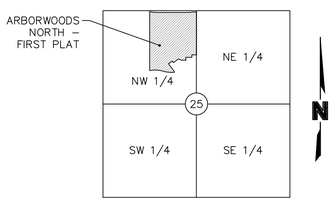
HAWTHORN RIDGE
1ST PLAT
HOOK ROAD IMPROVEMENTS PLANS

SECTION 25, TOWNSHIP 47 N., RANGE 32 W.
IN LEE'S SUMMIT, JACKSON, MO

CALL BEFORE YOU DIG
1-800-DIG-RITE
MISSOURI ONE CALL SYSTEM



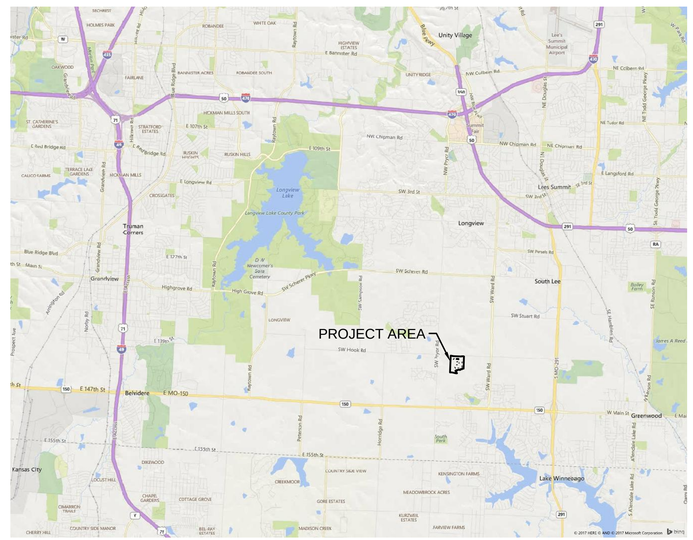
LOCATION MAP
Sec. 25, Twp. 47 N., Rge. 32 W.
(N.T.S.)

☐ NOT FOR CONSTRUCTION

☐ REVIEWED FOR CONSTRUCTION

DEVELOPMENT TEAM CONTACT INFORMATION		
CIVIL ENGINEER		
	MELISSA G DEGONIA, P.E. OLSSON ASSOCIATES	1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 TEL: 816.587.4320 FAX: 816.587.1393 MDEGONIA@OLSSONASSOCIATES.COM
OWNER/DEVLOPER		
	DAVID PRICE CMH PARKS, INC. D/B/A SUMMIT CUSTOM HOMES	120 SE 30TH ST LEE'S SUMMIT, MO 64082 TEL: 816.246.6700 DAVID@SUMMITCUSTOMHOMESKC.COM

UTILITY SERVICE NUMBERS	
LEE'S SUMMIT PUBLIC WORKS	816–969–1800
LEE'S SUMMIT WATER & SEWER DEPARTMENT	816–969–1940
MISSOURI GAS ENERGY	816–756–5252
AT&T	800–286–8313
KCP&L	816–471–5275
TIME WARNER CABLE	816–358–5360
GOOGLE FIBER	877–454–6959



PROPERTY DESCRIPTION:

A tract of land in the Northwest Quarter of Section 25, Township 47 North, Range 32 West of the 5th Principal Meridian in Lee's Summit, Jackson County, Missouri being bounded and described as follows: Commencing at the center of said Section 25; thence North 02°18'36" East, along the West line of said Northwest Quarter, 1,392.58 feet to the Point of Beginning of the tract of land to be herein described; thence North 87°41'24" West, 130.00 feet; thence South 02°18'36" West, 72.00 feet; thence North 87°41'24" West, 175.00 feet; thence South 02°18'36" West, 78.00 feet; thence North 87°41'24" West, 121.73 feet; thence North 65°30'07" West, 95.33 feet; thence South 54°57'38" West, 175.90 feet; thence North 35°02'22" West, 58.00 feet; thence South 54°57'38" West, 130.00 feet; thence South 35°02'22" East, 216.00 feet; thence South 26°05'21" East, 59.04 feet; thence South 11°06'36" East, 18.27 feet; thence North 87°41'24" West, 95.00 feet; thence North 85°13'24" West, 75.61 feet; thence North 77°26'18" West, 74.74 feet; thence North 73°51'15" West, 80.00 feet; thence North 75°24'39" West, 87.64 feet; thence North 81°26'34" West, 91.19 feet; thence North 87°51'30" West, 91.19 feet; thence South 86°06'14" West, 105.62 feet to a point on the West line of the East half said Northwest Quarter; thence North 02°27'15" East, along said West line, 1,661.30 feet to a point on the South right–of–way line of SW Hook Road, as now established; thence Easterly along said South right–of–way line, a along a curve to the right, having an initial tangent bearing of South 80°28'37" East with a radius of 470.00 feet, a central angle of 04°08'23" and an arc distance of 33.96 feet; thence Easterly, continuing along said South right–of–way line, along a curve to the left, having a common tangent with the last described course with a radius of 830.00 feet, a central angle of 11°15'17" and an arc distance of 163.04 feet; thence South 87°35'31" East, continuing along said South right–of–way line, 873.16 feet; thence Easterly continuing along said South right–of–way line, along a curve to the left having an initial tangent bearing of South 87°35'30" East with a radius of 830.00 feet, a central angle of 10°48'20" and an arc distance of 156.53 feet; thence South 87°45'42" East, continuing along said South right–of–way line, 95.80 feet to a point on said East line; thence South 02°18'36" West, along said East line, 1,210.33 feet to the Point of Beginning. Containing 1,939,986 square feet or 44.54 acres, more or less.

BENCHMARK

RR SPIKE IN SOUTH FACE OF POWER POLE ON NORTH SIDE OF SW. HOOK ROAD, IMMEDIATELY WEST OF DRIVEWAY FOR HOUSE#1622. ELEVATION= 1024.63'

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REVIEWED BY:

City of Lee's Summit — Date

Olsson Associates has been retained to provide as-built drawings for this project.

Melissa G DeGonia, P.E. — 12-14-17 Date
Civil Engineer
MO# 2011000892

The Policy of the "Plan Preparation Criteria and Procedure" and Policy Document No. 880544 "As-Built Drawings for Sewer Built by Permit" stipulate the following regarding "as-built" drawings: 1. Drawings are to be provided within thirty (30) days after the date the "Request for As-Builts" letter is issued by the City to the contractor. 2. Drawings must be accepted by the City before any service connections will be allowed. 3. Drawings are part of the permit obligations making them the responsibility of the permittee. 4. The cost of preparing "as-built" drawings shall be included in the performance bond.

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE–2011000892
PROFESSIONAL ENGINEER
12-14-17

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	08.10.2017	Submitted for City Review	
2	12.13.2017	Revised Per City Comments	

TITLE SHEET
HOOK ROAD IMPROVEMENTS PLAN

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET
C301

DWG: F:\2017\0001–0500\017–0188\40–Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_TTL01_017–0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 9:17am

GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE LEE'S SUMMIT, MISSOURI DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.

2. ALL MANHOLES, CATCH BASINS, UTILITY VALVES, AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.

3. ALL SIGNS (I.E. STREET NAME AND STOP SIGNS) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, DESIGN AND CONSTRUCTION MANUAL, PRIOR TO SUBSTANTIAL COMPLETION. REFER TO SHEET C134 FOR SIGNAGE DETAILS.

4. THE ASPHALTIC CONCRETE SURFACES ON ALL PERMITTED STREETS SHALL BE VIRGIN MATERIAL.

5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ROCK ELEVATIONS AT 25 FOOT (MAXIMUM) INTERVALS WHERE ENCOUNTERED, AND FURNISHING THIS INFORMATION TO THE DESIGN ENGINEER FOR USE ON "AS-BUILT" PLANS.

7. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

8. NO SUBSURFACE EXPLORATION FOR THE DETERMINATION OF AND/OR THE LOCATION OF EXISTING ROCK HAS BEEN MADE.

9. CONTRACTOR SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE STANDARD SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OR AS REQUIRED BY THE CITY'S FIELD REPRESENTATIVE.

10. CONTRACTOR MUST CONTACT PUBLIC WORKS INSPECTIONS AT 816-969-1827 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

⚠1

11. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THERE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS AND TO THE BEST OF OUR KNOWLEDGE CONSTITUTES ALL KNOWN FACILITIES. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT AT 1-800-331-5666 IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

12. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOTE OF RECORD OR SHOWN ON THESE PLANS.

13. CONTRACTOR SHALL CONTACT THE LOCAL BRANCH OF THE UNITED STATES POSTAL SERVICE PRIOR TO DISTURBANCE OF EXISTING MAILBOXES TO COORDINATE MAIL SERVICE TO PROPERTY OWNERS AS NEEDED AND EXACT LOCATION OF NEW MAILBOXES.

14. PRIOR TO ORDERING STRUCTURES, SHOP DRAWINGS SHOULD BE SUBMITTED TO THE ENGINEER FOR REVIEW.

15. OLSSON ASSOCIATES HAS BEEN RETAINED BY THE DEVELOPER TO PROVIDE CONSTRUCTION STAKING FOR THIS PROJECT.

16. DRIVEWAY ACCESS FOR HOUSES ALONG HOOK ROAD SHALL BE MAINTAINED AT ALL TIMES.

17. ALLOWABLE HOURS OF OPERATION SHALL BE BETWEEN 7:00 AM AND 10:00 PM.

18. REMOVAL AND DISPOSAL OF BUSHES AND TREES SMALLER THAN 12" IN DIAMETER SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR CLEARING AND GRUBBING.

19. ALL THE ITEMS REMOVED SHALL BE LEGALLY DISPOSED OFF SITE BY THE CONTRACTOR.

20. ALL SIDEWALK AND PAVEMENT TO REMAIN SHALL BE PROTECTED IN PLACE INCLUDING PROTECTION FROM DAMAGE CAUSED BY REMOVAL OF ABUTTING PAVEMENT. CONTRACTOR SHALL SAW CUT WHERE NECESSARY.

21. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. TO THE BEST PRACTICES AND AS APPROVED BY THE ENGINEER AND THE CITY.

22. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

23. LANDSCAPE AREAS WITHIN LIMITS OF DISTURBANCE SHALL BE CLEARED AND GRUBBED TO A DEPTH OF SIX INCHES.

24. ALL REMOVALS SHALL INCLUDE BUT NOT BE LIMITED TO ITEMS SUCH AS BUILDING FOOTINGS, SUB SURFACE STRUCTURES, SURFACE STRUCTURES, DRAINAGE STRUCTURES, PIPES, PAVEMENT OF ALL TYPES, CURB & GUTTER, SIDEWALK, ROCK, ABANDONED UTILITIES AS DIRECTED BY THE ENGINEER, TREES, TREE ROOTS, AND UNKNOWN MATERIALS, AND UNSUITABLE SUBGRADE MATERIALS.

25. CONTRACTOR TO PROVIDE NEAT SAWCUT LINE WHEN CUTTING EXISTING PAVEMENT.

26. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED INCLUDING ROCK. THERE WILL BE NO ADDITIONAL PAYMENT FOR ROCK EXCAVATION.

SITE DISTURBANCE NOTES:

1. THE INTENT OF THIS EROSION CONTROL PLAN IS TO ASSIST THE CONTRACTOR IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE CONTRACTOR'S PROPOSED METHOD OF REPAIR.

   THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AS A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION, THROUGH THE USE OF BERMS, DIKES, DAMS, SEDIMENT BASINS, FIBER MATS, NETTING, STRAW BALES, GRAVEL, MULCHES, GRASSES, SLOPE DRAINS, DIVERSION SWALES OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATIONS AND TO DIRECT THE CONTRACTOR TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT OR CONVEYANCES.

   THE TEMPORARY POLLUTION CONTROL PROVISIONS CONTAINED HEREIN SHALL BE COORDINATED WITH ANY PERMANENT EROSION CONTROL FEATURES SPECIFIED ELSEWHERE IN THE CONTRACT TO THE EXTENT PRACTICAL TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS EROSION CONTROL THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD.

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:
   ____ PRESERVATION OF EXISTING VEGETATION
   _X_ SEDIMENT BARRIERS
   _X_ SEDIMENT TRAPS
   _X_ INLET PROTECTION
   ____ OUTLET PROTECTION
   ____ SOIL RETAINING SYSTEMS
   ____ SLOPE DRAINS
   ____ SUBSURFACE DRAINS

   PHYSICAL DESCRIPTION OF EACH SPECIFIC SEDIMENT CONTROL DEVICE TO BE UTILIZED IS CALLED OUT ON THE PLANS WITH INSTALLATION PROCEDURES, CONSTRUCTION SPECIFICATIONS AND MAINTENANCE ARRANGEMENT AS CALLED FOR ON THE DETAIL SHEET. IN ADDITION TO THE MEASURES SPECIFIED, THE FOLLOWING GENERAL PRACTICES SHALL BE ADHERED TO WHEN APPLICABLE.

A) CLEARING AND GRUBBING WITHIN 50' OF A DEFINED DRAINAGE COURSE SHOULD BE AVOIDED WHEN POSSIBLE. WHERE CHANGES TO A DEFINED DRAINAGE COURSE OCCUR, WORK SHOULD BE DELAYED UNTIL ALL MATERIALS AND EQUIPMENT NECESSARY TO PROTECT AND COMPLETE THE DRAINAGE CHANGE ARE ON SITE. CHANGES SHALL BE COMPLETED AS QUICKLY AS POSSIBLE ONCE THE WORK HAS BEEN INITIATED. THE AREA IMPACTED BY THE CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR PROTECTED FROM EROSION AS SOON AS POSSIBLE, AREAS WITHIN 50' OF A DEFINED DRAINAGE WAYS SHOULD BE RECONTOURED AS NEEDED OR OTHERWISE PROTECTED WITHIN FIVE (5) WORKING DAYS AFTER GRADING HAS CEASED.

B) WHERE SOIL DISTURBING ACTIVITIES CEASE IN AN AREA FOR MORE THAN 14 DAYS, THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES. IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 OR IF THE SLOPE IS GREATER THAN 3% AND GREATER THAN 150 FEET IN LENGTH, THEN THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES IF ACTIVITIES CEASE FOR MORE THAN SEVEN (7) DAYS.

C) EXISTING VEGETATION SHALL BE PRESERVED TO THE EXTENT AND WHERE PRACTICAL. IN NO CASE SHALL DISTURBED AREAS REMAIN WITHOUT VEGETATIVE GROUND COVER FOR A PERIOD IN EXCESS OF 60 DAYS.

D) ADDITIONAL SITE MANAGEMENT PRACTICES WHICH SHALL BE ADHERED TO DURING THE CONSTRUCTION PROCESS SHALL INCLUDE:

   SOLID AND HAZARDOUS WASTE MANAGEMENT INCLUDING PROVIDING TRASH CONTAINERS AND REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE SUCH AS BUILDING MATERIAL, PRODUCT/MATERIAL SHIPPING WASTE, FOOD CONTAINERS AND CUPS, AND PROVIDING CONTAINERS FOR THE PROPER DISPOSAL OF WASTE PAINTS SOLVENTS, AND CLEANING COMPOUNDS.

   PROVISIONS OF PORTABLE TOILETS FOR PROPER DISPOSAL OF SANITARY SEWAGE.

   STORAGE OF CONSTRUCTION MATERIALS AWAY FROM DRAINAGE COURSES AND LOW AREAS.

   INSTALLATION OF CONTAINMENT BERMS AND USE OF DRIP PANS AT PETROLEUM PRODUCT AND LIQUID STORAGE TANKS AND CONTAINERS.

3. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED, IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE REVIEWING GOVERNING AGENCY AND GOOD ENGINEERING PRACTICES. THIS SHALL BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER COMPLETING THE WORK, IN ANY AREA. IF THIS IS OUTSIDE OF THE SEEDING PERIOD, SILT BARRIERS OR OTHER SIMILARLY EFFECTIVE MEASURES SHALL BE PROVIDED UNTIL SUCH TIME THAT THE AREAS CAN BE SEEDED.

4. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY THE REVIEWING GOVERNING AGENCY. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING ALL ADDITIONAL STANDARDS, SPECIFICATIONS OR REQUIREMENTS WHICH ARE REQUIRED BY GOVERNING AGENCIES (INCLUDING LOCAL, STATE AND FEDERAL AUTHORITIES) HAVING JURISDICTION OVER THE WORK PROPOSED BY THESE CONSTRUCTION DRAWINGS.

5. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE REPAIR WORK INCLUDING RELATED INCIDENTALS WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE PROPOSED WORK.

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ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
1	ASPHALT PAVEMENT	S.Y.	2645	
2	ASPHALT MILL & OVERLAY	S.Y.	1826	
3	CONCRETE PAVEMENT	S.Y.	418	
4	4" SOLID DOUBLE YELLOW STRIPING	L.F.	396	
5	YELLOW DIAGONAL CROSSHATCH STRIPING	S.Y.	814	
6	4" SOLID YELLOW STRIPING	L.F.	2117	
7	6" SOLID WHITE STRIPPING	L.F.	3179	
8	4" SOLID WHITE STRIPING	L.F.	400	
9	PAVEMENT MARKING ARROW	EA.	8	
10	15" CMP	L.F.	109	
11	15" CMP END SECTION	EA.	8	
SITE DISTURBANCE				
12	INLET PROTECTION	EA.	5	
13	SILT FENCE	L.F.	1291	
14	ROCK CHECK DAM	EA.	26	
15	TURF REINFORCED MAT	S.Y.	182	
16	STONE CONSTRUCTION ENTRANCE	EA.	1	

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

CONTROL POINT TABLE

Point Number	Northing	Easting	Point Elevation	Raw Description
800	983674.9350'	2813892.5500'	1016.38'	CP 800
801	983630.4880'	2815280.9210'	1019.74'	CP 801
802	981004.3220'	2812429.0660'	994.50'	CP 802
803	980493.4250'	2815984.1140'	1024.20'	CP 803
902	983638.8300'	2814391.8860'	1021.01'	CP 902

ALL NOTES REFERENCED ON THIS PLAN SHEET MAY HAVE APPLICATIONS TO EVERY FACET OF THE CONSTRUCTION PLANS. THE NOTE HEADINGS OR TITLES ARE TO BE USED AS A GENERAL GUIDE TO APPLICABLE SITUATIONS.

OLSSON® ASSOCIATES
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www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
⚠1	12.13.2017	Updated Quantities. Additional General Notes.	

GENERAL NOTES

HAWTHORN RIDGE
1ST PLAT

2017

LEE'S SUMMIT, MO

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

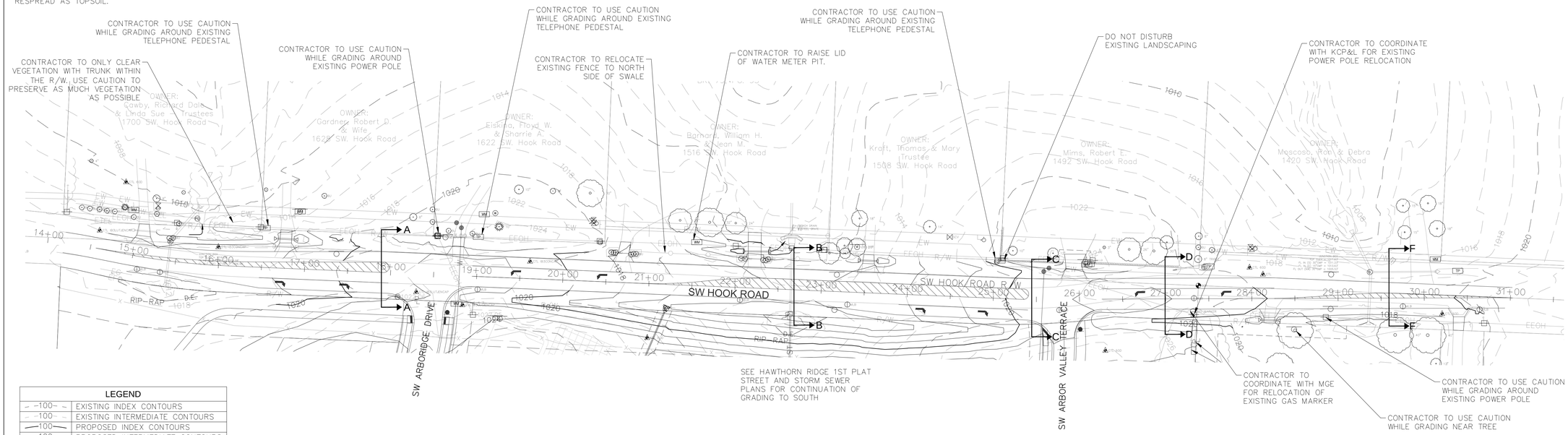
SHEET
C302

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_TYP01_017-0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 10:17am

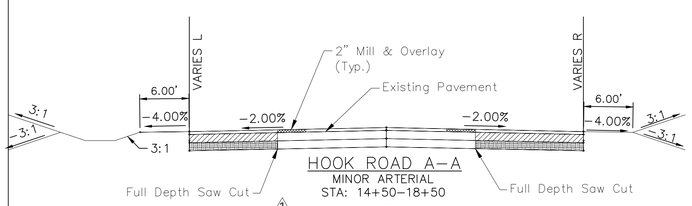
GENERAL NOTES:

1. GRADING AND SITE PREPARATION SHALL CONFORM TO SECTION 2100 OF THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.

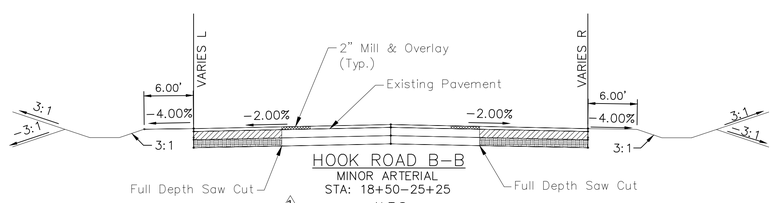
2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE, OR STOCKPILED AND RESPREAD AS TOPSOIL.



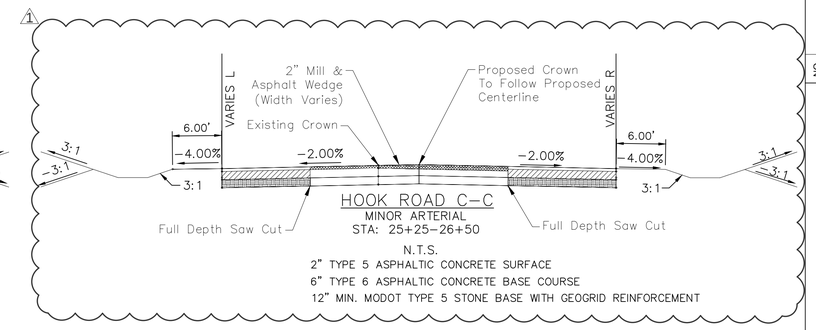
LEGEND	
100	EXISTING INDEX CONTOURS
100	EXISTING INTERMEDIATE CONTOURS
100	PROPOSED INDEX CONTOURS
100	PROPOSED INTERMEDIATE CONTOURS
100	FUTURE INDEX CONTOURS
100	FUTURE INTERMEDIATE CONTOURS



HOOK ROAD A–A
MINOR ARTERIAL
STA: 14+50–18+50
N.T.S.
2" TYPE 5 ASPHALTIC CONCRETE SURFACE
6" TYPE 6 ASPHALTIC CONCRETE BASE COURSE
12" MIN. MODOT TYPE 5 STONE BASE WITH GEOGRID REINFORCEMENT



HOOK ROAD B–B
MINOR ARTERIAL
STA: 18+50–25+25
N.T.S.
2" TYPE 5 ASPHALTIC CONCRETE SURFACE
6" TYPE 6 ASPHALTIC CONCRETE BASE COURSE
12" MIN. MODOT TYPE 5 STONE BASE WITH GEOGRID REINFORCEMENT

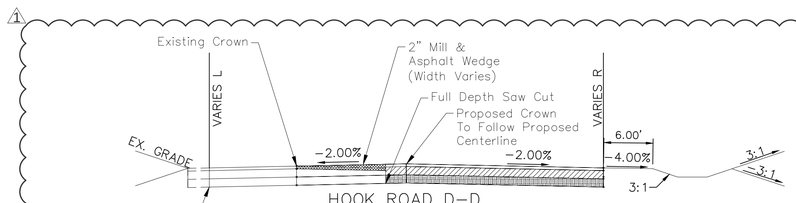


HOOK ROAD C–C
MINOR ARTERIAL
STA: 25+25–26+50
N.T.S.
2" TYPE 5 ASPHALTIC CONCRETE SURFACE
6" TYPE 6 ASPHALTIC CONCRETE BASE COURSE
12" MIN. MODOT TYPE 5 STONE BASE WITH GEOGRID REINFORCEMENT

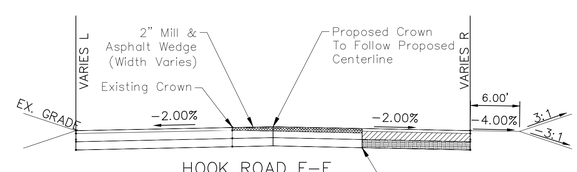
EARTHWORK QUANTITIES NOTES:
1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.

2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

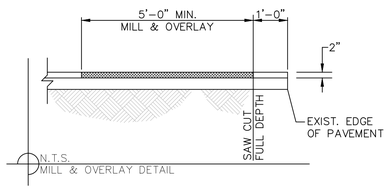
LOCATION	CUT (C.Y.)	FILL (C.Y.)
TOTAL	1,151	524



HOOK ROAD D–D
MINOR ARTERIAL
STA: 26+50–29+00
N.T.S.
2" TYPE 5 ASPHALTIC CONCRETE SURFACE
6" TYPE 6 ASPHALTIC CONCRETE BASE COURSE
12" MIN. MODOT TYPE 5 STONE BASE WITH GEOGRID REINFORCEMENT



HOOK ROAD F–F
MINOR ARTERIAL
STA: 29+00–30+95
N.T.S.
2" TYPE 5 ASPHALTIC CONCRETE SURFACE
6" TYPE 6 ASPHALTIC CONCRETE BASE COURSE
12" MIN. MODOT TYPE 5 STONE BASE WITH GEOGRID REINFORCEMENT



ROADWAY AND SWALE DIMENSIONS VARY.
SEE CROSS SECTIONS SHEETS FOR DETAILS.

DIRECTION OF FLOW

OLSSON ASSOCIATES
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MO Certificate of Authority #:001592
701 Ward Road, Suite 110
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www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
A	12.13.2017	Typical Sections Revised.	

REVISIONS

GRADING PLAN

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J.
project no.: 017-0188
date: 03.03.2017

SHEET C303

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_GRD01_017-0188.dwg USER: mdiebolt
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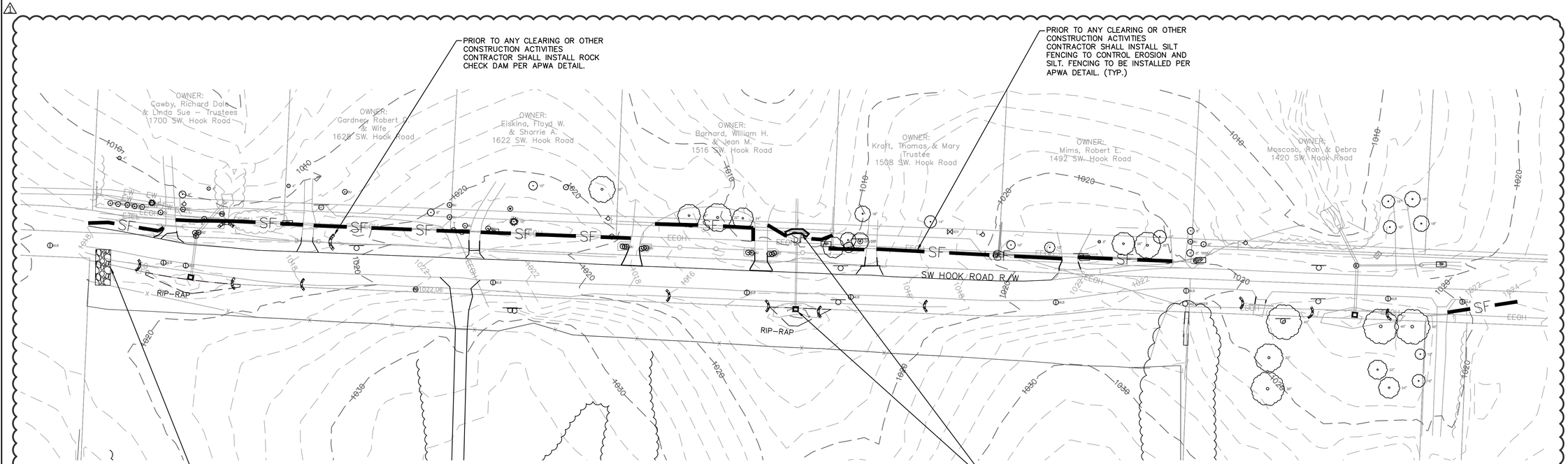

NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

LEGEND	
PHASE 1	
SF	SILT FENCE
	STORM DRAIN INLET PROTECTION
	ROCK CHECK DAMS
	TEMPORARY STONE CONSTRUCTION ENTRANCE

N

0' 30' 60' 120'
SCALE IN FEET

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STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Site Dist. Added Per City Comments	

REVISIONS

SITE DISTRUBANCE PLAN - PHASE 1

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET
C304

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_ERC01_ 017-0188.dwg USER: mdlebolt
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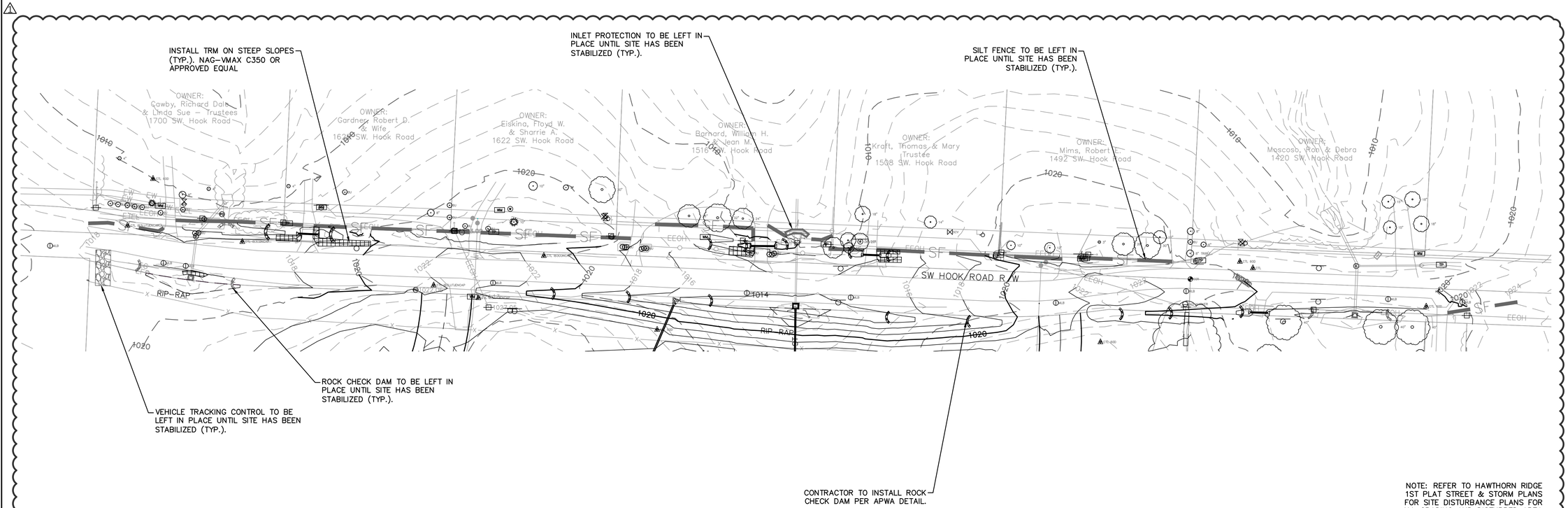

NOTE: REFER TO HAWTHORN RIDGE 1ST PLAT STREET & STORM PLANS FOR SITE DISTURBANCE PLANS FOR ALL GRADING AND DISTURBED AREA SOUTH OF HOOK ROAD.

NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

LEGEND

PHASE 1	PHASE 2	
SF	SF	SILT FENCE
		STORM DRAIN INLET PROTECTION
		ROCK CHECK DAMS
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		SOIL STABILIZATION BLANKETS & MATTING

N

0' 30' 60' 120'
SCALE IN FEET

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120 SW Chipman, Suite 101
North Kansas City, MO 64116
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STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Site Dist. Added Per City Comments	

REVISIONS

SITE DISTRUBANCE PLAN - PHASE 2

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C305

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_ERC02_017-0188.dwg USER: mdiebolt
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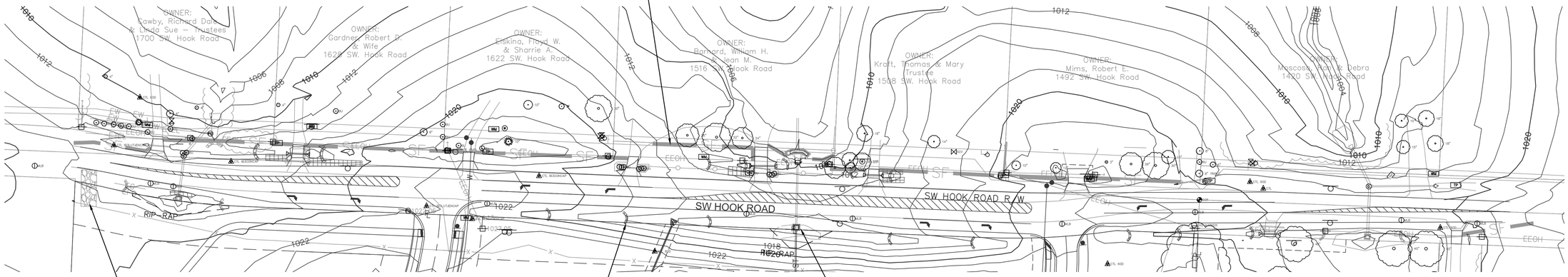

NOTE: REFER TO HAWTHORN RIDGE 1ST PLAT STREET & STORM PLANS FOR SITE DISTURBANCE PLANS FOR ALL GRADING AND DISTURBED AREA SOUTH OF HOOK ROAD.

GENERAL NOTES:

SEED & MULCH NOTES:
SEEDING SHALL BE DONE BEFORE THE PROPOSED SEEDBED BECOMES ERODED, CRUSTED OVER,OR DRIED OUT AND SHALL NOT BE DONE WHEN THE GROUND IS FROZEN, OR COVERED WITH SNOW. THE SEED SHALL COMPLY WITH THE REQUIREMENTS OF THE MISSOURI SEED LAW AND THE FEDERAL SEED ACT. ALSO, IT SHALL CONTAIN NO SEED OF ANY PLANT ON THE FEDERAL NOXIOUS WEED LIST. OTHER WEED SEED SHALL NOT EXCEED ONE PERCENT BY WEIGHT OF MIX.

SEED & FERTILIZER RATE:
MIX I – RYE GRASS / BLUE GRASS -----100 LBS. PER. ACRE
MIX II – TALL FESCUE / BLUE GRASS ----195 LBS. PER ACRE
LIME ----------2000 LBS. PER ACRE
(50 LBS. PER 1000 SQ. FT.)
FERTILIZER ----------800 TO 1200 LBS.
PER ACRE (25 LBS. PER 1000 SQ. FT.)

DURING THE DATES DECEMBER 15TH THROUGH MAY 31 ALL LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED TO FINISHED SLOPES OF DISTURBED AREAS. DURING THE MONTHS OF JUNE, JULY, OCTOBER, AND NOVEMBER 1ST THROUGH DECEMBER 15TH, LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:
LIME – 100 % OF SPECIFIED QUANTITY
FERTILIZER – 75 % OF THE SPECIFIED QUANTITY
SEED – 50 % OF THE SPECIFIED QUANTITY
MULCH – 100 % OF THE SPECIFIED QUANTITY
MULCH SHALL BE VEGETATIVE TYPE, CEREAL STRAW FROM STALKS OF OATS, RYE, OR BARLEY, OR APPROVED EQUAL. THE STRAW SHALL BE FREE OF PROHIBITED WEED SEED AND RELATIVELY FREE OF ALL OTHER NOXIOUS AND UNDESIRABLE SEED. MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE, (70 TO 90 LBS. PER 1000 SQ. FT.). MULCH SHALL BE EMBEDDED BY A MULCH ANCHORING TOOL OR DISK TYPE ROLLER HAVING FLAT SERRATED DISKS SPACED NOT MORE THAN 10 INCHES APART AND CLEANING SCRAPERS SHALL BE PROVIDED.

THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

LEGEND

PHASE 1	PHASE 2	PHASE 3	
SF	SF	SF	SILT FENCE
			STORM DRAIN INLET PROTECTION
			ROCK CHECK DAMS
			TEMPORARY STONE CONSTRUCTION ENTRANCE
			SOIL STABILIZATION BLANKETS & MATTING

N

0' 30' 60' 120'
SCALE IN FEET

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www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Site Dist. Added Per City Comments	

REVISIONS

SITE DISTRUBANCE PLAN - PHASE 3

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C306

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_ERC03_ 017-0188.dwg USER: mdiebolt
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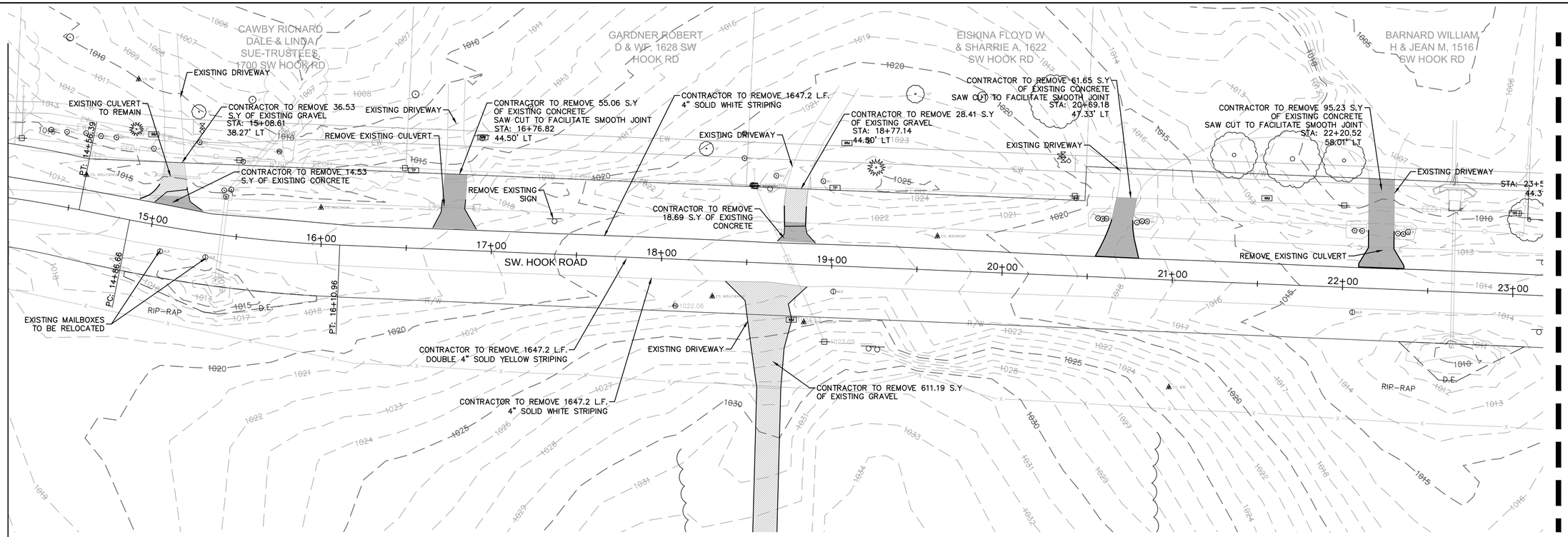
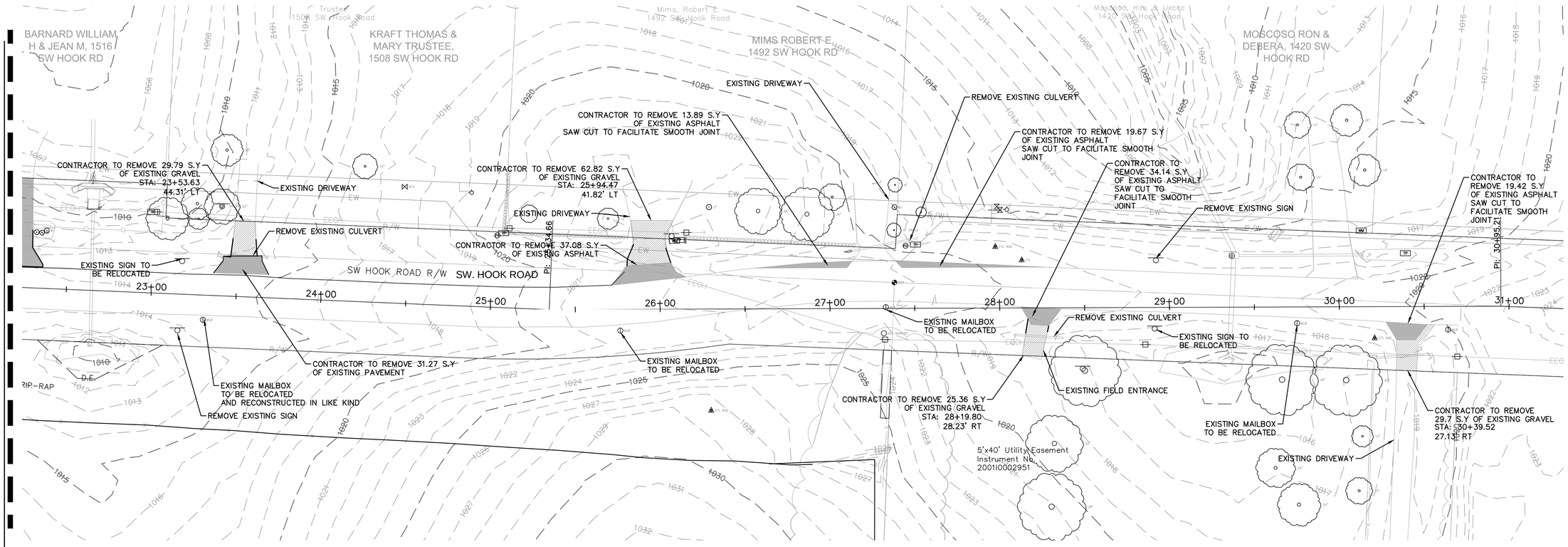


Scale: 1"=30'
SW HOOK ROAD AND ARBORIDGE DRIVE



Scale: 1"=30'
SW HOOK ROAD AND ARBOR VALLEY TERRACE

OLSSON ASSOCIATES

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North Kansas City, MO 64116

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STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EXISTING & DEMOLITION PLAN

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

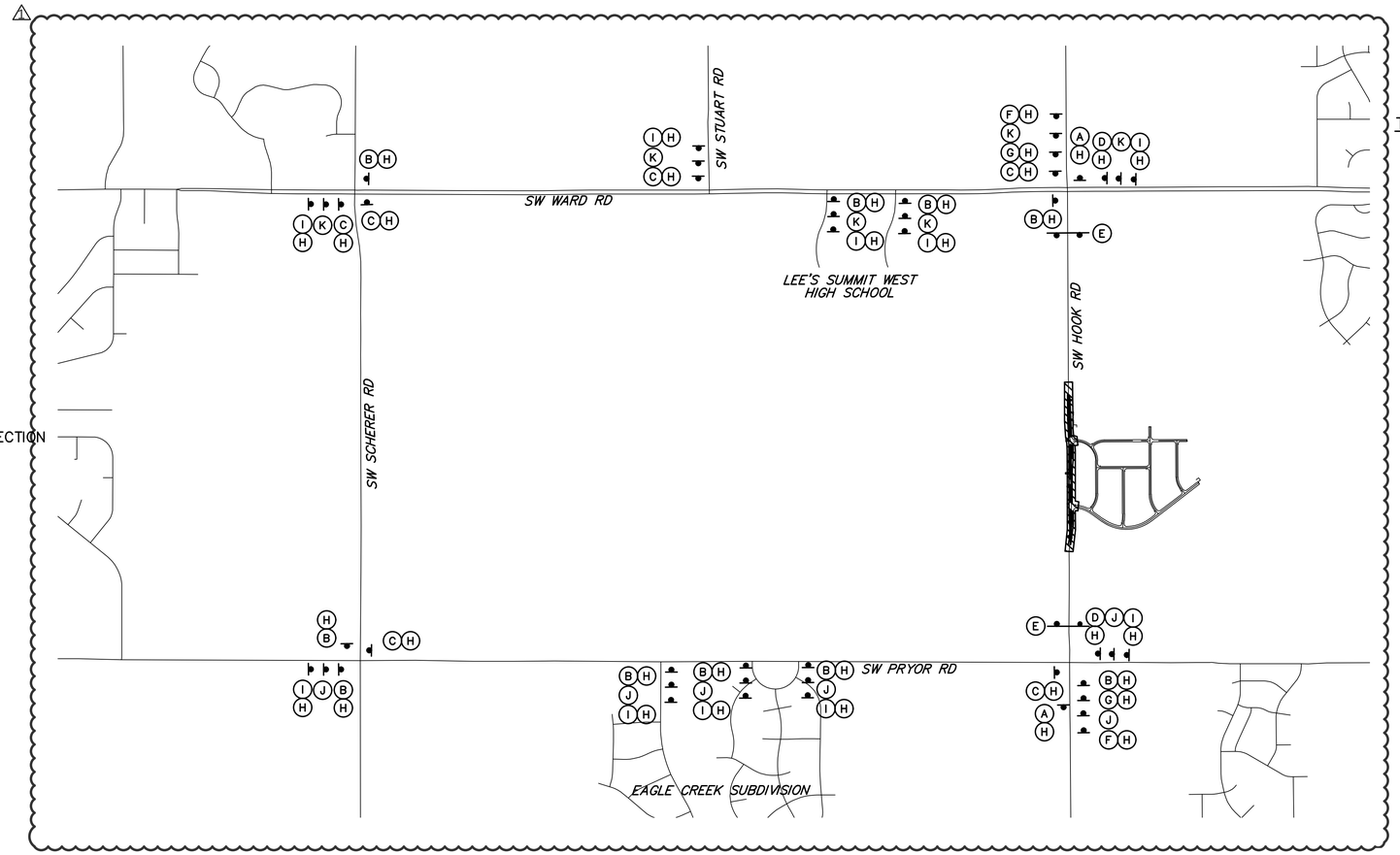
2017

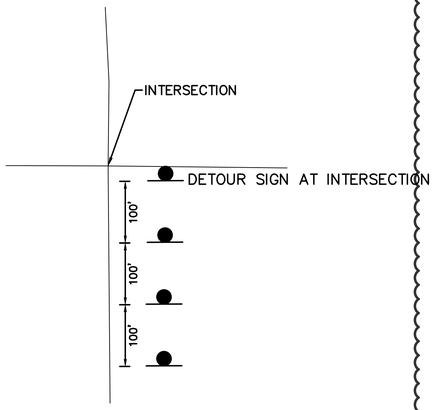
drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
Q/A/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C307

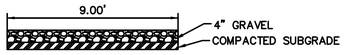
DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_EXC01_ 017-0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 9:22am

NOTE:
1. ALL TEMPORARY TRAFFIC CONTROL AND DETOUR SIGNS SHALL BE PLACED ON BREAKAWAY SIGN POSTS.
2. DRIVEWAY ACCESS FOR HOUSES ALONG HOOK ROAD SHALL BE MAINTAINED AT ALL TIMES.
3. SIGNS SHALL BE INSTALLED PER THE LATEST EDITION MUTCD STANDARDS AND GUIDELINES
4. CONTRACTOR SHALL COORDINATE WITH SCHOOL DISTRICT TO MAINTAIN BUS ACCESS.

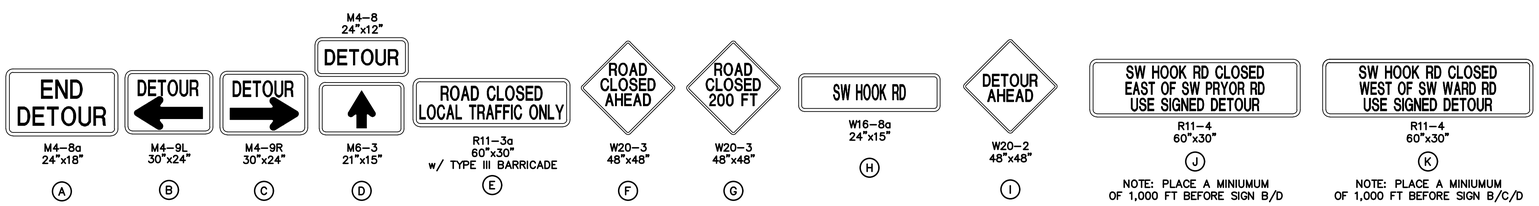




SIGN SPACING DETAIL
N.T.S.



TEMPORARY DRIVEWAY
N.T.S.



TYPE III BARRICADE
N.T.S.

N
NOT TO SCALE

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100 Railroad, Suite 105
North Kansas City, MO 64116
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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Revised Detour Plan Per City Comments	

REVISIONS

DETOUR PLAN

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C308

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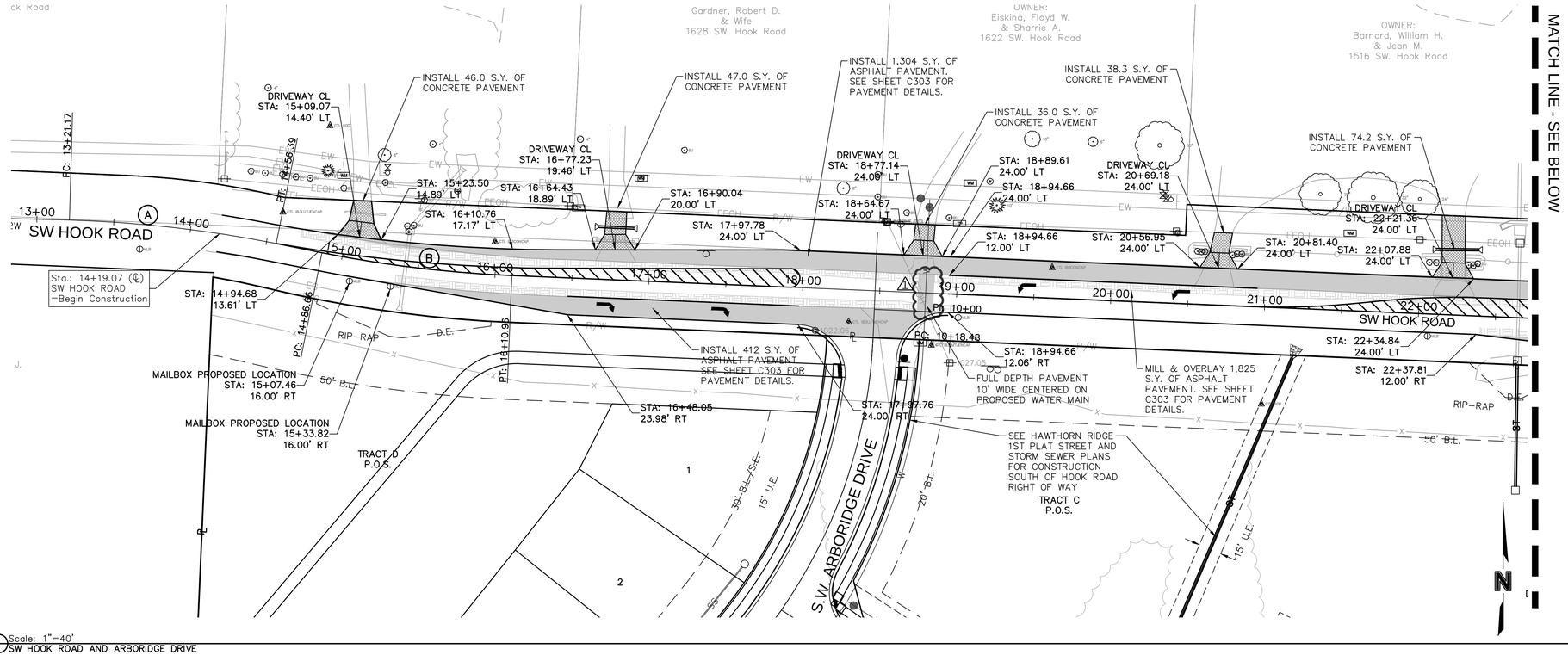
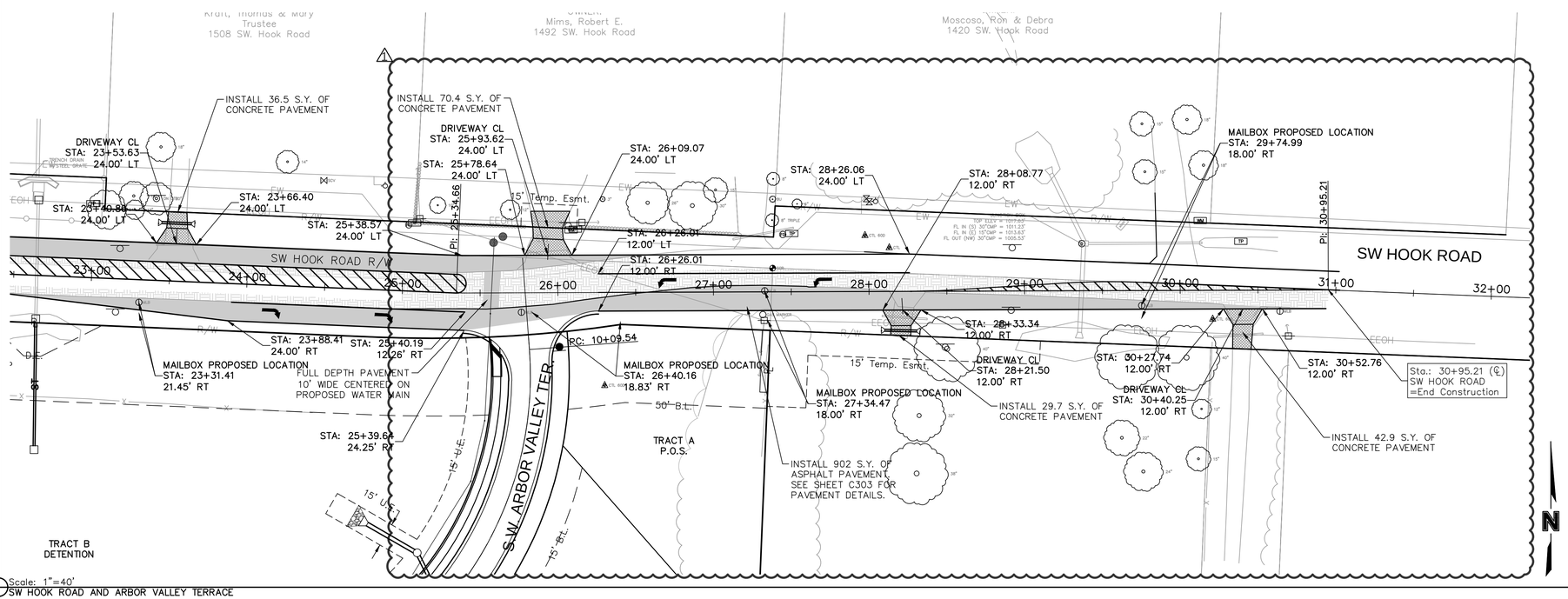


Scale: 1"=40'
SW HOOK ROAD AND ARBORIDGE DRIVE

CURVE	RADIUS	LENGTH	TANGENT	DELTA	P.I. STA. (BK.)
A	800	133.47	66.89	09°33'34"	13+89.50
B	800	124.30	62.28	08°54'09"	15+48.68



Scale: 1"=40'
SW HOOK ROAD AND ARBOR VALLEY TERRACE

CONCRETE PAVEMENT (6" PORTLAND CEMENT CONCRETE WITH 4" AGGREGATE BASE)

ASPHALT PAVEMENT

GRAVEL PAVEMENT

MILL AND OVERLAY

NOTE: CONTRACTOR TO PROVIDE ACCESS TO PROPERTY OWNERS AT ALL TIMES

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Mill & Overlay Sections Revised. Driveways To Be Concrete.	

REVISIONS

ROADWAY PAVEMENT PLAN

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C309

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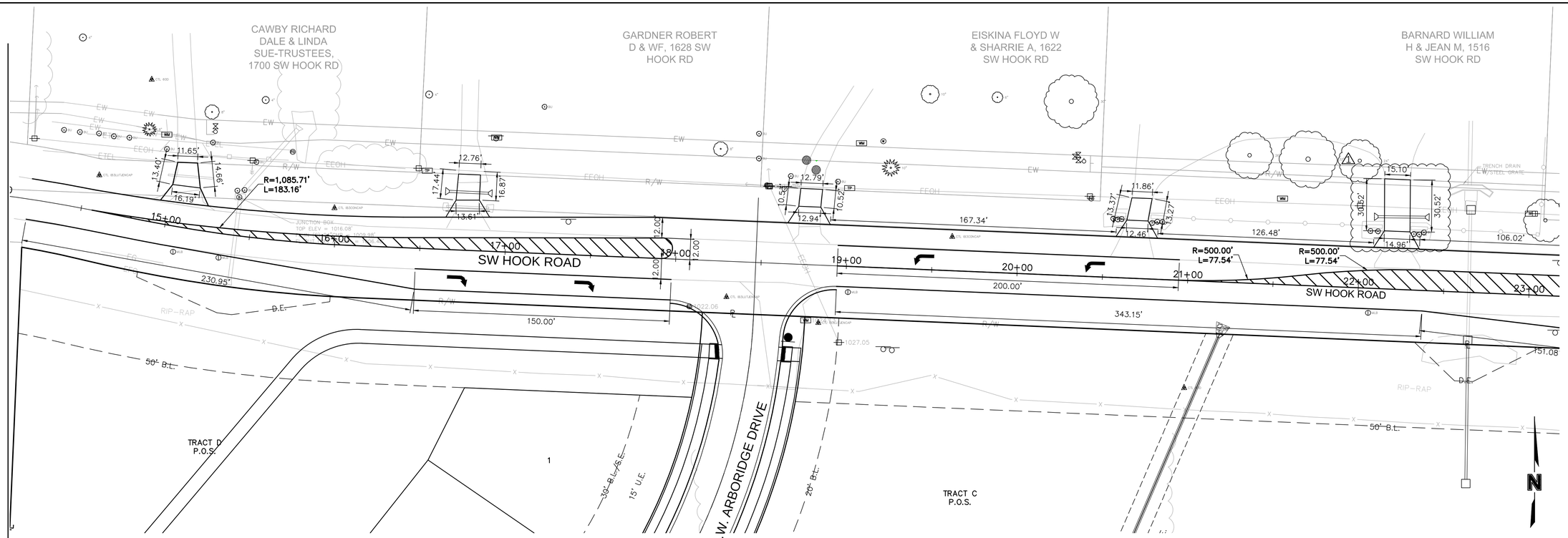

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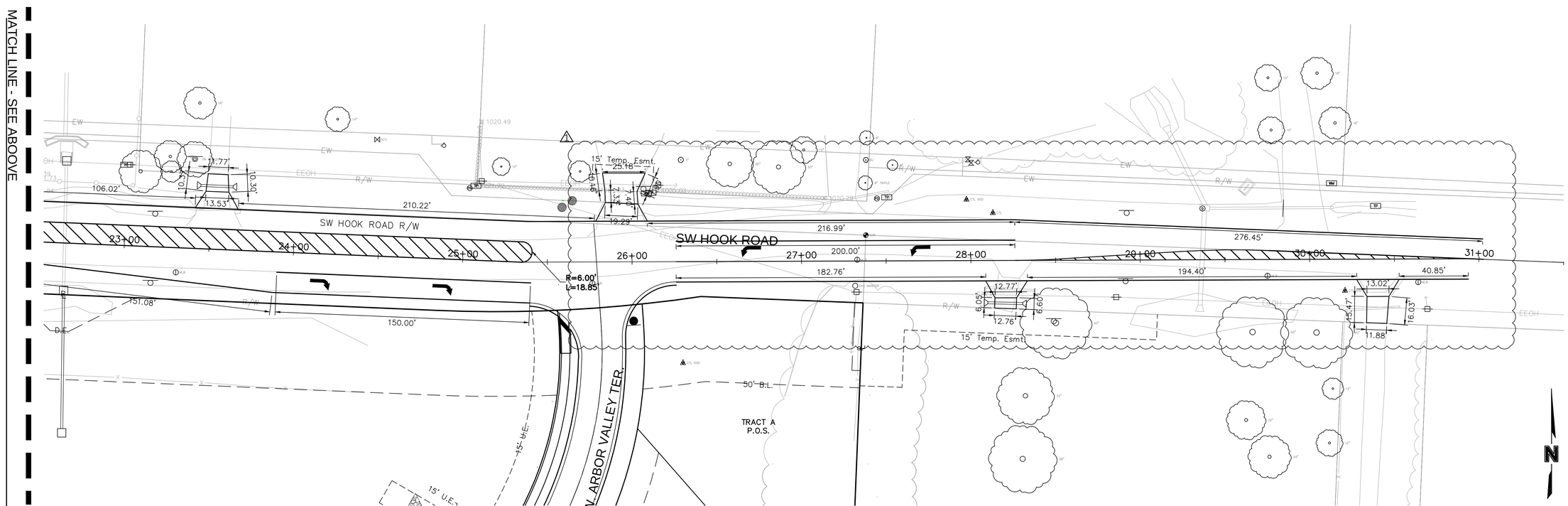
SW HOOK ROAD AND ARBORIDGE DRIVE



Scale: 1"=30'
SW HOOK ROAD AND ARBOR VALLEY TERRACE

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER
PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Updated Dimensions For Revised Alignment & Driveways.	

REVISIONS

DIMENSION PLAN

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET
C310

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_PAV01_017-0188.dwg USER: mdiebolt
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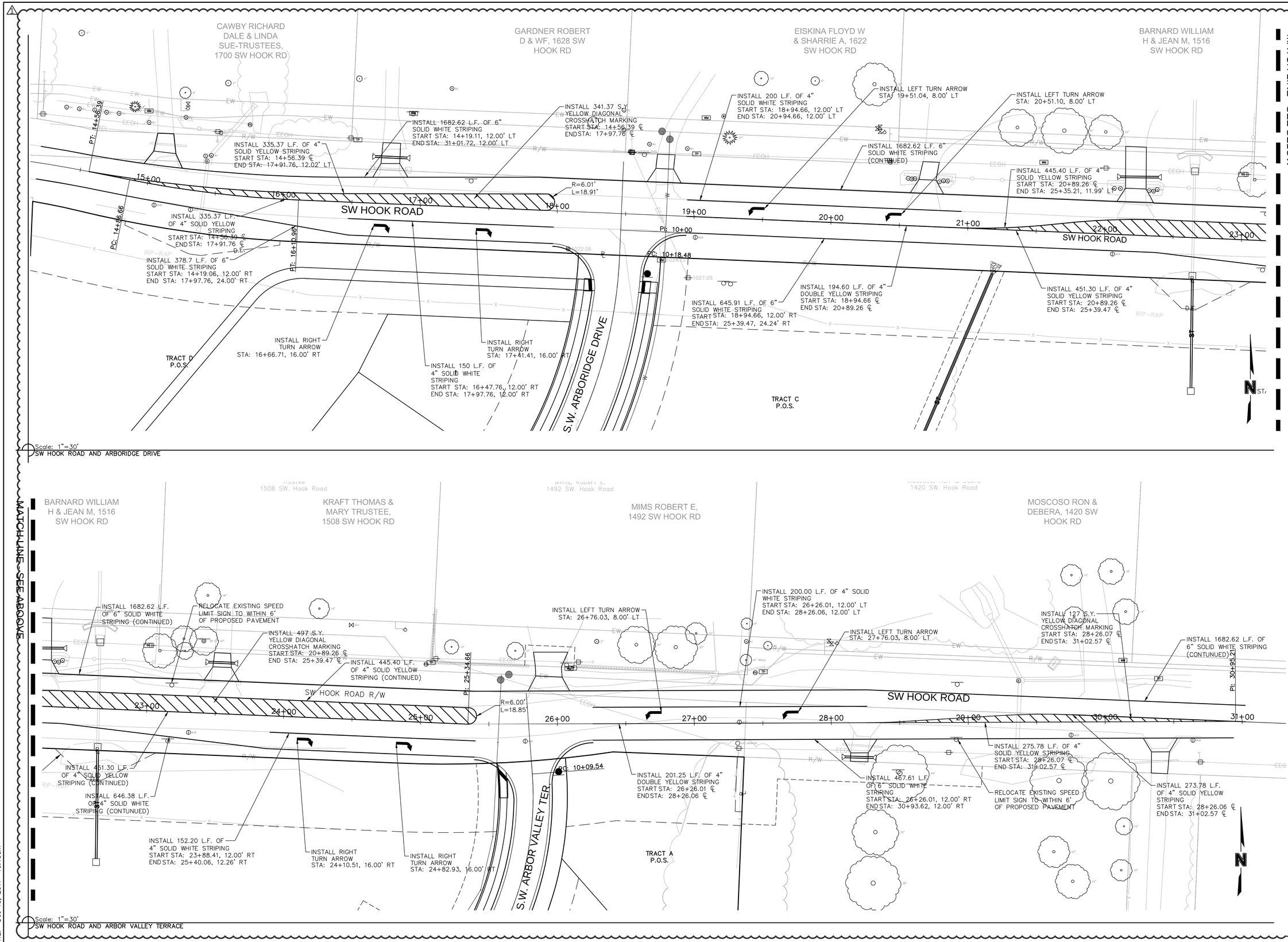

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FAX: 816.587.1393

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Diagonal Striping & Turn Arrows Added, R3-8 Signs Removed.	

REVISIONS

PAVEMENT MARKING PLAN

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C311

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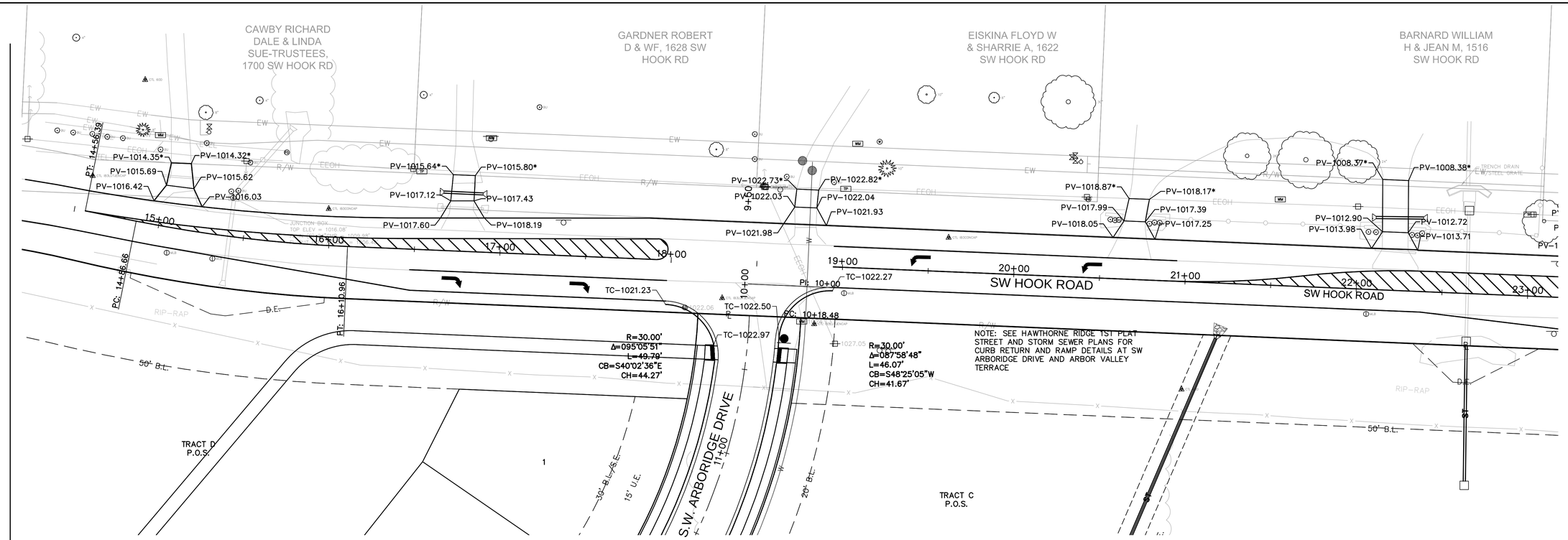

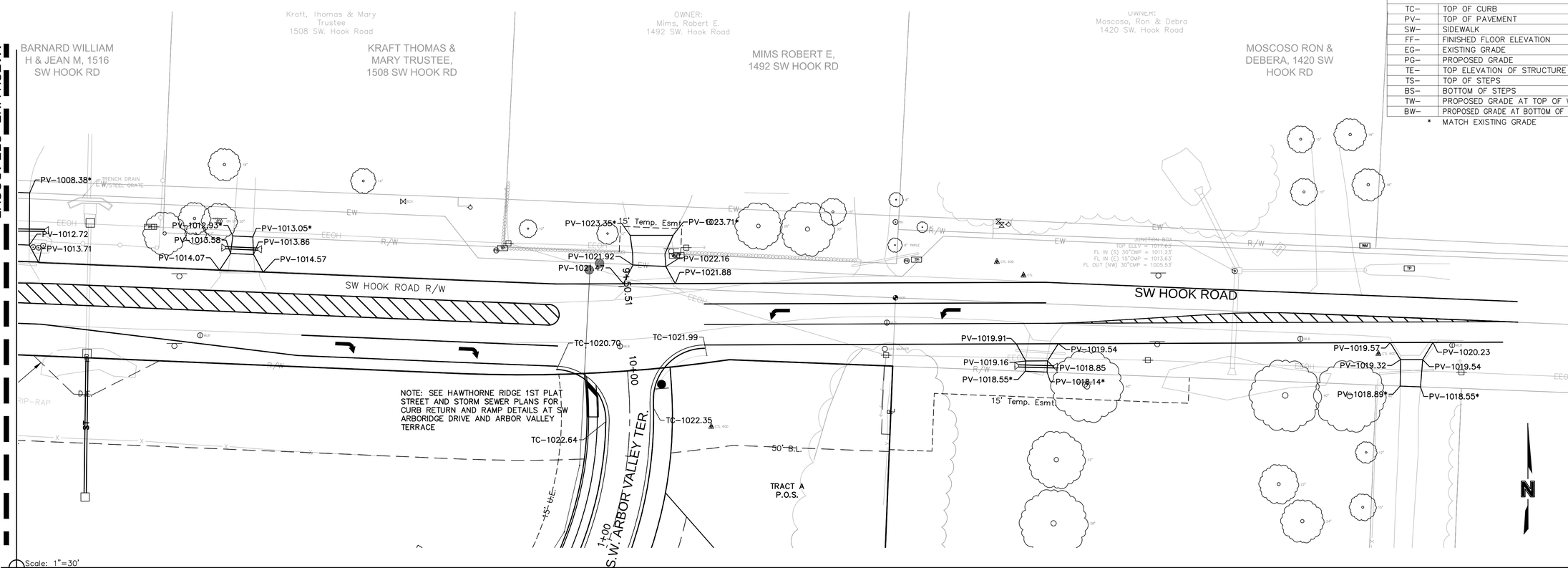

LEGEND	
TC–	TOP OF CURB
PV–	TOP OF PAVEMENT
SW–	SIDEWALK
FF–	FINISHED FLOOR ELEVATION
EG–	EXISTING GRADE
PG–	PROPOSED GRADE
TE–	TOP ELEVATION OF STRUCTURE
TS–	TOP OF STEPS
BS–	BOTTOM OF STEPS
TW–	PROPOSED GRADE AT TOP OF WALL
BW–	PROPOSED GRADE AT BOTTOM OF WALL
*	MATCH EXISTING GRADE

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROADWAY SPOT ELEVATIONS

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

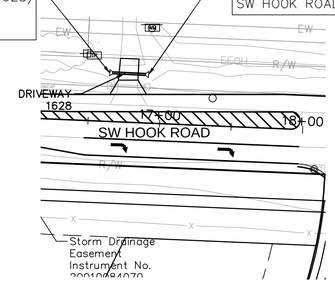
drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C312

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_SPT01_017-0188.dwg
DATE: Dec 13, 2017 9:26am
USER: mdiebolt

E.S. DW 1628–1, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+21.29 (DRIVEWAY 1628)
=STA.: 16+63.67 (℄)
SW HOOK ROAD, 34.13' LT

E.S. DW 1628–2, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+48.57 (DRIVEWAY 1628)
=STA.: 16+90.95 (℄)
SW HOOK ROAD, 33.98' LT



E.S. DW 1516–1, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+52.45 (DRIVEWAY 1516)
=STA.: 22+07.68 (℄)
SW HOOK ROAD, 42.07' LT

E.S. DW 1516–2, CONSTRUCT 12"
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W/ CONCRETE TOE WALL
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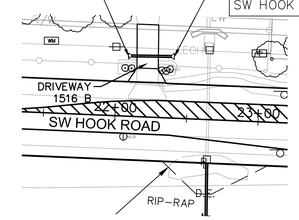
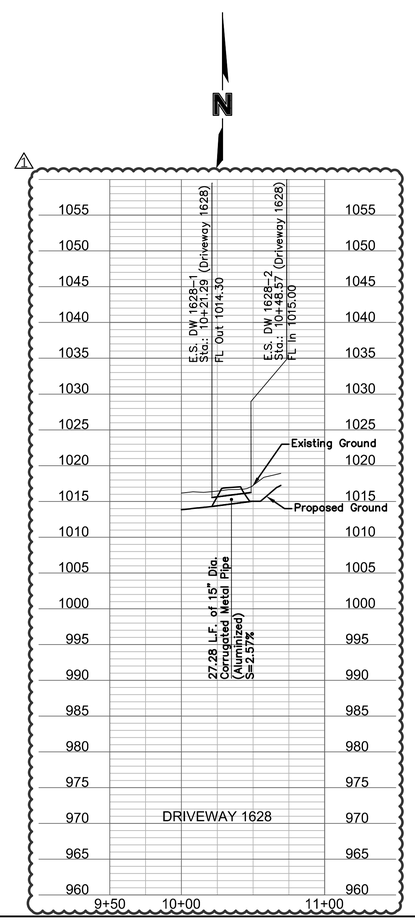
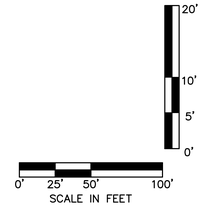
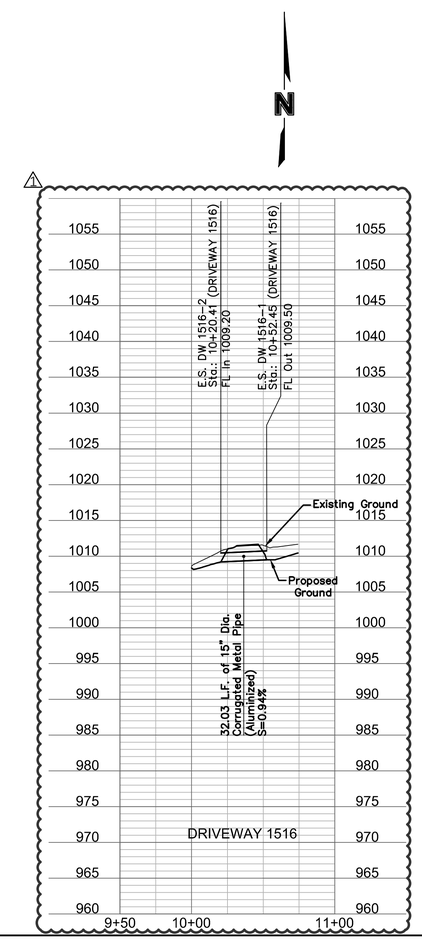
=STA.: 22+39.70 (℄)
SW HOOK ROAD, 43.07' LT









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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER
PE–2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Revised Pipe Material & FL's	

REVISIONS

STORM SEWER PLAN & PROFILE

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

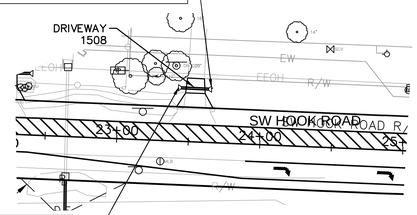
drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

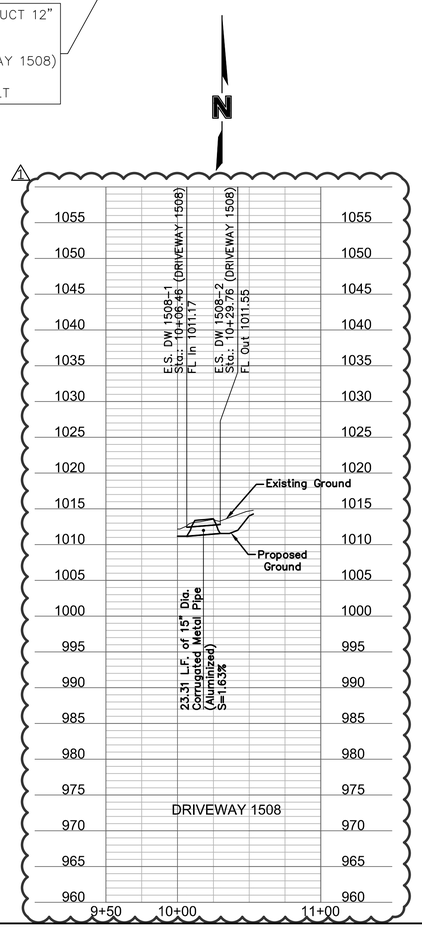
SHEET
C313

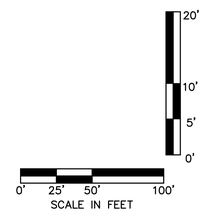
DWG: F:\2017\0001–0500\017–0188\40–Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_STM01_ 017–0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 9:28am

E.S. DW 1508–2, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+29.76 (DRIVEWAY 1508)
=STA.: 23+64.88 (℄)
SW HOOK ROAD, 37.30' LT

E.S. DW 1508–1, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+06.46 (DRIVEWAY 1508)
=STA.: 23+41.58 (℄)
SW HOOK ROAD, 37.29' LT

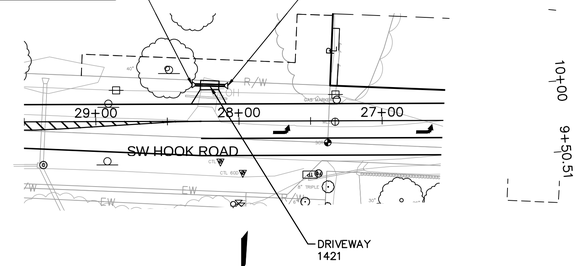


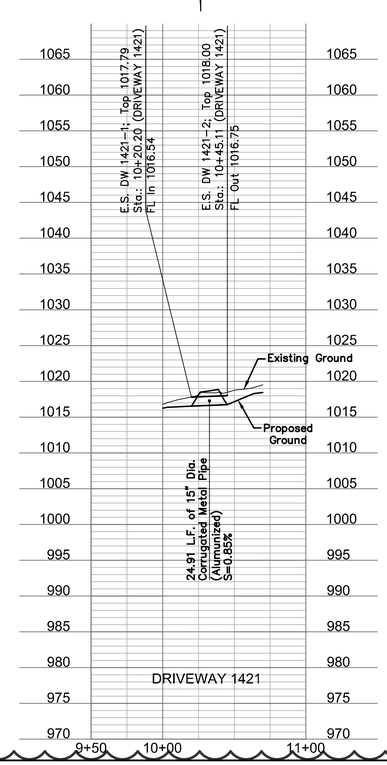




E.S. DW 1421–1, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+20.20 (DRIVEWAY 1421)
=STA.: 28+32.69 (℄)
SW HOOK ROAD, 25.55' RT

E.S. DW 1421–2, CONSTRUCT 12"
CMP END SECTION
W/ CONCRETE TOE WALL
STA.: 10+45.11 (DRIVEWAY 1421)
=STA.: 28+07.79 (℄)
SW HOOK ROAD, 24.83' RT





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STATE OF MISSOURI
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NUMBER PE–2011000892
12-14-17
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Revised Pipe Material & Fl.'s, Driveway 1421 Culvert Added.	

STORM SEWER PLAN & PROFILE

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET
C314

DWG: F:\2017\0001–0500\017–0188\40–Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_STM01_ 017–0188.dwg USER: mdlebolt
DATE: Dec 13, 2017 9:29am

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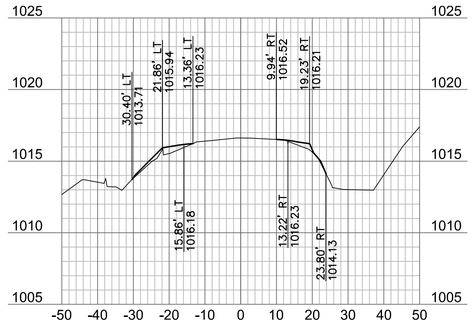

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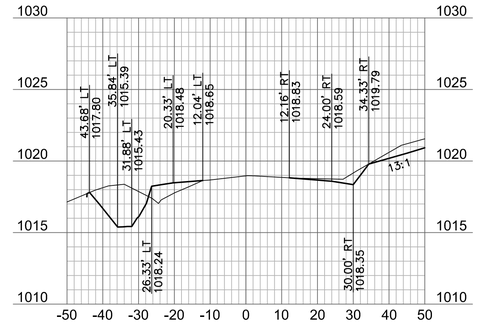

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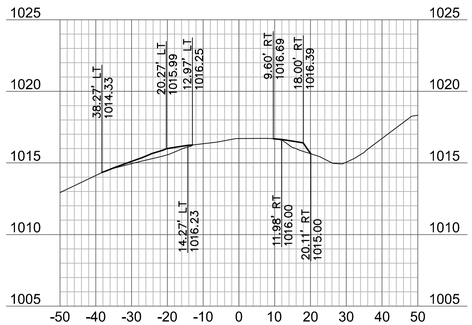

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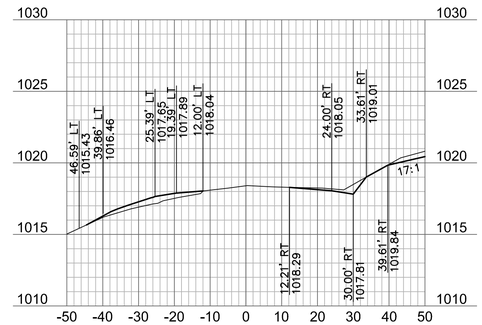

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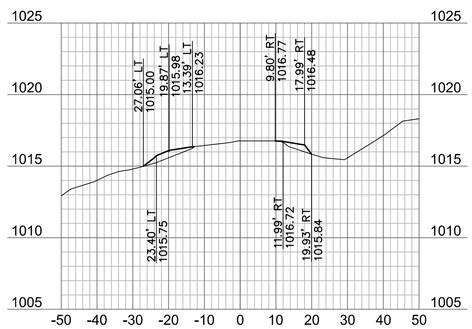

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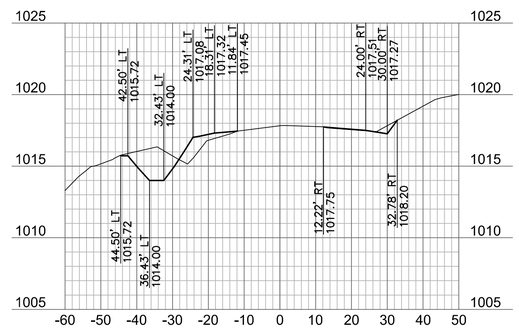

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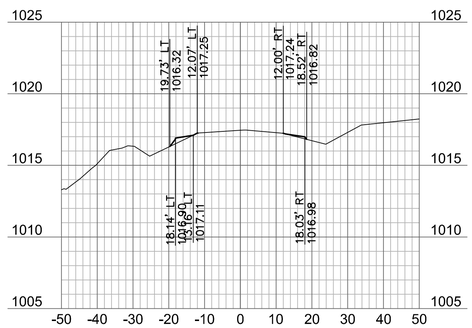

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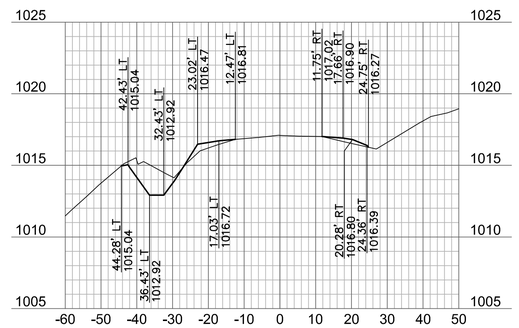

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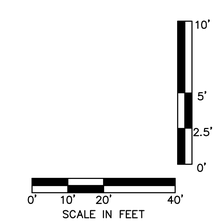

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

CROSS SECTION PROFILE 1

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

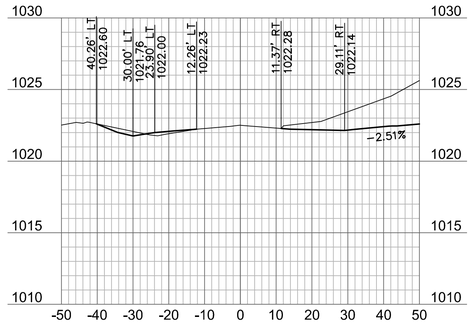
2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C315

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_STM02_ 017-0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 9:29am

NOTE: WHERE GRADING EXCEEDS CROSS SECTION VIEW ON RIGHT SIDE, SEE HAWTHORN RIDGE 1ST PLAT STREET AND STORM SEWER PLANS FOR CONTINUATION OF GRADING.



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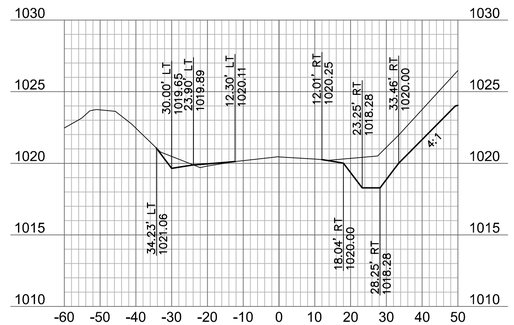

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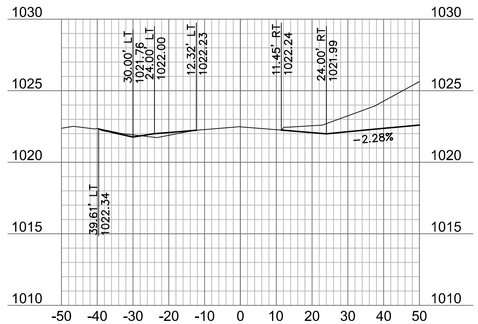

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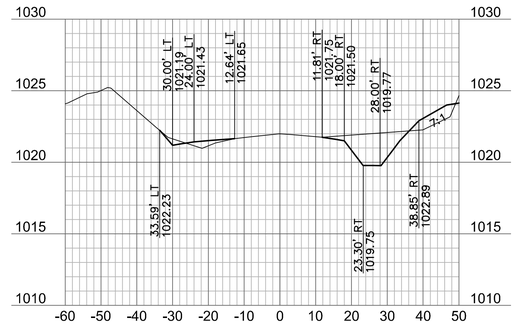

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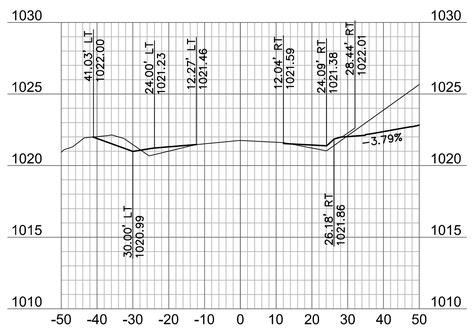

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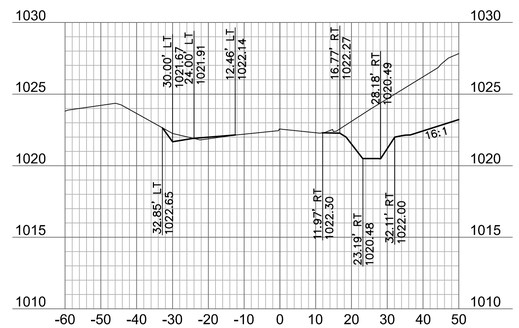

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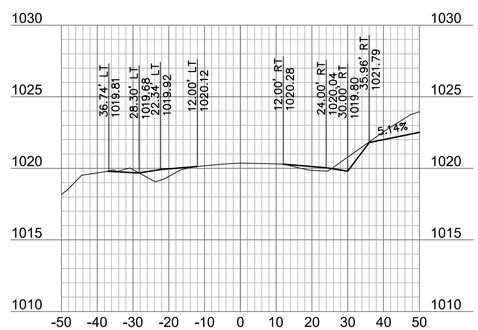

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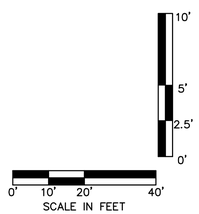

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STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

CROSS SECTION PROFILE (1-2)

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C316

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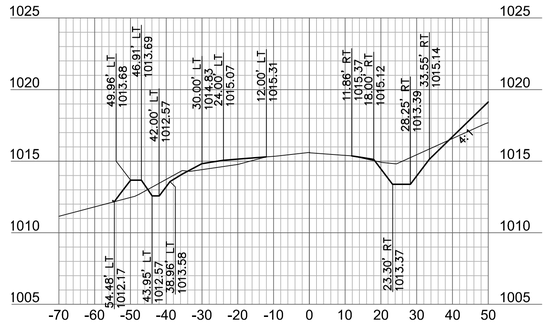

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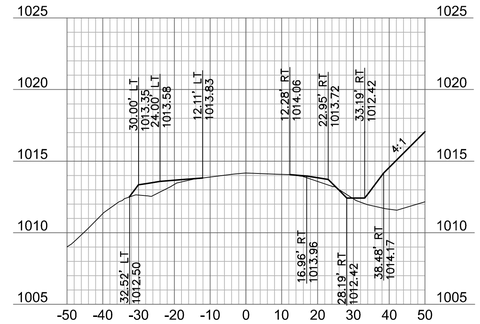
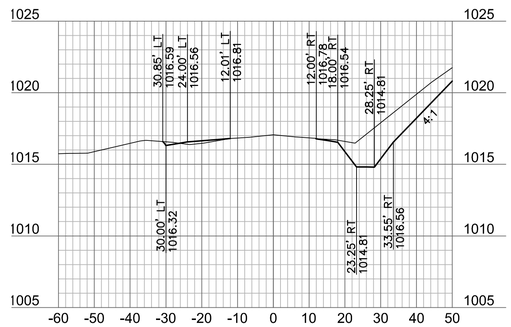


23+00

NOTE: WHERE GRADING EXCEEDS CROSS SECTION VIEW ON RIGHT SIDE, SEE HAWTHORN RIDGE 1ST PLAT STREET AND STORM SEWER PLANS FOR CONTINUATION OF GRADING.



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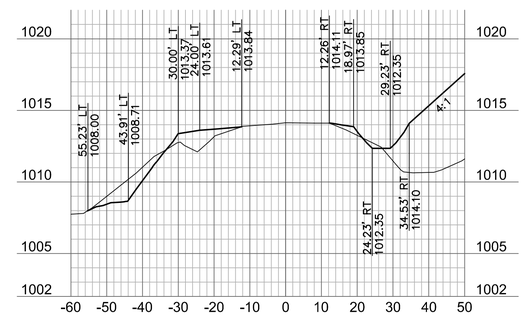

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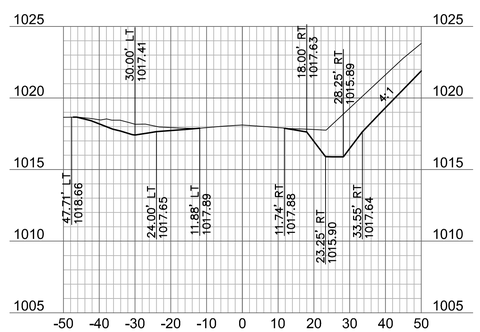

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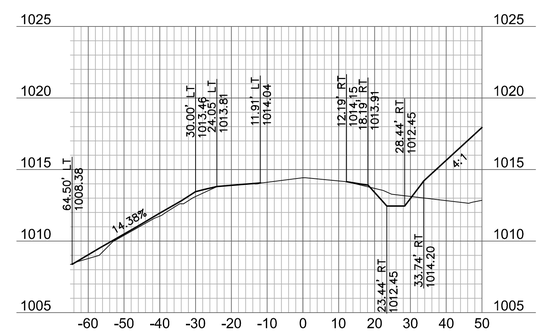

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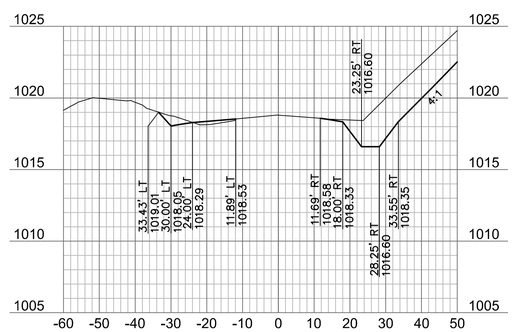

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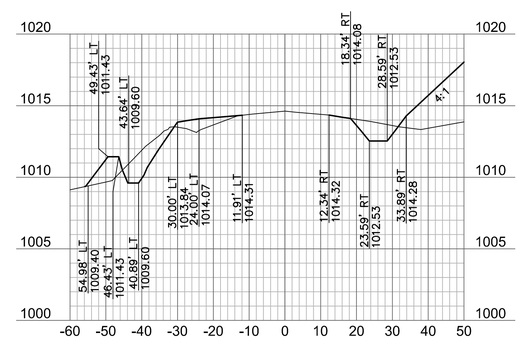

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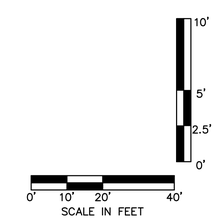

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STATE OF MISSOURI
MELISSA G. DEGONIA
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PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

CROSS SECTION PROFILE (2)

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
Q/A/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C317

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_STM02_ 017-0188.dwg USER: mdiebolt
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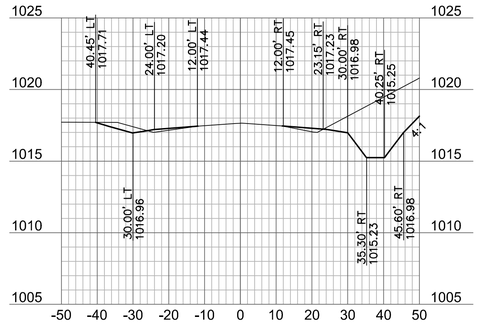

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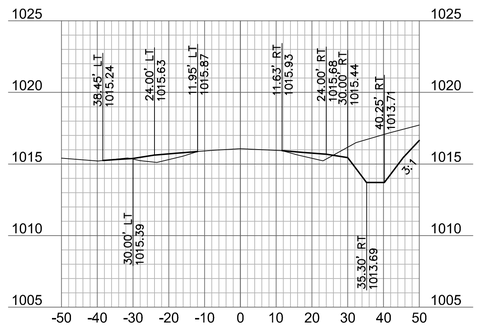

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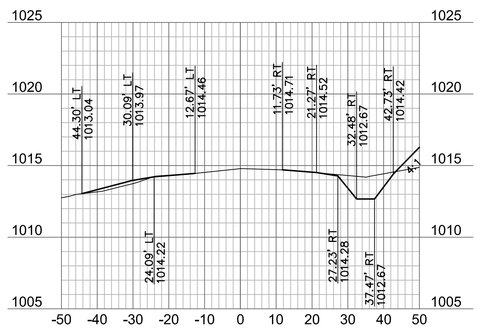

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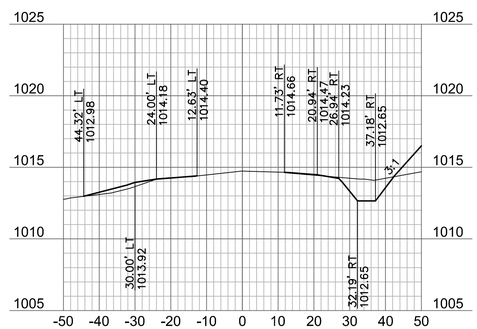

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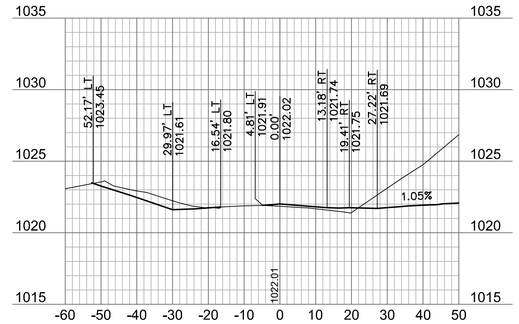

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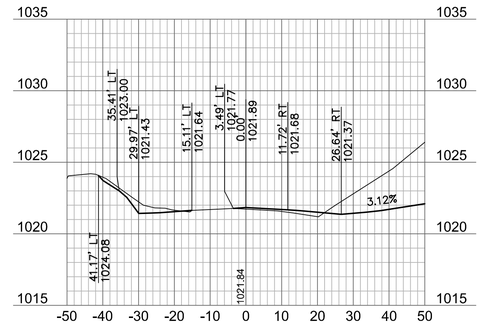

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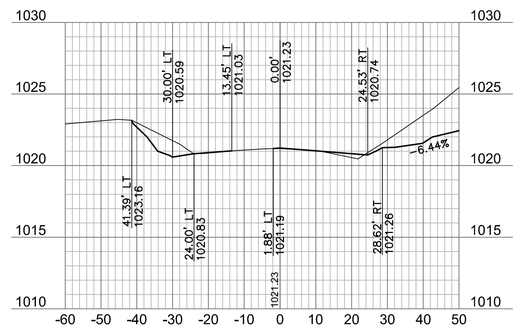

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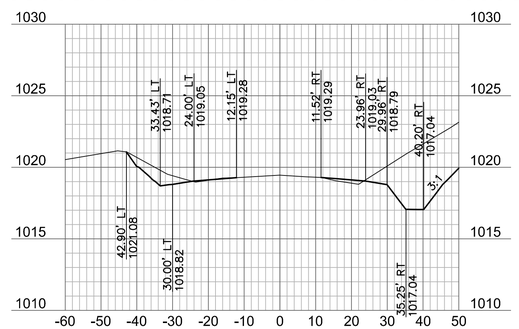

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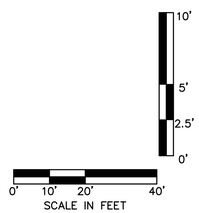
NOTE: WHERE GRADING EXCEEDS CROSS SECTION VIEW ON RIGHT SIDE, SEE HAWTHORN RIDGE 1ST PLAT STREET AND STORM SEWER PLANS FOR CONTINUATION OF GRADING.



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STATE OF MISSOURI
MELISSA G. DECONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Revised Cross Sections For Shifted Road Crown	

REVISIONS

CROSS SECTION PROFILE (2-2)

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C318

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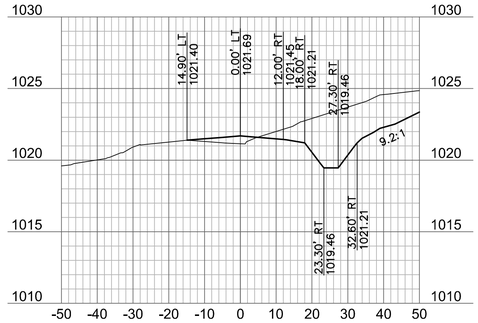

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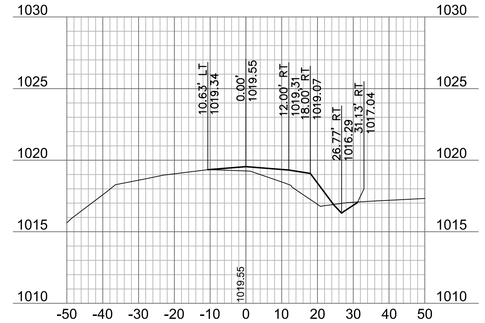

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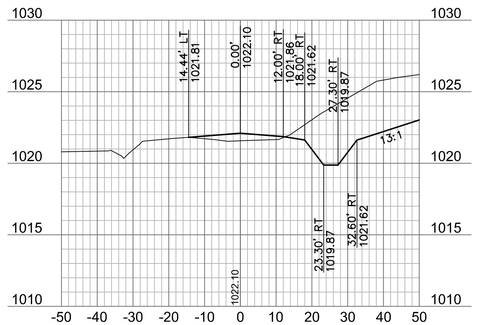

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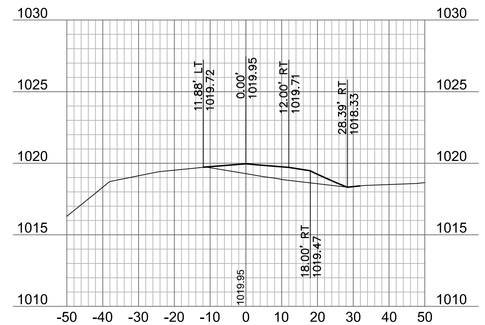

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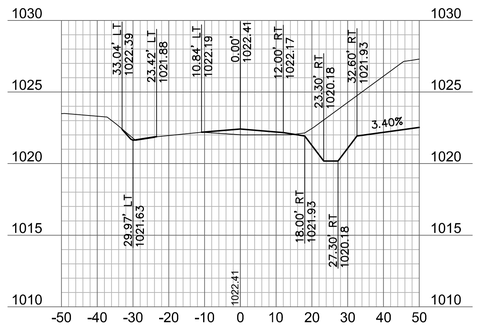

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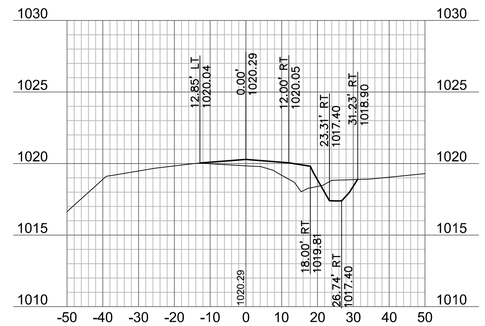

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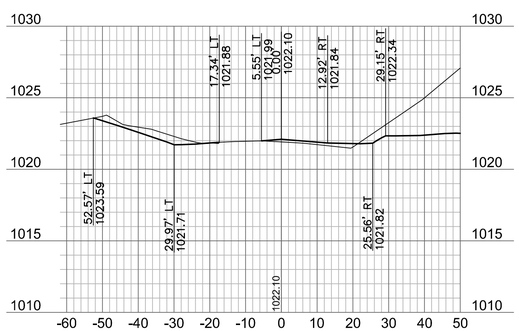

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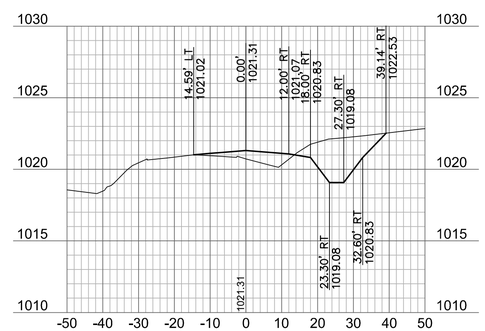

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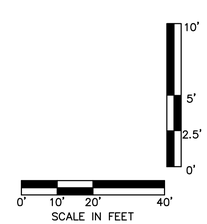

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	Revised Cross Sections For Shifted Road Crown	

REVISIONS

CROSS SECTOIN PROFILE (3)

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C319

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_STM02_ 017-0188.dwg USER: mdiebolt
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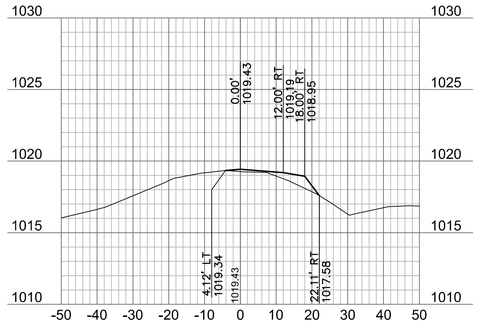
NOTE: WHERE GRADING EXCEEDS CROSS SECTION VIEW ON RIGHT SIDE, SEE HAWTHORN RIDGE 1ST PLAT STREET AND STORM SEWER PLANS FOR CONTINUATION OF GRADING.



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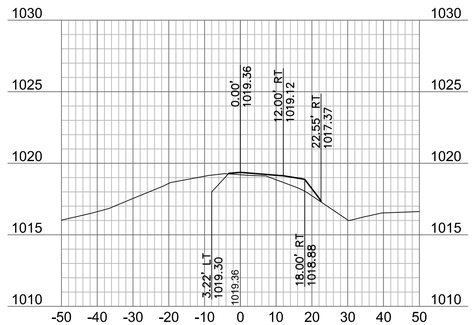

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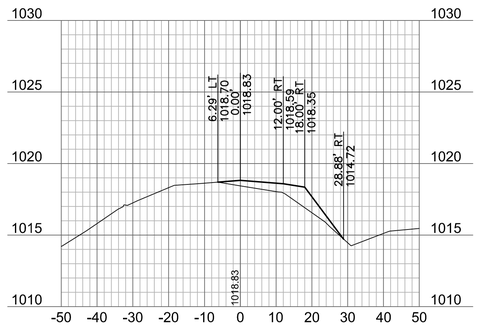

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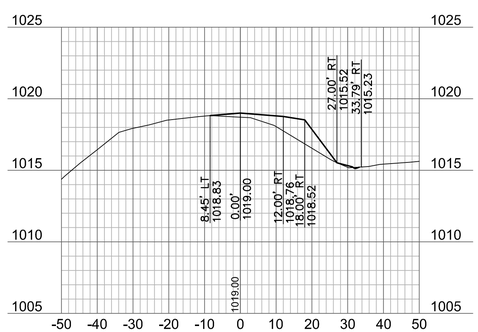

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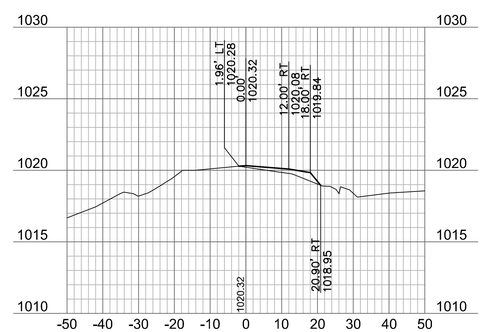

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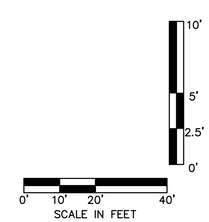

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MELISSA G. DEGONIA
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PROFESSIONAL ENGINEER
12-14-17

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
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REVISIONS

CROSS SECTION PROFILE (3-2)

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C320

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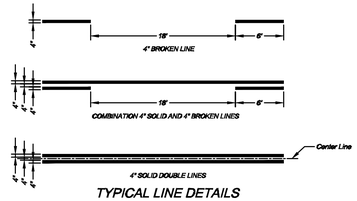
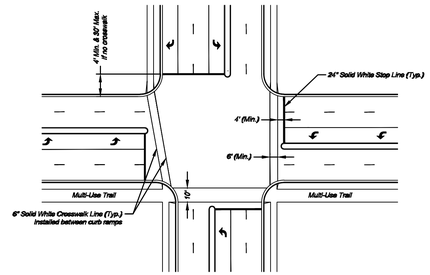


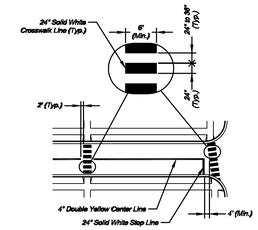
TYPICAL LINE DETAILS

NOTES:
1. All edge line, center line, and lane line pavement markings shall be 4" wide unless otherwise noted.
2. Edge lines shall be continuous solid white or yellow lines. Right side edge lines shall be solid white. Median or left side edge lines on divided roadways are to be solid yellow. Edge lines and center lines shall be continuous across driveways.

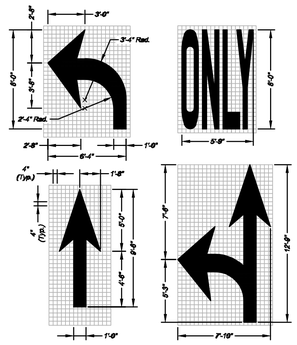


TYPICAL INTERSECTION MARKINGS

NOTES:
1. Transverse crosswalk lines shall be installed such that the distance between lines is at least 6 or 10 feet.
2. Stop lines are required at signalized intersections, on multi-lane stop controlled approaches, or in front of crosswalks at controlled intersections.

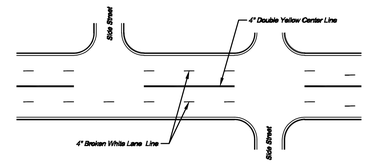


TYPICAL MIDBLOCK OR SCHOOL CROSS WALK

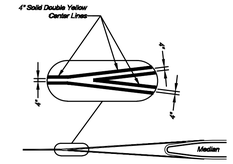


ARROW AND SYMBOL DETAILS

NOTES:
1. All arrow and symbol markings shall be white, and shall be centered in their respective traffic lanes.
2. Right-turn and combination right-turn/straight arrows are reverse of arrows shown.



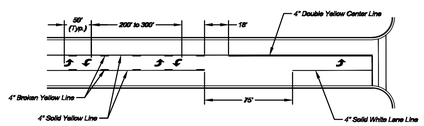
TYPICAL MARKINGS FOR FOUR-LANE UNDIVIDED ROADWAY



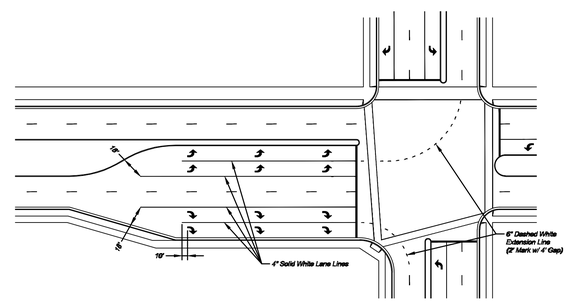
TYPICAL MEDIAN NOSE CENTER LINE DETAIL

PAVEMENT MARKING GENERAL NOTES:
1. All pavement markings shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. All words and symbols shall conform to the latest edition of Standard Alphabets for Highway Signs and Pavement Markings printed by the U.S. Department of Transportation, Federal Highway Administration.
3. Pavement markings, either temporary or permanent are required at all times if the roadway is open to traffic.
4. All pavement markings that conflict with the desired markings shall be completely removed. Removals shall not leave the road surface scarred with an image that misleads traffic. Any excess damage or scarring of pavement shall be repaired at the Contractor's expense.
5. The proposed permanent markings shall be laid out by the Contractor in advance of the marking installation. Markings shall not be applied until the layout has been approved by the City Traffic Engineer.
6. Center lines shall be marked on all undivided arterial streets, and any other undivided street with more than two lanes and/or a speed limit of 30 mph or more.
7. Edge lines shall be marked on all non-curbed streets.

N.T.S.
01 ROADWAY MARKING DETAILS – CITY OF LEE'S SUMMIT

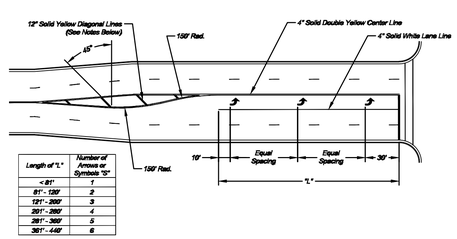


TYPICAL MARKINGS FOR TWO-WAY LEFT-TURN LANE



TYPICAL DUAL TURN LANE MARKINGS

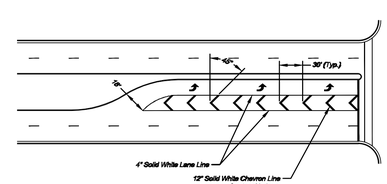
NOTE:
1. Dashed extension lines shall not extend through crosswalks.



Length of "L"	Number of Arrows or Symbols "S"
< 81'	1
81' - 120'	2
121' - 200'	3
201' - 280'	4
281' - 360'	5
361' - 440'	6

TYPICAL TURN LANE MARKINGS

NOTES:
1. Diagonal lines are required between centerlines if the width of the area between the center lines is greater than 12' and/or the length of the area between center lines is greater than 200'.
2. Diagonal lines should be spaced at 5' increments, equal to the posted speed limit.
3. Equal Spacing is calculated as (L - 40) / (S - 1).
4. When a through lane of traffic terminates as a mandatory turn lane, Arrow and "ONLY" symbols should be marked in the turn lane, in alternating order. The first and last symbols should be Arrows.



TYPICAL STRIPED OUT TURN LANE MARKINGS

N.T.S.
02 INTERSECTION MARKING DETAILS – CITY OF LEE'S SUMMIT

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STATE OF MISSOURI
MELISSA G. DEGONIA
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PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

DETAILS

HAWTHORN RIDGE 1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.Q
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET C321

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_XSC01_017-0188.dwg USER: mdiebolt
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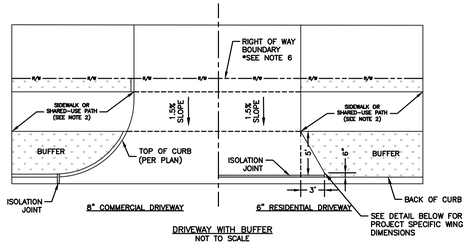
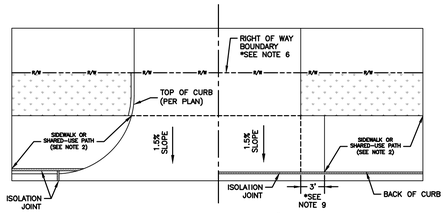
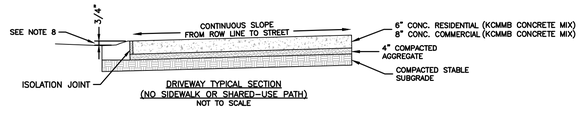


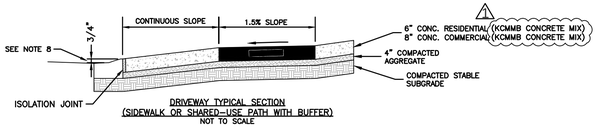
DRIVEWAY WITH BUFFER
NOT TO SCALE



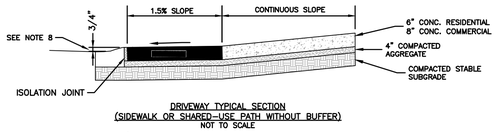
DRIVEWAY WITHOUT BUFFER
NOT TO SCALE



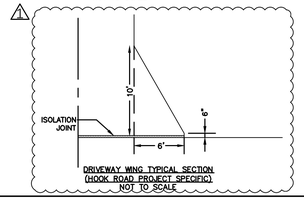
DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)
NOT TO SCALE



DRIVEWAY WING TYPICAL SECTION
(HOOK ROAD PROJECT SPECIFIC)
NOT TO SCALE

GENERAL NOTES

1. SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL).
3. JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
4. KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
5. COMMERCIAL DRIVEWAYS AND DRIVEWAY APPROACHES, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CC-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
9. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
10. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

N.T.S.
03 DRIVEWAY DETAIL – CITY OF LEE'S SUMMIT

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STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
12-14-17
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	12.13.2017	KCMMB Mix Specified. Revised Driveway Wing Detail.	

REVISIONS

DETAILS

HAWTHORN RIDGE
1ST PLAT

LEE'S SUMMIT, MO

2017

drawn by: D.A.H.O
checked by: M.G.D.
designed by: P.M.D
QA/QC by: K.S.J
project no.: 017-0188
date: 03.03.2017

SHEET
C322

DWG: F:\2017\0001-0500\017-0188\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Road Improvements_36x24\C_XSC01_017-0188.dwg USER: mdiebolt
DATE: Dec 13, 2017 9:31am