FINAL PLANS FOR
PUBLIC ROADWAY IMPROVEMENTS
OLDHAM PARKWAY & PRINCETON DRIVE
LEE'S SUMMIT, MISSOURI

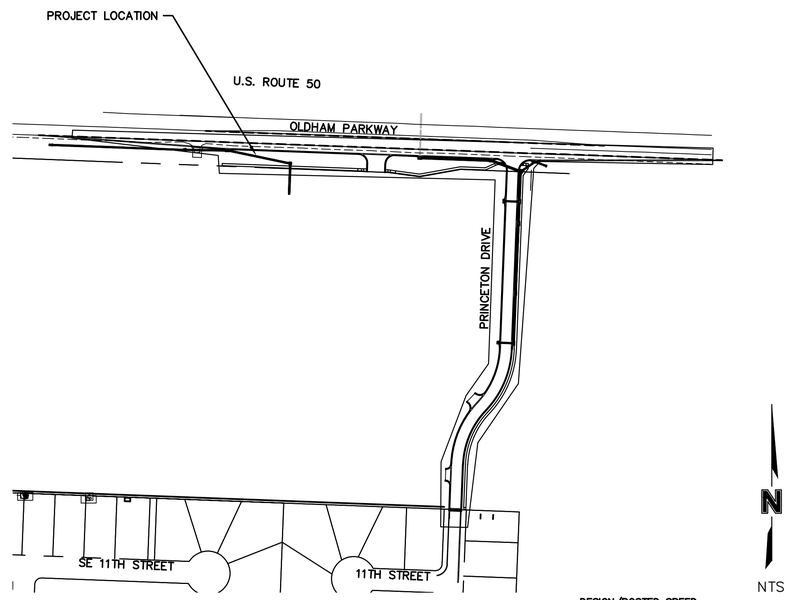
LEGEND

CTL	SURVEY CONTROL POINT	TS	TRAFFIC SIGNAL BOX
	SURVEY BENCHMARK	TS	TRAFFIC SIGNAL MANHOLE
TBM	SURVEY TEMPORARY BEMCHMARK		TRAFFIC SIGNAL POLE W/ ARM
GM	GAS METER		TRAFFIC SIGNAL POLE
GAR	GAS RISER	TC	TRAFFIC SIGNAL CONTROL BOX
	GAS MANHOLE	TS	TRAFFIC SIGNAL PEDESTAL
GR	GAS REGULATOR	E	ELECTRIC MANHOLE
TVP	TELEVISION PEDESTAL	EM	ELECTRIC METER
F	FIBER BOX	ER	ELECTRIC RISER
	FIBER PEDESTAL	E	ELECTRIC BOX
C	CABLE BOX		ELECTRIC CABINET
CV	CABLE VAULT	J	ELECTRIC JUNCTION BOX
TP	TELEPHONE PEDESTAL	SPH	SPRINKLER HEAD
	STORM MANHOLE	SCV	SPRINKLER CONTROL VALVE
	STORM GRATE		WATER METER PIT
S	SANITARY MANHOLE		FIRE HYDRANT
YL	YARD LIGHT	WM	WATER METER
LTP	LIGHT POLE	WV	WATER VALVE
	POWER POLE	FP	FLAG POLE
LPPP	POWER POLE W/ LIGHT		SIGN
	GUY WIRE		BOLLARD
BU	STUMP		WOOD POST
	BUSH		STEEL POST
	EVERGREEN TREE	COL	COLUMN
	DECIDUOUS TREE		BORE HOLE

- SECTION LINE
- PROPERTY LINE
- CENTER LINE
- PROPOSED ROW LINE
- EXISTING ROW LINE
- UTILITY EASEMENT
- 1371 EXISTING CONTOUR
- 1371 EXISTING CONTOUR
- 1371 PROPOSED MINOR CONTOUR
- 1371 PROPOSED MAJOR CONTOUR
- TEL EXISTING TELEPHONE LINE
- EXISTING SANITARY LINE
- EXISTING STORM LINE
- G EXISTING GAS LINE
- W EXISTING WATER LINE
- X EXISTING CHAIN LINK FENCE
- P-OH EXISTING OVERHEAD ELECTRIC
- P EXISTING PIPE LINE
- GRADING LIMITS
- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED UTILITY OVERHEAD EASEMENT
- PROPOSED PERMANENT DRAINAGE EASEMENT
- X PROPOSED CHAIN LINK FENCE
- PROPOSED WOOD PRIVACY FENCE
- EXISTING TREELINE

ABBREVIATION TABLE

M.G.	MATCH GRADE
BOC	BACK OF CURB
EOP	EDGE OF PAVEMENT
R/W	RIGHT-OF-WAY
D/E	DRAINAGE EASEMENT
S/E	SANITARY EASEMENT
S/W	SIDEWALK
TCE	TEMPORARY CONSTRUCTION EASEMENT
UOHE	UTILITY OVERHEAD EASEMENT
PDE	PERMANENT DRAINAGE EASEMENT
PROP.	PROPOSED
EXIST.	EXISTING
TYP.	TYPICAL
CONST.	CONSTRUCT
TBM	TEMPORARY BENCMARK
C.P.	CONTROL POINT
D.N.D.	DO NOT DISTURB
U.I.P.	USE IN PLACE
ADJ.	ADJUST
EL.	ELEVATION
ESMT.	EASEMENT
BK.CB.	BACK OF CURB
BK.SWK.	BACK OF SIDEWALK



LOCATION MAP
SEC. 10, TWP. 47N, RNG. 31W

DESIGN/POSTED SPEED:
OLDHAM PARKWAY = 40 MPH
PRINCETON DRIVE = 25 MPH

INDEX OF SHEETS

SHEET NO.	TITLE
T1	TITLE SHEET
T2	GENERAL LAYOUT
T3	ALIGNMENT DATA & SURVEY CONTROL
T4	GENERAL NOTES
T5	DEMOLITION AND REMOVALS
T6	TYPICAL SECTIONS
T7-T11	PLAN AND PROFILES
T12	INTERSECTION LAYOUTS
T13-T14	DRIVE LAYOUTS
T15	SIDEWALK RAMP LAYOUTS
T16-T22	STANDARD DETAILS
T23-T24	EROSION CONTROL PLANS
T25-T29	PAVEMENT MARKING & SIGNING PLANS & DETAILS
T33-T34	TRAFFIC CONTROL PLANS & DETAILS
T35-T51	CROSS SECTIONS

PUBLIC STORM WATER

SHEET NO.	TITLE
ST1.0-ST1.3	STORM PROFILES
ST2.0-ST3.0	DRAINAGE MAP & STORM SEWER CALCULATIONS
ST4.0-ST4.1	STORM WATER DETAILS

*PROPOSED UTILITIES

- [ATT] PROPOSED AT&T
- [FO] PROPOSED FIBER
- [G] PROPOSED GAS
- [W] PROPOSED WATERLINE
- [UTL OH] PROPOSED OVERHEAD UTILITIES
- [SL] PROPOSED STREET LIGHT CONDUIT
- [CCI] PROPOSED CONSOLIDATED

**The utilities as shown in this legend represent the intended construction or relocation of utilities. These plans do not take into account the construction schedule or "As-Constructed Plans" of utility construction or relocations. Therefore, the Contractor shall notify all utility agencies before beginning work and shall cooperate with them in locating and protecting their utilities. The Engineer and Owner make no guarantee as to accuracy or completeness of information shown.*

AT&T
RON GIPFERT
500 E. 8TH STREET, ROOM 1146
KANSAS CITY, MISSOURI 64106
PHONE: (816) 275-1550
EMAIL: RG7910@ATT.COM

KANSAS CITY POWER & LIGHT
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401 SE BAILEY ROAD
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EMAIL: JEFF.WILLIAMS@KCPL.COM

CONSOLIDATED COMMUNICATIONS
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14859 W. 95TH STREET
LENEXA, KS 66215
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GOOGLE FIBER
LAUREN MARCUCCI
PHONE: (913) 663-1900
EMAIL: LMARCUCCI@GOOGLE.COM

LEE'S SUMMIT R-7 SCHOOL DISTRICT
KINZIE WOODERSON
301 NE TUDOR ROAD
LEE'S SUMMIT, MO 64086
PHONE: (816) 986-1050
EMAIL: KINZIE.WOODERSON@LSR7.NET

LEE'S SUMMIT WATER UTILITIES
DAVID LOHE
PHONE: (816) 969-1800
EMAIL: DAVID.LOHE@CITYOFLS.NET

SPIRE GAS
RICHARD FROCK
3025 SE CLOVER DRIVE
LEE'S SUMMIT, MO 64082
PHONE: (816) 472-3489
EMAIL: RICHARD.FROCK@SPIREENERGY.COM

CHARTER/SPECTRUM CABLE
TROY PREWITT
8221 W. 119TH STREET
OVERLAND PARK, KS 66213
PHONE: (816) 401-3573
EMAIL: TROY.PREWITT@CHARTER.COM

MISSOURI ONE CALL SYSTEM

1-800-DIG-RITE OR 811

www.mo1call.com

THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!

PREPARED & SUBMITTED BY:
OLSSON ASSOCIATES
7301 W. 133RD STREET, SUITE 200
OVERLAND PARK, KANSAS 66213

RYAN B. FLEMING DATE

I CERTIFY THESE PLANS WERE PREPARED BY ME OR UNDER MY IMMEDIATE PERSONAL SUPERVISION.

olsson
Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI — RYAN B. FLEMING — NUMBER PE-2002003161 — 7-24-19 — PROFESSIONAL ENGINEER

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
3	07/19/2019	ENGR. REVIEW COMMENTS	

REVISIONS

TITLE SHEET

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS
LEE'S SUMMIT, MISSOURI
2019

C.O.A. NO.:	001592
DRAWN BY:	AS
CHECKED BY:	JKL
APPROVED BY:	RBF
QA/QC BY:	JKL/RBF
PROJECT NO.:	018-1450
DWG NO.:	T_TTL_81450
DATE:	07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\GENERAL\T_TTL_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 12:00pm XREFS: t_pbase_81450 t_ptblk_81450 V_ABOU_81450 V_TOPO_81450

U.S. ROUTE 50

STA: 15+90.15 ℄ OLDHAM PARKWAY BASELINE =
STA: 40+60.00 ℄ FIELD ENTRANCE STA: 15+90.15

STA: 19+95.51 ℄ OLDHAM PARKWAY BASELINE =
STA: 30+90.00 ℄ DRIVE STA: 19+95.51

STA: 23+05.13 ℄ OLDHAM PARKWAY BASELINE =
STA: 100+00.00 ℄ PRINCETON DRIVE

OLDHAM PARKWAY

℄ MODOT 1999 PROJECT NO. J4P1191

OA CPT#311

OA CPT#312

EXIST. R/W

EXIST. 10' TEMPORARY CONSTRUCTION EASEMENT DOC. NO. 2016E0073914

PROP. 10' WATER MAIN EASEMENT

FIELD ENTRANCE STA: 15+90.15

DRIVE STA: 19+95.51

PROP. R/W

PROPERTY LINE

PRINCETON DRIVE

℄ PRINCETON DRIVE

PROP. 10' WATER EASEMENT

PC: 104+56.08

DRIVE STA: 106+02.30

STA: 106+02.30 ℄ PRINCETON DRIVE =
STA: 20+40.00 ℄ DRIVE STA: 106+02.30

PC: 106+00.55

PT: 107+45.59

DRIVE STA: 107+70.59

STA: 107+70.59 ℄ PRINCETON DRIVE =
STA: 10+50.00 ℄ DRIVE STA: 107+70.59

10' PROP. TCE

PROPERTY ID# 60-430-98-01-00-0-00-000
OWNER: METCALF BANK
OWNER ADDRESS: 609 NE 291 HWY.
LEE'S SUMMIT, MO. 64086
PROPERTY ADDRESS: NO ADDRESS ASSIGNED BY CITY
LEE'S SUMMIT, MO. 64081
LAND USE TYPE: 4100
ZONING: PLANNED COMMUNITY COMMERCIAL

PROPERTY ID# 60-430-98-01-00-0-00-000
OWNER: METCALF BANK
OWNER ADDRESS: 1701 S.E. OLDHAM PARWAY
LEE'S SUMMIT, MO. 64086
PROPERTY ADDRESS: NO ADDRESS ASSIGNED BY CITY
LEE'S SUMMIT, MO. 64081
LAND USE TYPE: 4100
ZONING: PLANNED COMMUNITY COMMERCIAL

PROPERTY ID# 60-400-04-00-00-0-00-000
OWNER: BARBER & SONS CO.
OWNER ADDRESS: 27210 E. 50 HWY.
LEE'S SUMMIT, MO. 64086
PROPERTY ADDRESS: NO ADDRESS ASSIGNED BY CITY
LEE'S SUMMIT, MO. 64086
LAND USE TYPE: 4100
ZONING: RURAL DENSITY RESIDENTIAL

Unplatted
1,089,001 S.F.
25.0000 AC.
No Site Address Available
"No Buildings"
Current Zoning CP-2

LEGEND

ASPHALT

CONCRETE

N

0' 25' 50' 100'
SCALE IN FEET

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\GENERAL\T_GENL_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:20am XREFS: t_pbase_81450 t_ppatt_81450 T_PTBLK_81450 V_TOPO_81450 V_XBOU_81450 C_PBASE_81450

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Overland Park, KS 66213-4750 FAX 913.381.1174

RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

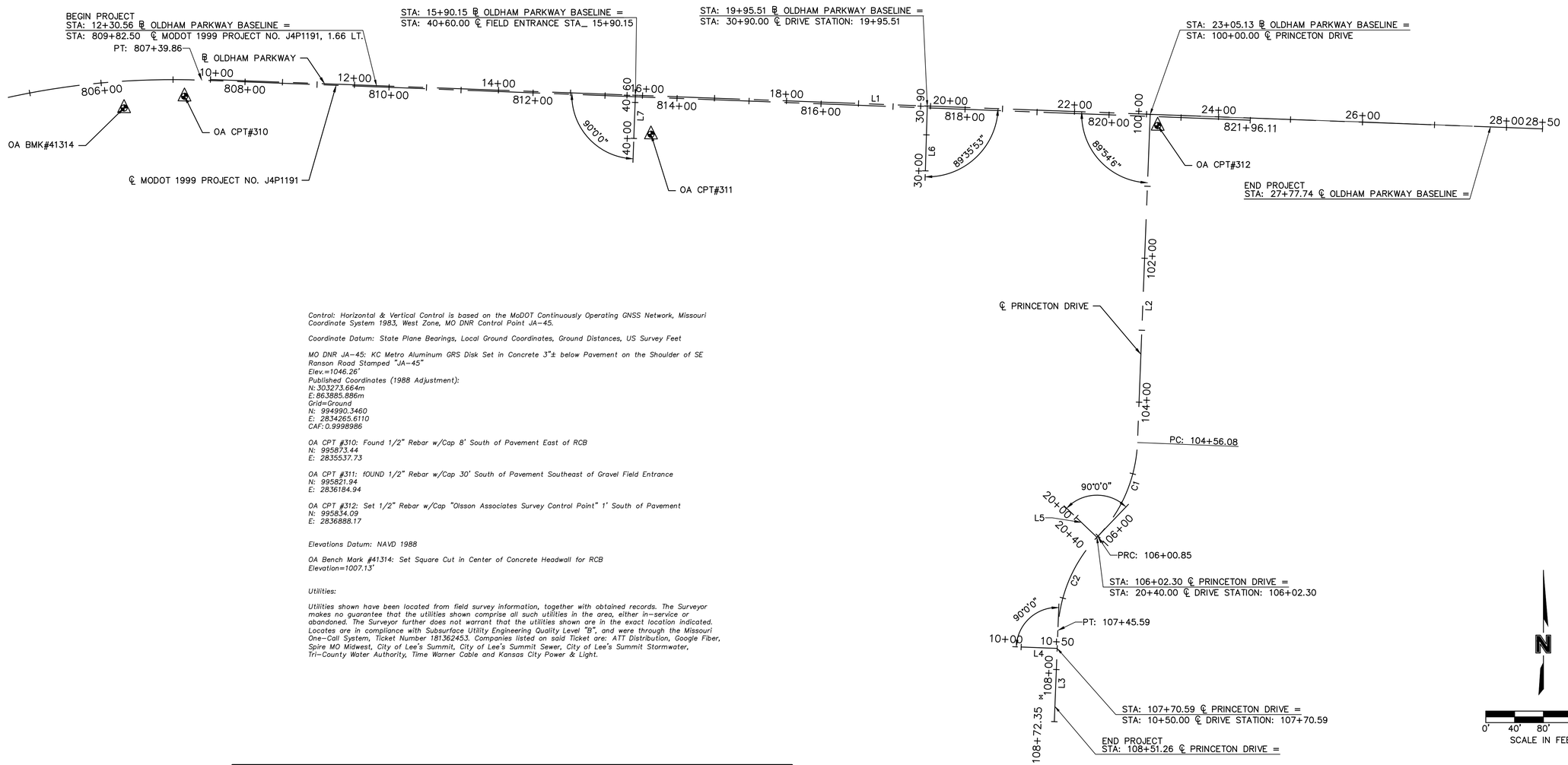
GENERAL LAYOUT

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_GENL_81450
DATE: 07.19.19



Control: Horizontal & Vertical Control is based on the MoDOT Continuously Operating GNSS Network, Missouri Coordinate System 1983, West Zone, MO DNR Control Point JA-45.

Coordinate Datum: State Plane Bearings, Local Ground Coordinates, Ground Distances, US Survey Feet

MO DNR JA-45: KC Metro Aluminum GRS Disk Set in Concrete 3"± below Pavement on the Shoulder of SE Ranson Road Stamped "JA-45"
Elev.=1046.26'
Published Coordinates (1988 Adjustment):
N: 303273.664m
E: 863885.886m
Grid=Ground
N: 994990.3460
E: 2834265.6110
CAF: 0.9998986

OA CPT #310: Found 1/2" Rebar w/Cap 8' South of Pavement East of RCB
N: 995873.44
E: 2835537.73

OA CPT #311: fOUND 1/2" Rebar w/Cap 30' South of Pavement Southeast of Gravel Field Entrance
N: 995821.94
E: 2836184.94

OA CPT #312: Set 1/2" Rebar w/Cap "Olsson Associates Survey Control Point" 1' South of Pavement
N: 995834.09
E: 2836888.17

Elevations Datum: NAVD 1988

OA Bench Mark #41314: Set Square Cut in Center of Concrete Headwall for RCB
Elevation=1007.13'

Utilities:

Utilities shown have been located from field survey information, together with obtained records. The Surveyor makes no guarantee that the utilities shown comprise all such utilities in the area, either in-service or abandoned. The Surveyor further does not warrant that the utilities shown are in the exact location indicated. Locates are in compliance with Subsurface Utility Engineering Quality Level "B", and were through the Missouri One-Call System, Ticket Number 181362453. Companies listed on said Ticket are: ATT Distribution, Google Fiber, Spire MO Midwest, City of Lee's Summit, City of Lee's Summit Sewer, City of Lee's Summit Stormwater, Tri-County Water Authority, Time Warner Cable and Kansas City Power & Light.

OLDHAM PARKWAY BASELINE

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L1	10+00 28+50	N: 995897.33 E: 2835573.57	N: 995828.82 E: 2837422.30			1850.00	S87°52'39"E	

PRINCETON DRIVE

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L2	100+00 104+56.08	N: 995849.00 E: 2836877.81	N: 995393.27 E: 2836860.13			456.08	S2°13'14"W	
C1	PC 104+56.08 PT 106+00.85	PC N: 995393.27 E: 2836860.13	PT N: 995262.85 E: 2836804.89	105+31.80	N: 995317.60 E: 2836857.20	141.63	S22°57'27"W	200.00
C2	PC 106+00.85 PT 107+45.59	PC N: 995262.85 E: 2836804.89	PT N: 995132.47 E: 2836749.65	106+76.55	N: 995208.12 E: 2836752.59	141.60	S22°57'45"W	200.00
L3	107+45.59 108+72.35	N: 995132.47 E: 2836749.65	N: 995005.80 E: 2836744.72			126.77	S2°13'49"W	

DRIVE STATION: 107+70.59

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L4	10+00 10+50	N: 995109.43 E: 2836698.71	N: 995107.48 E: 2836748.68			50.00	S87°46'11"E	

DRIVE STATION: 106+02.30

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L5	20+00 20+40	N: 995289.44 E: 2836774.98	N: 995261.80 E: 2836803.89			40.00	S46°17'14"E	

DRIVE STATION: 19+95.51

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L6	30+00 30+90	N: 995770.51 E: 2836565.70	N: 995860.47 E: 2836568.40			90.00	N1°43'14"E	

FIELD ENTRANCE STA_ 15+90.15

ID #	STATION RANGE	START COORD.	END COORD.	PI STATION	PI COORD.	LINE/CHORD LENGTH (FT)	LINE/CHORD BEARING	RADIUS (FT)
L7	40+00 40+60	N: 995815.52 E: 2836161.09	N: 995875.48 E: 2836163.31			60.00	N2°07'21"E	

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RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
7-24-19
PROFESSIONAL ENGINEER

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
3	07/19/2019	ENGR. REVIEW COMMENTS	

REVISIONS

ALIGNMENT DATA & SURVEY CONTROL

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
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PROJECT NO.: 018-1450
DWG NO.: T_ALGN_81450
DATE: 07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\GENERAL\T_ALGN_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:20am XREFS: t_pbase_81450 t_ppatt_81450 T_PTBLK_81450 V_XBOU_81450 V_TOPO_81450

GENERAL NOTES FOR CAPITAL IMPROVEMENTS PROJECTS
(REV. FEBRUARY 10, 2010)

1) PRELIMINARY INFORMATION:

a) CONSULT PARAGRAPH 6.12 OF THE EJCDC GENERAL CONDITIONS (C-700) FOR A COMPLETE LIST OF RECORD DOCUMENTS THAT THE CONTRACTOR SHALL MAINTAIN ON SITE.

b) PERMITS REQUIRED FOR THE WORK CAN BE FOUND IN SECTION 1010 OF THE GENERAL REQUIREMENTS (DIVISION 1).

c) CONSTRUCTION OF THE WORK SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED UNLESS ALL PRELIMINARY CONTRACT OBLIGATIONS ARE MET, AND THE OWNER IS NOTIFIED OF THE INTENT TO START THE WORK. SEE SECTION 1020 OF DIVISION 1.

d) ALL WORK SHALL BE CONFINED WITHIN THE CONSTRUCTION LIMITS OR AS OTHERWISE DIRECTED BY THE OWNER.

e) ANY WORK PERFORMED PRIOR TO ENGINEER'S REVIEW AND APPROVAL OF THE PERTINENT SUBMITTAL WILL BE AT THE SOLE EXPENSE AND RESPONSIBILITY OF CONTRACTOR. SUBMITTAL PROCEDURES AND REQUIREMENTS CAN BE FOUND IN PARAGRAPH 6.17 OF C-700 AND SECTIONS 1115 AND 1116 OF DIVISION 1.

f) OWNER IS DEFINED AS THE CITY OF LEE'S SUMMIT.

2) COORDINATION AND NOTIFICATIONS:

a) ANY TIME REFERENCES LISTED IN PARAGRAPH 2 ARE TYPICAL TIMELINES. CONSULT SECTION 1105 OF DIVISION 1 FOR PROJECT SPECIFIC TIMELINES, COORDINATION AND NOTIFICATION PROCESSES.

b) PRIOR TO ANY STREET CLOSURES, APPROPRIATE NOTIFICATIONS WILL BE DISTRIBUTED. THE CLOSURES OF ARTERIAL AND COLLECTOR STREETS WILL TYPICALLY CAUSE THE OWNER TO GENERATE A PRESS RELEASE AND DETOUR MAP. THIS IS TYPICALLY 14 CALENDAR DAYS.

c) THE REMOVAL OF TREES, SHEDS, FENCING OR OTHER ITEMS ON PRIVATE PROPERTY ARE NOT AUTHORIZED ON THIS PROJECT. CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY IF ANY SUCH WORK IS PROPOSED. THE OWNER REQUIRES AT LEAST 14 CALENDAR DAYS TO NOTIFY PROPERTY OWNER RESIDENT, IN ORDER TO GIVE THEM OPPORTUNITY TO SALVAGE THESE ITEMS.

d) PRIOR TO DRIVEWAY DEMOLITION AND RECONSTRUCTION, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE PROPERTY OWNER OR RESIDENT. THIS IS TYPICALLY 2 WORKING DAYS.

e) PRIOR TO SHUTTING DOWN A WATER MAIN, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE PROPERTY OWNER OR RESIDENT. THIS IS TYPICALLY 2 WORKING DAYS.

f) CONTRACTOR SHALL NOT BE ALLOWED TO WORK WEEKENDS OR HOLIDAYS WITHOUT REQUESTING PRIOR APPROVAL FROM OWNER THREE WORKING DAYS IN ADVANCE.

g) BY ORDINANCE 17-42, WORKING HOURS WITHIN THE CITY OF LEE'S SUMMIT ARE 7:00 A.M. TO 10:00 P.M. REQUESTS TO WORK BEYOND THESE HOURS MUST BE FILED WITH THE OWNER ONE WEEK IN ADVANCE.

3) SURVEY:

a) IN ACCORDANCE WITH PARAGRAPH 4.05 OF C-700, OWNER OR ENGINEER SHALL PROVIDE ENGINEERING SURVEYS TO ESTABLISH REFERENCE POINTS FOR CONSTRUCTION WHICH IN THEIR JUDGMENT ARE NECESSARY TO ENABLE CONTRACTOR TO PERFORM THE WORK. CONTRACTOR IS RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL SET THOSE STAKES NECESSARY TO CONSTRUCT THIS PROJECT. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, UNLESS LISTED IN THE BID TAB.

b) IN ACCORDANCE WITH PARAGRAPH 4.05 OF C-700, CONTRACTOR SHALL RESET ANY PERMANENT REFERENCE POINTS, PROPERTY CORNERS AND PROPERTY MONUMENTS THAT ARE DISTURBED DURING CONSTRUCTION. THESE POINTS AND MONUMENTS SHALL BE RESET BY A REGISTERED LAND SURVEYOR IN ACCORDANCE WITH STATE LAW. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.

4) UNDERGROUND FACILITIES:

a) INFORMATION REGARDING UNDERGROUND FACILITIES IS APPROXIMATE AND WAS COMPILED USING INFORMATION PROVIDED BY THE FACILITY OWNER. CONSULT PARAGRAPH 4.04 OF C-700 FOR FURTHER INFORMATION.

b) UNLESS BORED, ALL UNDERGROUND UTILITIES (INCLUDING THE CONTRACTOR'S WORK) THAT CROSS UNDER PROPOSED STREET PAVEMENTS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT.

5) WATER, STORM & SANITARY SEWER:

a) WATER CAN BE PURCHASED FROM THE CITY'S WATER UTILITIES DEPARTMENT.

b) ALL MANHOLES, VALVE LIDS, METER LIDS, FIRE HYDRANTS AND AIR RELIEF ASSEMBLIES WITHIN THE CONSTRUCTION LIMITS SHALL BE RELOCATED OR ADJUSTED TO GRADE BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS. ALL VALVE RISERS IN PAVEMENT (WHETHER ADJUSTED, REPLACED OR PLACED) SHALL BE CAST IRON AND CONFORM TO THE SPECIFICATIONS. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, UNLESS LISTED IN THE BID TAB.

c) CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE FLOWS AROUND EACH SEGMENT OF PIPE THAT IS TO BE REPLACED OR REFURBISHED. CONTRACTOR SHALL HAVE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE WORK ON THE PIPE SEGMENT PRIOR TO ISOLATING THE SEWER SEGMENT AND BEGINNING BYPASS PUMPING OPERATIONS. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, UNLESS LISTED IN THE BID TAB.

6) ENVIRONMENTAL & SAFETY:

a) CONTRACTOR SHALL USE ADEQUATE DUST CONTROL MEASURES DURING ALL PHASES OF THE WORK. CONSULT SECTION 1145 IN DIVISION 1.

b) SILTATION AND EROSION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL SYSTEMS, REPLACING DAMAGED OR FAILED EROSION CONTROL DEVICES AND INSPECTING THE SITE IN ORDER TO REPAIR THE EROSION CONTROL SYSTEMS WITHIN 24 HOURS AFTER A SIGNIFICATION RAIN EVENT. GRADING ADJACENT TO PAVEMENTS SHALL BE LEFT THREE INCHES BELOW THE TOP OF PAVEMENT UNTIL IMMEDIATELY BEFORE SOD OR SEED IS PLACED. EROSION AND SEDIMENT CONTROL MUST BE IN PLACE PRIOR TO THE DISTURBANCE OF THE GROUND. FIELD ADJUSTMENTS TO EROSION AND SEDIMENT CONTROL MAY BE REQUIRED DEPENDING ON THE SITE CONDITIONS.

c) UNLESS WAIVED IN SECTION 1010, CONTRACTOR SHALL MAINTAIN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE IN ACCORDANCE WITH DNR REGULATIONS.

d) PROPERTY MAINTENANCE INFORMATION CAN BE FOUND IN SECTION 1145 OF DIVISION 1.

7) GRADING, REMOVALS & DAMAGED ITEMS:

a) INFORMATION ON SALVAGED MATERIAL CAN BE FOUND IN SECTION 1150 OF DIVISION 1.

b) NO BURNING IS ALLOWED ON THE SITE.

c) DRIVEWAYS, PARKING LOTS, SIDEWALKS, FENCES, IRRIGATION SYSTEMS AND OTHER ITEMS DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN EXISTING BEFORE DAMAGE OCCURRED. UNLESS WAIVED BY OWNER, ALL ITEMS REQUIRING REPLACEMENT SHALL BE REPLACED WITH NEW MATERIALS, AND ALL MATERIALS ARE SUBJECT TO OWNER'S APPROVAL. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, UNLESS LISTED IN THE BID TAB.

d) ALL FENCE REPLACEMENT SHOULD BE RELOCATED TO THE PROPERTY LINES, UNLESS THE EXISTING FENCE WAS LOCATED INSIDE OF THE PROPERTY LINES. FENCE INSIDE OF PROPERTY LINES SHOULD BE PLACED IN ITS ORIGINAL LOCATION. GATES AND FENCE CORNERS SHALL BE RE-ESTABLISHED AT THE ORIGINAL LOCATIONS, UNLESS INDICATED BY THE DRAWINGS. REMOVALS SHALL BE AS SHOWN ON THE DRAWINGS OR AS APPROVED BY OWNER. REMOVALS NOT APPROVED BY OWNER WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

e) ROOF DRAINS, UNDER DRAINS, SEPTIC LINES AND OTHER SMALL DRAINAGE LINES NOT SHOWN ON THE DRAWINGS THAT ARE UNCOVERED OR DAMAGED SHALL BE REPAIRED, AND THE POINT OF DISCHARGE SHALL BE PLACED NO CLOSER THAN FIVE FEET TO ANY ADJOINING PROPERTY LINE INCLUDING THE RIGHT-OF-WAY LINE (SECTION 16-413 OF THE CODE OF ORDINANCES). UNLESS DIRECTED BY THE CITY ENGINEER, NO DRAIN LINES SHALL BE CONNECTED TO THE STORM SEWER SYSTEM. MATERIALS AND LOCATION ARE SUBJECT TO OWNER'S APPROVAL. IF NO UNIT PRICE IS IN THE BID, THEN PAYMENT WILL BE NEGOTIATED PER THE CONTRACT DOCUMENTS.

f) MATERIALS THAT MAY BE CLASSIFIED AS UNSUITABLE OR REQUIRE UNDERGRADING SHALL BE DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL NOT MAKE THIS DETERMINATION.

8) TRAFFIC:

a) UNLESS DIRECTED IN THE CONTRACT DOCUMENTS OR DRAWINGS, CONTRACTOR SHALL MAINTAIN TRAFFIC AND PEDESTRIAN ACCESS AT ALL TIMES.

b) APPROPRIATE TRAFFIC CONTROL DEVICES, SIGNAGE AND PAVEMENT MARKINGS SHALL BE ESTABLISHED AND MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE MUTCD.

ADDITIONAL GENERAL NOTES:

1) ALL TREES TO BE GRUBBED ARE MARKED THUS "X". SPARE ALL TREES THAT ARE MARKED DND (DO NOT DISTURB) OR ANY TREES NOT MARKED AT ALL. EXCEPTIONALLY GOOD TREES SHALL BE SPARED BY ADJUSTING BACKSLOPE LINES DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. ALL TREES WITHIN THE CONSTRUCTION LIMITS TO BE SAVED SHALL HAVE HEIR TRUNKS AND ROOT ZONE PHYSICALLY PROTECTED PRIOR TO CONSTRUCTION OPERATIONS BY METHODS APPROVED BY THE ENGINEER.

2) THE CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION OF ANY PORTION OF THE STORM SEWER, UNDERDRAINS, CONDUIT, AND ANY OTHER SUBSURFACE ELEMENTS OF THE PROJECT. THIS SURVEY INFORMATION SHALL BE FORWARDED TO THE ENGINEER FOR REVIEW. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION ON ANY SUBSURFACE ELEMENT ON THE PROJECT WITHOUT THE APPROVAL OF THE ENGINEER. THIS ITEM SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

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RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
7-24-19
PROFESSIONAL ENGINEER

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GENERAL NOTES

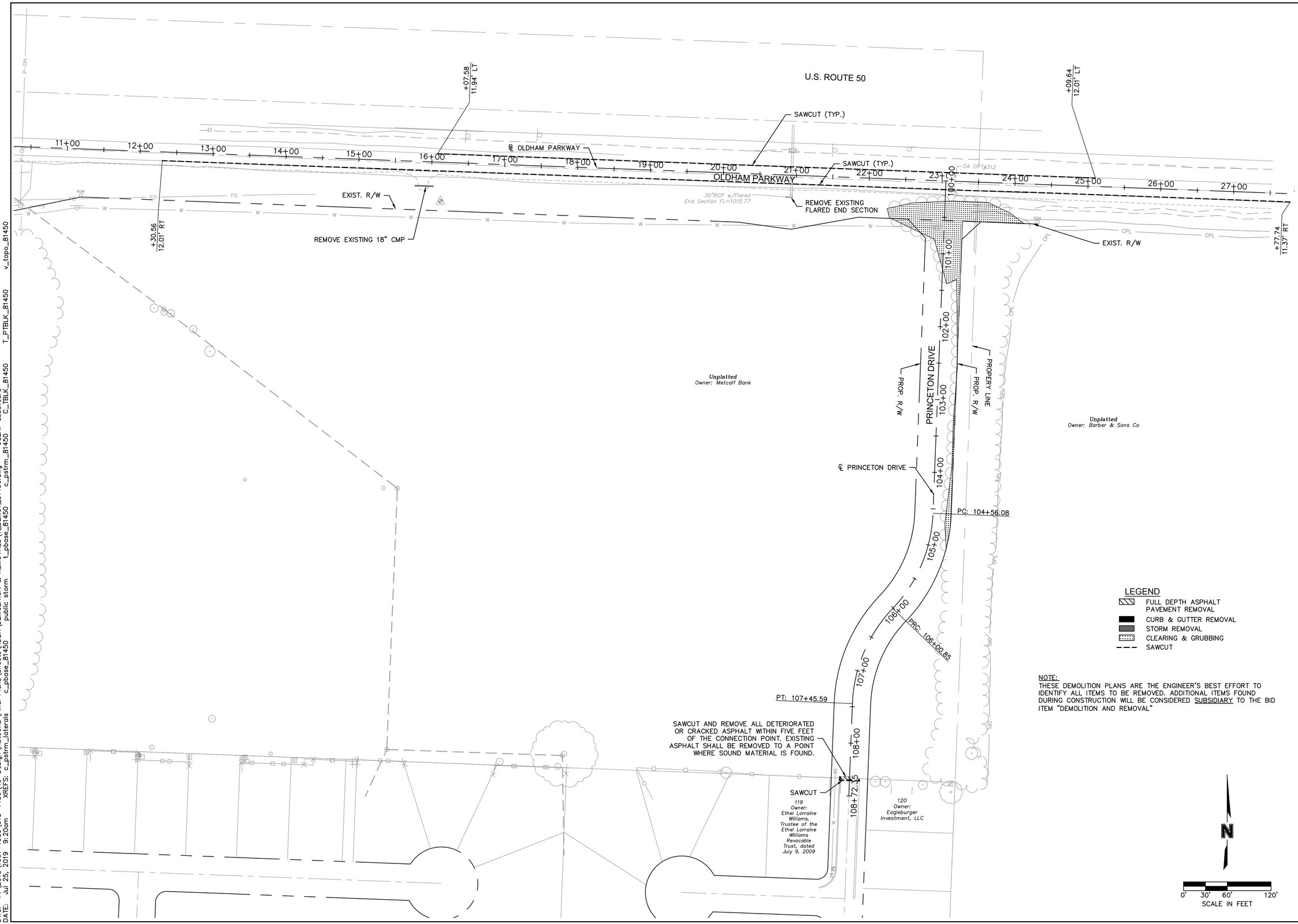
OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_GEN_81450
DATE: 07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\GENERAL\T_GEN_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:20am XREFS: T_PTBLK_81450



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DEMOLITION & REMOVALS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.:	001592
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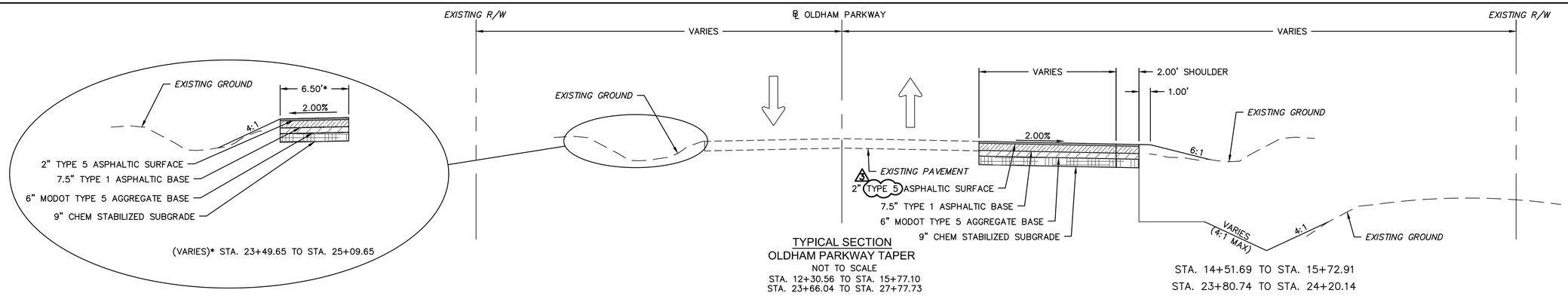
APPROVED BY:	RBF
QA/QC BY:	JKL/RBF
PROJECT NO.:	018-1450
DWG NO.:	T_DEM01_81450
DATE:	07.19.19



TYPICAL SECTION
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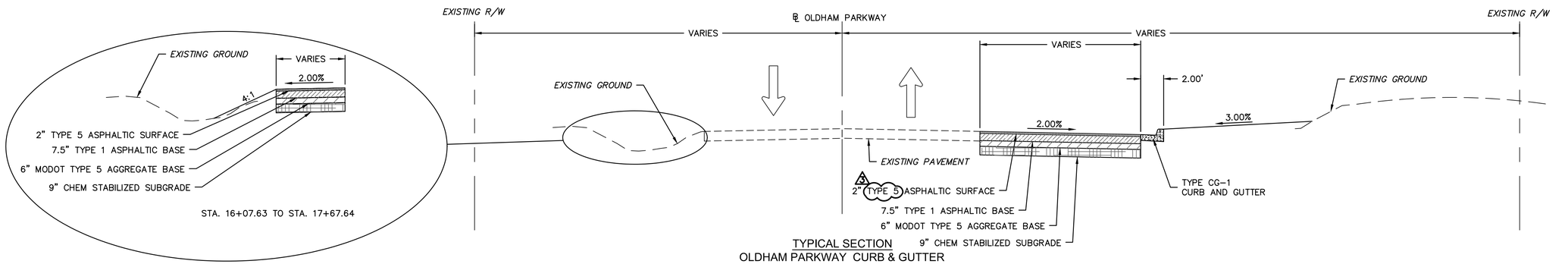
NOT TO SCALE
STA. 12+30.56 TO STA. 15+77.10
STA. 23+66.04 TO STA. 27+77.73



TYPICAL SECTION
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NOT TO SCALE
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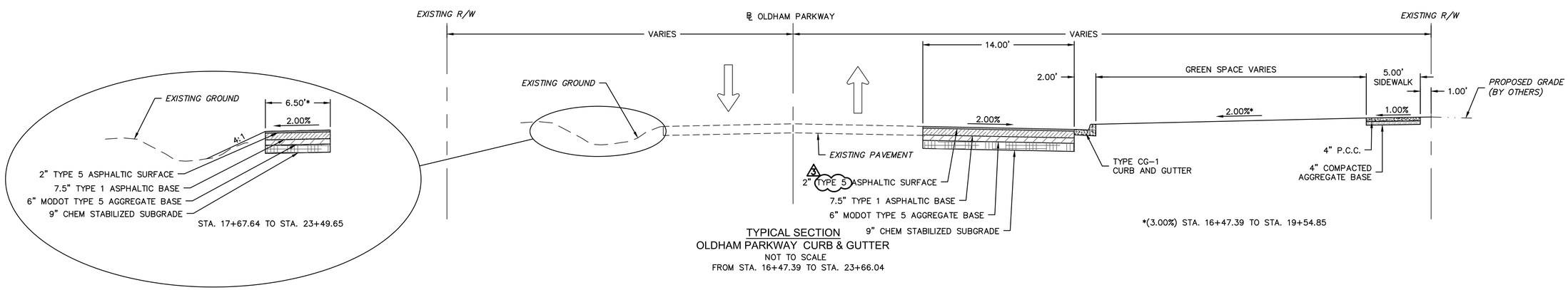
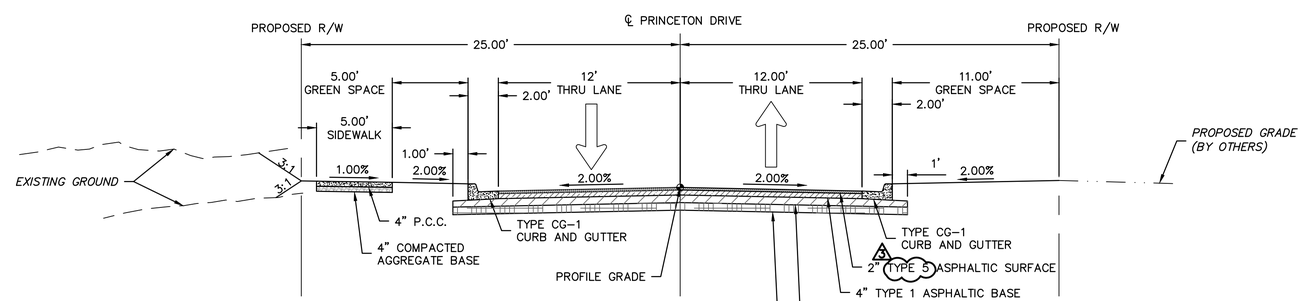


TYPICAL SECTION
OLDHAM PARKWAY CURB & GUTTER
NOT TO SCALE
FROM STA. 16+47.39 TO STA. 23+66.04



TYPICAL SECTION
PRINCETON DRIVE
NOT TO SCALE
STA. 100+53.07 TO STA. 108+51.26

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REVISIONS

TYPICAL SECTIONS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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CHECKED BY:	JKL
APPROVED BY:	RBF
QA/QC BY:	JKL/RBF
PROJECT NO.:	018-1450
DWG NO.:	T_TYP_81450
DATE:	07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\GENERAL\T_TYP_81450.dwg USER: asaavedra
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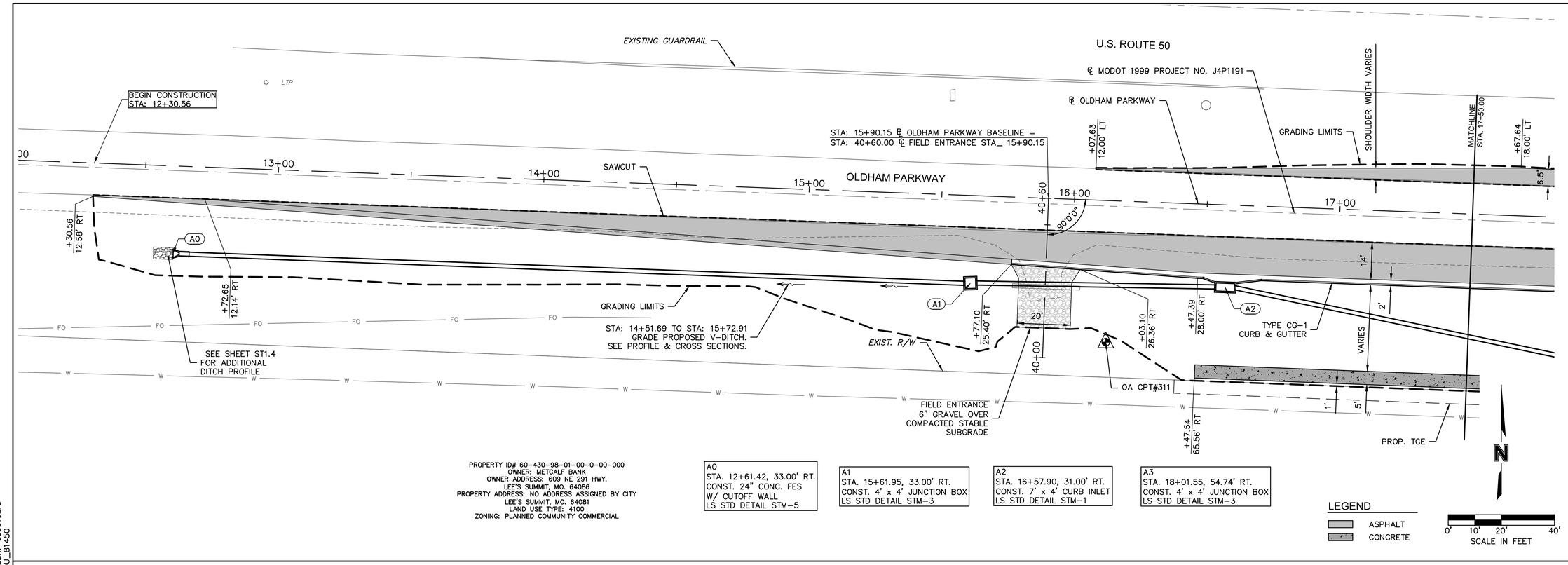
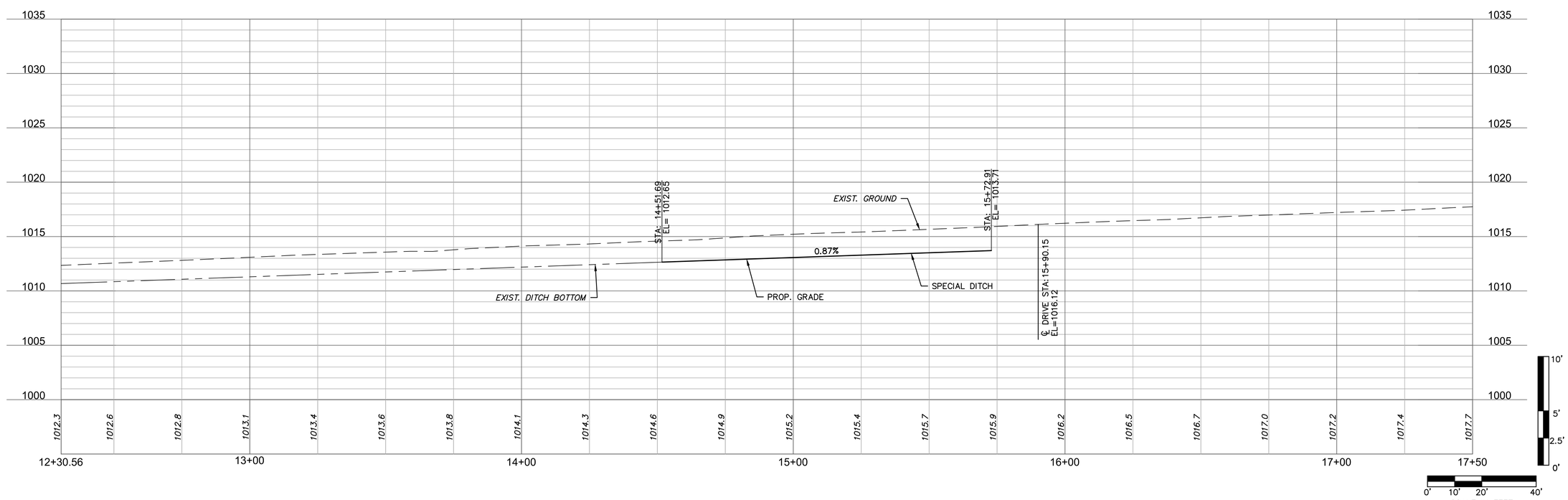


PROPERTY ID# 60-430-98-01-00-0-00-000
OWNER: METCALF BANK
OWNER ADDRESS: 609 NE 291 HWY.
LEE'S SUMMIT, MO. 64086
PROPERTY ADDRESS: NO ADDRESS ASSIGNED BY CITY
LEE'S SUMMIT, MO. 64081
LAND USE TYPE: 4100
ZONING: PLANNED COMMUNITY COMMERCIAL

A0	A1	A2	A3
STA. 12+61.42, 33.00' RT.	STA. 15+61.95, 33.00' RT.	STA. 16+57.90, 31.00' RT.	STA. 18+01.55, 54.74' RT.
CONST. 24" CONC. FES	CONST. 4' x 4' JUNCTION BOX	CONST. 7' x 4' CURB INLET	CONST. 4' x 4' JUNCTION BOX
W/ CUTOFF WALL	LS STD DETAIL STM-3	LS STD DETAIL STM-1	LS STD DETAIL STM-3
LS STD DETAIL STM-5			

OLDHAM PARKWAY BASELINE (12+30.56 - 17+50)



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OLDHAM PARKWAY
PLAN & PROFILE

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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QA/QC BY: JKU/RBF
PROJECT NO.: 018-1450
DWG NO.: T_RPP01_81450
DATE: 07.19.19

SHEET
T7 OF 70

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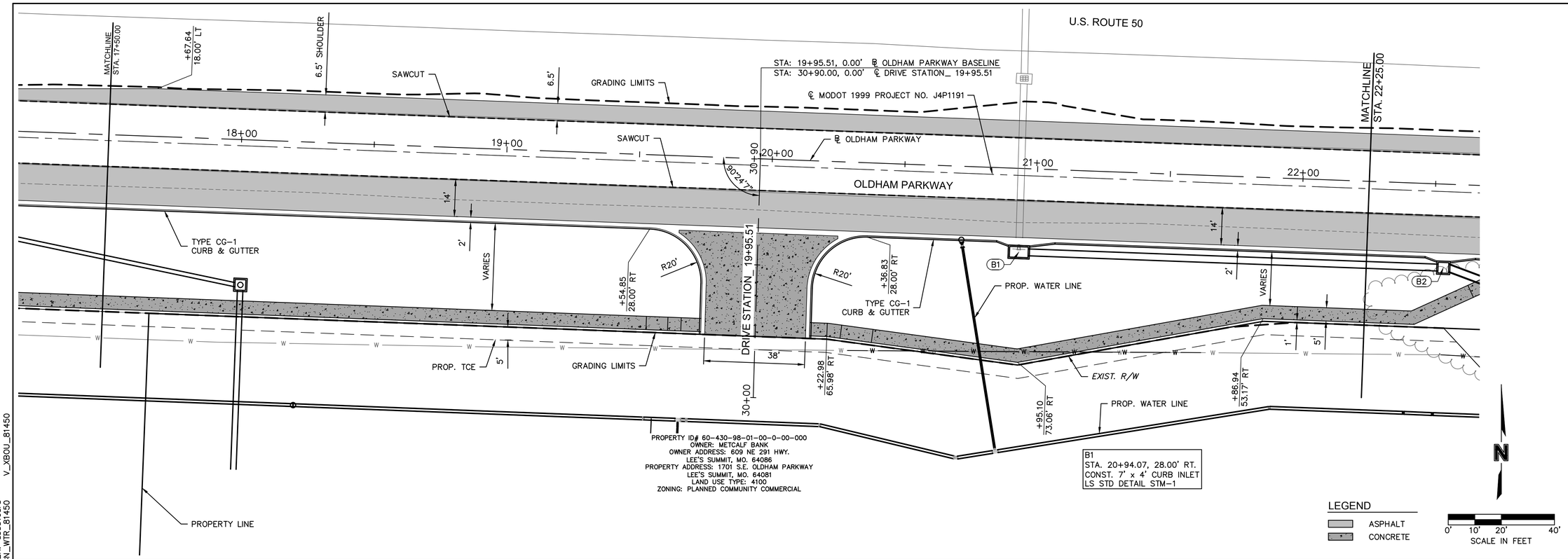
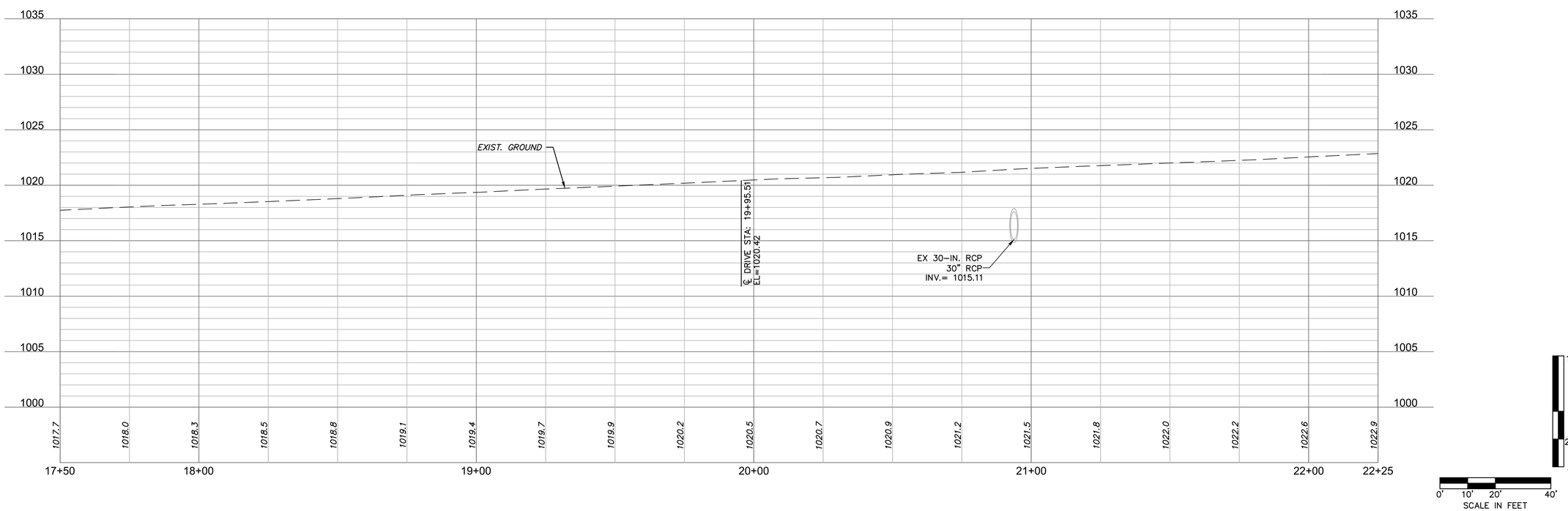


OLDHAM PARKWAY BASELINE (17+50 - 22+25)



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OLDHAM PARKWAY
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PROJECT NO.:	018-1450
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DATE:	07.19.19

SHEET
T8 OF 70

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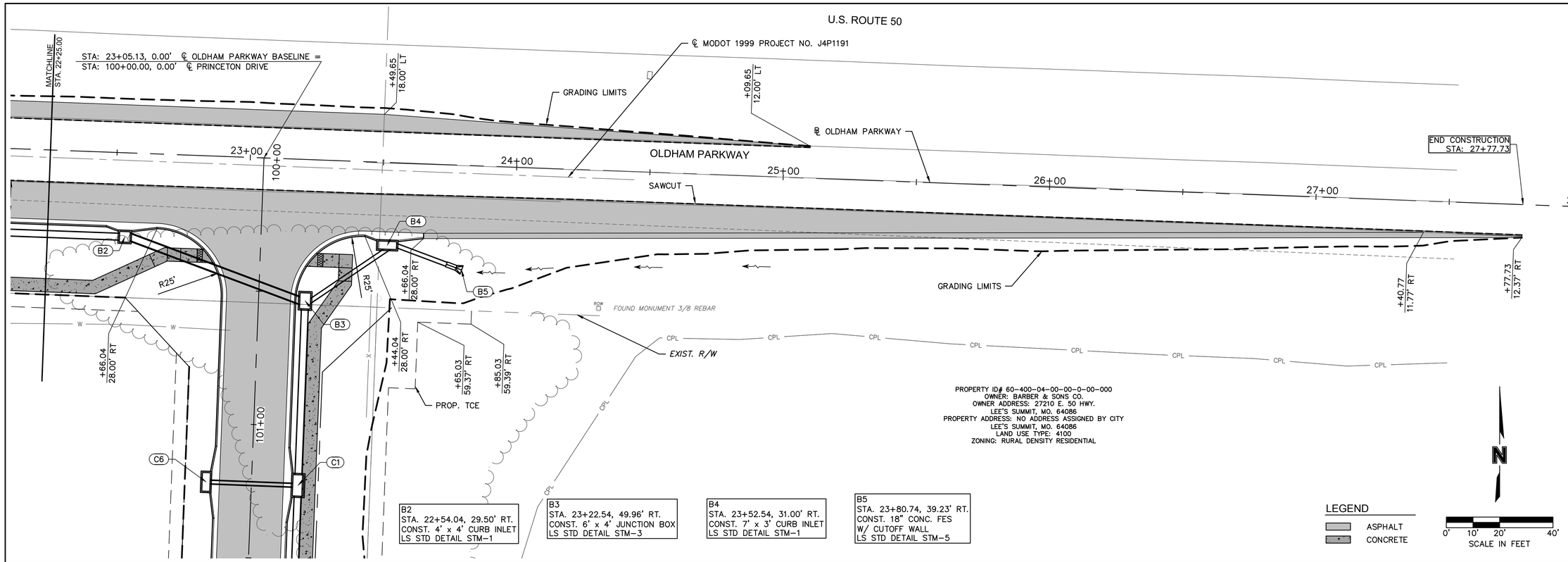
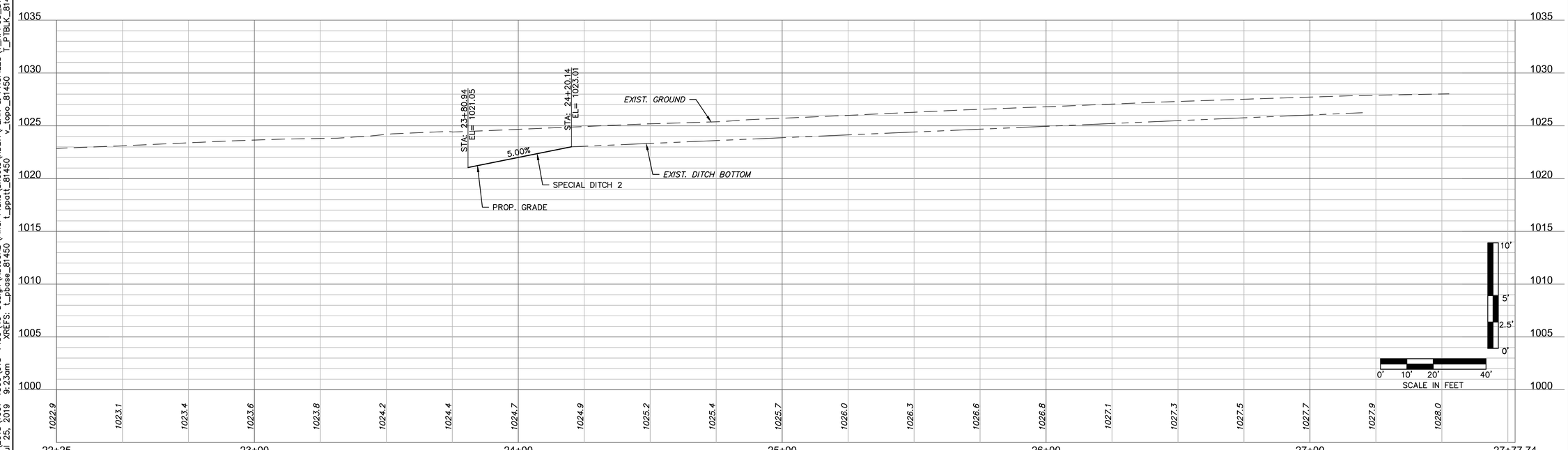


OLDHAM PARKWAY BASELINE (22+25 - 27+77.74)



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OLDHAM PARKWAY
PLAN & PROFILE

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

2019

LEE'S SUMMIT, MISSOURI

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PROJECT NO.:	018-1450
DWG NO.:	T_RPP03_81450
DATE:	07.19.19

SHEET
T9 OF 70

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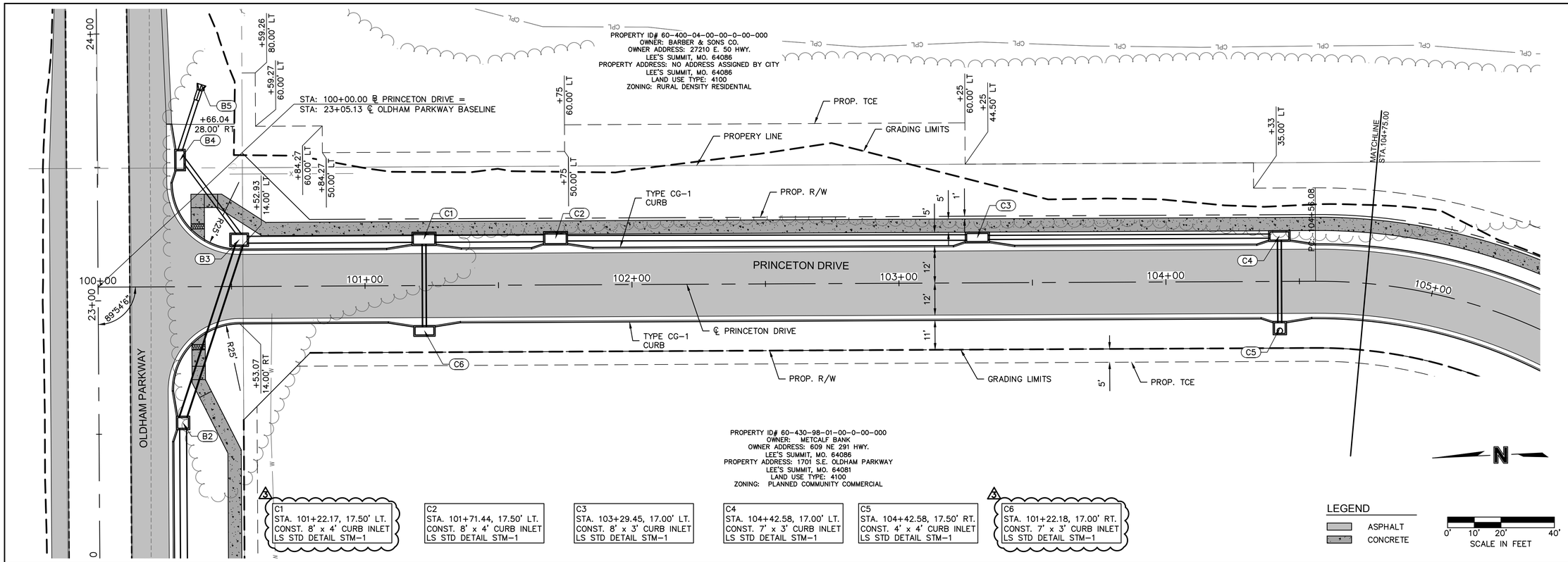
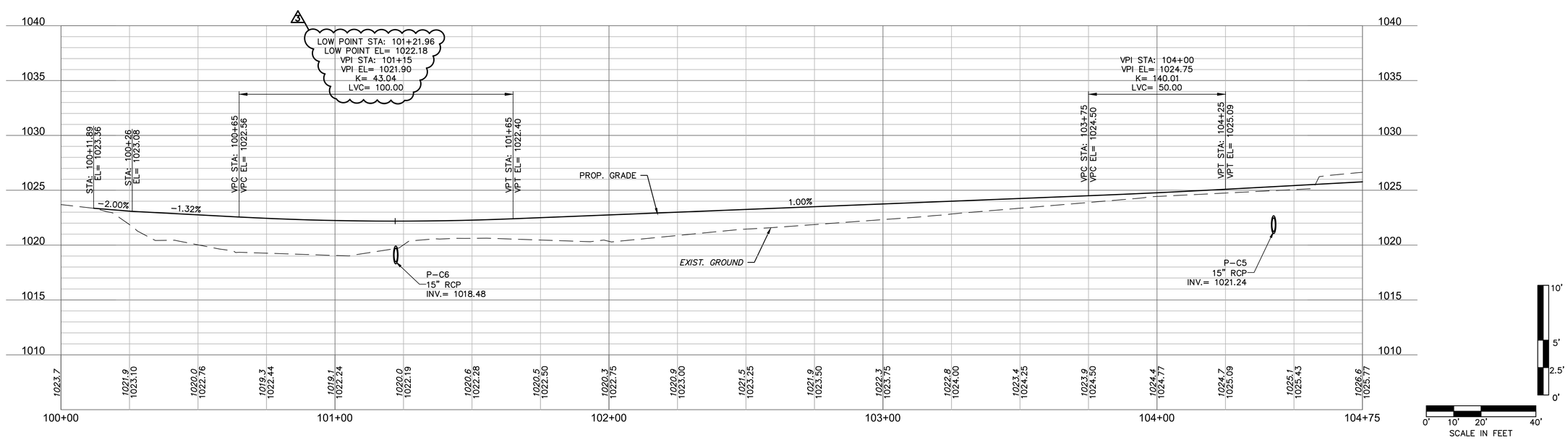


PRINCETON DRIVE (100+00 - 104+75)



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STATE OF MISSOURI RYAN B. FLEMING NUMBER PE-2002003161 PROFESSIONAL ENGINEER 7-24-19

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REVISIONS

PRINCETON DRIVE
PLAN & PROFILE

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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PROJECT NO.: 018-1450
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SHEET
T10 OF 70

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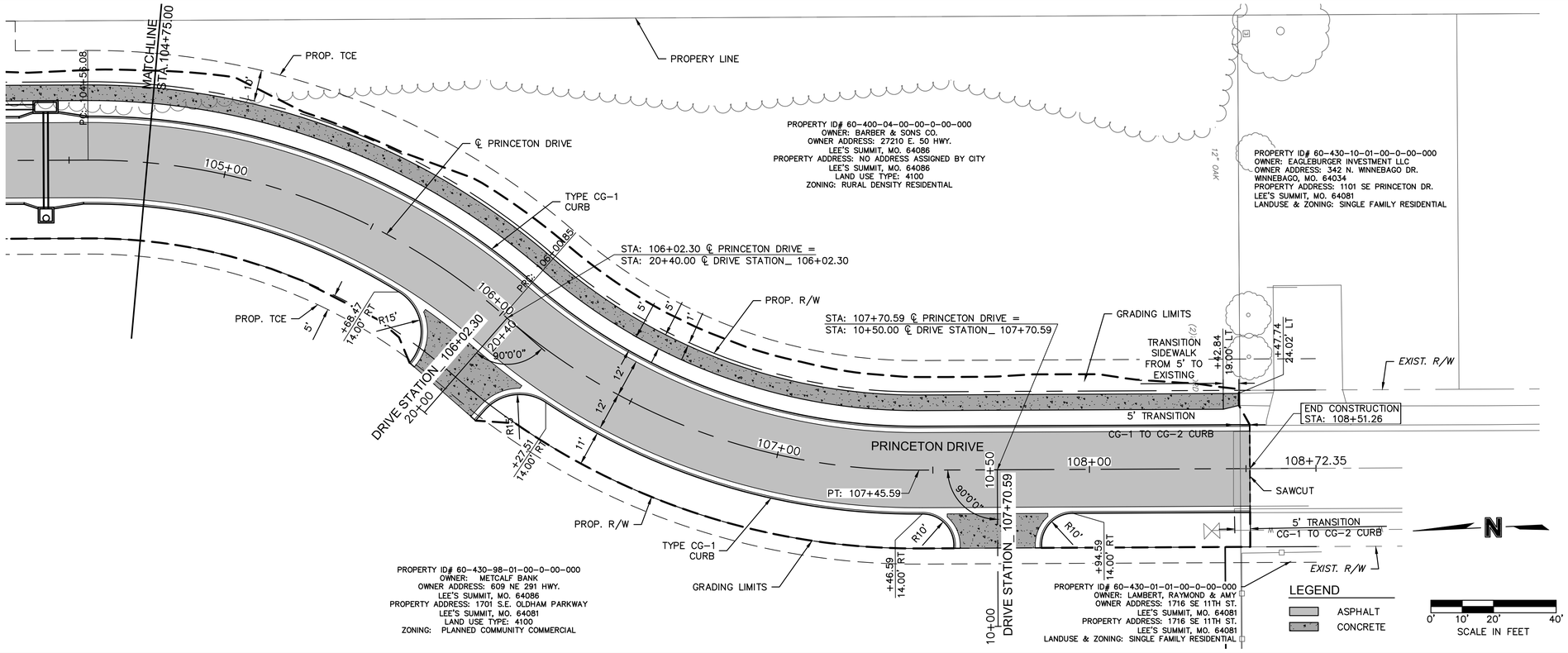
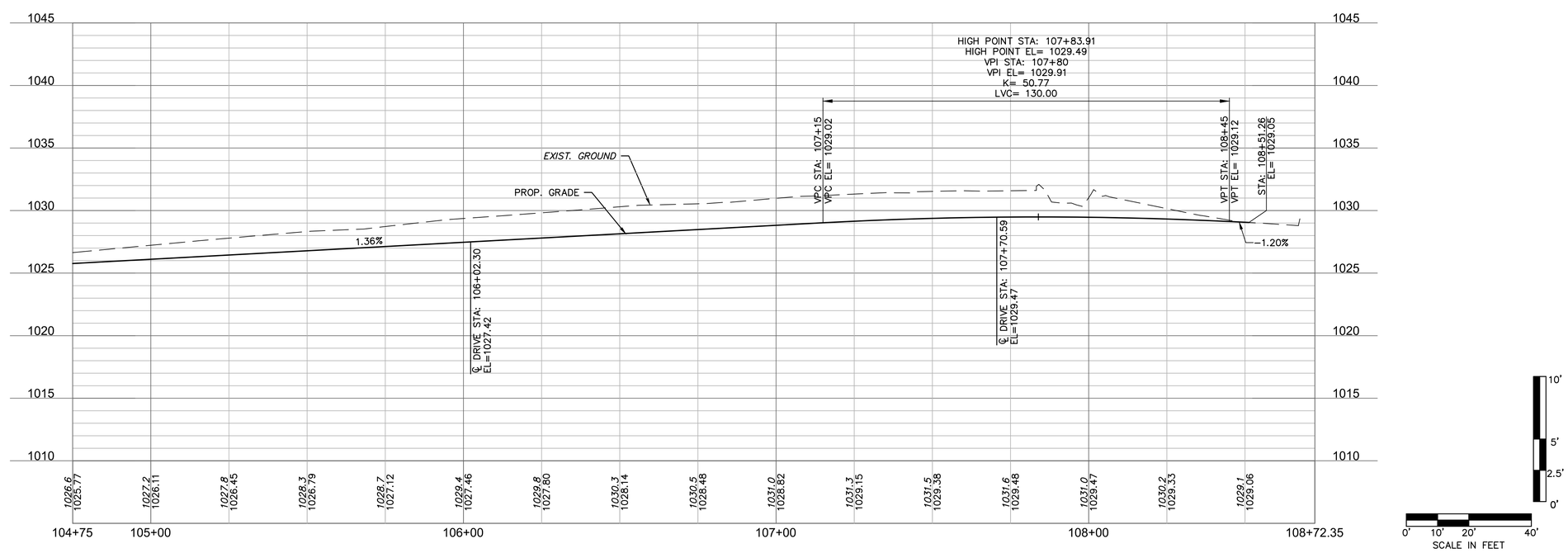


PRINCETON DRIVE (104+75 - 108+72.35)



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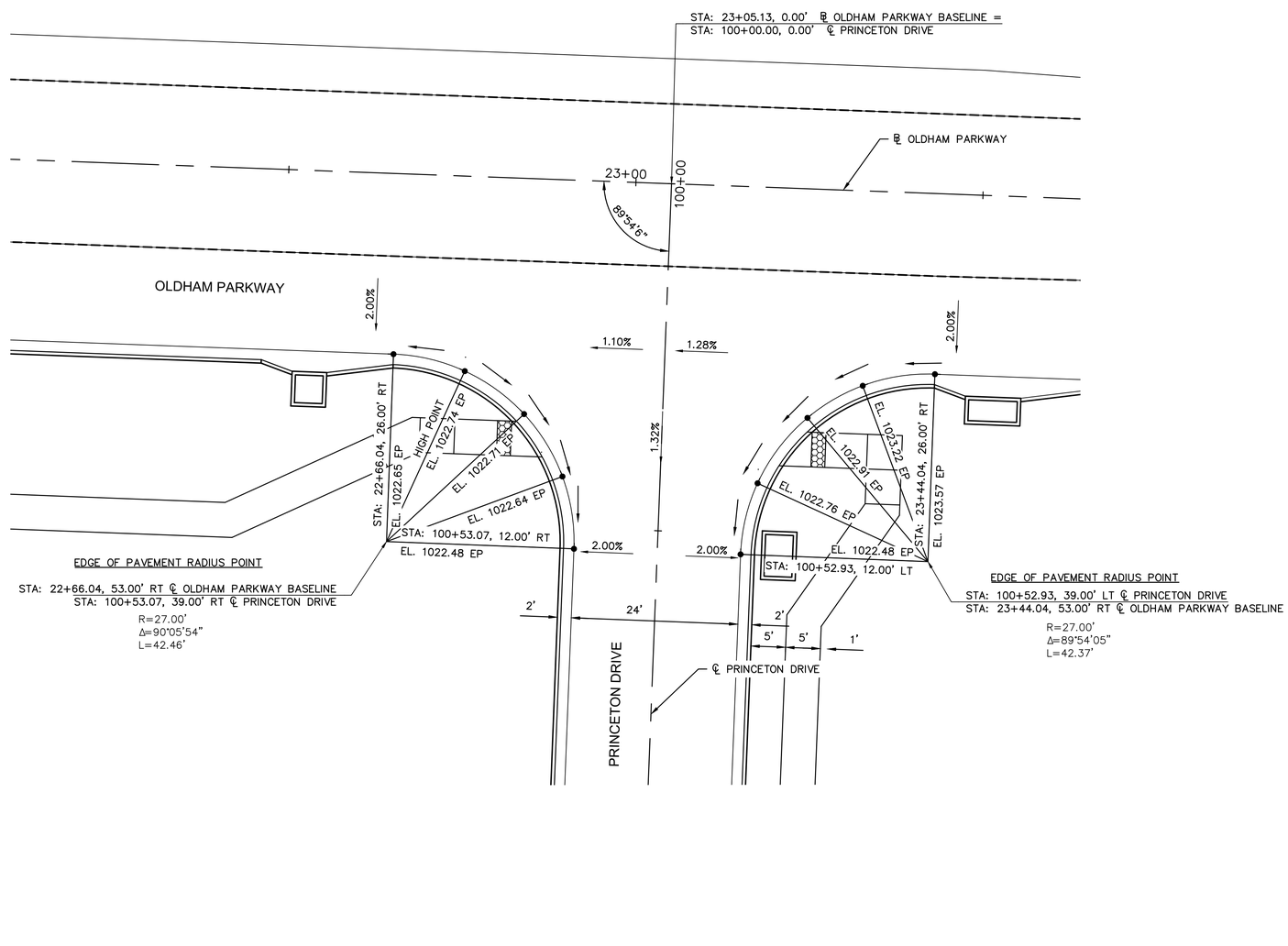

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INTERSECTION LAYOUT

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

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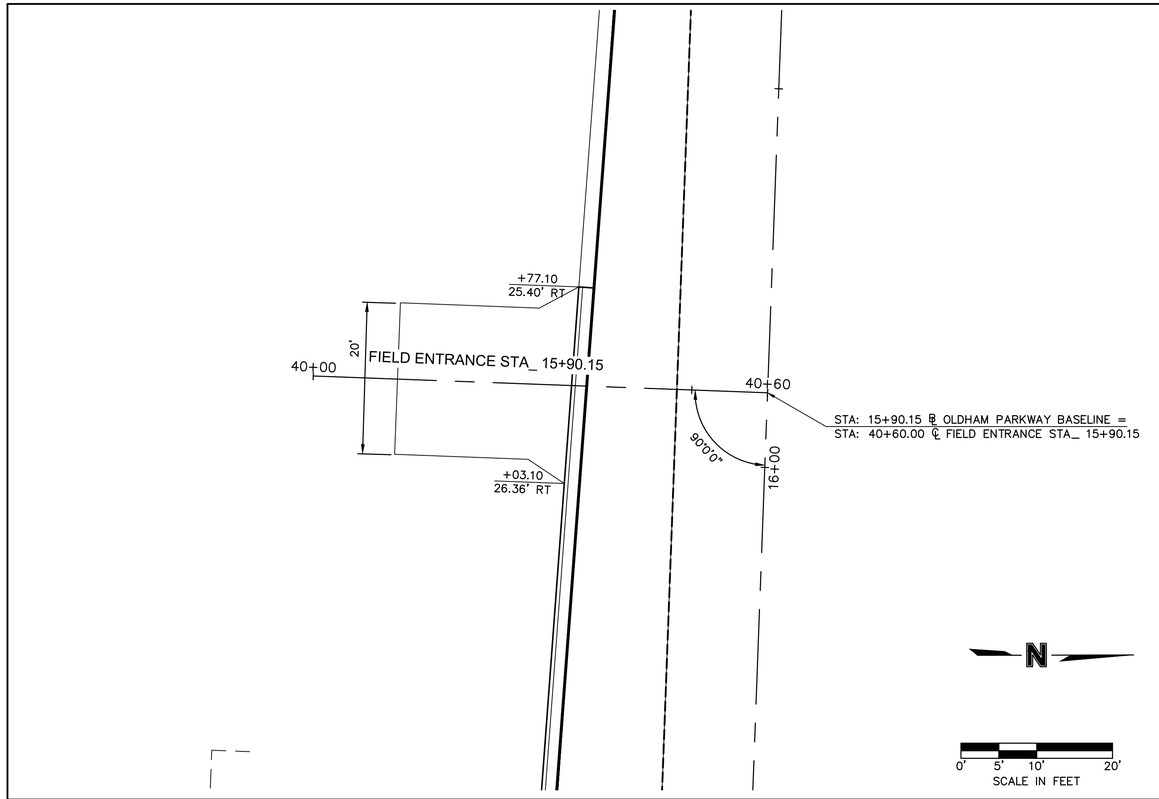
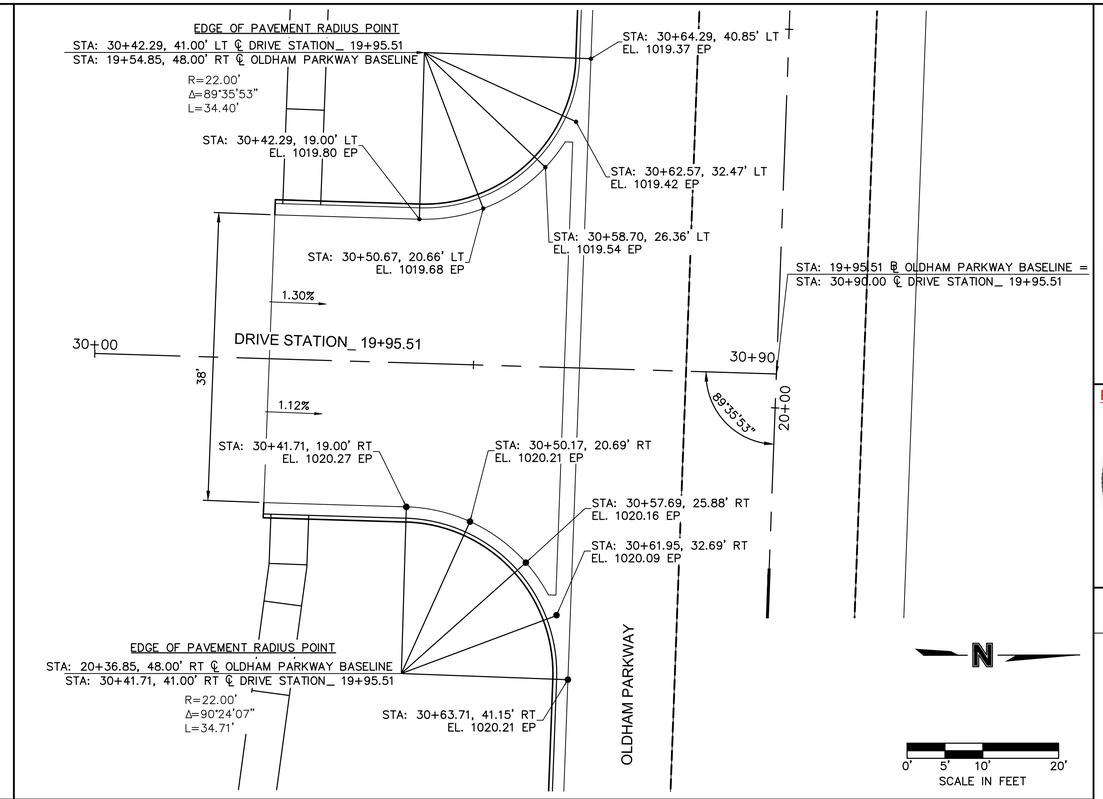
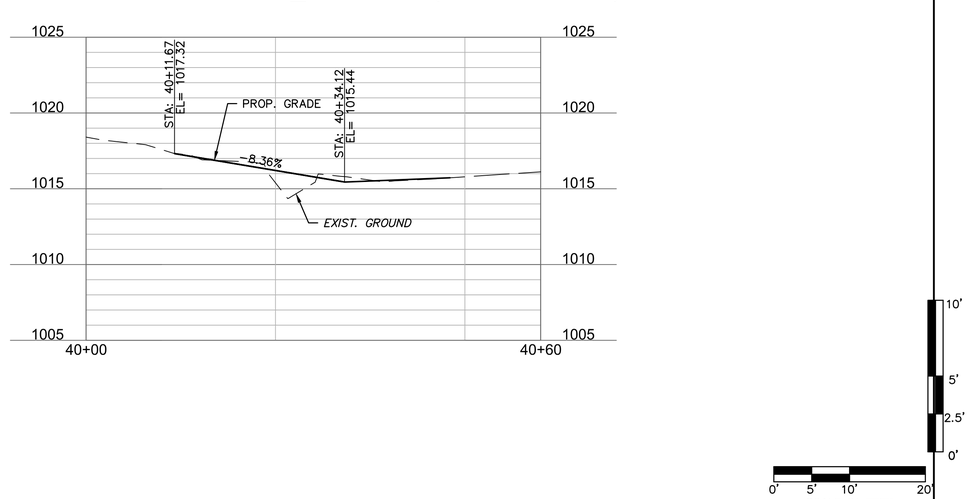
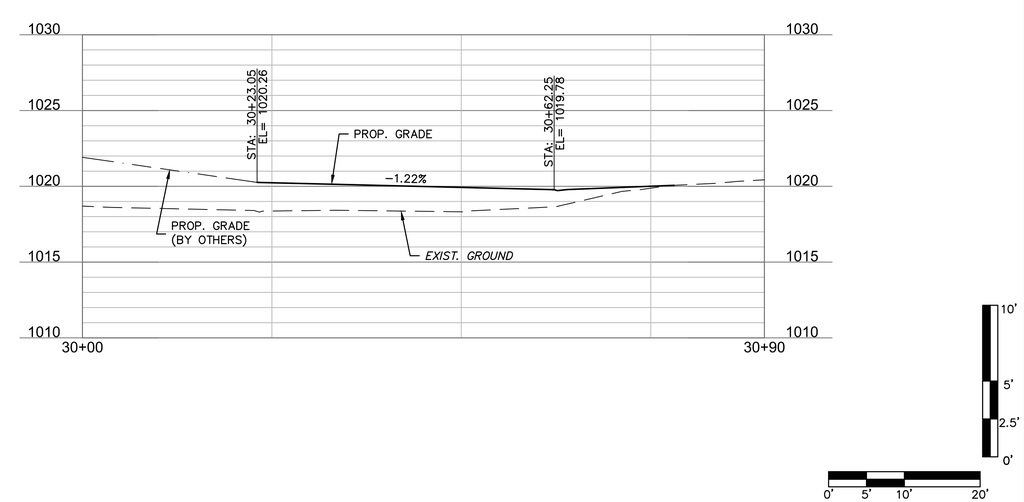




FIELD ENTRANCE STA_ 15+90.15 (40+00 - 40+60)



DRIVE STATION_ 19+95.51 (30+00 - 30+90)



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DRIVE LAYOUTS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
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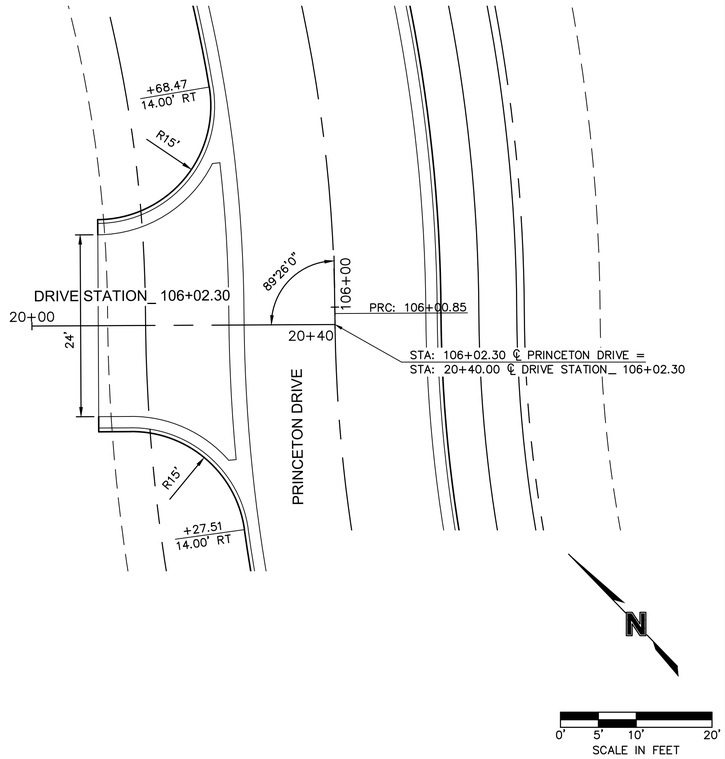
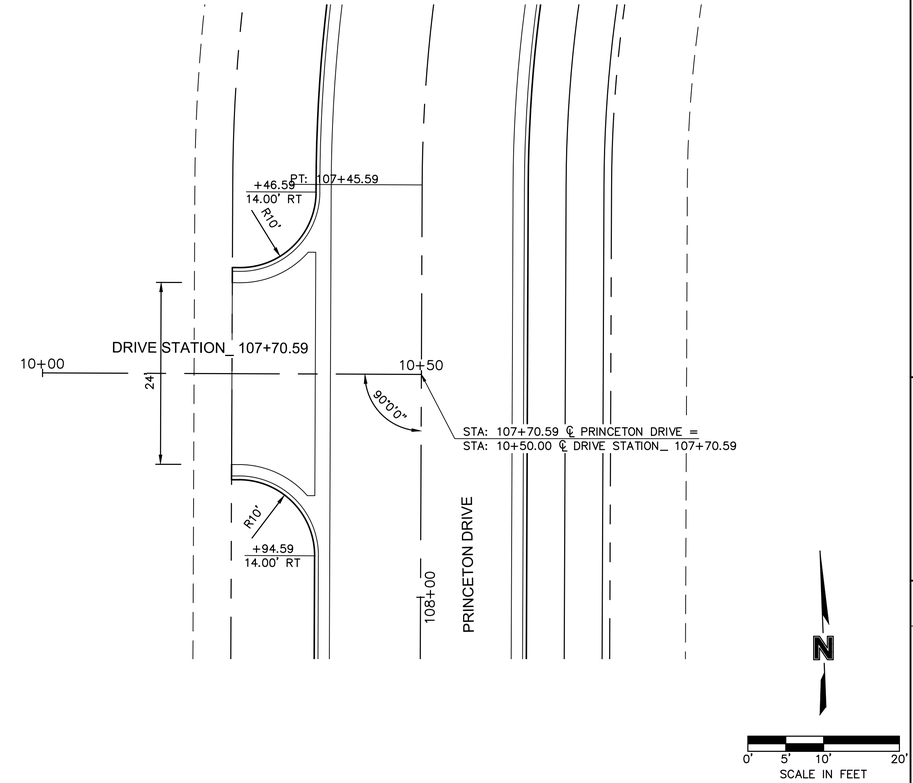
APPROVED BY:	RBF
QA/QC BY:	JKL/RBF
PROJECT NO.:	018-1450
DWG NO.:	T_DRV01_81450
DATE:	07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\DRIVE LAYOUTS\T_DRV01_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:25am XREFS: t_pbase_81450 T_PTBLK_81450 PUBLIC STORM





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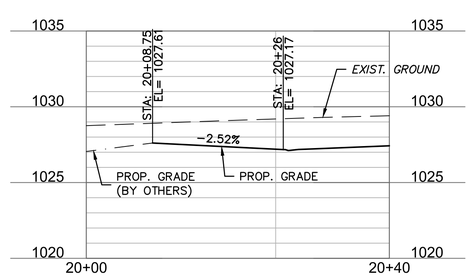

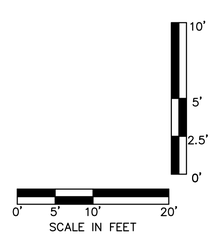

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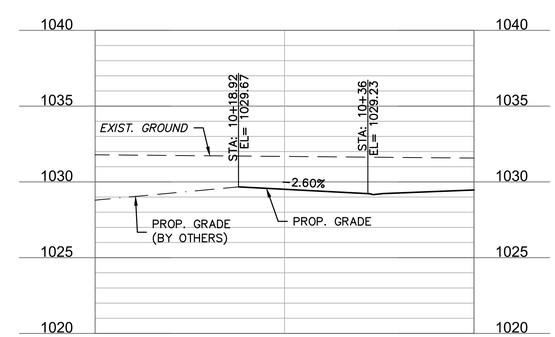

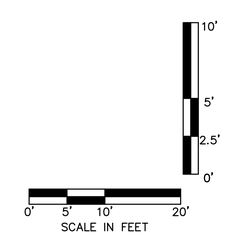

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RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER
PE-2002003161
7-24-19
PROFESSIONAL ENGINEER

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

DRIVE LAYOUTS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
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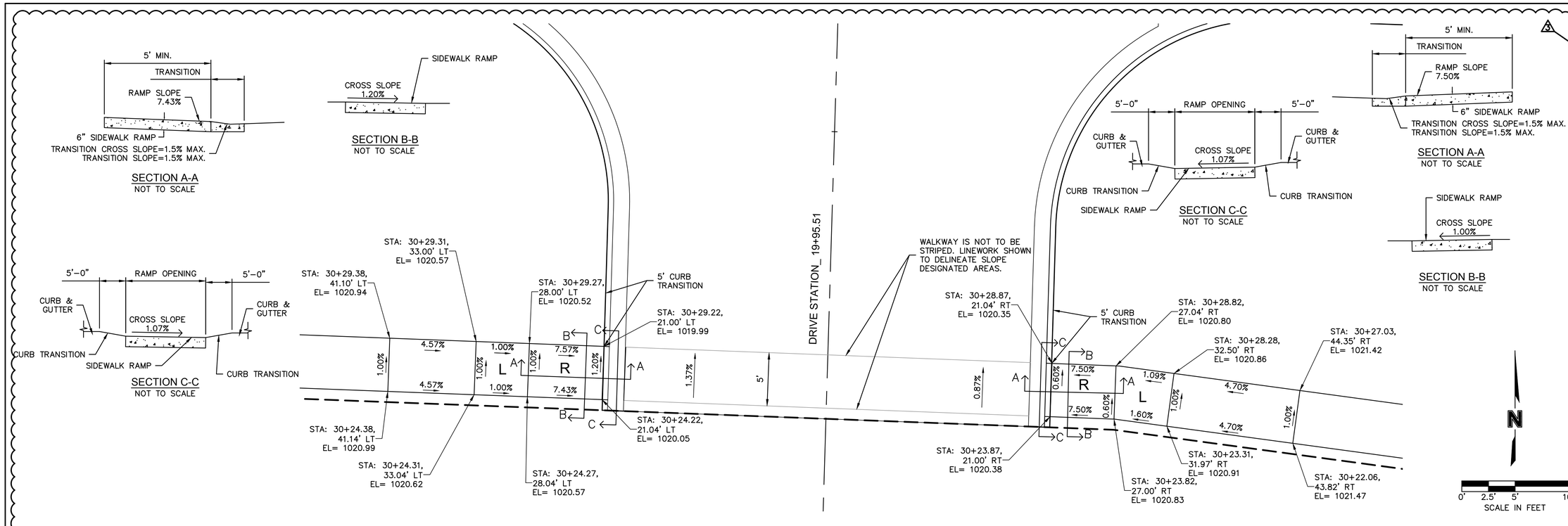

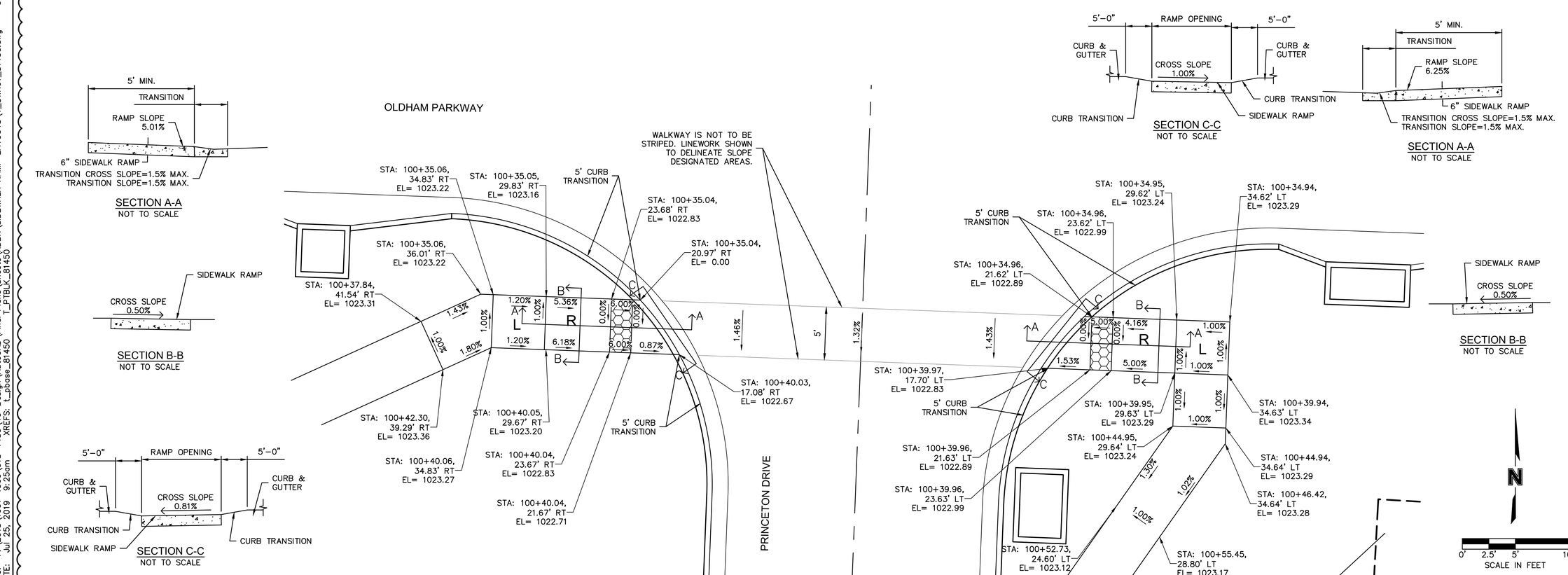

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STATE OF MISSOURI — RYAN B. FLEMING — NUMBER PE-2002003161 — PROFESSIONAL ENGINEER — 7-24-19

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3	07/19/2019	ENGR. REVIEW COMMENTS	

REVISIONS

SIDEWALK RAMP LAYOUT

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
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QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_SWK01_81450
DATE: 07.19.19

SHEET
T15 OF 70

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\SIDEWALK RAMP LAYOUTS\T_SWK01_81450.dwg USER: asaavedra
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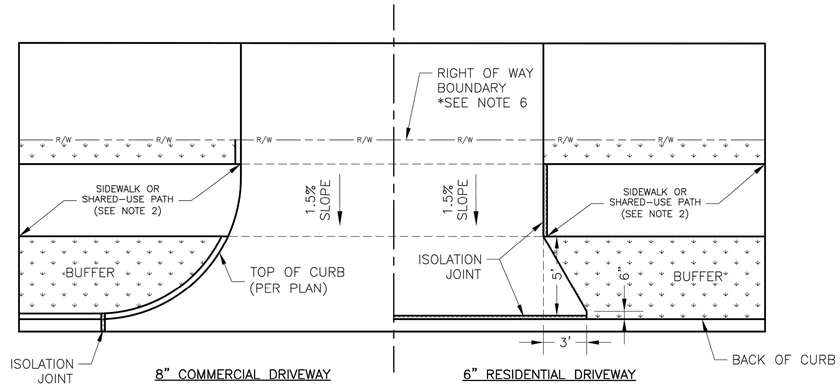
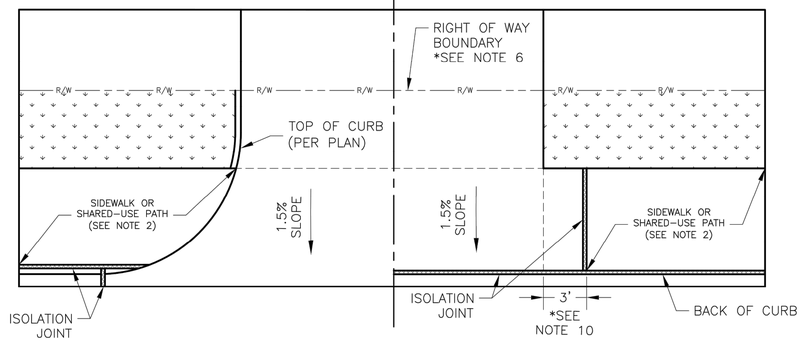


DRIVEWAY WITH BUFFER
NOT TO SCALE



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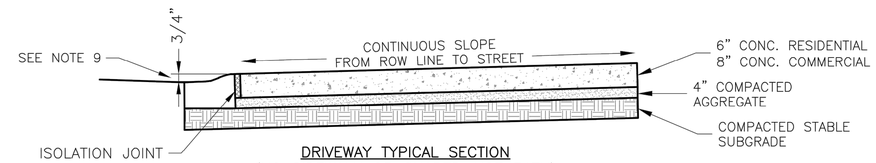
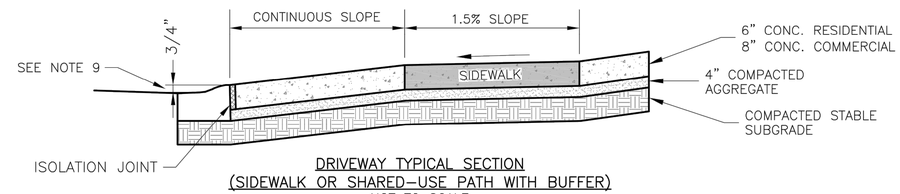
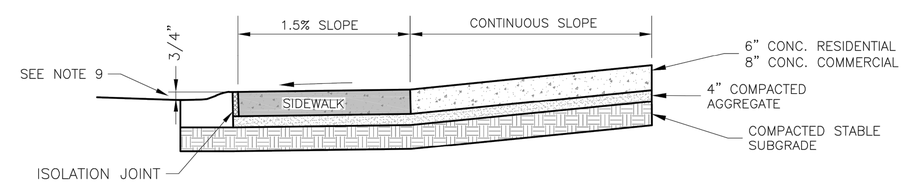


DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



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

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 GEN-3B, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY 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, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMMB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEEDS TO BE APPROVED BY CITY INSPECTOR.
7. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
9. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
10. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
11. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

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PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: DRIVEWAY DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Project No.:

GEN-1

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STATE OF MISSOURI
RYAN D. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STANDARD DETAILS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_STD1_81450
DATE: 07.19.19

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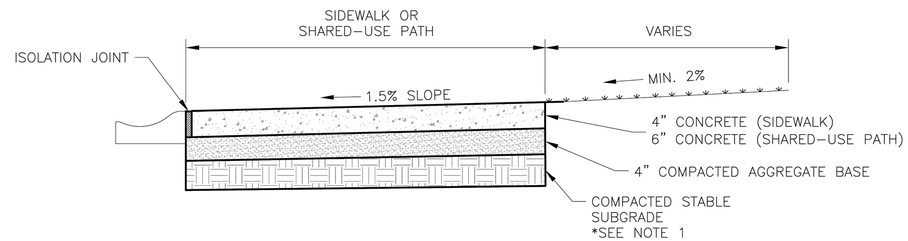
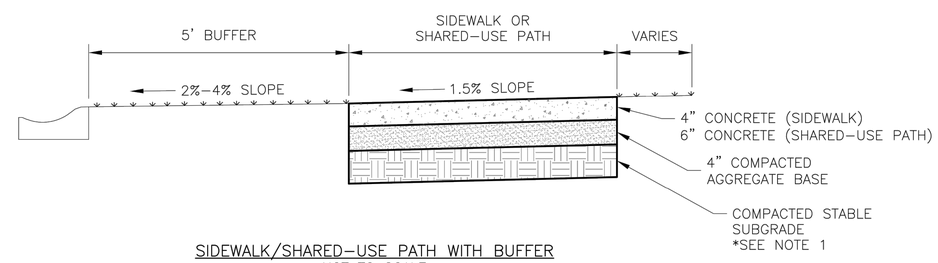


SIDEWALK/SHARED–USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED–USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED–USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALK/SHARED–USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED–USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED–USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED–USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED–USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SIDEWALK/SHARED-USE PATH DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

GEN-2

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STATE OF MISSOURI
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PROFESSIONAL ENGINEER

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OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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PROJECT NO.: 018-1450
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DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\DETAILS\STANDARD DETAILS\T_STD1_81450.dwg USER: asaavedra
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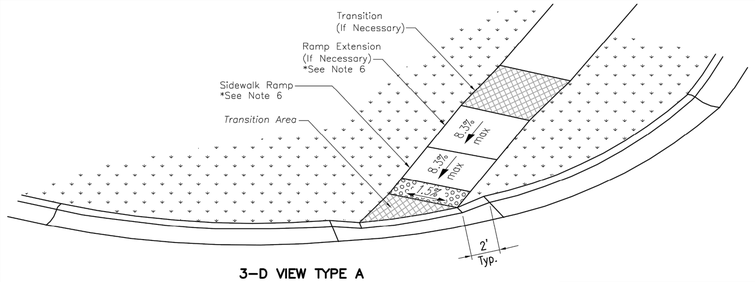
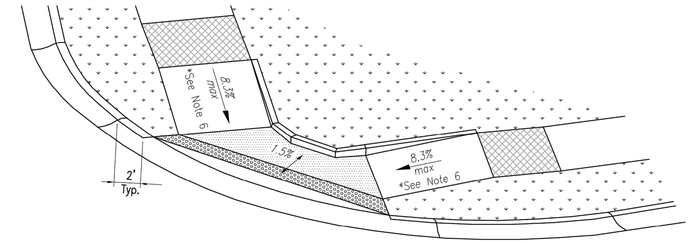


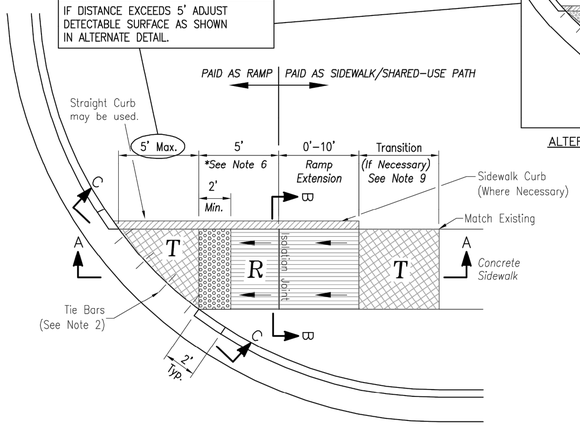
3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP



TYPE A SIDEWALK/SHARED-USE RAMP
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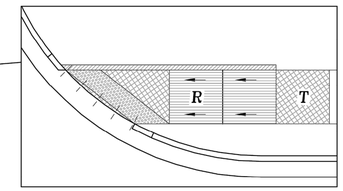
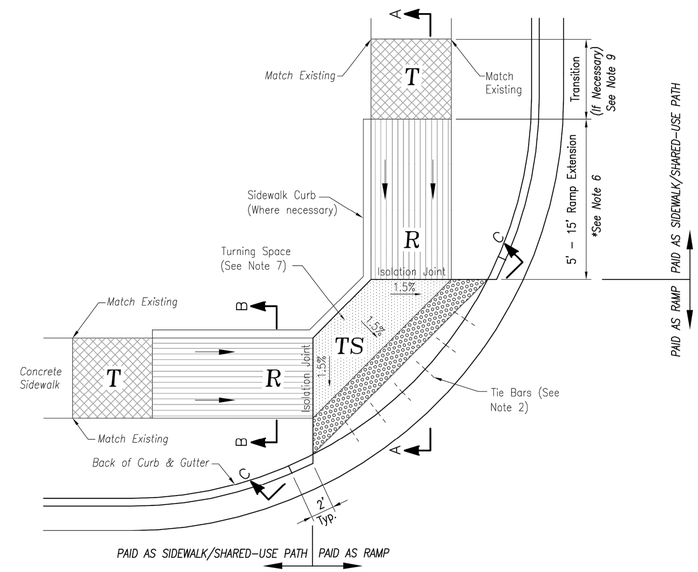


ALTERNATE DETECTABLE SURFACE LAYOUT

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



TYPE B SIDEWALK/SHARED-USE RAMP
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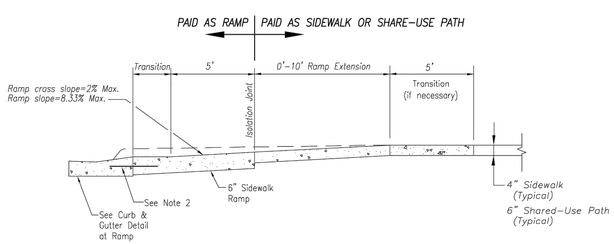
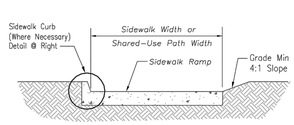
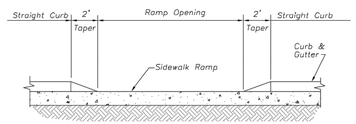


SECTION A-A



SECTION B-B



SECTION C-C

TYPE A & B SIDEWALK RAMP
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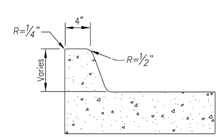
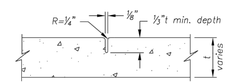
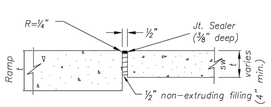


SIDEWALK CURB DETAIL
Not to Scale

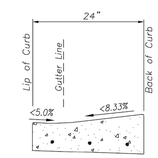


CONTRACTION JOINT



ISOLATION JOINT

JOINT DETAILS
Not to Scale



CURB & GUTTER DETAIL AT RAMP
Not to Scale

NOTE: THESE DETAILS ARE MEANT TO DESCRIBE TIE BAR LOCATIONS. AND ISOLATION JOINTS. IT IS NOT MEANT TO SUPERCEDE THE SITE-SPECIFIC DESIGN DETAILS FOR THE ADA-ACCESSIBLE RAMPS.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3A

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RECORD DRAWING

STATE OF MISSOURI — RYAN B. FLEMING — NUMBER PE-2002003161 — PROFESSIONAL ENGINEER — 7-24-19

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REVISIONS

STANDARD DETAILS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS
LEE'S SUMMIT, MISSOURI
2019

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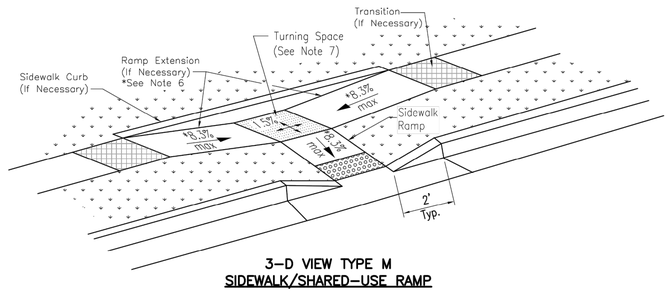
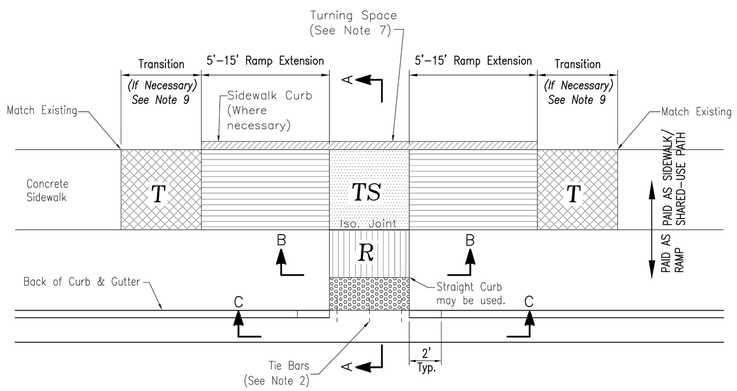
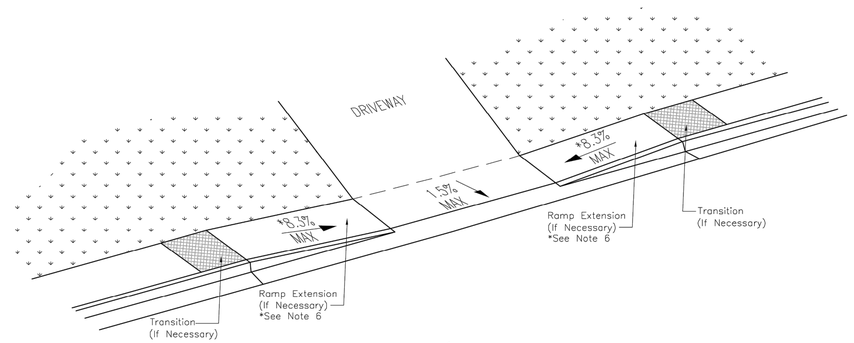


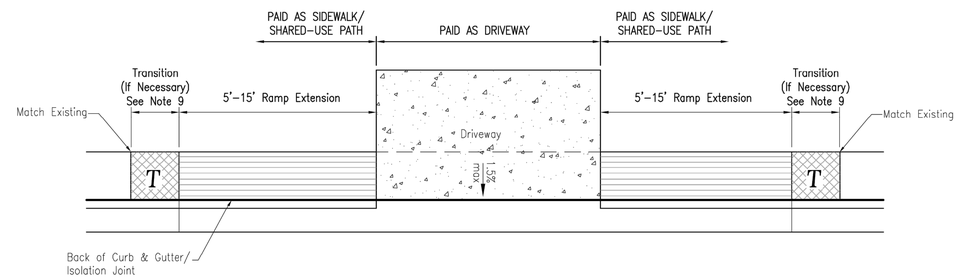
3-D VIEW TYPE M
SIDEWALK/SHARED-USE RAMP



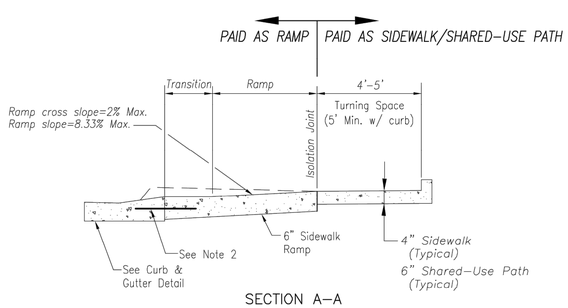
TYPE M SIDEWALK/SHARED-USE RAMP
Not to Scale



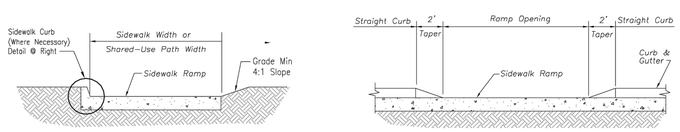
3-D VIEW SIDEWALK/SHARED-USE RAMP
AT DRIVEWAY



SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB



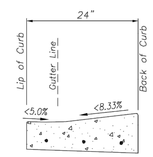
SECTION A-A



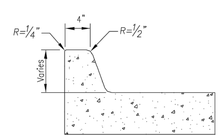
SECTION B-B

SECTION C-C

TYPE M SIDEWALK RAMP
Not to Scale



CURB & GUTTER DETAIL AT RAMP
Not to Scale



SIDEWALK CURB DETAIL
Not to Scale

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3B

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RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

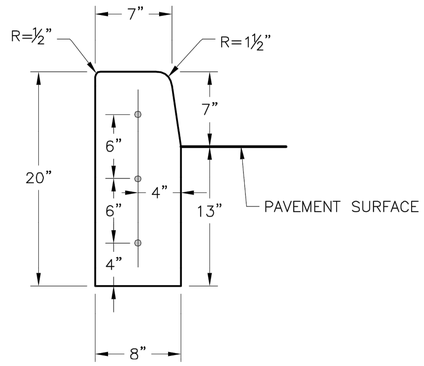
REVISIONS

STANDARD DETAILS

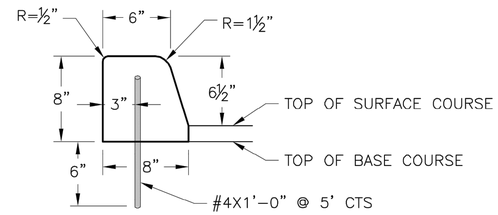
OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS
LEE'S SUMMIT, MISSOURI
2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_STD1_81450
DATE: 07.19.19

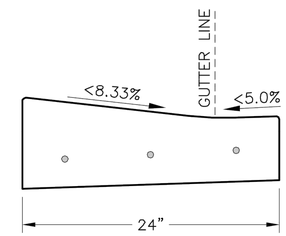
DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\DETAILS\STANDARD DETAILS\T_STD1_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:26am XREF'S: t_ptblk_81450



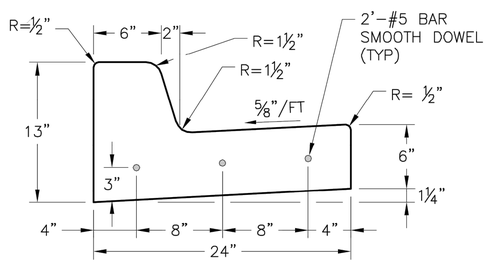
STRAIGHT CURB
(TYPE C–1)



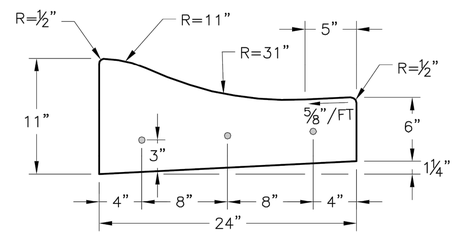
DOWELLED CURB
(TYPE DC)



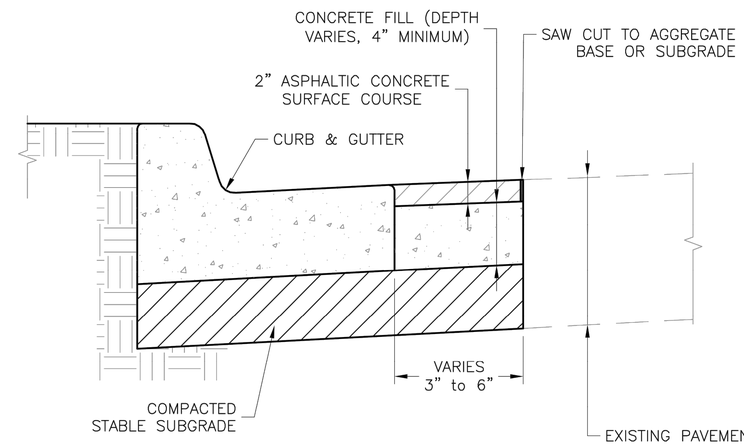
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



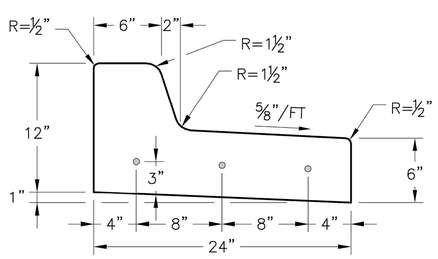
STRAIGHT BACK CURB &
GUTTER
(TYPE CG–1)



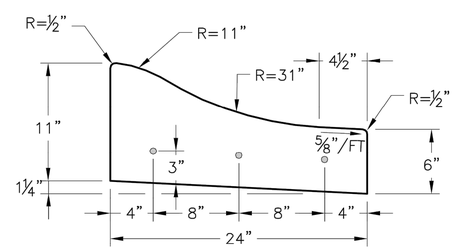
ROLL BACK CURB &
GUTTER
(TYPE CG–2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB &
GUTTER
(TYPE CG–1 DRY)



ROLL BACK DRY CURB &
GUTTER
(TYPE CG–2 DRY)

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'–#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4

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RECORD DRAWING

STATE OF MISSOURI
RYAN D. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STANDARD DETAILS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

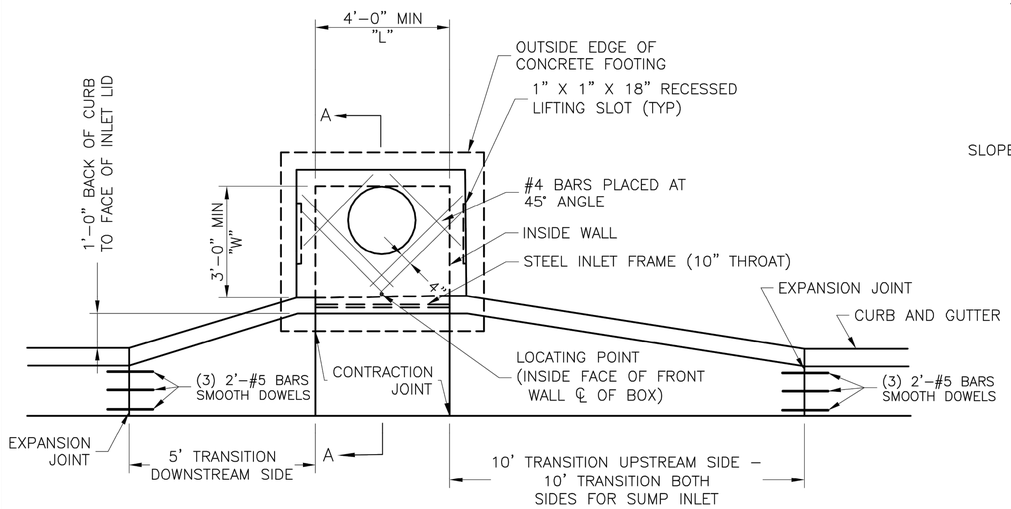
LEE'S SUMMIT, MISSOURI

2019

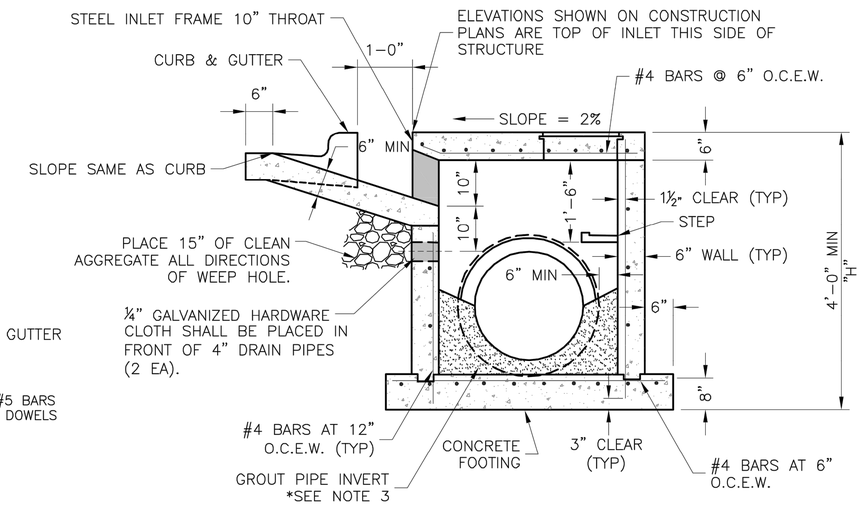
C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_STD1_81450
DATE: 07.19.19

SHEET
T20 OF 70

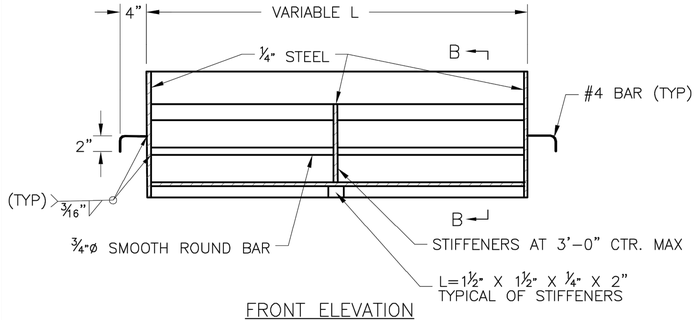
DWG: F:\2018\1001–1500\018–1450\40–Design\AutoCAD\Final Plans\Sheets\RDBR\DETAILS\STANDARD DETAILS\T_STD1_81450.dwg USER: asaavedra
DATE: Jul 25, 2019 9:26am XREFS: t_ptblk_81450



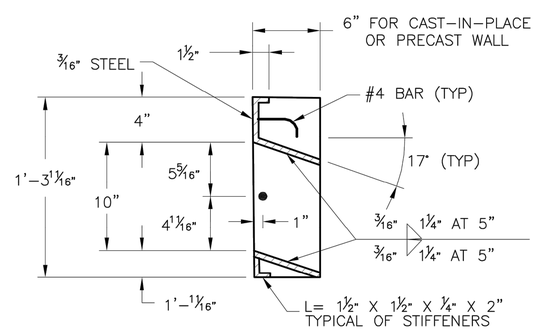
PLAN VIEW



SECTION A–A



FRONT ELEVATION



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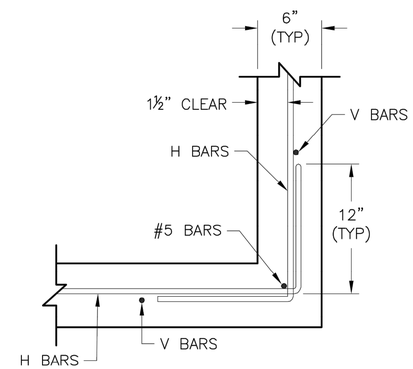
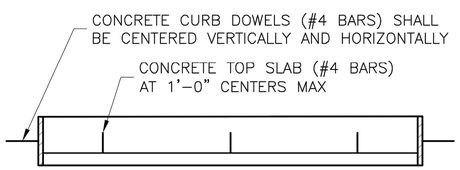


WALL CORNER DETAIL



PLAN VIEW

STEEL FRAME NOTES:

1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:

1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1

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RECORD DRAWING

STATE OF MISSOURI RYAN B. FLEMING NUMBER PE-2002003161 PROFESSIONAL ENGINEER 7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STANDARD DETAILS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_STD1_81450
DATE: 07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\DETAILS\STANDARD DETAILS\T_STD1_81450.dwg USER: asaavedra
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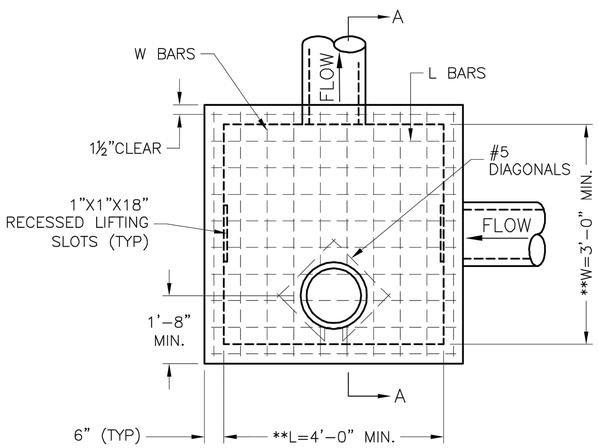
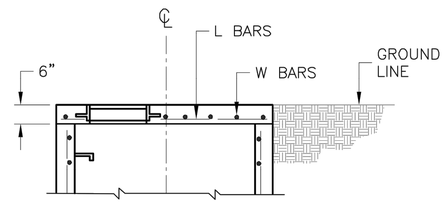


PLAN

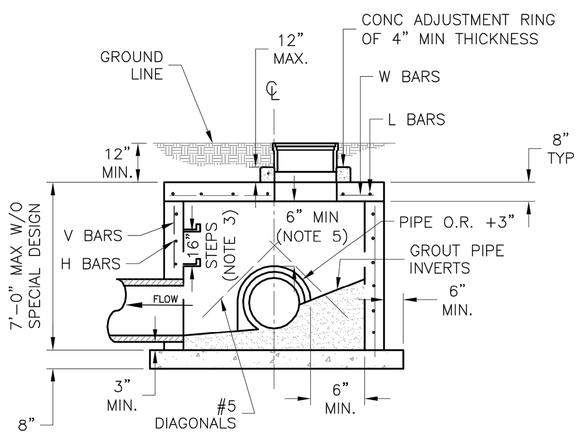


SLAB TOP ALTERNATE FOR
JUNCTION BOX (SHALLOW)

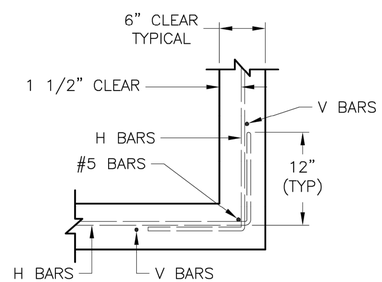
** INCREASE IN MULTIPLES OF 6"
(7'-0") MAX WITHOUT SPECIAL DESIGN.
(SEE PROJECT PLANS FOR DETAILS)

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



SECTION A–A



WALL CORNER DETAIL

GENERAL NOTES:

1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: JUNCTION BOX DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-3

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RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
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LEE'S SUMMIT, MISSOURI
2019

C.O.A. NO.: 001592
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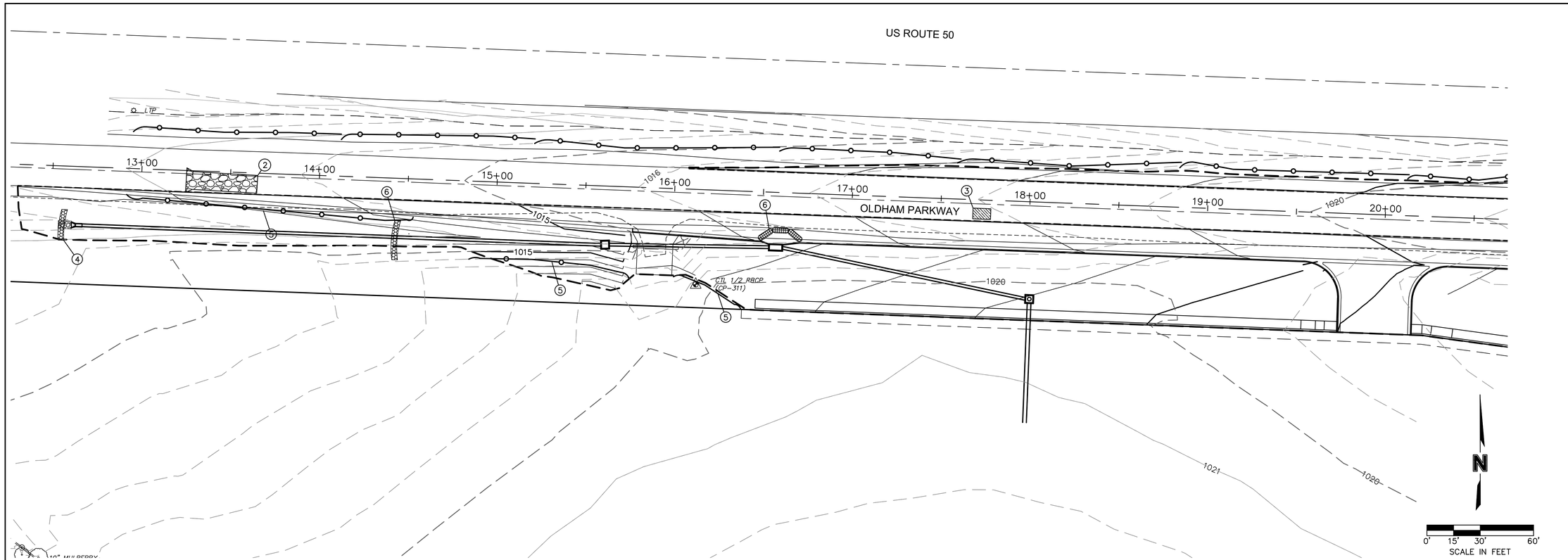
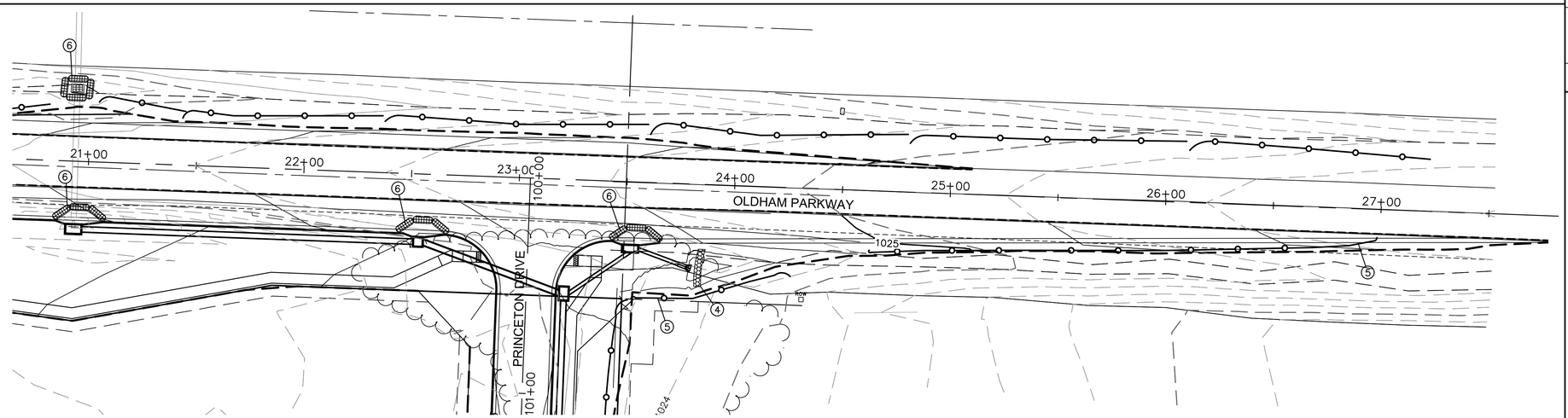


NOTES:

1. CONTRACTOR SHALL ADJUST SWPPP AND EROSION CONTROL PLANS PER PHASING AND FIELD CONDITIONS.
2. CONTRACTOR SHALL PROVIDE A CONCRETE WASHOUT CONFORMING TO THE LATEST EDITION OF THE CITY'S BMP MANUAL FOR LAND DISTURBANCE ACTIVITY. CONCRETE WASHOUT IS SUBSIDIARY TO OTHER EROSION CONTROL BID ITEMS. NO DIRECT PAY.
3. CONTRACTOR SHALL COORDINATE WITH THE CITY'S INSPECTOR TO DETERMINE THE LOCATION OF THE CONCRETE WASHOUT.
4. REFER TO PHASED EROSION CONTROL STAGING CHART.



EROSION AND SEDIMENT CONTROL STAGING CHART

PROJECT STAGE	EROSION CONTROL PLAN BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRIOR TO LAND DISTURBANCE	1	STAGING AREA	C	
	2	TEMPORARY CONSTRUCTION ENTRANCE	C	
	3	CONCRETE WASHOUT	C	
	4	TYPE II DITCH CHECK		INSTALL BEFORE STORM SEWER INSTALLATION
	5	SILT FENCE AND/OR STRAW WATTLES	D	
B – ROADWAY GRADING & STORM SEWER INSTALLATION	N/A	EROSION AND SEDIMENT CONTROL	N/A	PERFORM MAINTENANCE ON ALL EROSION CONTROL MEASURES FOR ALL PREVIOUS PHASES AS NECESSARY.
	6	CURB INLET/AREA INLET PROTECTION	C	PROTECT ALL OPEN BOXES WITH SILT FENCE
C – PAVING				PER CURB INLET DETAIL
D – STABILIZE SITE	7	SEED & SOD	N/A	

LEGEND

- SILT FENCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT
- TURF REINFORCEMENT MAT
- OUTLET STABILIZATION
- INLET PROTECTION
- TYPE II DITCH CHECKS

N

0' 15' 30' 60'
SCALE IN FEET

olsson

Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EROSION CONTROL PLANS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.:	001592
DRAWN BY:	AS
CHECKED BY:	JKL
APPROVED BY:	RBF
QA/QC BY:	JKL/RBF
PROJECT NO.:	018-1450
DWG NO.:	T_ERC1_81450
DATE:	07.19.19

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\EROSION CONTROL PLANS\T_ERC1_81450.dwg
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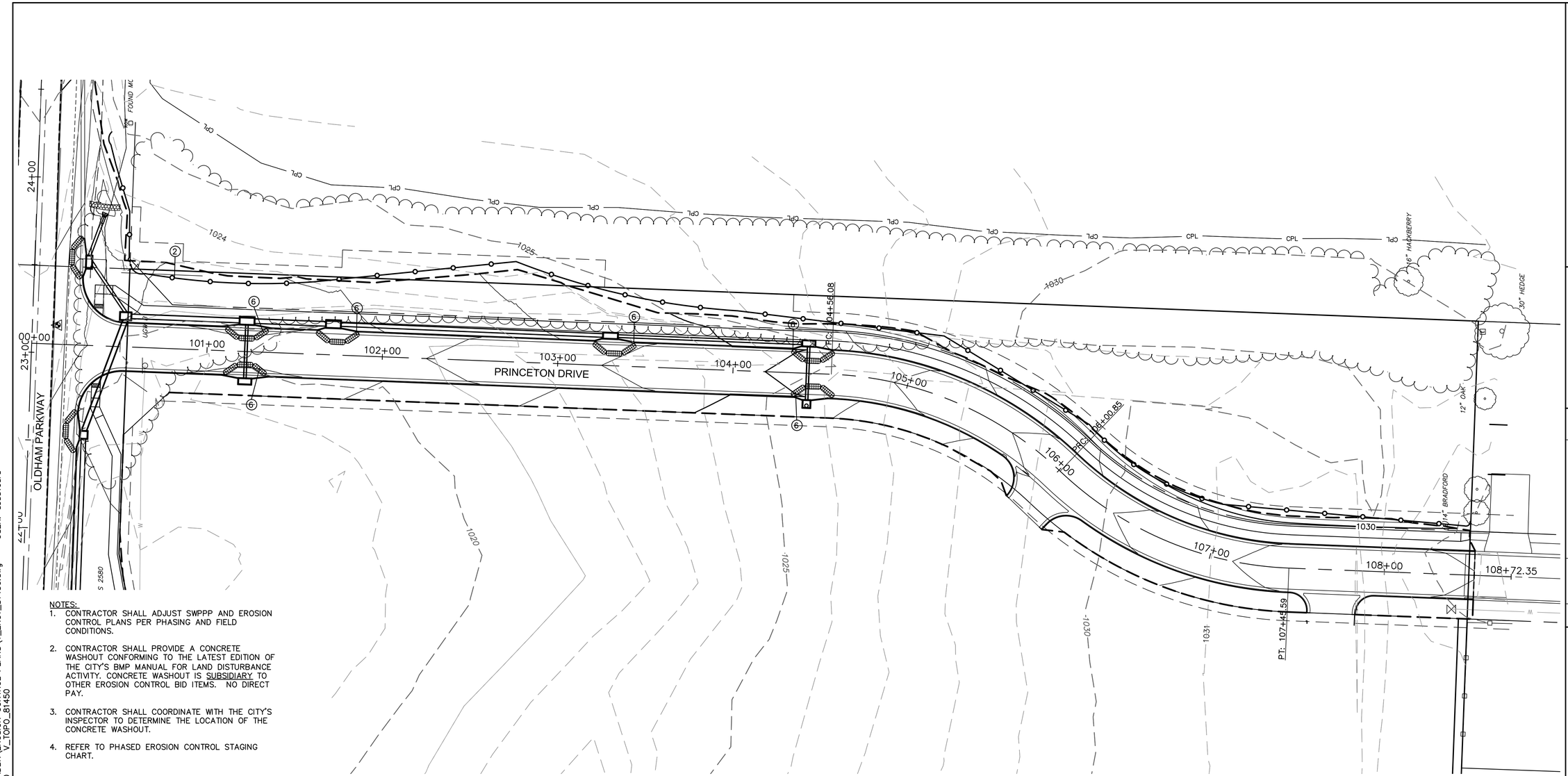

NOTES:

1. CONTRACTOR SHALL ADJUST SWPPP AND EROSION CONTROL PLANS PER PHASING AND FIELD CONDITIONS.
2. CONTRACTOR SHALL PROVIDE A CONCRETE WASHOUT CONFORMING TO THE LATEST EDITION OF THE CITY'S BMP MANUAL FOR LAND DISTURBANCE ACTIVITY. CONCRETE WASHOUT IS SUBSIDIARY TO OTHER EROSION CONTROL BID ITEMS. NO DIRECT PAY.
3. CONTRACTOR SHALL COORDINATE WITH THE CITY'S INSPECTOR TO DETERMINE THE LOCATION OF THE CONCRETE WASHOUT.
4. REFER TO PHASED EROSION CONTROL STAGING CHART.

EROSION AND SEDIMENT CONTROL STAGING CHART

PROJECT STAGE	EROSION CONTROL PLAN BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A – PRIOR TO LAND DISTURBANCE	1	STAGING AREA	C	
	2	TEMPORARY CONSTRUCTION ENTRANCE	C	
	3	CONCRETE WASHOUT	C	
	4	TYPE II DITCH CHECK		INSTALL BEFORE STORM SEWER INSTALLATION
	5	SILT FENCE AND/OR STRAW WATTLES	D	
B – ROADWAY GRADING & STORM SEWER INSTALLATION	N/A	EROSION AND SEDIMENT CONTROL	N/A	PERFORM MAINTENANCE ON ALL EROSION CONTROL MEASURES FOR ALL PREVIOUS PHASES AS NECESSARY.
	6	CURB INLET/AREA INLET PROTECTION	C	PROTECT ALL OPEN BOXES WITH SILT FENCE
C – PAVING				PER CURB INLET DETAIL
D – STABILIZE SITE	7	SEED & SOD	N/A	

LEGEND

- SILT FENCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT
- TURF REINFORCEMENT MAT
- OUTLET STABILIZATION
- INLET PROTECTION
- TEMPORARY ROCK DITCH CHECKS

N

0' 15' 30' 60'
SCALE IN FEET

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7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI
RYAN B. FLEMING
NUMBER PE-2002003161
PROFESSIONAL ENGINEER
7-24-19

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EROSION CONTROL PLANS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
CHECKED BY: JKL
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_ERC1_81450
DATE: 07.19.19

SHEET
T24 OF 70

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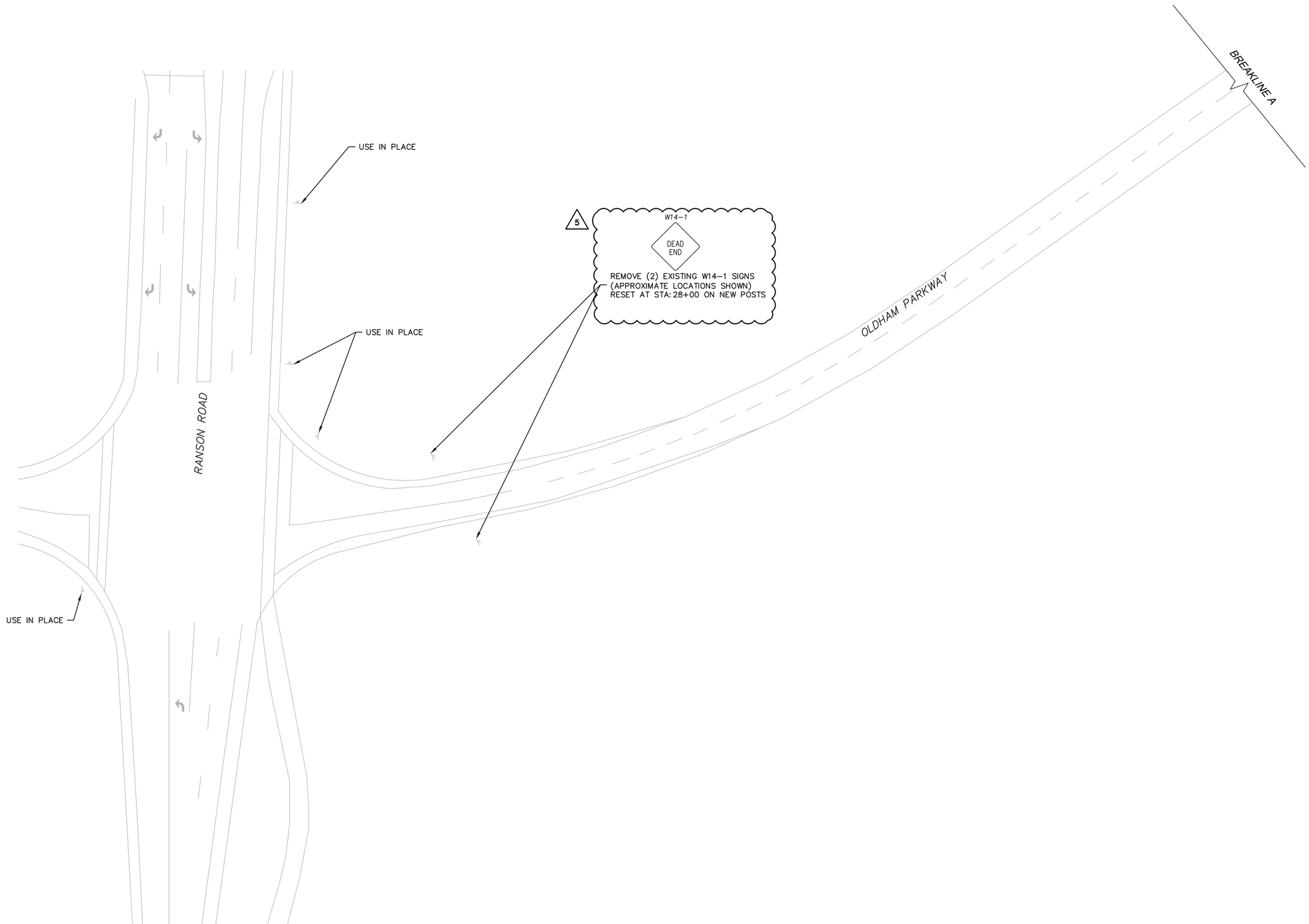

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0' 15' 30' 60'
SCALE IN FEET

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RECORD DRAWING

STATE OF MISSOURI
JEREMY SCOTT STREET
NUMBER PE-2017023856
PROFESSIONAL ENGINEER
8-14-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
5	08/14/2019	MoDOT Review Comments	JRC

REVISIONS

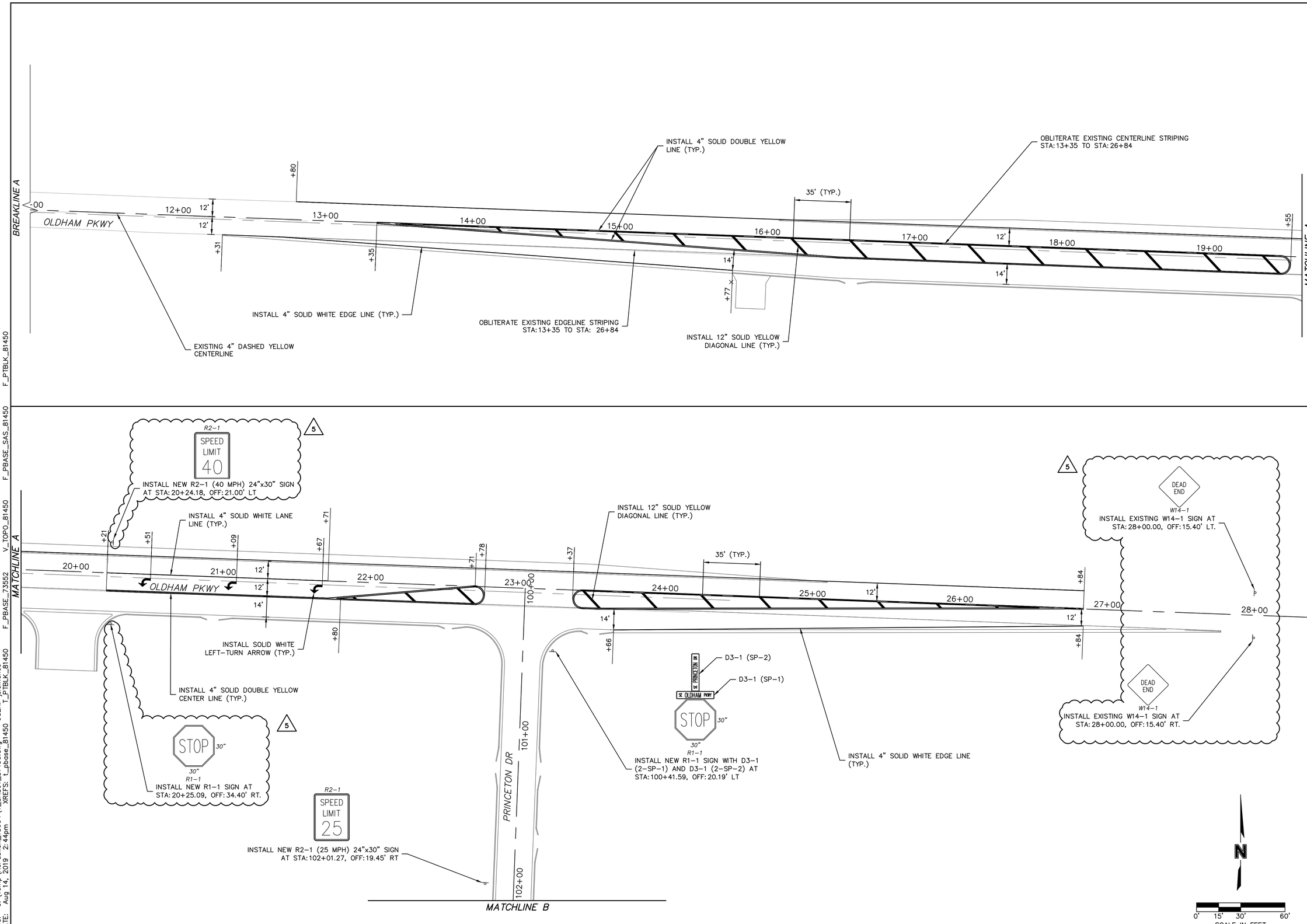
PAVEMENT MARKING AND SIGNING

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: LZ
CHECKED BY: JAC
APPROVED BY: JSS
QA/QC BY: JSS
PROJECT NO.: 018-1450
DWG NO.: T SAS PB
DATE: 07.19.19



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Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI
JEREMY SCOTT STREETER
NUMBER PE-2017023856
PROFESSIONAL ENGINEER
6-14-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
5	08/14/2019	MoDOT Review Comments	JRC

REVISIONS

PAVEMENT MARKING AND SIGNING

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.:	001592
DRAWN BY:	LZ
CHECKED BY:	JAC
APPROVED BY:	JSS
QA/QC BY:	JSS
PROJECT NO.:	018-1450
DWG NO.:	T_SA01_B1450
DATE:	07.19.19

SHEET
T26 OF 70

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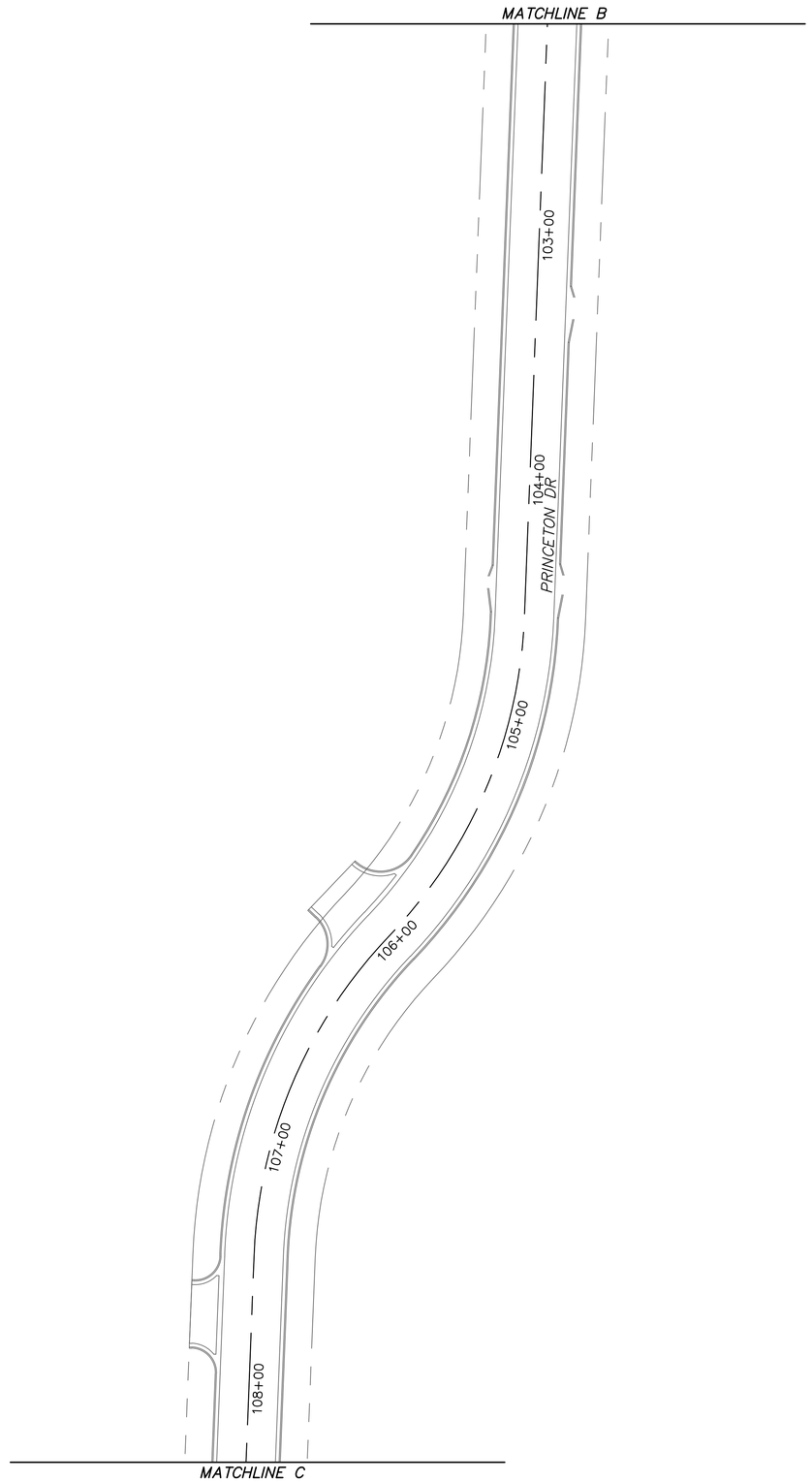

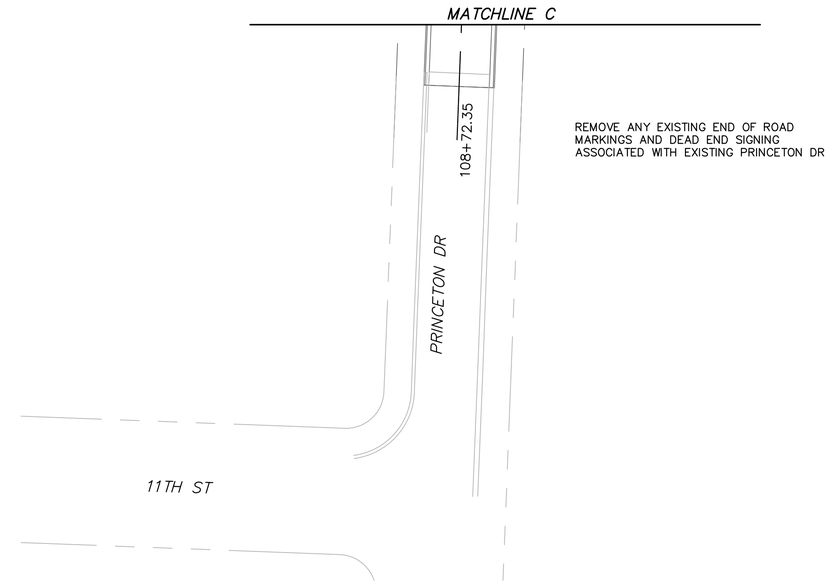

REMOVE ANY EXISTING END OF ROAD MARKINGS AND DEAD END SIGNING ASSOCIATED WITH EXISTING PRINCETON DR

PAVEMENT MARKING SUMMARY

STATION TO STATION		LOCATION	4" SOLID WHITE LANE LINES (LF) *	4" SOLID YELLOW LANE LINE (LF) *	12" YELLOW CROSSHATCH LINES (LF) *	WHITE TURN ARROWS (EA) **
						LT.
13+35	19+55	OLDHAM		2480		
13+35	19+55	OLDHAM			178	
12+31	15+77	OLDHAM	346			
20+21	21+71	OLDHAM	150			
20+21	22+78	OLDHAM		710		
20+51		OLDHAM				1
21+09		OLDHAM				1
21+67		OLDHAM				1
21+80	22+78	OLDHAM			25	
23+37	26+84	OLDHAM		1388		
23+37	26+84	OLDHAM			65	
23+66	26+84	OLDHAM	318			
12+80	26+84	OLDHAM	1404			
TOTALS			2218	4578	268	3

*ALL PAVEMENT MARKINGS ON ASPHALT SHALL BE THERMOPLASTIC
**PAVEMENT MARKINGS SHALL BE PRE-FORMED THERMOPLASTIC

PERMANENT SIGNING SUMMARY***

STATION	STREET REFERENCE	OFFSET FROM ℄	MUTCD DESIGNATION	SIGN SIZE	AREA (S.F.) MEP SIGNS	POST TYPE
APPROX.	OLDHAM	–	W14-1 (2)	EXISTING	EXISTING	REMOVE (2)
20+24.18	OLDHAM	21.00'L	R2-1	24"x30"	5	SQUARE
20+25.09	OLDHAM	34.40'R	R1-1	30"x30"	5.18	SQUARE
28+00.00	OLDHAM	15.40'R	W14-1	EXISTING	EXISTING	SQUARE
28+00.00	OLDHAM	15.40'L	W14-1	EXISTING	EXISTING	SQUARE
100+41.59	PRINCETON	20.19'L	R1-1	30"x30"	5.18	SQUARE
100+41.59	PRINCETON	20.19'L	D3-1 (SP-1) (2)	9"x48"	3 (2)	SHARED
100+41.59	PRINCETON	20.19'L	D3-1 (SP-2) (2)	9"x48"	3 (2)	SHARED
102+1.27	PRINCETON	19.45'R	R2-1	24"x30"	5	SQUARE
TOTALS				32.36 SF		6 EA

***ALL SIGNS REMOVED SHALL BE SUBSIDIARY TO NEW SIGNING

0' 15' 30' 60'
SCALE IN FEET

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Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI
JEREMY SCOTT STREET
NUMBER PE-2017023856
PROFESSIONAL ENGINEER
8-14-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
5	08/14/2019	MoDOT Review Comments	JRC

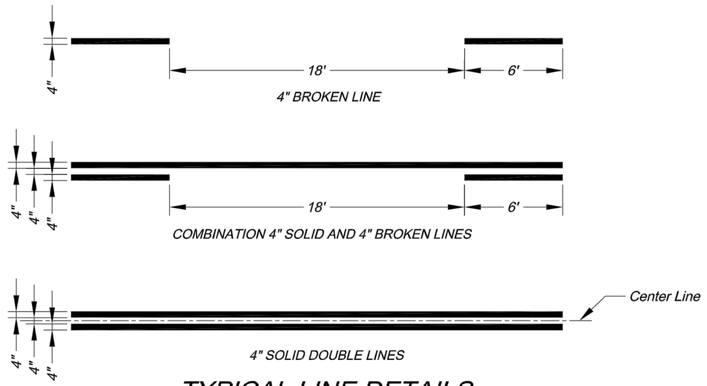
REVISIONS

PAVEMENT MARKING AND SIGNING

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS
LEE'S SUMMIT, MISSOURI
2019

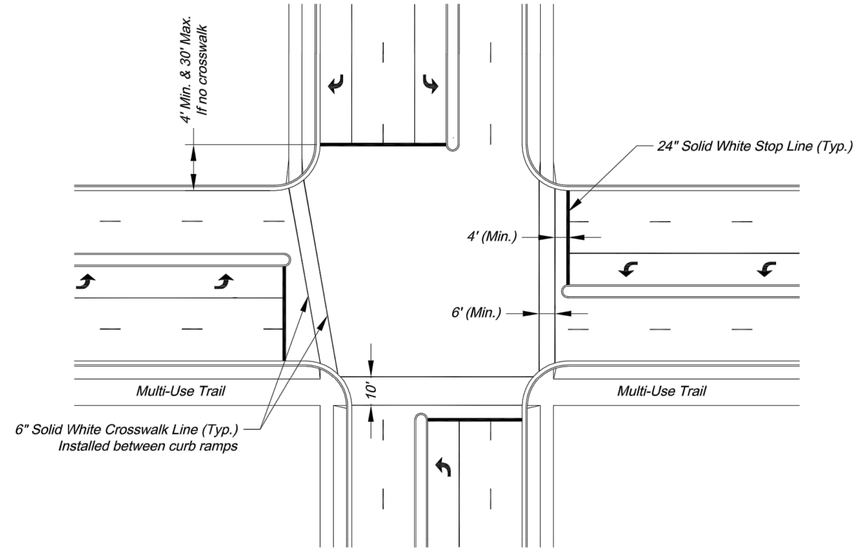
C.O.A. NO.: 001592
DRAWN BY: LZ
CHECKED BY: JAC
APPROVED BY: JSS
QA/QC BY: JSS
PROJECT NO.: 018-1450
DWG NO.: T_SAS01_81450
DATE: 07.19.19

DWG: C:\Temp\AcPublish_13604\T_SAS01_81450.dwg USER: jclemence F_PBASE_SAS_81450 F_PTBLK_81450
DATE: Aug 14, 2019 2:44pm XREFS: t_pbase_81450 T_PTBLK_81450 F_PBASE_73552 V_TOPO_81450



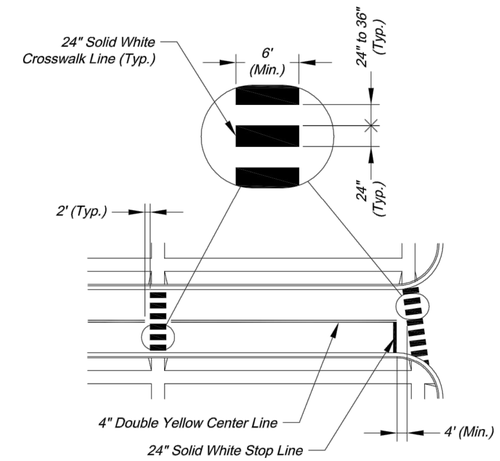
TYPICAL LINE DETAILS

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.

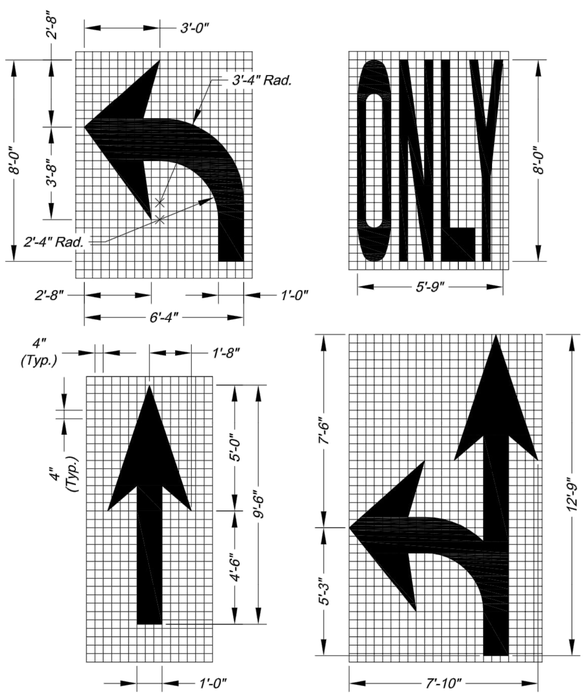


TYPICAL INTERSECTION MARKINGS

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.

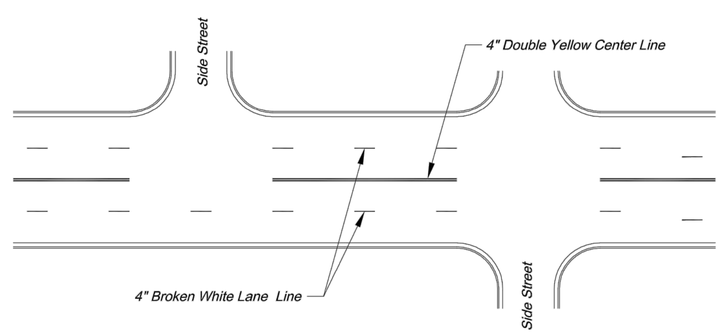


TYPICAL MIDBLOCK OR SCHOOL CROSS WALK

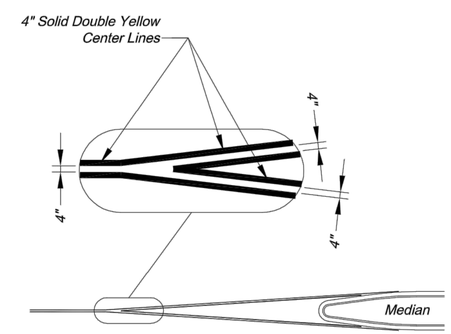


ARROW AND SYMBOL DETAILS

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.

RECORD DRAWING

"NOT AS BUILT"

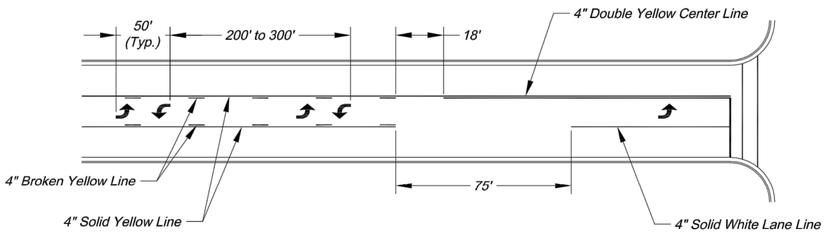
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

Project: O'REILLY DEVELOPMENT SENIOR LIVING

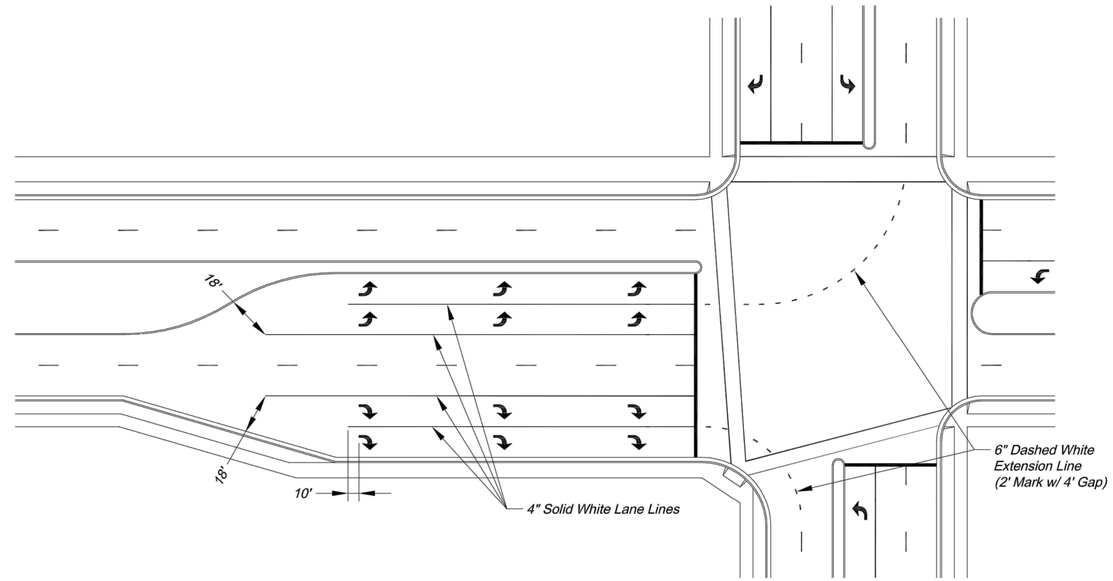
ROADWAY MARKING DETAILS

Sheet Name: STANDARD DRAWING PM-1

Drawn By: AS
Checked By: JW
Date: 09/09/2009
Project#

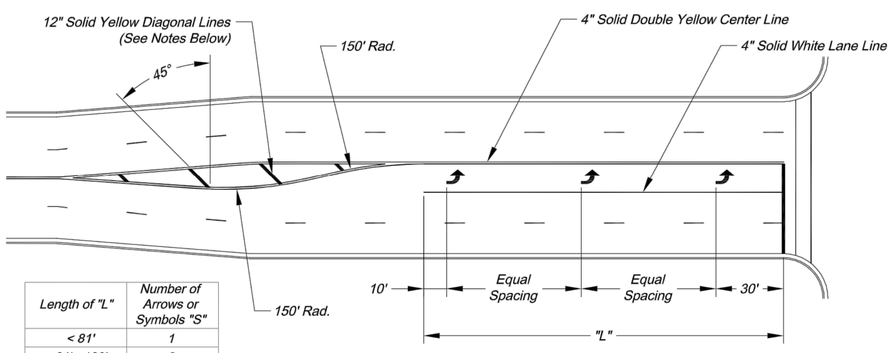


TYPICAL MARKINGS FOR TWO-WAY LEFT-TURN LANE



TYPICAL DUAL TURN LANE MARKINGS

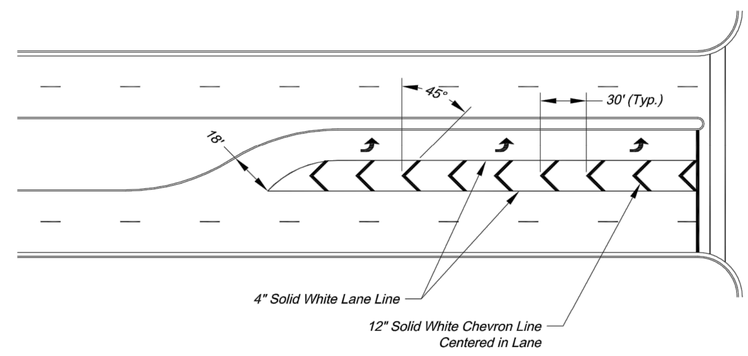
NOTE:
1. Dashed extension lines shall not extend through crosswalks.



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 250'.
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

RECORD DRAWING

"NOT AS BUILT"

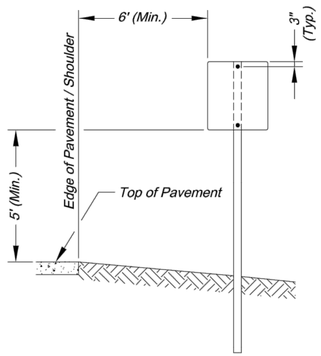
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

Project: O'REILLY DEVELOPMENT SENIOR LIVING

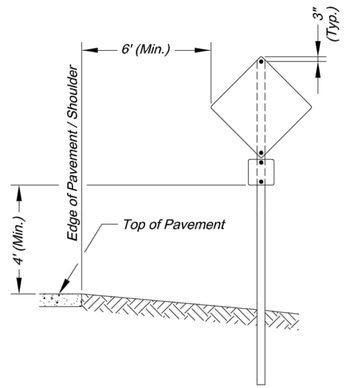
INTERSECTION MARKING DETAILS

Sheet Name: STANDARD DRAWING PM-2

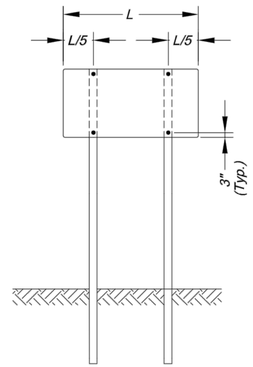
Drawn By: AS
Checked By: JW
Date: 09/09/2009
Project#



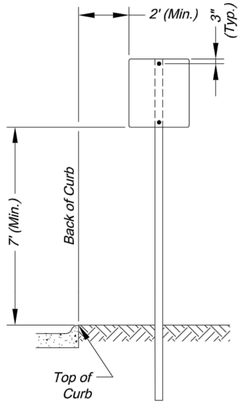
SIGN INSTALLATION FOR NON-CURBED STREET



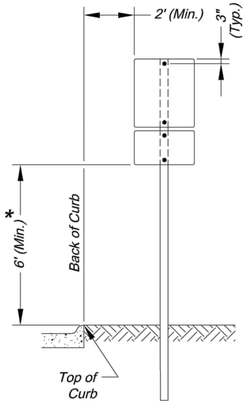
SIGN INSTALLATION WITH AUXILARY SIGN FOR NON-CURBED STREET



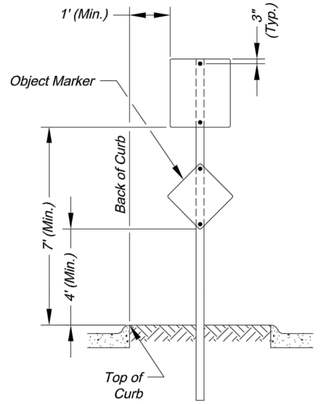
SIGN INSTALLATION WITH TWO SIGN POSTS



SIGN INSTALLATION FOR CURBED STREET



SIGN INSTALLATION WITH AUXILARY SIGN FOR CURBED STREET

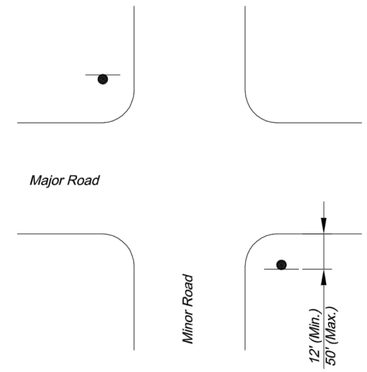


SIGN INSTALLATION FOR RAISED MEDIANS

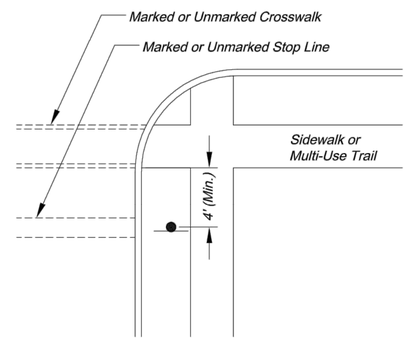
SIGN MOUNTING DETAILS

* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

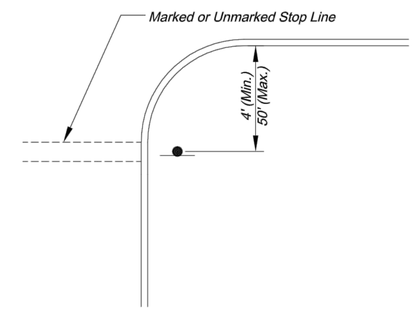
NOTE:
1. Generally, the sign mounting height should not be more than 1' greater than the minimum mounting height.



NON-CURBED INTERSECTION INSTALLATION

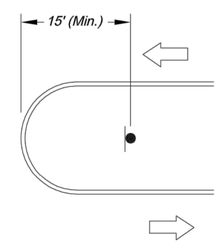


INTERSECTION WITH SIDEWALK / MULTI-USE TRAIL INSTALLATION



CURBED INTERSECTION INSTALLATION

CONTROL SIGN LOCATION



TYPICAL MEDIAN SIGN LOCATION

MEDIAN SIGN LOCATION

NOTES:
1. A 4" P.V.C. sleeve shall be installed in new concrete medians at each location where a sign is to be installed.
2. For existing concrete medians, a 4" hole shall be cored into the concrete.

RECORD DRAWING

"NOT AS BUILT"

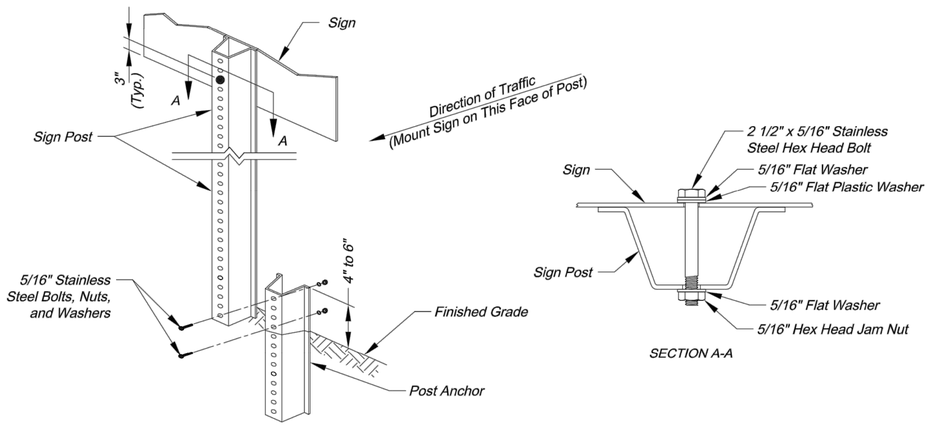
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

Project: O'REILLY DEVELOPMENT SENIOR LIVING

SIGN MOUNTING DETAILS

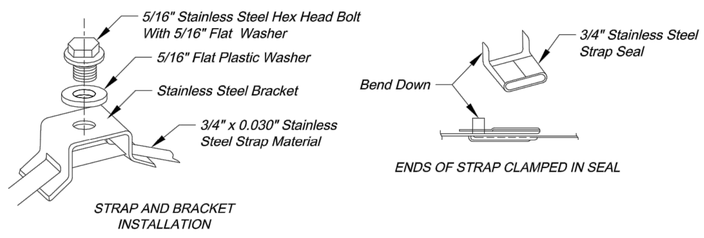
Sheet Name: STANDARD DRAWING SN-1

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#



U-STEEL POST DETAILS

U-STEEL POST NOTES:
1. Splice shall be positioned entirely between finished grade line and 18" above finished grade line. Only one splice will be allowed per post.
2. U-Steel post shall be 3 lb./ft., galvanized according to ASTM A123.
3. U-Steel post can be used for installation of signs with an area of less than 2.5 square feet.
4. All posts shall be embedded a minimum of 3 feet.

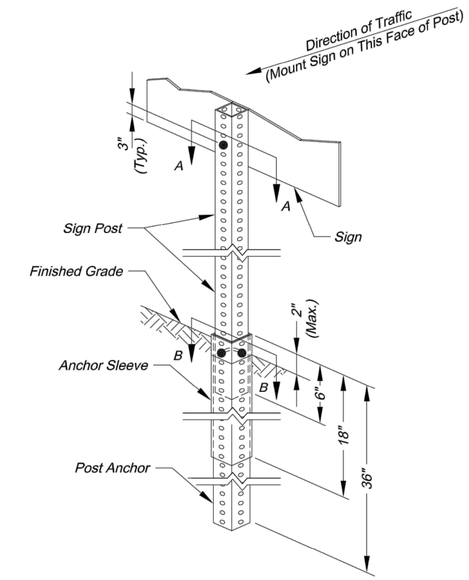


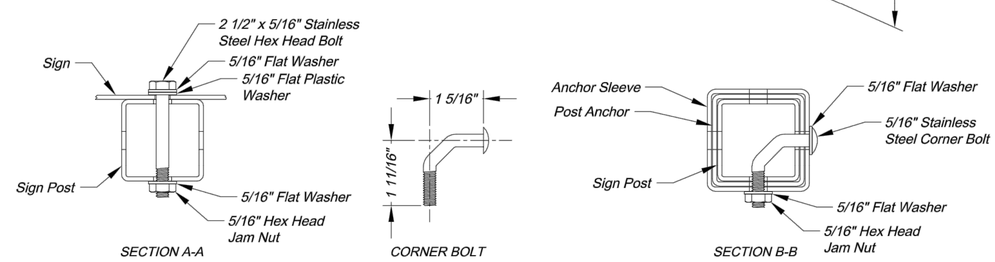
STRAP TYPE SIGN SUPPORT DETAILS

METAL POLE SIGN MOUNTING NOTES:
1. Signs on metal poles shall be attached with two brackets and stainless steel bands.
2. Holes in sign for attachment to the mounting brackets shall be offset a minimum of 2 inches from the edge of the sign.
3. Holes in sign shall be located such that the sign is level.
4. All strap, bracket, and seal materials should be Type 201 stainless steel.

PERMANENT SIGNING GENERAL NOTES:
1. All signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. The Contractor is responsible for avoiding any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.
3. All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit.
4. The Contractor shall stake the location of all sign posts to be installed. The City Inspector shall inspect the staking prior to installation. Minor relocation to avoid conflicts may be allowed with the approval of the City Traffic Engineer or designee.
5. Signs shown to be installed on the side of metal poles shall be mounted with stainless steel straps or wing brackets as detailed. No signs are to be installed on wood poles. See Traffic Signal Standard Drawings for the installation of signs on mast arms.
6. All post mounted signs shall be installed with breakaway anchors according to the Standard Drawings.
7. All existing signs will be used in place during construction and protected from damage unless otherwise indicated in the plans. If the Contractor damages any existing sign or posts during construction, the Contractor will be required to replace the damaged materials with new signs or posts of the same type and size at the Contractor's expense. The Contractor shall be responsible for removing and storing any signs that are to be reinstalled on the project. All equipment shall be reinstalled in good condition.
8. Existing permanent signs and posts removed by the Contractor for construction purposes which are not to be reinstalled shall be delivered to the City's Public Works Maintenance Facility (1971 SE Hamblen Road). The Contractor shall be responsible for removing and storing equipment in good condition and is fully responsible for the equipment until it is delivered.
9. All Stop, Yield, or street name signs shall be maintained in a conspicuous location for the driving public. All Stop and Yield signs removed for construction purposes can be temporarily erected in reflectorized drums (no less than 7 feet above the pavement surface) until they can be reinstalled. Any temporary Stop or Yield sign installation to be left in place overnight will require prior approval from the City Inspector.

SQUARE STEEL POST INSTALLATION SEQUENCE:
1. Sign post anchor driven partially into the ground using a drive cap with a sledge or power equipment.
2. Anchor sleeve slipped over anchor and drive into the ground together with the sign post anchor.
3. Insert sign post into the post anchor and bolt in place.





SQUARE STEEL POST DETAILS

SQUARE STEEL POST NOTES:
1. Square steel sign posts and break-away anchor shall consist of the following materials:
   - Sign Post - 14 Ga. 2" x 2" Square Steel Post
   - Post Anchor - 12 Ga. 2 ¼" x 2 ¼" x 36" Square Steel Post
   - Anchor Sleeve - 12 Ga. 2 ½" x 2 ½" x 18" Square Steel Post
2. 14 Gauge posts must meet a certified minimum yield strength of 60,000 psi.
3. In all installations the first hole above the finished grade line on the sign post, anchor, and anchor sleeve must be in line for the insertion of the corner bolt.
4. The maximum area for one sign post is 9.0 square feet. A sign or combination of signs with an area greater than 9.0 square feet will require two posts. Also, signs with a width greater than 36" (not including 36" x 36" diamond shaped signs) will require two posts.

RECORD DRAWING

"NOT AS BUILT"

CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

Project: O'REILLY DEVELOPMENT SENIOR LIVING

SIGN POST DETAILS

Sheet Name: STANDARD DRAWING SN-2

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#

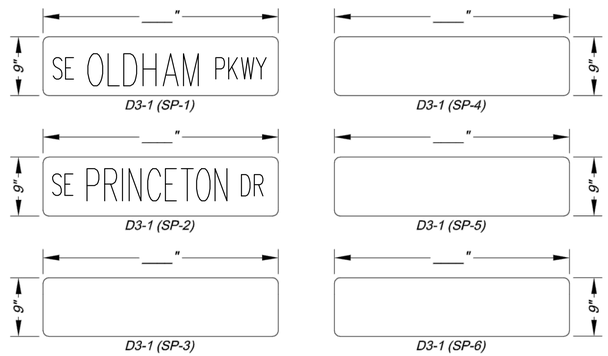
STANDARD ABBREVIATION LISTS

Named Streets	
Avenue	AVE
Boulevard	BLVD
Circle	CIR
Creek	CR
Court	CT
Crossing	XING
Drive	DR
Highway	HWY
Lane	LN
Parkway	PKWY
Place	PL
Road	RD
Street	ST
Terrace	TER
Trail	TRL
Way	WAY

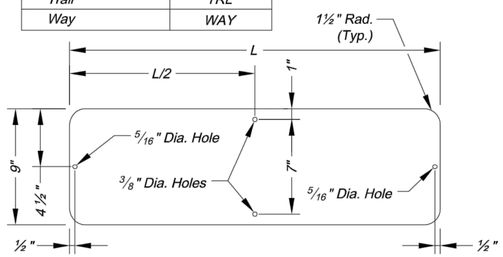
Numbered Streets	
First	ST
Second	ND
Third	RD
Fourth to Tenth	TH

STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Number	Quantity (Sq. Ft.)
D3-1 (SP-1)	9" x 48"	3	2	6
D3-1 (SP-2)	9" x 48"	3	2	6

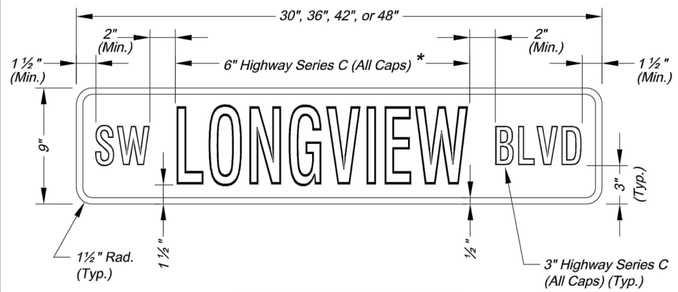


PROJECT SIGN DETAILS



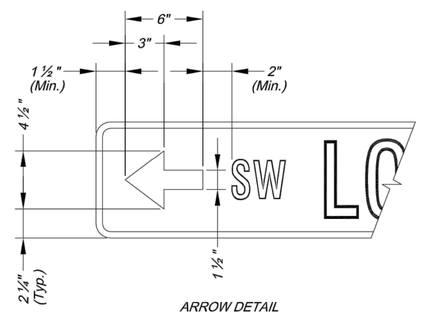
STREET NAME SIGN BLANK DETAILS

For Mounting on Square Steel Posts

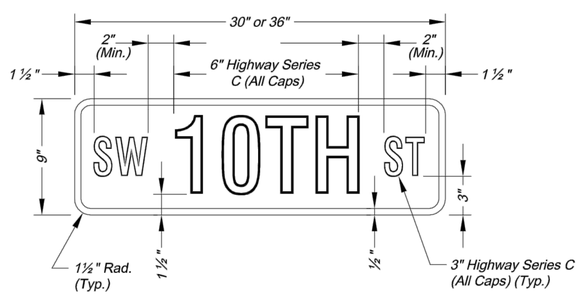


NAMED STREET NAME SIGN DETAIL

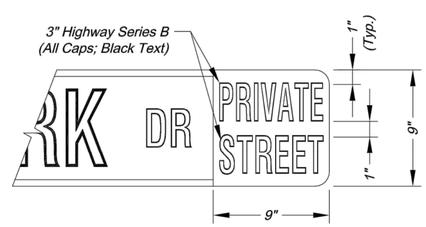
* Use Highway Series B (All Caps) in lieu of series C if necesary to fit text on a 36" sign blank.



ARROW DETAIL



NUMBERED STREET NAME SIGN DETAIL

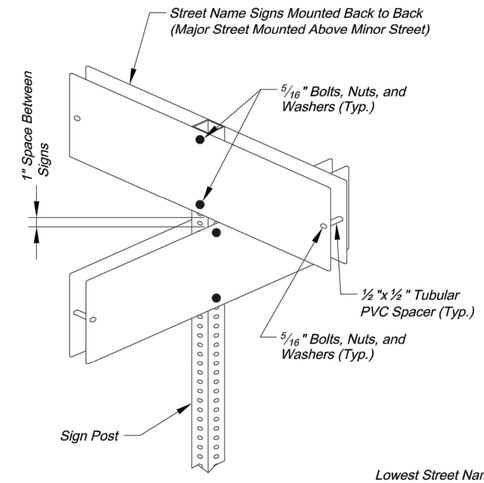


PRIVATE STREET TAG DETAIL

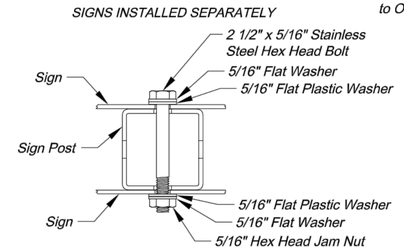
NOTES:

1. For all street name signs, the legend shall be white and the background shall be green.
2. Arrows shall be added to street name signs where the name of a street changes at an intersection. Street name signs with arrows are to be installed on each side of the intersection to indicate the change in names. Arrows shall be white.
3. The "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.

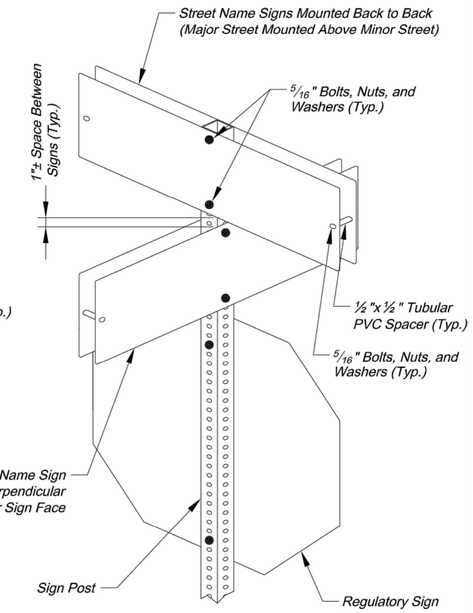
STREET NAME SIGN FACE DETAILS



SIGNS INSTALLED SEPARATELY

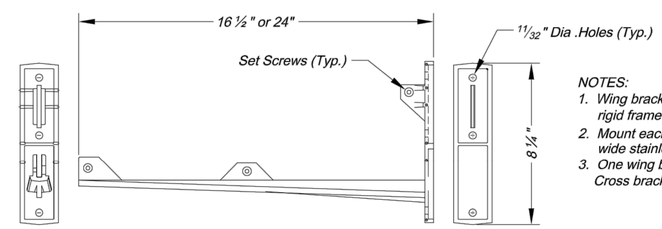


PLAN VIEW



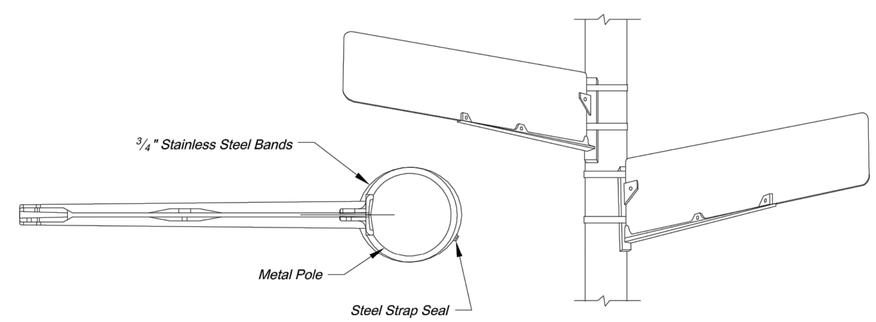
SIGNS INSTALLED WITH OTHER SIGNS

SQUARE STEEL POST MOUNTING DETAILS



NOTES:

1. Wing bracket shall be an L-shaped cantilever of T-beam rigid frame 380-3 aluminum alloy construction.
2. Mount each wing bracket to metal pole using two ¾" wide stainless steel straps.
3. One wing bracket shall be installed per each sign. Cross brackets are not allowed.



WING BRACKET MOUNTING DETAILS

RECORD DRAWING

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CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

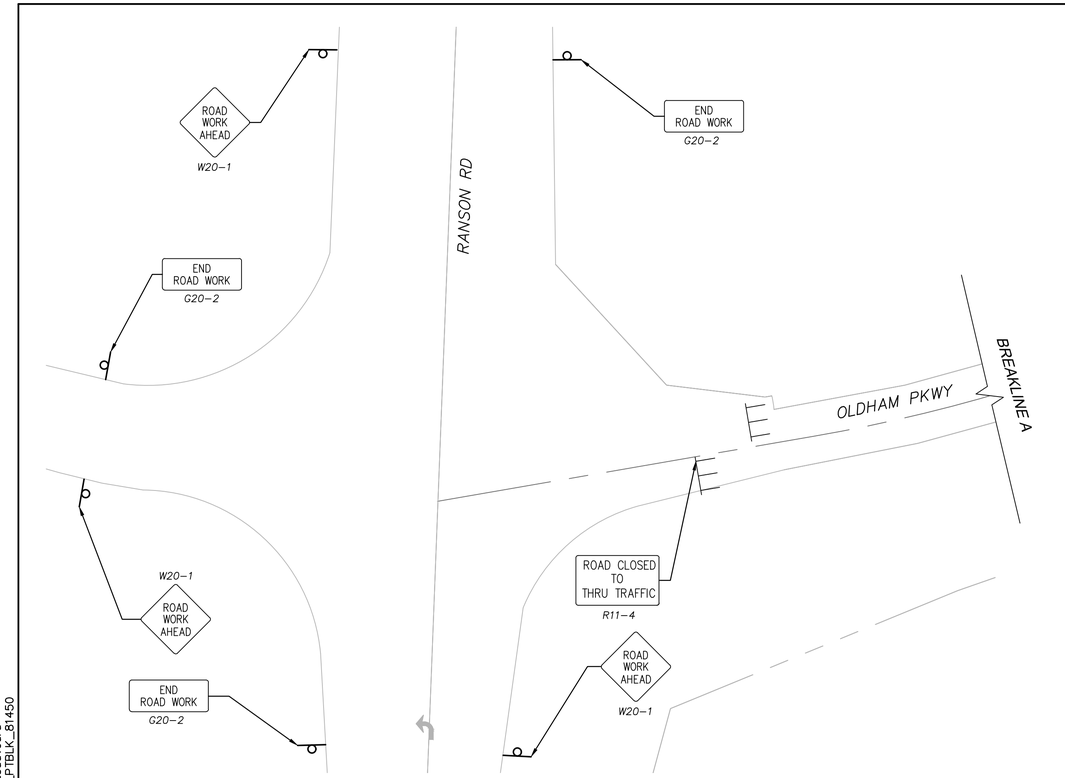
Project: O'REILLY DEVELOPMENT SENIOR LIVING

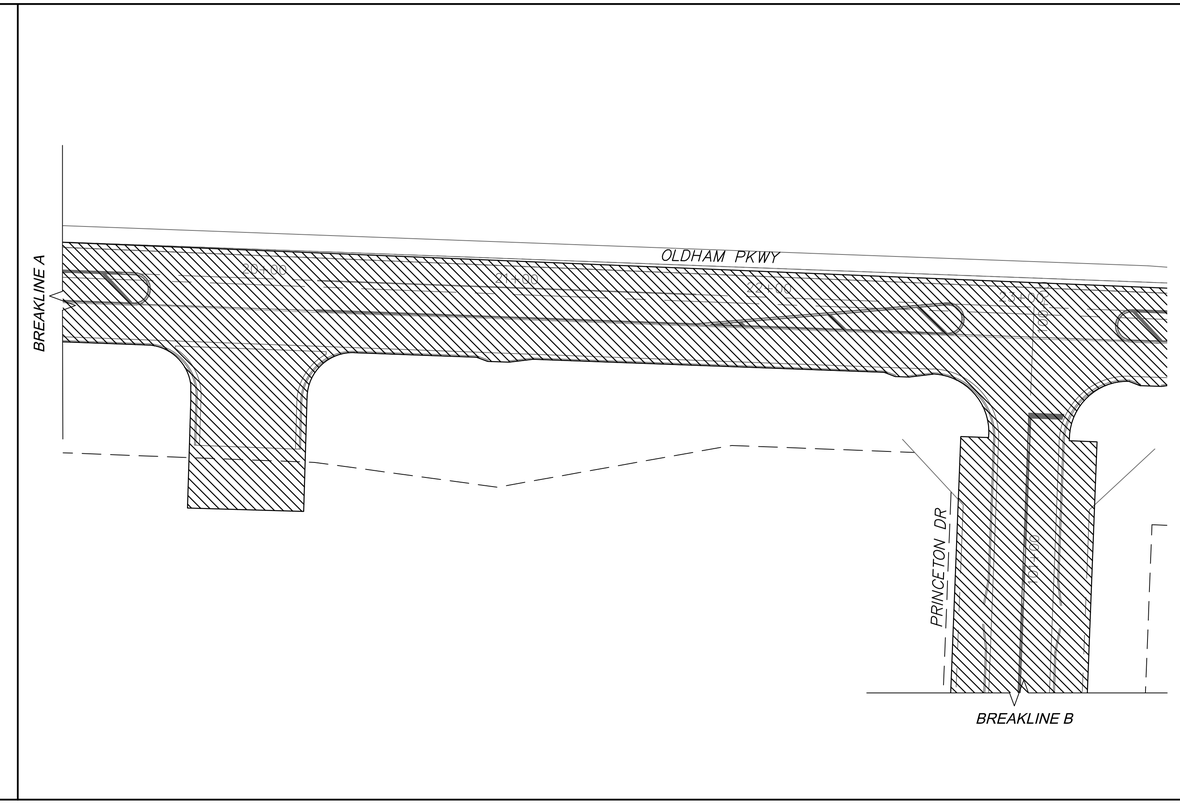
STREET NAME SIGN DETAILS

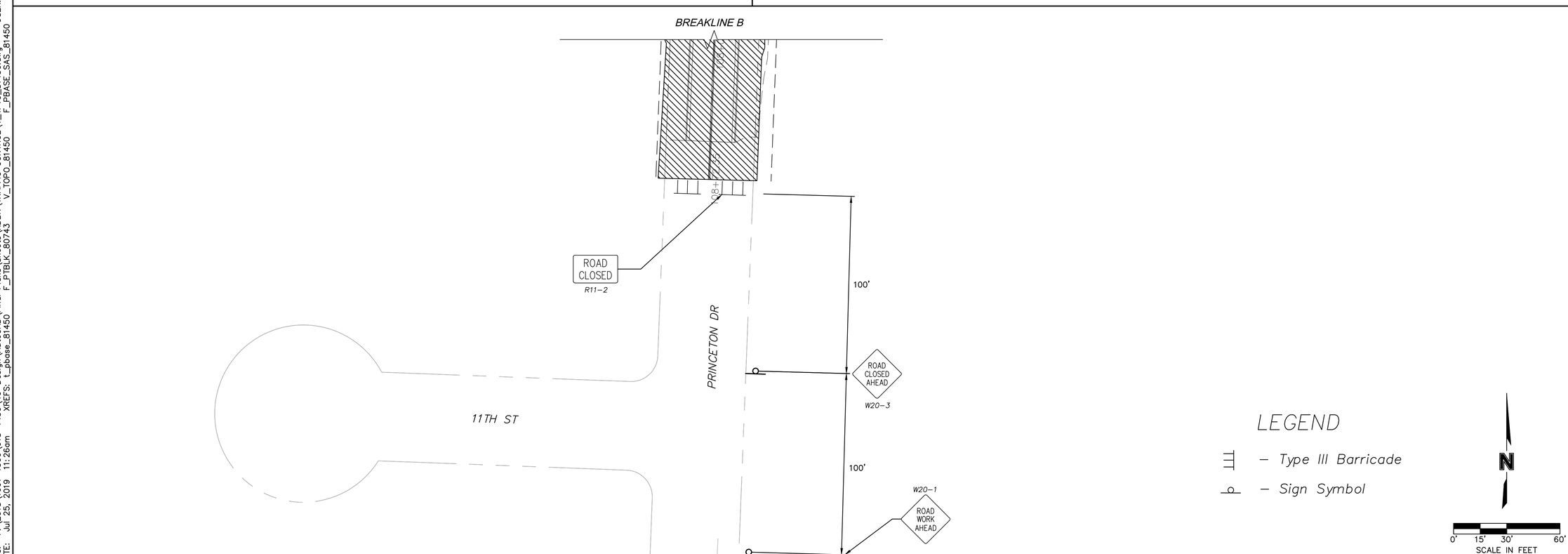
Sheet Name: STANDARD DRAWING SN-3

STATE OF MISSOURI — JOHN WESLEY — NUMBER PE-2003030484 — REGISTERED PROFESSIONAL ENGINEER — 8/25/09

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#







olsson
Olsson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174 www.olsson.com

RECORD DRAWING

STATE OF MISSOURI
TODD A. FREDRICKSEN
NUMBER
PE-2005030484
REGISTERED PROFESSIONAL ENGINEER
7/25/19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

TRAFFIC CONTROL

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

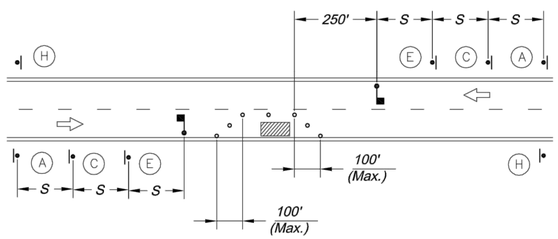
C.O.A. NO.:	001592
DRAWN BY:	LZ
CHECKED BY:	JAC
APPROVED BY:	JSS
QA/QC BY:	JSS
PROJECT NO.:	018-1450
DWG NO.:	T_TFTC_81450
DATE:	07.19.19

SHEET
T33 OF 70

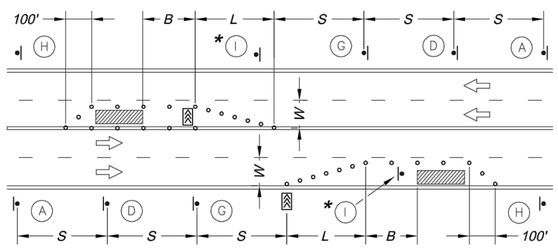
DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\RDBR\TRAFFIC CONTROL\T_TFTC_81450.dwg USER: gsaavedra
DATE: Jul 25, 2019 11:26am XREFS: t_pbase_81450 F_PTBLK_80743 V_TOPO_81450 F_PBASE_SAS_81450 F_PTBLK_81450

SYMBOL LEGEND

- Work Area
- Sign
- Barricade
- Direction of Travel
- Channelizer
- Arrow Panel
- Flagger

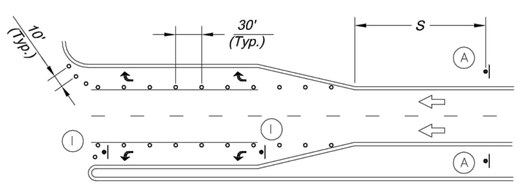


LANE CLOSURE - TWO LANE STREET



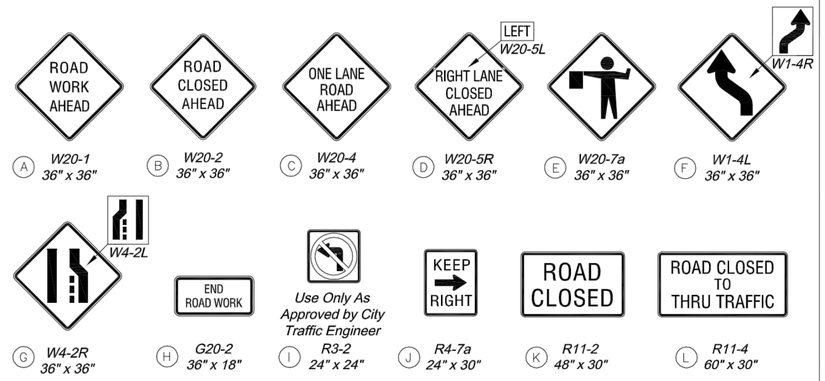
LANE CLOSURE - FOUR LANE STREET

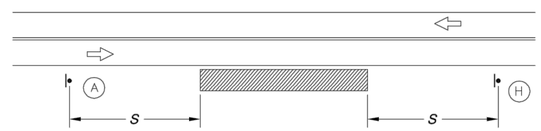
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



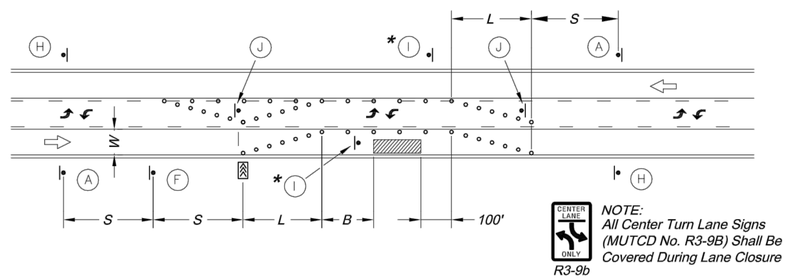
TURN LANE CLOSURE

SIGN LEGEND





TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET



NOTE:
All Center Turn Lane Signs (MUTCD No. R3-9B) Shall Be Covered During Lane Closure

LANE CLOSURE - THREE LANE STREET

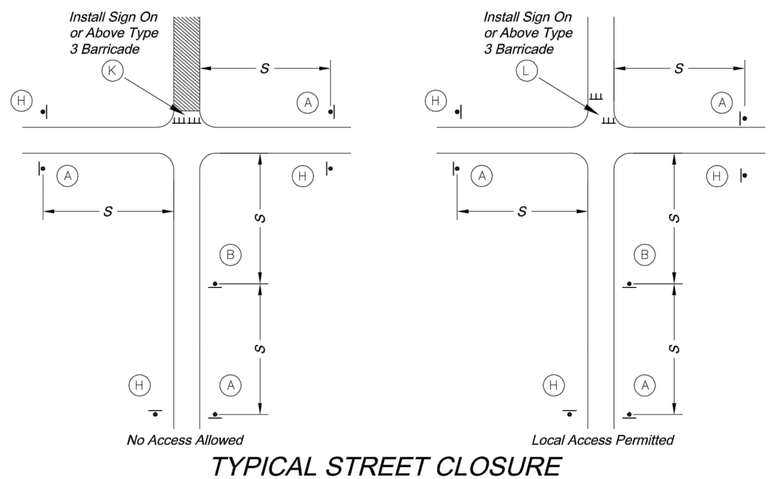
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed

Sign Spacing "S"	
Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

Taper Dimensions (Feet)				
Speed Limit (mph)	Minimum Taper Length "L", per Lane Width "W"			Minimum Number of Channelizers
	10	11	12	
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13

Guidelines for Length of Longitudinal Buffer Space "B"	
Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

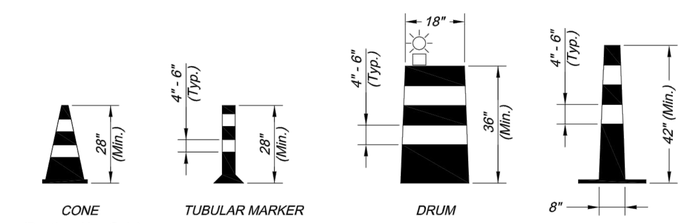
Maximum Channelizer Spacing		
Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90



TYPICAL STREET CLOSURE

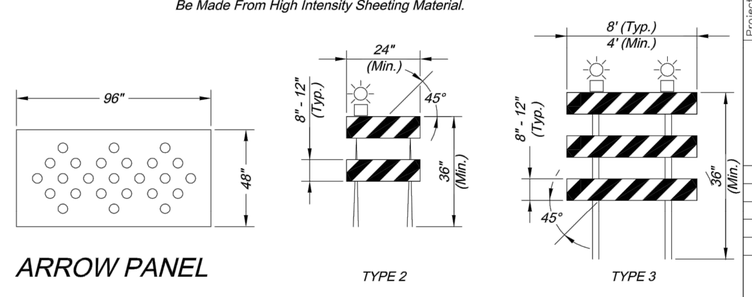
GENERAL NOTES:

1. All signs, barricades, channelizers, markings and other traffic control devices shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. All traffic control devices shall be standard in size, shape, color, and message, in good condition, and retro-reflectorized. All signs shall be securely mounted with height and lateral location as described in the MUTCD.
3. Warning lights shall be used on barricades in place at night and on warning signs which alert drivers about a change in alignment, traffic control, lane closure, or road closure.
4. Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic, or where construction activities impose a restriction on traffic, as directed by the City Traffic Engineer. Where flaggers are used, advance signing shall be erected as shown in the details or as specified in the MUTCD. Flaggers shall meet the requirements in the MUTCD in regard to character, training, attire, and behavior.
5. Trim-lines are the City's preferred channelizing device. Cones may not be used at nighttime.
6. Traffic control devices not in use or not applicable shall be either covered or removed from the work area.
7. The Contractor shall use barricades, street plates, or fencing as needed to effectively shield pedestrian and vehicular traffic from exposed objects, excavations, and construction activities.
8. Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.
9. No street shall be closed without the approval of the City Traffic Engineer. The Contractor shall notify the City Traffic Engineer at least 7 days in advance of any street closure. If a detour route around the closure is to be provided, all detour signing shall be as shown on a plan approved by the City Traffic Engineer.
10. Construction vehicles parked along streets shall be located within the work area (traffic control) or where otherwise normally permitted. Construction materials, including traffic control and vehicles shall not restrict sight distance for vehicles exiting at streets or drives.
11. Construction materials shall be kept off of sidewalks, consolidated in one location within City right-of-way, and removed daily unless otherwise approved by the Inspector. Dirt, mud, and other construction debris on streets and sidewalks shall be removed immediately.
12. The Contractor shall not perform any work that will restrict vehicular traffic in any way between the hours of 7:00 a.m. and 9:00 a.m. or 4:00 p.m. and 6:00 p.m. Monday through Friday unless otherwise indicated in the specifications.
13. All travel lanes should be at least 11 feet wide unless otherwise authorized by the City Traffic Engineer. A "Narrow Lanes" sign shall be installed in advance of a lane width reduction to less than 11 feet.
14. All edge drop-offs of more than 2 inches and less than 4 inches should be protected by a wedge or barrier and all edge drop-offs greater than 4 inches shall have edge protection (see Traffic Control Specifications for edge treatment requirements).
15. The "Workers" symbolic sign (MUTCD No. W21-1a) may be used instead of the "Road Work Ahead" sign for work with a duration of 12 hours or less. The "End Road Work" sign is not required to be installed after the "Workers" sign.
16. No traffic signal shall be altered or modified in any way without a plan approved by the City Traffic Engineer.
17. The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
18. The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of drivers, pedestrians, and workers at all times.
19. Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the City Traffic Engineer or representative, the City may take one or more of the following actions:
    - A) Employ another agency to correct deficiencies in traffic control devices and deduct the cost from the Contractor's pay estimate,
    - B) Stop the work until deficiencies are corrected,
    - C) Suspend all pay estimates until deficiencies are corrected, or
    - D) Place the Contractor in default.



CHANNELIZERS

NOTE: White Bands On Barricades and Channelizers Shall Be Made From High Intensity Sheeting Material.



ARROW PANEL

BARRICADES

RECORD DRAWING

"NOT AS BUILT"

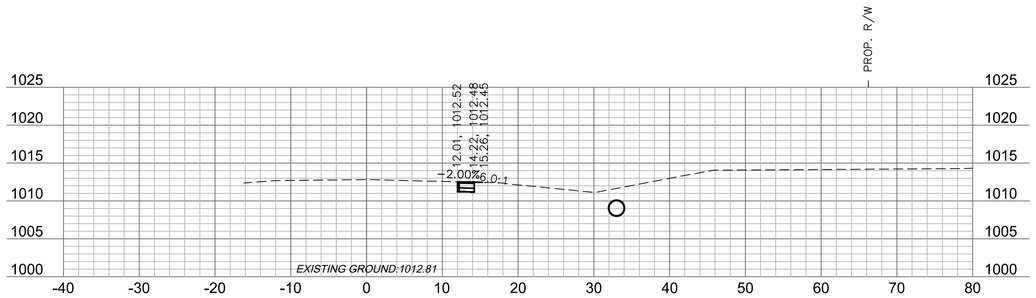
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

Project: O'REILLY DEVELOPMENT SENIOR LIVING

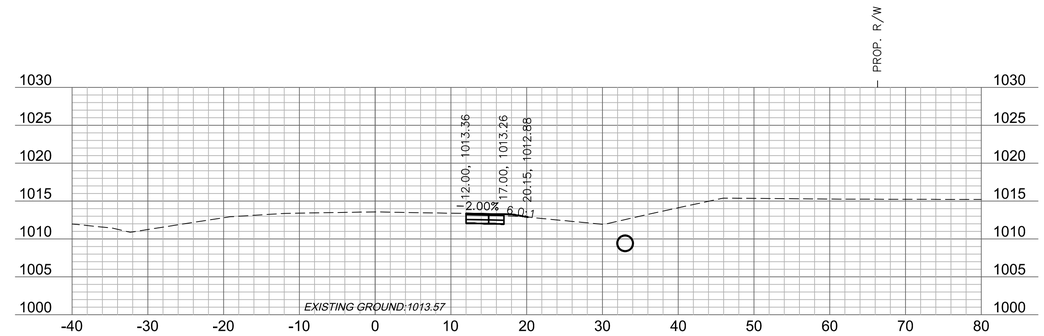
TRAFFIC CONTROL DETAILS

Sheet Name: STANDARD DRAWING TC-1

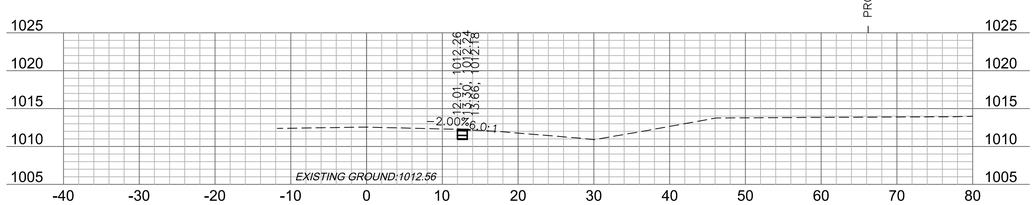
Drawn By: JJW
Checked By: MP
Date: 12-10-2008
Project No.: X



12+75



13+50



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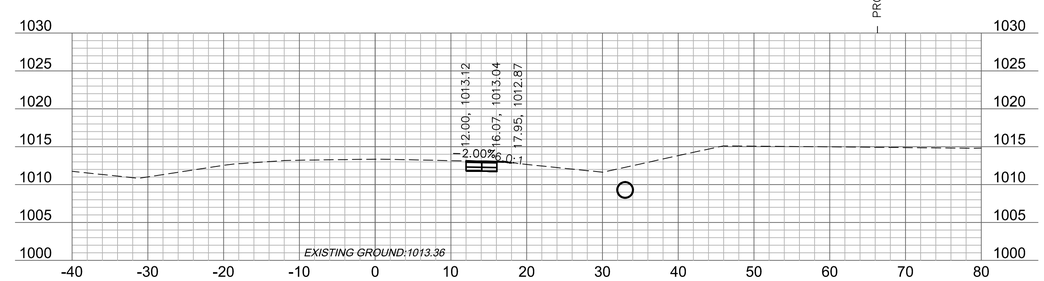

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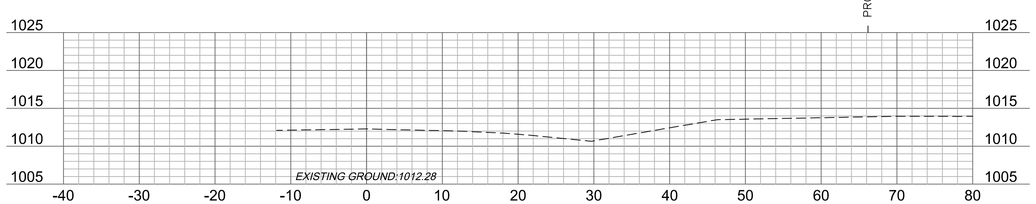

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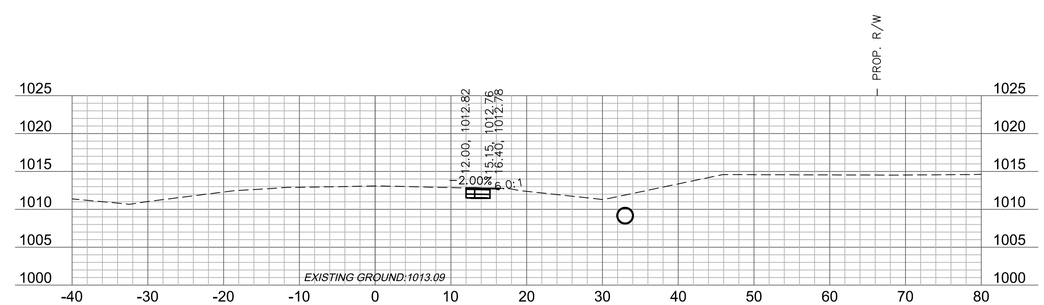

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OREILLY DEVELOPMENT SENIOR LIVING FACILITY
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LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
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APPROVED BY: RBF
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PROJECT NO.: 018-1450
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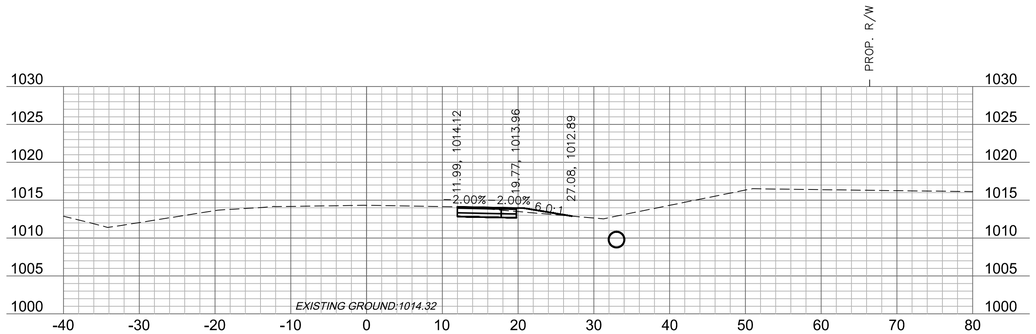

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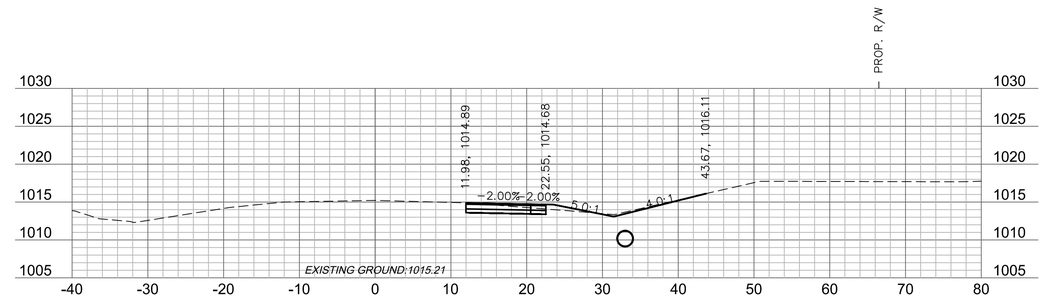

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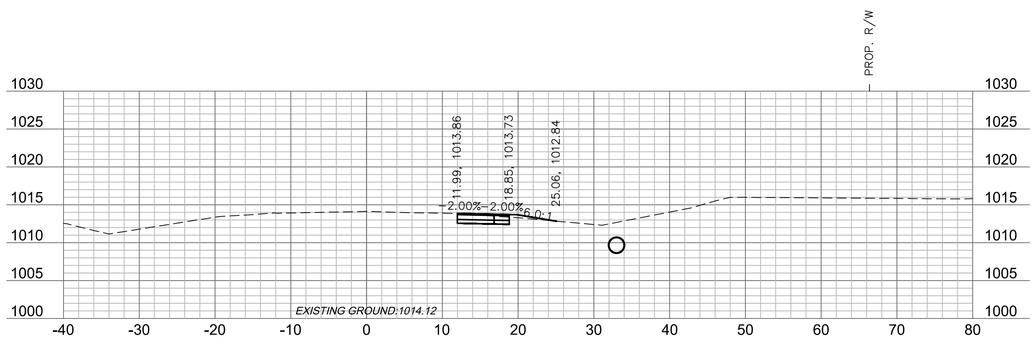

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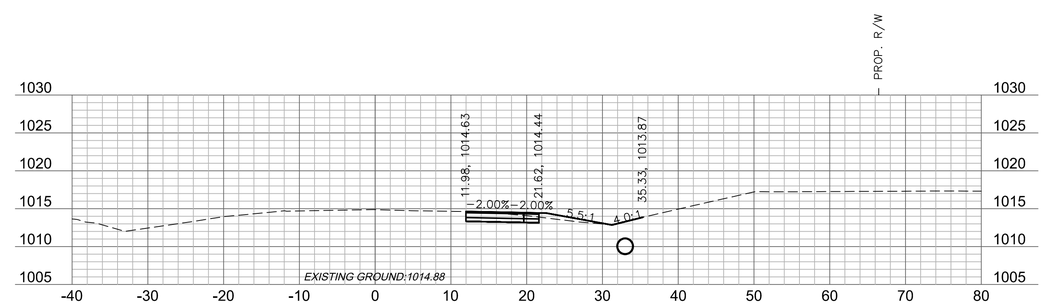

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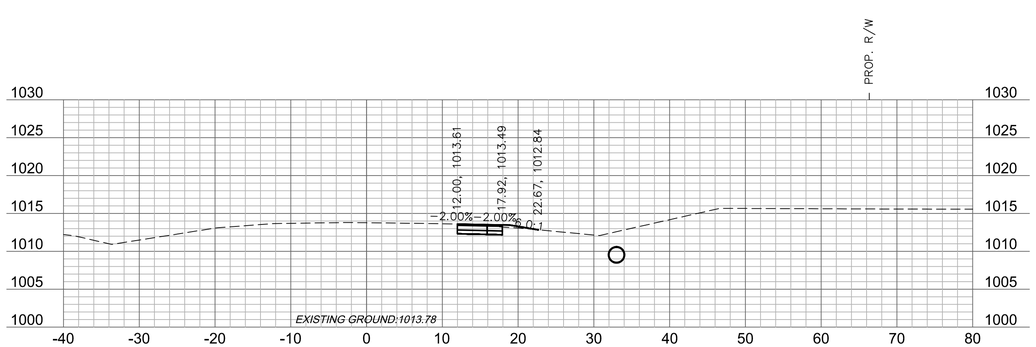

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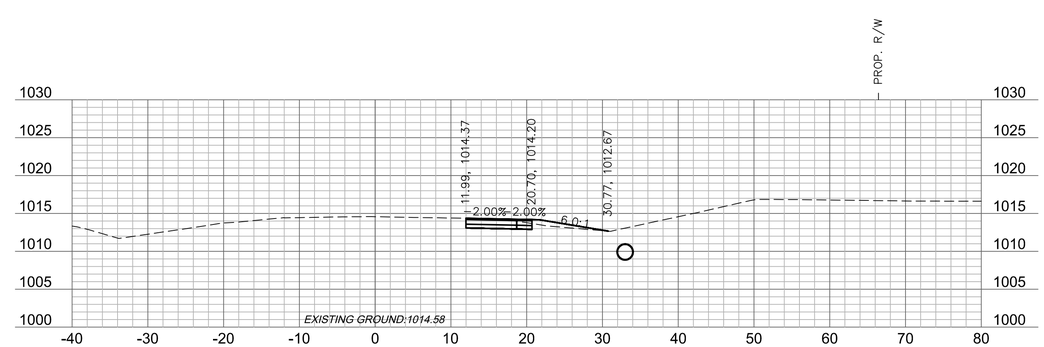

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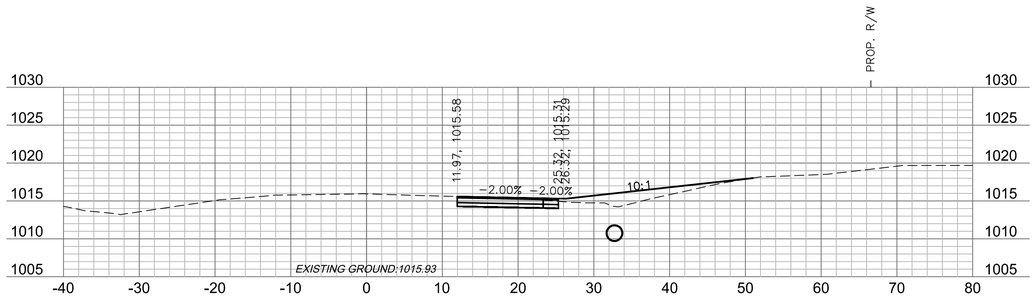

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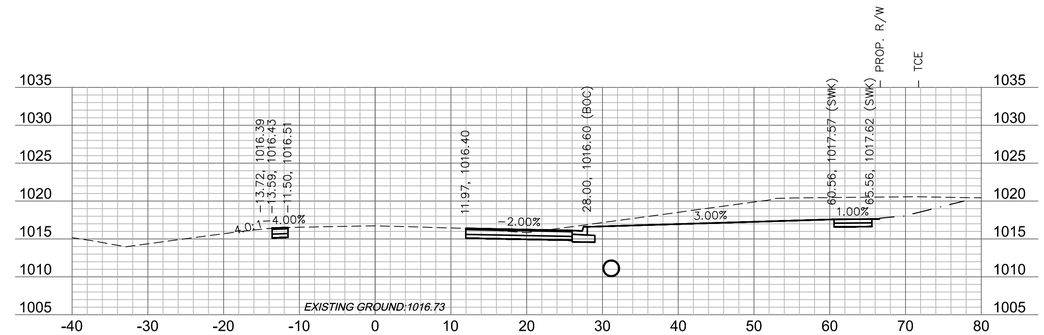

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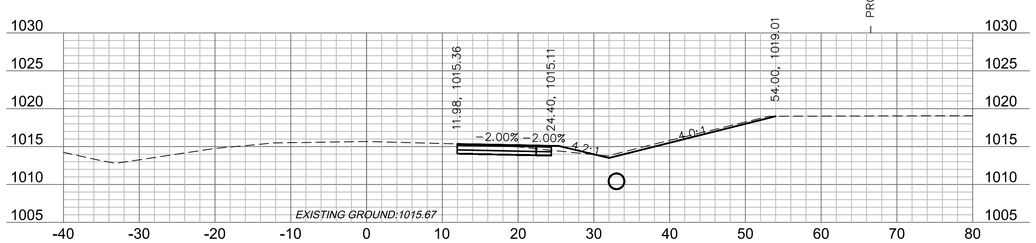

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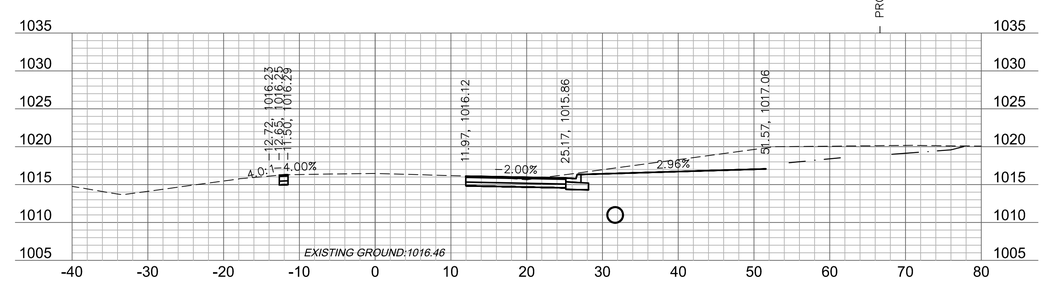

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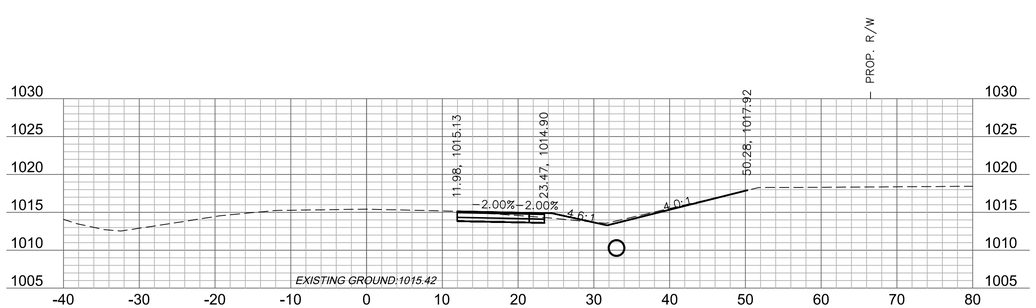

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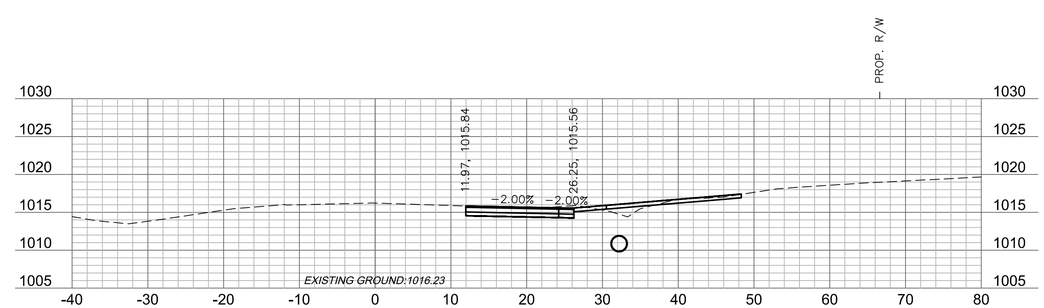

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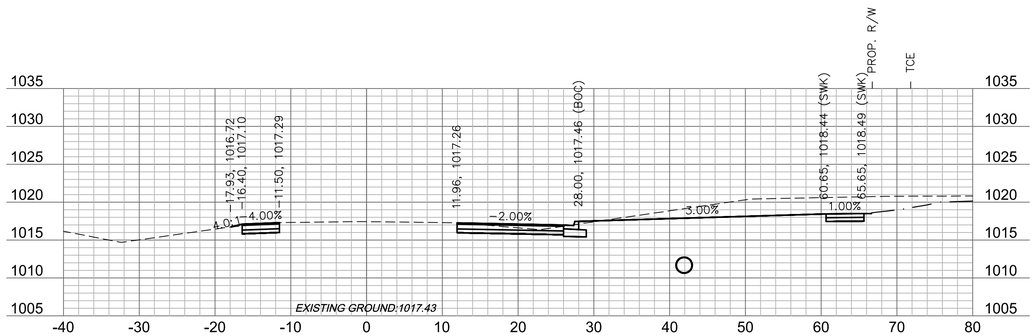

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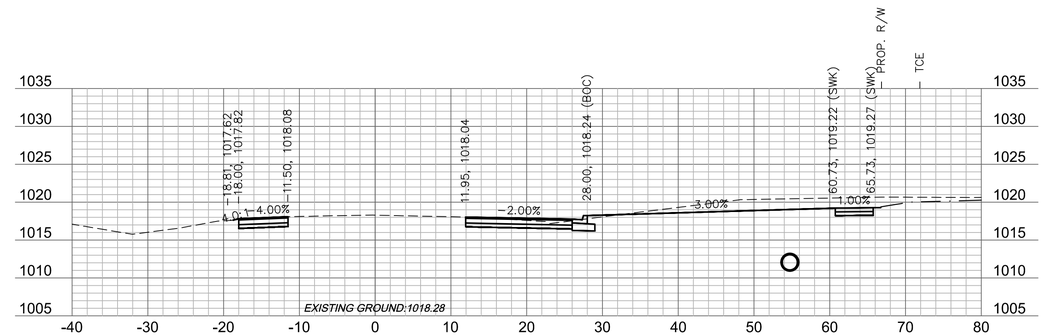

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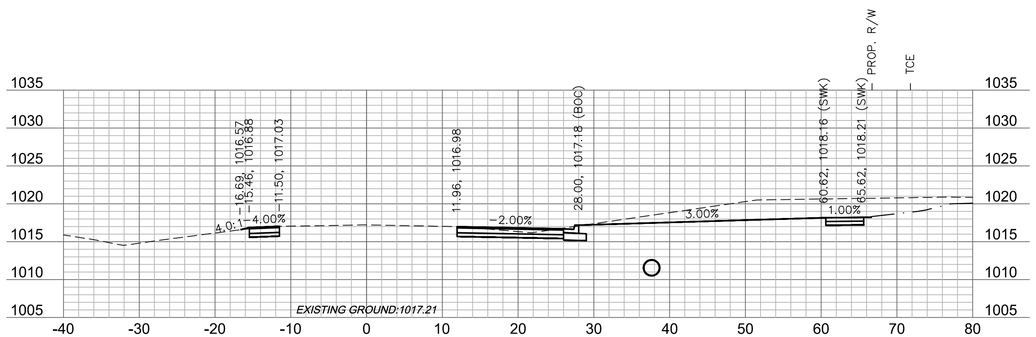

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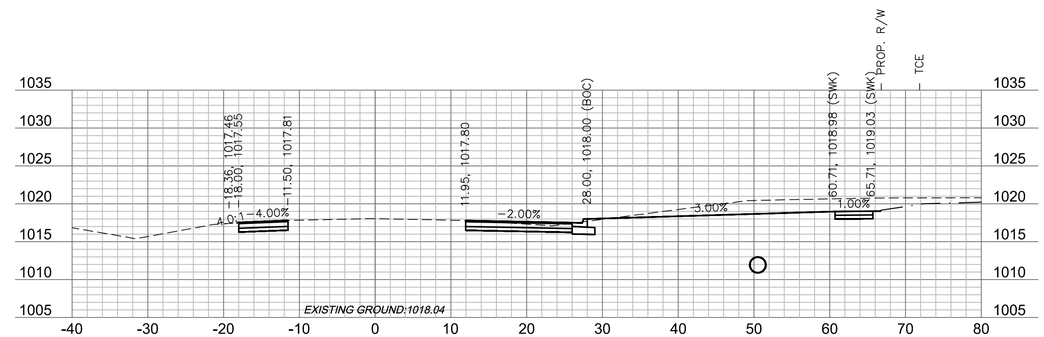

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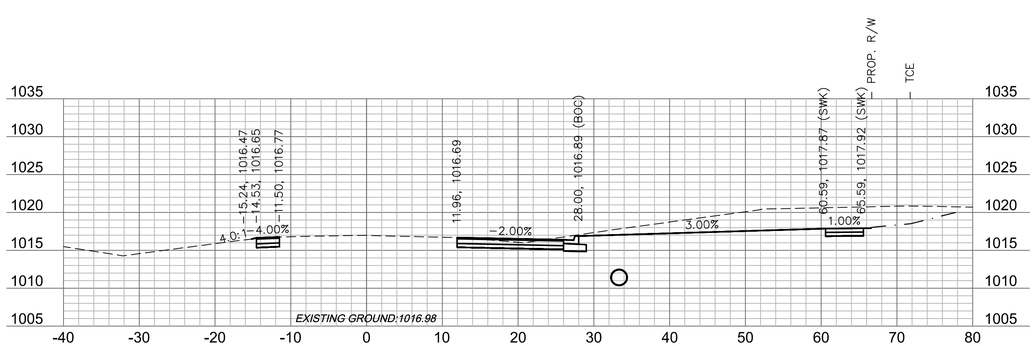

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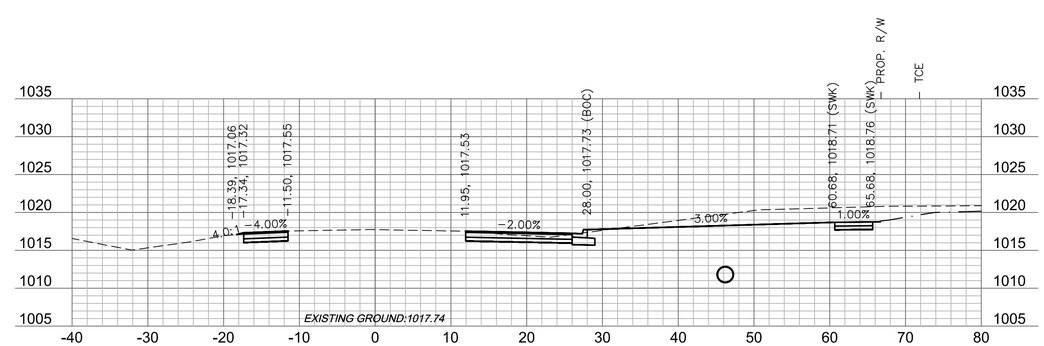

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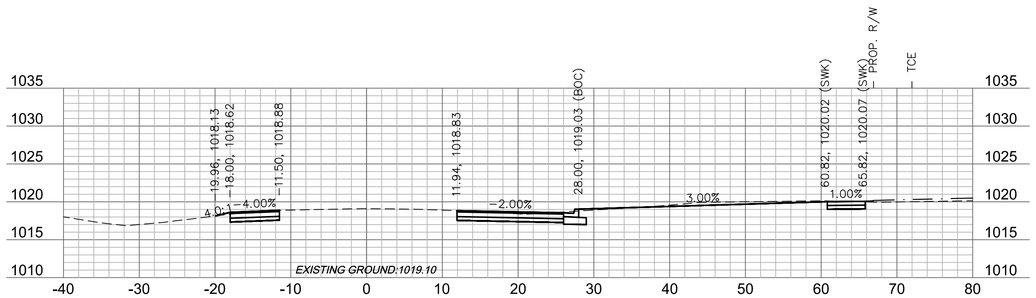

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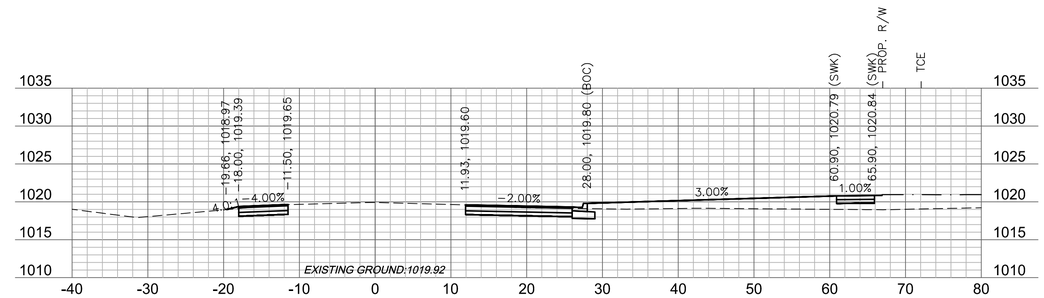

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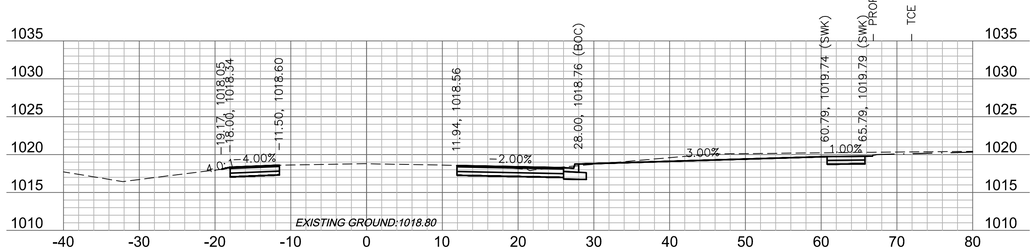

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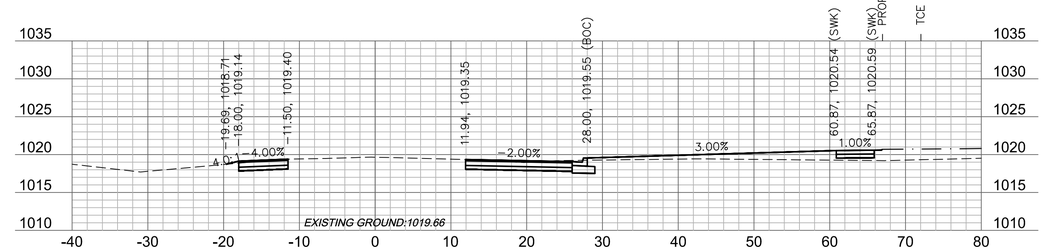

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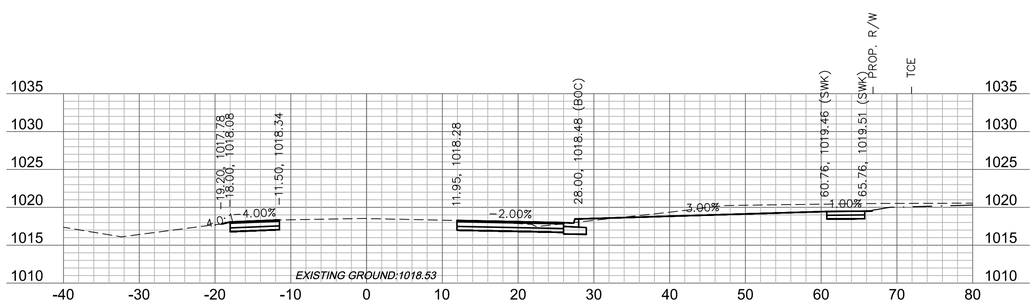

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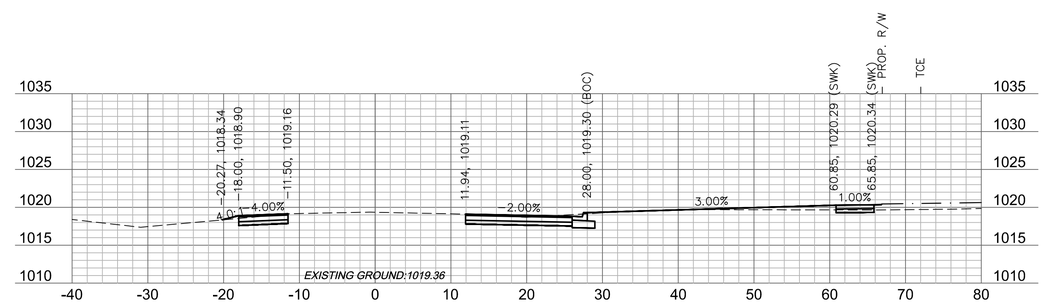

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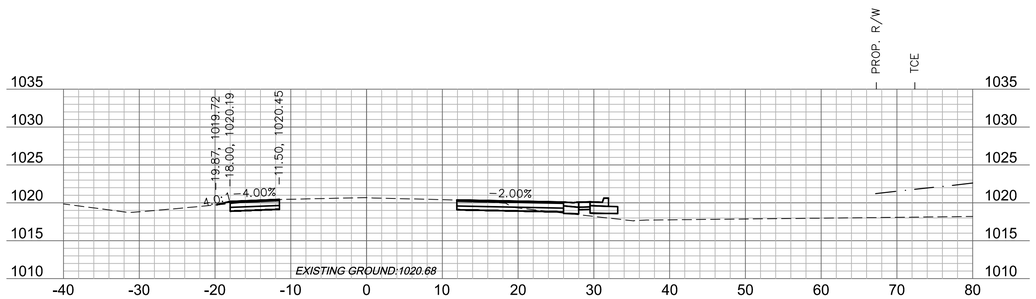

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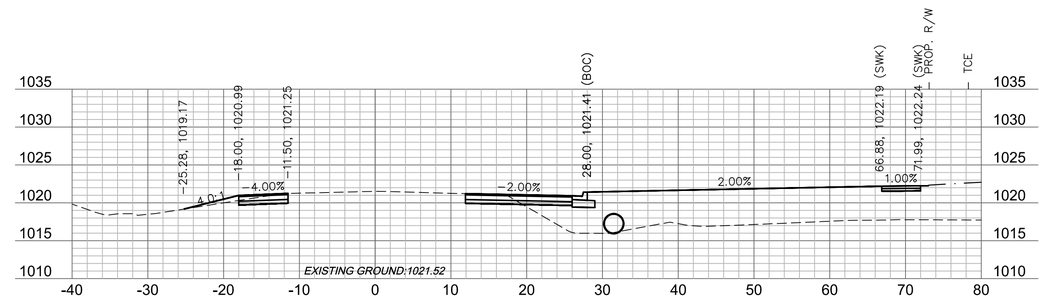

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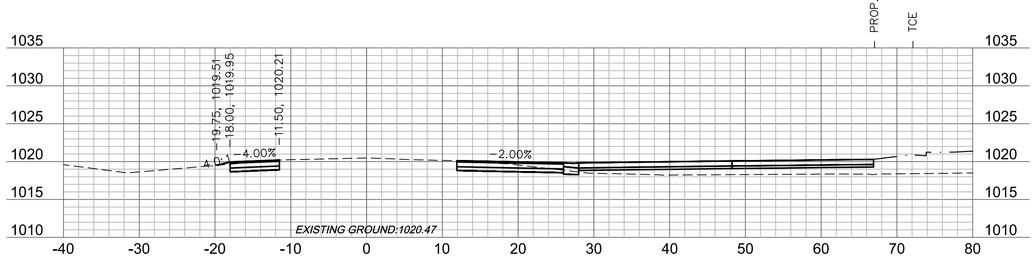

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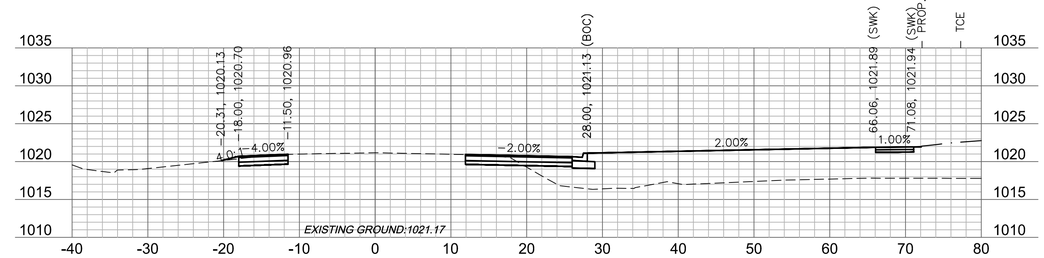

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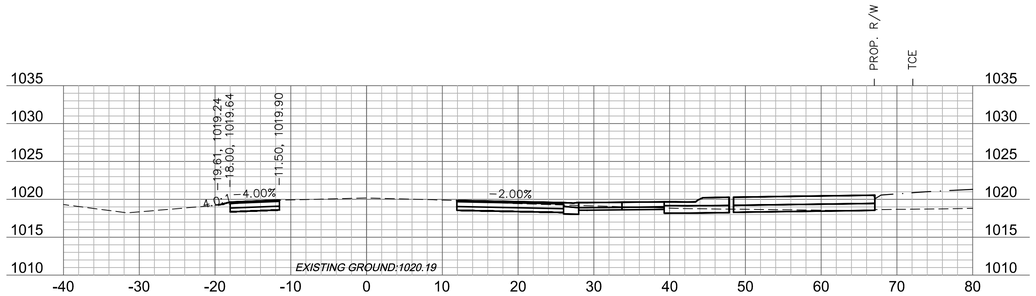

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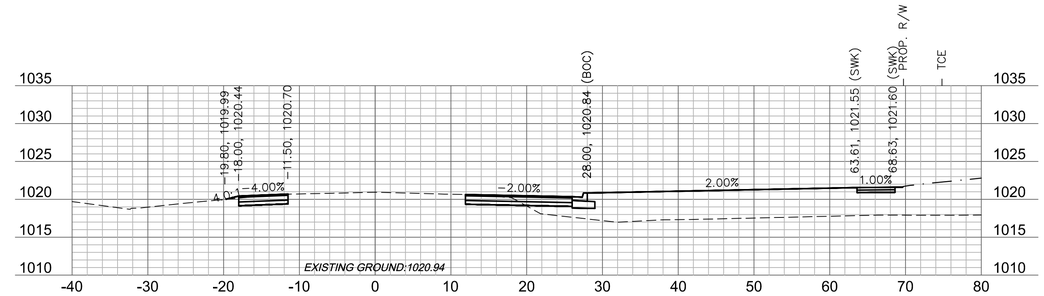

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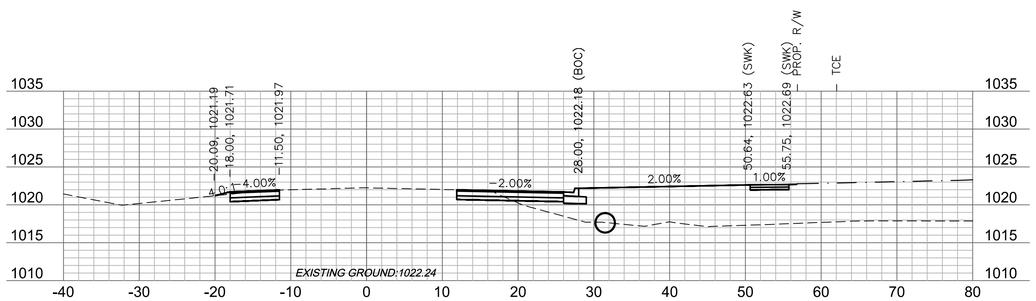

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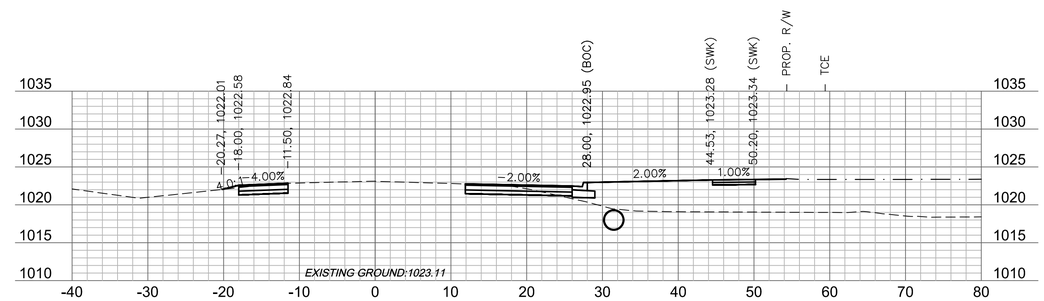

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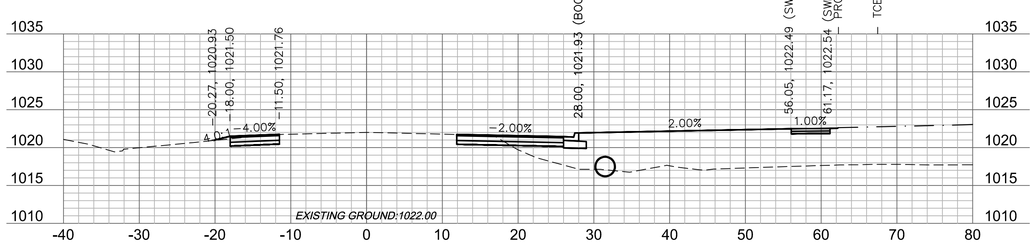

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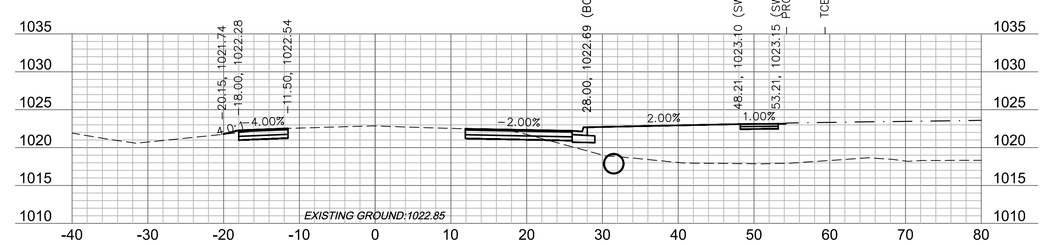

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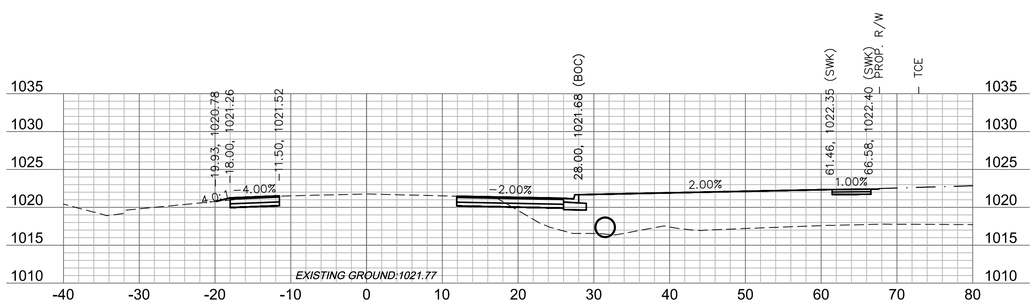

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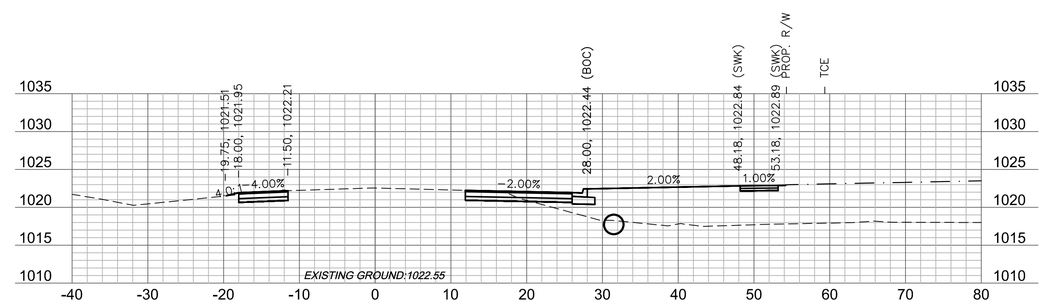

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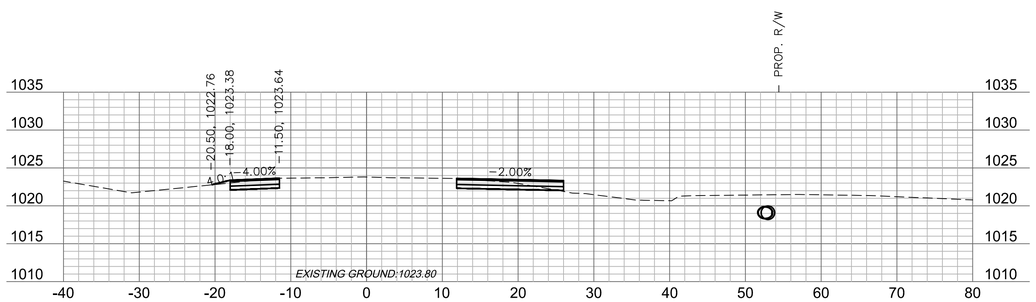

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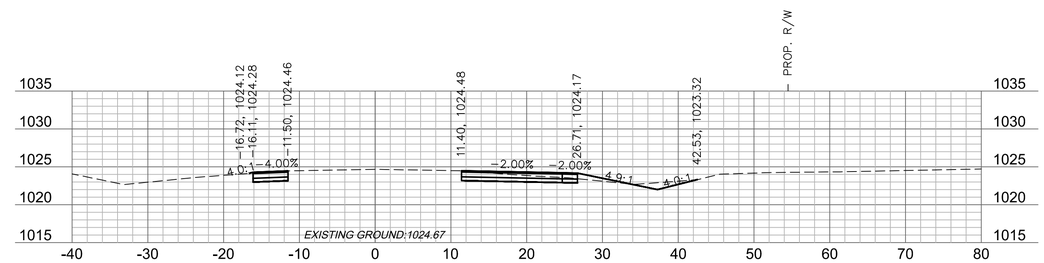

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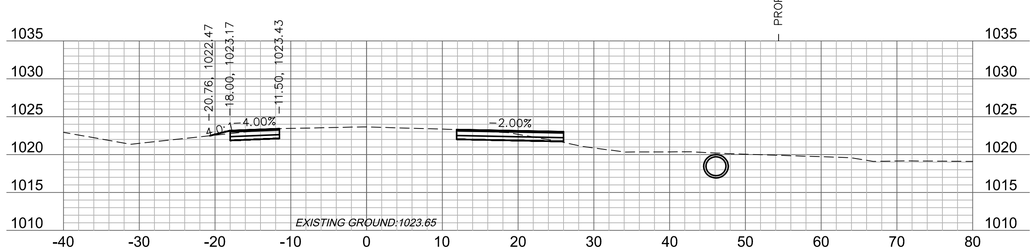

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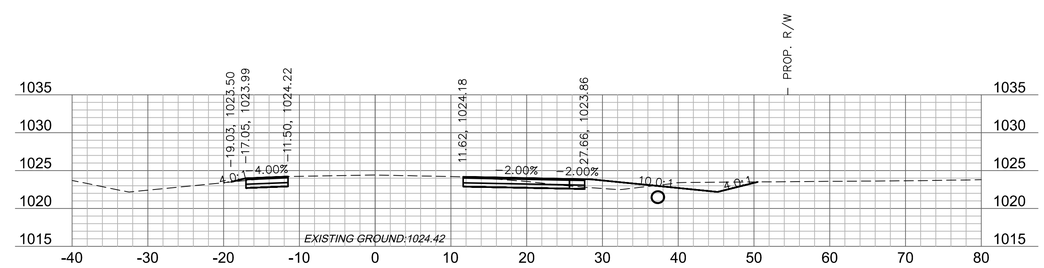

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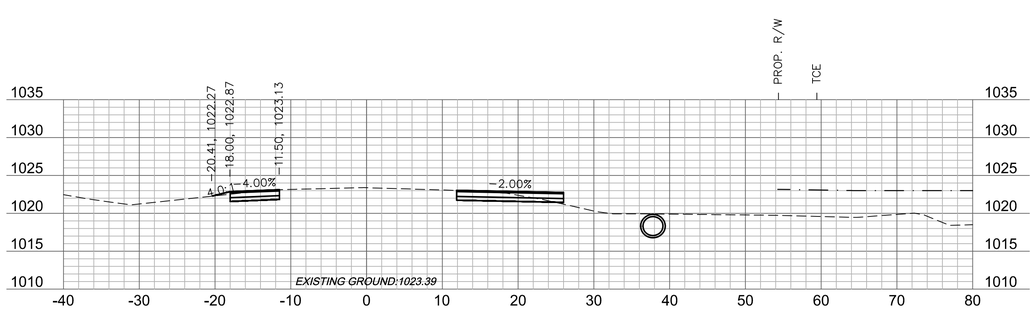

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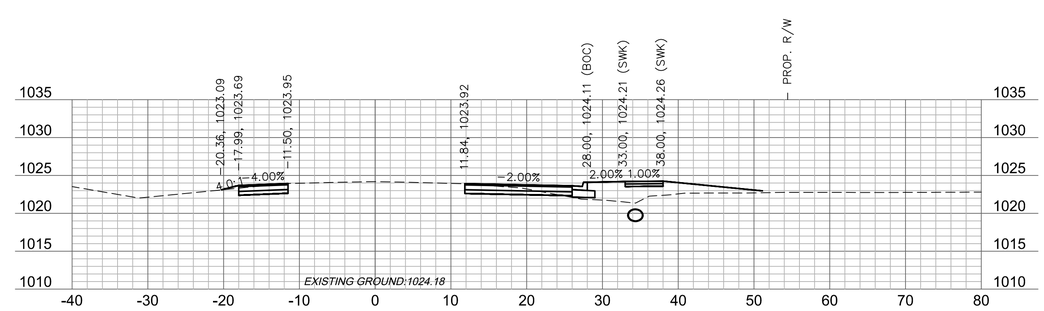

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REVISIONS

OLDHAM PARKWAY
CROSS SECTIONS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
DRAWN BY: AS
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QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
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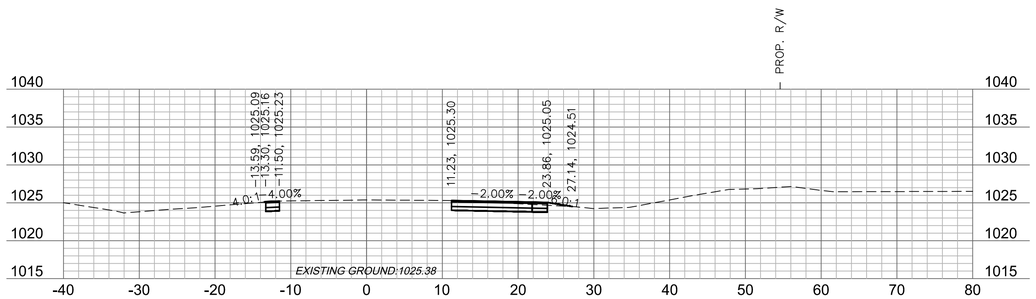

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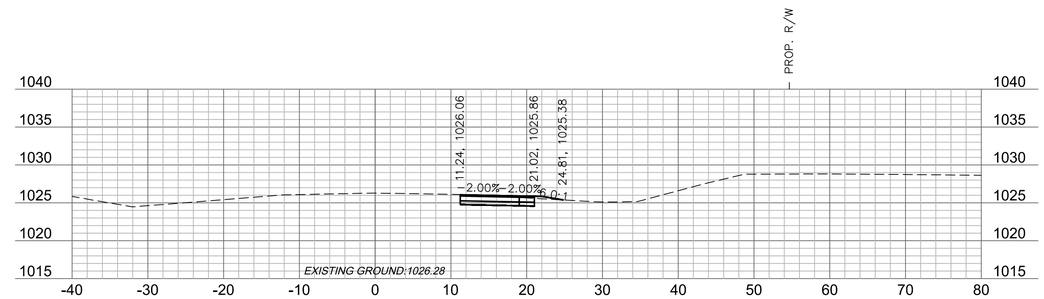

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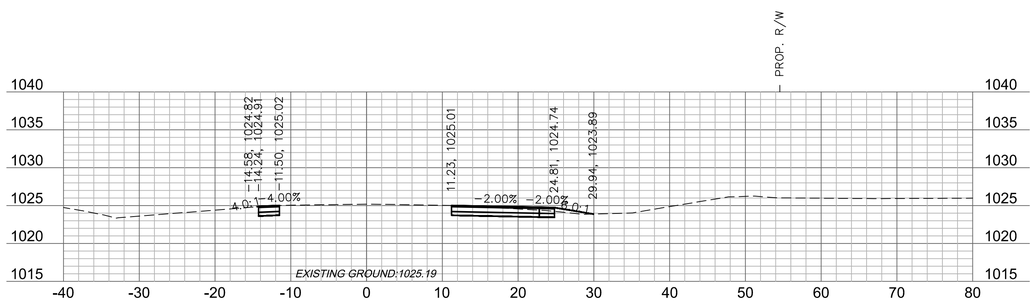

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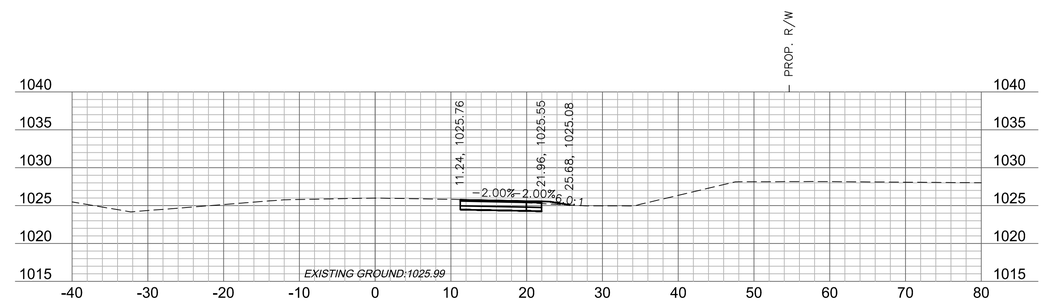

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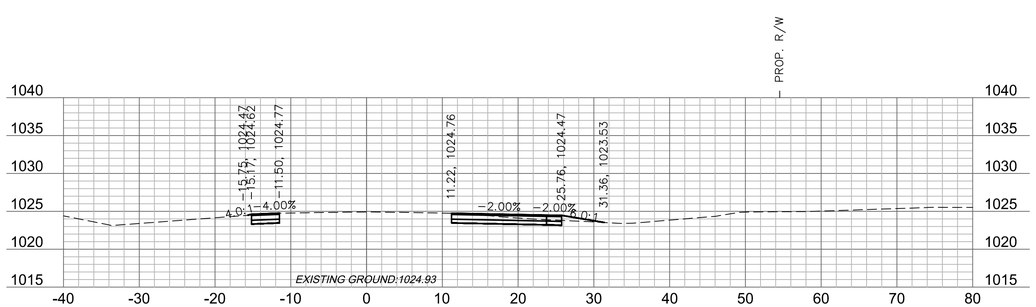

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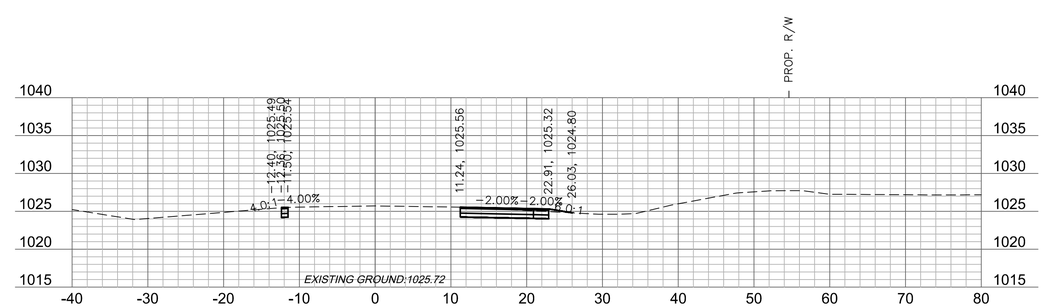

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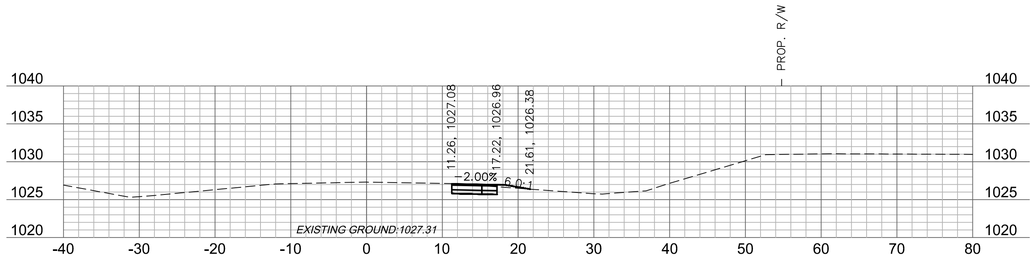

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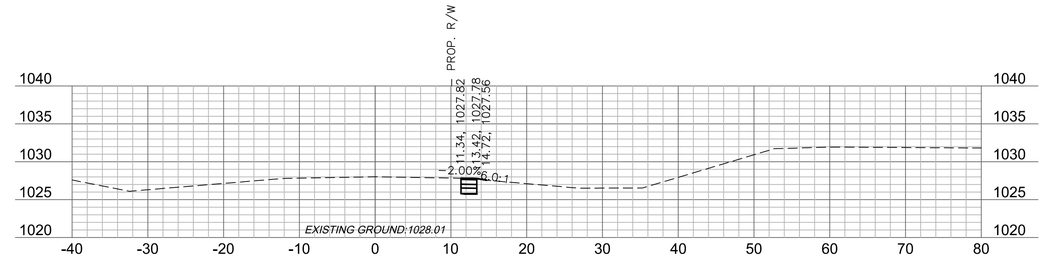

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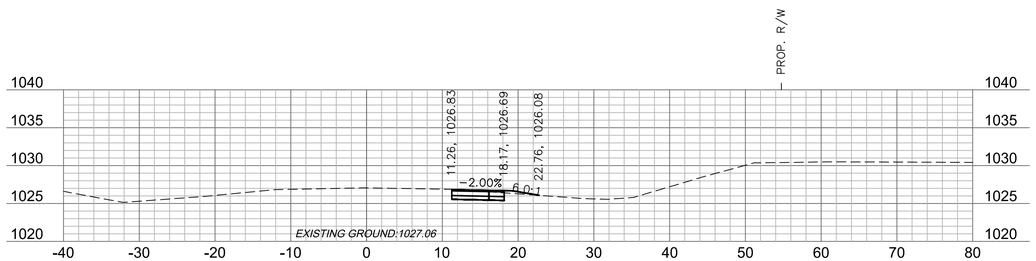

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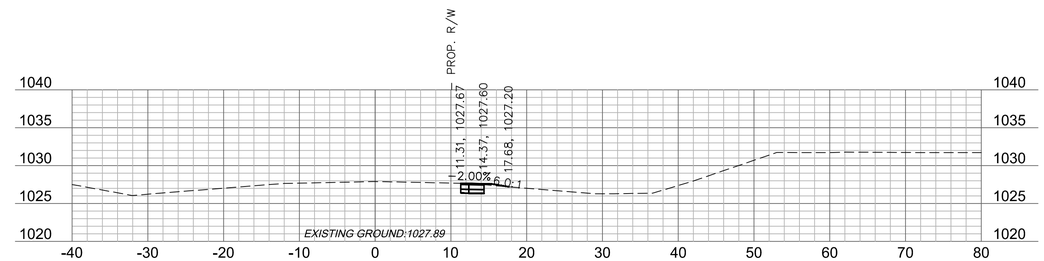

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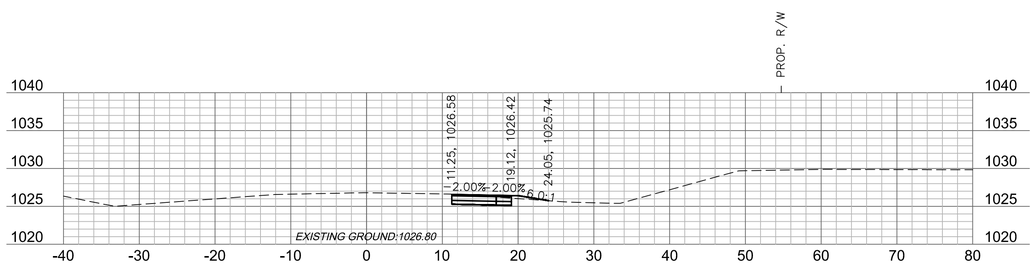

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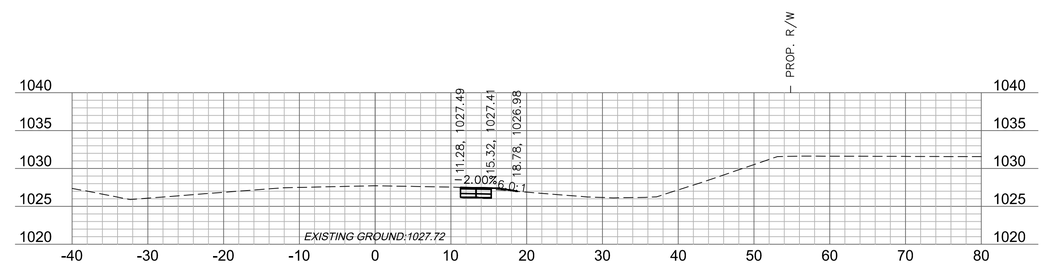

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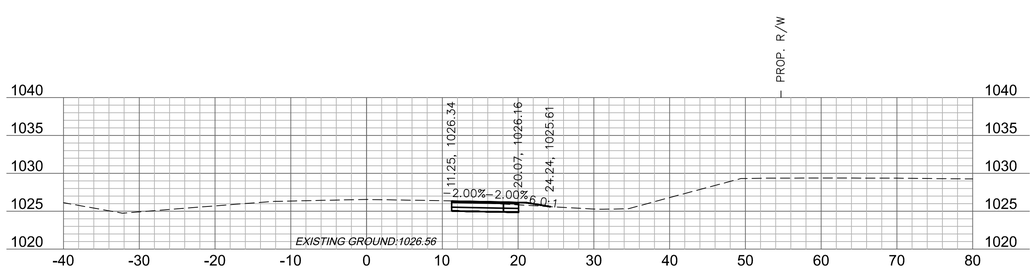

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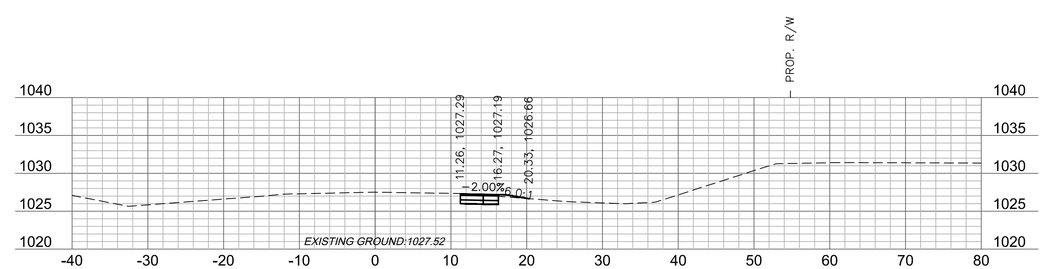

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OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

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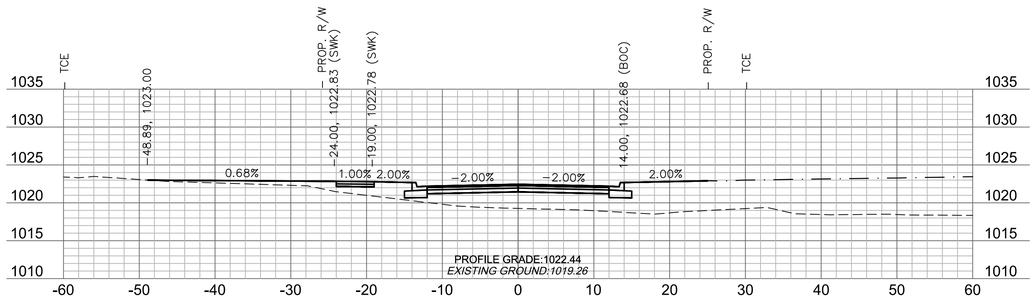

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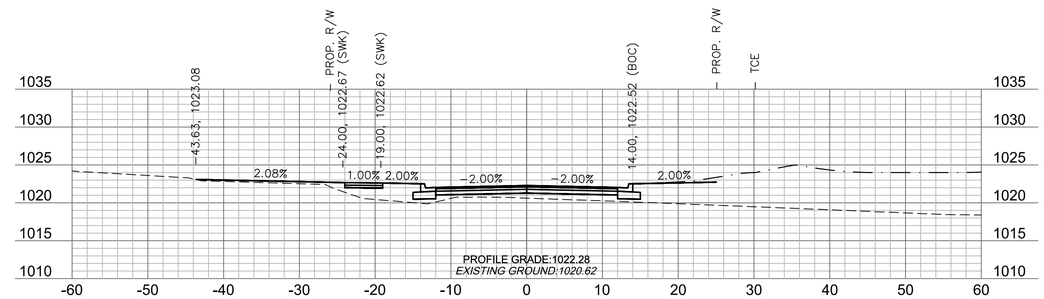

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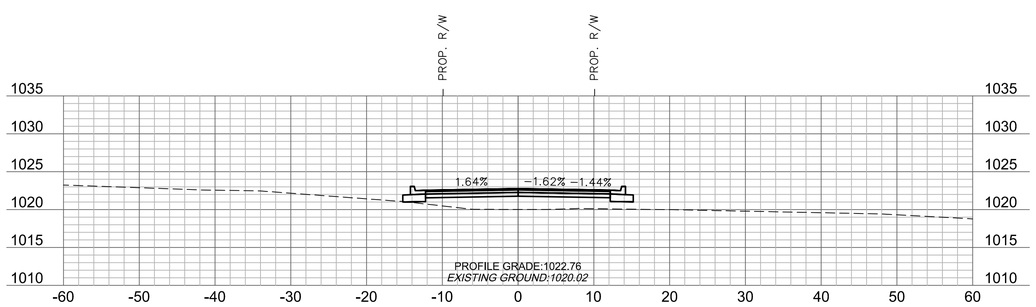

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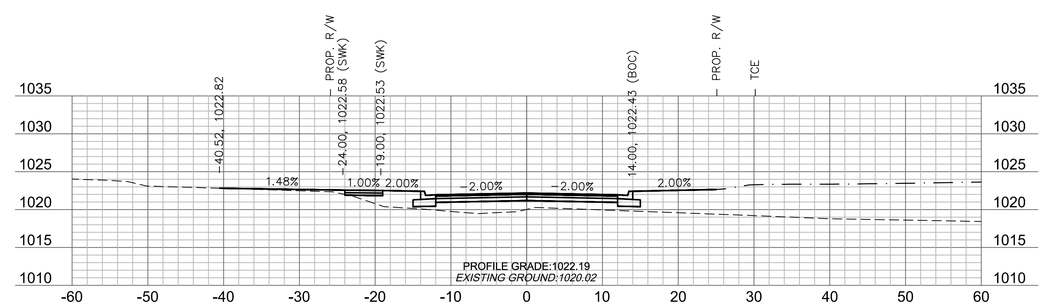

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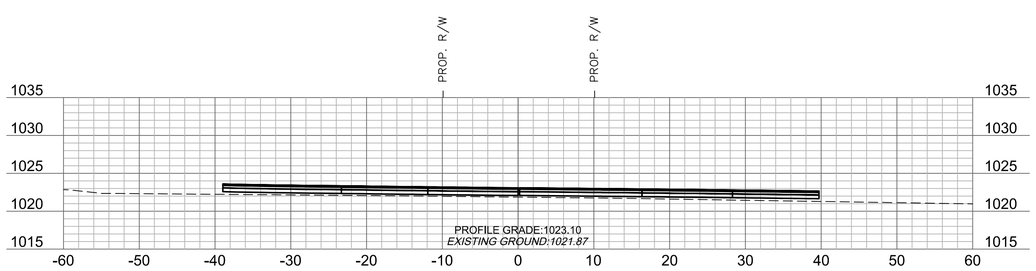

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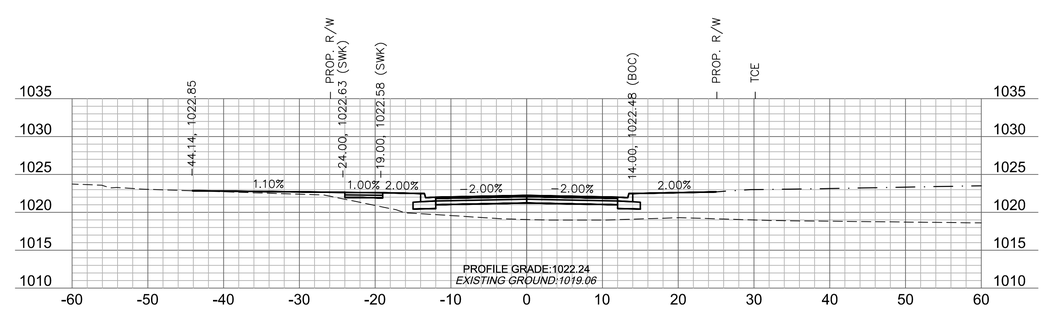

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OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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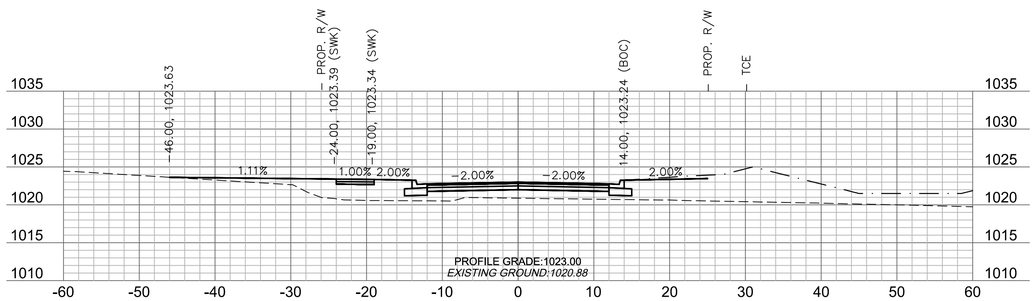

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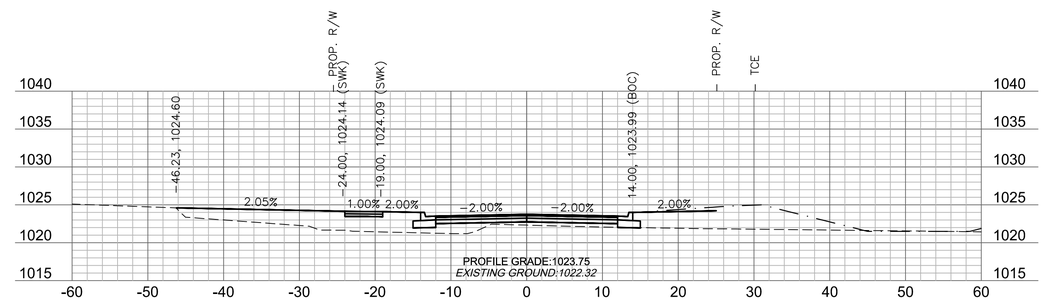

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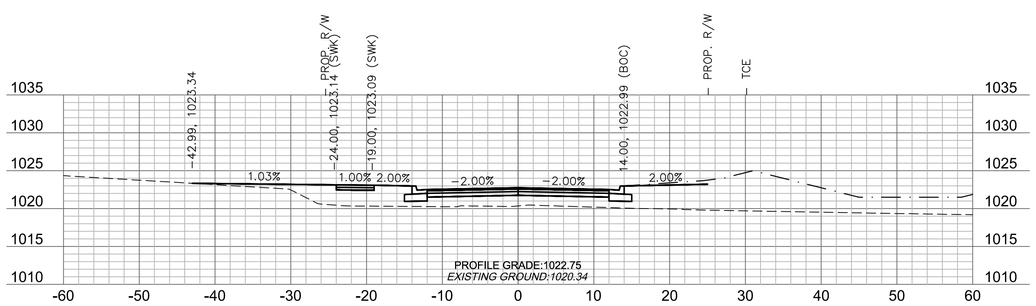

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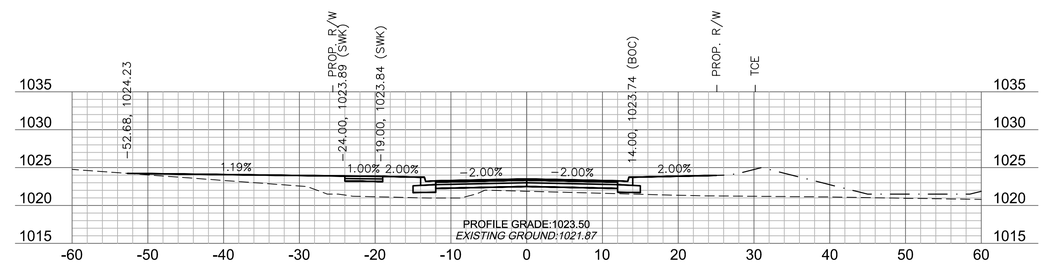

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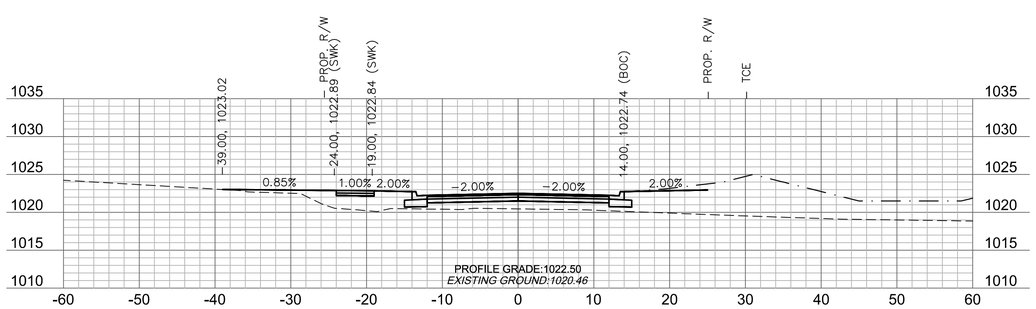

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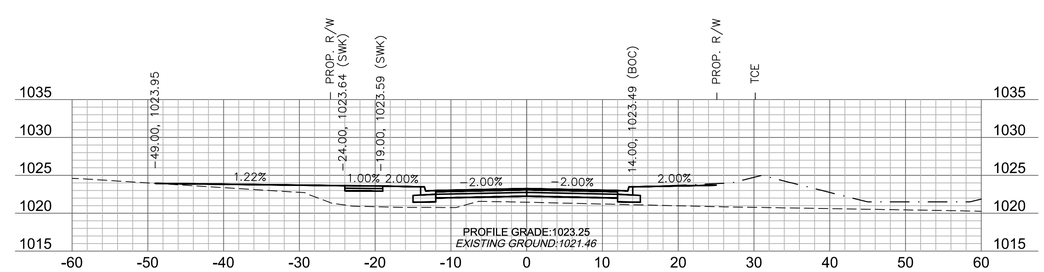

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SHEET
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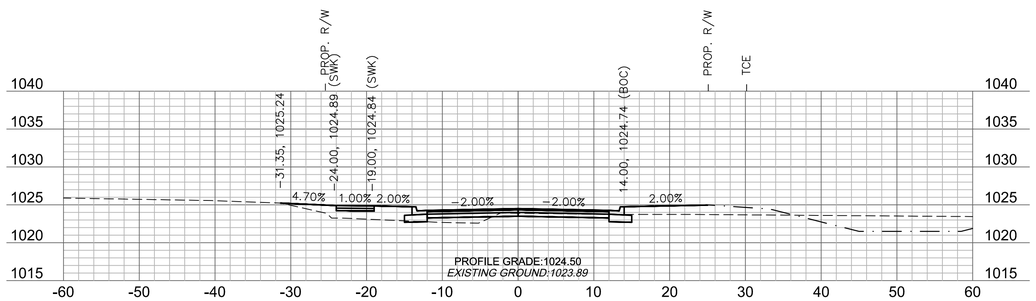

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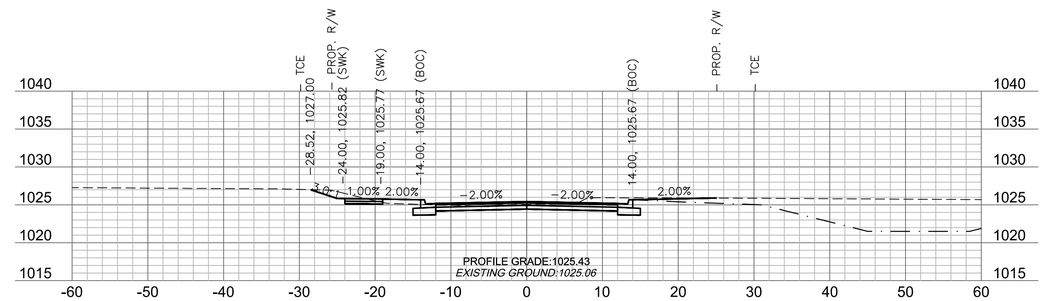

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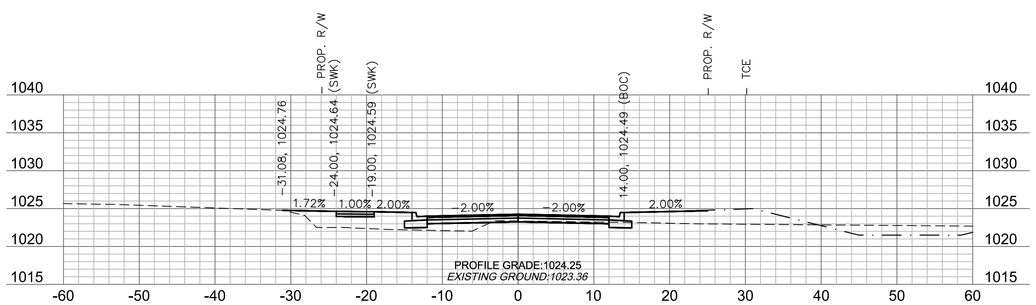

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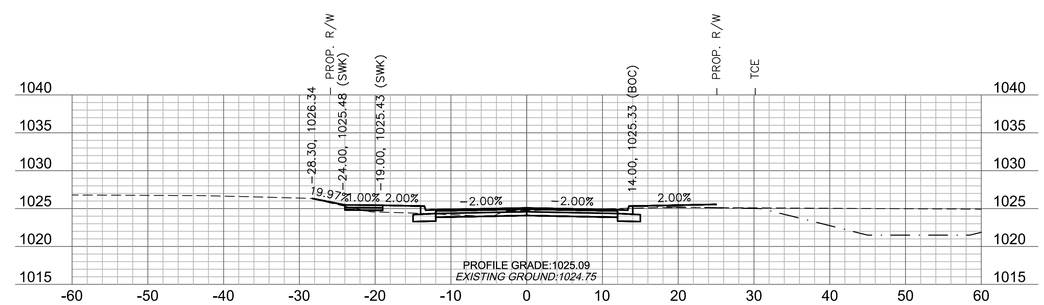

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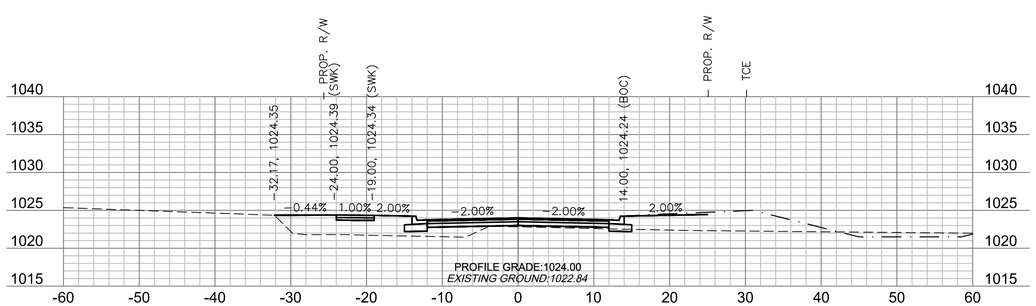

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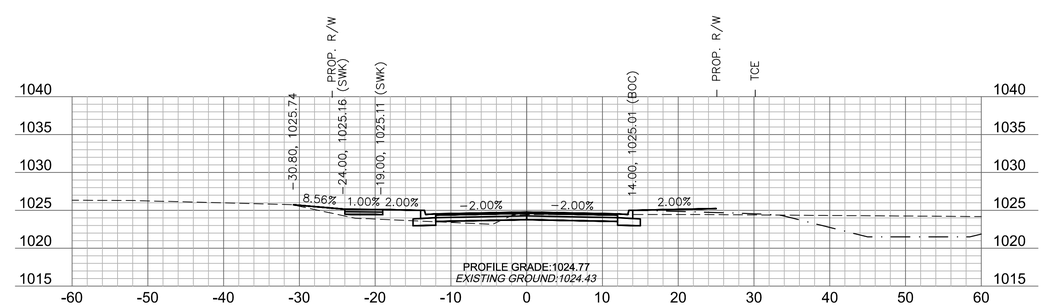

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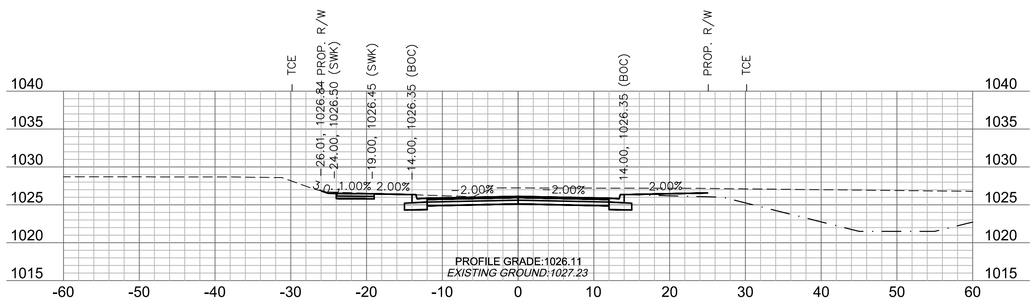

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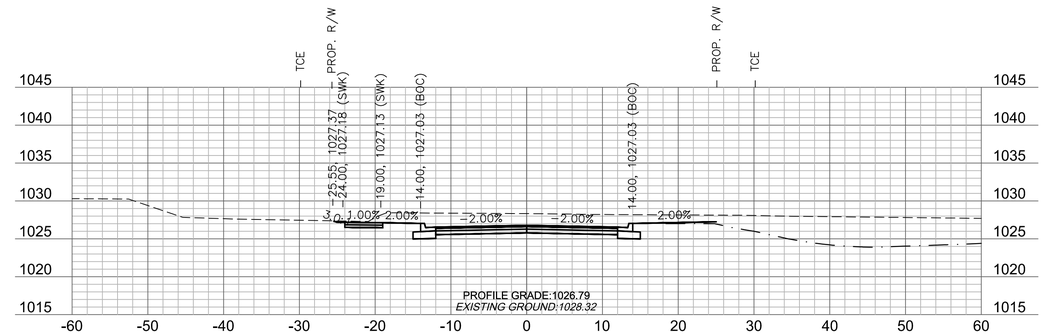

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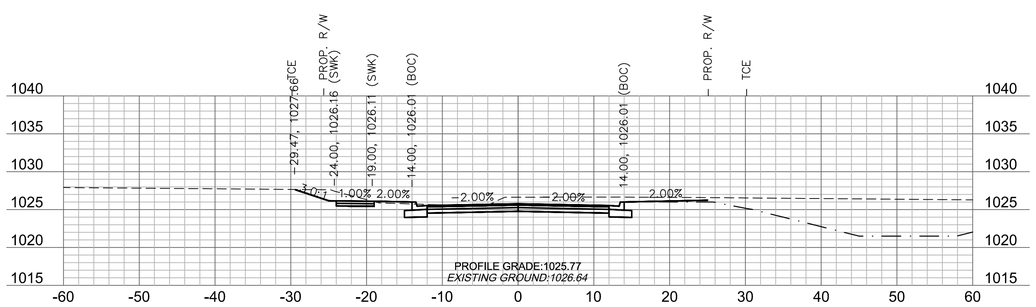

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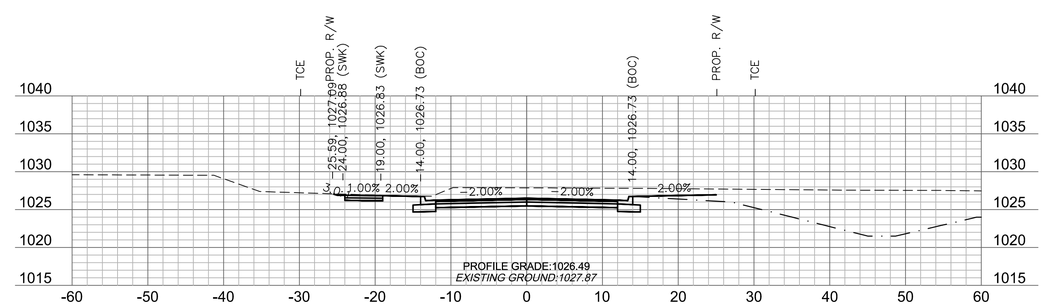

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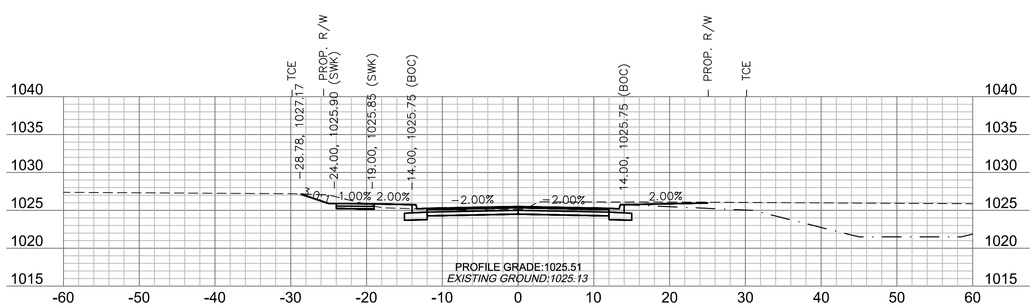

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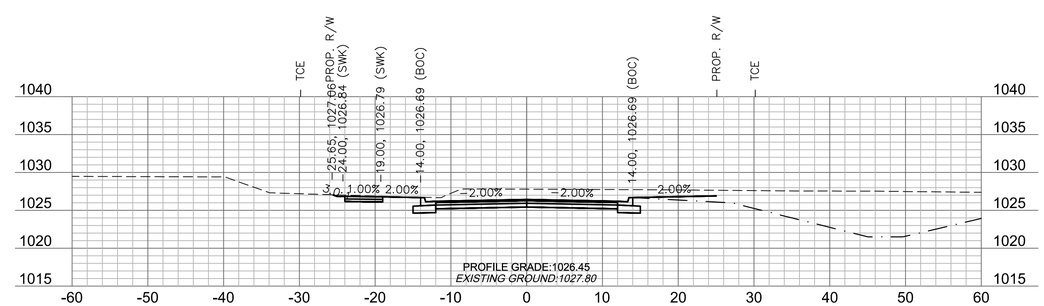

105+25

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PRINCETON DRIVE
CROSS SECTIONS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
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LEE'S SUMMIT, MISSOURI

2019

C.O.A. NO.: 001592
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QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_PCORR_81450
DATE: 07.19.19

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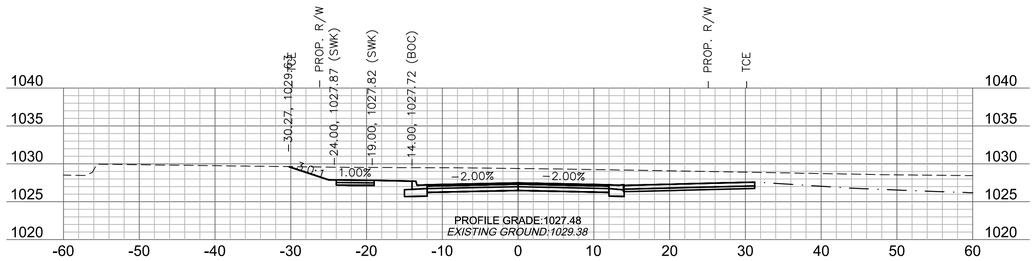

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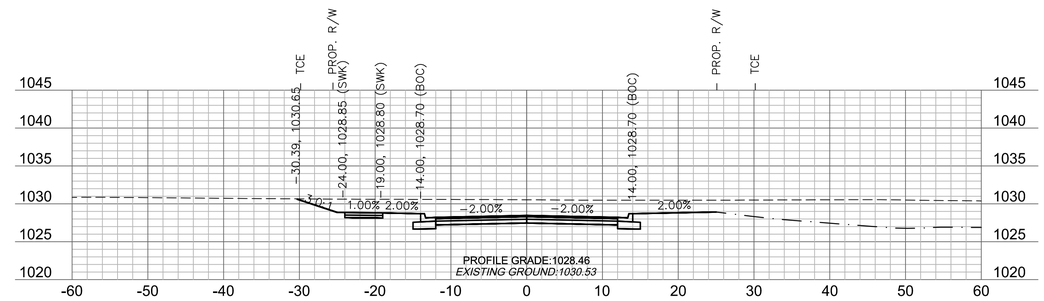

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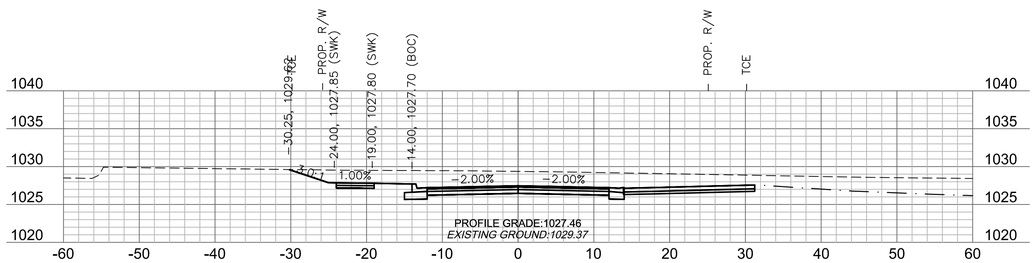

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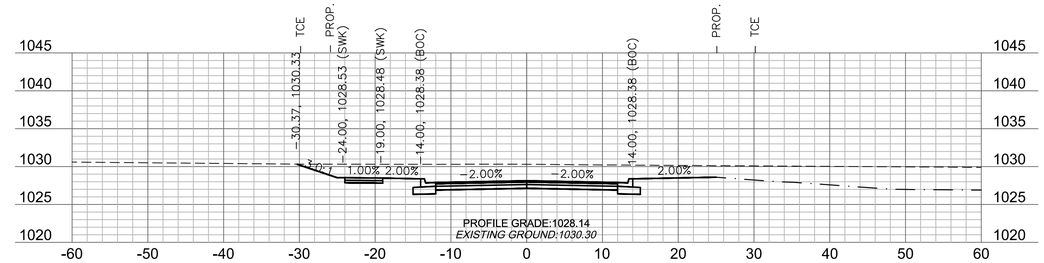

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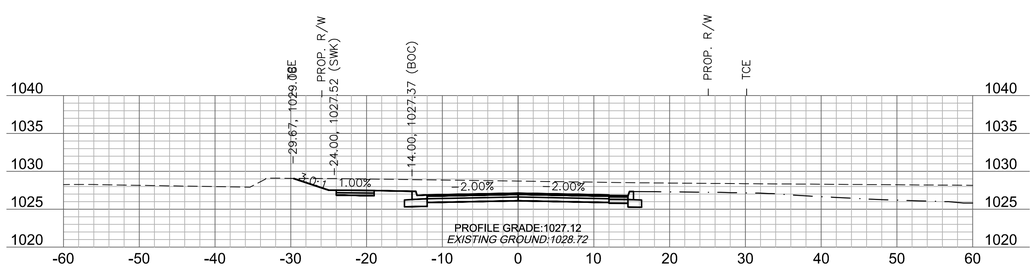

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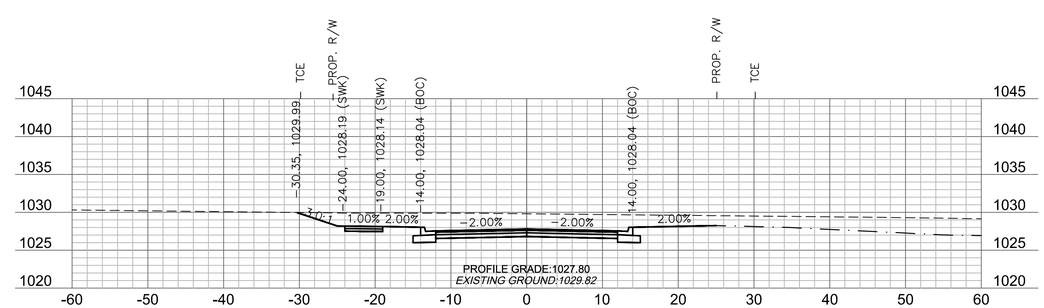

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PRINCETON DRIVE
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OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_PCORR_81450
DATE: 07.19.19

SHEET
T49 OF 70

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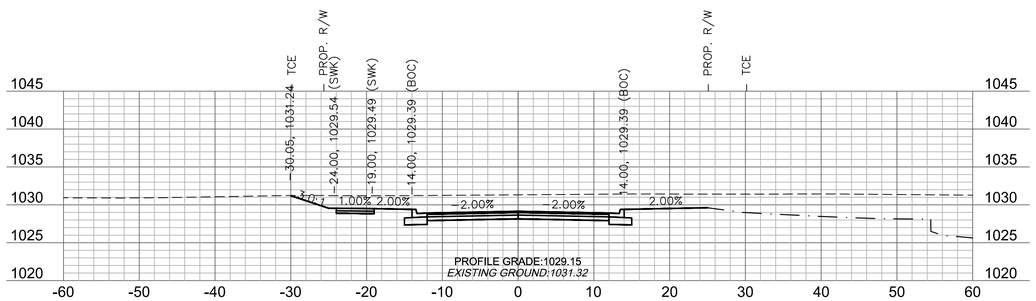

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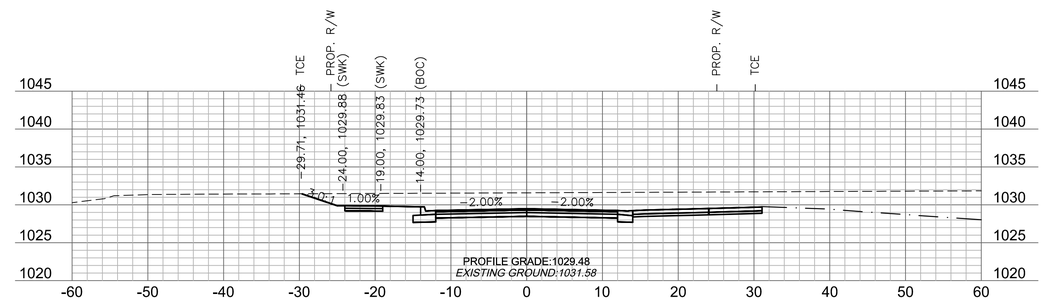

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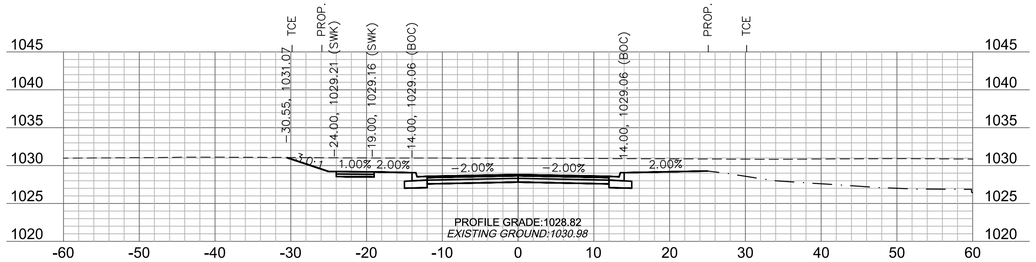

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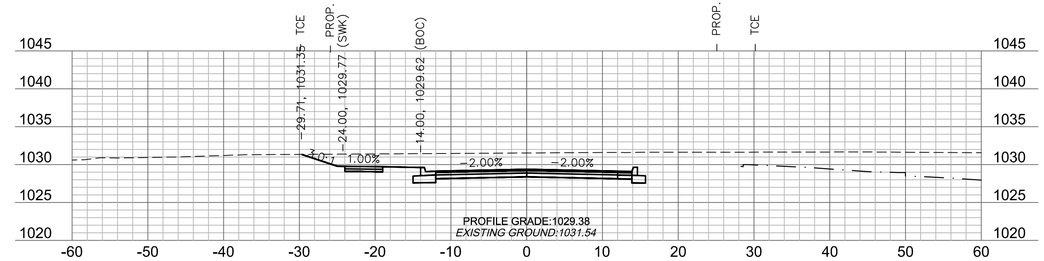

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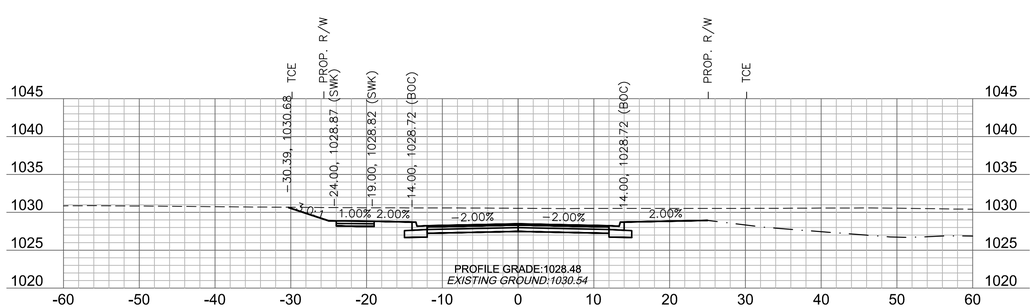

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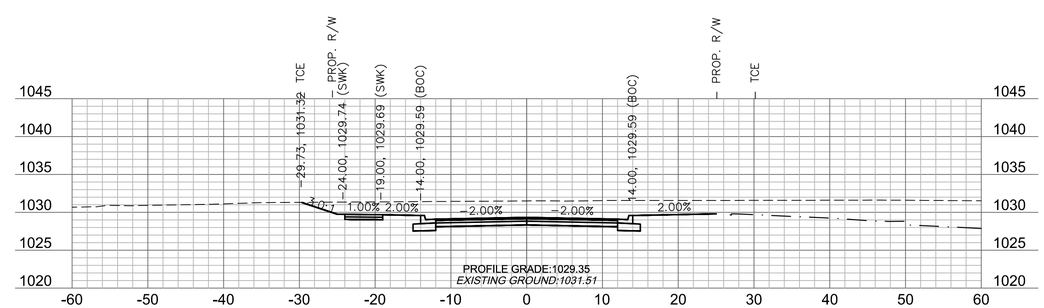

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CROSS SECTIONS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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PROJECT NO.: 018-1450
DWG NO.: T_PCORR_81450
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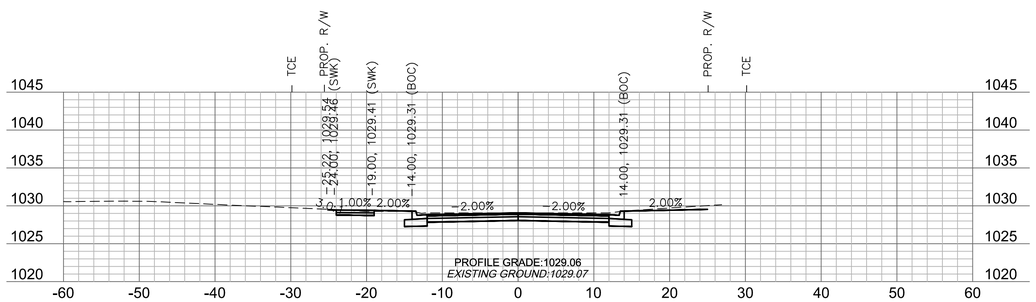

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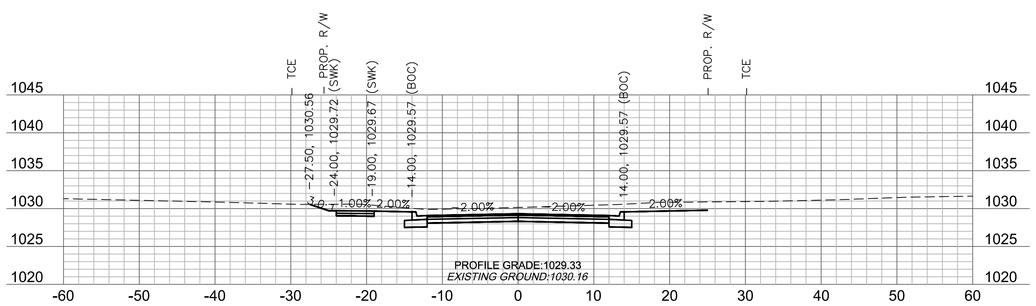

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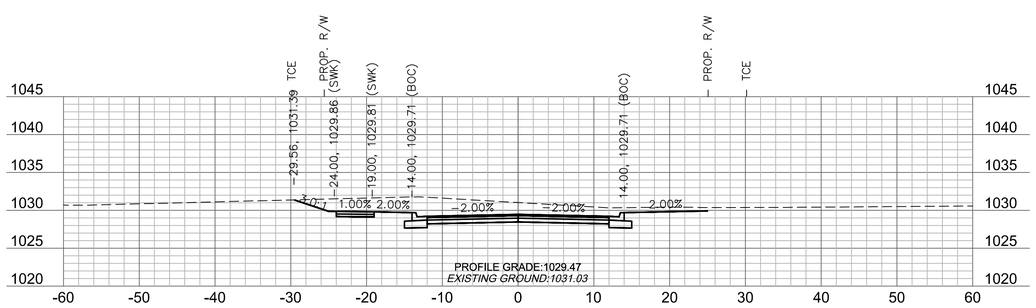

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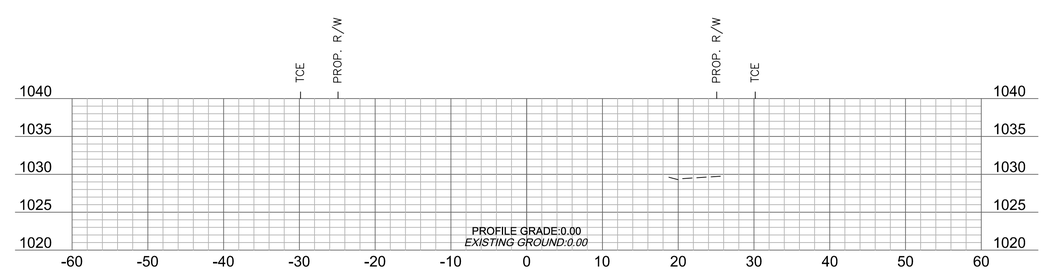

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

PRINCETON DRIVE
CROSS SECTIONS

OREILLY DEVELOPMENT SENIOR LIVING FACILITY
OLDHAM PARKWAY & PRINCETON DRIVE IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

2019

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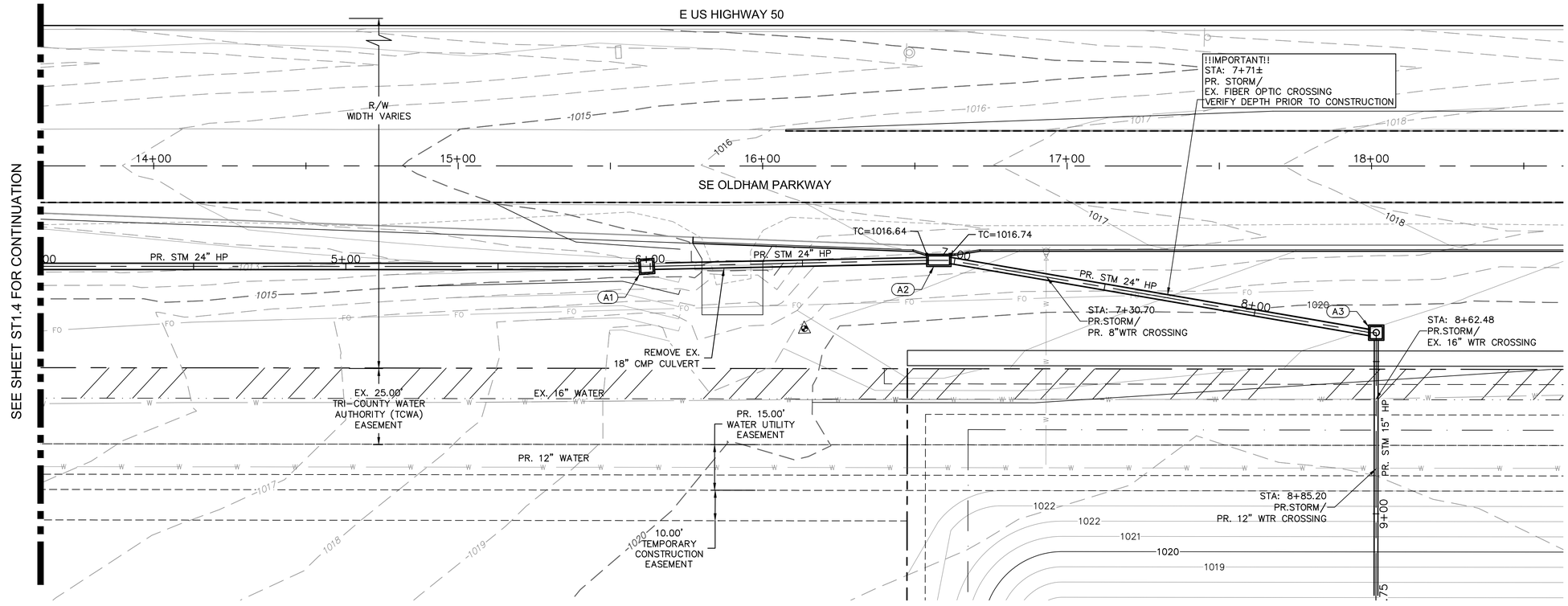
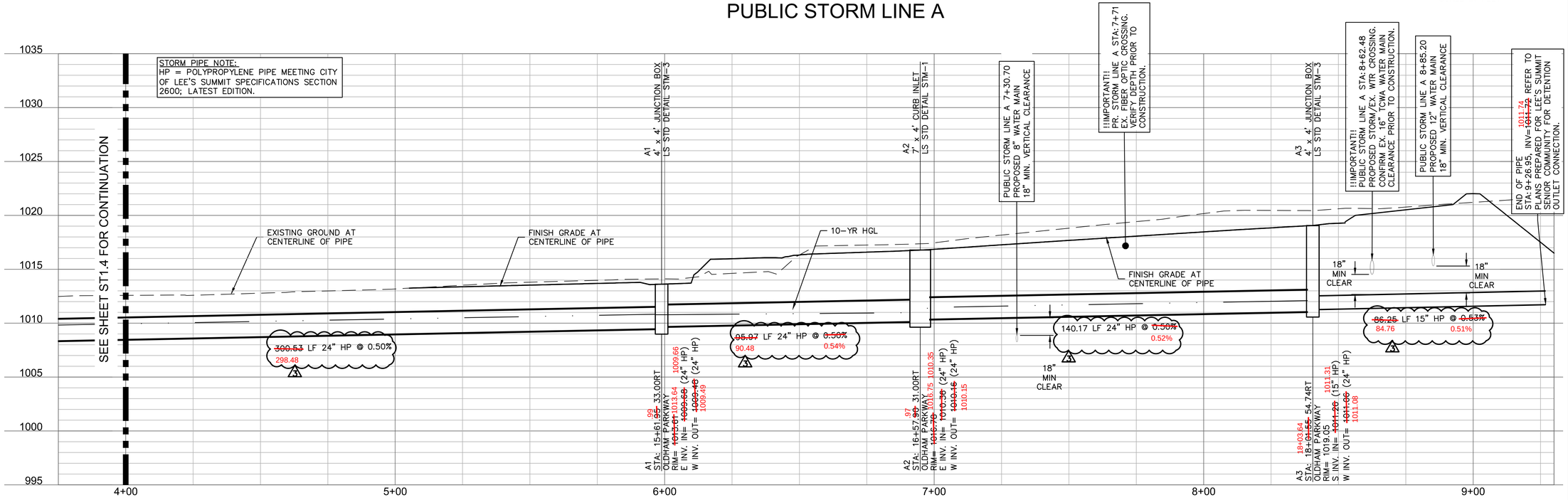
APPROVED BY: RBF
QA/QC BY: JKL/RBF
PROJECT NO.: 018-1450
DWG NO.: T_PCORR_81450
DATE: 07.19.19



AS-BUILT
11/18/22

PUBLIC STORM LINE A



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SE OLDHAM PARKWAY
PUBLIC STORM LINE A PLAN & PROFILE

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_PROF_81450
date: 07.19.19

SHEET
ST1.0

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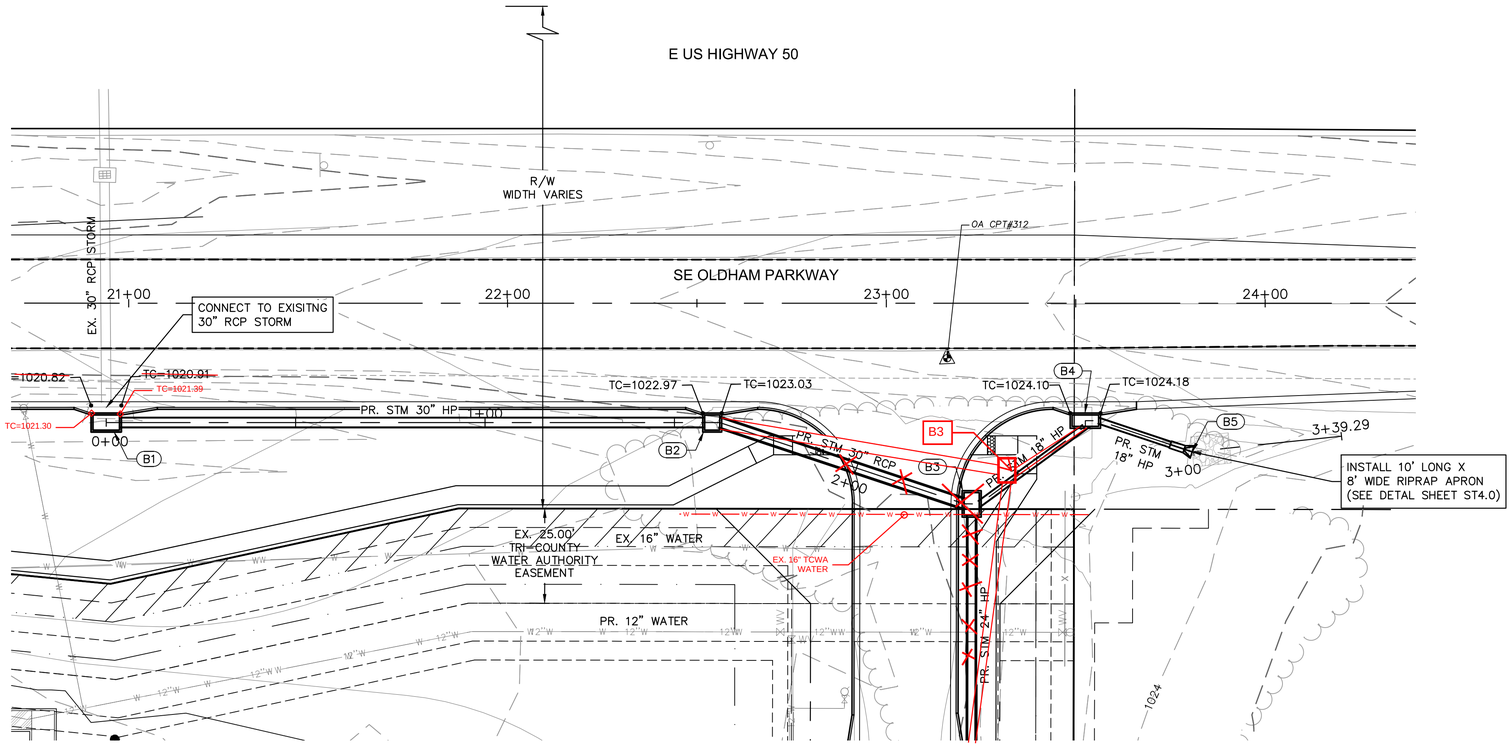
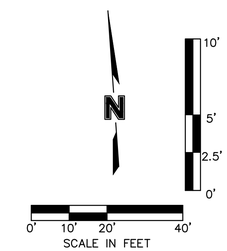


AS-BUILT
11/18/22



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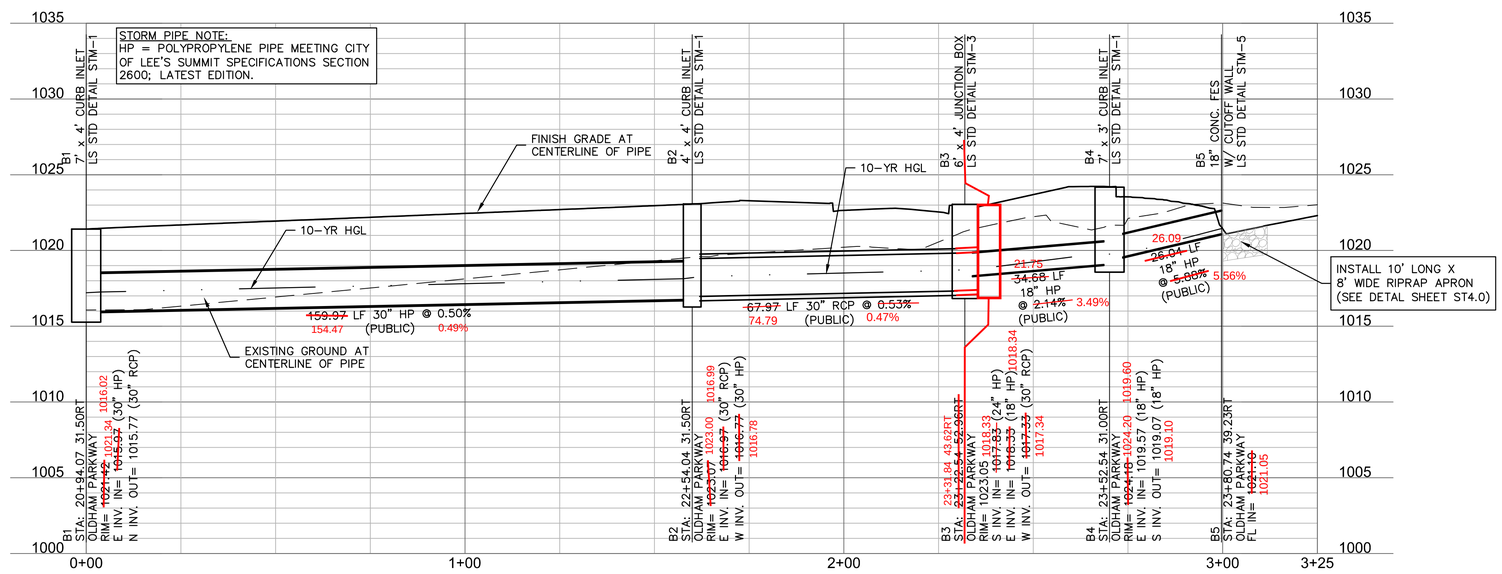

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REV. NO.	DATE	REVISIONS DESCRIPTION

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SE OLDHAM PARKWAY
PUBLIC STORM LINE B PLAN & PROFILE

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

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designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_PROF_81450
date: 07.19.19

SHEET
ST1.1

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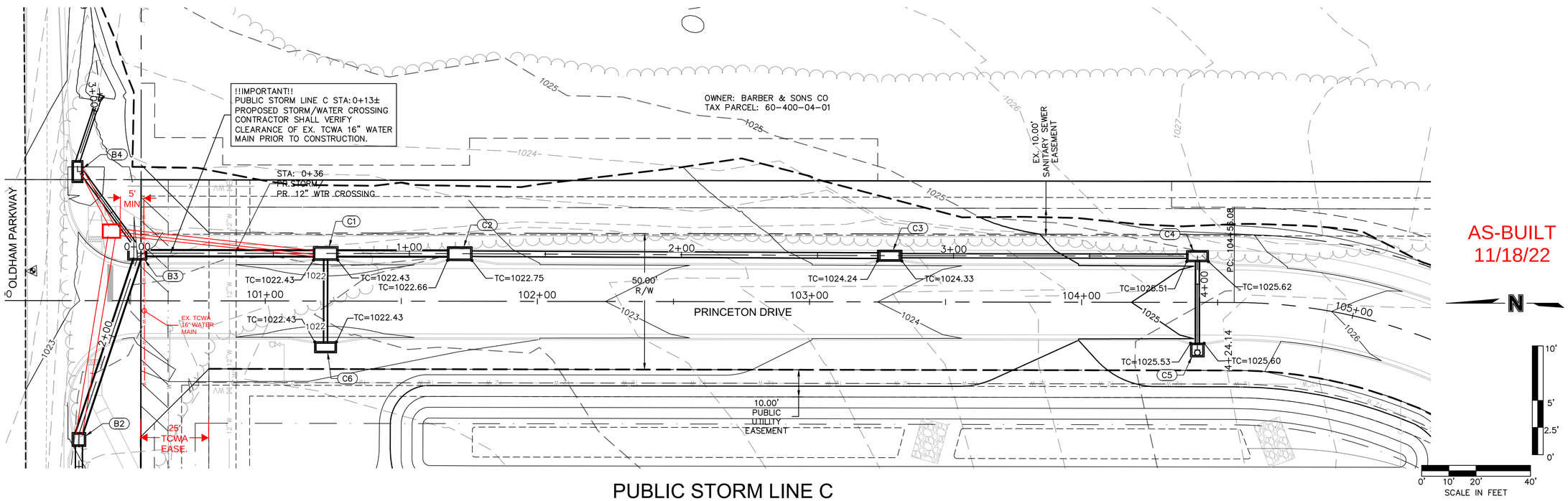

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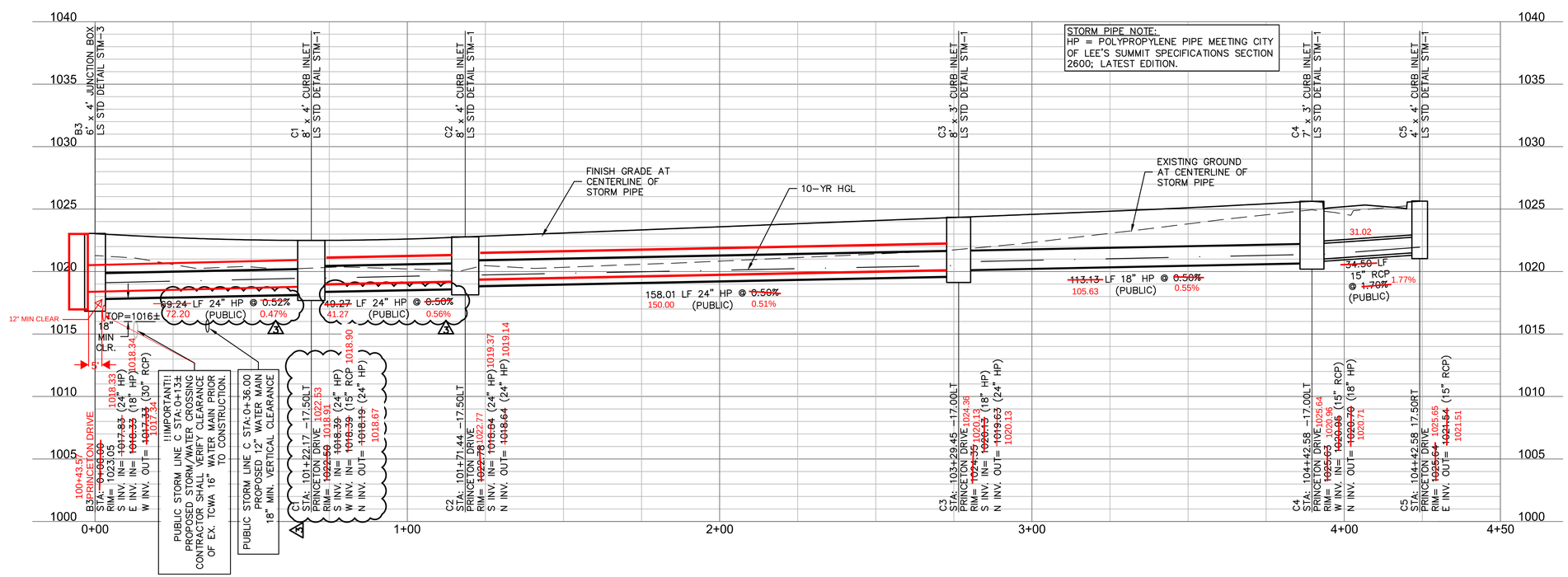

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PUBLIC STORM LINE C PLAN & PROFILE

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

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designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_PROF_81450
date: 07.19.19

SHEET
ST1.2

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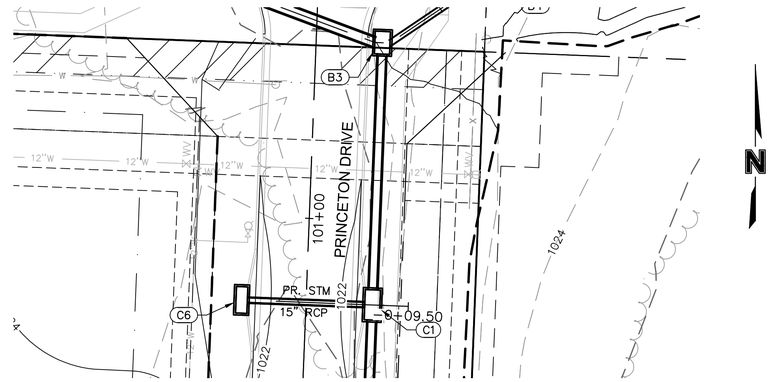
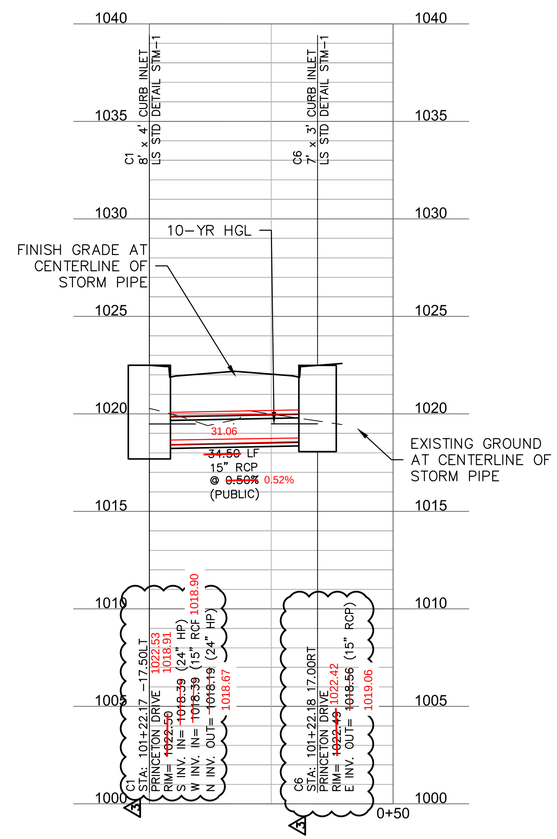
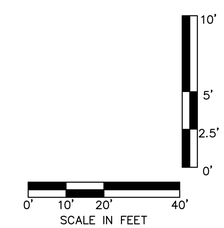


PUBLIC STORM LINE C6



AS-BUILT
11/18/22



STORM PIPE NOTE:
HP = POLYPROPYLENE PIPE MEETING CITY OF LEE'S SUMMIT SPECIFICATIONS SECTION 2600; LATEST EDITION.

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SE PRINCETON DRIVE
PUBLIC STORM LINE C6

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

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designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_PROF_81450
date: 07.19.19

SHEET
ST1.3

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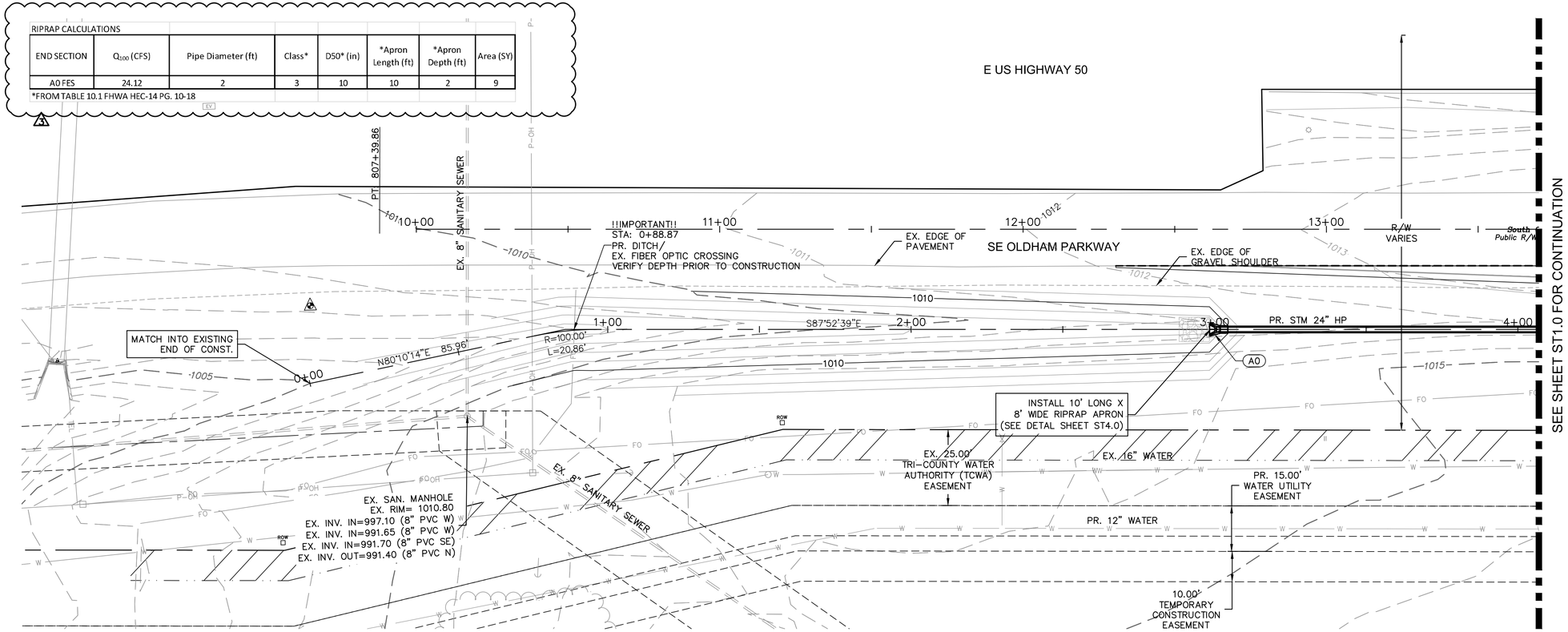
RIPRAP CALCULATIONS

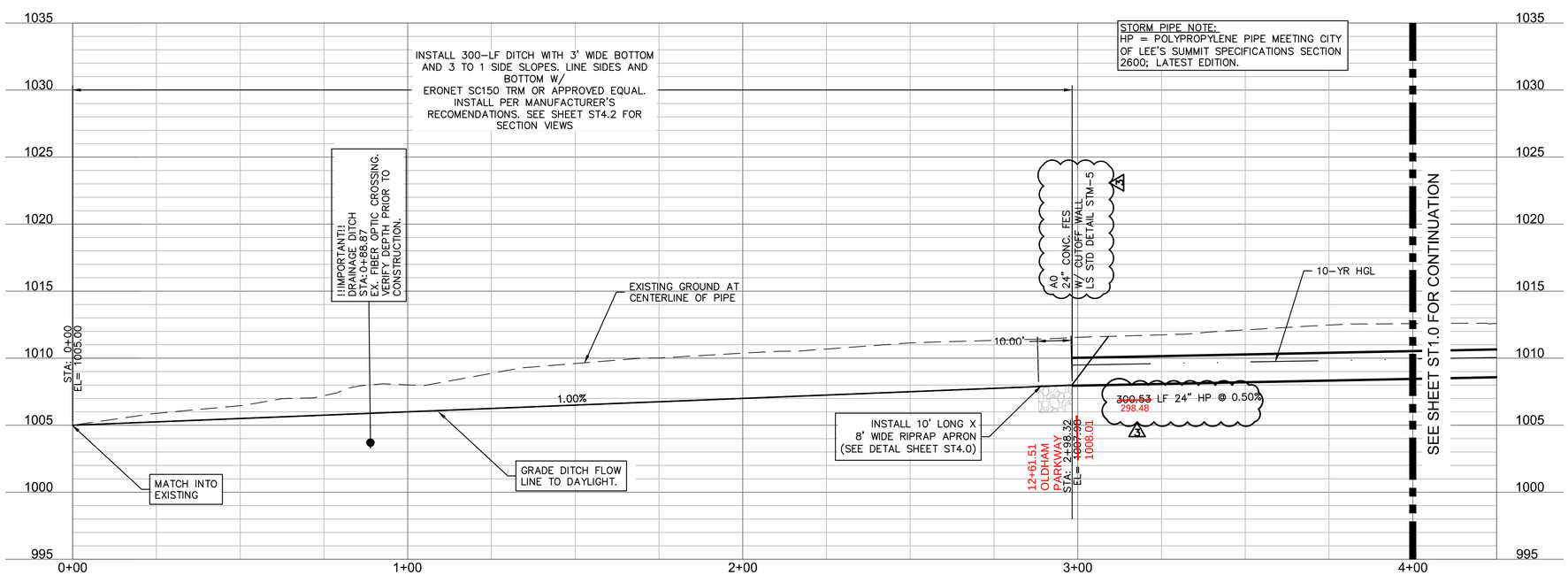
END SECTION	Q_{100} (CFS)	Pipe Diameter (ft)	Class*	D50* (in)	*Apron Length (ft)	*Apron Depth (ft)	Area (SY)
A0 FES	24.12	2	3	10	10	2	9

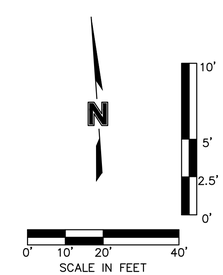
*FROM TABLE 10.1 FHWA HEC-14 PG. 10-18



AS-BUILT
11/18/22

DRIANAGE DITCH AND PUBLIC STORM LINE A





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NUMBER
PE-2012024241
PROFESSIONAL ENGINEER
7-24-19
RYAN V. JEPPSON
PROFESSIONAL ENGINEER
MO# PE-2012024241

REV. NO.	DATE	REVISIONS DESCRIPTION
1	07/19/2019	ENGR. REVIEW COMMENTS

REVISIONS

SE OLDHAM PARKWAY
DRAINAGE DITCH PLAN & PROFILE

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

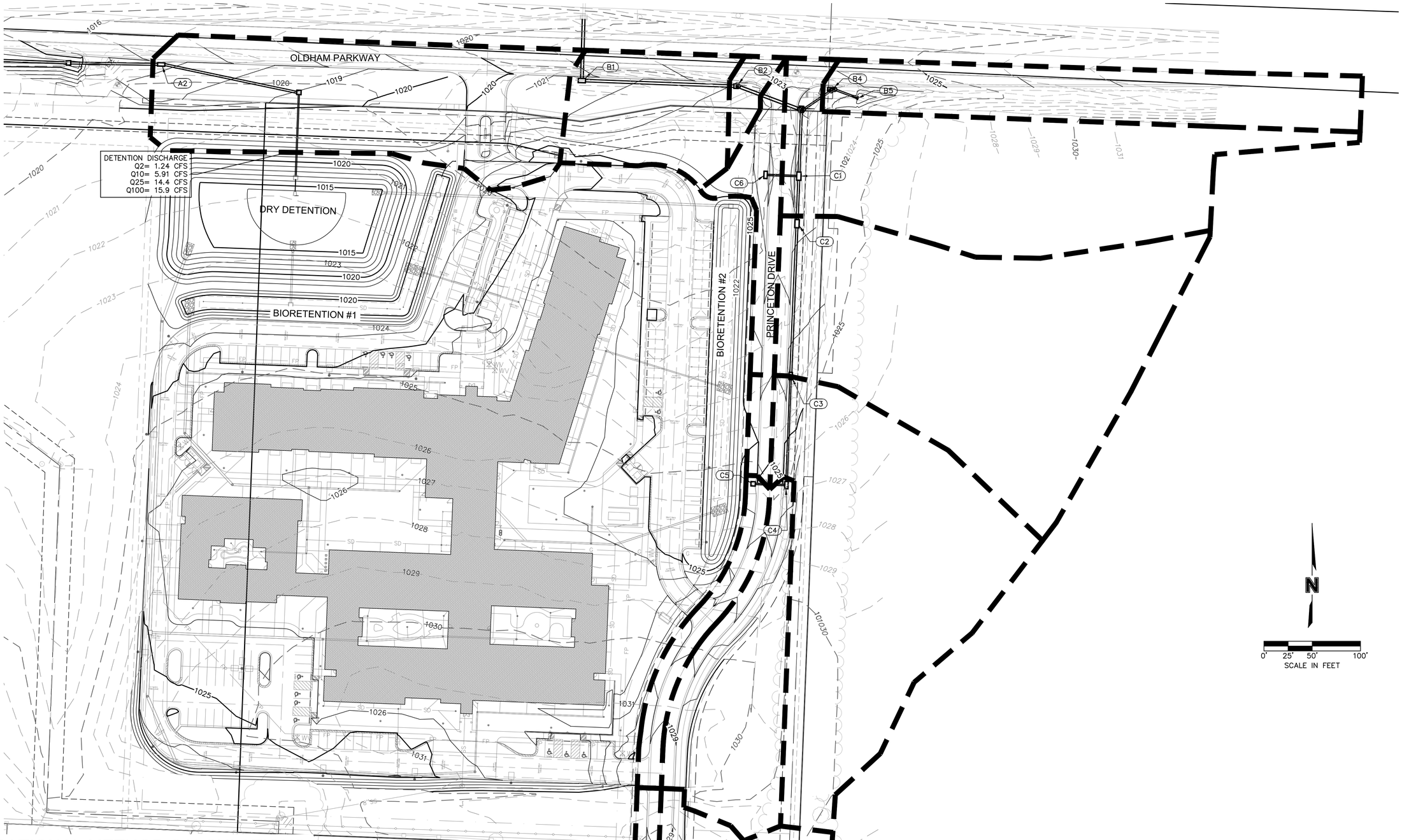
LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_PROF_81450
date: 07.19.19

SHEET
ST1.4

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\GNCV\PUBLIC STORM\C-STM_PROF_81450.DWG USER: rjeppson
DATE: Jul 24, 2019 2:57pm XREFS: V_XBOU_81450 V_TOPO_81450 C_PBASE_81450 T_PBASE_81450 C_TBLK_22x34_81450



RATIONAL METHOD CALCULATIONS

INLET	DRAINAGE AREA (AC)	Pavement Area (AC) C=0.90	Open Space Area (AC) C=0.30	RUNOFF COEFFICIENT "C2" & "C10"	RUNOFF COEFFICIENT "C25" (1.1)	RUNOFF COEFFICIENT "C50" (1.20)	RUNOFF COEFFICIENT "C100" (1.25)	Time of Concentration "Tc" (min)	2-YEAR INTENSITY	10-YEAR INTENSITY	25-YEAR INTENSITY	50-YEAR INTENSITY	100-YEAR INTENSITY	Q2year (CFS)	Q10year (CFS)	Q25year (CFS)	Q50year (CFS)	Q100year (CFS)
A2 CURB INLET	1.21	0.43	0.78	0.51	0.56	0.62	0.64	5.00	5.41	7.35	8.53	9.40	10.32	3.36	4.57	5.83	7.00	8.02
B1 CURB INLET	0.47	0.12	0.35	0.45	0.49	0.54	0.56	5.00	5.41	7.35	8.53	9.40	10.32	1.14	1.55	1.97	2.37	2.71
B2 CURB INLET	0.08	0.03	0.05	0.54	0.59	0.65	0.68	5.00	5.41	7.35	8.53	9.40	10.32	0.23	0.32	0.41	0.49	0.56
B4 CURB INLET	0.52	0.29	0.23	0.64	0.70	0.77	0.80	5.00	5.41	7.35	8.53	9.40	10.32	1.80	2.44	3.11	3.74	4.28
B5 FES	0.19	0.10	0.09	0.63	0.69	0.75	0.78	5.00	5.41	7.35	8.53	9.40	10.32	0.64	0.87	1.11	1.34	1.53
C1 CURB INLET	1.42	0.09	1.33	0.34	0.37	0.41	0.42	15.00	3.72	5.18	6.01	6.70	7.36	1.79	2.49	3.18	3.87	4.43
C2 CURB INLET	1.93	0.07	1.86	0.32	0.36	0.39	0.40	15.00	3.72	5.18	6.01	6.70	7.36	2.32	3.23	4.12	5.01	5.73
C3 CURB INLET	1.67	0.05	1.62	0.32	0.35	0.38	0.40	15.00	3.72	5.18	6.01	6.70	7.36	1.97	2.74	3.50	4.26	4.87
C4 CURB INLET	0.66	0.15	0.51	0.44	0.48	0.53	0.55	5.00	5.41	7.35	8.53	9.40	10.32	1.57	2.13	2.72	3.27	3.74
C5 CURB INLET	0.23	0.13	0.10	0.63	0.69	0.76	0.79	5.00	5.41	7.35	8.53	9.40	10.32	0.78	1.07	1.36	1.64	1.87
C6 CURB INLET	0.26	0.14	0.12	0.62	0.68	0.75	0.78	5.00	5.41	7.35	8.53	9.40	10.32	0.88	1.19	1.52	1.82	2.09

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"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION

REVISIONS

SE OLDHAM PARKWAY & PRINCETON DRIVE
DRAINAGE AREA MAP

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_DRN_81450
date: 07.19.19

SHEET
ST3.0

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\GNCV\PUBLIC STORM\C_DRN_81450.DWG USER: rjeppson
DATE: Jul 24, 2019 3:05pm XREFS: C_TBLK_22x34_81450 t_pbase_81450 t_pstickmap_70830 v_xbou_81450 v_topo_81450 C_PBASE_81450

100-YEAR PUBLIC STORM SEWER HYDRAULIC CALCULATIONS

MyReport

Page 1

Line No.	Line ID	Line Length (ft)	Line Size (in)	n-val Pipe	Invert Dn (ft)	Invert Up (ft)	Line Slope (%)	Gnd/Rim El Dn (ft)	Gnd/Rim El Up (ft)	HGL Dn (ft)	HGL Up (ft)	Vel Ave (ft/s)	Defl Ang (Deg)	J-Loss Coeff	Minor Loss (ft)	Energy Loss (ft)	Known Q (cfs)	Flow Rate (cfs)
1	EX 30-IN. RCP	61.411	30	0.013	1014.45	1015.77	2.15	0.00	1021.42	1015.74	1017.69	10.14	91.614	1.50 z	1.44	0.000	2.71	31.81
2	P-B2	159.969	30	0.012	1015.97	1016.77	0.50	1021.42	1023.07	1017.87	1018.67	7.26	-89.493	0.52	0.43	0.799	0.56	29.10
3	P-B3	67.970	30	0.013	1016.97	1017.33	0.53	1023.07	1023.05	1019.10	1019.37	6.53	17.292	0.96	0.66	0.321	0.00	28.54
4	P-C1	69.240	24	0.012	1017.83	1018.19	0.52	1023.05	1022.50	1020.03	1020.63	7.24	72.806	1.50	1.22	0.596	4.43	22.73
5	P-C2	49.270	24	0.012	1018.39	1018.64	0.51	1022.50	1022.78	1021.85	1022.06	5.16	0.524	0.50	0.21	0.216	5.73	16.21
6	C3	158.010	24	0.012	1018.84	1019.63	0.50	1022.78	1024.35	1022.27	1022.56	3.34	-0.523	0.50	0.09	0.289	4.87	10.48
7	P-C4	113.126	18	0.012	1020.13	1020.70	0.50	1024.35	1025.63	1022.65	1022.92	3.17	0.000	1.50	0.24	0.275	3.74	5.61
8	P-C5	34.500	15	0.013	1020.95	1021.54	1.71	1025.63	1025.64	1023.16	1023.19	1.52	90.000	1.00	0.04	0.029	1.87	1.87
9	P-B4	34.680	18	0.012	1018.33	1019.07	2.13	1023.05	1024.18	1020.03	1020.00 j	4.17	-53.320	1.09 z	n/a	0.136	4.28	5.81
10	P-B5	26.040	18	0.012	1019.57	1021.10	5.88	1024.18	1022.70	1020.00	1021.56	3.48	43.121	1.00 z	0.17	0.000	1.53	1.53
11	C6	34.500	15	0.013	1018.39	1018.56	0.49	1022.50	1022.49	1021.85	1021.88	1.70	90.004	1.00	0.05	0.036	2.09	2.09
12	P-A1	300.530	24	0.012	1007.98	1009.48	0.50	1010.98	1013.61	1009.98	1012.85	7.61	2.122	0.15	0.14	2.865	0.00	23.92
13	P-A2	95.970	24	0.012	1009.68	1010.16	0.50	1013.61	1016.78	1012.98	1013.90	7.61	0.000	0.63	0.57	0.915	8.02	23.92
14	P-A3	140.170	24	0.012	1010.36	1011.06	0.50	1016.78	1019.05	1014.46	1015.05	5.06	21.462	0.94	0.37	0.590	0.00	15.90

Project File: PUBLIC STORM 100-YR.stm | Number of lines: 14 | Date: 7/24/2019

NOTES: ** Critical depth

Storm Sewers

10-YEAR PUBLIC STORM SEWER HYDRAULIC CALCULATIONS

MyReport

Page 1

Line No.	Line ID	Line Length (ft)	Line Size (in)	n-val Pipe	Invert Dn (ft)	Invert Up (ft)	Line Slope (%)	Gnd/Rim El Dn (ft)	Gnd/Rim El Up (ft)	HGL Dn (ft)	HGL Up (ft)	Vel Ave (ft/s)	Defl Ang (Deg)	J-Loss Coeff	Minor Loss (ft)	Energy Loss (ft)	Known Q (cfs)	Flow Rate (cfs)
1	EX 30-IN. RCP	61.411	30	0.013	1014.45	1015.77	2.15	0.00	1021.42	1015.39	1017.21	8.43	91.614	1.50 z	0.89	0.000	1.55	18.03
2	P-B2	159.969	30	0.012	1015.97	1016.77	0.50	1021.42	1023.07	1017.26	1018.14	6.23	-89.493	0.52 z	0.29	0.000	0.32	16.48
3	P-B3	67.970	30	0.013	1016.97	1017.33	0.53	1023.07	1023.05	1018.28	1018.69	6.07	17.292	0.96 z	n/a	0.000	0.00	16.16
4	P-C1	69.240	24	0.012	1017.83	1018.19	0.52	1023.05	1022.50	1019.10	1019.48	6.07	72.806	1.50 z	0.84	0.000	2.49	12.85
5	P-C2	49.270	24	0.012	1018.39	1018.64	0.51	1022.50	1022.78	1019.48	1019.72 j	5.27	0.524	0.50 z	n/a	0.000	3.23	9.17
6	C3	158.010	24	0.012	1018.84	1019.63	0.50	1022.78	1024.35	1019.72	1020.49 j	4.52	-0.523	0.50 z	n/a	0.000	2.74	5.94
7	P-C4	113.126	18	0.012	1020.13	1020.70	0.50	1024.35	1025.63	1020.79	1021.38	4.20	0.000	1.50 z	n/a	0.000	2.13	3.20
8	P-C5	34.500	15	0.013	1020.95	1021.54	1.71	1025.63	1025.64	1021.38	1021.95 j	2.97	90.000	1.00 z	n/a	0.000	1.07	1.07
9	P-B4	34.680	18	0.012	1018.33	1019.07	2.13	1023.05	1024.18	1018.78	1019.76	5.74	-53.320	1.09 z	n/a	0.000	2.44	3.31
10	P-B5	26.040	18	0.012	1019.57	1021.10	5.88	1024.18	1022.70	1019.76	1021.45	4.68	43.121	1.00 z	n/a	0.000	0.87	0.87
11	C6	34.500	15	0.013	1018.39	1018.56	0.49	1022.50	1022.49	1019.48	1019.49	1.14	90.004	1.00	0.02	0.013	1.19	1.19
12	P-A1	300.530	24	0.012	1007.98	1009.48	0.50	1010.98	1013.61	1009.27	1010.64 j	5.22	2.122	0.15 z	n/a	0.000	0.00	10.48
13	P-A2	95.970	24	0.012	1009.68	1010.16	0.50	1013.61	1016.78	1010.80	1011.32	5.66	0.000	0.63 z	0.30	0.000	4.57	10.48
14	P-A3	140.170	24	0.012	1010.36	1011.06	0.50	1016.78	1019.05	1011.32	1011.92 j	4.28	21.462	0.94 z	n/a	0.000	0.00	5.91

Project File: PUBLIC STORM 10-YR.stm | Number of lines: 14 | Date: 7/24/2019

NOTES: ** Critical depth

Storm Sewers

100-YEAR PUBLIC STORM SEWER INLET CALCULATIONS

Inlet Report

Page 1

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet Ht (in)	Curb Inlet L (ft)	Grate Inlet Area (sqft)	Grate Inlet L (ft)	Grate Inlet W (ft)	Gutter So (ft/ft)	Gutter W (ft)	Gutter Sw (ft/ft)	Gutter Sx (ft/ft)	Gutter n	Gutter Depth (ft)	Gutter Spread (ft)	Inlet Depth (ft)	Inlet Spread (ft)	Inlet Depr (in)	Byp Line No
1	B1	2.71*	0.00	2.70	0.01	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.22	9.55	0.82	0.78	9.5	13
2	B2	0.56*	0.00	0.56	0.00	Curb	0.5	4.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.13	5.11	0.79	0.00	9.5	1
3	B3	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
4	C1	4.43*	1.35	5.78	0.00	Curb	0.5	6.40	0.00	0.00	0.00	Sag	1.33	0.039	0.020	0.013	0.46	21.67	1.25	21.67	9.5	Off
5	C2	5.73*	0.49	5.30	0.92	Curb	0.5	8.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.29	13.13	0.94	6.24	9.5	4
6	C3	4.87*	0.32	4.71	0.49	Curb	0.5	8.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.27	12.26	0.91	4.82	9.5	5
7	C4	3.74*	0.00	3.42	0.32	Curb	0.5	7.00	0.00	0.00	0.00	0.013	1.33	0.039	0.020	0.013	0.23	10.28	0.89	3.83	9.5	6
8	C5	1.87*	0.00	1.59	0.28	Curb	0.5	4.00	0.00	0.00	0.00	0.013	1.33	0.039	0.020	0.013	0.18	7.86	0.89	3.59	9.5	11
9	B4	4.28*	0.00	3.85	0.43	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.25	11.38	0.91	4.57	9.5	4
10	B5	1.53*	0.00	1.53	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
11	C6	2.09*	0.28	2.37	0.00	Curb	0.5	5.60	0.00	0.00	0.00	Sag	1.33	0.039	0.020	0.013	0.28	12.76	1.07	12.76	9.5	Off
12	A1	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
13	A2	8.02*	0.01	5.64	2.39	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.31	14.47	1.00	9.10	9.5	Off
14	A3	0.00	15.90	0.00	15.90	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off

Project File: PUBLIC STORM 100-YR.stm | Number of lines: 14 | Run Date: 7/24/2019

NOTES: Inlet N-Values = 0.016; Known Qs only; * Indicates Known Q added. All curb inlets are throat.

Storm Sewers v12.00

10-YEAR PUBLIC STORM SEWER INLET CALCULATIONS

Inlet Report

Page 1

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet Ht (in)	Curb Inlet L (ft)	Grate Inlet Area (sqft)	Grate Inlet L (ft)	Grate Inlet W (ft)	Gutter So (ft/ft)	Gutter W (ft)	Gutter Sw (ft/ft)	Gutter Sx (ft/ft)	Gutter n	Gutter Depth (ft)	Gutter Spread (ft)	Inlet Depth (ft)	Inlet Spread (ft)	Inlet Depr (in)	Byp Line No
1	B1	1.55*	0.00	1.55	0.00	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.18	7.68	0.79	0.00	9.5	13
2	B2	0.32*	0.00	0.32	0.00	Curb	0.5	4.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.11	4.03	0.79	0.00	9.5	1
3	B3	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
4	C1	2.49*	0.00	2.49	0.00	Curb	0.5	6.40	0.00	0.00	0.00	Sag	1.33	0.039	0.020	0.013	0.27	12.37	1.06	12.37	9.5	Off
5	C2	3.23*	0.00	3.23	0.00	Curb	0.5	8.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.23	10.22	0.81	0.49	9.5	4
6	C3	2.74*	0.00	2.74	0.00	Curb	0.5	8.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.22	9.59	0.79	0.00	9.5	5
7	C4	2.13*	0.00	2.13	0.00	Curb	0.5	7.00	0.00	0.00	0.00	0.013	1.33	0.039	0.020	0.013	0.19	8.27	0.79	0.00	9.5	6
8	C5	1.07*	0.00	1.06	0.01	Curb	0.5	4.00	0.00	0.00	0.00	0.013	1.33	0.039	0.020	0.013	0.15	6.30	0.82	0.81	9.5	11
9	B4	2.44*	0.00	2.44	0.00	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.21	9.17	0.79	0.00	9.5	4
10	B5	0.87*	0.00	0.87	0.00	Hdwl	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
11	C6	1.19*	0.01	1.20	0.00	Curb	0.5	5.60	0.00	0.00	0.00	Sag	1.33	0.039	0.020	0.013	0.19	8.11	0.98	8.11	9.5	Off
12	A1	0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off
13	A2	4.57*	0.00	4.02	0.55	Curb	0.5	7.00	0.00	0.00	0.00	0.010	1.33	0.039	0.020	0.013	0.26	11.67	0.92	5.06	9.5	Off
14	A3	0.00	5.91	0.00	5.91	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.013	0.00	0.00	0.00	0.00	0.0	Off

Project File: PUBLIC STORM 10-YR.stm | Number of lines: 14 | Run Date: 7/24/2019

NOTES: Inlet N-Values = 0.016; Known Qs only; * Indicates Known Q added. All curb inlets are throat.

Storm Sewers v12.00

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RECORD DRAWING

STATE OF MISSOURI
RYAN V. JEPPSON
NUMBER
PE-2012024241
PROFESSIONAL ENGINEER

RYAN V. JEPPSON
PROFESSIONAL ENGINEER
MO# PE-2012024241

7-24-19

"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION

REVISIONS

SE PRINCETON DRIVE & PRINCETON DRIVE
STORM DRAINAGE CALCULATIONS

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

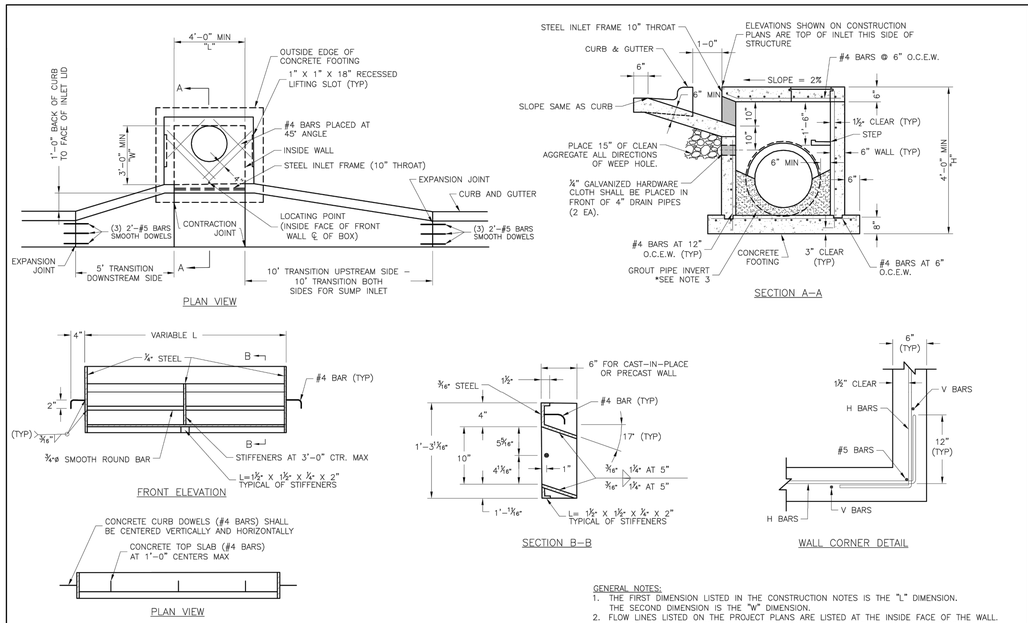
LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_CALCS_81450
date: 06.14.19

SHEET
ST3.0

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\GNCV\PUBLIC STORM\C_CALCS_81450.DWG USER: rjeppson
DATE: Jul 24, 2019 3:07pm XREFS: C_TBLK_22x34_81450



STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

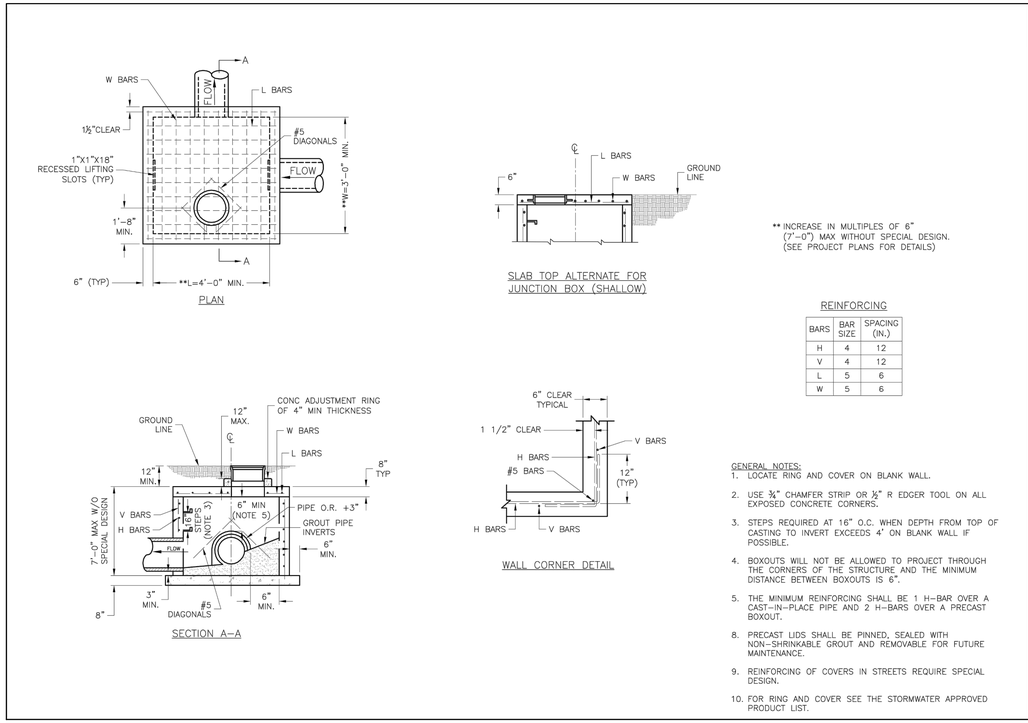
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB INLET DETAIL

Project:
Sheet Name:

Drawn By: MJF
Checked By: DL
Date: 06/17
Proj. #

STM-1



GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

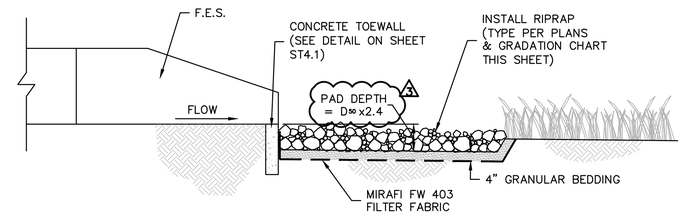
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
JUNCTION BOX DETAIL

Project:
Sheet Name:

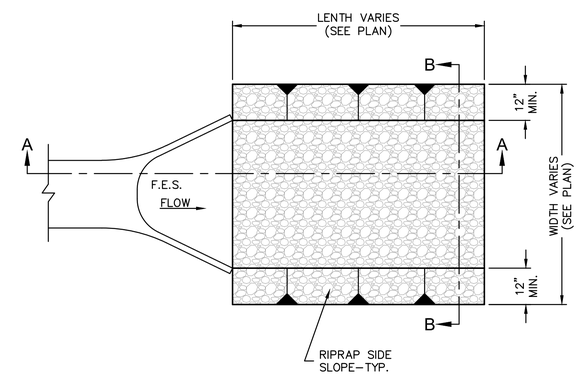
Drawn By: MJF
Checked By: DL
Date: 06/17
Proj. #

STM-3

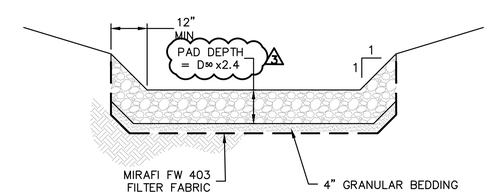


SECTION A - A

SECTION B-B



PLAN VIEW



RIPRAP APRON DETAILS

NOT TO SCALE

NOTES:
1. RIPRAP SHALL BE PLACED IN SUCH A MANNER AS TO AVOID SEGREGATION OF VARIOUS SIZES OF ROCK, AND DISTRIBUTED SO THAT THERE WILL BE NO LARGE ACCUMULATION OF EITHER THE LARGER OR SMALLER SIZES OF STONE.
2. INDIVIDUAL ROCKS SHALL BE PLACED IN TIGHT CONTACT WITH ONE ANOTHER IN SUCH A WAY TO PRODUCE THE LEAST AMOUNT OF VOID SPACES.
3. RIPRAP SHALL BE SOLID, UNFRACTURED ROCK OR CONCRETE, BULKY IN SHAPE WITH SHARP, ANGULAR EDGES.
4. GRANULAR BEDDING SHALL CONSIST OF 1" CLEAN, FRACTURED LIMESTONE.
5. INSTALL FILTER FABRIC ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

CLASSIFICATION & GRADATION OF RIPRAP & RIVER GRAVEL

RIP-RAP DESIGNATION	PERCENT (%) SMALLER THAN GIVEN BY WEIGHT	INTERMEDIATE ROCK DIMENSION (INCHES)	*D_{50} (INCHES)
CLASS III	85–100	18	10
	50–85	13	
	15–50	9.5	
	2–15	7	

*D_{50} = MEAN PARTICLE SIZE (INTERMEDIATE DIMENSION).

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RECORD DRAWING
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RYAN V. JEPPSON
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PROFESSIONAL ENGINEER
MO#: PE-2012024241
7-24-19
"NOT AS BUILT"

REV. NO.	DATE	REVISIONS DESCRIPTION
1	07/19/2019	ENGR. REVIEW COMMENTS

REVISIONS

SE OLDHAM PARKWAY & SE PRINCETON DRIVE
STORM WATER DETAILS

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_DTLS_81450
date: 07.19.19

SHEET
ST4.0

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\GNCV\PUBLIC STORM\C-STM_DTLS_81450.DWG USER: rjeppson
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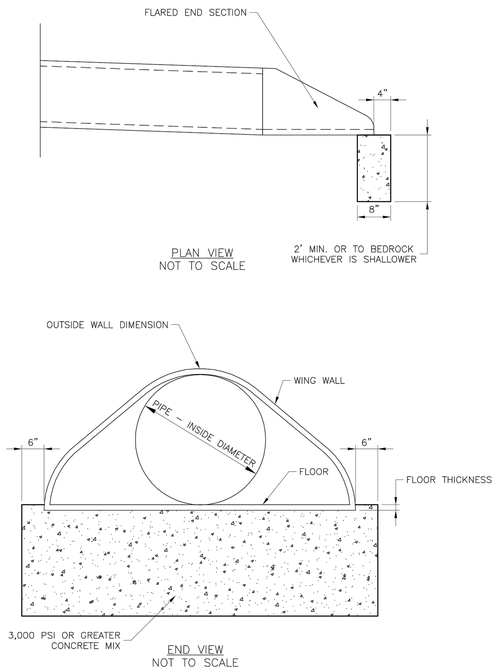
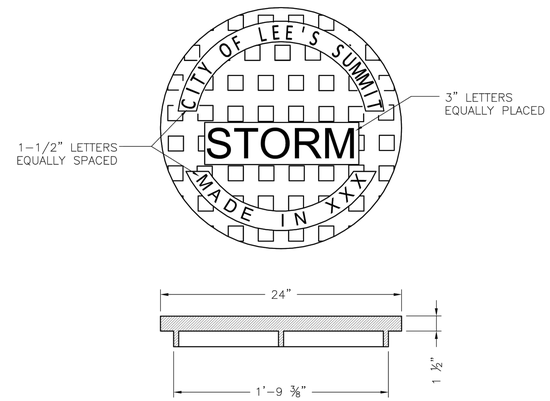


LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

FLARED END SECTION SUPPORT DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-5



STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT
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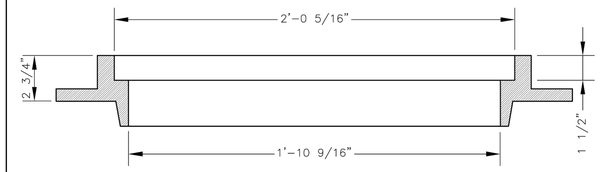
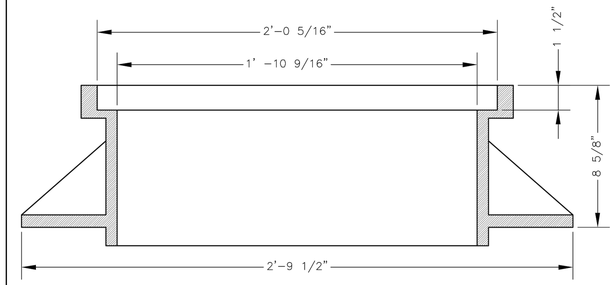
STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-6



SLAB MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS103A
MINIMUM WEIGHT = 145 LB



STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

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STORM MANHOLE FRAME DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-7

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REVISIONS

SE OLDHAM PARKWAY & SE PRINCETON DRIVE
STORM WATER DETAILS

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

drawn by: RPJ
designed by: RVJ
checked by: JLR
project no.: 018-1450
drawing no.: C_STM_DTLS_81450
date: 07.19.19

SHEET
ST4.1

DWG: F:\2018\1001-1500\018-1450\40-Design\AutoCAD\Final Plans\Sheets\GNCV\PUBLIC STORM\C_STM_DTLS_81450.DWG USER: rjeppson
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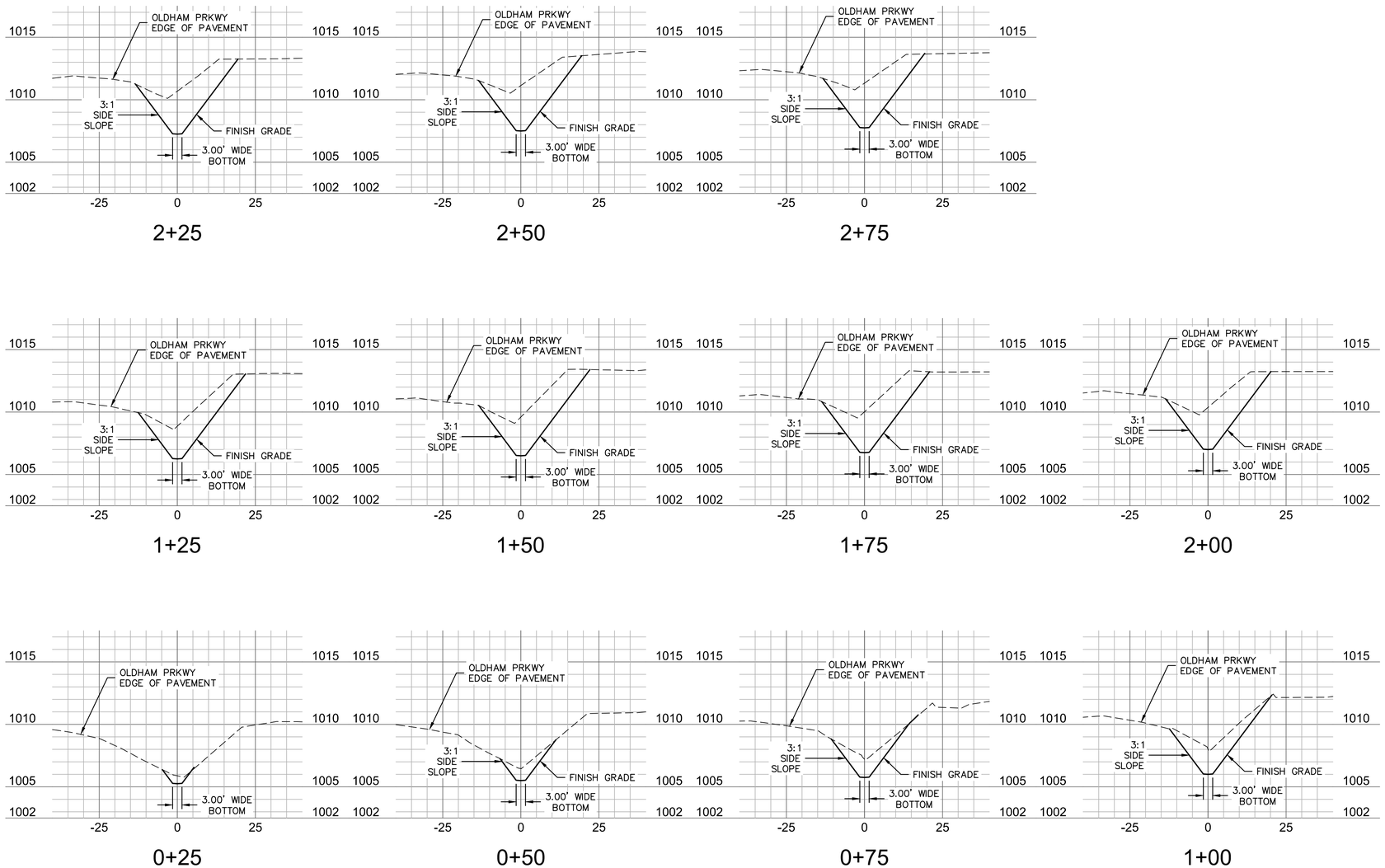
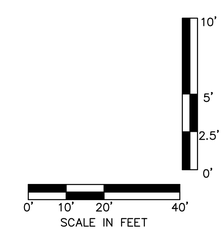


OLDHAM PARKWAY DRAINAGE DITCH SECTION VIEWS

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'



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REV. NO.	DATE	REVISIONS DESCRIPTION

REVISIONS

SE OLDHAM PARKWAY & SE PRINCETON DRIVE
DRAINAGE DITCH CROSS SECTIONS

THE PRINCETON SENIOR LIVING
SE OLDHAM PARKWAY

LEE'S SUMMIT, MISSOURI

2019

drawn by:	RPJ
designed by:	RVJ
checked by:	JLR
project no.:	018-1450
drawing no.:	C_STM_DTLS_81450
date:	07.19.19

SHEET
ST4.2

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