED:** District 2

**PROJECT:** TPV 22-010 COM-PRJ-APP21-39803985 – Brackenridge Park Bond Project

**SUBJECT:** TPV 22-010 COM-PRJ-APP21-39803985 – Brackenridge Park Bond Project Variance Request

Variance Request to mitigate for removal of significant trees in excess of the 80% tree preservation requirements and below 100% preservation of heritage trees within the Floodplain & Environmentally Sensitive Areas in place under the 2010 Tree Preservation Ordinance

**SUMMARY:**

Requested by Jamaal Moreno, Project Delivery Division - Vertical Section, Public Works Department, City of San Antonio for a variance to remove trees in excess of the 80% preservation of significant tree preservation and 100% heritage tree preservation requirement within the Floodplain and Environmentally Sensitive Areas as stated under the 2010 Tree Preservation Ordinance. Staff supports the variance request.

**BACKGROUND INFORMATION:**

Council District: 2

Filing Date: January 4, 2022 Public Works Department on behalf of the Parks & Recreation Department, City of San Antonio

Applicant/Project Manager: Jamaal Moreno, Project Delivery Division, Public Works Department

Staff Coordinator: Jacob Sanchez, Assistant City Arborist, 210-207-0161 [jacob.sanchez@sanantonio.gov](mailto:jacob.sanchez@sanantonio.gov)

**ANALYSIS:**

The Development Services Department (DSD) has reviewed the information presented in Mr. Jamaal Moreno's letter dated January 19th, 2022. The Unified Development Code (UDC) – Article V, Section 35-523 (h), 100-Year Floodplain(s) and Environmentally Sensitive Areas (ESA) states that, "Significant trees shall be preserved at eighty (80) percent preservation within both the 100-year floodplains and Environmentally Sensitive Areas (ESA). Heritage trees shall be preserved at one hundred (100) percent preservation within both the 100-year floodplain and environmentally sensitive areas. Mitigation shall be prohibited in floodplains and environmentally sensitive area except when a variance is granted by the Planning Commission."

The applicant is requesting a Variance Request to mitigate for removal of significant species trees in excess of the 80% significant tree preservation and the 100% heritage tree preservation requirements within the floodplain and Environmentally Sensitive Areas (ESA) in place under the 2010 Tree Preservation Ordinance for a capital improvement project at Brackenridge Park for the Parks and Recreation Department. The proposed project focuses on the rehabilitation and reconstruction of several historically significant cultural resources. DSD staff does agree with the applicant's request to mitigate for the removal of significant species trees below the minimum 80% and heritage tree preservation below 100% for the following reasons:

1. *Existing site conditions* – The current state of some of the cultural resources in Brackenridge Park are in various states of disrepair with some sections leaning, some cracking and crumbling and other sections already completely failed and fallen including: the Lambert Beach River walls, the Lambert Beach Steps, the Brackenridge Pump House, the Upper Labor Acequia and the Upper Labor Dam. These sections of the park have become a health, safety and welfare issue and have been closed to public access.
  - a. Several of these cultural resources have trees either within them or directly adjacent to them or both, making reconstruction, rehabilitation and/or repair of those resources physically impossible without major detriment to, or removal of, the adjacent trees.
  - b. In some cases, the structural infrastructure that is proposed for restoration is intended to prevent future failures. These cultural resources cannot physically be re-constructed without the removal of adjacent trees.
  - c. Some design alternatives were considered in an attempt to lessen the impacts to the trees that are directly adjacent to the cultural resources. However, it was concluded that there was no alternative design that would accomplish this adequately, as their implementation would each require heavy equipment, major excavation, and major infrastructure to properly rebuild and rehabilitate the cultural resources. As such, the design chosen was based on other factors such as cost and ease of construction.
  - d. In addition, The Texas Historical Commission (THC) and the Office of Historic Preservation (OHP) have both weighed in on the importance of reconstructing and repairing all the cultural resources to their original condition and in their original location and configuration in order to preserve the historical significance of each particular cultural resource. For instance, in the case of the Lambert Beach walls and the Upper Labor Acequia walls, we would not be allowed to move walls forward or backward or adjust any configurations (i.e., lines, curves, angles, etc.) to avoid, or otherwise distance the walls from, any of the existing trees.
  - e. Tree removal in Floodplain & ESA
    - i. Floodplain 80% Minimum Preservation Significant
    - ii. 2,128 total significant inches, 969.5 inches preserved = 46% preservation, 733 inches mitigation Floodplain 100% Minimum Preservation Heritage
      1. 1,083 total heritage inches, 779 inches preserved = 72% preservation, 912” inches mitigation (304” @ 3:1)
    - iii. ESA 80% Minimum Preservation Significant
      1. 124 total significant inches, 86 inches preserved (17” exempt) = 69% preservation, 13 inches mitigation
    - iv. ESA 100% Minimum Preservation Heritage
      1. 136 total heritage inches, 111 inches preserved, 82% preservation, 75 inches mitigation (25”@ 3:1)
    - v. Total Mitigation: 1,633 inches (ESA 13”+75”) (FP 733”+912”) (less 100” excess upland)
2. *Tree mitigation*– The total mitigation required for the removal of significant and heritage trees in the floodplain and ESA is 1,633 inches. The owner proposes a two-fold approach to planting trees to meet mitigation requirements. During the construction phase of the capital improvement project – 219 trees totaling 792 inches of mitigation will be planted. The remaining mitigation balance of 840 inches will be planted within Brackenridge Park but outside of the capital project. The most opportune areas to plant trees will be the St. Mary’s Street corridor within the park boundary, the wilderness area along Avenue B, and the San Antonio River corridor south of Tuleta Dr. The proposed planting of these mitigation trees outside of the capital improvement

project will be throughout the 2023 and winter/spring of 2024. Trees proposed to be planted are native small, medium, and large species trees. The planted trees will range in sizes from 2-inch to 6-inch caliper trees and will provide additional species diversity.

DSD staff supports the applicant's request to fall below the minimum 80% tree preservation of large significant species within the ESA based on the conditions of the site, design constraints, and the applicant is meeting mitigation requirements by planting. The proposed Variance Request meets the intent and spirit of the Tree Ordinance therefore, staff recommends approval.

**ISSUE:**

The applicants project proposes removal of significant and heritage trees in the floodplain and ESA and does not meet the required minimum preservation of 80% for Large Significant trees and 100% Heritage trees within the Floodplain and Environmentally Sensitive Areas.

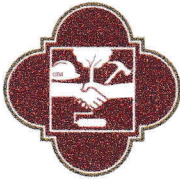
**ALTERNATIVES:**

Planning Commission may decide to deny the variance, which means the applicant will have to comply with the Tree Preservation Ordinance.

**RECOMMENDATION:**

DSD staff recommends approval of the proposed variance.





# CITY OF SAN ANTONIO

## DEVELOPMENT SERVICES DEPARTMENT

1901 S. Alamo, San Antonio, TX 78204

### ADMINISTRATIVE EXCEPTION/VARIANCE REQUEST APPLICATION

Project Name:	Brackenridge Park Tree Preservation
A/P # /PPR # /Plat #	COM-PRJ-APP21-39803985
Date:	January 19, 2022
Code Issue:	Tree preservation minimums
Code Sections:	Sec. 25-523, f2A and Table 523-1A

Submitted By:	<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Owners Agent * (Requires notarized Letter of Agent)
Owners Name:	Jamaal Moreno	
Company:	City of San Antonio - Public Works Department	
Address:	P.O. Box 839966	Zip Code: 78283
Tel #:	210-207-6924	Fax# E-Mail: jamaal.moreno@sanantonio.gov
Consultant:	Kinder Baumgardner	
Company:	SWA Group	
Address:	The Jones on Main, 712 Main street, Houston, TX	Zip Code: 77002
Tel #:	713-868-1676	Fax# E-Mail: kbaumgardner@swagroup.com
Signature:		

#### Additional Information – Subdivision Plat Variances & Time Extensions

- ☐ Time Extension ☐ Sidewalk ☐ Floodplain Permit ☐ Completeness Appeal  
☒ Other Tree permit
- City Council District 2 Ferguson Map Grid \_\_\_\_\_ Zoning District \_\_\_\_\_
- San Antonio City Limits ☒ Yes ☐ No
- Edwards Aquifer Recharge Zone? ☐ Yes ☒ No
- Previous/existing landfill? ☐ Yes ☒ No
- Parkland Greenbelts or open space? Floodplain? ☒ Yes ☐ No



January 19, 2022

Variance Request Review<sup>1</sup>  
City of San Antonio  
Development Services  
Department1901 S. Alamo  
San Antonio, TX 78204

Re: Brackenridge Park Tree Preservation Project  
COM-PRJ-APP21-39803985  
Sec. 35-523 (h) & Table 523-1B, Preservation  
percentage requirements within the 100-yr  
floodplain.

Dear Development Services,

The City of San Antonio Public Works department is currently managing a capital improvement project at Brackenridge Park for the Parks and Recreation Department that focuses on the rehabilitation and reconstruction of several historically significant cultural resources. SWA Group is the design consultant on the project. As project manager for the Public Works Department, I am submitting this Variance Request to the Development Services Department for review and approval.

Our main area of focus for the scope of work on this project is the northern section of Brackenridge Park between Hildebrand Ave. and the San Antonio River, located in Council District 2. The project will include the structural and aesthetic rehabilitation of several cultural resources, an event plaza, a cultural trail, an Upper Labor Dam overlook, underground conversion of electrical services, new lighting, furniture, interpretive signage, pedestrian bridges, landscaping, trees and irrigation.

The project team is requesting a variance regarding section 35-523, (h) and Table 523-1B of the Unified Development Code (UDC) that states the preservation percentage requirements for commercial developments within the 100-yr floodplain. Our understanding of that section is that at least 80% of significant trees and 100% of Heritage trees must be preserved within the 100-yr floodplain. Our current improvement plan for Brackenridge Park project does not meet those percentage requirements.

The cultural resources within this area of the park that we are proposing to address in this capital project include the Lambert Beach River walls, the Lambert Beach Steps, the Brackenridge Pump House, the Upper Labor Acequia and the Upper Labor Dam. These cultural resources are all contributing features to Brackenridge Park, which is on the National Register of Historic Places and is a State Antiquities Landmark.



This current state of some of these cultural resources has led to them being closed off from public access and have become a health, safety and welfare issue that needs to be addressed. Different sections of these cultural resources are in multiple states of disrepair, with some sections leaning, some cracking and crumbling, and some already completely failed and fallen.

Several of these cultural resources have trees either within them or directly adjacent to them or both, making reconstruction, rehabilitation and/or repair of those resources physically impossible without major detriment to, or removal of, the adjacent trees.

To date, there have been no historic records or photographs showing that the trees proposed to be removed were part of the construction plans for any of the cultural resources. However, there are a few concave and convex areas of the WPA era river walls that suggest that the walls may have been purposely constructed around existing or proposed trees at the time. Currently, no trees exist at these locations. It would stand to reason that if this were indeed the case, that the straight portions of the walls had no trees existing or proposed in proximity. These straight sections of river wall constitute the bulk of the tree removal areas, including heritage specimens, and it could be concluded that these trees to be removed were planted sometime after construction of the river walls, possibly by man but more plausibly by nature.

In some cases, the structural infrastructure that is being proposed to prevent future failures and disrepair of these cultural resources cannot physically be constructed without the removal of adjacent trees. In other cases, some trees are negatively impacting the cultural resource and if allowed to continue to grow, would eventually severely damage or destroy said resource. In both cases, it's important to the rehabilitation and the sustainability of the park's cultural resources to remove those trees.

Some design alternatives were considered to attempt to lessen the impact to the trees that were directly adjacent to the cultural resources. However, it was concluded that there was no alternative design that would accomplish this adequately, as their implementation would each require heavy equipment, major excavation, and major infrastructure to adequately rebuild and rehabilitate the cultural resources. As such, the design chosen was based on other factors such as cost and ease of construction.

In addition, it was considered by the design and owner teams to change the design of the walls and build them so that their footprint was further away from some of the trees in question, thus providing space enough to not have to remove trees. However, the Texas Historical Commission (THC) and the Office of Historic Preservation (OHP) have both weighed in on the importance of reconstructing and repairing all the cultural resources to their original condition and **in their original location and configuration** to preserve the historical significance of each cultural resource. For instance, in the case of the Lambert Beach river walls and the Upper Labor Acequia walls, we would not be allowed to move walls forward or backward or adjust any configurations (i.e., lines, curves, angles, etc.) to avoid, or otherwise distance the walls from, any of the existing trees.

Because of this requirement for the preservation of the historically significant cultural resources by the THC, our only option for addressing these multiple sections of river walls and Acequia walls would be to remove those trees that would otherwise not allow us to reconstruct and/or repair the walls in proper fashion and in the manner consistent with the THC's requirements for the project.

Not addressing these resources at all, specifically where trees are directly adjacent, would allow the degradation and structural failure of those cultural resources to continue, exacerbating the current problem and posing a threat to the health, safety, and welfare of the public. In addition, allowing walls to fail where they are retaining the adjacent trees and their root systems would also eventually cause those trees to fail as well.

In conclusion, to adequately rehabilitate and repair all the cultural resources within our capital project's scope of work as proposed, and in accordance with the THC and the OHP, several trees must be removed from the project site equating to less than 80% preservation for significant trees and less than 100% preservation for Heritage trees.

## Preservation Calculations

	Floodplain		Floodplain Buffer (ESA)		Upland		
	Significant	Heritage	Significant	Heritage	Significant	Heritage	Totals
Total caliper inches	2128	1083	124	136	195	135	3801
Total inches preserved	969.5	779	86	111	178	135	2258.5
Total inches removed	1158.5	304	38	25	17	0	1542.5
Total mitigation	733	912	13	75	-100	0	1633

### Mitigation:

Total proposed inches to be planted during construction phase of the capital improvement project – 792”

Total number of trees to be planted during construction phase of the capital improvement project – 220

Remaining mitigation balance to be planted elsewhere within Brackenridge Park – 841”

The construction project that rebuilds and rehabilitates the park's cultural resources and plants a portion of the mitigation trees will most likely start construction in early 2023 and be complete sometime in the Spring or Summer of 2024. It's likely that these 220 trees will be planted in spring 2024 to coincide with the latter stages of construction.

As for the balance to be planted elsewhere within Brackenridge Park but outside of the capital project, the most opportune areas to plant would be the St. Mary's Street corridor within the park boundary, the wilderness area along Avenue B, and the San Antonio River corridor south of Tuleta Dr. Another possible area for a smaller grouping of tree plantings would be the Brackenridge Park main entrance off Broadway, across from Mahncke park. The current plan is to initiate these plantings throughout fall of 2023 and winter/spring of 2024 as a supplemental and concurrent phase of the capital improvement project.

Should you have any questions or require any additional information, please reach out to my office to discuss via email at [jamaal.moreno@sanantonio.gov](mailto:jamaal.moreno@sanantonio.gov) or via phone at 210-207-6924.

Respectfully,



Jamaal Moreno, PLA  
Project Manager  
Project Delivery Division, Vertical Section  
Public Works Department  
City of San Antonio



# BRACKENRIDGE PARK

## 2017 BOND PROGRAM IMPROVEMENTS

A PROJECT OF  
THE CITY OF SAN ANTONIO  
114 W. Commerce Street  
11th Floor San Antonio, Texas 78205  
ISSUE FOR TREE REMOVAL AND MITIGATION PERMIT  
20 JANUARY 2022

Landscape Architect

**swa**

712 MAIN STREET  
HOUSTON, TEXAS  
77002-3342  
United States  
www.swagroup.com  
+1.713.868.1876 o

### Consultants

**WORKSHOP**  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

**OVERLAND**  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

**SEVENTH GENERATION DESIGN**  
833 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

**SPARKS ENGINEERING, INC.**  
833 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

**CNO ENGINEERING**  
1917 N. NEW BRAUNFELS AVE., SUITE 201  
SAN ANTONIO TX, 78208



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### Revision

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### Date

20 JANUARY 2022

### Plan

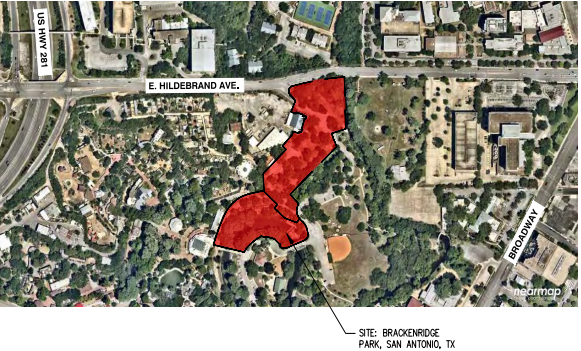
ISSUE FOR TREE REMOVAL AND MITIGATION PERMIT

### Job Number

CN05701

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### VICINITY MAP:



# BRACKENRIDGE PARK

SAN ANTONIO, TX

**Client**

CITY OF SAN ANTONIO - PUBLIC WORKS DEPARTMENT (TCP)  
PO BOX 839966, SAN ANTONIO TX 78263-3966

**Landscape Architect**

**swa**

712 Main Street,  
6th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1 713 888 1876

**LOCAL LANDSCAPE**

**WORKSHOP**  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

**ARCHITECT**

**OVERLAND**  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

**HISTORICAL ARCHITECT**

**SEVENTH GENERATION DESIGN**  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

**STRUCTURAL ENGINEER**

**SPARKS ENGINEERING, INC.**  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

**CIVIL ENGINEER**

**INTELLIGENT ENGINEERING SERVICES**  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

**MEP**

**CNG ENGINEERING**  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208



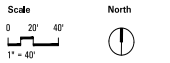
**Revisions**

1
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**Date**  
20 JANUARY 2022

**Phase**  
TREE REMOVAL AND MITIGATION PERMIT

**Job Number**  
CNOS701

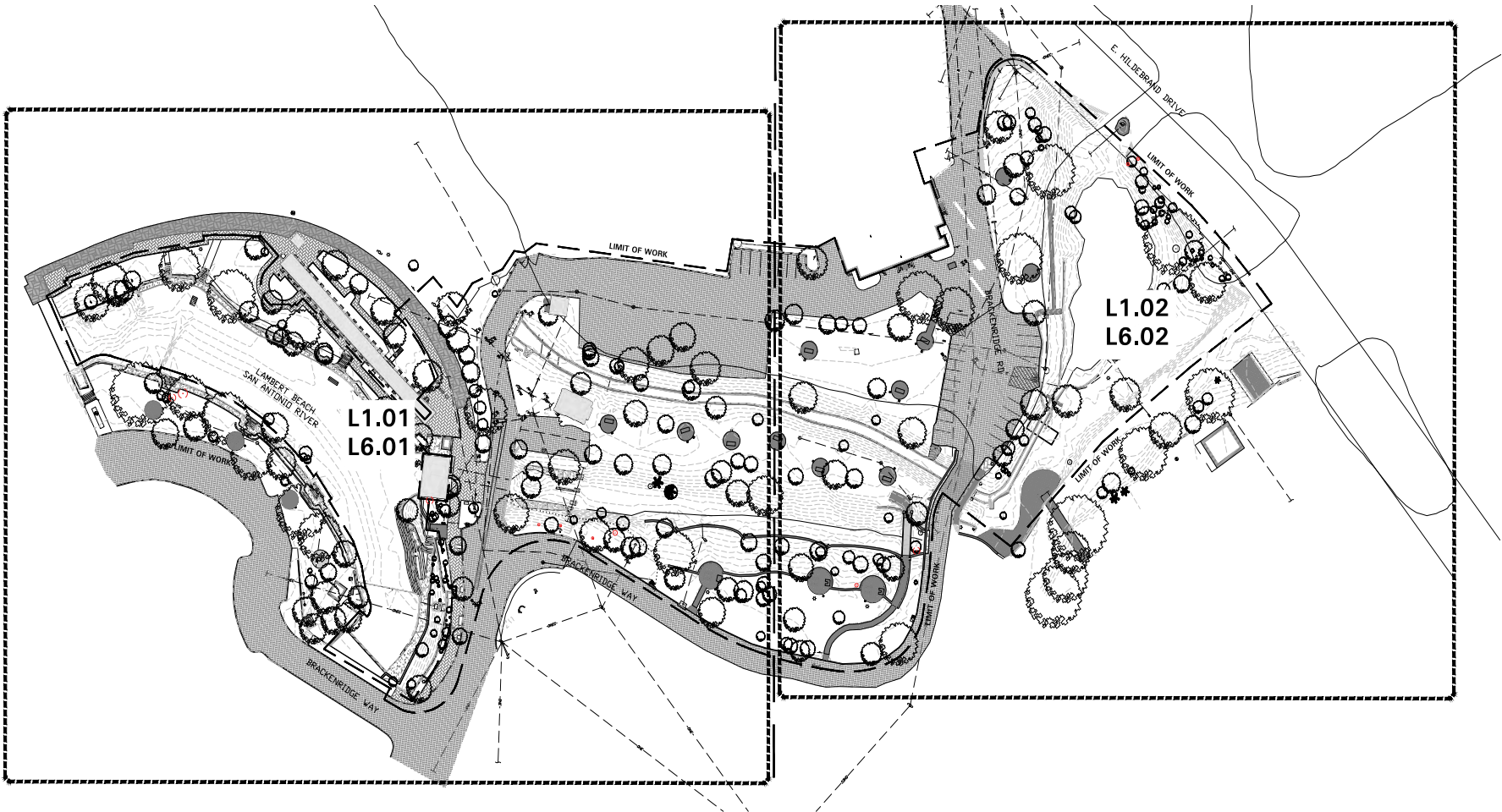


**Drawing Title**

TREE MITIGATION KEY MAP

**Drawing Number**

**L0.01**



### TREE REMOVAL NOTES:

1. \*TREES TO BE REMOVED UNDER HISTORIAN OVERSIGHT\* PER LEGEND WILL REQUIRE A HISTORIAN (PROVIDED BY PWD EMD) TO BE PRESENT BEFORE REMOVAL ACTIVITIES CAN BEGIN.
2. DO NOT STAGE EQUIPMENT ON OR NEAR HISTORIC RIVER WALLS OR HISTORIC STRUCTURES. EXACT DISTANCE WILL DEPEND ON CONDITION OF HISTORIC STRUCTURE. SUPPORT WILL BE PROVIDED BY THE MONITOR ON SITE.
3. IF HEAVY EQUIPMENT (SKID LOADER AND UP) IS TO BE USED NEAR A HISTORIC STRUCTURE, USE EDM APPROVED METHODS OF PROTECTION. CONTACT THE PWD EMD ARCHITECTURAL HISTORIAN (210-207-1454) FOR GUIDANCE.
4. NO MACHINERY SHOULD BE DRIVEN ON TOP OF THE UPPER LABOR DAM.
5. ALL TREES DESIGNATED FOR REMOVAL ARE TO BE REMOVED AT 3" ABOVE GRADE.
6. NO SOIL IS TO BE DISTURBED AS PART OF TREE REMOVAL.
7. ALL TREES TO BE REMOVED SHALL BE MARKED PER TECHNICAL SPECIFICATIONS AND REMOVED UPON REVIEW AND APPROVAL BY OWNER AND LANDSCAPE ARCHITECT.
8. ALL TREES IN AREAS NOT MARKED FOR REMOVAL SHALL REMAIN UNLESS OTHERWISE NOTED. ANY TREE THAT DOES NOT APPEAR ON THE TREE SURVEY SHALL BE VERIFIED WITH THE OWNER AND LANDSCAPE ARCHITECT TO DETERMINE STATUS OF REMOVAL.
9. ALL TREES REMOVED EXCEPT THOSE DESIGNATED BY OWNER SHALL BE MULCHED ON SITE INCLUDING ALL LIMB/BRANCH DEBRIS AND TRUNK. MULCH GRIND SHALL BE STORED ON SITE UNLESS OTHERWISE NOTED. REFER TO SPECIFICATIONS FOR REMOVAL AND STORAGE INFORMATION.

### EXISTING TREE MAINTENANCE NOTES:

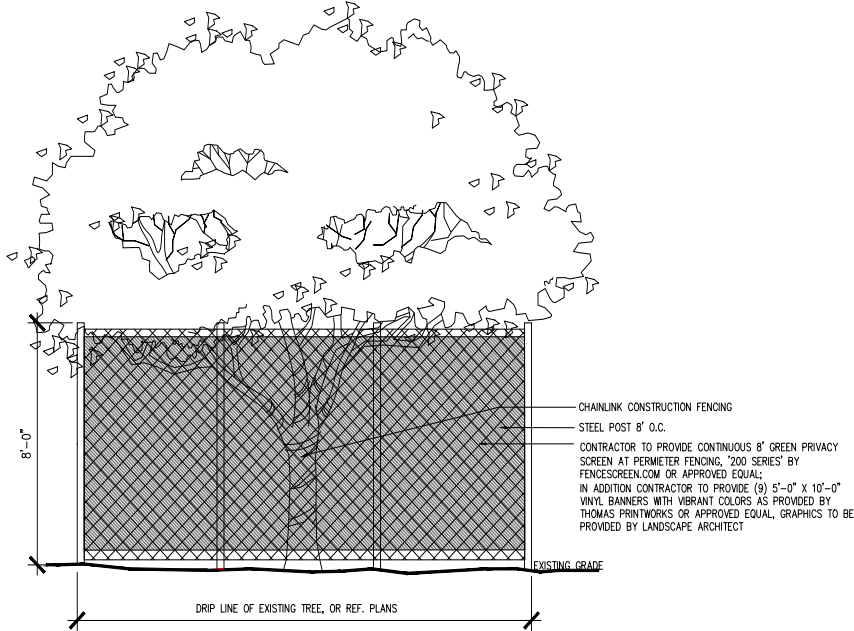
1. TREE MAINTENANCE SHALL OCCUR AS NOTED FOR ALL EXISTING TREES AS REQUIRED PER TECHNICAL SPECIFICATIONS ISSUED. SUCH OPERATIONS MAY INCLUDE TRIMMING, PRUNING, FERTILIZING, WATERING, ROOT PRUNING AND/OR FOLIAGE WASHING AS REQUIRED BY SITE ARBORIST OR LANDSCAPE ARCHITECT.
2. TREE MAINTENANCE OPERATIONS SHALL BE DEEMED HIGH PRIORITY AND SHALL OCCUR WHEN SUCH NOTED OPERATIONS ARE NOTED TO OCCUR AND SHALL OCCUR AS NOTED BY ARBORIST.

### GENERAL TREE PROTECTION NOTES:

1. ALL TREES INDICATED ON THE TREE PRESERVATION PLANS TO BE PROTECTED SHALL BE PROTECTED WITH TEMPORARY FENCING THROUGHOUT CONSTRUCTION.
2. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION AND/OR SITE PREPARATION WORK (CLEARING OR GRUBBING).
3. NO SOIL IS TO BE DISTURBED BY THIS SCOPE OF WORK.
4. FENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES. FENCES SHALL BE LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIP LINE) AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT. FENCES MAY BE MOVED OR REMOVED TO ENABLE THE PROGRESS OF CONSTRUCTION ONLY AS APPROVED BY THE LANDSCAPE ARCHITECT.
5. WHERE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8' (OR TO THE LIMITS OF THE LOWER BRANCHING) AS INDICATED ON TREE PRESERVATION PLANS.
6. COVER THE ROOT ZONE AREA WITH 4" OF HARDWOOD MULCH, UNDER DIRECTION OF THE LANDSCAPE ARCHITECT, WHERE ROOT ZONES WITHIN DRIP LINES ARE UNPROTECTED BY FENCING.
7. ANY ROOT SEVERED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH SPECIFIED TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH SPECIFIED ORGANIC MATERIAL. THE OWNER AND LANDSCAPE ARCHITECT MUST BE NOTIFIED IMMEDIATELY OF ANY DAMAGE TO PRESERVED TREES.
8. TREES HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE WATERED THOROUGHLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER AS DIRECTED BY THE LANDSCAPE ARCHITECT. TREE CROWNS SHALL BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

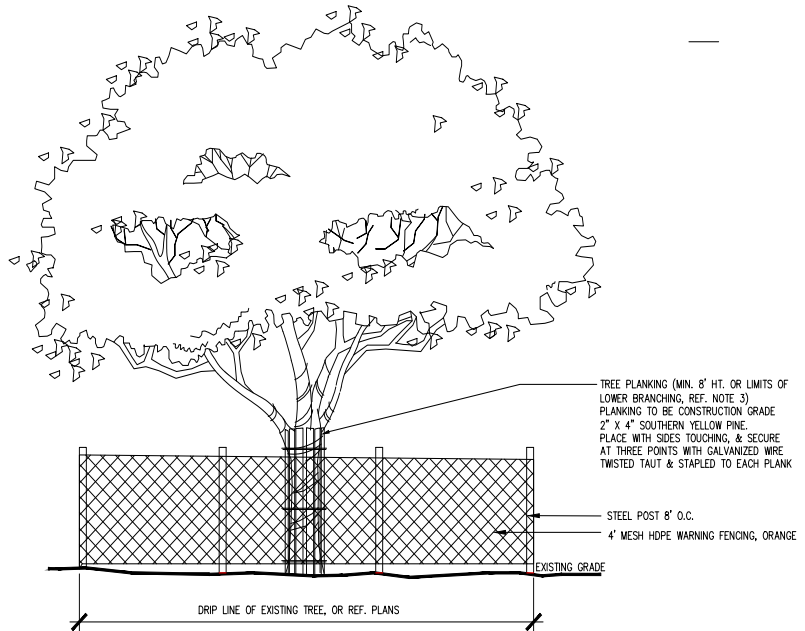
### GENERAL TREE PROTECTION NOTES (CONT.):

9. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN A 3" LAYER SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL OR MULCH IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
10. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS BY A RECOGNIZED ARBORIST.
11. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES).
12. COVER SEVERED ROOTS AND TREE SIDE OF TRENCH WITH 8 MIL BLACK VISQUENE TO FULL DEPTH OF TRENCH AND 6" OVER TOP. STAPLE VISQUENE IN PLACE, BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL, TO PROTECT ROOT ENDS FROM CONCRETE AND LIME.
13. CORE AERATE AND DEEP ROOT FERTILIZE TREES BY PROBE AND WATER INJECTION OF DAVEY ARBOR GREEN FERTILIZER, REFER TO MANUFACTURER'S MAXIMUM RECOMMENDED RATES PER TREE CALIPER INCHES. INJECT 18"-24" DEEP 9-0" O.C. THROUGHOUT DRIP-LINE OF TREE.
14. CONTRACTOR SHALL MODIFY EXHAUST PIPES ON CONSTRUCTION EQUIPMENT AS NEEDED TO INSURE THAT TREE CROWNS ARE NOT DAMAGED FROM EXHAUST HEAT FROM VERTICAL EXHAUST PIPES ON TOP OF CONSTRUCTION EQUIPMENT.
15. EQUIPMENT MUST NOT TOUCH UNDERSIDE OF TREE CROWNS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TREE WORK/REPAIR TO ANY DAMAGE TO EXISTING TREES DURING THE CONTRACT PERIOD. DAMAGE TO ANY EXISTING TREES SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL SUBMIT TO OWNER'S REPRESENTATIVE A WRITTEN PROGRAM OF CORRECTIVE PRUNING AND TREE CARE TO REPAIR DAMAGE WITH THE NAME OF A QUALIFIED URBAN FORESTER OR ARBORIST FOR OWNER'S APPROVAL.
17. PLANS ARE DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF REQUIRED TREE FENCING LIMITS.
18. ALL EXISTING TREES, IN DESIGNATED PROTECTED AREAS, MUST BE PRUNED TO AVOID DAMAGE BY EQUIPMENT DURING CONSTRUCTION OPERATIONS (REF. SPEC SECTION 02112).
19. THESE NOTES ARE SUPPLEMENTARY TO SPECIFICATION SECTION 01503B.



### 02 PERIMETER FENCING

1 1/2" = 1'-0"



### 01 TREE FENCE

1 1/2" = 1'-0"

## BRACKENRIDGE PARK

SAN ANTONIO, TX

### Client

CITY OF SAN ANTONIO - PUBLIC WORKS DEPARTMENT (TC)  
PO BOX 839966, SAN ANTONIO TX 78263-3966

### Landscape Architect

## swa

712 Main Street,  
8th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1 713 888 1876 o

### LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

### ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

### HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

### STRUCTURAL ENGINEER

SPARKS ENGINEERING, INC.,  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

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INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

### MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

### Stamp



### Revisions

- 1
- 2
- 3
- 4
- 5

### Date

20 JANUARY 2022

### Phase

TREE REMOVAL AND MITIGATION PERMIT

### Job Number

CNOS701

### Scale

North

### Drawing Title

TREE PROTECTION AND  
DEMOLITION NOTES

### Drawing Number

## L0.02

SAN ANTONIO, TX

**CITY OF SAN ANTONIO - PUBLIC  
WORKS DEPARTMENT (TCI)**  
PO BOX 839966, SAN ANTONIO TX  
78283-3966

swa

712 Main Street,  
6th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1.713.868.1676

**WORKSHOP**  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

**OVERLAND**  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

**SEVENTH GENERATION DESIGN**  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

**SPARKS ENGINEERING, INC.**  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

**INTELLIGENT ENGINEERING SERVICES**  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

**CNG ENGINEERING**  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

- 1
- 2
- 3
- 4
- 5

Phase  
TREE REMOVAL AND MITIGATION PERMIT  
Job Number  
CNOS701

### COSA TREE MITIGATION CALCULATIONS

## L0.03

TOTAL CALIPER IN NEW TREES

## REQUIRED MITIGATION

**Tree Canopy Cover (Floodplain Excluded)**



## Floodplain Tree Preservation Inventory

SMALL SPECIES TREES**				LARGE SPECIES TREES*				PROTECTED CAL INCHES EXEMPT	COMMENTS
TREE #	TAG #	SPECIES	DBH	SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1-1)		
005	2276	Willow	11						
007	2262	Willow	11						
008	2233	Oak	8	8					
009	2232	Chinaberry	7						
000	2224	Hackberry	12						
001	2280	Willow	15			13			
002	2221	Willow	25			25			
003	2258	Ash	8	8					
004	2253	Oak	54			54			
005	2222	TX Mountain Laurel	3						
005	5135 (25/35)	Oak	18			18			
007	2216	TX Mountain Laurel	3	3					
008	2270	TX Mountain Laurel	3	3					
009	3034	Hackberry	4	4					
090	2254	elm	34			34			
091	2236	Oak	15			15			
092	2220	Cedar Elm	12			12			
093	2242	Willow	12			12			
094	2256	Willow	7			7			
095	2227	Willow	16			16			
095	2257	Willow	6			6			Previously Removed
097	2284	Willow	11			11			Previously Removed
098	2274	Ash	11			11			Previously Removed
099	2225	Willow	25			25			Previously Removed
040	7125	Willow	28						
040	2217	Cedar Elm	9			9			
044	2271	Cedar Elm	12			12			
045	2206	Cedar Elm	18			18			
045	2363	Crape Myrtle	9			9			
047	9751	Bald Cypress	6			6			
048	9700	Willow	13					13	Not Counted, Outside LOW
049	2249	Pecan	27					27	Previously Removed
058	2205	Oak	26			26			
060	2264	Cedar Elm	26			26			
061	3403	Black Oak	8			8			Twin (6-4)
063	2285	Anaqua	28			28			
065	2111	Pecan	29			29			
067	2200	Cedar Elm	14			14			
068	2350	Cedar Elm	10			10			
069	2177	Anaqua	17			17			Multi-Trunk Tree
070	2122	Cedar Elm	9			9			
071	2194	Cedar Elm	13			13			
072	3027	Oak	12			12			Multi-trunk Tree
079	3028	Oak	12			12			Multi-trunk Tree
074	2138	Cedar Elm	15			15			
075	2209	Oak	18			18			
076	10512	Hackberry	5	5					
077	2304 (10429)	Crape Myrtle	17			17			
078	2157	Crape Myrtle	22			22			Multi-trunk Tree
079	10430	Crape Myrtle	14			14			Multi-trunk Tree
080	2179	Crape Myrtle	17			17			Multi-trunk Tree
081	2369	Crape Myrtle	11			11			Multi-trunk Tree
082	2349	Crape Myrtle	11			11			
082	2303	Oak	39			39			
084	2421	Crape Myrtle	10			10			Multi-trunk Tree
085	2323	Crape Myrtle	15			15			Multi-trunk Tree
085	6000 (2351)	Bald Cypress	27			27			Outside LOW, Not Counted
087	6002 (2378)	Bald Cypress	21			21			Outside LOW, Not Counted
088	6003 (500)	Oak	23			23			Outside LOW, Not Counted
089	6003 (2382)	Bald Cypress	17			17			Outside LOW, Not Counted
090	6003 (602)	Oak	26			26			Outside LOW, Not Counted
091	3029	Crape Myrtle	9			9			Outside LOW, Not Counted
092	2229	Oak	7			7			
093	2234	Bald Cypress	19			19			Dead, Removed, Not Counted
094	2130	Chinese Tallow	12			12			Underirable Species, Not Counted
095	2334	Oak	32			32			
096	2338	Oak	34			34			
097	2330	Oak	22			22			
098	2354	Oak	18			18			
099	2335	Oak	16			16			
100	6006 (2306)	Oak	27			27			
101	2374	Oak	44			44			
102	2319	Cedar Elm	18			18			
103	2328	Bald Cypress	20			20			Outside LOW, Not Counted
104	6007 (602)	Pecan	8			8			
105	2306	Oak	33			33			
106	2358	Cypress	23			23			
107	2364	Pecan	18			18			
108	2382	Pecan	22			22			
109	2325	Crape Myrtle	10			10			Multi-Trunk
111	3005	Vaupon	3			3			
112	2372	Crape Myrtle	16			16			Multi-Trunk
113	2375	Pecan	20			20			
114	2374	Pecan	14			14			
115	2365	Cedar Elm	23			23			
116	2369	Pecan	22			22			
117	2314	Pecan	24			24			Outside LOW, Not Counted
118	2387	Crape Myrtle	27			27			Outside LOW, Not Counted
119	2311	Crape Myrtle	15			15			Multi-Trunk
120	2344	Crape Myrtle	23			23			Dead, Removed, Not Counted
121	2371	Crape Myrtle	26			26			Dead, Removed, Not Counted
122	2383	Pecan	23			23			
123	2342	Cypress	40			40			
124	2388	Bald Cypress	46			46			
125	2343	Crape Myrtle	27			27			Multi-trunk
126	2398	Bald Cypress	38			38			
127	2378	Crape Myrtle	9			9			
128	2336	Crape Myrtle	22			22			Dead, Removed, Not Counted
129	2326	Bald Cypress	48			48			
130	2337	Bald Cypress	37			37			
131	2315	Hackberry	12	12					
132	2400	Crape Myrtle	17			17			Multi-trunk
133	2300	Bald Cypress	53			53			Multi-trunk
134	6008 (2376)	Oak	16			16			
135	6009 (2307)	Oak	15			15			
136	6010 (609)	Oak	20			20			
137	6011 (2305)	Cedar Elm	17			17			
138	6012 (2309)	Cedar Elm	16			16			
139	2385	Pecan	26			26			
140	2399	Pecan	24			24			
141	2354	Bald Cypress	27			27			
142	2316	Pecan	20			20			
143	2318	Cedar Elm	12			12			
144	2373	elm's Necklace	8			8			
145	2126	Oak	32			32			
146	2134	Hulsache	13			13			
147	2427 (2246)	Pecan	28			28			
148	3030	Oak	7			7			
149	2317	Ash	9			9			
150	2405	Pecan	12			12			
151	2118	Oak	20			20			
152	2124	Pecan	18			18			
153	2175	Oak	16			16			
154	2079 (2308)	Pecan	16			16			
155	2307	Oak	17			17			
156	1001	Cedar Elm	19			19			
157	1002	Cedar Elm	20			20			
158	1003	Cedar Elm	20			20			
159	2288	Cedar Elm	11			11			
160	2289	Cedar Elm	18			18			

				SMALL SPECIES TREES**		LARGE SPECIES TREES*								
TREE #	TAG #	SPECIES	DBH	SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1-1)	SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1-1)	HERITAGE REMOVED (1-3)	PROTECTED CAL INCHES EXEMPT	COMMENTS
161	1008	Cedar Elm	13					13						
162	1009	Cedar Elm	13					13						
163	1007	Cedar Elm	9					9						
164	1006	Cedar Elm	12						12					
165	1010	Cedar Elm	8					8						
166	1011	Cedar Elm	20					20						
167	1012	Cedar Elm	11					11						
168	1013	Cedar Elm	13					13						
169	1014	Cedar Elm	18					18						
170	1015	Cedar Elm	14					14						
171	1016	Oak	11					11						
172	1017	Oak	19					19						
173	1018	Pecan	36					36						
174	2245	Cedar Elm	14					14						
175	2311 (48)	Pecan	15						15					
176	2304 (48)	Cedar Elm	14							14				
177	2305	Cedar Elm	23					23						
178	2312 (47)	Ligustrum	16										15	Undesirable Species, Removed
179	2313	Ligustrum	9										9	Undesirable Species, Removed
180	1401	Chinaberry	7										7	Undesirable Species, Removed
181	2314 (48)	Ligustrum	11										11	Undesirable Species, Removed
182	2315 (49)	Pecan	14							14				
183	2316 (50)	Ligustrum	10										10	Undesirable Species, Removed
184	2317	Pecan	13					13						
185	2318 (51)	Oak	21					21						
186	186	Pecan	20					20						
187	3402	Anacua	8					8						
188	2294 (2201)	Oak	16						16					
189	2295 (2677)	Oak	20										24	
190	2198	Cedar Elm	9											
191	2206	Cedar Elm	14						9					
192	2126	Oak	10									33		
193	2294 (2208)	Oak	22											
194	2299 (2205)	Oak	19					19						
195	2296 (190)	Oak	13					13						
196	2297 (2295)	Oak	19					19						
197	2298 (190)	Oak	15					15						
198	2211	Cedar Elm	10					10						
199	2199	Oak	19							19				
200	2119	Oak	15					15						
201	2298	Oak	18					18						
202	2193	Palm	20					20						
203	2120	Palm	18					18						
204	2207	Box Elder	12					12						
205	2109	Palm	22					22						
206	2309 (2102)	Oak	17					17						
207	2303	Red Oak	22					22						
208	2402 (2002)	Oak	16											
209	199	Pecan	15						19					
210	2108	Pecan	29							29				
211	2144	Pecan	16							16				
212	2123	Oak	18							16				
213	2294	Pecan	18							18				
214	1402	Box Elder	10					10						
215	2190	Crope Myrtle	19					19						Multi 6-4-2-2; Outside Low
217	3019	Oak	5					5						
218	3030	Oak	3					3						
219	3001	Oak	4					4						
220	3000	Oak	4					4						
221	3056	Box Elder	5					5						
222	3015	Box Elder	5					5						
223	3011	Ligustrum	6					6					6	Undesirable Species, Removed
224	3017	Hackberry	4	4										
225	3018	Hackberry	4	4										
226	3020	Red Willow	8							8				
227	3008	Gulfen Rain-tree	5					5						
228	3007	Hackberry	5	5										
229	3005	Red Oak	5					5						
230	3006	Hackberry	9	9										
231	3009	Ligustrum	6											
232	3003	Oak	3					3						Undesirable Species, Removed
233	3004	Anacua	3					3						
234	3002	Red Oak	6					6						
235	3027	Anacua	8											
236	10420	Oak	6							8				Multi Trunk
237	10425	Hulachoe	5	5						6				Cluster
238	10407	Yucca Holly	3							5				
239	10424	Mesquite	2		2									
240	10421	Crope Myrtle	3						3					
241	10406	Yucca Holly	2											
242	10405	Elm	1							1				
243	10404	Elm	4							4				
244	10403	Hackberry	2		2									
245	10402	Hackberry	4		4									
246	10401	Elm	2							2				
247	10423	Cypress	3		3									
248	10422	Cypress	3		3									
249	10418	Chinaberry	4										4	Undesirable Species, Removed
250	10420	Oak	4							4				
251	10411	Chinaberry	2										2	Undesirable Species, Removed
252	10412	Chinaberry	4										4	Undesirable Species, Removed
253	10413	Pecan	4						4					CLUSTER
254	10400	Yucca Holly	5						5					
255	3052	Crope Myrtle	4						4					
256	3002	Crope Myrtle	5						5					
257	3024	Crope Myrtle	4							4				
258	10432	Pecan	28										28	Outside LOW, Not Counted
259	3113	Pecan	23						23					Previously Removed
260	2664	Pecan	19						19					Previously Removed
261	2312	Crope Myrtle	12						12					Previously Removed
262	2395	Crope Myrtle	4						4					Previously Removed
263	2395	Crope Myrtle	4						4					Previously Removed
264	2395	Crope Myrtle	8						8					Previously Removed
265	2359	Crope Myrtle	8						8					Previously Removed
266	2408	Mesquite	4						4					
267	10409	Buckeye	4											
268	10410	Mesquite	4.5		4.5									
269	10411	Buckeye	2							2				
270	10412	Hackberry	4			4								Trunk Cluster
271	10413	Hackberry	8			8								Cluster
272	10414	Hackberry	3			3								
273	2335	Crope Myrtle	6						6					
274	2330	Crope Myrtle	8										8	Dead, Not Counted
275	3028	Yucca Holly	2						2					
276	NO TAG	Buckeye	2						2					
277	NO TAG	Buckeye	2						2					
278	NO TAG	Chinaberry	4										4	Undesirable Species, Removed
279	NO TAG	Yucca Holly	2					2						
280	NO TAG	Anacua	2.5					2.5						
281	NO TAG	Hackberry	3	3										
282	NO TAG	Willow	6						4					
283	NO TAG	Paper Mulberry	6										6	Undesirable Species, Removed
284	NO TAG	Hackberry	2	2										
285	NO TAG	Hackberry	2	2										
286	3012	Hackberry	6	6										
287	NO TAG	Tree of Heaven	2										2	Undesirable Species, removed
288	NO TAG	Tree of Heaven	2										2	Undesirable Species, removed
289	NO TAG	Crope Myrtle	4											
TOTALS			3090	83	62.5	0	0	888.5	1096	779	304	0	496	

# BRACKENRIDGE PARK

SAN ANTONIO, TX

Client

CITY OF SAN ANTONIO - PUBLIC WORKS DEPARTMENT (TCJ)  
PO BOX 839966, SAN ANTONIO TX 78263-3966

Landscape Architect

# swa

712 Main Street,  
8th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1 713 888-1876 x

LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

STRUCTURAL ENGINEER

SPARIS ENGINEERING, INC.  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

CIVIL ENGINEER

INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

Stamp



Revisions

- 1
- 2
- 3
- 4
- 5

Date

20 JANUARY 2022

Phase

TREE REMOVAL AND MITIGATION PERMIT

Job Number

CNOS701

Scale

North

Drawing Title

TREE INVENTORY

Drawing Number

# L0.05

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CITY OF SAN ANTONIO - UDC-V-9-20-525

## Upland Tree Preservation Inventory

TREE #	TAG #	SPECIES	DBH	SMALL SPECIES TREES**				LARGE SPECIES TREES*					PROTECTED CAL INCHES EXEMPT	COMMENTS
				SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1:1)	SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1:1)	HERITAGE REMOVED (1:1)		
003	2248	Cedar Elm	17											
006	2243	Cedar Elm	20					20	17					Multi-trunk
008	2113 (135113)	Cedar Elm	6					6						
010	2114 (135114)	Cedar Elm	7					7						
011	2238	Cedar Elm	12					12						
012	2251	Cedar Elm	9					9						
013	2278	Cedar Elm	12					12						Multi-trunk
014	2238	Cedar Elm	13					12						
015	2223	Oak	27							27				
050	2282	Oak	37							37				
051	1380	Oak	42							42				
052	2229	Cedar Elm	29					29						
053	1383	Cedar Elm	13					13						
054	1384	Cedar Elm	12					12						
055	1283	Cedar Elm	16					16						
059	1252	Cedar Elm	17					17						
057	2109	Cedar Elm	18					18						
060	1404	Live Oak	28							28				
TOTALS				313	0	0	0	178	17	135	0	0	0	

No category to fall below 20% preservation.

Preserved: Tree to remain that meets not protection zone requirements described in section 35-523 of the UDC.

Mitigation 1:1 for significant trees below minimum preservation requirements; 3:1 for heritage trees below 100% preservation

\*\*Small species: Cordilia, Redbud, Tx. Mountain Laurel, Tx. Persimmon, Hawthorn, Pissumshaw - these are mitigated at 1:1 for Heritage Trees

\*\* Ashe Juniper, Huachuca, Mesquite, Arizona Ash, Hackberry protected at 10" dbh and mitigated at 1:1 for heritage trees

UPLAND TREE PRESERVATION SUMMARY			
RID 1 OVERLAY DISTRICT			
TOTAL CAL INCHES ON SITE:		313	
SIGNIFICANT TREES		HERITAGE TREES	
CAL INCHES ON SITE:		195	135
CAL INCHES PRESERVED:		178	135
CAL INCHES EXEMPT:		0	0
CLASS PRESERVATION RATIO		90%	CAL INCHES REMOVED (1:1): 0
REQUIRED PRESERVATION RATIO		40%	CLASS PRESERVATION RATIO: 100%
CLASS PRESERVATION RATIO:		1:1	REQUIRED PRESERVATION RATIO: 100%
CLASS EXCESS / MITIGATION:		-100	CLASS EXCESS / MITIGATION (1:1): 0
			CLASS EXCESS / MITIGATION (1:1): 0
			TOTAL HERITAGE EXCESS / MITIGATION: 0
			TOTAL EXCESS / MITIGATION: -100

CITY OF SAN ANTONIO - UDC-V-9-20-525

## ESA Tree Preservation Inventory

TREE #	TAG #	SPECIES	DBH	SMALL SPECIES TREES**				LARGE SPECIES TREES*					PROTECTED CAL INCHES EXEMPT	COMMENTS
				SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1:1)	SIGNIFICANT PRESERVED	SIGNIFICANT REMOVED	HERITAGE PRESERVED	HERITAGE REMOVED (1:1)	HERITAGE REMOVED (1:1)		
001	2218	Cedar Elm	21							21				
002	2272	Oak	42							42				
004	2241	Cedar Elm	14					14						
006	2240	Cedar Elm	17					17						
007	2275	Oak	45							45				
009	2115 (29115)	Cedar Elm	13					13						
041	2247	Oak	25							25				
042	2264	Cedar Elm	17							17				
059	2267	Cedar Elm	17					17				17	Outside ROW, Not Counted	
064	2125	Oak	24							24				
065	2147	Pecan	25					25						
216	3022	Oak	5					5						
TOTALS				260	0	0	0	86	38	111	25	0	17	

No category to fall below 20% preservation.

Preserved: Tree to remain that meets not protection zone requirements described in section 35-523 of the UDC.

Mitigation 1:1 for significant trees below minimum preservation requirements; 3:1 for heritage trees below 100% preservation

\*\* Small species: Cordilia, Redbud, Tx. Mountain Laurel, Tx. Persimmon, Hawthorn, Pissumshaw - these are mitigated at 1:1 for all small trees regardless of size within the Floodplain and heritage trees are mitigated at 1:1

\*\* Ashe Juniper, Huachuca, Mesquite, Arizona Ash, Hackberry protected regardless of size in the Floodplain and mitigated at 1:1 for heritage trees (12" DBH)

ESA PRESERVATION SUMMARY				
RID 1 OVERLAY DISTRICT				
TOTAL CAL INCHES ON SITE:		260		
SIGNIFICANT TREES				
CAL INCHES ON SITE:		124	CAL INCHES ON SITE:	136
CAL INCHES PRESERVED:		86	CAL INCHES PRESERVED:	111
CAL INCHES EXEMPT:		17	CAL INCHES REMOVED (1:1):	25
CLASS PRESERVATION RATIO		69%	CAL INCHES REMOVED (1:1):	0
REQUIRED PRESERVATION RATIO		80%	CLASS PRESERVATION RATIO:	62%
CLASS PRESERVATION RATIO:		1:1	REQUIRED PRESERVATION RATIO:	100%
CLASS EXCESS / MITIGATION:		13	CLASS EXCESS / MITIGATION (1:1):	75
			CLASS EXCESS / MITIGATION (1:1):	0
			TOTAL HERITAGE EXCESS / MITIGATION:	75
			TOTAL EXCESS / MITIGATION:	88

FLOODPLAIN TREE PRESERVATION SUMMARY				
RID 1 OVERLAY DISTRICT				
TOTAL CAL INCHES ON SITE:		3690		
SIGNIFICANT TREES				
CAL INCHES ON SITE:		2128	CAL INCHES ON SITE:	1083
CAL INCHES PRESERVED:		969.5	CAL INCHES PRESERVED:	779
CAL INCHES EXEMPT:		496	CAL INCHES REMOVED (1:1):	384
CLASS PRESERVATION RATIO		46%	CAL INCHES REMOVED (1:1):	0
REQUIRED PRESERVATION RATIO		80%	CLASS PRESERVATION RATIO:	72%
CLASS PRESERVATION RATIO:		1:1	REQUIRED PRESERVATION RATIO:	100%
CLASS EXCESS / MITIGATION:		733	CLASS EXCESS / MITIGATION (1:1):	112
			CLASS EXCESS / MITIGATION (1:1):	0
			TOTAL HERITAGE EXCESS / MITIGATION:	912
			TOTAL EXCESS / MITIGATION:	3645

# BRACKENRIDGE PARK

SAN ANTONIO, TX

## Client

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WORKS DEPARTMENT (TC)  
PO BOX 839966, SAN ANTONIO TX  
78293-3966

## Landscape Architect

# swa

712 Main Street,  
6th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1 713 888-1876

## LOCAL LANDSCAPE

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SAN ANTONIO, TX 78209

## ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

## HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

## STRUCTURAL ENGINEER

SPARKS ENGINEERING, INC.  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

## CIVIL ENGINEER

INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

## MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

## Stamp



## Revisions

- 1
- 2
- 3
- 4
- 5

## Date

20 JANUARY 2022

## Phase

TREE REMOVAL AND MITIGATION PERMIT  
Job Number  
CNOS701

## Scale

0 10' 20'  
1" = 20'

## Drawing Title

TREE PROTECTION AND  
DEMOLITION PLAN

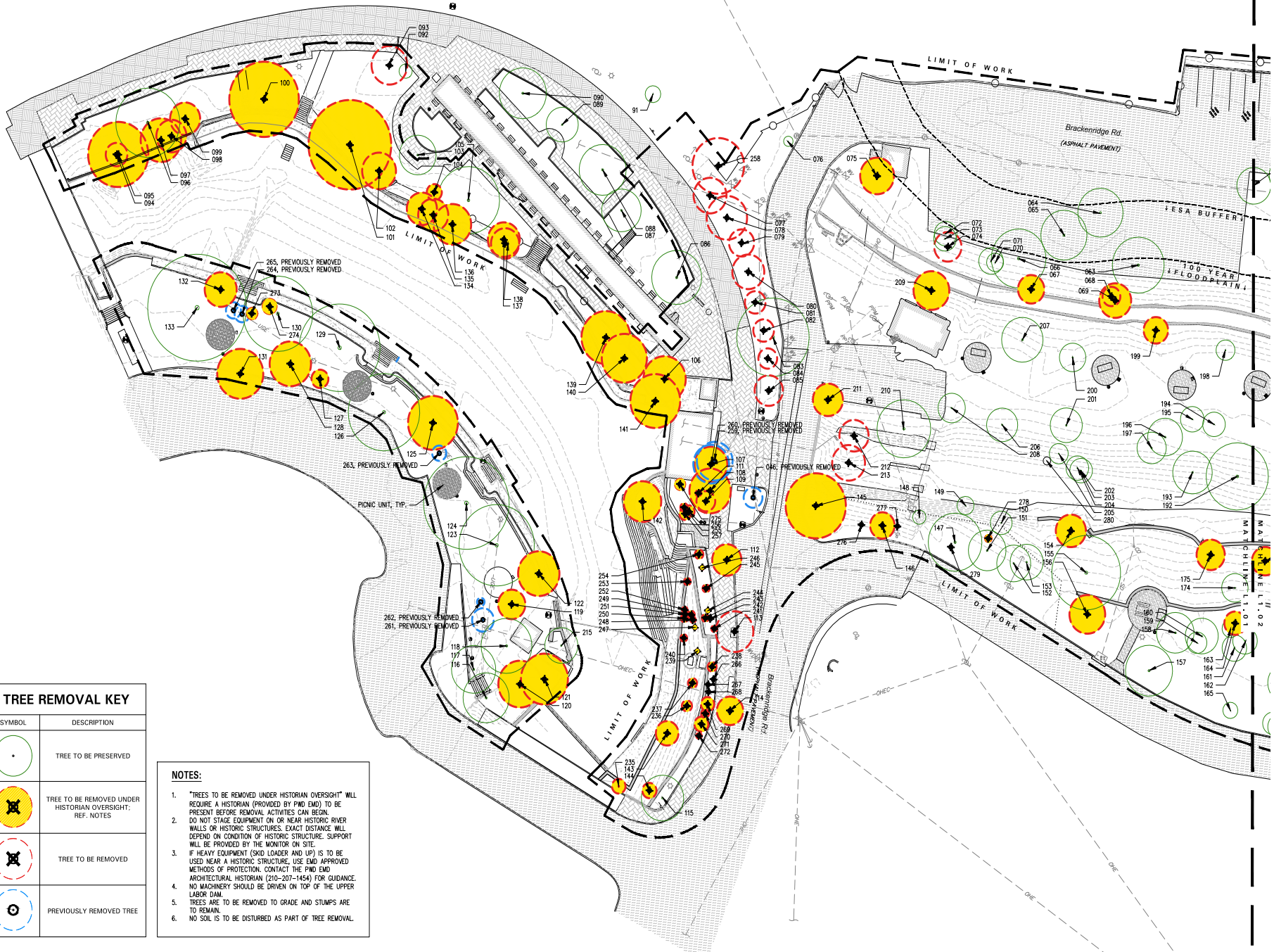
## Drawing Number

# L1.01

TREE REMOVAL KEY	
SYMBOL	DESCRIPTION
	TREE TO BE PRESERVED
	TREE TO BE REMOVED UNDER HISTORIAN OVERSIGHT; REF. NOTES
	TREE TO BE REMOVED
	PREVIOUSLY REMOVED TREE

## NOTES:

- "TREES TO BE REMOVED UNDER HISTORIAN OVERSIGHT" WILL REQUIRE A HISTORIAN (PROVIDED BY FWD EMD) TO BE PRESENT BEFORE REMOVAL ACTIVITIES CAN BEGIN. DO NOT STAGE EQUIPMENT ON OR NEAR HISTORIC RIVER WALLS OR HISTORIC STRUCTURES. EXACT DISTANCE WILL DEPEND ON CONDITION OF HISTORIC STRUCTURE. SUPPORT WILL BE PROVIDED BY THE MONITOR ON SITE.
- IF HEAVY EQUIPMENT (SKID LOADER AND UP) IS TO BE USED NEAR A HISTORIC STRUCTURE, USE EMD APPROVED METHODS OF PROTECTION. CONTACT THE FWD EMD ARCHITECTURAL HISTORIAN (210-207-1454) FOR GUIDANCE. NO MACHINERY SHOULD BE DRIVEN ON TOP OF THE UPPER LABOR DAM.
- TREES ARE TO BE REMOVED TO GRADE AND STUMPS ARE TO REMAIN.
- NO SOIL IS TO BE DISTURBED AS PART OF TREE REMOVAL.





# BRACKENRIDGE PARK

SAN ANTONIO, TX

## Client

CITY OF SAN ANTONIO - PUBLIC  
WORKS DEPARTMENT (TC)  
PO BOX 839966, SAN ANTONIO TX  
78263-3966

## Landscape Architect

# swa

712 Main Street,  
8th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1.713.888.1876

## LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

## ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

## HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

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1917 N. NEW BRAUNFELS AVE., SUITE  
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TREE REMOVAL AND MITIGATION PERMIT

## Job Number

CNOS701

## Scale

0 1" = 20'

## Drawing Title

TREE PROTECTION AND  
DEMOLITION PLAN

## Drawing Number

# L1.02







**001**  
CEDAR ELM | 21  
TAG #2218  
PRESERVED



**002**  
OAK | 42  
TAG #2272  
PRESERVED



**003**  
CEDAR ELM | 17  
TAG #2248  
REMOVED



**004**  
CEDAR ELM | 14  
TAG #2241  
PRESERVED



**005**  
CEDAR ELM | 20  
TAG #2243  
PRESERVED



**006**  
CEDAR ELM | 12  
TAG #2240  
PRESERVED



**007**  
LIVE OAK | 45  
TAG #2275  
PRESERVED



**008**  
CEDAR ELM | 6  
TAG #2113  
PRESERVED



**009**  
CEDAR ELM | 13  
TAG #2115  
PRESERVED



**010**  
CEDAR ELM | 7  
TAG #2114  
PRESERVED



**011**  
CEDAR ELM | 12  
TAG #2238  
PRESERVED



**012**  
CEDAR ELM | 9  
TAG #2251  
PRESERVED



**013**  
CEDAR ELM | 12  
TAG #2278  
PRESERVED



**014**  
CEDAR ELM | 13  
TAG #2278  
PRESERVED



**015**  
OAK | 27  
TAG #2223  
PRESERVED



**016**  
WILLOW | 11  
TAG #2238  
PRESERVED



**017**  
WILLOW | 11  
TAG #2262  
REMOVED



**018**  
OAK | 8  
TAG #2233  
PRESERVED



**019**  
CHINABERRY | 7  
TAG #2232  
INVASIVE, REMOVED



**020**  
HACKBERRY | 12  
TAG #2224  
INVASIVE, REMOVED



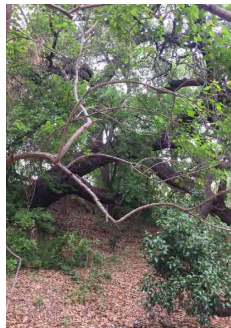
**021**  
WILLOW | 19  
TAG #2260  
REMOVED



**022**  
WILLOW | 19  
TAG #2221  
REMOVED



**023**  
ASH | 8  
TAG #2233  
PRESERVED



**024**  
OAK | 54  
TAG #2222  
PRESERVED



**025**  
TEXAS MOUNTAIN LAUREL  
TAG #2222  
PRESERVED



**026**  
OAK | 18  
TAG #2135  
PRESERVED



**027**  
TEXAS MOUNTAIN LAUREL | 3  
TAG #2216  
PRESERVED



**028**  
TEXAS MOUNTAIN LAUREL | 3  
TAG #2216  
PRESERVED

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## ARCHITECT

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## HISTORICAL ARCHITECT

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933 NORTH FLORES STREET, SUITE B  
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## MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
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20 JANUARY 2022

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TREE REMOVAL AND MITIGATION PERMIT

## Job Number

CNOS701

## Scale

North

## NOT TO SCALE

## Drawing Title

TREE SURVEY

## Drawing Number

# L1.03





**029**  
HACKBERRY | 4  
TAG # 3014  
PRESERVED



**030**  
CEDAR ELM | 34  
TAG #2254  
PRESERVED



**031**  
OAK | 15  
TAG #2236  
REMOVED



**032**  
CEDAR ELM | 12  
TAG #2220  
REMOVED



**033**  
WILLOW | 12  
TAG #2242  
REMOVED



**034**  
WILLOW | 7  
TAG #2256  
REMOVED



**035**  
WILLOW | 16  
TAG #2257  
REMOVED



**036**  
WILLOW | 8  
TAG #2227  
REMOVED, PREVIOUSLY REMOVED



**037**  
WILLOW | 11  
TAG #2284  
REMOVED, PREVIOUSLY REMOVED



**038**  
ASH | 11  
TAG #2274  
REMOVED, PREVIOUSLY REMOVED



**039**  
WILLOW | 16  
TAG #2225  
REMOVED, PREVIOUSLY REMOVED



**040**  
WILLOW | 28  
TAG #7125  
REMOVED



**041**  
OAK | 28  
TAG #2247  
PRESERVED



**042**  
CEDAR ELM | 17  
TAG #2264  
PRESERVED



**043**  
CEDAR ELM | 17  
TAG #2217  
PRESERVED



**044**  
CEDAR ELM | 12  
TAG #2231  
PRESERVED



**045**  
CEDAR ELM | 18  
TAG #2266  
PRESERVED



**047**  
BALD CYPRESS | 6  
TAG #6711  
PRESERVED



**048**  
WILLOW | 13  
TAG #6710  
PRESERVED, OUTSIDE LOW



**050**  
OAK | 37  
TAG #2249  
PRESERVED



**051**  
OAK | 43  
TAG #1381  
PRESERVED



**052**  
CEDAR ELM | 23  
TAG #1383  
PRESERVED



**053**  
CEDAR ELM | 13  
TAG #1383  
PRESERVED



**054**  
CEDAR ELM | 12  
TAG #1384  
PRESERVED



**055**  
CEDAR ELM | 16  
TAG #2283  
PRESERVED



**056**  
CEDAR ELM | 17  
TAG #2252  
PRESERVED



**057**  
CEDAR ELM | 18  
TAG #2109  
PRESERVED

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SAN ANTONIO, TX 78209

**ARCHITECT**

**OVERLAND**  
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SAN ANTONIO, TX 78215

**HISTORICAL ARCHITECT**  
SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

**STRUCTURAL ENGINEER**  
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INTELLIGENT ENGINEERING SERVICES  
1046 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

**MEP**  
CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

**Stamp**



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**Job Number**  
CNOS701

**Scale** North

NOT TO SCALE

**Drawing Title**

TREE SURVEY

**Drawing Number**

# L1.04





**058**  
OAK | 25  
TAG #2285  
PRESERVED



**059**  
CEDAR ELM | 17  
TAG #2267  
PRESERVED



**060**  
CEDAR ELM | 26  
TAG #2268  
PRESERVED



**061**  
BLACK OAK | 8  
CITY TAG 3403  
REMOVED



**062**  
TREE SPECIES | SIZE  
CONDITION  
CITY TAG #



**063**  
ANAGUA | 28  
TAG #2285  
PRESERVED



**064**  
OAK | 24  
TAG #2131  
PRESERVED



**065**  
PECAN | 25  
TAG #2147  
PRESERVED



**066**  
PECAN | 29  
TAG #2111  
PRESERVED



**067**  
CEDAR ELM | 14  
TAG #2300  
REMOVED



**068**  
CEDAR ELM | 10  
TAG #2350  
REMOVED



**069**  
ANAGUA | 28  
TAG #2122  
PRESERVED



**070**  
CEDAR ELM | 9  
TAG #2122  
PRESERVED



**071**  
CEDAR ELM | 13  
TAG #2194  
PRESERVED



**072**  
OAK | 18  
TAG #3027  
PRESERVED



**073**  
OAK | 12  
TAG #3028  
PRESERVED



**074**  
CEDAR ELM | 15  
TAG #2138  
REMOVED



**075**  
OAK | 18  
TAG #2209  
REMOVED



**076**  
HACKBERRY | 5  
TAG #2304  
PRESERVED



**077**  
CREPE MYRTLE | 17  
TAG #2304  
REMOVED



**078**  
CREPE MYRTLE | 22  
TAG #2357  
REMOVED



**079**  
CREPE MYRTLE | 14  
TAG #2349  
REMOVED



**080**  
CREPE MYRTLE | 17  
TAG #2379  
PRESERVED



**081**  
CREPE MYRTLE | 11  
TAG #2369  
PRESERVED



**082**  
CREPE MYRTLE | 11  
TAG #2349  
PRESERVED



**083**  
OAK | 39  
TAG #2303  
PRESERVED



**084**  
CREPE MYRTLE | 10  
TAG #2323  
PRESERVED



**085**  
CREPE MYRTLE | 15  
TAG #2323  
PRESERVED

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SAN ANTONIO, TX 78209

ARCHITECT

OVERLAND  
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HISTORICAL ARCHITECT  
SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

STRUCTURAL ENGINEER

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933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

CIVIL ENGINEER

INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78238

Stamp



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- 1
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20 JANUARY 2022  
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Job Number  
CNOS701

Scale North

NOT TO SCALE

Drawing Title

TREE SURVEY

Drawing Number

# L1.05





**086**  
BALD CYPRESS | 27  
TAG #6000  
PRESERVED; OUTSIDE LOW



**087**  
BALD CYPRESS | 21  
TAG #6001  
PRESERVED; OUTSIDE LOW



**088**  
OAK | 23  
TAG #6002  
PRESERVED; OUTSIDE LOW



**089**  
BALD CYPRESS | 17  
TAG #6003  
PRESERVED; OUTSIDE LOW



**090**  
OAK | 25  
TAG #6004  
PRESERVED; OUTSIDE LOW



**091**  
CREPE MYRTLE | 9  
TAG #3029  
PRESERVED; OUTSIDE LOW



**092**  
OAK | 7  
TAG #2229  
PRESERVED; OUTSIDE LOW



**093**  
BALD CYPRESS | 19  
TAG #2234  
REMOVED; DEAD (NOT COUNTED)



**094**  
CHINESE TALLOW | 12  
TAG #2339  
REMOVED; INVASIVE SPECIES (NOT COUNTED)



**095**  
OAK | 32  
TAG #2334  
REMOVED



**096**  
OAK | 34  
TAG #2338  
PRESERVED



**097**  
OAK | 18  
TAG #2364  
PRESERVED



**098**  
OAK | 22  
TAG #2310  
PRESERVED



**099**  
OAK | 16  
TAG #2335  
PRESERVED



**100**  
OAK | 37  
TAG #6006  
REMOVED



**101**  
OAK | 44  
TAG #2324  
REMOVED



**102**  
CEDAR ELM | 18  
TAG #2319  
PRESERVED



**103**  
BALD CYPRESS | 20  
TAG #2328  
PRESERVED; OUTSIDE LOW



**104**  
PECAN | 8  
TAG #6007  
REMOVED



**105**  
OAK | 33  
TAG #2366  
PRESERVED



**106**  
CYPRESS | 23  
TAG #2358  
REMOVED



**107**  
PECAN | 18  
TAG #2364  
REMOVED



**108**  
PECAN | 22  
TAG #2392  
REMOVED



**109**  
CREPE MYRTLE | 10  
TAG #2325  
PRESERVED



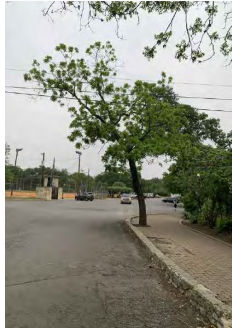
**110**  
YAUPOON | 3  
TAG #3026  
PRESERVED



**111**  
CREPE MYRTLE | 16  
TAG #2372  
REMOVED



**112**  
PECAN | 20  
TAG #2375  
REMOVED



**113**  
CEDAR ELM | 23  
TAG #2345  
REMOVED

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## ARCHITECT

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HISTORICAL ARCHITECT  
SEVENTH GENERATION DESIGN  
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## MEP

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1917 N. NEW BRAUNFELS AVE., SUITE  
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Stamp



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Scale North

NOT TO SCALE

Drawing Title

TREE SURVEY

Drawing Number

# L1.06





**115**  
CEDAR ELM | 23  
TAG #2345  
PRESERVED



**116**  
PECAN | 25  
TAG #2359  
PRESERVED; OUTSIDE LOW



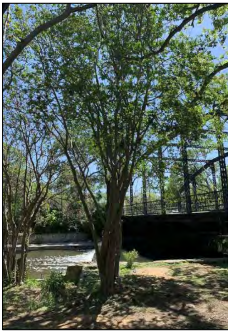
**117**  
PECAN | 24  
TAG #2314  
PRESERVED; OUTSIDE LOW



**118**  
CREPE MYRTLE | 27  
TAG #2387  
PRESERVED; OUTSIDE LOW



**119**  
CREPE MYRTLE | 15  
TAG #2311  
REMOVED



**120**  
CREPE MYRTLE | 23  
TAG #2344  
PRESERVED; OUTSIDE LOW



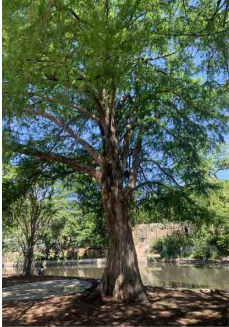
**121**  
CREPE MYRTLE | 25  
TAG #2371  
PRESERVED; OUTSIDE LOW



**122**  
PECAN | 22  
TAG #2383  
REMOVED



**123**  
CYPRESS | 40  
TAG #2342  
PRESERVED; OUTSIDE LOW



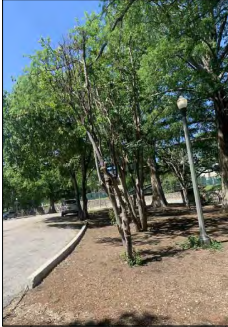
**124**  
BALD CYPRESS | 46  
TAG #2388  
PRESERVED; OUTSIDE LOW



**125**  
CREPE MYRTLE | 27  
TAG #2343  
REMOVED



**126**  
BALD CYPRESS | 38  
TAG #2388  
PRESERVED; OUTSIDE LOW



**127**  
CREPE MYRTLE | 9  
TAG #2378  
REMOVED



**128**  
CREPE MYRTLE | 22  
TAG #2356  
REMOVED



**129**  
BALD CYPRESS | 43  
TAG #2226  
PRESERVED; OUTSIDE LOW



**130**  
BALD CYPRESS | 37  
TAG #2337  
PRESERVED; OUTSIDE LOW



**131**  
HACKBERRY | 25  
TAG #2337  
REMOVED



**132**  
CREPE MYRTLE | 17  
TAG #2300  
REMOVED



**133**  
BALD CYPRESS | 53  
TAG #2320  
PRESERVED; OUTSIDE LOW



**134**  
OAK | 16  
TAG #6008  
REMOVED



**135**  
OAK | 15  
TAG #6009  
REMOVED



**136**  
OAK | 20  
TAG #6010  
REMOVED



**137**  
CEDAR ELM | 17  
TAG #6012  
REMOVED



**138**  
CEDAR ELM | 16  
TAG #6012  
REMOVED



**139**  
PECAN | 26  
TAG #2385  
REMOVED



**140**  
PECAN | 24  
TAG #2385  
REMOVED



**141**  
BALD CYPRESS | 27  
TAG #2354  
REMOVED



**142**  
PECAN | 20  
TAG #2316  
REMOVED; DEAD (NOT COUNTED)

# BRACKENRIDGE PARK

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MEP  
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Scale North

NOT TO SCALE

Drawing Title

TREE SURVEY

Drawing Number

# L1.07





**143**  
CEDAR ELM | 12  
TAG #2318  
REMOVED



**144**  
EYE'S NECKLACE | 8  
TAG #2373  
REMOVED



**145**  
OAK | 32  
TAG #2126  
REMOVED



**146**  
HUICAHUATE | 13  
TAG #2134  
REMOVED



**147**  
PECAN | 28  
TAG #2426  
PRESERVED



**148**  
TREE SPECIES | SIZE  
CONDITION  
CITY TAG #



**149**  
ASH | 7  
TAG #3030  
PRESERVED



**150**  
PECAN | 12  
TAG #2426  
PRESERVED



**151**  
OAK | 20  
TAG #2425  
PRESERVED



**152**  
PECAN | 18  
TAG #2424  
PRESERVED



**153**  
OAK | 16  
TAG #2423  
PRESERVED



**154**  
PECAN | 16  
TAG #2039  
REMOVED



**155**  
OAK | 37  
TAG #2407  
PRESERVED



**156**  
CEDAR ELM | 19  
TAG #001  
REMOVED



**157**  
CEDAR ELM | 25  
TAG #1002  
PRESERVED



**158**  
CEDAR ELM | 20  
TAG #1003  
PRESERVED



**159**  
CEDAR ELM | 11  
TAG #1005  
PRESERVED



**160**  
CEDAR ELM | 18  
TAG #1004  
PRESERVED



**161**  
CEDAR ELM | 13  
TAG #1007  
PRESERVED



**162**  
CEDAR ELM | 13  
TAG #1009  
PRESERVED



**163**  
CEDAR ELM | 9  
TAG #007



**164**  
CEDAR ELM | 12  
TAG #1006  
REMOVED



**165**  
CEDAR ELM | 8  
TAG #1010  
PRESERVED



**166**  
CEDAR ELM | 20  
TAG #1011  
PRESERVED



**167**  
CEDAR ELM | 11  
TAG #1011  
PRESERVED



**168**  
CEDAR ELM | 13  
TAG #1013  
PRESERVED



**169**  
CEDAR ELM | 18  
TAG #1014  
PRESERVED



**170**  
CEDAR ELM | 14  
TAG #1015  
PRESERVED

# BRACKENRIDGE PARK

SAN ANTONIO, TX

Client  
CITY OF SAN ANTONIO - PUBLIC WORKS DEPARTMENT (TCP)  
PO BOX 839966, SAN ANTONIO TX 78263-3966

Landscape Architect

# swa

712 Main Street,  
8th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
+1.713.868.1876 e

LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

HISTORICAL ARCHITECT  
SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

STRUCTURAL ENGINEER  
SPARKS ENGINEERING, INC.  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

CIVIL ENGINEER  
INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

MEP  
CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

Stamp



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Date  
20 JANUARY 2022  
Phase  
TREE REMOVAL AND MITIGATION PERMIT  
Job Number  
CNOS701

Scale North

NOT TO SCALE

Drawing Title

TREE SURVEY

Drawing Number

# L1.08





**171**  
OAK | 11  
TAG #1016  
PRESERVED



**172**  
OAK | 19  
TAG #1017  
PRESERVED



**173**  
PECAN | 35  
TAG #1018  
PRESERVED



**174**  
CEDAR ELM | 14  
TAG #2306  
PRESERVED



**175**  
PECAN | 15  
TAG #2311  
REMOVED



**176**  
CEDAR ELM | 14  
TAG #2304  
REMOVED



**177**  
CEDAR ELM | 17  
TAG #2305  
PRESERVED



**178**  
LIGUSTRUM | 16  
TAG #2312  
REMOVED



**179**  
LIGUSTRUM | 16  
TAG #2313  
REMOVED



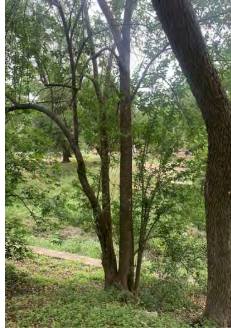
**180**  
CHINABERRY | 7  
TAG #2401  
REMOVED



**181**  
LIGUSTRUM | 11  
TAG #2314  
REMOVED



**182**  
PECAN | 14  
TAG #2315  
REMOVED



**183**  
LIGUSTRUM | 10  
TAG #2316  
REMOVED



**184**  
PECAN | 13  
TAG #2317  
PRESERVED



**185**  
OAK | 21  
TAG #2318  
PRESERVED



**186**  
PECAN | 20  
TAG #2319  
PRESERVED



**187**  
ANAGUA | 8  
TAG #2402  
PRESERVED



**188**  
OAK | 16  
TAG #2290  
REMOVED



**189**  
TREE SPECIES | SIZE  
CONDITION  
CITY TAG #



**190**  
CEDAR ELM | 9  
TAG #2198  
REMOVED



**191**  
CEDAR ELM | 14  
TAG #2206  
PRESERVED



**192**  
OAK | 33  
TAG #2216  
PRESERVED



**193**  
OAK | 22  
TAG #2294  
PRESERVED



**194**  
OAK | 22  
TAG #2295  
PRESERVED



**195**  
OAK | 13  
TAG #2297  
PRESERVED



**196**  
OAK | 19  
TAG #2298  
PRESERVED



**197**  
OAK | 15  
TAG #2299  
PRESERVED



**198**  
CEDAR ELM | 10  
TAG #2211  
PRESERVED

# BRACKENRIDGE PARK

SAN ANTONIO, TX

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**swa**

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Houston, Texas 77002  
United States  
www.swagroup.com  
+1.713.868.1876

## LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

## ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

## HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

## STRUCTURAL ENGINEER

SPARKS ENGINEERING, INC.  
933 NORTH FLORES STREET  
SAN ANTONIO, TX 78212

## CIVIL ENGINEER

INTELLIGENT ENGINEERING SERVICES  
1045 CENTRAL PARKWAY NORTH,  
SUITE 200, SAN ANTONIO, TX 78232

## MEP

CNG ENGINEERING  
1917 N. NEW BRAUNFELS AVE., SUITE  
201, SAN ANTONIO TX, 78208

## Stamp



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## Phase

TREE REMOVAL AND MITIGATION PERMIT

## Job Number

CNOS701

## Scale

North

## NOT TO SCALE

## Drawing Title

TREE SURVEY

## Drawing Number

**L1.09**





**199**  
OAK | 19  
TAG #2199  
REMOVED



**200**  
OAK | 15  
TAG #2203  
PRESERVED



**201**  
OAK | 18  
TAG #2299  
PRESERVED



**202**  
PALM | 20  
TAG #2201  
PRESERVED



**203**  
PALM | 18  
TAG #2120  
PRESERVED



**204**  
BOX ELDER | 12  
TAG #2207  
PRESERVED



**205**  
PALM | 22  
TAG #2169  
PRESERVED



**206**  
OAK | 17  
TAG #2300  
PRESERVED



**207**  
OAK | 22  
TAG #2203  
PRESERVED



**208**  
OAK | 16  
TAG #2430  
PRESERVED



**209**  
PECAN | 19  
TAG #193  
REMOVED



**210**  
PECAN | 29  
TAG #2168  
PRESERVED



**211**  
PECAN | 16  
TAG #2144  
REMOVED



**212**  
OAK | 16  
TAG #2123  
REMOVED



**213**  
PECAN | 18  
TAG #2204  
REMOVED



**214**  
BOX ELDER | 10  
TAG #10021  
PRESERVED



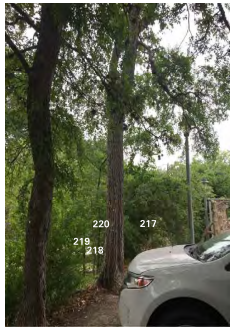
**215**  
CREPE MYRTLE | 19  
TAG #10021  
PRESERVED; OUTSIDE LOW



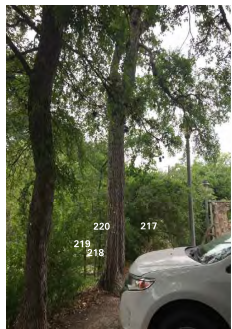
**216**  
OAK | 5  
TAG #3022  
PRESERVED



**217**  
OAK | 5  
TAG #3022  
PRESERVED



**218**  
OAK | 3  
TAG #3020  
PRESERVED



**219**  
OAK | 4  
TAG #3001  
PRESERVED



**220**  
OAK | 4  
TAG #3000  
PRESERVED



**221**  
BOX ELDER | 5  
TAG #3016  
PRESERVED



**222**  
BOX ELDER | 5  
TAG #3015  
PRESERVED



**223**  
LIQUIDUM | 6  
TAG #3011  
REMOVED; UNDESIRABLE SPECIES (NOT COUNTED)



**224**  
HACKBERRY | 4  
TAG #3018  
PRESERVED



**225**  
HACKBERRY | 4  
TAG #3018  
PRESERVED



**226**  
BLACK WILLOW | 8  
TAG #3010  
REMOVED

# BRACKENRIDGE PARK

SAN ANTONIO, TX

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**swa**

712 Main Street,  
6th Floor  
Houston, Texas 77002  
United States  
www.swagroup.com  
41.753.888.1876 e

## LOCAL LANDSCAPE

WORKSHOP  
123 PARLAND PLACE, SUITE 100  
SAN ANTONIO, TX 78209

## ARCHITECT

OVERLAND  
203 E. JONES AVE., SUITE 104  
SAN ANTONIO, TX 78215

## HISTORICAL ARCHITECT

SEVENTH GENERATION DESIGN  
933 NORTH FLORES STREET, SUITE B  
SAN ANTONIO, TX 78212

## STRUCTURAL ENGINEER

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933 NORTH FLORES STREET  
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1917 N. NEW BRAUNFELS AVE., SUITE  
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TREE REMOVAL AND MITIGATION PERMIT

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CNOS701

## Scale

North

## NOT TO SCALE

## Drawing Title

TREE SURVEY

## Drawing Number

**L1.10**





**227**  
GOLDEN RAINTREE | 5  
TAG #3010  
PRESERVED



**228**  
HACKBERRY | 5  
TAG #3007  
PRESERVED



**229**  
RED OAK | 5  
TAG #3005  
PRESERVED



**230**  
HACKBERRY | 9  
TAG #3006  
PRESERVED



**231**  
LIQUSTRUM | 6  
TAG #3009  
PRESERVED



**232**  
OAK | 3  
TAG #3003  
PRESERVED



**233**  
ANACUA | 3  
TAG #3004  
PRESERVED



**234**  
OAK | 4  
TAG #3000  
PRESERVED



**235**  
ANACUA | 8  
TAG #10427  
REMOVED



**236**  
OAK | 8  
TAG #10426  
PRESERVED



**237**  
HUICACHE | 5  
TAG #10425  
PRESERVED



**238**  
YAUPON | 5  
TAG #3017  
REMOVED



**239**  
MESQUITE | 2  
TAG #10424  
REMOVED



**240**  
CREPE MYRTLE | 3  
TAG #10421  
REMOVED



**241**  
YAUPON HOLLY | 2  
TAG #10406  
REMOVED



**242**  
ELM | 1  
TAG #10405  
REMOVED



**243**  
ELM | 1  
TAG #10405  
REMOVED



**244**  
HACKBERRY | 2  
TAG #10403  
REMOVED



**245**  
HACKBERRY | 4  
TAG #10402  
REMOVED



**246**  
ELM | 1  
TAG #10401  
REMOVED



**247**  
CYPRESS | 3  
TAG #10423  
REMOVED



**247**  
CYPRESS | 3  
TAG #10422  
REMOVED



**248**  
HACKBERRY | 3  
TAG #10422  
PRESERVED



**249**  
CHINABERRY | 4  
TAG #10418  
REMOVED



**250**  
OAK | 4  
TAG #10420  
PRESERVED



**251**  
HACKBERRY | 2  
TAG #10411  
PRESERVED



**252**  
HACKBERRY | 4  
TAG #10417  
PRESERVED



**253**  
PECAN | 4  
TAG #10415  
PRESERVED

# BRACKENRIDGE PARK

SAN ANTONIO, TX

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# swa

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Phase

TREE REMOVAL AND MITIGATION PERMIT

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CNOS701

Scale

North

NOT TO SCALE

Drawing Title

TREE SURVEY

Drawing Number

L1.11

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**254**  
YAUPOON HOLLY | 5  
TAG #10400  
REMOVED



**255**  
CREPE MYRTLE | 4  
TAG #3025  
REMOVED



**256**  
BUCKEYE | 5  
TAG #3005  
REMOVED



**257**  
HACKBERRY | 9  
TAG #10406  
REMOVED



**258**  
PECAN | 28  
TAG #10431  
PRESERVED, OUTSIDE LOW



**266**  
MESQUITE | 4  
TAG #10408  
REMOVED



**267**  
BUCKEYE | 8  
TAG #10409  
REMOVED



**268**  
MESQUITE | 4.5  
TAG #10410  
REMOVED



**269**  
BUCKEYE | 2  
TAG #10411  
REMOVED



**270**  
HACKBERRY | 4  
TAG #10412  
REMOVED



**271**  
HACKBERRY | 8  
TAG #10413  
REMOVED



**272**  
HACKBERRY | 3  
TAG #10414  
REMOVED



**273**  
CREPE MYRTLE | 6  
TAG #2335  
REMOVED



**274**  
CREPE MYRTLE | 8  
TAG #2370  
REMOVED, DEAD



**275**  
YAUPOON | 2  
NO TAG  
REMOVED



**276**  
BUCKEYE | 2  
NO TAG  
REMOVED



**277**  
BUCKEYE | 2  
NO TAG  
REMOVED



**278**  
CHINABERRY | 4  
NO TAG  
REMOVED



**279**  
YAUPOON HOLLY | 2  
NO TAG  
PRESERVED



**280**  
ANAGUA | 2.5  
NO TAG  
PRESERVED



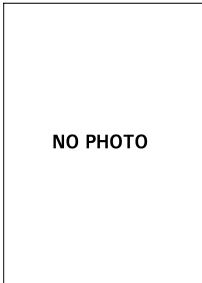
**281**  
HACKBERRY | 3  
NO TAG  
PRESERVED



**282**  
WILLOW | 4  
NO TAG  
PRESERVED



**283**  
PAPER MULBERRY | 6  
NO TAG  
REMOVED, INVASIVE



**284**  
HACKBERRY | 2  
NO TAG  
PRESERVED



**285**  
HACKBERRY | 2  
NO TAG  
PRESERVED



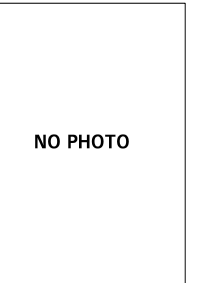
**286**  
HACKBERRY | 6  
NO TAG  
PRESERVED



**287**  
TREE OF HEAVEN | 2  
NO TAG  
PRESERVED



**288**  
TREE OF HEAVEN | 2  
NO TAG  
REMOVED



**289**  
CREPE MYRTLE | 2  
NO TAG  
PRESERVED

# BRACKENRIDGE PARK

SAN ANTONIO, TX

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CNOS701

## Scale

North

## NOT TO SCALE

## Drawing Title

TREE SURVEY

## Drawing Number

# L1.12