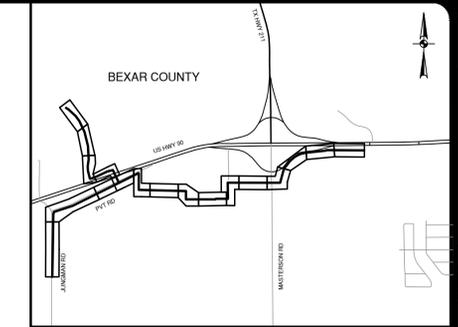
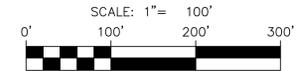


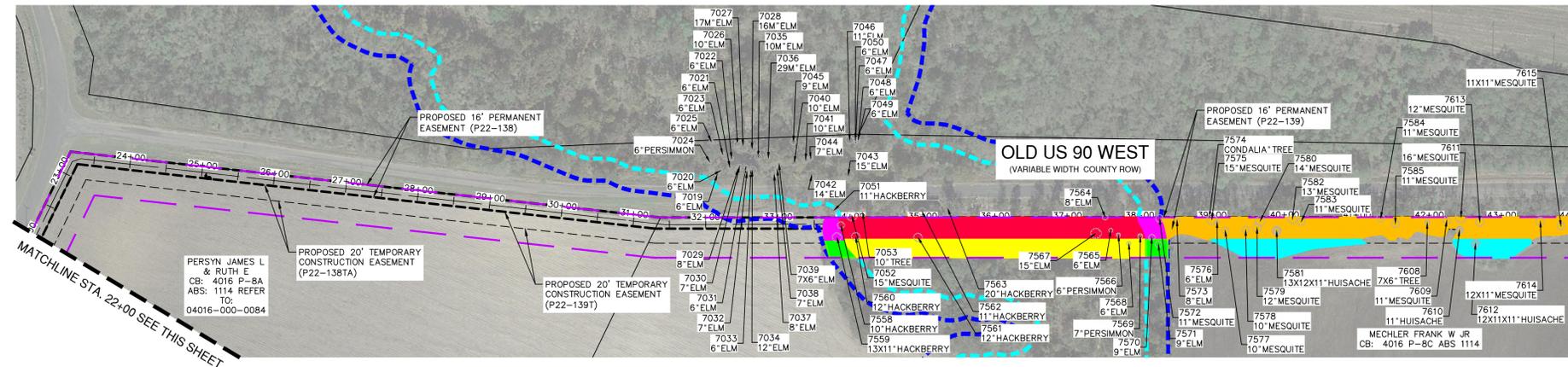
MATCHLINE STA. 22+00 SEE THIS SHEET



LOCATION MAP
NOT-TO-SCALE



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| DATE | |
| NO. | REVISION |
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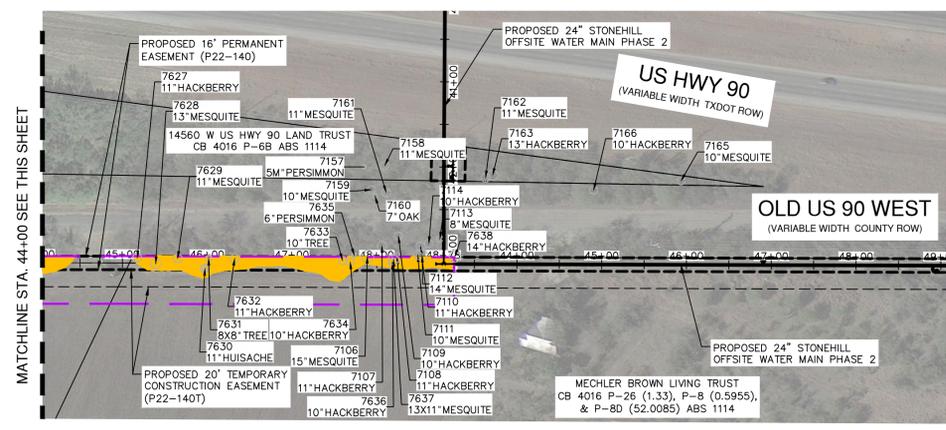
MATCHLINE STA. 44+00 SEE THIS SHEET

LEGEND

- PROPOSED WATER LINE
- PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- EXISTING OVERHEAD ELECTRIC OHE
- EXISTING 1' CONTOURS -946
- EXISTING 5' CONTOURS -950
- 1% ANNUAL-CHANCE FEMA FLOODPLAIN
- 30' WIDE FLOODPLAIN BUFFER
- PROJECT LIMITS
- CANOPY TO BE REMOVED INSIDE FLOODPLAIN
- CANOPY TO BE PRESERVED INSIDE FLOODPLAIN
- CANOPY TO BE REMOVED OUTSIDE FLOODPLAIN
- CANOPY TO BE PRESERVED OUTSIDE FLOODPLAIN
- CANOPY TO BE REMOVED INSIDE 30' WIDE BUFFER
- CANOPY TO BE PRESERVED INSIDE 30' WIDE BUFFER

PAPE-DAWSON ENGINEERS
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

STONEHILL OFF-SITE WATER EXTENSION
BEXAR COUNTY, TEXAS
PHASE I
TREE PRESERVATION PLAN



MATCHLINE STA. 44+00 SEE THIS SHEET

WATER: SAWS PRESSURE ZONE 930
STONEHILL OFF-SITE WATER EXTENSION

| | |
|---|-------------------------|
| Developer's Name: DR HORTON | |
| Address: 211 NORTH LOOP 1604, SUITE 130 | |
| City: SAN ANTONIO | State: TEXAS ZIP: 78232 |
| Phone# (210) 498-2668 | FAX# N/A |
| SAWS Block Map# 076558, 074558 | |
| PHASE I - 4,765 LF ~ 16" PVC WATER | |
| Total Linear Footage of Pipe PHASE II - 15,036 LF ~ 24" PVC WATER | |
| Number of Lots N/A TOTAL EDU'S N/A SAWS JOB NO. 23-7003 | |

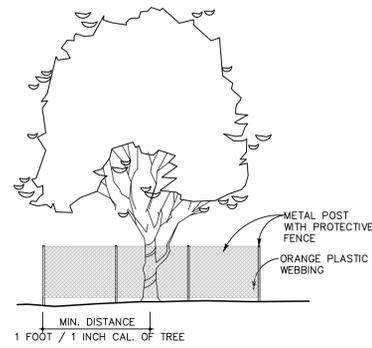
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|----------|---------------|
| PLAT NO. | N/A |
| JOB NO. | 12747-00 |
| DATE | NOVEMBER 2023 |
| DESIGNER | CN |
| CHECKED | SG DRAWN JD |
| SHEET | C6.00 |

Date: June 1, 2023, 3:00 PM - User ID: omohammed
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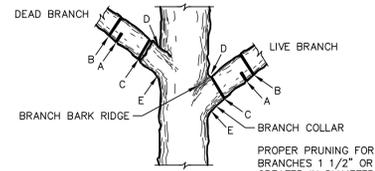
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TREE PRESERVATION GENERAL NOTES

- ALL TREES SHALL REMAIN UNLESS NOTED ON THE CITY OF SAN ANTONIO APPROVED PLANS.
- NO UTILITY EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE.
- EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
- NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS ONE FOOT RADIUS PER DIAMETER INCH OF THE TRUNK OF THE TREE. A TEN INCH TREE SHALL REQUIRE A TEN FOOT ROOT PROTECTION ZONE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL WOUNDS TO OAK TREES SHALL BE PAINTED WITHIN 20 MINUTES TO PREVENT THE SPREAD OF OAK WILT.
- THE CITY ARBORIST, 207-0278, SHALL APPROVE ANY TREE REMOVED.
- TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES MAY BE NEATLY TRIMMED BY THE CONTRACTOR ONLY AFTER APPROVAL FROM THE CITY INSPECTOR.
- TREES THAT ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
- SAPLINGS, SHRUBS OR BUSHES TO BE REMOVED FROM THE PROTECTED ROOT ZONE AREA OF PROTECTED TREES SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR.
- ALL DEBRIS GENERATED BY THE PRUNING OR TRIMMING OF THE TREES AND/OR BUSHES SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
- TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT PROTECTION ZONE AND/OR WASHING FOLIAGE.
- NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED TREES.
- PRIOR TO START OF WORK, CALL 207-1111 TO SCHEDULE A PRE-CONSTRUCTION & FENCING INSPECTION (PER SECTION 35-477 OF THE UDC, SUBSECTION TREE PERMITS (5)(C)).
- FAILURE TO SCHEDULE A FENCING INSPECTION PRIOR TO START OF WORK MAY RESULT IN A STOP WORK ORDER OR A PENALTY OF \$2,000 OR BOTH (PER SECTION 35-523 OF THE UDC, SUBSECTION (K)(2), THE BARRIER SHALL BE IN PLACE BEFORE ANY SITE WORK IS INITIATED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS).
- TREE PLANTING AND MAINTENANCE: ALL PRESERVED AND PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATING, FERTILIZING, PRUNING, AND OTHER MAINTENANCE AS NEEDED. TREES THAT DIE WITHIN TWELVE MONTHS SHALL BE REPLACED WITH A TREE OF COMPARABLE SIZE AND SPECIES. REGARDING REPLACEMENT OF PRESERVED TREES, SIGNIFICANT TREES SHALL BE REPLACED WITH A 1:1 RATIO (OR INCH-FOR-INCH) AND HERITAGE TREES SHALL BE REPLACED AT A 3:1 RATIO (OR THREE-TO-ONE INCH).



TREE PROTECTION DETAIL EXISTING TREES
N.T.S.



TREE PRUNING DETAIL
N.T.S.

TREE PRESERVATION NOTES

- ALL TREES TO REMAIN ON SITE REQUIRE PROTECTIVE FENCING, PRUNING, WATERING, AND FERTILIZATION AS DIRECTED BY A QUALIFIED ARBORIST.
- PROTECTIVE FENCING CONSISTS OF 4'-0" HIGH FENCE.
- FENCE TO EXTEND FROM TRUNK ONE FOOT FOR EVERY CALIPER INCH OF TREE (MINIMUM). THE OPTIMUM DISTANCE IS TO INSTALL FENCE DIRECTLY BENEATH DRIPLINE OF TREE TO REMAIN AS SHOWN.
- DURING CONSTRUCTION, NO EXCESS SOIL, FILL MATERIAL, EQUIPMENT, LIQUIDS, OR CONSTRUCTION DEBRIS SHALL BE PLACED WITHIN THE PROTECTIVE FENCING, NOR SHALL ANY SOIL BE REMOVED FROM WITHIN THE FENCING.
- ALL TREE PROTECTION MUST BE IN PLACE BEFORE CONSTRUCTION BEGINS.
- INSTALL 4" MINIMUM DEPTH OF SHREDDED MULCH BENEATH THE DRIPLINE OF THE TREE.

NOTE: DO NOT CUT FROM D TO E

- FIRST CUT - TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
- SECOND CUT - TO REDUCE THE WEIGHT OF BRANCH.
- FINAL CUT - ALLOW FOR HEALING COLLAR BUT NO STUBS
- BRANCH RIDGES - INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.

FOR OAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN. TO PREVENT THE SPREAD OF OAK WILT.

CANOPY PRESERVATION SUMMARY

| OUTSIDE FLOODPLAIN: | |
|--------------------------------------|-----------|
| EXISTING CANOPY = | 29,428 SF |
| REQUIRED TO REMAIN (25%) = | 7,357 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 22,060 SF |
| EXISTING TREE CANOPY TO REMAIN = | 7,368 SF |
| PERCENTAGE AREA PRESERVED = | 25% |
| CANOPY REQUIRED TO BE MITIGATED = | 0 SF |

| INSIDE FLOODPLAIN: | |
|--------------------------------------|-----------|
| EXISTING CANOPY = | 22,766 SF |
| REQUIRED TO REMAIN (80%) = | 18,213 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 12,685 SF |
| EXISTING TREE CANOPY TO REMAIN = | 10,081 SF |
| PERCENTAGE AREA PRESERVED = | 44% |
| CANOPY REQUIRED TO BE MITIGATED = | 8,132 SF |

| INSIDE 30' FLOODPLAIN BUFFER: | |
|--------------------------------------|----------|
| EXISTING CANOPY = | 3,233 SF |
| REQUIRED TO REMAIN (80%) = | 2,586 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 1,693 SF |
| EXISTING TREE CANOPY TO REMAIN = | 1,540 SF |
| PERCENTAGE AREA PRESERVED = | 48% |
| CANOPY REQUIRED TO BE MITIGATED = | 1,046 SF |

HERITAGE TREE PRESERVATION SUMMARY

| TAG # | SIZE | SPECIES | FLOODPLAIN | TO BE PRESERVED |
|-------|----------|----------|------------|-----------------|
| 7581 | 13x12x11 | HUISACHE | NO | NO |

TREE CANOPY MITIGATION CALCULATIONS

OUTSIDE FLOODPLAIN

- EXISTING CANOPY AREA PRESERVED: 7,368 SF
- EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 25% x 29,428 SF = 7,357 SF

** TREE CANOPY AREA BEING PRESERVED EXCEEDS THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS NOT REQUIRED.

INSIDE FLOODPLAIN

- EXISTING CANOPY AREA PRESERVED: 10,081 SF
- EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 22,766 SF = 18,213 SF

** TREE CANOPY AREA BEING PRESERVED DOES NOT EXCEED THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS REQUIRED.

INSIDE 30' WIDE BUFFER

- EXISTING CANOPY AREA PRESERVED: 1,540 SF
- EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 3,233 SF = 2,586 SF

** TREE CANOPY AREA BEING PRESERVED DOES NOT EXCEED THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS REQUIRED.

MITIGATION REQUIREMENTS

INSIDE FLOODPLAIN

NUMBER OF TREES REQUIRED TO BE PLANTED = 8,132 SF ÷ (875 SF/TREE) = 10 TREES
INCHES OF CANOPY REQUIRED TO BE MITIGATED = 10 TREES x 16.7 INCHES = 167 INCHES

INSIDE 30' WIDE BUFFER

NUMBER OF TREES REQUIRED TO BE PLANTED = 1,046 SF ÷ (875 SF/TREE) = 2 TREES
INCHES OF CANOPY REQUIRED TO BE MITIGATED = 2 TREES x 16.7 INCHES = 34 INCHES

TOTAL MITIGATION

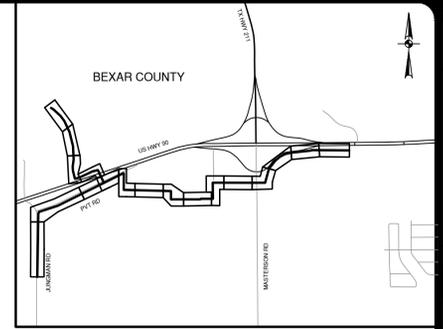
INSIDE FLOODPLAIN CANOPY MITIGATION INCHES = 167 INCHES
BUFFER CANOPY MITIGATION INCHES = 34 INCHES

MITIGATION FEE @ \$200.00/INCH

FLOODPLAIN CANOPY FEE = 167 INCHES x \$200 = \$33,400

BUFFER CANOPY FEE = 34 INCHES x \$200 = \$6,800

TOTAL MITIGATION FEE = \$40,200



LOCATION MAP
NOT-TO-SCALE

| NO. | REVISION | DATE |
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STONEHILL OFF-SITE WATER EXTENSION
BEXAR COUNTY, TEXAS
PHASE I
TREE PRESERVATION PLAN DETAILS

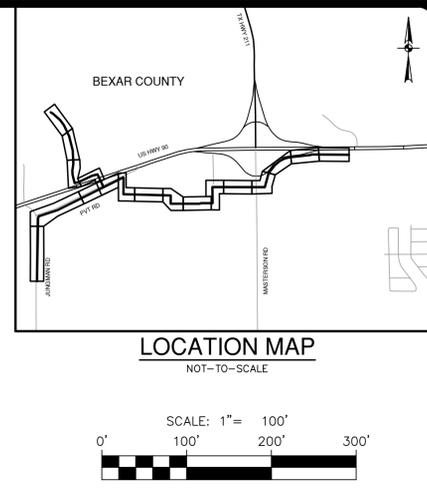
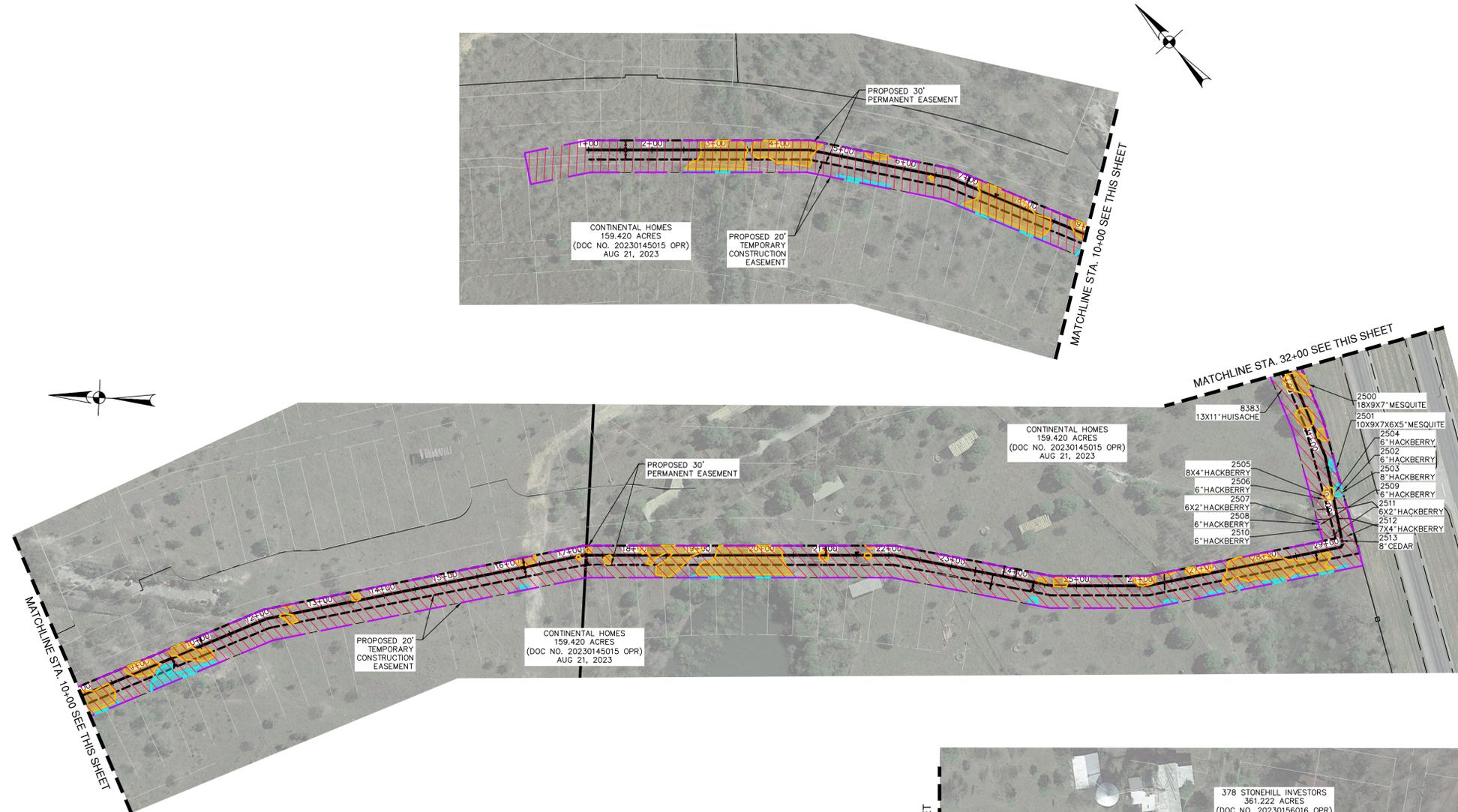
WATER: SAWS PRESSURE ZONE 930
STONEHILL OFF-SITE WATER EXTENSION

| |
|--|
| Developer's Name: DR HORTON |
| Address: 211 NORTH LOOP 1604, SUITE 130 |
| City: SAN ANTONIO State: TEXAS ZIP: 78232 |
| Phone# (210) 496-2668 FAX# N/A |
| SAWS Block Map# 076558_074558 Total Acreage 8.14 |
| PHASE I - 4,765 LF ~ 16" PVC WATER |
| Total Linear Footage of Pipe PHASE II - 15,036 LF ~ 24" PVC WATER Plat No. N/A |
| Number of Lots N/A TOTAL EDU'S N/A SAWS JOB NO. 23-7003 |

| | |
|----------|---------------|
| PLAT NO. | N/A |
| JOB NO. | 12747-00 |
| DATE | NOVEMBER 2023 |
| DESIGNER | CN |
| CHECKED | SG DRAWN JD |
| SHEET | C6.01 |

Date: June 1, 2023, 3:01 PM - User ID: omohammed
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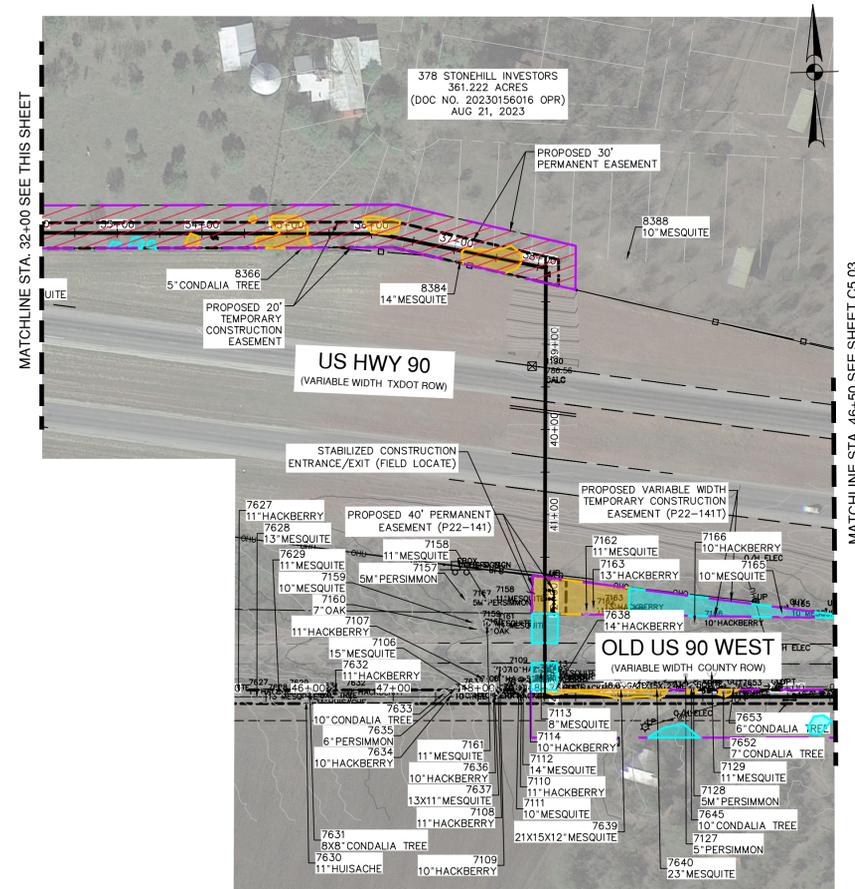


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| DATE | |
| NO. | REVISION |
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STATE OF TEXAS
JASON T. DIAMOND
 96532
 PROFESSIONAL ENGINEER
Jason T. Diamond
 11-20-23

LEGEND

| | |
|---|---------|
| PROPOSED SEWER LINE | --- |
| PROPERTY LINE | --- |
| PROPOSED EASEMENT | --- |
| EXISTING EASEMENT | --- |
| EXISTING OVERHEAD ELECTRIC | --- OHE |
| EXISTING 1' CONTOURS | --- 946 |
| EXISTING 5' CONTOURS | --- 950 |
| 1% ANNUAL-CHANCE FEMA FLOODPLAIN | --- |
| 30' WIDE FLOODPLAIN BUFFER | --- |
| PROJECT LIMITS | --- |
| CANOPY TO BE REMOVED INSIDE FLOODPLAIN | --- |
| CANOPY TO BE PRESERVED INSIDE FLOODPLAIN | --- |
| CANOPY TO BE REMOVED OUTSIDE FLOODPLAIN | --- |
| CANOPY TO BE PRESERVED OUTSIDE FLOODPLAIN | --- |
| CANOPY TO BE REMOVED INSIDE 30' WIDE BUFFER | --- |
| CANOPY TO BE PRESERVED INSIDE 30' WIDE BUFFER | --- |
| PROJECT AREA ACCOUNTED FOR IN STONEHILL MDP TREE PLAN | --- |



WATER: SAWS PRESSURE ZONE 930

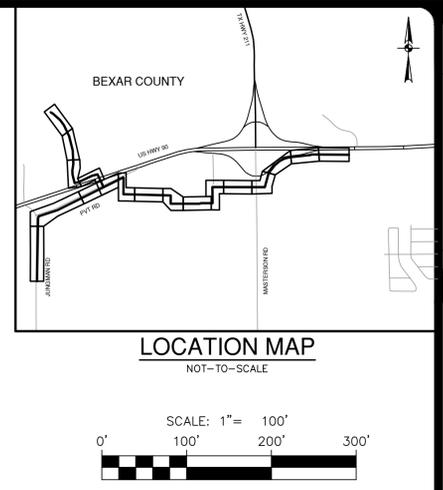
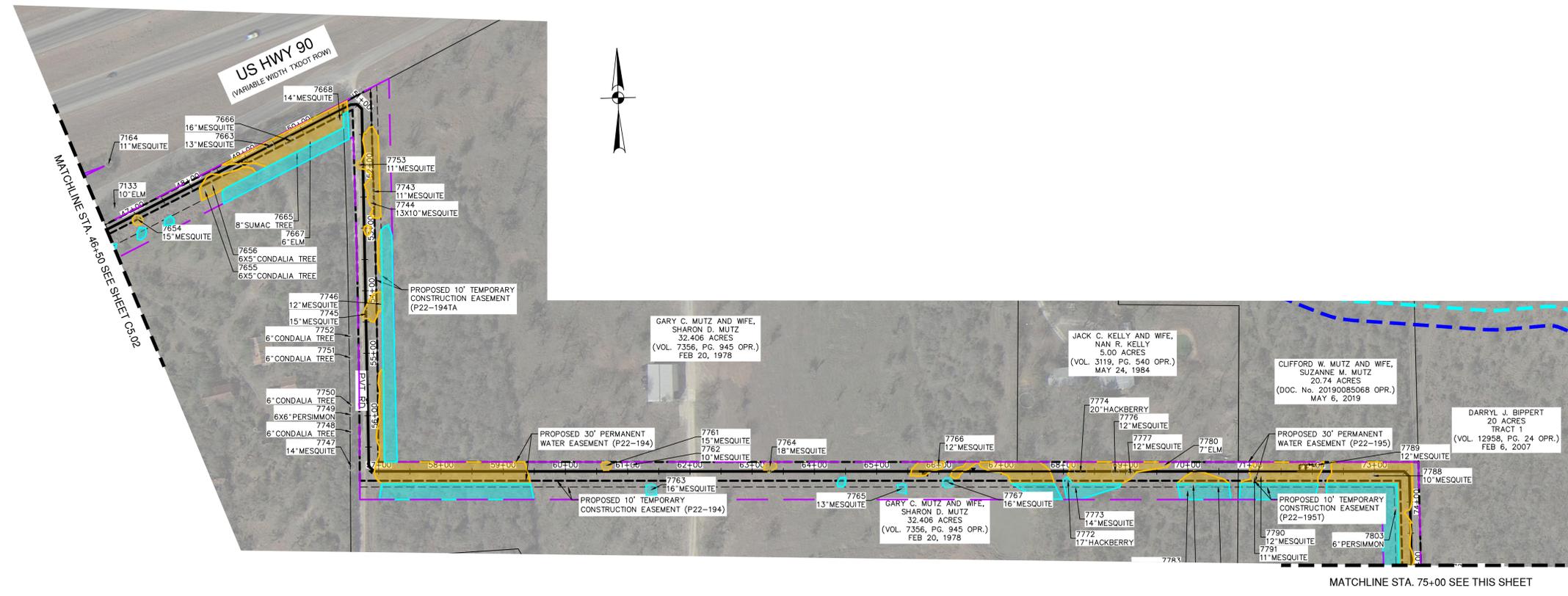
STONEHILL OFF-SITE WATER EXTENSION

| |
|---|
| Developer's Name: DR HORTON |
| Address: 211 NORTH LOOP 1604, SUITE 130 |
| City: SAN ANTONIO State: TEXAS ZIP: 78232 |
| Phone# (210) 496-2888 FAX# N/A |
| SAWS Block Map# 076558_074558 |
| Total Linear Footage of Pipe PHASE II = 15,036 LF @ 24" PVC WATER |
| Number of Lots N/A TOTAL EDU'S N/A SAWS JOB NO. 23-7003 |

STONEHILL OFF-SITE WATER EXTENSION
 BEXAR COUNTY, TEXAS
 PHASE II
 TREE PRESERVATION PLAN

PLAT NO. N/A
 JOB NO. 12747-00
 DATE NOVEMBER 2023
 DESIGNER CN
 CHECKED SG DRAWN JD
 SHEET C6.02

PAPE-DAWSON ENGINEERS
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800



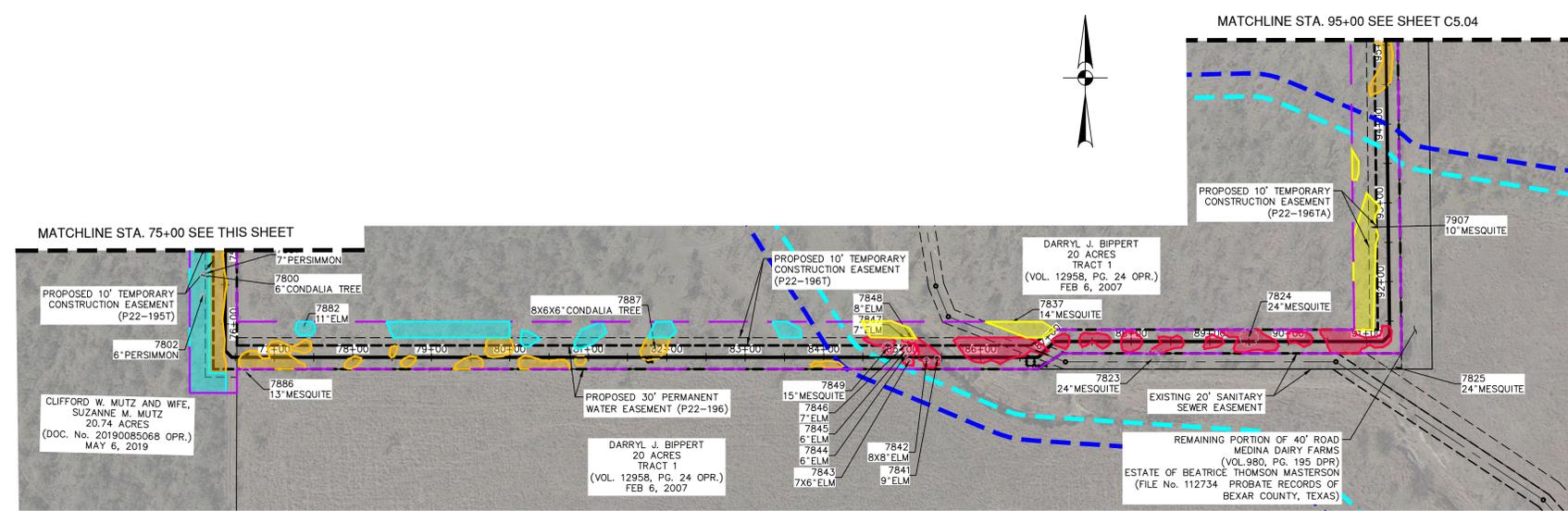
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|--------------|--|
| DATE | |
| NO. REVISION | |



LEGEND

| | |
|---|-------|
| PROPOSED SEWER LINE | --- |
| PROPERTY LINE | --- |
| PROPOSED EASEMENT | --- |
| EXISTING EASEMENT | --- |
| EXISTING OVERHEAD ELECTRIC | OHE |
| EXISTING 1' CONTOURS | -946- |
| EXISTING 5' CONTOURS | -950- |
| 1% ANNUAL-CHANCE FEMA FLOODPLAIN | --- |
| 30' WIDE FLOODPLAIN BUFFER | --- |
| PROJECT LIMITS | --- |
| CANOPY TO BE REMOVED INSIDE FLOODPLAIN | --- |
| CANOPY TO BE PRESERVED INSIDE FLOODPLAIN | --- |
| CANOPY TO BE REMOVED OUTSIDE FLOODPLAIN | --- |
| CANOPY TO BE PRESERVED OUTSIDE FLOODPLAIN | --- |
| CANOPY TO BE REMOVED INSIDE 30' WIDE BUFFER | --- |
| CANOPY TO BE PRESERVED INSIDE 30' WIDE BUFFER | --- |
| PROJECT AREA ACCOUNTED FOR IN STONEHILL MDP TREE PLAN | --- |

PAPE-DAWSON ENGINEERS
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800



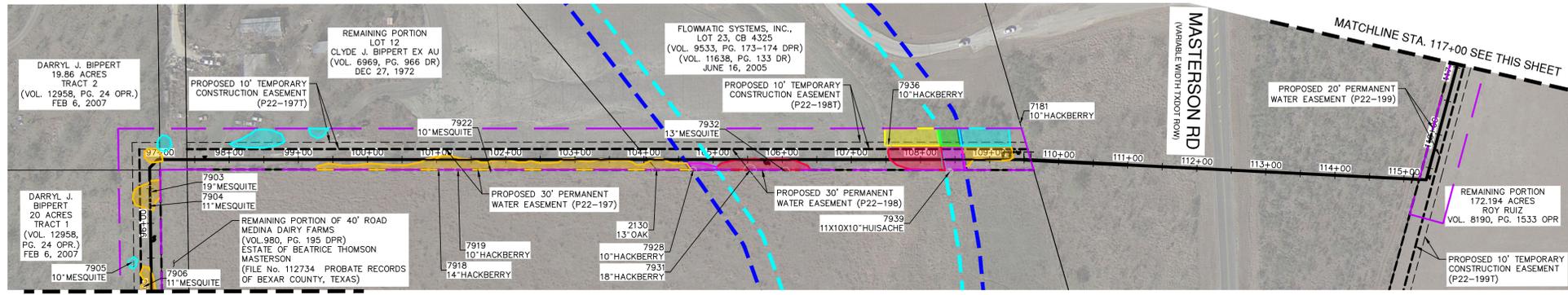
WATER: SAWS PRESSURE ZONE 930
 STONEHILL OFF-SITE WATER EXTENSION

| |
|---|
| Developer's Name: DR HORTON |
| Address: 211 NORTH LOOP 1604, SUITE 130 |
| City: SAN ANTONIO State: TEXAS ZIP: 78232 |
| Phone# (210) 496-2668 FAX# N/A |
| SAWS Block Map# 076558_074558 |
| Total Linear Footage of Pipe PHASE I = 4,765 LF ~ 16" PVC WATER |
| Total Linear Footage of Pipe PHASE II = 15,036 LF ~ 24" PVC WATER |
| Number of Lots: N/A TOTAL EDU'S: N/A SAWS JOB NO. 23-7003 |

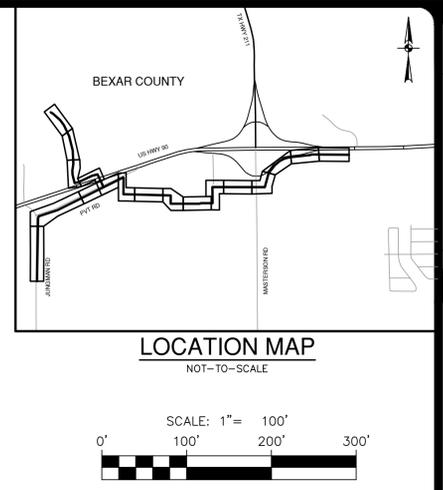
STONEHILL OFF-SITE WATER EXTENSION
 BEXAR COUNTY, TEXAS
 PHASE II
 TREE PRESERVATION PLAN
 PLAT NO. N/A
 JOB NO. 12747-00
 DATE NOVEMBER 2023
 DESIGNER CN
 CHECKED SG DRAWN JD
 SHEET C6.03

Date: June 1, 2023, 3:02 PM - User ID: omohammed
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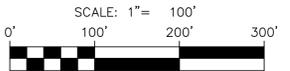
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MATCHLINE STA. 95+00 SEE SHEET C5.03

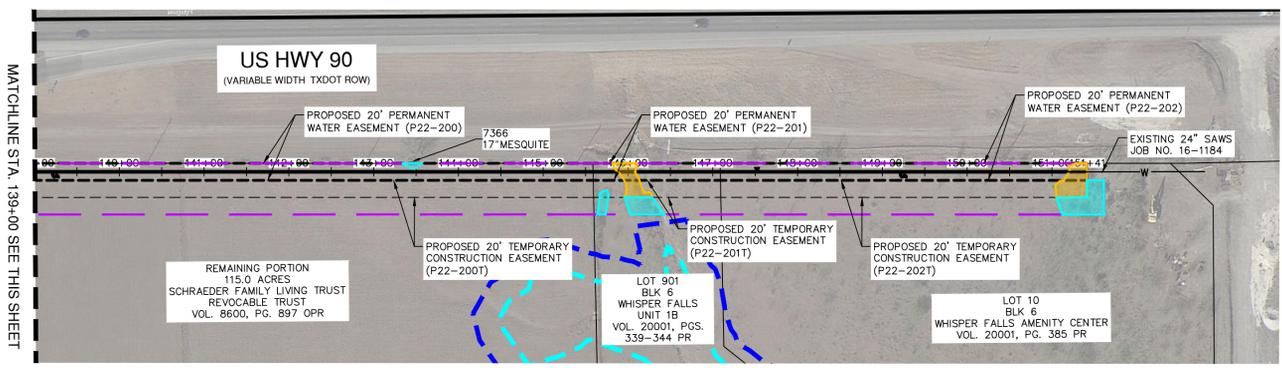
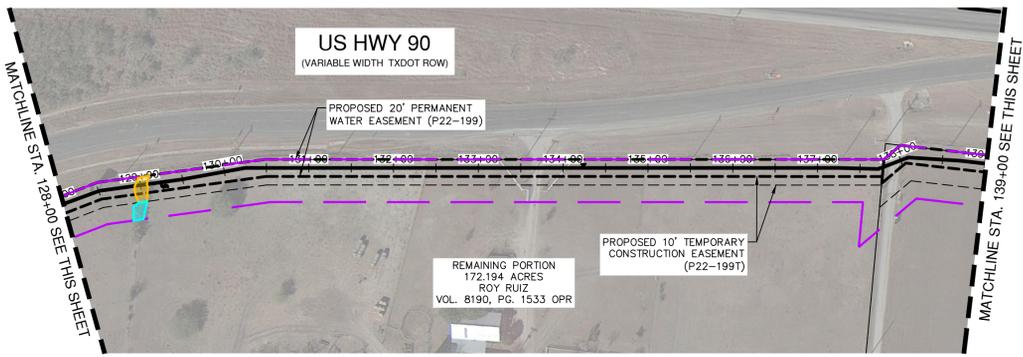
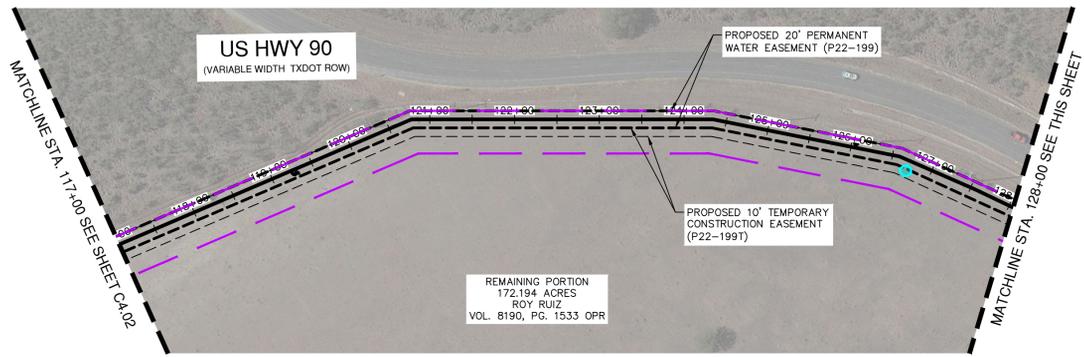


LOCATION MAP
NOT-TO-SCALE

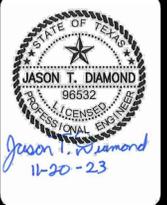


LEGEND

- PROPOSED SEWER LINE
- PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- EXISTING OVERHEAD ELECTRIC
- EXISTING 1' CONTOURS
- EXISTING 5' CONTOURS
- 1% ANNUAL-CHANCE FEMA FLOODPLAIN
- 30' WIDE FLOODPLAIN BUFFER
- PROJECT LIMITS
- CANOPY TO BE REMOVED INSIDE FLOODPLAIN
- CANOPY TO BE PRESERVED INSIDE FLOODPLAIN
- CANOPY TO BE REMOVED OUTSIDE FLOODPLAIN
- CANOPY TO BE PRESERVED OUTSIDE FLOODPLAIN
- CANOPY TO BE REMOVED INSIDE 30' WIDE BUFFER
- CANOPY TO BE PRESERVED INSIDE 30' WIDE BUFFER
- PROJECT AREA ACCOUNTED FOR IN STONEHILL MDP TREE PLAN



| | |
|------|----------|
| DATE | |
| NO. | REVISION |
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| | |



PAPE-DAWSON ENGINEERS
 2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800

STONEHILL OFF-SITE WATER EXTENSION
 BEXAR COUNTY, TEXAS
 PHASE II
 TREE PRESERVATION PLAN

WATER: SAWS PRESSURE ZONE 930
 STONEHILL OFF-SITE WATER EXTENSION

| |
|--|
| Developer's Name: DR HORTON |
| Address: 211 NORTH LOOP 1604, SUITE 130 |
| City: SAN ANTONIO State: TEXAS ZIP: 78232 |
| Phone# (210) 496-2668 FAX# N/A |
| SAWS Block Map# 076558_074558 |
| PHASE I - 4,765 LF - 16" PVC WATER Total Acreage 8.14 |
| Total Linear Footage of Pipe PHASE II - 15,036 LF - 24" PVC WATER Plat No. N/A |
| Number of Lots N/A TOTAL EDU'S N/A SAWS JOB NO. 23-7003 |

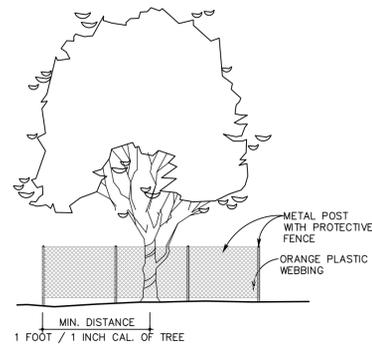
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| PLAT NO. | N/A |
| JOB NO. | 12747-00 |
| DATE | NOVEMBER 2023 |
| DESIGNER | CN |
| CHECKED | SG DRAWN JD |
| SHEET | C6.04 |

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 File: P:\2747\Design\Civil\Water\TRP-12747-00-PH-II.dwg

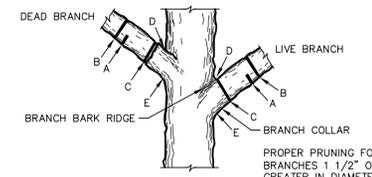
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TREE PRESERVATION GENERAL NOTES

- ALL TREES SHALL REMAIN UNLESS NOTED ON THE CITY OF SAN ANTONIO APPROVED PLANS.
- NO UTILITY EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE.
- EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
- NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS ONE FOOT RADIUS PER DIAMETER INCH OF THE TRUNK OF THE TREE. A TEN INCH TREE SHALL REQUIRE A TEN FOOT ROOT PROTECTION ZONE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. ALL WOUNDS TO OAK TREES SHALL BE PAINTED WITHIN 20 MINUTES TO PREVENT THE SPREAD OF OAK WILT.
- THE CITY ARBORIST, 207-0278, SHALL APPROVE ANY TREE REMOVED.
- TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES MAY BE NEATLY TRIMMED BY THE CONTRACTOR ONLY AFTER APPROVAL FROM THE CITY INSPECTOR.
- TREES THAT ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
- SAPLINGS, SHRUBS OR BUSHES TO BE REMOVED FROM THE PROTECTED ROOT ZONE AREA OF PROTECTED TREES SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR.
- ALL DEBRIS GENERATED BY THE PRUNING OR TRIMMING OF THE TREES AND/OR BUSHES SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
- TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT PROTECTION ZONE AND/OR WASHING FOLIAGE.
- NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED TREES.
- PRIOR TO START OF WORK, CALL 207-1111 TO SCHEDULE A PRE-CONSTRUCTION & FENCING INSPECTION (PER SECTION 35-477 OF THE UDC, SUBSECTION TREE PERMITS (5)(C)).
- FAILURE TO SCHEDULE A FENCING INSPECTION PRIOR TO START OF WORK MAY RESULT IN A STOP WORK ORDER OR A PENALTY OF \$2,000 OR BOTH (PER SECTION 35-523 OF THE UDC, SUBSECTION (K)(2)). THE BARRIER SHALL BE IN PLACE BEFORE ANY SITE WORK IS INITIATED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- TREE PLANTING AND MAINTENANCE: ALL PRESERVED AND PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATING, FERTILIZING, PRUNING, AND OTHER MAINTENANCE AS NEEDED. TREES THAT DIE WITHIN TWELVE MONTHS SHALL BE REPLACED WITH A TREE OF COMPARABLE SIZE AND SPECIES. REGARDING REPLACEMENT OF PRESERVED TREES, SIGNIFICANT TREES SHALL BE REPLACED WITH A 1:1 RATIO (OR INCH-FOR-INCH) AND HERITAGE TREES SHALL BE REPLACED AT A 3:1 RATIO (OR THREE-TO-ONE INCH).



**TREE PROTECTION DETAIL
EXISTING TREES**
N.T.S.

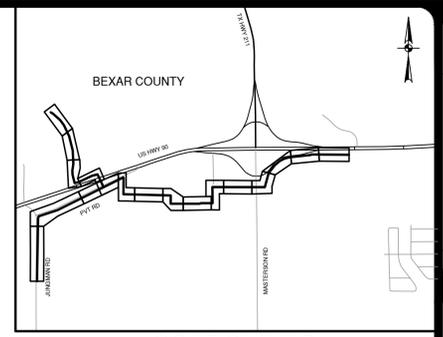


TREE PRUNING DETAIL
N.T.S.

TREE PRESERVATION NOTES

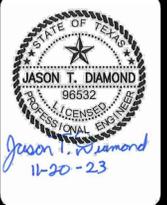
- ALL TREES TO REMAIN ON SITE REQUIRE PROTECTIVE FENCING, PRUNING, WATERING, AND FERTILIZATION AS DIRECTED BY A QUALIFIED ARBORIST.
- PROTECTIVE FENCING CONSISTS OF 4'-0" HIGH FENCE.
- FENCE TO EXTEND FROM TRUNK ONE FOOT FOR EVERY CALIPER INCH OF TREE (MINIMUM). THE OPTIMUM DISTANCE IS TO INSTALL FENCE DIRECTLY BENEATH DRILLLINE OF TREE TO REMAIN AS SHOWN.
- DURING CONSTRUCTION, NO EXCESS SOIL, FILL MATERIAL, EQUIPMENT, LIQUIDS, OR CONSTRUCTION DEBRIS SHALL BE PLACED WITHIN THE PROTECTIVE FENCING, NOR SHALL ANY SOIL BE REMOVED FROM WITHIN THE FENCING.
- ALL TREE PROTECTION MUST BE IN PLACE BEFORE CONSTRUCTION BEGINS.
- INSTALL 4" MINIMUM DEPTH OF SHREDDED MULCH BENEATH THE DRILLLINE OF THE TREE.

- NOTE:** DO NOT CUT FROM D TO E
- FIRST CUT** - TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
 - SECOND CUT** - TO REDUCE THE WEIGHT OF BRANCH.
 - FINAL CUT** - ALLOW FOR HEALING COLLAR BUT NO STUBS
 - BRANCH RIDGES** - INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.
- FOR OAKS ONLY:** PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN. TO PREVENT THE SPREAD OF OAK WILT.



LOCATION MAP
NOT-TO-SCALE

| NO. | REVISION | DATE |
|-----|----------|------|
| | | |
| | | |



PAPE-DAWSON ENGINEERS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

CANOPY PRESERVATION SUMMARY

| OUTSIDE FLOODPLAIN: | |
|--------------------------------------|------------|
| EXISTING CANOPY = | 129,822 SF |
| REQUIRED TO REMAIN (25%) = | 32,455 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 72,003 SF |
| EXISTING TREE CANOPY TO REMAIN = | 57,819 SF |
| PERCENTAGE AREA PRESERVED = | 45% |
| CANOPY REQUIRED TO BE MITIGATED = | 0 SF |

| INSIDE FLOODPLAIN: | |
|--------------------------------------|-----------|
| EXISTING CANOPY = | 23,414 SF |
| REQUIRED TO REMAIN (80%) = | 18,731 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 14,736 SF |
| EXISTING TREE CANOPY TO REMAIN = | 8,678 SF |
| PERCENTAGE AREA PRESERVED = | 37% |
| CANOPY REQUIRED TO BE MITIGATED = | 10,054 SF |

| INSIDE 30' FLOODPLAIN BUFFER: | |
|--------------------------------------|----------|
| EXISTING CANOPY = | 2,129 SF |
| REQUIRED TO REMAIN (80%) = | 1,703 SF |
| EXISTING TREE CANOPY TO BE REMOVED = | 1,377 SF |
| EXISTING TREE CANOPY TO REMAIN = | 752 SF |
| PERCENTAGE AREA PRESERVED = | 35% |
| CANOPY REQUIRED TO BE MITIGATED = | 952 SF |

TREE CANOPY MITIGATION CALCULATIONS

OUTSIDE FLOODPLAIN
 A. EXISTING CANOPY AREA PRESERVED: 57,819 SF
 B. EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 25% x 129,822 SF = 32,455 SF
 ** TREE CANOPY AREA BEING PRESERVED EXCEEDS THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS NOT REQUIRED.

INSIDE FLOODPLAIN
 A. EXISTING CANOPY AREA PRESERVED: 18,731 SF
 B. EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 23,414 SF = 18,731 SF
 ** TREE CANOPY AREA BEING PRESERVED DOES NOT EXCEED THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS REQUIRED.

INSIDE 30' WIDE BUFFER
 A. EXISTING CANOPY AREA PRESERVED: 752 SF
 B. EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 2,129 SF = 1,703 SF
 ** TREE CANOPY AREA BEING PRESERVED DOES NOT EXCEED THE REQUIRED CANOPY AREA; THEREFORE, MITIGATION IS REQUIRED.

MITIGATION REQUIREMENTS

INSIDE FLOODPLAIN
 NUMBER OF TREES REQUIRED TO BE PLANTED = 10,054 SF ÷ (875 SF/TREE) = 12 TREES
 INCHES OF CANOPY REQUIRED TO BE MITIGATED = 12 TREES x 16.7 INCHES = 201 INCHES

INSIDE 30' WIDE BUFFER
 NUMBER OF TREES REQUIRED TO BE PLANTED = 952 SF ÷ (875 SF/TREE) = 2 TREES
 INCHES OF CANOPY REQUIRED TO BE MITIGATED = 2 TREES x 16.7 INCHES = 34 INCHES

TOTAL MITIGATION

INSIDE FLOODPLAIN CANOPY MITIGATION INCHES = 201 INCHES
 BUFFER CANOPY MITIGATION INCHES = 34 INCHES

MITIGATION FEE @ \$200.00/INCH
 FLOODPLAIN CANOPY FEE = 201 INCHES x \$200 = \$40,200
 BUFFER CANOPY FEE = 34 INCHES x \$200 = \$6,800
 TOTAL MITIGATION FEE = \$47,000

HERITAGE TREE PRESERVATION SUMMARY

| TAG # | SIZE | SPECIES | FLOODPLAIN | TO BE PRESERVED |
|-------|----------|----------|------------|-----------------|
| 2500 | 18X9X7 | MESQUITE | NO | NO |
| 7639 | 21X15X12 | MESQUITE | NO | NO |

*TO BE ADDRESSED BY STONEHILL DEVELOPMENT TREE PLAN

WATER: SAWS PRESSURE ZONE 930
STONEHILL OFF-SITE WATER EXTENSION

| |
|---|
| Developer's Name: DR HORTON |
| Address: 211 NORTH LOOP 1604, SUITE 130 |
| City: SAN ANTONIO State: TEXAS ZIP: 78232 |
| Phone# (210) 496-2668 FAX# N/A |
| SAWS Block Map# 076558_074558 |
| Number of Lots: N/A TOTAL EDU'S: N/A SAWS JOB NO. 23-7003 |

STONEHILL OFF-SITE WATER EXTENSION
BEXAR COUNTY, TEXAS
PHASE II
TREE PRESERVATION PLAN DETAILS

| | |
|----------|---------------|
| PLAT NO. | N/A |
| JOB NO. | 12747-00 |
| DATE | NOVEMBER 2023 |
| DESIGNER | CN |
| CHECKED | SG DRAWN JD |
| SHEET | C6.05 |