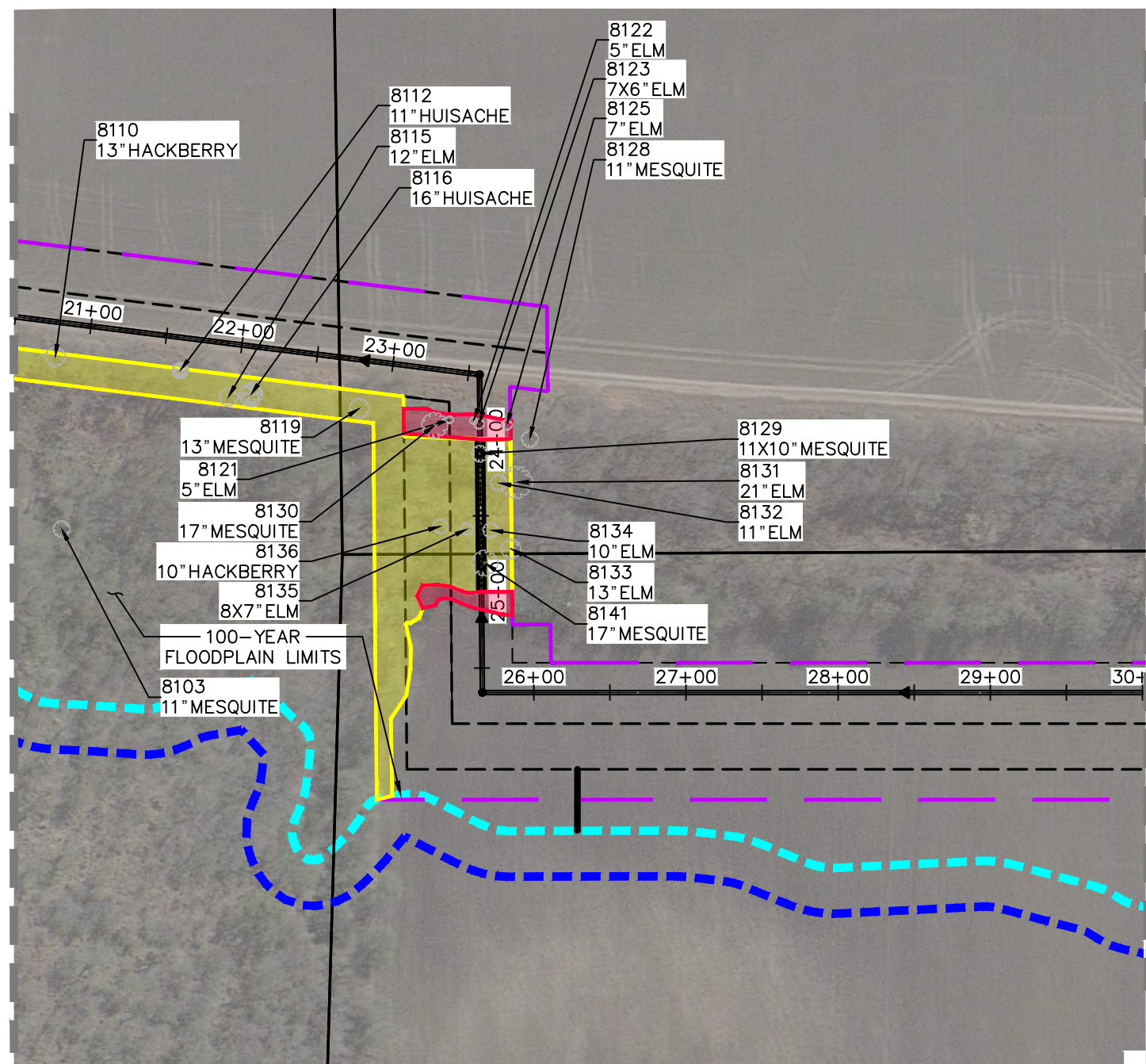


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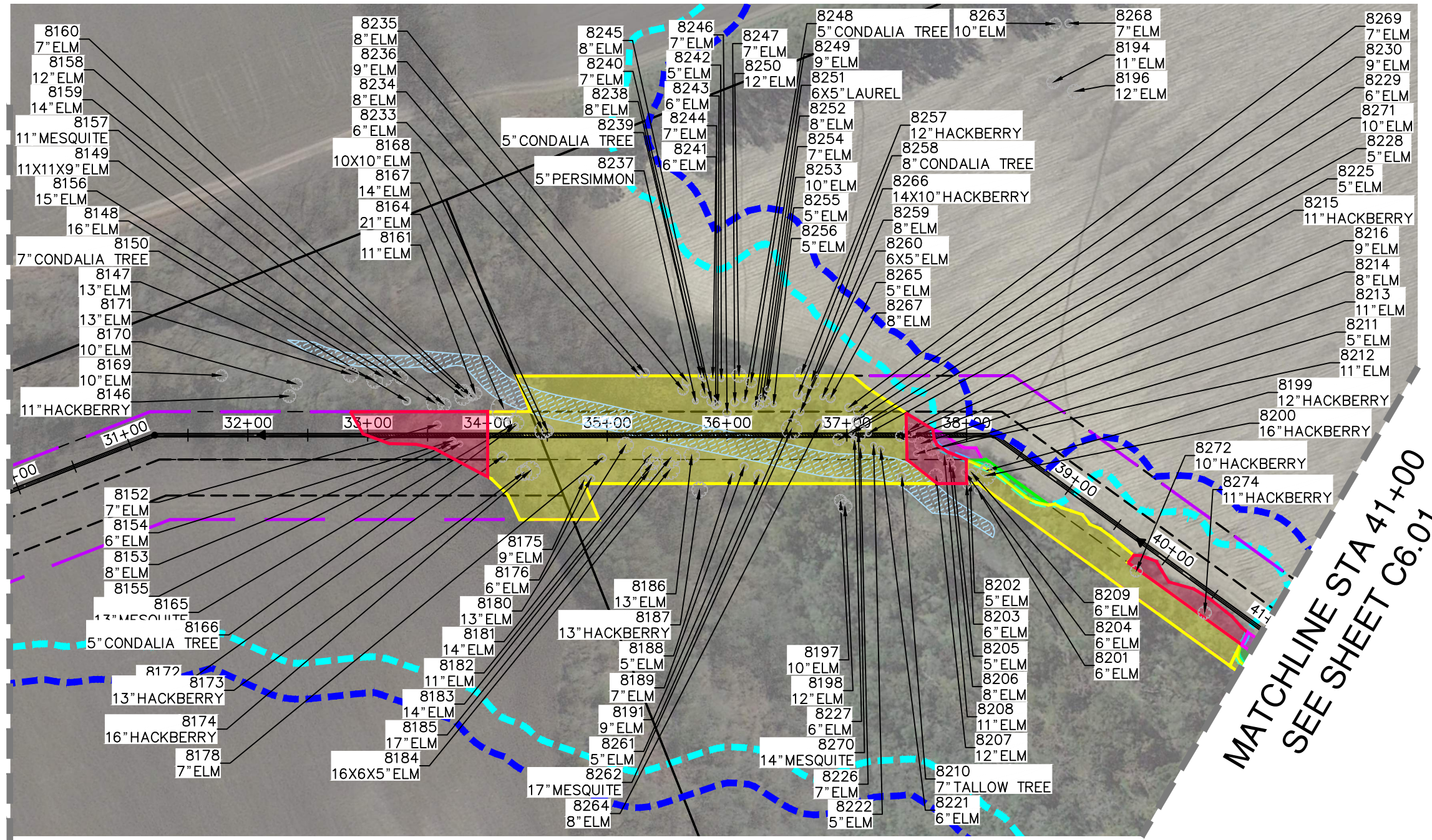
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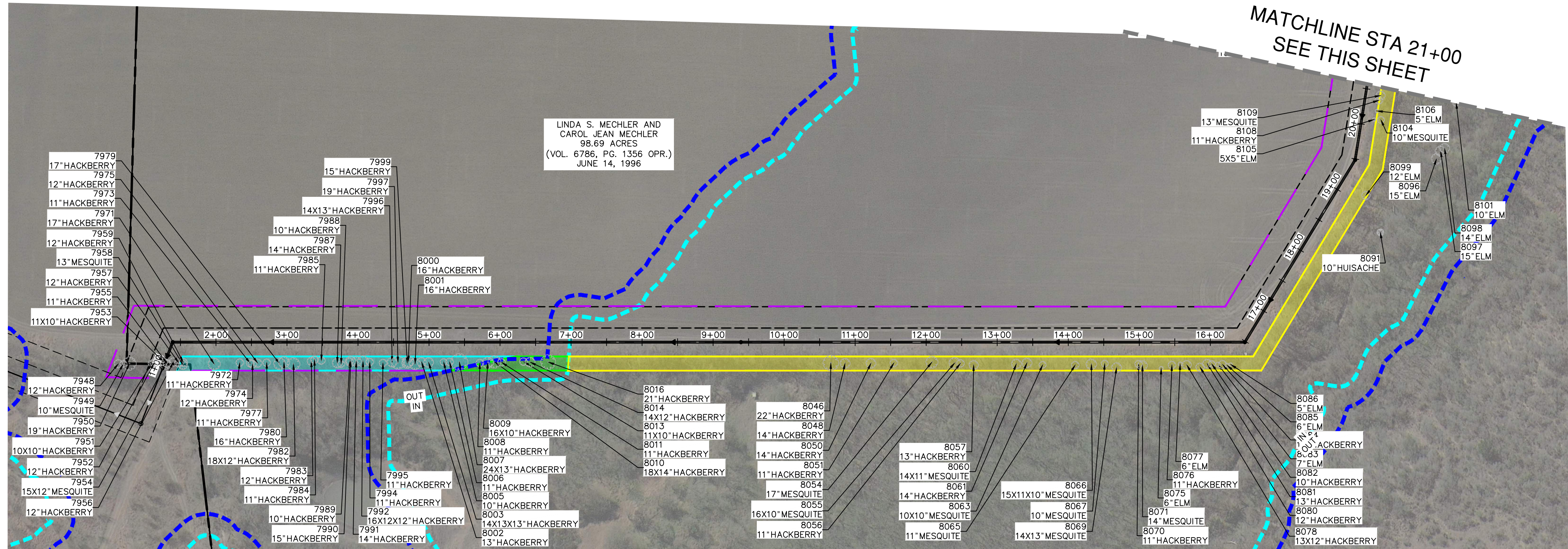


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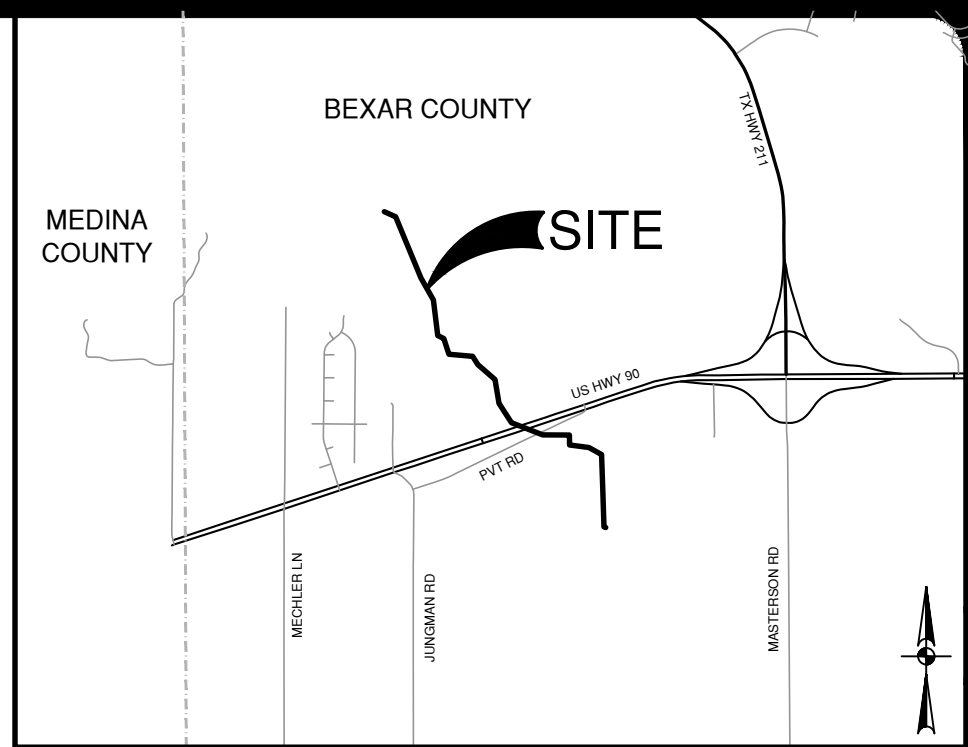
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MATCHLINE STA 41+00
SEE SHEET C6.01

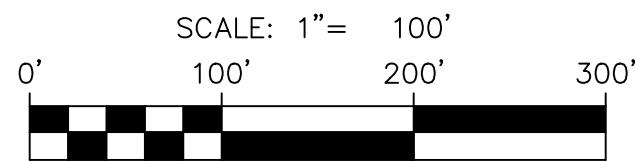


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LOCATION MAP

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	
50' 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 50' WIDE BUFFER	
CANOPY TO BE PRESERVED INSIDE 50' WIDE BUFFER	
PROJECT AREA ACCOUNTED FOR IN STONEHILL MDP TREE PLAN	

SEWER: SOUTH WATERSHED - DOS RIOS W.R.C.
STONEHILL OFF-SITE SEWER EXTENSION - PHASE 1

Developer's Name: DR. HORTON	
Address: 211 NORTH LOOP 1604, SUITE 130	
City: SAN ANTONIO	State: TEXAS ZIP: 78232
Phone# (210) 496-2868	FAX# N/A
SAWS Block Map# 066558, 066560, 066556, 066558, 070554, 070556 Total Acreage 8.19	
Total Linear Footage of Pipe 9,285 LF ~ 30" FRP SEWER Plat No. N/A	
Number of Lots N/A	TOTAL EDU'S N/A SAWS JOB NO. 23-4518

STONEHILL OFF-SITE SEWER EXTENSION PHASE I

BEXAR COUNTY, TEXAS

TREE PRESERVATION PLAN

PAPE-DAWSON
ENGINEERS

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008860

NO.	REVISION	DATE

PLAT NO.	
JOB NO.	12747-02
DATE	SEPTEMBER 2023
DESIGNER	CD
CHECKED	MP DRAWN RJ
SHEET	C6.00

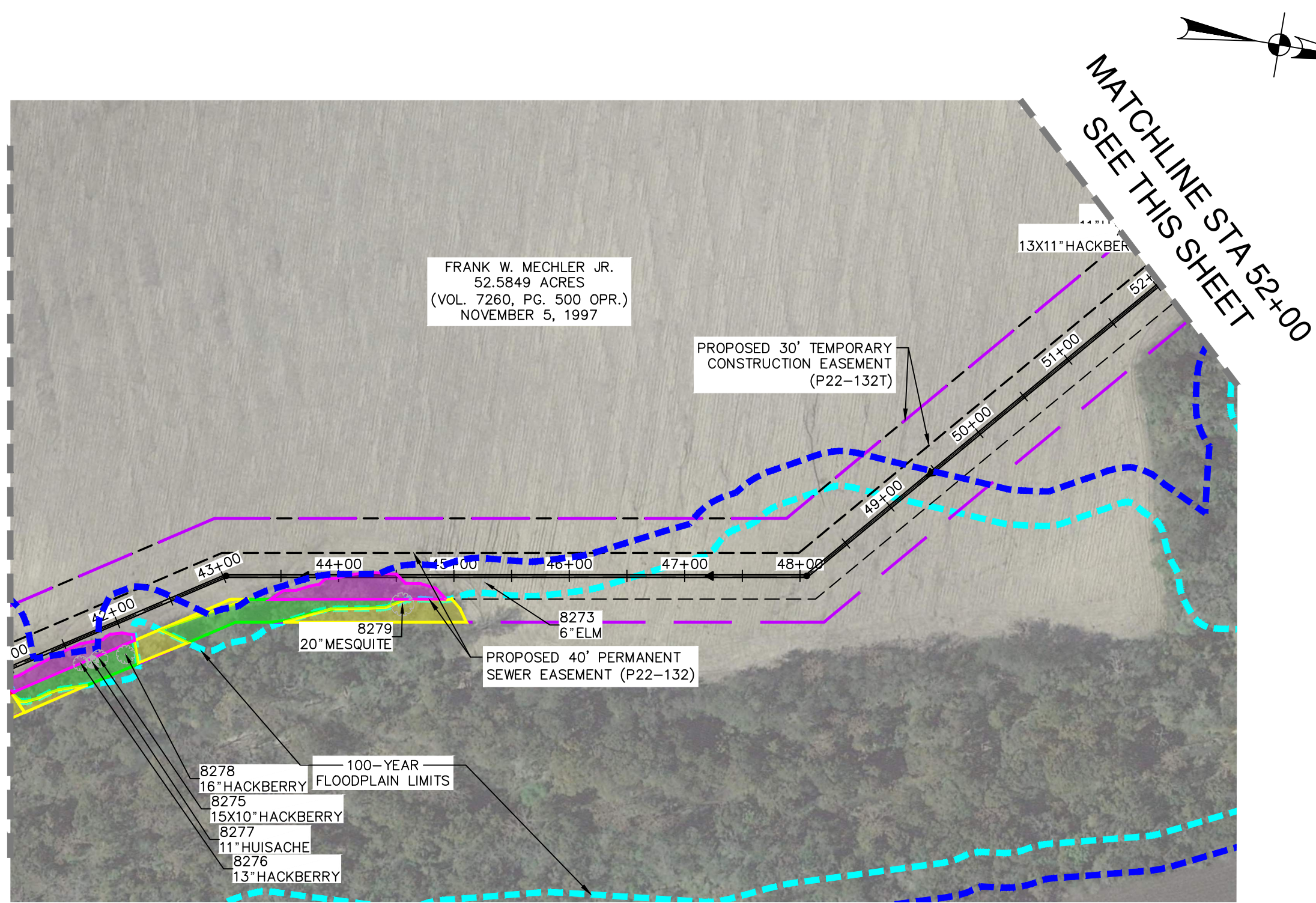
PD JOB NO. 12747-02 STONEHILL OFF-SITE SEWER EXTENSION PHASE I

CONFORMED SET

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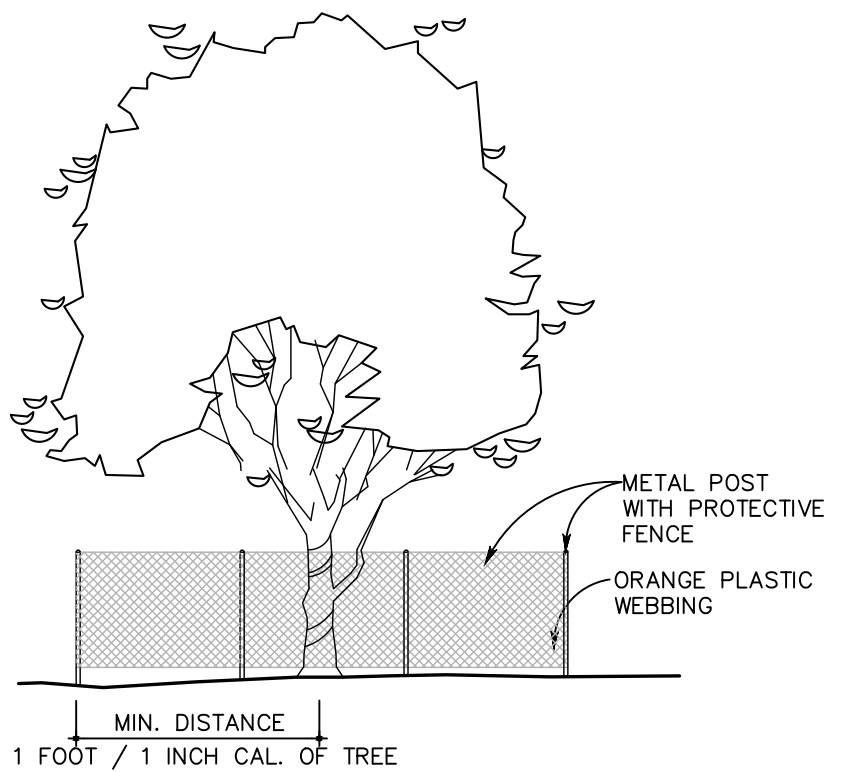


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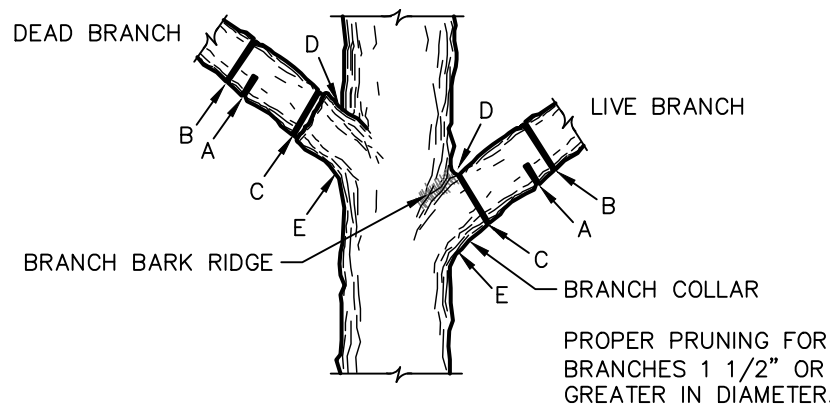
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TREE PRESERVATION GENERAL NOTES

- 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 =	8,772 SF
REQUIRED TO REMAIN (25%) =	0 SF
EXISTING TREE CANOPY TO BE REMOVED =	0 SF
EXISTING TREE CANOPY TO REMAIN =	8,772 SF
PERCENTAGE AREA PRESERVED =	100%
CANOPY REQUIRED TO BE MITIGATED =	0 SF

INSIDE FLOODPLAIN:	
EXISTING CANOPY =	171,170 SF
REQUIRED TO REMAIN (80%) =	136,936 SF
EXISTING TREE CANOPY TO BE REMOVED =	57,478 SF
EXISTING TREE CANOPY TO REMAIN =	113,692 SF
PERCENTAGE AREA PRESERVED =	66%
CANOPY REQUIRED TO BE MITIGATED =	23,244 SF

INSIDE 30' FLOODPLAIN BUFFER:	
EXISTING CANOPY =	15,450 SF
REQUIRED TO REMAIN (80%) =	12,360 SF
EXISTING TREE CANOPY TO BE REMOVED =	4,149 SF
EXISTING TREE CANOPY TO REMAIN =	11,302 SF
PERCENTAGE AREA PRESERVED =	73%
CANOPY REQUIRED TO BE MITIGATED =	1,059 SF

TREE CANOPY MITIGATION CALCULATIONS

INSIDE FLOODPLAIN

- EXISTING CANOPY AREA PRESERVED: 113,692 SF
- EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 171,170 SF = 136,936 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: 11,302 SF
- EXISTING CANOPY AREA REQUIRED TO BE PRESERVED: 80% x 15,450 SF = 12,360 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 = 23,244 SF ÷ (875 SF/TREE) = 27 TREES
INCHES OF CANOPY REQUIRED TO BE MITIGATED = 27 TREES x 16.7 INCHES = 451 INCHES

INSIDE 30' WIDE BUFFER

NUMBER OF TREES REQUIRED TO BE PLANTED = 1,059 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 = 451 INCHES

BUFFER CANOPY MITIGATION INCHES = 34 INCHES

MITIGATION FEE @ \$200.00/INCH

FLOODPLAIN CANOPY FEE = 451 INCHES x \$200 = \$90,200

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

TOTAL MITIGATION FEE = \$97,000

SEWER: SOUTH WATERSHED - DOS RIOS W.R.C.
STONEHILL OFF-SITE SEWER EXTENSION - PHASE 1

Developer's Name: DR HORTON	
Address: 211 NORTH LOOP 1604, SUITE 130	
City: SAN ANTONIO	State: TEXAS ZIP: 78232
Phone# (210) 496-2868	FAX# N/A
SAWS Block Map# 066558,066560,068556,068558,070554,070556 Total Acreage 8.19	
Total Linear Footage of Pipe 9,285 LF ~ 30" FRP SEWER Plat No. N/A	
Number of Lots N/A	TOTAL EDU'S N/A SAWS JOB NO. 23-4518

PLAT NO.	
JOB NO.	12747-02
DATE	SEPTEMBER 2023
DESIGNER	CD
CHECKED	MP DRAWN RJ
SHEET	C6.02

STONEHILL OFF-SITE SEWER EXTENSION PHASE I

BEXAR COUNTY, TEXAS

TREE PRESERVATION PLAN DETAILS

PAPE-DAWSON
ENGINEERS

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008860

NO. REVISION

DATE

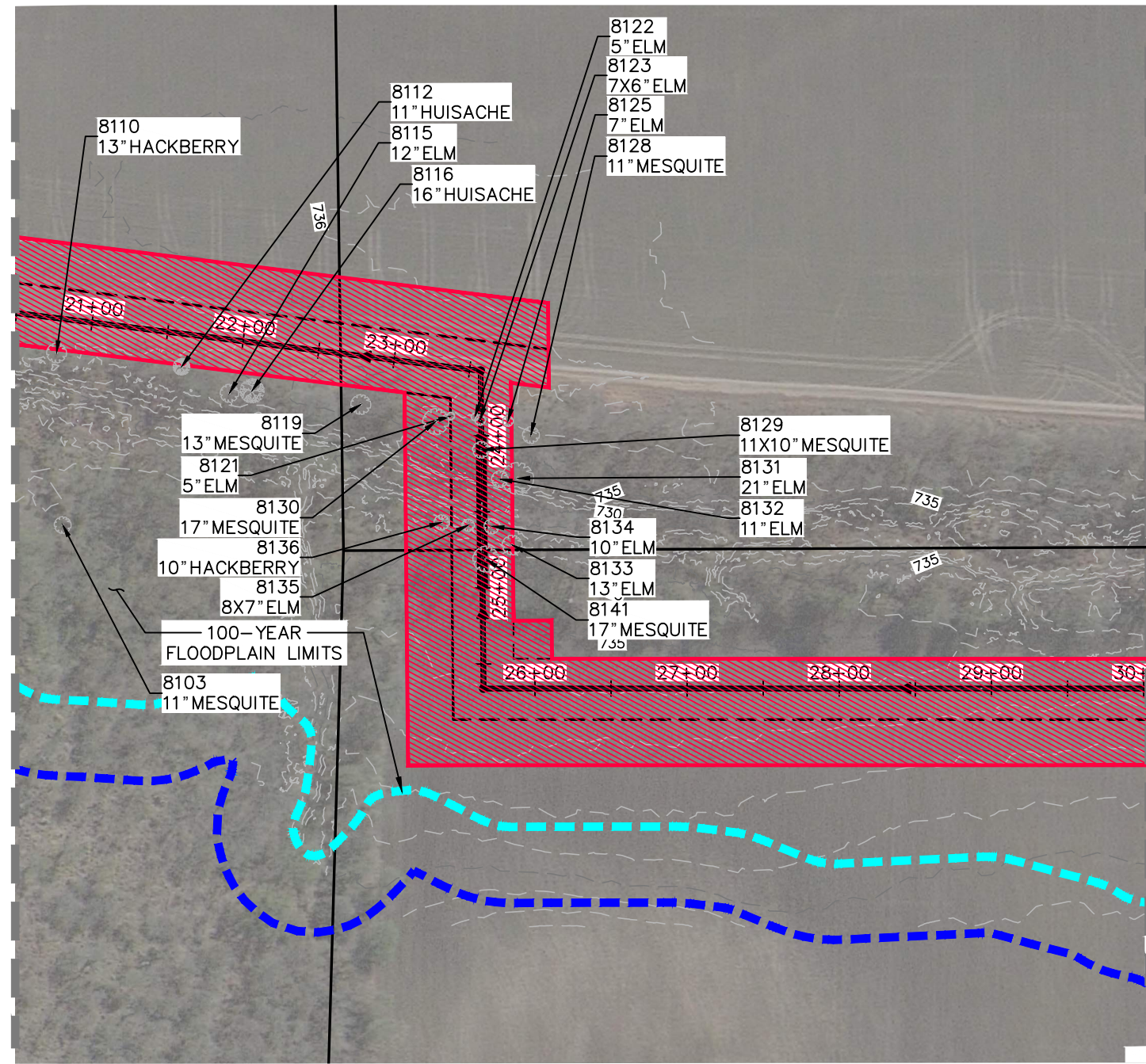
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PD JOB NO. 12747-02 STONEHILL OFF-SITE SEWER EXTENSION PHASE I

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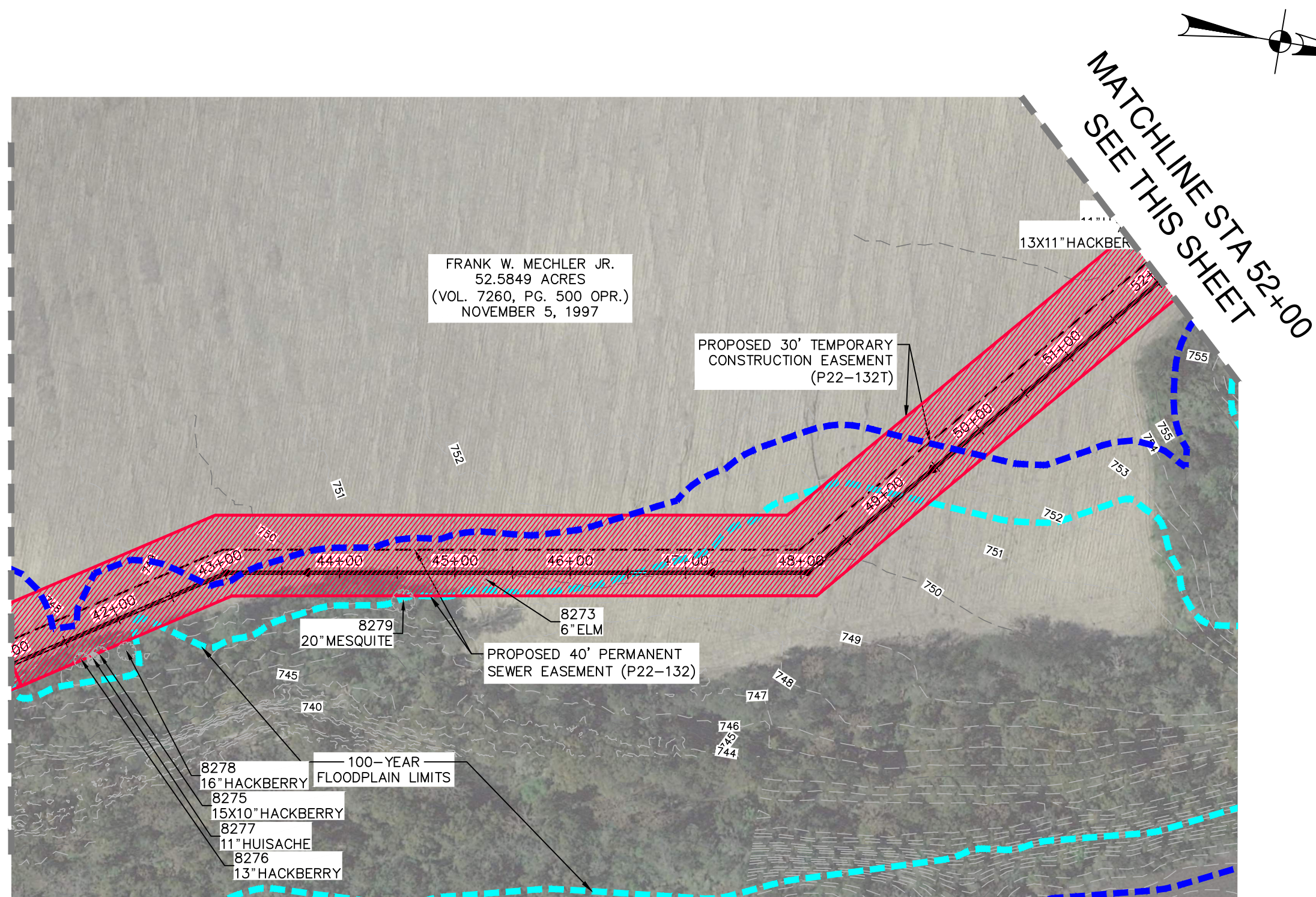
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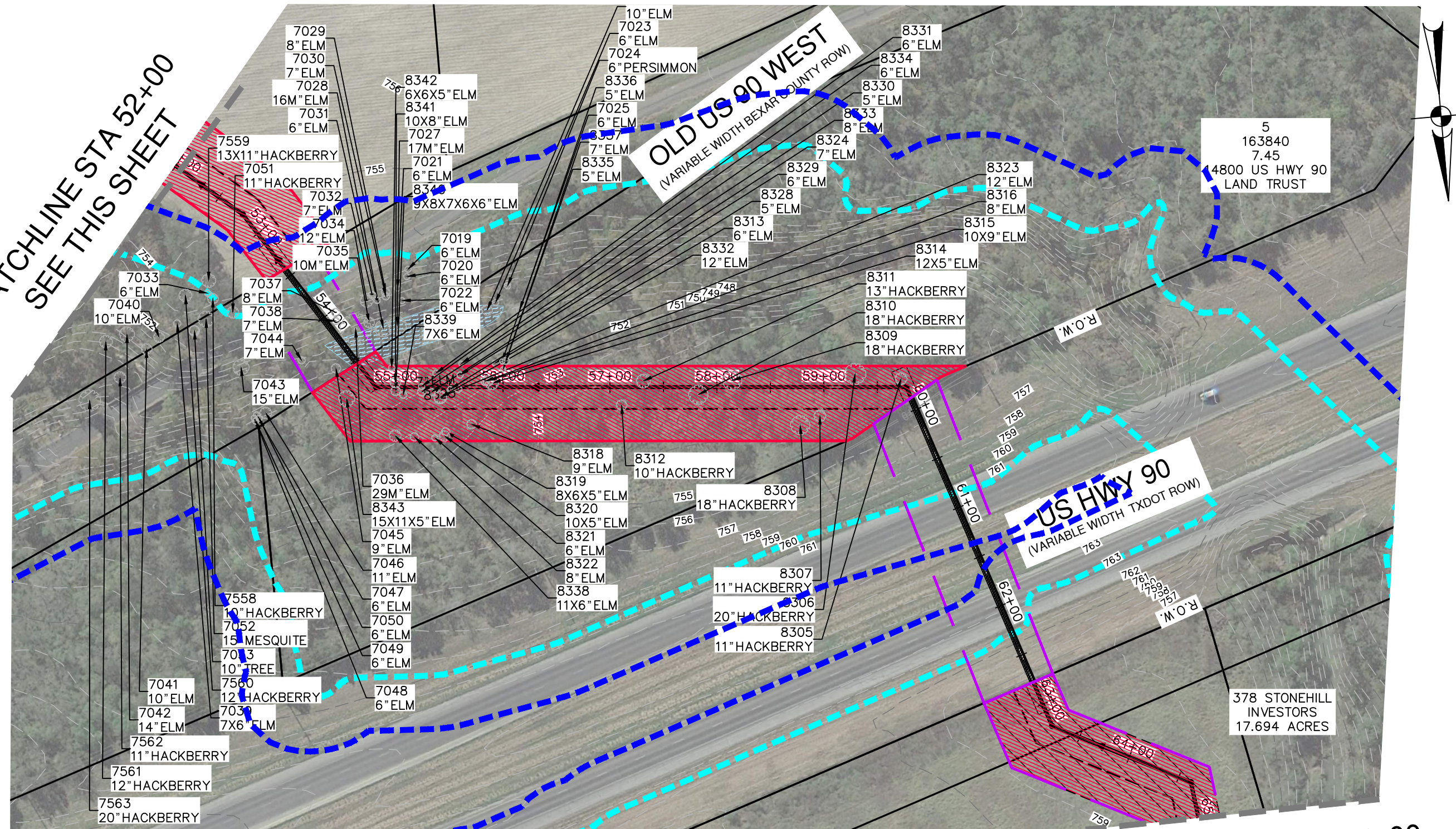
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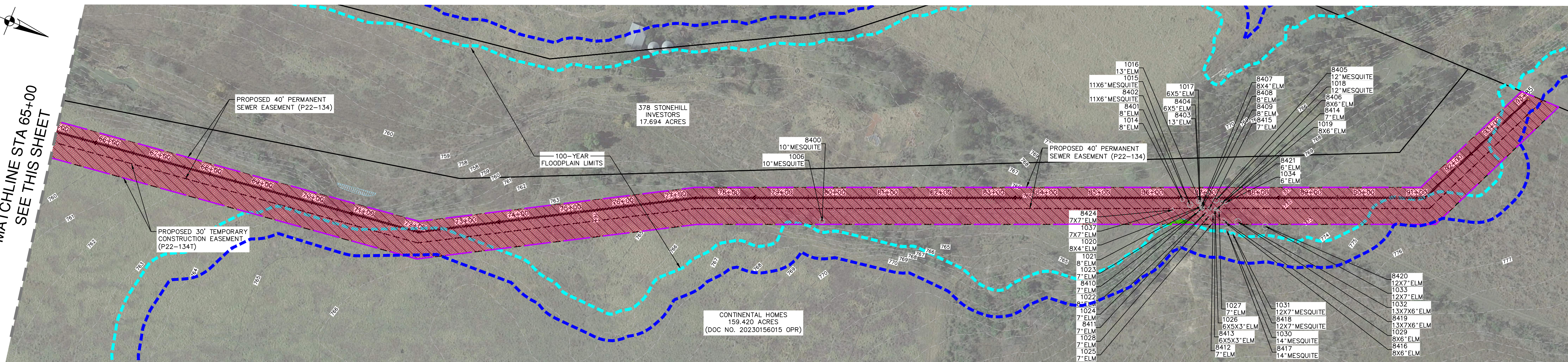


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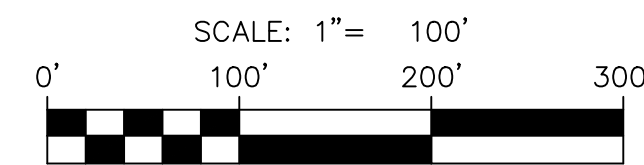
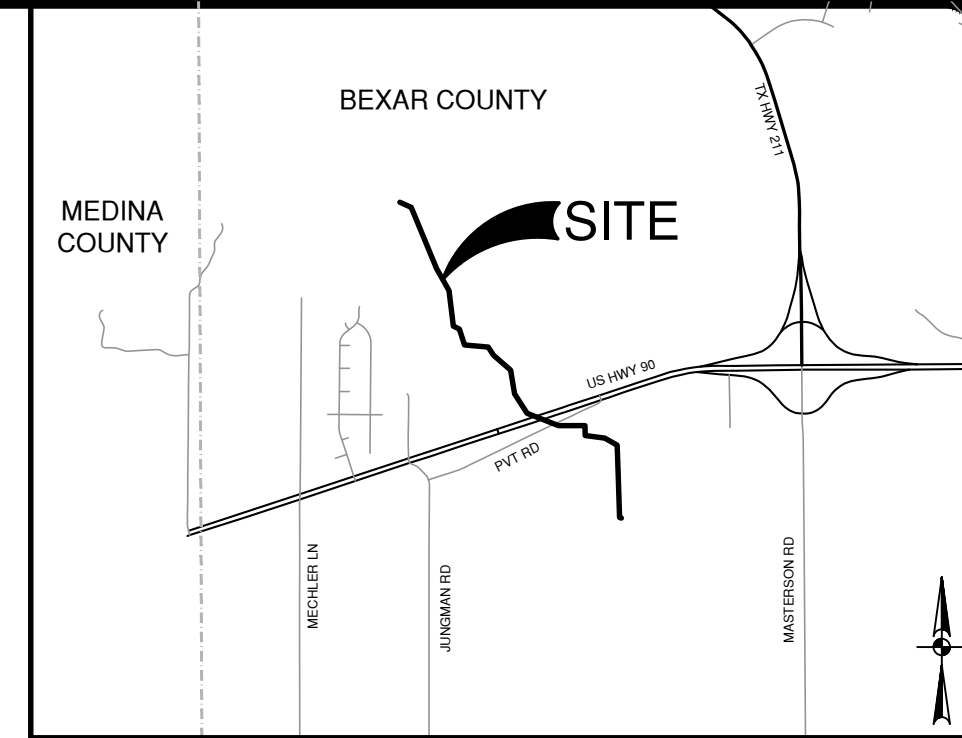


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MATCHLINE STA 65+00
SEE THIS SHEET



QUANTITY TABLE			
ITEM	DESCRIPTION	UNIT	QTY
SC-7	REVEGETATION (DRILL SEEDING WITH NATIVE MIXTURE & HYDROMULCH)	SY	34,053



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	---
AREA TO BE SEEDING WITH NATIVE SEED MIXTURE	---
PROJECT AREA ACCOUNTED FOR IN STONEHILL MDP TREE PLAN	---

STONEHILL OFF-SITE SEWER EXTENSION PHASE I

BEXAR COUNTY, TEXAS

REVEGETATION PLAN

PAPE-DAWSON
ENGINEERS

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 HW LOOP 410 | SAN ANTONIO, TX 78211 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008860

DATE	
NO.	
REVISION	

PLAT NO.	
JOB NO.	12747-02
DATE	SEPTEMBER 2023
DESIGNER	CD
CHECKED	MP
DRAWN	RJ
SHEET	C7.01

SEWER: SOUTH WATERSHED - DOS RIOS W.R.C.
STONEHILL OFF-SITE SEWER EXTENSION - PHASE I

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: 066558, 066560, 066556, 066558, 070554, 070556 Total Acreage: 8.19	
Total Linear Footage of Pipe: 9,285 LF ~ 30" FRP SEWER	Plat No. N/A
Number of Lots: N/A TOTAL EDU'S: N/A SAWS JOB NO.: 23-4518	

PD JOB NO. 12747-02 STONEHILL OFF-SITE SEWER EXTENSION PHASE I

CONFORMED SET