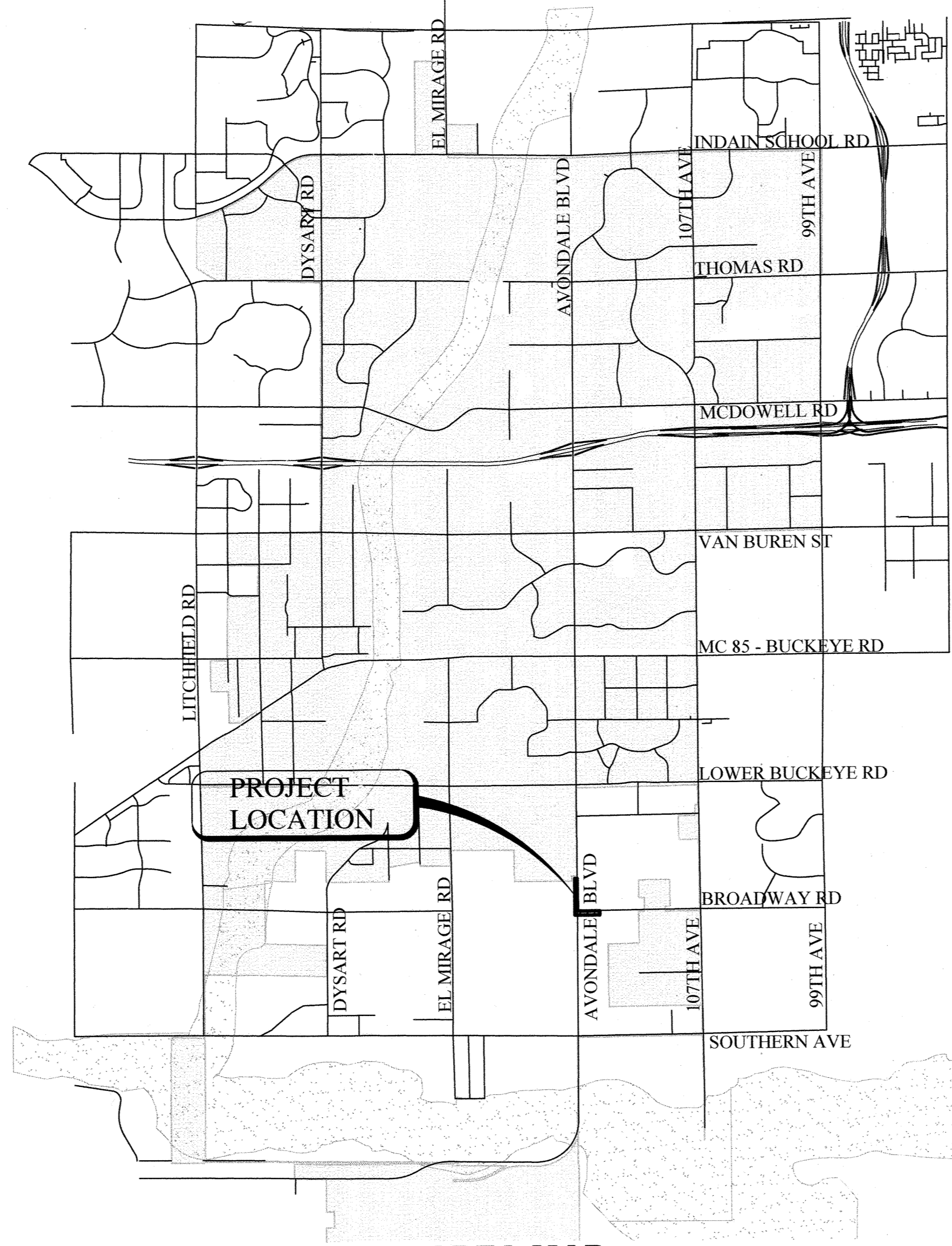
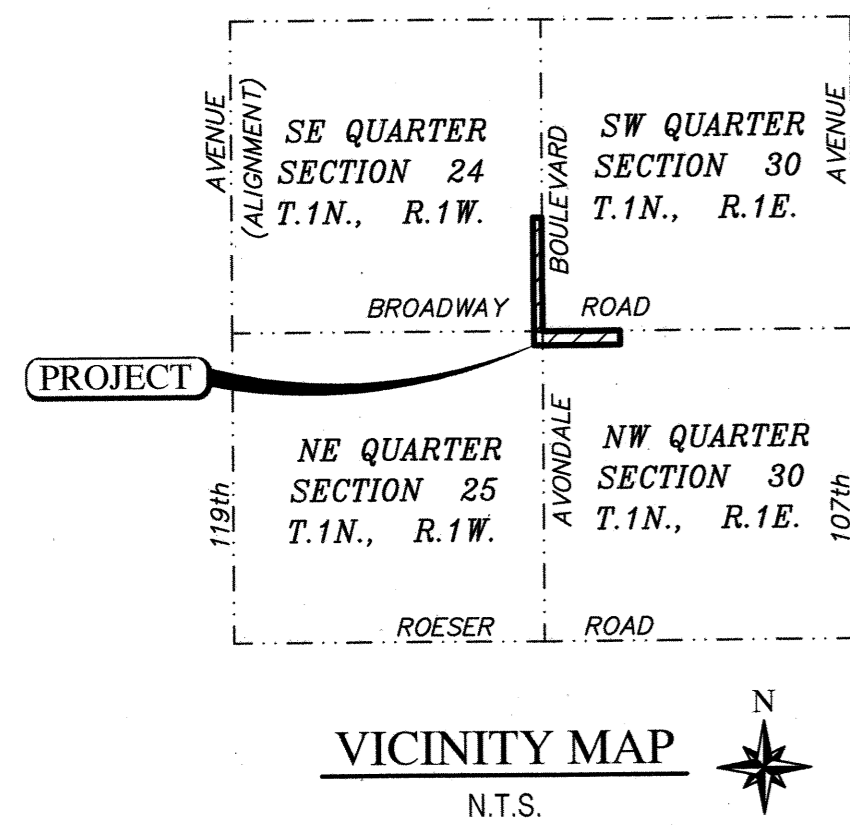


# PAVING, SIGNING AND MARKING PLAN AVONDALE BOULEVARD NORTH AND BROADWAY ROAD EAST ALAMAR - PHASE 1

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 1 NORTH, RANGE 1 WEST, AND A PORTION OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 1 NORTH, RANGE 1 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



## Utility Conflict Notification Block

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES, WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES. THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL NOTES AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

SALT RIVER POWER DISTRICT	COMPANY REPRESENTATIVE	9/1/18	DATE
ARIZONA PUBLIC SERVICE	COMPANY REPRESENTATIVE	9/1/18	DATE
CENTURY LINK	KATHY HADRICH COMPANY REPRESENTATIVE	9/1/18	DATE
COX COMMUNICATIONS	CORY DAY COMPANY REPRESENTATIVE	9/1/18	DATE
SOUTHWEST GAS	SCOTT SUASO COMPANY REPRESENTATIVE	9/1/18	DATE
SALT RIVER IRRIGATION DISTRICT	COMPANY REPRESENTATIVE	9/1/18	DATE
ROOSEVELT IRRIGATION DISTRICT	KEN CRAIG COMPANY REPRESENTATIVE	9/1/18	DATE
EL PASO NATURAL GAS	STEVE WEATHERHEAD COMPANY REPRESENTATIVE	9/1/18	DATE

MCDOT PAVING QUANTITIES			
STORMDRAIN	ON-SITE	UNIT	OFF-SITE UNIT
"L" TYPE HEADWALL			1 EA
12" R.G.R.C.P.			13 LF
PIPE COLLAR			1 EA
PAVING			
5" A.C. OVER 14" A.B.C. PAVEMENT			1,414 SY
SAFETY EDGE			1,596 LF
CIRCULAR GUARDRAIL TA-5040.32			54 LF
GUARD RAIL TRANSITION 31" TO 28"			25 LF
STANDARD MASH GUARD RAIL 31"			704 LF
MASH COMPLIANT TL3 END TERMINAL			1 EA
SAWCUT, REMOVE & REPLACE A.C. PAVEMENT			361 SY

QUANTITIES			
GRADING & DRAINAGE	ON-SITE	UNIT	OFF-SITE UNIT
GRADING	N/A	SY	N/A
STORM SEWER PIPE	N/A	LF	N/A
STORM SEWER MANHOLE	N/A	EA	N/A
UNDERGROUND RETENTION PIPE	N/A	LF	N/A
DRYWELL	N/A	EA	N/A
SPILLWAY	N/A	EA	N/A
RIP RAP	N/A	CY	N/A
CURB OPENING	N/A	LF	N/A
BOX CULVERT	N/A	EA	N/A
CATCH BASIN/HEADWALL	N/A	EA	N/A
SCUPPER	N/A	EA	N/A
IRRIGATION			
IRRIGATION PIPE	N/A	LF	N/A
IRRIGATION MANHOLE/STRUCTURE	N/A	EA	N/A
FLAT CONCRETE			
SIDEWALK	N/A	SF	5,790 SF
CURB AND GUTTER/SINGLE CURB/RIBBON	N/A	LF	996 LF
VALLEY GUTTER AND APRON	N/A	SF	N/A
BUS BAY, RT. TURN LANE	N/A	SF	N/A
RETURN TYPE DRIVEWAY	N/A	SF	N/A
DRIVEWAY (NON-RETURN TYPE)	N/A	EA	N/A
SIDEWALK RAMP	N/A	EA	N/A
PAVING			
NEW CONC/ASPHALT PAVING	N/A	SY	1,498 SY
ASPHALT/CONC OVERLAY	N/A	SY	N/A
SLURRY SEAL/MICRO SEAL	N/A	SY	N/A
UTILITY ADJUSTMENT (IN R/W STREET)	N/A	EA	2 EA
SURVEY MONUMENT	N/A	EA	N/A
STREET SIGN	N/A	EA	4 EA
BARRICADE/GUARDRAIL	N/A	LF	N/A
STRIPING (4" EQUIV.)	N/A	LF	4,369 LF
ASPHALT/CONC REPLACEMENT	N/A	SY	224 SY
STREET LIGHTS	N/A	EA	N/A
TRAFFIC SIGNAL	N/A	EA	N/A

## AVERAGE DAILY TRAFFIC

BROADWAY ROAD = 4410 (2017)  
AVONDALE BOULEVARD = 2057 (2017)

## MCDOT STREET CLASSIFICATION

BROADWAY ROAD = PRINCIPAL ARTERIAL  
AVONDALE BOULEVARD = MINOR ARTERIAL

## DESIGN SPEED

BROADWAY ROAD - POSTED SPEED LIMIT = 50 MPH  
DESIGN SPEED = 60 MPH

AVONDALE BOULEVARD - POSTED SPEED LIMIT = 50 MPH  
DESIGN SPEED = 60 MPH

## MCDOT CLEAR ZONE DISTANCE

BROADWAY ROAD = 30'  
AVONDALE BOULEVARD = 30'

## OWNER/ DEVELOPER

BROOKFIELD LAKIN, LLC  
14646 N. KIERLAND BOULEVARD,  
SUITE 165  
SCOTTSDALE, ARIZONA 85254  
PHONE: (602) 903-7509  
CONTACT: ROGER THEIS

## BENCHMARK

NATIONAL GEODETIC SURVEY CONTROL POINT H 395, PID DV0444, LOCATED AT THE NORTHWEST CORNER OF EL MIRAGE ROAD AND BROADWAY ROAD, HAVING AN ELEVATION OF 939.03', NAVD 88 DATUM.

## GEOTECHNICAL REPORT

GEOTECHNICAL INVESTIGATION, LAKIN RANCH PHASE 1  
PROTEX - THE PT Xperts, LLC  
JOB NO. 7649, APRIL 16, 2018.

## SHEET INDEX:

- 1 - COVER
  - 2 - NOTES AND LEGEND
  - 3 - MCDOT NOTES -
  - 4 - INDEX MAP/ STREET SECTIONS
  - 5-7 - PAVING PLAN (AVONDALE BLVD.)
  - 8-10 - PAVING PLAN ( BROADWAY RD.)
  - 11 - MCDOT DETAILS
  - 12 - AVONDALE BLVD SIGNING AND STRIPING PLAN
- TOTAL SHEETS - 12

## ENGINEER & SURVEYOR

WOOD, PATEL & ASSOCIATES, INC.  
2051 WEST NORTHERN AVENUE  
SUITE 100  
PHOENIX, ARIZONA 85021  
PHONE: (602) 335-8500  
CONTACT: FRANK KOO, P.E.

## BASIS OF BEARING

GEODETIC "NORTH" BASED ON: MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION (MCDOT) GEODETIC DENSIFICATION AND CADASTRAL SURVEY (GDACS) WEBSITE  
WWW.MCDOT.MARICOPA.GOV., UNDER THE SURVEY INFORMATION LINK ON MARCH 1, 2017.  
PROJECTION: CENTRAL ZONE, NAD 83, (EPOCH 2010) DATUM: GRS-80  
UNITS: INTERNATIONAL FEET  
GEOID MODEL: GEOID 2012A

NATIONAL GEODETIC SURVEY CONTROL POINT: H 395  
PID: DV0444  
LATITUDE: 33°24'22.55252"N  
LONGITUDE: 112°19'25.08998"W  
ELLIPSOID HEIGHT: 255.899 (METERS)  
DESCRIPTION: BRASS DISK IN CONCRETE SLEEVE

MODIFIED TO GROUND AT (GRID) N: 875587.531, E: 575808.124, USING A SCALE FACTOR OF 1.0001224277.

HORIZONTAL ADJUSTMENT: NONE  
HORIZONTAL ROTATION: NONE

## CITY OF AVONDALE

### MAYOR

KENNETH WEISE

### CITY MANGER

CHARLES MONTOYA

### CITY CLERK

MARCELLA CARRILLO

### VICE MAYOR

PAT DENNIS

### COUNCIL MEMBERS

CURTIS NIELSON TINA CONDE  
VERONICA MALONE BRIAN KILGORE  
MIKE PINEDA

## APPROVALS

*Mark Smith*  
CITY ENGINEERING DEPARTMENT

4/3/19  
DATE

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.

11465 W. CIVIC CENTER DRIVE  
AVONDALE, AZ 85323  
(623) 333-4200

## STORM WATER CERTIFICATION

1. ALL DRAINAGE DESIGN WILL COMPLY WITH THE DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, ARIZONA, VOLUMES I & II, JANUARY 28, 1996, AS AMENDED OR UPDATED.
2. THE DEVELOPMENT WILL PROVIDE ADEQUATE RETENTION FOR THE 100-YEAR 2-HOUR STORM. THIS INCLUDES ONSITE AND ADJACENT HALF STREET RUNOFF.
3. IN ALL CASES THE HALF STREET FLOW FROM THE 100-YEAR, 2-HOUR STORM WILL BE CONTAINED WITHIN THE PUBLIC RIGHT OF WAY.
4. THE COLLECTION SYSTEM FOR THE 10-YEAR 2-HOUR STORM HAS BEEN DESIGNED SO THAT ALL ARTERIAL AND MAJOR COLLECTOR STREETS SHALL MAINTAIN ONE DRY LANE IN EACH DIRECTION.
5. FINISHED FLOOR ELEVATIONS MUST BE MINIMUM OF 14-INCHES ABOVE THE OUT FALL TOP OF CURB ELEVATION, OR 12-INCHES ABOVE THE COMPUTED 100-YEAR 2-HOUR WATER SURFACE ELEVATION WHICH EVER IS GREATER.
6. ALL STORM WATER RETENTION SHALL BE DRAINED WITHIN 36 HOURS. IF BASINS DO NOT DRAIN WITHIN 36 HOURS, DEVELOPER/OWNER SHALL ENACT MEASURE TO CORRECT.

*Frank Koo* 2/13/19  
SIGNATURE DATE

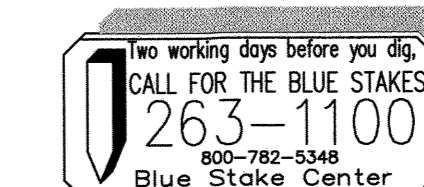
REGISTERED LAND SURVEYOR

SEAL

REGISTRATION NUMBER

DATE

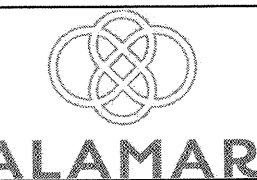
COMPANY NAME:  
ADDRESS:  
CITY/STATE/ZIP CODE:  
PHONE NUMBER:



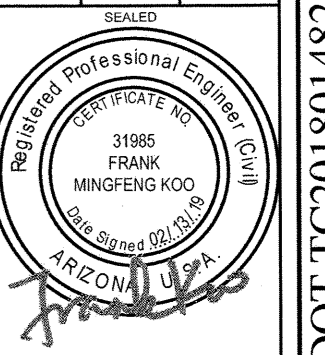
## NOTE:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CITY OF AVONDALE'S SUPPLEMENT TO THE M.A.G. SPECIFICATIONS AND STANDARD DETAILS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE'S ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF AVONDALE'S WEBSITE.

**WOOD/PATEL**  
MISSION: CLIENT SERVICE  
(602) 335-8500  
WWW.WOODPATEL.COM



BROOKFIELD LAKIN, LLC  
PROJECT NAME  
**ALAMAR - PHASE 1**  
PROJECT LOCATION  
PAVING, SIGNING AND MARKING PLAN  
AVONDALE BLVD NORTH AND BROADWAY RD EAST



PLAN DATE  
02/13/2019  
LATEST REVISION DATE  
SHEET NUMBER  
1 OF 12  
PROJECT NUMBER  
174612.04



**ENGINEER'S NOTES**

- MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTALS THEREOF PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
- ALL WORK REQUIRED TO COMPLETE THE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH THE M.A.G. STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTALS THEREOF PER THE LOCAL CITY OR TOWN UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTALS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING, AND SAFETY CONCERNS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION, UNLESS SPECIFICALLY ADDRESSED OTHERWISE IN THIS PLAN OR ELSEWHERE IN THE CONTRACT.
- THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
- THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERROR AND OMISSION. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48 HOURS IN ADVANCE FOR BLUE STAKE (1-800-STAKE-IT) PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
- ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT FILL AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL BE AWARE THAT CERTAIN UTILITIES REQUIRE PROPER ATTENTION AND CAREFUL PLANNING DURING SITE CONSTRUCTION. PLEASE NOTE THAT UTILITIES ON THESE PLANS MAY NOT EXHIBIT THE FULL PROTECTIVE COVER REQUIRED DURING THE SUBGRADE PREPARATION PHASE OF THE CONSTRUCTION. IN SUCH INSTANCES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL PROTECTION (SUCH AS RAMPING) OR INCREASED PIPE STRENGTH TO PROVIDE THE NECESSARY PROTECTION REQUIRED TO PREVENT DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL HOLD THE ENGINEER HARMLESS IN ALL CASES FOR DAMAGES TO UTILITIES WHERE INADEQUATE PROTECTIVE MEASURES OCCUR.
- THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINTS OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.
- CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOUT WITH ARCHITECT'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT.
- COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
- CONTRACTOR IS RESPONSIBLE FOR PROJECT AND SITE CONDITIONS, AND TO WORK WITH WEATHER CONDITIONS AS THE PROJECT SITE MAY BE LOCATED IN A FLOOD PRONE AREA AND SUBJECT TO FLOODING AND ITS HAZARDS.
- THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS-SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER, OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS-SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY CROSSINGS AT CULVERT CROSSINGS BEFORE STARTING WORK ON CULVERT. COORDINATE WITH OWNER REPRESENTATIVE. VERIFY UTILITY LINES AND/OR CONDUITS ARE IN PLACE BEFORE STARTING CULVERT WORK.
- CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
- THIS PROJECT REQUIRES A REGULAR ONGOING MAINTENANCE PROGRAM FOR THE DESIGNED DRAINAGE SYSTEM(S) TO PRESERVE THE DESIGN INTEGRITY AND THE ABILITY TO PERFORM ITS OPERATIONAL INTENT. FAILURE TO PROVIDE MAINTENANCE WILL JEOPARDIZE THE DRAINAGE SYSTEM(S) PERFORMANCE AND MAY LEAD TO ITS INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- SEWER LINES DESIGNED IN PROFILE AND PUBLIC WATER LINES ARE REQUIRED TO BE ASBUILT AND THE INSTALLATION AND TESTING WITNESSED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODES R18-9-E301 "4.01 GENERAL PERMIT: SEWAGE COLLECTIONS SYSTEMS" AND R18-5-507 AND 508 "APPROVAL OF CONSTRUCTION" AND "RECORD DRAWINGS", RESPECTIVELY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNER 72 HOURS IN ADVANCE WHEN THOSE SYSTEMS ARE READY TO BE WITNESSED.
- THE WORK PRODUCT PRESENTED IS BELIEVED TO BE COMPLIANT WITH THE INTENT OF THE CURRENT AMERICANS DISABILITIES ACT (ADA) REQUIREMENTS AS INTERPRETED BY THE REVIEWING AGENCY(S). IF CONSTRUCTION OF THE PROJECT IS DELAYED, THIS WORK PRODUCT SHOULD BE UPDATED TO ACCOUNT FOR ANY RELEVANT ADA UPDATES BEFORE CONSTRUCTION BEGINS.
- FINISH FLOOR (FF) REFERS TO EITHER FLOOR/SLAB ELEVATION OR TOP OF BASEMENT SLAB. LF ELEVATIONS ON THE GRADING AND DRAINAGE PLANS FOR RESIDENTIAL UNITS REFLECT SLAB ON GRADE CONDITIONS AND CANNOT BE LOWERED WITHOUT AGENCY APPROVAL IN LOCATIONS WHERE 'SPECIAL FLOOD HAZARD AREAS' EXIST. IN NON-FLOOD HAZARD LOCATIONS, TO ENSURE THAT ADEQUATE RESIDENTIAL LOT DRAINAGE CAN BE ACHIEVED, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF THE LF FOR THE SLAB IS PROPOSED TO BE LOWERED, OR IF A BASEMENT IS TO BE CONSTRUCTED.
- CONTRACTOR TO INSTALL IRRIGATION SLEEVES PRIOR TO PAVEMENT AND CONCRETE WORK. REFER TO IRRIGATION PLAN BY HINES, INC. FOR SLEEVE INFORMATION.

**CITY OF AVONDALE  
SIGNING AND STRIPING NOTES**

- THE CITY OF AVONDALE ENGINEERING DEPARTMENT SHALL BE NOTIFIED THREE (3) BUSINESS DAYS PRIOR TO STARTING ANY SIGNING OR STRIPING WORK.
- UNLESS OTHERWISE SPECIFIED, ALL PAVEMENT MARKING AND TRAFFIC CONTROL SIGNING INSTALLATIONS AND REMOVALS SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE CITY OF AVONDALE "CONSTRUCTION SPECIFICATIONS" SECTION XI. ITEMS NOT COVERED UNDER THE CITY SPECIFICATIONS SHALL CONFORM TO THE ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) STANDARD DRAWINGS, DETAILS AND SPECIFICATIONS OR THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) LATEST EDITION, AS APPLICABLE. SIGN REQUIREMENTS, GUIDELINES, AND WARRANTIES SHALL BE IN ACCORDANCE WITH THE MUTCD MOST RECENT EDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF THE PERMANENT PAVEMENT MARKINGS FOLLOWING CONTROL POINTS THAT HAVE BEEN SET NO MORE THAN 50 FEET APART ALONG THE LINES TO BE STRIPED. PAVEMENT MARKING DIMENSIONS ARE TO THE CENTER OF THE STRIPE FOR SINGLE LINE STRIPING, AND TO THE CENTER OF THE SPACE BETWEEN THE TWO LINES FOR DOUBLE LINE STRIPING. WHERE CURB AND GUTTER ARE PRESENT, DIMENSIONS ARE TO THE BACK OF THE CURB. THE CONTRACTOR SHALL SCHEDULE INSPECTION OF THE PAVEMENT MARKING LAYOUT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO LAYOUT AND INSTALLATION OF PERMANENT PAVEMENT MARKING. INSPECTION SHALL TAKE PLACE DURING DAYTIME AND ON A BUSINESS DAY PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
- PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY AND NOT TO SCALE. THE CONTRACTOR SHALL FOLLOW ALL DIMENSIONS, NOTES, DETAILS AND STANDARDS WHEN INSTALLING PAVEMENT STRIPING, MARKINGS AND MARKERS.
- TEMPORARY TRAFFIC CONTROL SHALL CONFORM TO THE MOST RECENT EDITION OF THE CITY OF PHOENIX "TRAFFIC BARRICADE MANUAL," THE "MUTCD," AND/OR AS DIRECTED BY THE CITY OF AVONDALE.
- UNLESS OTHERWISE DIRECTED, ALL FINAL LOCATION LANE STRIPING INCLUDING CROSSWALKS AND STOP BARS SHALL BE THERMOPLASTIC MATERIAL APPLIED AT A MINIMUM THICKNESS OF 60 MIL. ALL PAVEMENT SYMBOLS, ARROWS, AND LETTERING SHALL BE THERMOPLASTIC, TYPE I (PERMANENT) PREFORMED PAVEMENT MARKINGS. TEMPORARY PAVEMENT MARKINGS SHALL BE REFLECTORIZED TRAFFIC PAINT. TEMPORARY STRIPING OF A HALF STREET ROADWAY SHALL BE THERMOPLASTIC.
- ALL SIGNS SHALL CONFORM TO THE MUTCD AND SHALL BE MADE FROM .080 INCH THICK ALUMINUM. SIGN POSTS AND EXTENSIONS SHALL BE GALVANIZED SQUARE PERFORATED STEEL TUBING PER CITY STANDARDS. HEIGHT REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE MUTCD.
- ALL TRAFFIC CONTROL SIGN FACES SHALL BE CONSTRUCTED OF DIAMOND GRADE REFLECTIVE SHEETING SUCH AS 3M STANDARD, UNLESS OTHERWISE NOTED.
- ALL SIGNS SHALL HAVE A MINIMUM CLEARANCE FROM THE EDGE OF THE SIGN TO THE FACE OF THE CURB OF AT LEAST TWO (2) FEET. IF NO CURB EXISTS, THE MINIMUM CLEARANCE SHALL BE AT LEAST TEN (10) FEET FROM THE EDGE OF THE PAVEMENT. ALL SIGNS SHALL BE PLACED SO AS TO NOT INTERFERE WITH PEDESTRIAN MOVEMENT.
- ANY TRAFFIC CONTROL SIGNAGE, INCLUDING STREET NAME SIGNS, WHICH MAY BE LOCATED WITHIN TEN (10) FEET OF AN EXISTING STREET LIGHT POLE, MAY BE PROPERLY MOUNTED TO THE POLE WITH APPROVAL FROM THE CITY. SIGN LOCATIONS AND OFFSETS MAY BE ADJUSTED BY THE CITY TO IMPROVE VISIBILITY.
- ALL CONCRETE MEDIAN CURB NOSES SHALL BE PAINTED WITH YELLOW REFLECTIVE SAFETY PAINT FROM THE FRONT OF THE BULLNOSE BACK TEN (10) FEET.
- RAISED PAVEMENT MARKERS (RPMS) SHALL BE INSTALLED ON ARTERIAL ROADWAYS WITH EXISTING RPMS OR ROADWAYS WITHOUT FULL STREET LIGHTING. ALL RAISED PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH ADOT STANDARD DRAWINGS 4-M-2.02, 4-M-2.03.1, 4-M- 2.03.2, AND 4-M-2.04. TWO-WAY TYPE M RAISED PAVEMENT MARKERS SHALL BE INSTALLED ADJACENT TO FIRE HYDRANTS PER CITY OF AVONDALE STANDARDS.
- ANY EXISTING SIGNAGE THAT IS REQUIRED TO BE RELOCATED BY THE CONTRACTOR SHALL BE REMOVED, PROTECTED, AND STORED FOR REINSTALLATION BY THE CONTRACTOR. DAMAGED SIGNAGE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY EXISTING SIGNS REQUIRED TO BE PERMANENTLY REMOVED BY THE CONTRACTOR SHALL BE SALVAGED FOR RETURN TO THE CITY.
- THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS AND STRIPING IN CONFLICT WITH THE FINAL STRIPING PLAN BY ULTRA HIGH-PRESSURE WATER (36,000 PSI PER MAG SPECIFICATIONS). ALL REMOVAL METHODS SHALL BE DONE IN CONFORMANCE WITH EPA REQUIREMENTS. IF THE REMOVAL OF STRIPING CAUSES A DEPRESSION OF 1/8 INCH OR GREATER IN THE PAVEMENT SURFACE, THE CONTRACTOR SHALL FILL AND SLURRY SEAL THE AREA PER MAG STANDARD SPECIFICATION 713 & 715, TYPE II.
- THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE CITY BY POWER BROOM, STREET SWEEPING, AIR JET BLOWING, AND/OR WATER JET/TRUCK PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS. THE ROAD PAVEMENT SURFACE SHALL BE ABSOLUTELY DRY. THE AIR AND PAVEMENT TEMPERATURES SHALL NOT BE LESS THAN 55° F AND 61° F FOR THE PLACEMENT OF THERMOPLASTIC MARKING AND TYPE I MARKING TAPE, RESPECTIVELY.
- STREET NAME SIGNS LOCATED AT ALL INTERSECTIONS SHALL HAVE BLOCK NUMBERS. BLOCK NUMBERS SHALL BE ASSIGNED BY THE CITY'S BUILDING DIVISION. BLOCK NUMBERS SHALL BE INSTALLED PER CITY SPECIFICATIONS.

**LEGEND**

	BNDRY	PROJECT BOUNDARY
	C/L	CENTER LINE
	S/L	SECTION LINE
	R/W	RIGHT OF WAY
		EASEMENT LINE
		PROPOSED CONTOUR w/ ELEVATION
		EXISTING CONTOUR w/ ELEVATION
		POTABLE WATER PIPE & VALVE
		SANITARY SEWER PIPE & MANHOLE
		STORM DRAIN PIPE
	S.V.T.	SIGHT VISIBILITY TRIANGLE
	P.U.E.	PUBLIC UTILITY EASEMENT
	A.E.	ACCESS EASEMENT
	W.E.	WATER EASEMENT
	E.E.	ELECTRICAL EASEMENT
	V.N.A.E.	VEHICULAR NON-ACCESS EASEMENT
	W.P.E.	WATER PIPE EASEMENT
	S.E.	SEWER EASEMENT
	T.D.E.	TEMPORARY DRAINAGE EASEMENT
	S.W.E.	SIDEWALK EASEMENT
	F.S.L.	FRONT SETBACK LINE
	R.S.L.	REAR SETBACK LINE
	S.S.L.	SIDE SETBACK LINE
	B.P.	BOLLARD PROTECTION
	R/W	RIGHT-OF-WAY
	FF	FINISHED FLOOR ELEVATION
	PAD	PAD ELEVATION
	B.C.H.H.	BRASS CAP IN HANDHOLE
		HIGH POINT
		LOW POINT
		SURVEY MONUMENT
		FLOW ARROW
		GRADE BREAK
	OHU	EXISTING OVERHEAD UTILITY
		EXISTING SEWER MANHOLE
		FIRE HYDRANT
		SANITARY SEWER MANHOLE
		WATER VALVE
	S	PROPOSED SEWER LINE
	W	PROPOSED WATER LINE
		PROPOSED SCUPPER WITH RIPRAP
		CATCH BASIN
		STORM DRAIN PIPE
		RIP-RAP

**WOOD/PATEL**  
MISSION: CLIENT SERVICE®  
(602) 335-8500  
WWW.WOODPATEL.COM



DISTRICT OWNER: **BROOKFIELD LAKIN, LLC**  
PROJECT NAME: **ALAMAR - PHASE 1**  
PLAN TYPE: **PAVING, SIGNING AND MARKING PLAN**  
AVONDALE BLVD NORTH AND BROADWAY RD EAST



**NOTE:**  
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CITY OF AVONDALE'S SUPPLEMENT TO THE M.A.G. SPECIFICATIONS AND STANDARD DETAILS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE'S ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF AVONDALE'S WEBSITE.

PLAN DATE: 02/13/2019  
LATEST REVISION DATE:  
SHEET NUMBER: 2 OF 12  
PROJECT NUMBER: 174612.04

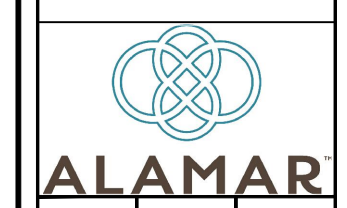


**MCDOT GENERAL NOTES FOR RIGHT-OF-WAY PERMITS**

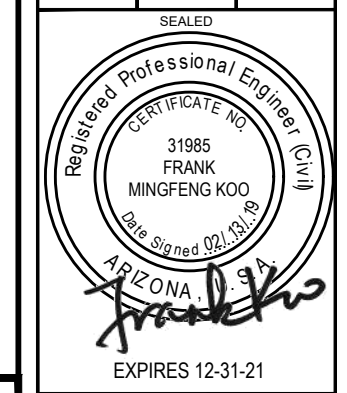
1. ALL WORK SHALL CONFORM TO THE REVISED EDITION OF THE UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AS AUTHORIZED AND MODIFIED BY THE MOST CURRENT MCDOT SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND NON-CONFLICTING PROJECT SPECIAL PROVISIONS. ALL WORK MUST ALSO COMPLY WITH RESOLUTION 2001-01 MARICOPA COUNTY RESOLUTION FOR PERMITS TO WORK IN DEDICATED RIGHT-OF-WAY AND RESOLUTION 2001-02 MARICOPA COUNTY RESOLUTION FOR STREET IMPROVEMENTS, INSTALLATION OF UTILITIES AND TRAFFIC CONTROL. ANY EXCEPTIONS MUST RECEIVE EXPLICIT APPROVAL FROM MCDOT AND SHALL BE IDENTIFIED ON THE PLANS AS HAVING EXPLICIT APPROVAL FROM MCDOT. ALL CLEAR ZONE HAZARDS SHALL BE MITIGATED IN A MANNER APPROVED BY MCDOT AT NO COST TO THE COUNTY.
2. THE ENGINEERING DESIGNS ON THESE PLANS ARE ONLY APPROVED BY MCDOT IN CONCEPT AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY MCDOT. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT MCDOT FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, THE MCDOT ROADWAY DESIGN MANUAL, OR OTHER DESIGN ISSUES.
3. AN APPROVED SET OF PLANS SHALL BE ON THE SITE DURING CONSTRUCTION AND AVAILABLE TO MCDOT AND OTHER INSPECTORS.
4. ALL BOX CULVERTS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) LATEST DESIGN SPECIFICATIONS AND STANDARDS. MINIMUM CLEAR HEIGHT OF BOX CULVERT SHALL BE 4 FEET.
5. CONTRACTOR TO OBTAIN MCDOT PERMITS PRIOR TO CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY, AND ALL NECESSARY PERMITS FROM OTHER AGENCIES AND FROM LOCAL GOVERNMENTS FOR WORK WITHIN THEIR JURISDICTION.
6. CONTRACTOR SHALL NOTIFY THE MCDOT INSPECTION DEPT. AT LEAST 24 HOURS IN ADVANCE OF ANY CONSTRUCTION AT (602) 506-8606.
7. CONTRACTOR PERFORMING CONSTRUCTION OR EXCAVATING OPERATIONS IS RESPONSIBLE FOR LOCATING AND RELOCATING ALL UTILITIES IN CONFLICT AT NO EXPENSE TO MARICOPA COUNTY. THE CONTRACTOR SHALL CONTACT 'BLUE STAKE' AT (602) 263-1100 PRIOR TO BEGINNING CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS FOR EARTH MOVING FROM MARICOPA COUNTY AIR QUALITY DEPARTMENT'S DUST COMPLIANCE DIVISION (602) 506-6010 PRIOR TO CONDUCTING EXCAVATION OPERATIONS. A COPY OF THE PERMIT AND DUST CONTROL PLAN SHALL BE SUBMITTED TO THE COUNTY ENGINEER PRIOR TO COMMENCEMENT OF ANY EARTHMOVING ACTIVITIES.
9. PRIOR TO CONDUCTING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL OBTAIN FROM THE ARIZONA STATE HISTORICAL PRESERVATION OFFICER (602) 542-4009, RECOMMENDATIONS REGARDING THE NEED FOR CULTURAL RESOURCES (ARCHAEOLOGICAL) CLEARANCE. ALL DISCOVERIES OF HUMAN REMAINS, CULTURAL ARTIFACTS, OR PALEONTOLOGICAL REMAINS SHALL BE REPORTED TO THE ARIZONA STATE MUSEUM AND MCDOT. UPON DISCOVERY, CONTRACTOR SHALL CEASE OPERATIONS IN THE VICINITY OF THE FIND AND PROTECT THE DISCOVERY AREA FROM FURTHER DISTURBANCE UNTIL THE FIND CAN BE PROFESSIONALLY INVESTIGATED BY THE ARIZONA STATE MUSEUM AND MCDOT.
10. EXCEPT UNDER EMERGENCY CONDITIONS, ROADS SHALL NOT BE CLOSED FOR CONSTRUCTION ACTIVITY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE MCDOT TRANSPORTATION DIRECTOR OR HIS REPRESENTATIVE.
11. PRIOR TO MOVING OR DESTROYING PROTECTED NATIVE PLANT SPECIES, THE CONTRACTOR SHALL FILE A FORMAL NOTICE OF INTENT WITH THE ARIZONA DEPARTMENT OF AGRICULTURE NATIVE PLANTS (602) 542-6408.
12. PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, BASE COURSE AND WEARING SURFACE, SUBMIT SOIL TEST(S) OF SUBGRADE AND REVISED PAVEMENT DESIGN/CALCULATIONS TO MCDOT FOR REVIEW AND APPROVAL. IF SUBGRADE STABILIZATION IS REQUIRED, THE AREA STABILIZED SHALL BE FROM BACK OF SIDEWALK TO BACK OF SIDEWALK AND MATCH THE STABILIZATION DEPTH OF THE PAVEMENT STRUCTURE.
13. ASPHALT MIX DESIGN SHALL BE SUBMITTED TO MCDOT A MINIMUM OF 48 HOURS PRIOR TO PLACING ANY ASPHALT COURSES. (TRENCH WORK EXCLUDED.) ALL PAVED TURNOUTS SHALL HAVE THE SAME ASPHALT AND BASE REQUIREMENTS AS THE ADJACENT ROADWAY UNLESS NOTED OTHERWISE.
14. ALL COMPACTION AND BACKFILL WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE MCDOT SUPPLEMENT TO MAG SPECIFICATION SECTION 601. BACKFILL UNDER EXISTING PAVEMENT, CURB AND GUTTER, ROADWAY SHOULDERS, AND UNPAVED ROADWAYS SHALL CONSIST OF ONE-HALF (1/2) OR ONE SACK CLSM. UNPAVED ROADWAY AREAS INCLUDE THE TRAVELLED WAY PLUS FIVE FEET BEYOND THE TRAVELED WAY.
15. ALL STRUCTURES, SUCH AS MANHOLES, VALVE BOX & COVERS, AND MONITORING WELLS MUST BE MARKED WITH AT LEAST TWO REFLECTIVE YELLOW FLEX POSTS WHEN STRUCTURES ARE LOCATED OUTSIDE THE TRAVELED WAY AND WITHIN THE RIGHT-OF-WAY. (APPLIES ONLY WHEN THERE IS NO CURB.)
16. PAVEMENT WIDENING AND PAVEMENT REPLACEMENT SHALL CONFORM TO REQUIREMENTS OF SPECIFICATION SECTION 336. PAVEMENT CUTS SHALL NOT BE LOCATED WITHIN A LANE WHEEL PATH. THE LANE WHEEL PATH IS THE ENTIRE LANE WIDTH EXCEPT THE AREA WITHIN ONE FOOT OF A LANE LINE STRIPE AND EXCEPT THE CENTER TWO FEET OF THE TRAVEL LANE.
17. ALL EXISTING PAVEMENT MARKINGS, TRAFFIC SIGNS AND SIGNAL EQUIPMENT THAT NEED TO BE REMOVED, REPLACED, RELOCATED OR REPAIRED BECAUSE OF CONTRACTOR'S WORK WILL BE DONE BY THE CONTRACTOR AT HIS EXPENSE. ALL SALVAGED SIGNS SHALL BE DELIVERED TO THE TRAFFIC OPS BUILDING AT 2909 W. DURANGO ST. ARRANGEMENTS CAN BE MADE FOR DELIVERY BY CALLING (602) 506-8662. ALL NEW STREET NAME SIGNS SHALL BE PROVIDED AND INSTALLED BY PERMITTEE AT NO EXPENSE TO MARICOPA COUNTY.
18. PAVEMENT MARKING, SIGNING AND SIGNAL WORK WILL BE INSPECTED AND SHALL MEET COUNTY STANDARDS BEFORE RELEASE OF BOND.
19. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY TO A CONDITION EQUAL TO OR BETTER THAN PRIOR EXISTING CONDITIONS PER MAG 107.9. DISPOSAL OF ALL WASTE MATERIAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A

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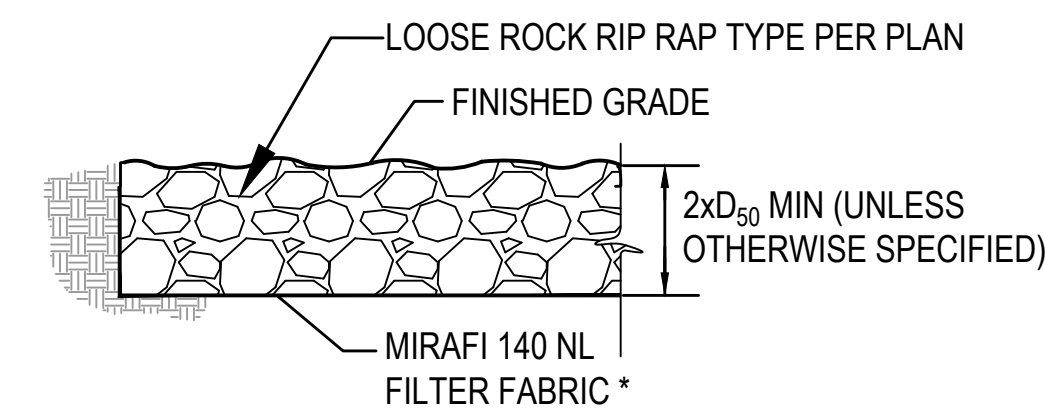
DEVELOPER/OWNER: **BROOKFIELD LAKIN, LLC**  
PROJECT NAME: **ALAMAR - PHASE 1**  
PLAN TYPE: **PAVING, SIGNING AND MARKING PLAN**  
AVONDALE BLVD NORTH AND BROADWAY RD EAST



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PLAN DATE: 02/13/2019  
LATEST REVISION DATE:  
SHEET NUMBER: 3 OF 12  
PROJECT NUMBER: 174612.04

ENG 18-0218 MCDOT TC201801482(18-194)



**LOOSE ROCK RIPRAP**

NOTE: RIP-RAP TO BE ANGULAR STONE

PERCENT FINER BY WEIGHT (D)	SIEVE SIZE			
	TYPE I	TYPE II	TYPE III	TYPE IV
15	3"	4"	6"	8"
50	6"	9"	12"	18"
85	8"	14"	18"	27"
100	12"	18"	24"	36"

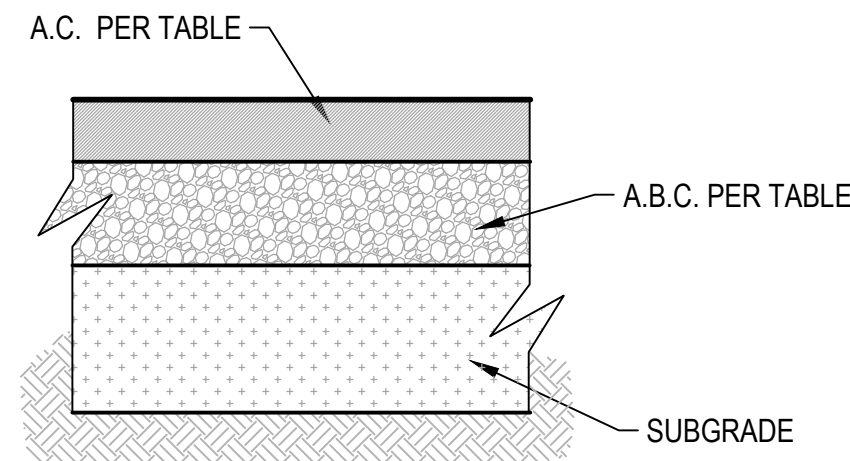
INSTALL LOOSE RIP-RAP PER M.A.G. SPEC. 220

\* INSTALL "MIRAF1 140 NL" FILTER FABRIC OR APPROVED EQUAL UNDER ALL LOOSE RIP-RAP

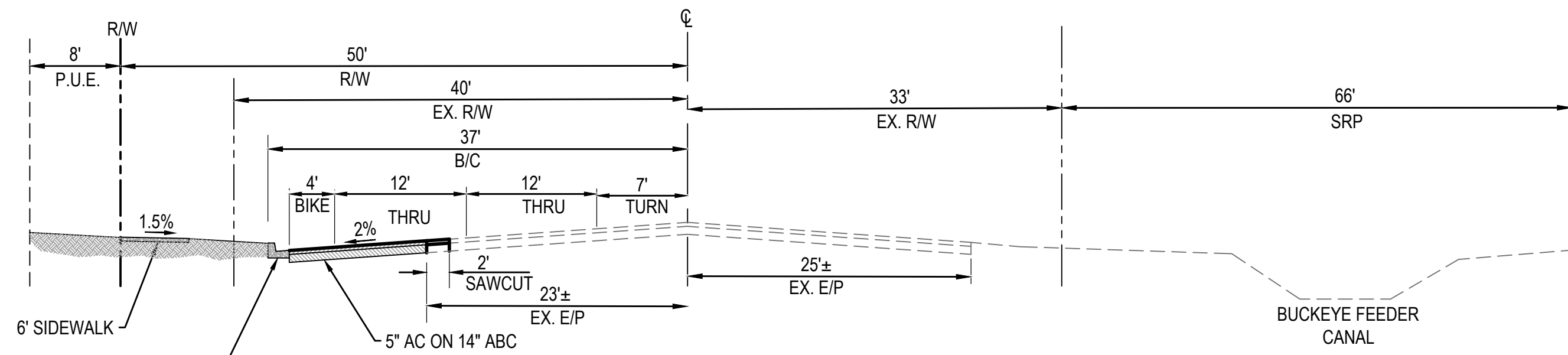
**ROADWAY SECTION TABLES**

STREET	AC THK	ABC THK	SUB-BASE*
LOCAL / NEIGHBORHOOD ENTRY	3"	8"	12"
PRINCIPAL ARTERIAL (BROADWAY RD)	5"	14"	12"
MINOR ARTERIAL (AVONDALE BLVD)	5"	14"	12"
MINOR COLLECTOR (ALAMAR PKWY)	3.5"	10"	12"

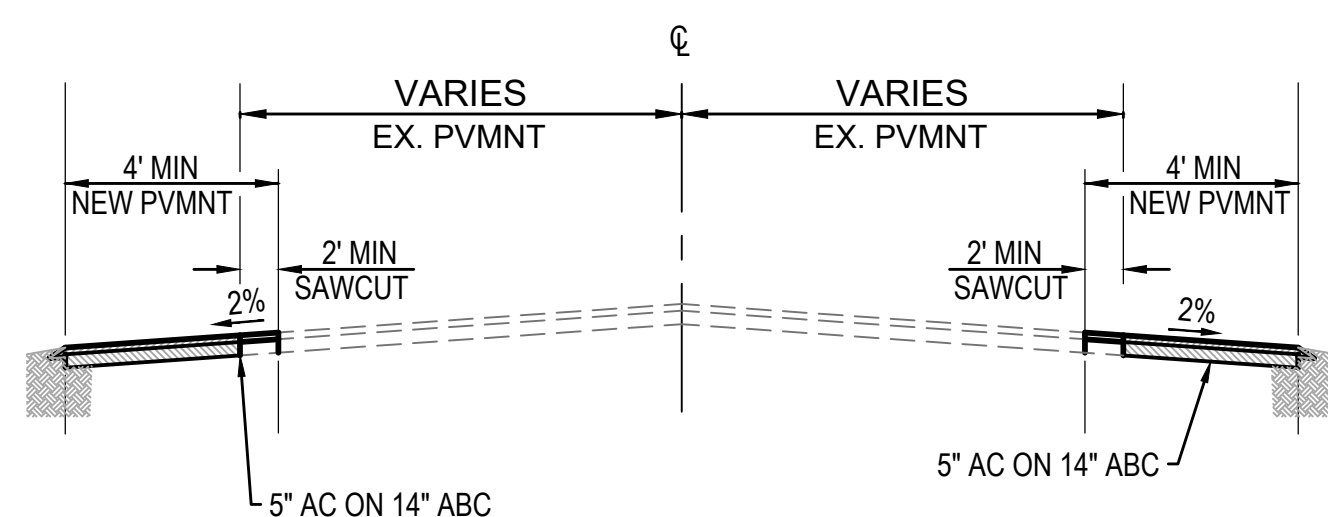
NOTE:  
ROADWAY SECTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.  
\*SUB-BASE TO BE MOISTURE CONDITIONED AND MIN. 95% COMPACTED (NUMBER OF LIFTS PER C.O.A. STANDARD)



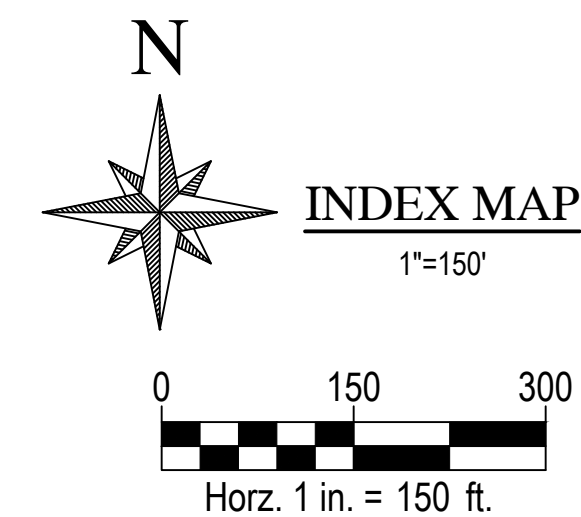
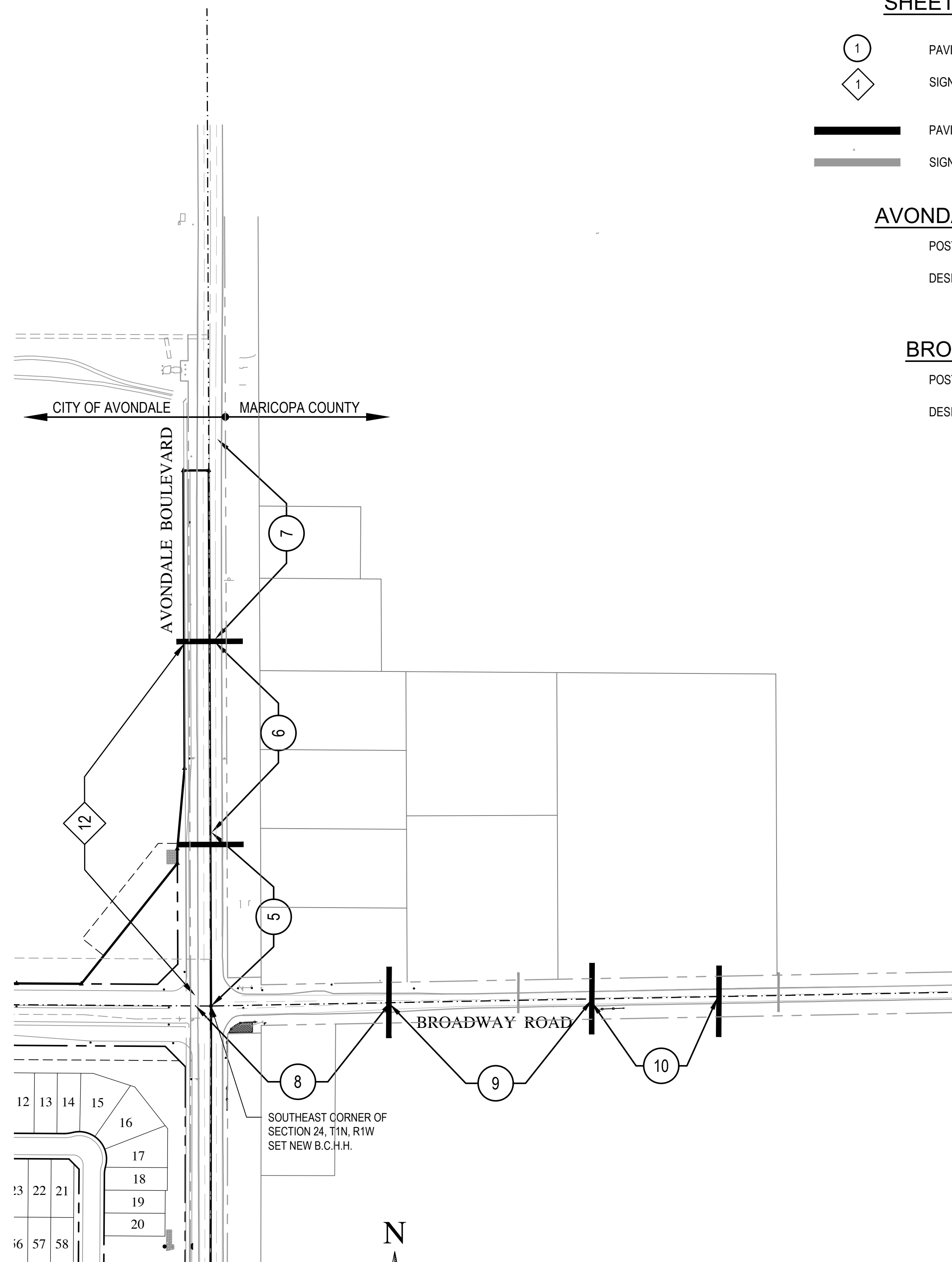
**ROADWAY PAVEMENT SECTION**  
N.T.S.



**AVONDALE BLVD (MINOR ARTERIAL)**  
LOOKING NORTH  
N.T.S.



**SECTION A**  
LOOKING EAST  
N.T.S.



**SHEET INDEX LEGEND**

- 1 PAVING PLAN & PROFILE SHEET NUMBER
- SIGNING AND STRIPING SHEET NUMBER
- PAVING PLAN & PROFILE MATCHLINE
- SIGNING AND STRIPING MATCHLINE

**AVONDALE BOULEVARD**

POST SPEED: 50 MPH  
DESIGN SPEED: 60 MPH

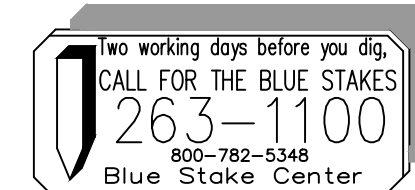
**BROADWAY ROAD**

POST SPEED: 50 MPH  
DESIGN SPEED: 60 MPH

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WWW.WOODPATEL.COM



DEVELOPER: **BROOKFIELD LAKIN, LLC**  
PROJECT NAME: **ALAMAR - PHASE 1**  
PLAN TYPE: PAVING, SIGNING AND MARKING PLAN  
AVONDALE BLVD NORTH AND BROADWAY RD EAST

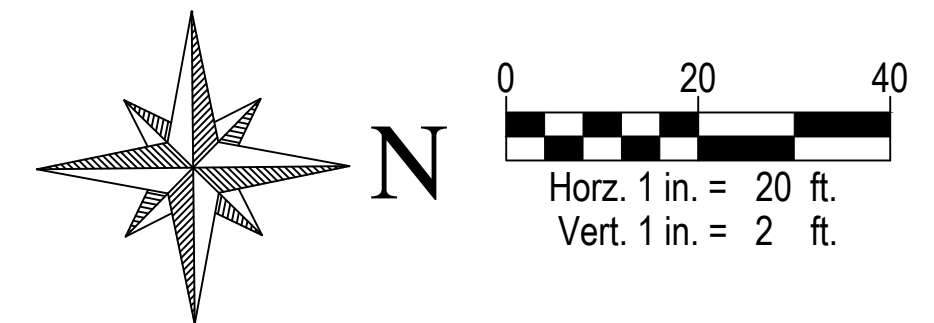
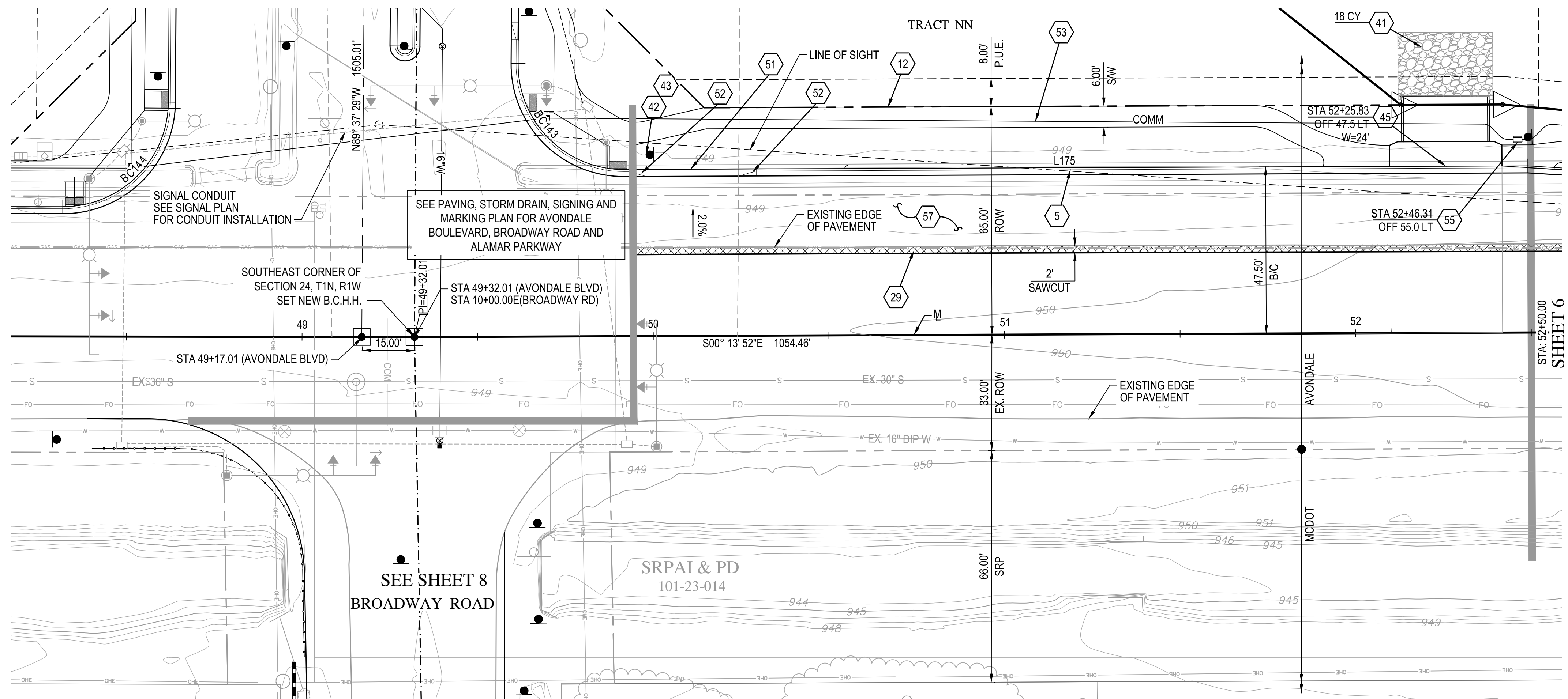


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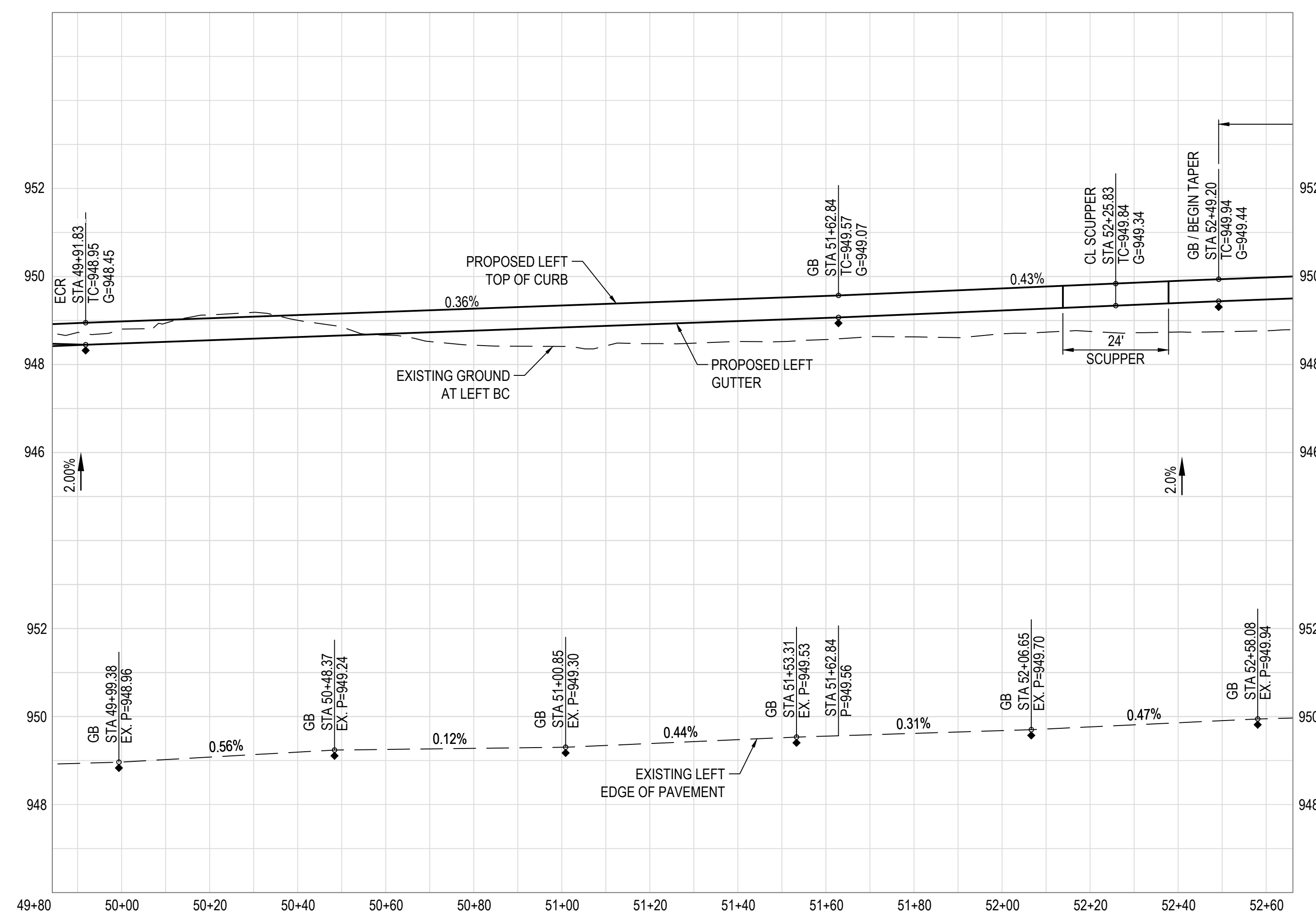
PLAN DATE: 02/13/2019  
LATEST REVISION DATE:  
SHEET NUMBER: 4 OF 12  
PROJECT NUMBER: 174612.04





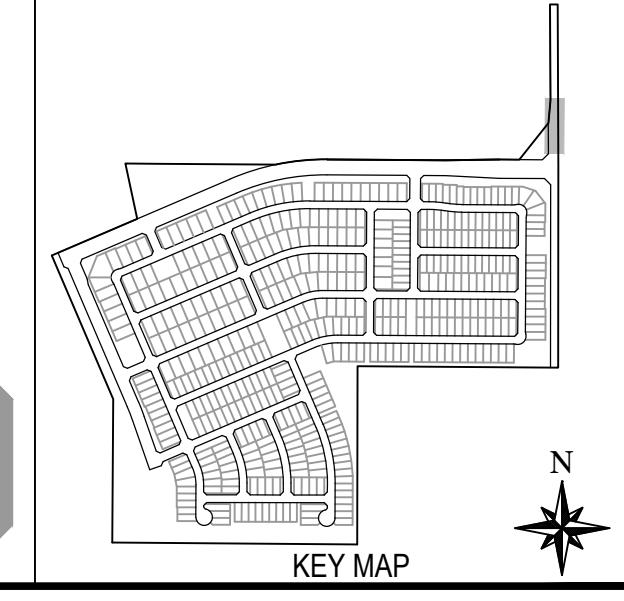
- PAVING NOTES**
- 5 CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STANDARD DETAIL 220-1, TYPE "A".
  - 12 CONSTRUCT 6" CONCRETE SIDEWALK PER M.A.G. STANDARD DETAIL 230.
  - 29 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
  - 41 CONSTRUCT TYPE I LOOSE RIP-RAP PROTECTION PER GRADATION TABLE ON DETAIL SHEET. THICKNESS = 12"
  - 42 INSTALL SIGN POST PER C.O.A. STANDARD DETAIL A1600
  - 43 INSTALL 30"x30" STOP SIGN (R1-1) PER MUTCD.
  - 45 CONSTRUCT SCUPPER PER M.A.G. STANDARD DETAIL 206-1 AND 206-2 (WIDTH PER PLAN) AND HAND RAIL PER M.A.G. STANDARD DETAIL 145 TYPE I.
  - 51 CONSTRUCT MOUNTABLE CURB & GUTTER PER M.A.G. STANDARD DETAIL 220-2, TYPE "E".
  - 52 CONSTRUCT 5" CURB TRANSITION FROM 6" VERTICAL CURB TO MOUNTABLE CURB PER M.A.G. STANDARD DETAIL 220-2.
  - 53 INSTALL 2-2" AND 2-4" SCHEDULE 80 PVC CONDUIT WITH PULL TAPE FOR PRIMARY COMMUNICATIONS NETWORK PER CITY OF AVONDALE STANDARD DETAIL A1720-1 TRENCH DETAIL.
  - 55 INSTALL PULL BOX PER C.O.A. STANDARD DETAIL A1717.
  - 57 CONSTRUCT STREET SECTION PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND C.O.A. STANDARD DETAIL A1103. SEE ROADWAY PAVEMENT SECTION DETAIL ON SHEET 4.

**AVONDALE BOULEVARD**



BACK OF CURB LINE TABLE		
LINE	BEARING	DISTANCE
L175	S00°13'52"E	250.00'

BACK OF CURB CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	TANGENT	CHORD
BC143	90°36'23"	30.00'	47.44'	30.32	42.65
BC144	89°42'39"	30.00'	46.97'	29.85	42.32



Two working days before you dig,  
CALL FOR THE BLUE STAKES  
**263-1100**  
Blue Stake Center

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**ALAMAR**

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BROOKFIELD LAKIN, LLC  
ALAMAR - PHASE 1  
PAVING, SIGNING AND MARKING PLAN  
AVONDALE BLVD NORTH AND BROADWAY RD EAST

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SEAL  
Professional Engineer  
31985  
FRANK  
MINGCHENG WOO  
Arizona  
No. 00134  
EXPRES 12-31-21

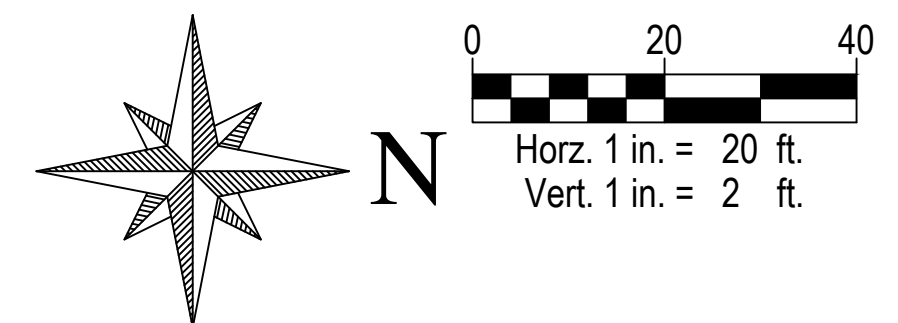
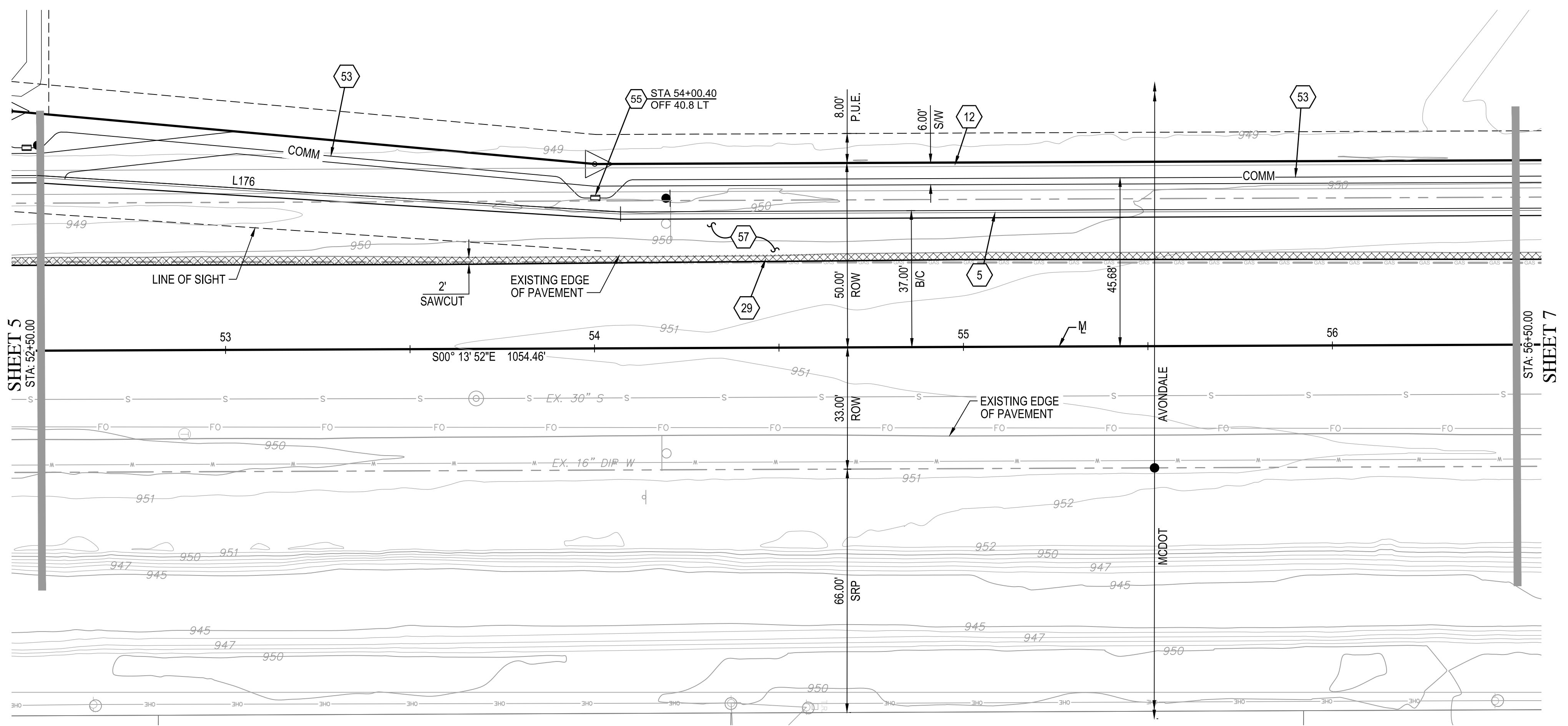
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DATE: 02/13/2019  
LATEST REVISION DATE:  
SHEET NUMBER: 5 OF 12  
PROJECT NUMBER: 174612.04

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ENG 18-0218 MCDOT TC201801482(18-194)

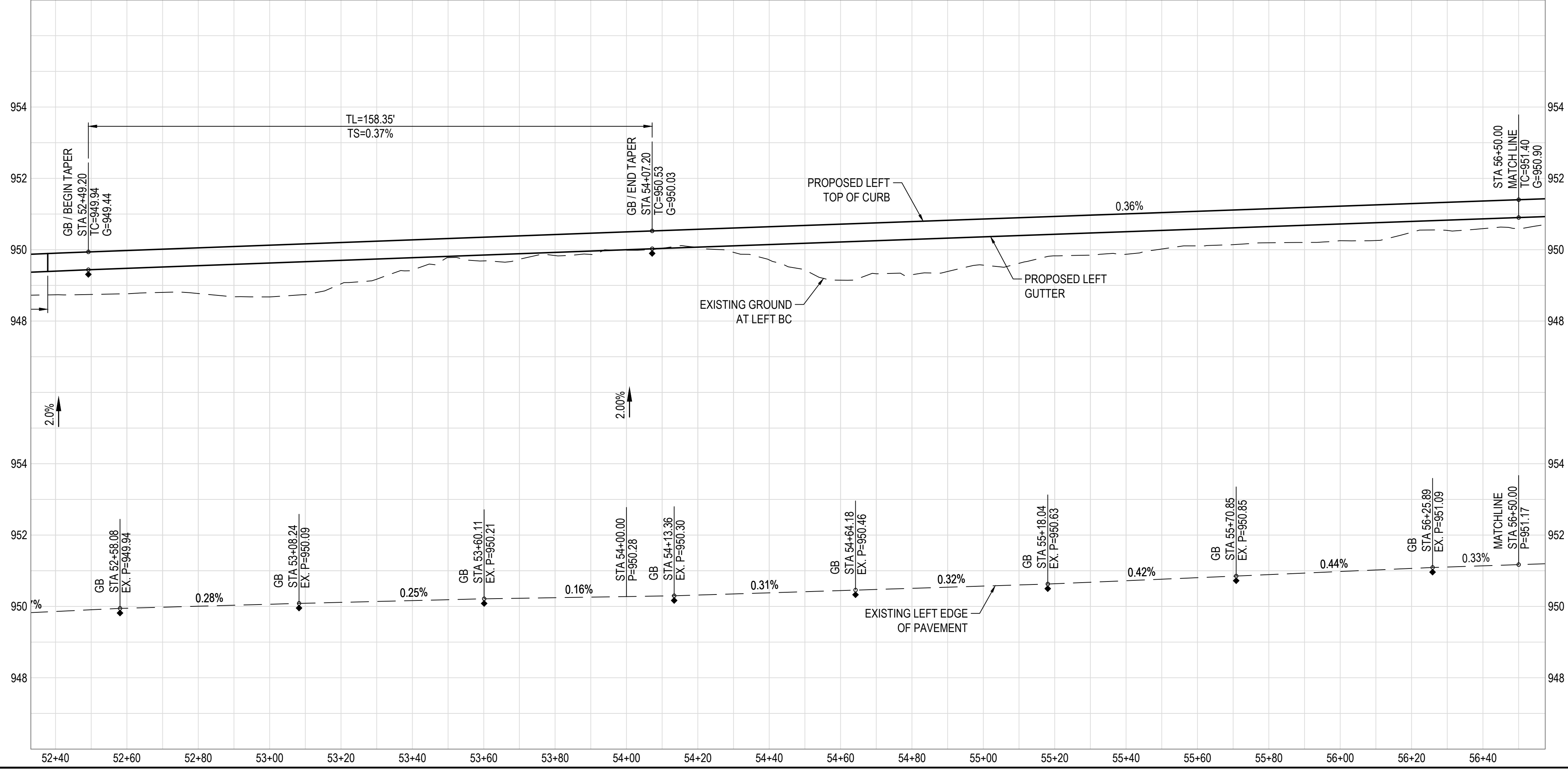




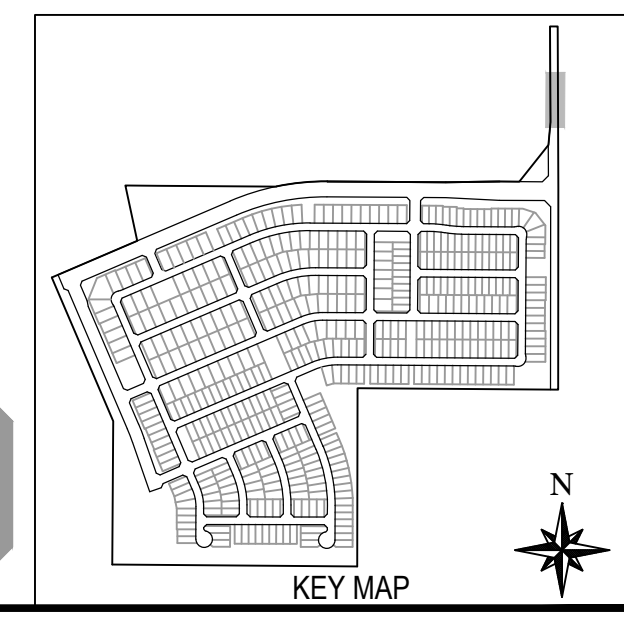
**PAVING NOTES**

- 5 CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STANDARD DETAIL 220-1, TYPE "A".
- 12 CONSTRUCT 6" CONCRETE SIDEWALK PER M.A.G. STANDARD DETAIL 230.
- 29 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
- 53 INSTALL 2-2" AND 2-4" SCHEDULE 80 PVC CONDUIT WITH PULL TAPE FOR PRIMARY COMMUNICATIONS NETWORK PER CITY OF AVONDALE STANDARD DETAIL A1720-1 TRENCH DETAIL.
- 55 INSTALL PULL BOX PER C.O.A. STANDARD DETAIL A1717.
- 57 CONSTRUCT STREET SECTION PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND C.O.A. STANDARD DETAIL A1103. SEE ROADWAY PAVEMENT SECTION DETAIL ON SHEET 4.

**AVONDALE BOULEVARD**



BACK OF CURB LINE TABLE		
LINE	BEARING	DISTANCE
L176	S03°34'15"W	158.35'

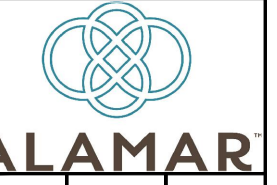


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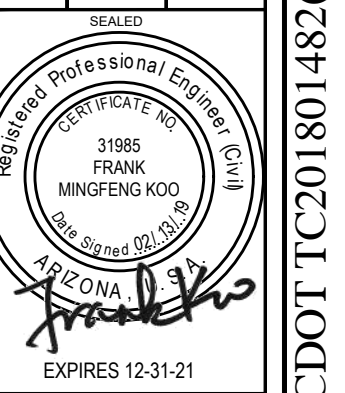
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SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	1" = 2'

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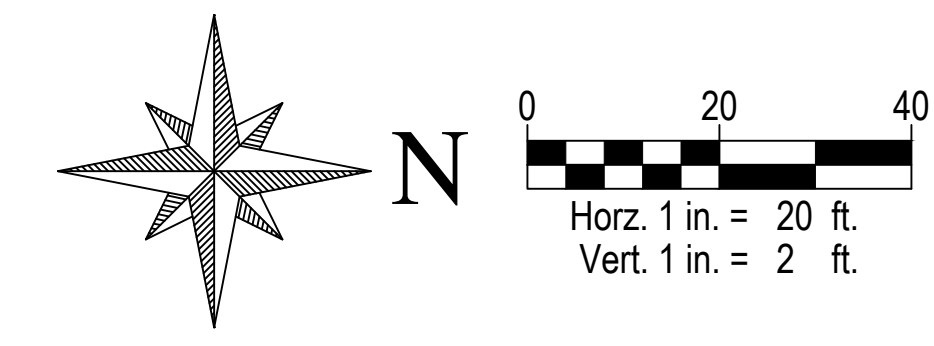
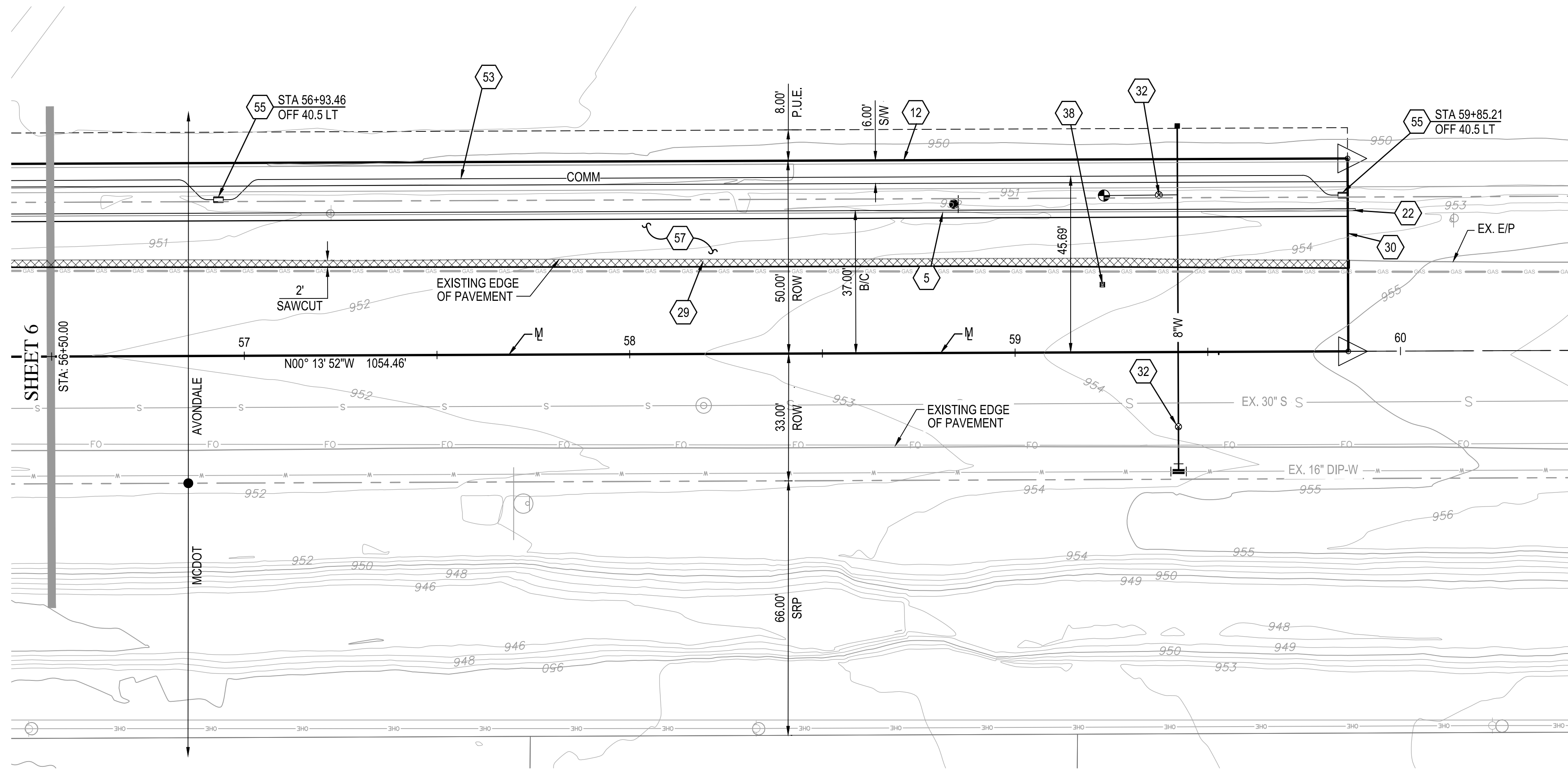


DEVELOPER  
**BROOKFIELD LAKIN, LLC**  
PROJECT NAME  
**ALAMAR - PHASE 1**  
PLAN TYPE  
PAVING, SIGNING AND MARKING PLAN  
AVONDALE BLVD NORTH AND BROADWAY RD EAST



DATE  
02/13/2019  
LATEST REVISION DATE  
SHEET NUMBER  
6 OF 12  
PROJECT NUMBER  
174612.04

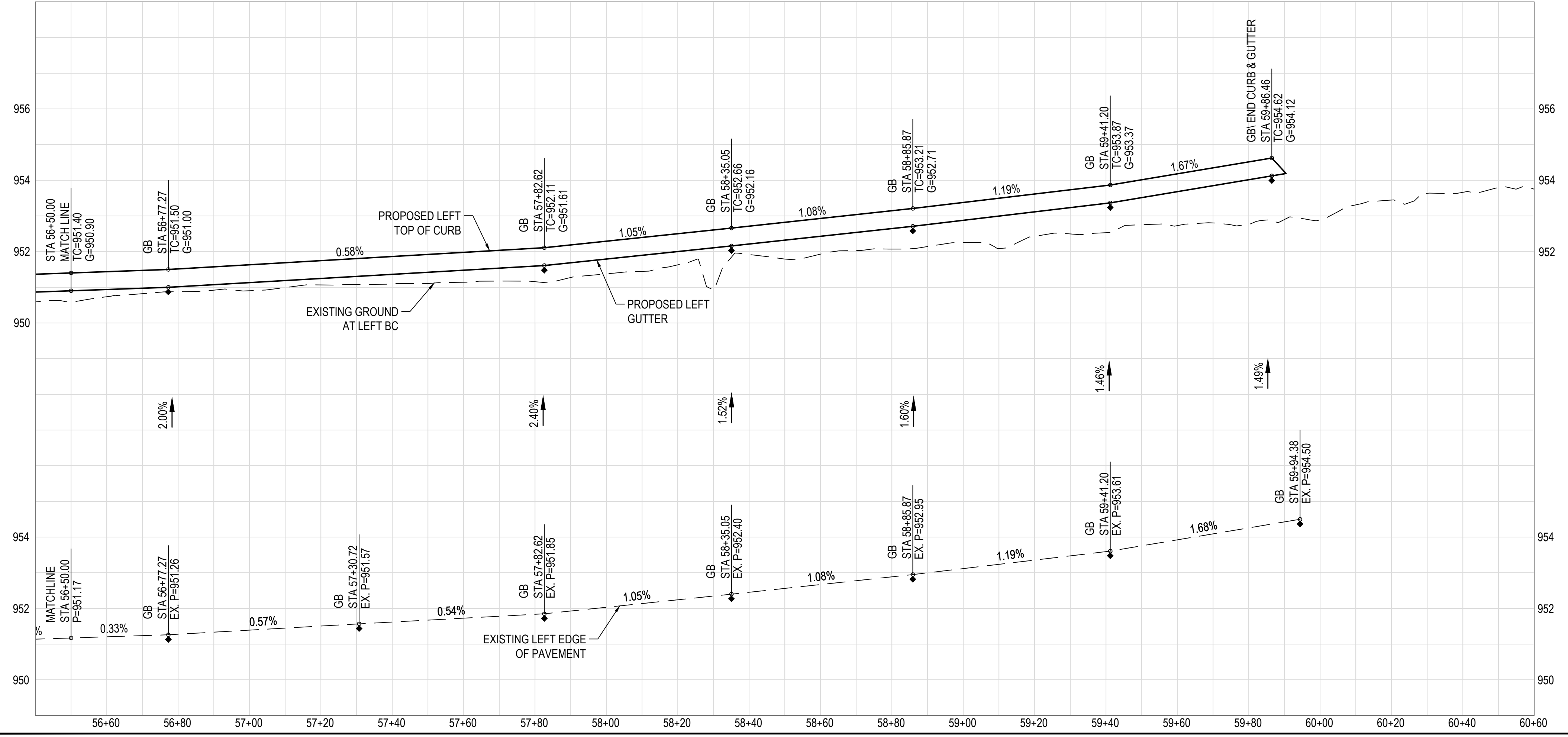




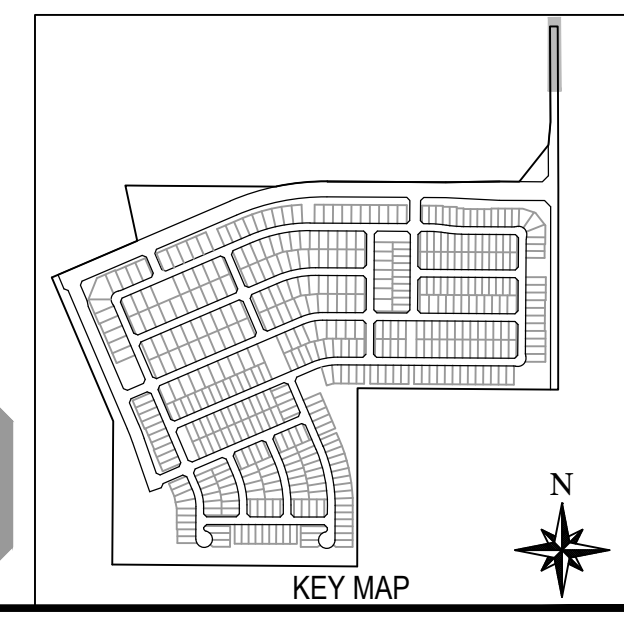
**PAVING NOTES**

- 5 CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STANDARD DETAIL 220-1, TYPE "A".
- 12 CONSTRUCT 6" CONCRETE SIDEWALK PER M.A.G. STANDARD DETAIL 230.
- 22 CONSTRUCT CURB TERMINATION PER M.A.G. STANDARD DETAIL 222.
- 28 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
- 30 CONSTRUCT ASPHALT PAVEMENT EDGE PER M.A.G. STANDARD DETAIL 201, TYPE "A".
- 32 ADJUST FRAME & COVER PER C.O.A. STANDARD DETAIL A1391.
- 38 INSTALL FIRE HYDRANT MARKER PER C.O.A. STANDARD DETAIL A1609.
- 53 INSTALL 2-2" AND 2-4" SCHEDULE 80 PVC CONDUIT WITH PULL TAPE FOR PRIMARY COMMUNICATIONS NETWORK PER CITY OF AVONDALE STANDARD DETAIL A1720-1 TRENCH DETAIL.
- 55 INSTALL PULL BOX PER C.O.A. STANDARD DETAIL A1717.
- 57 CONSTRUCT STREET SECTION PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND C.O.A. STANDARD DETAIL A1103. SEE ROADWAY PAVEMENT SECTION DETAIL ON SHEET 4.

**AVONDALE BOULEVARD**



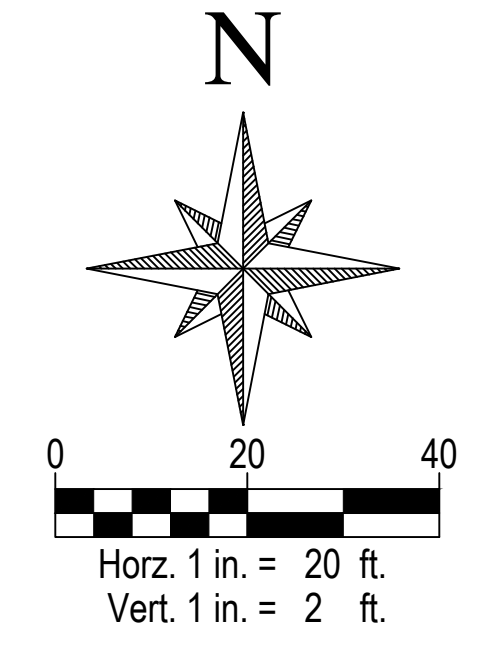
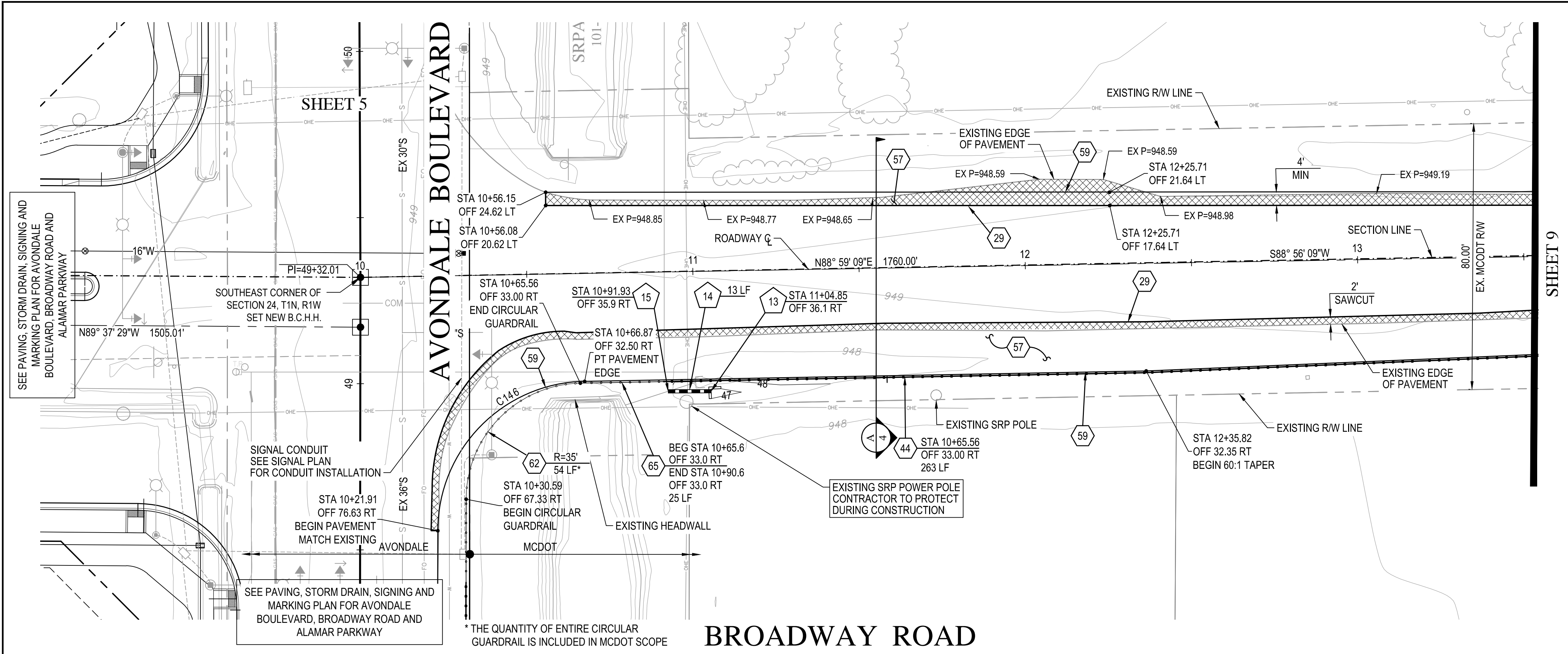
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 <b>WOOD/PATEL</b> MISSION: CLIENT SERVICE (602) 335-8500 WWW.WOODPATEL.COM	 <b>ALAMAR</b>
BROOKFIELD LAKIN, LLC PROJECT NAME <b>ALAMAR - PHASE 1</b> PLAN TYPE PAVING, SIGNING AND MARKING PLAN AVONDALE BLVD NORTH AND BROADWAY RD EAST	DATE PREPARED 02/13/2019 LATEST REVISION DATE SHEET NUMBER <b>7 OF 12</b> PROJECT NUMBER <b>174612.04</b>





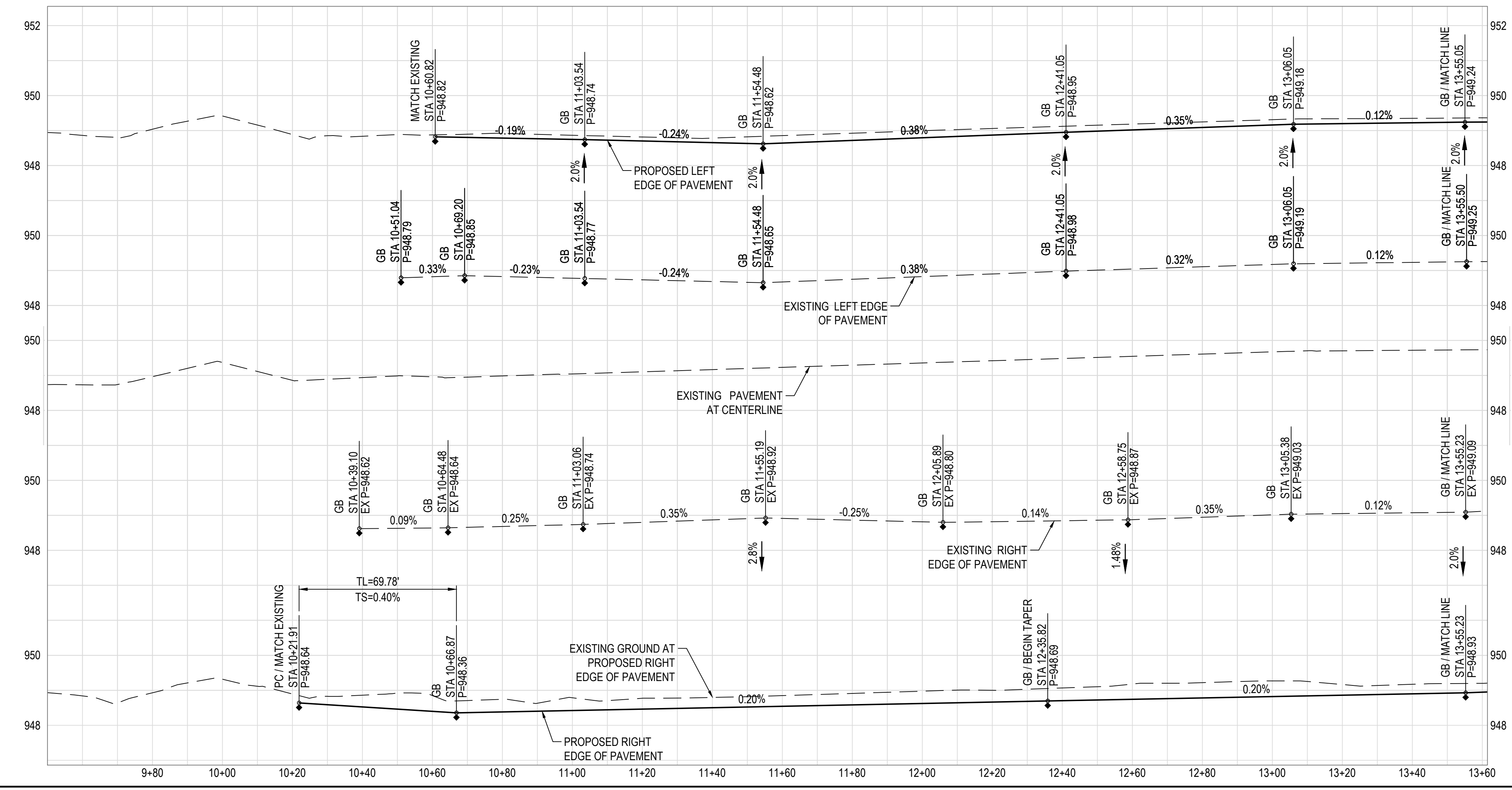
**PAVING NOTES**

- 6 CONSTRUCT 6" VERTICAL CURB & GUTTER W/ DEPRESSED LIP PER MODIFIED M.A.G. STANDARD DETAIL 220-1, TYPE "A".
- 29 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
- 44 INSTALL TRINITY T-31 W-BEAM GUARDRAIL OR APPROVED EQUAL PER DETAIL ON SHEET 11.
- 57 CONSTRUCT STREET SECTION PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND C.O.A. STANDARD DETAIL A1103. SEE ROADWAY PAVEMENT SECTION DETAIL ON SHEET 4.
- 59 CONSTRUCT ASPHALT PAVEMENT EDGE PER M.A.G. STANDARD DETAIL 201, SAFETY EDGE.
- 60 INSTALL GUARDRAIL END TERMINAL PER DETAIL ON SHEET 11.
- 62 INSTALL 28" GUARDRAIL PER FHWA TA-5040.32 ON RADIUS
- 65 INSTALL GUARDRAIL TRANSITION PER MCDOT STANDARD DETAIL 3009.

**STORM DRAIN NOTES**

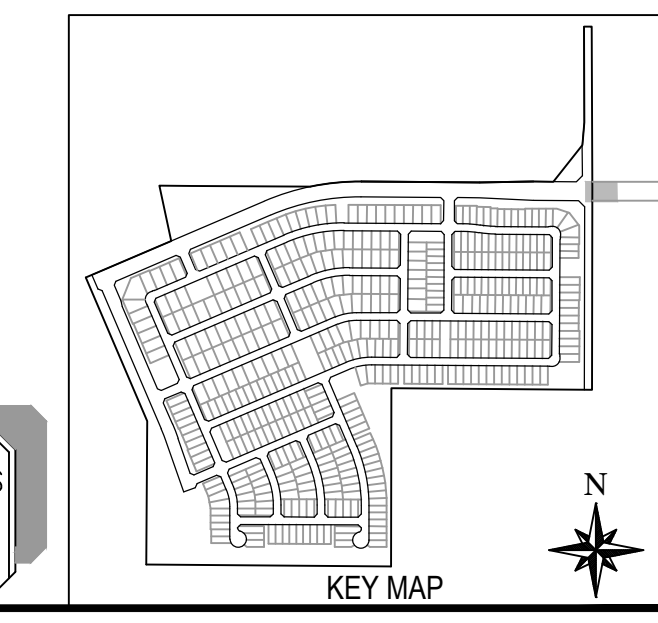
- 13 REMOVE EXISTING HEADWALL AND CONSTRUCT NEW "L" TYPE HEADWALL PER M.A.G. STANDARD DETAIL 501-1. RE-GRADE DRAINAGE DITCH TO NEW HEADWALL.
- 14 INSTALL 12" R.G.R.C.P. CLASS V STORM DRAIN PIPE.
- 15 ATTACH TO EXISTING PIPE BY CONSTRUCTING CONCRETE PIPE COLLAR PER M.A.G. STANDARD DETAIL 505. L=1.0', T=5"

NOTE:  
INSPECTIONS EAST OF AVONDALE BOULEVARD TO BE PERFORMED BY MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION.



**CURVE TABLE**

CURVE	DELTA	RADIUS	ARC
C146	88°51'00"	45.00'	69.78'



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**ALAMAR**

DISTRICT/OWNER: BROOKFIELD LAKIN, LLC  
PACKAGE NAME: ALAMAR - PHASE 1  
PLAN TYPE: PAVING, SIGNING AND MARKING PLAN  
PROJECT: AVONDALE BLVD NORTH AND BROADWAY RD EAST

SEAL  
Professional Engineer  
31985  
FRANK  
MINGFENG WOO  
EXPIRES 12-31-21

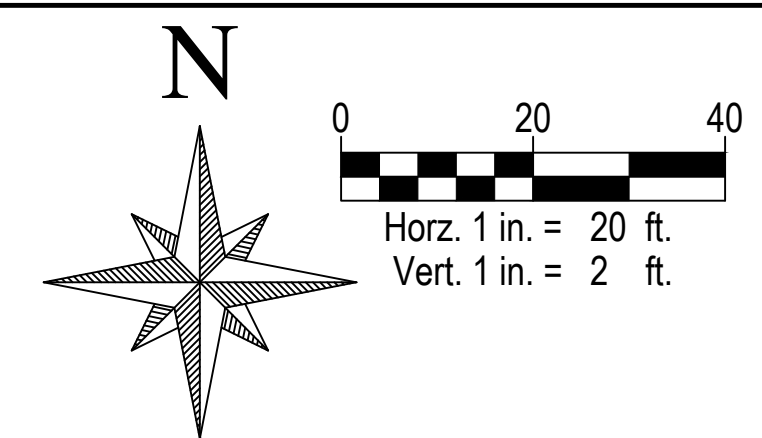
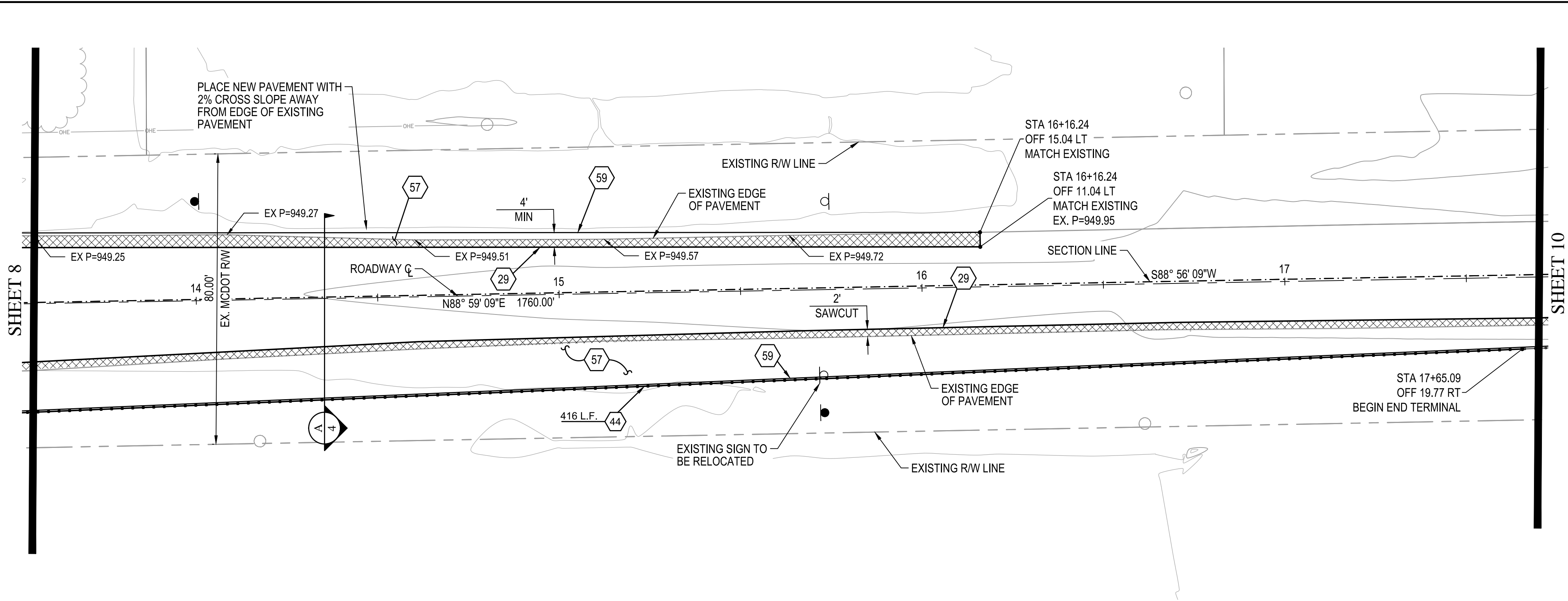
DATE: 02/13/2019  
LATEST REVISION DATE

SHEET NUMBER: 8 OF 12  
PROJECT NUMBER: 174612.04

ENG 18-0218 MCDOT TC201801482(18-194)

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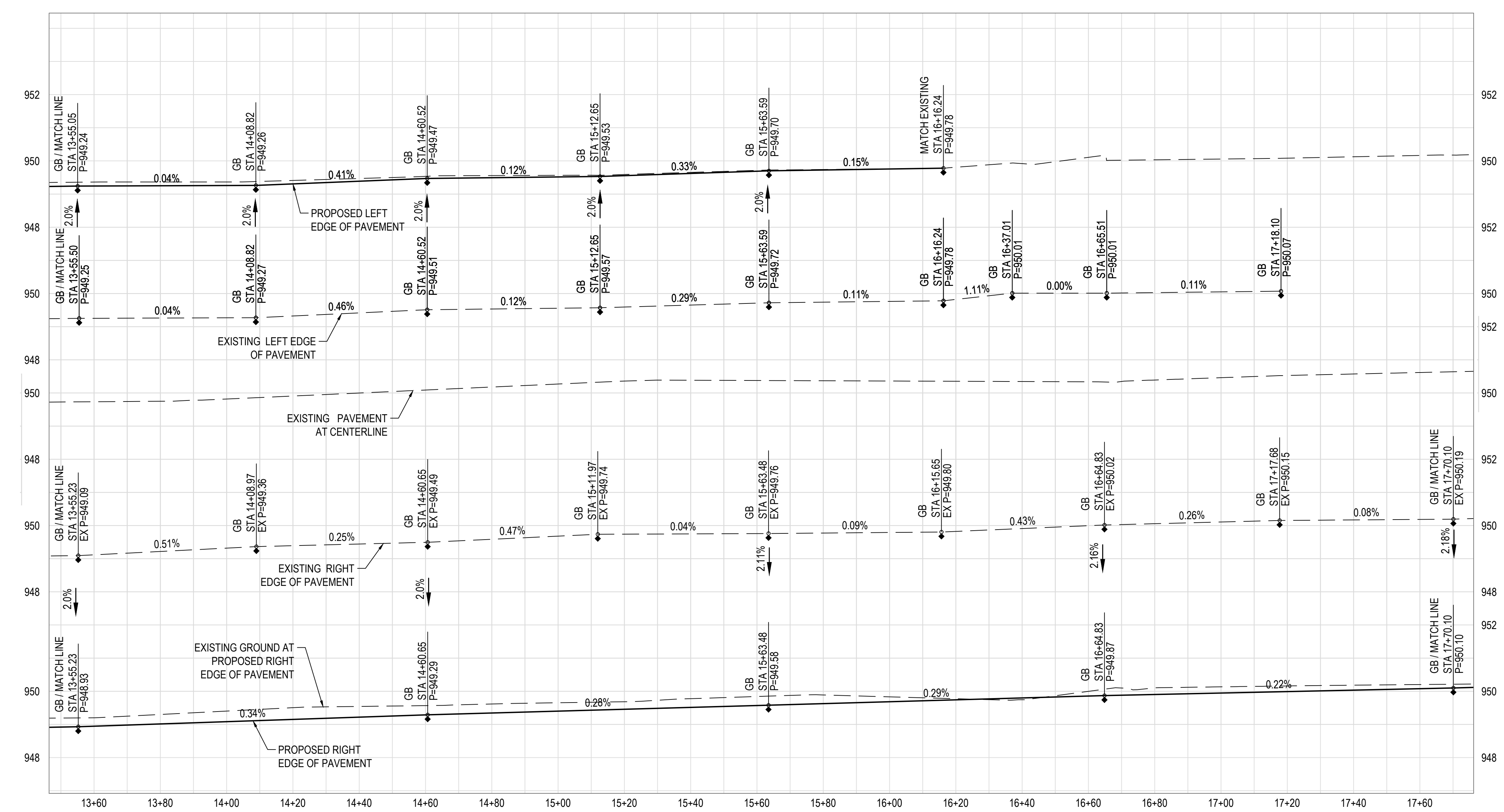




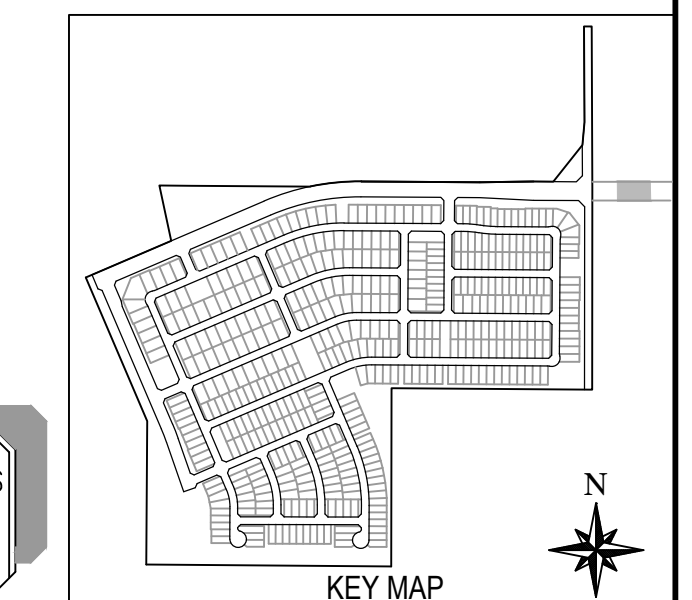
**PAVING NOTES**

- 29 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
- 44 INSTALL TRINITY T-31 W-BEAM GUARDRAIL OR APPROVED EQUAL PER DETAIL ON SHEET 11.
- 57 CONSTRUCT STREET SECTION PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND C.O.A. STANDARD DETAIL A1103. SEE ROADWAY PAVEMENT SECTION DETAIL ON SHEET 4.
- 59 CONSTRUCT ASPHALT PAVEMENT EDGE PER M.A.G. STANDARD DETAIL 201, SAFETY EDGE.

**BROADWAY ROAD**



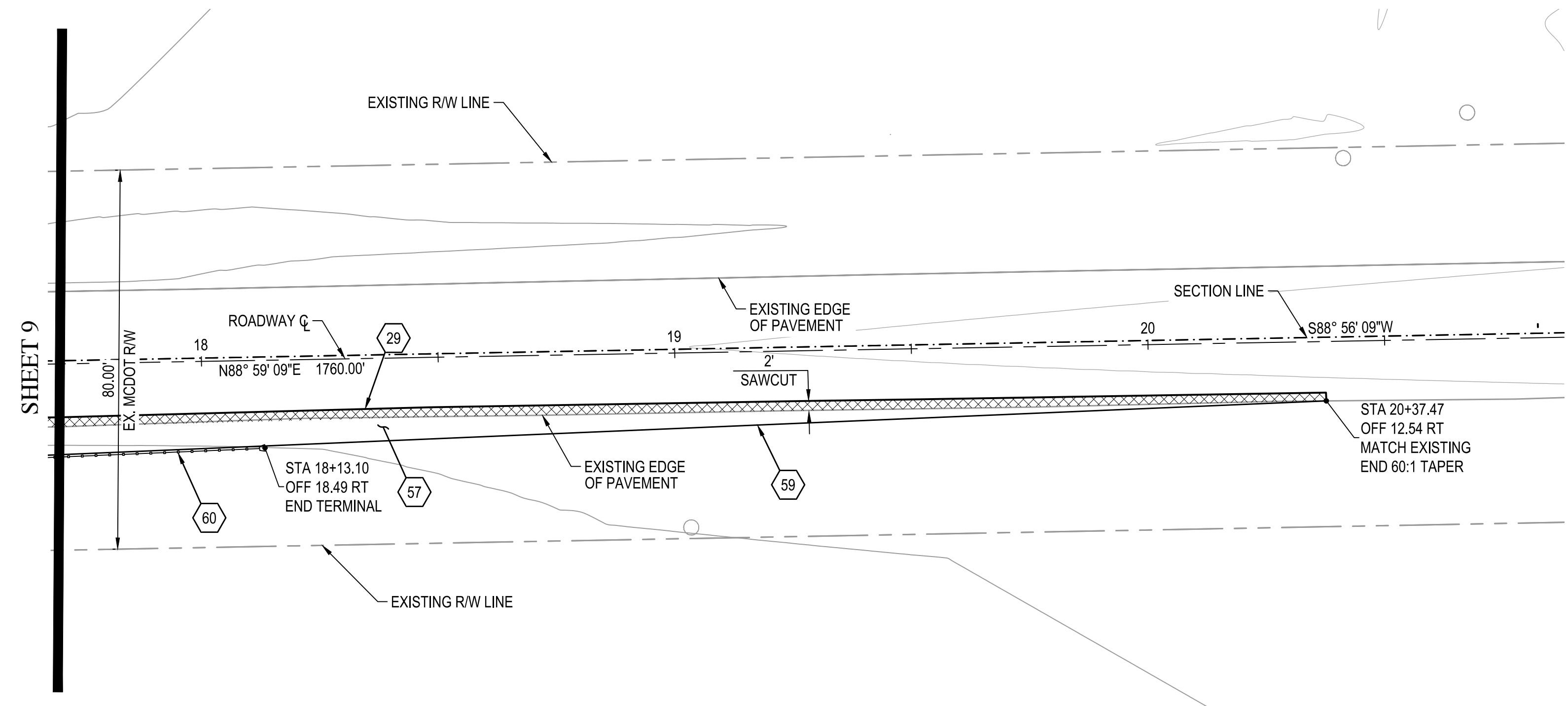
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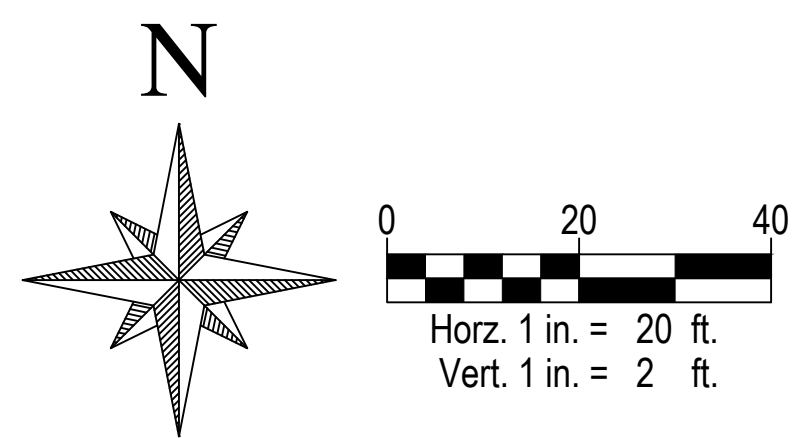
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<p><b>WOOD/PATEL</b> MISSION: CLIENT SERVICE® (602) 335-8500 WWW.WOODPATEL.COM</p>	<p><b>ALAMAR</b></p>
<p>DATE/ISSUE: BROOKFIELD LAKIN, LLC PACKAGE NAME: ALAMAR - PHASE 1 PLAN TYPE: PAVING, SIGNING AND MARKING PLAN PROJECT: AVONDALE BLVD NORTH AND BROADWAY RD EAST</p>	<p>SCALE (HORIZ.): 1" = 20' SCALE (VERT.): 1" = 2'</p>
<p>DATE: 02/13/2019 LATEST REVISION DATE</p>	
<p>SHEET NUMBER: 9 OF 12 PROJECT NUMBER: 174612.04</p>	
<p>EXPIRES 12-31-21</p>	

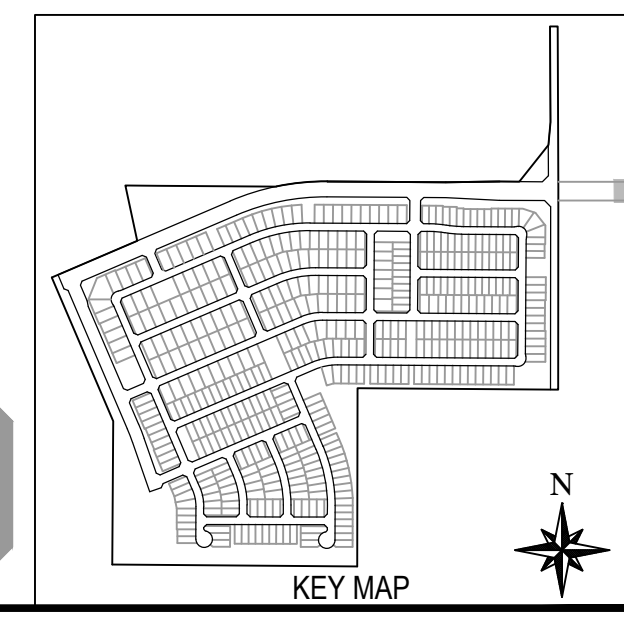
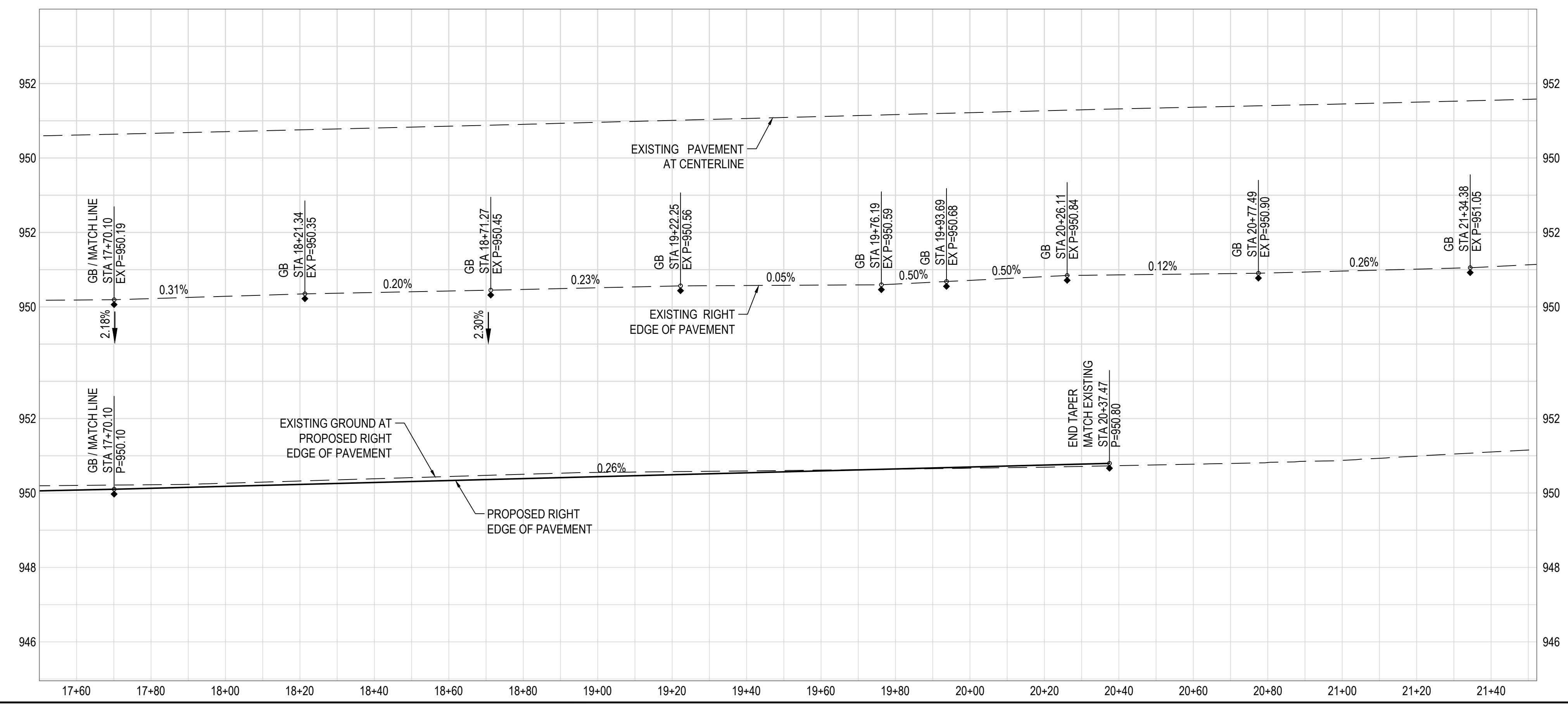




**BROADWAY ROAD**



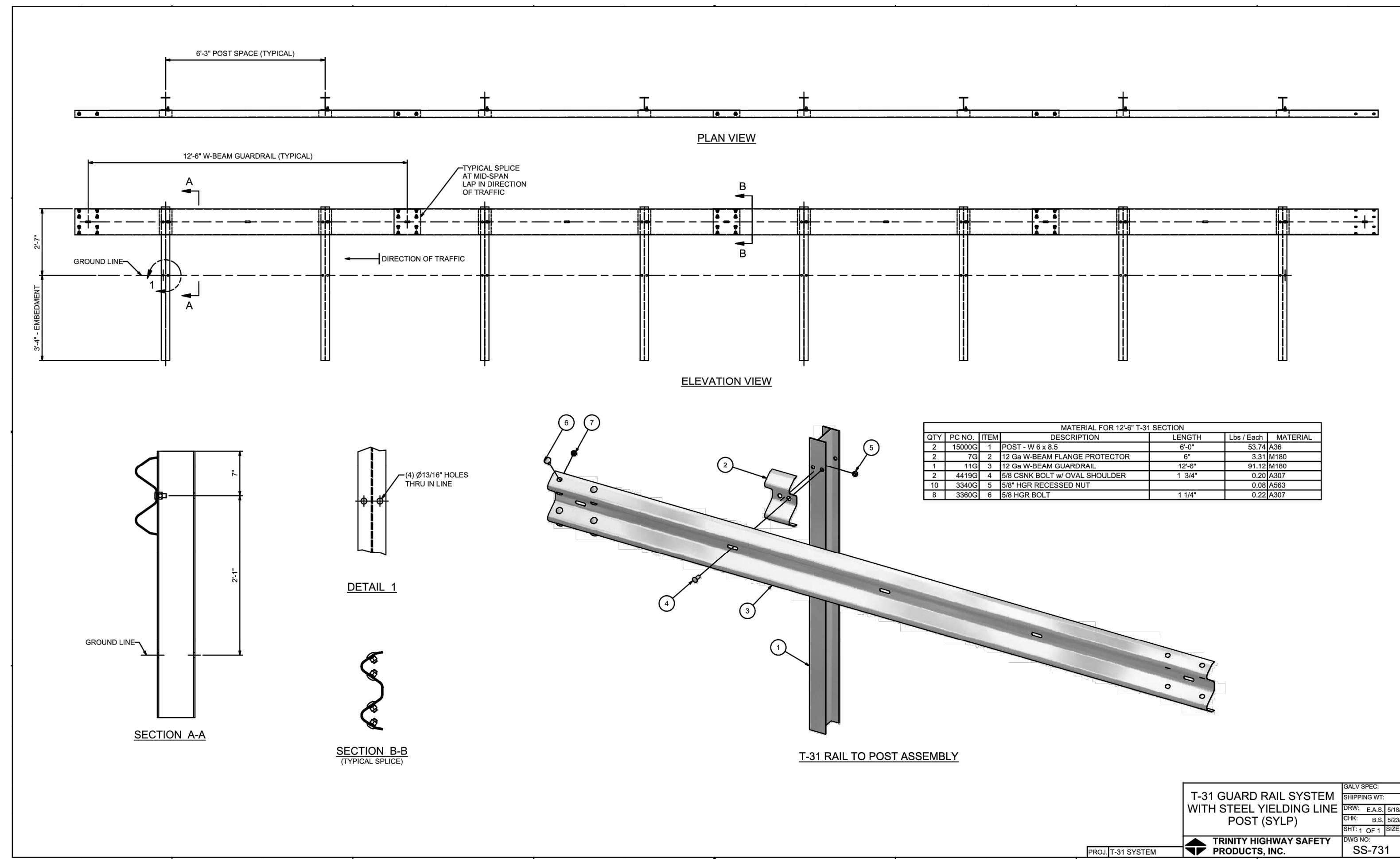
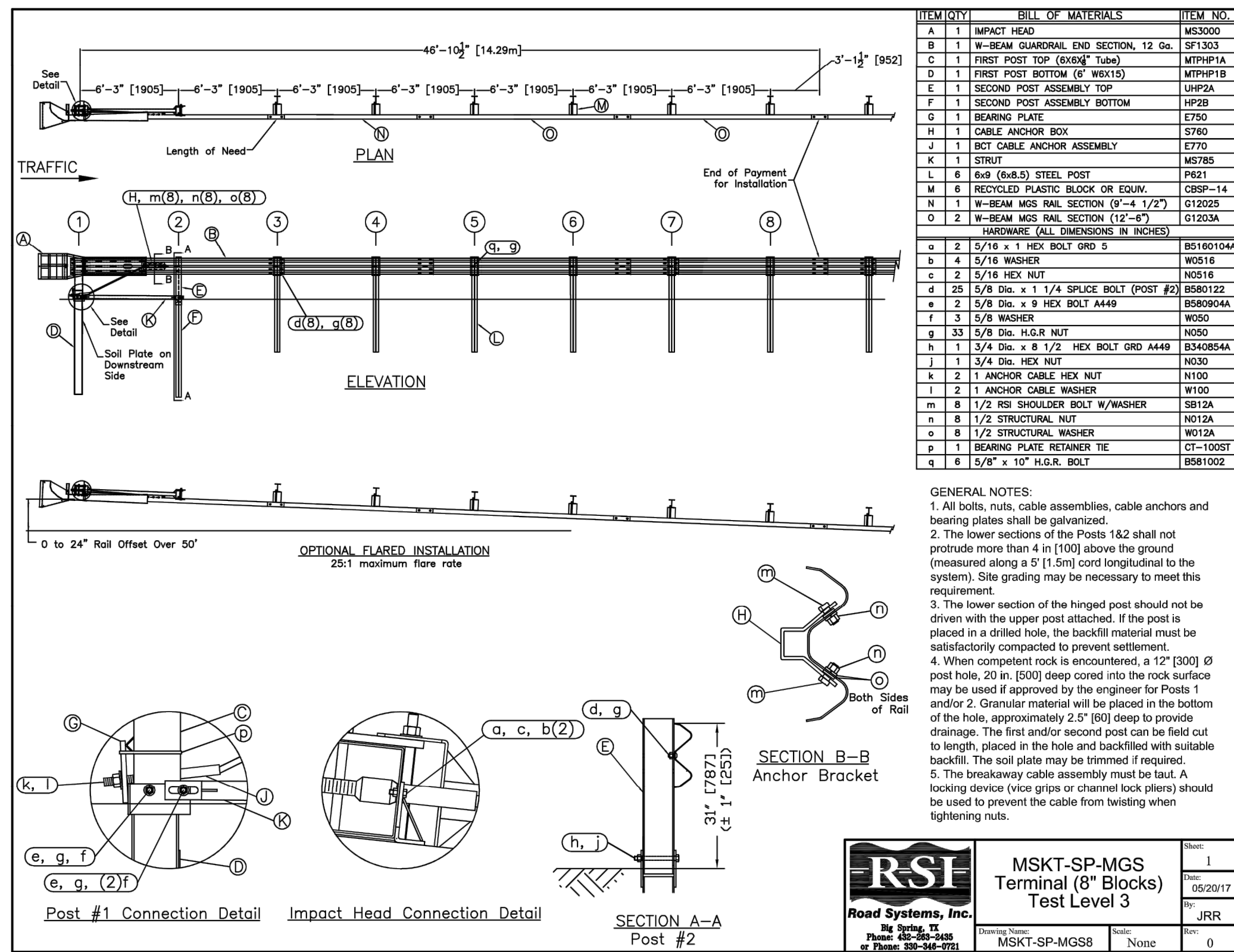
- PAVING NOTES**
- 29 SAWCUT AND REMOVE & REPLACE EXISTING PAVEMENT PER M.A.G. SPECIFICATIONS SECTION 310 AND 321 AND PAVEMENT SECTION PER DETAIL ON DETAIL SHEET.
  - 44 INSTALL TRINITY T-31 W-BEAM GUARDRAIL OR APPROVED EQUAL PER DETAIL ON SHEET 11.
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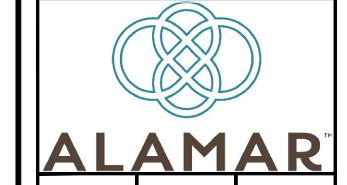
SCALE (HORIZ.) 1" = 20'	SCALE (VERT.) 1" = 2'								
<b>WOOD/PATEL</b> MISSION: CLIENT SERVICE® (602) 335-8500 WWW.WOODPATEL.COM									
DEVELOPER <b>BROOKFIELD LAKIN, LLC</b>	PROJECT NAME <b>ALAMAR - PHASE 1</b>								
PLAN TYPE PAVING, SIGNING AND MARKING PLAN									
LOCATION AVONDALE BLVD NORTH AND BROADWAY RD EAST									
<p><b>NOTE:</b></p> <p>ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CITY OF AVONDALE'S SUPPLEMENT TO THE M.A.G. SPECIFICATIONS AND STANDARD DETAILS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE'S ENGINEERING DEPARTMENT OR ONLINE AT THE CITY OF AVONDALE'S WEBSITE.</p>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>PLAN DATE</td> <td style="text-align: center;">02/13/2019</td> </tr> <tr> <td>LATEST REVISION DATE</td> <td></td> </tr> <tr> <td>SHEET NUMBER</td> <td style="text-align: center;">10 OF 12</td> </tr> <tr> <td>PROJECT NUMBER</td> <td style="text-align: center;">174612.04</td> </tr> </table>		PLAN DATE	02/13/2019	LATEST REVISION DATE		SHEET NUMBER	10 OF 12	PROJECT NUMBER	174612.04
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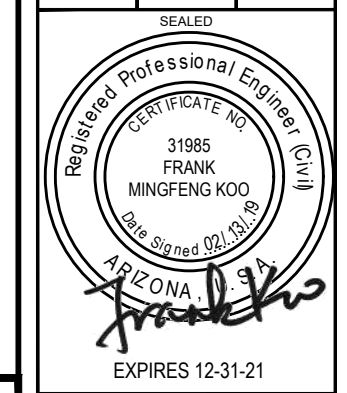


SCALE (HORIZ)	N/A
SCALE (VERT)	N/A

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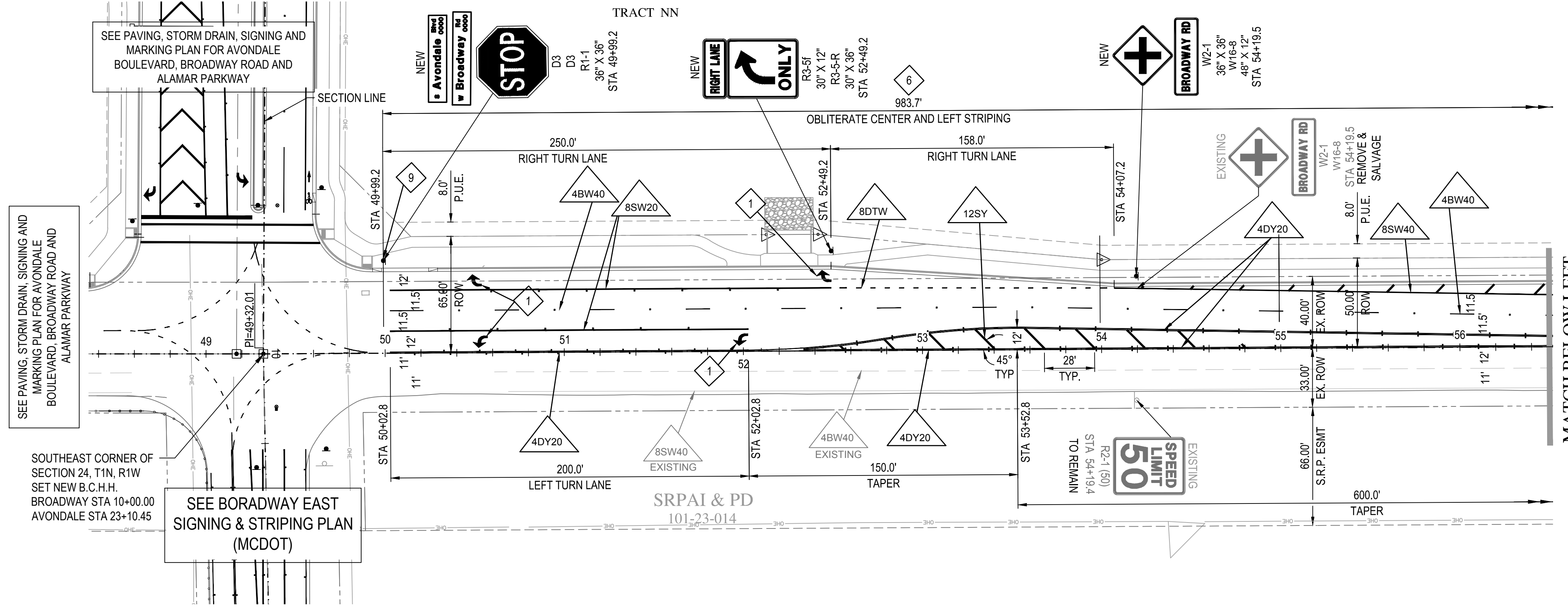
DEVELOPER  
**BROOKFIELD LAKIN, LLC**  
PROJECT NAME  
**ALAMAR - PHASE 1**  
PLANTYPE  
PAVING, SIGNING AND MARKING PLAN  
AVONDALE BLVD NORTH AND BROADWAY RD EAST



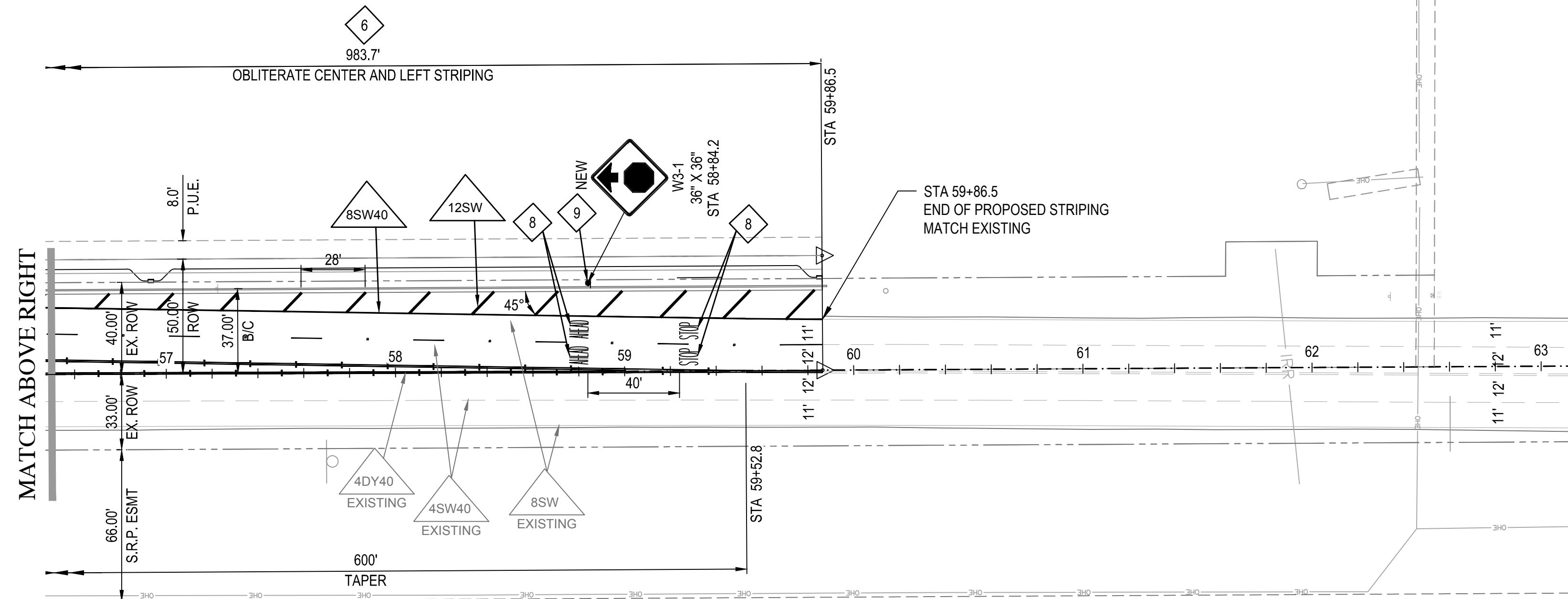
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PLAN DATE	02/13/2019
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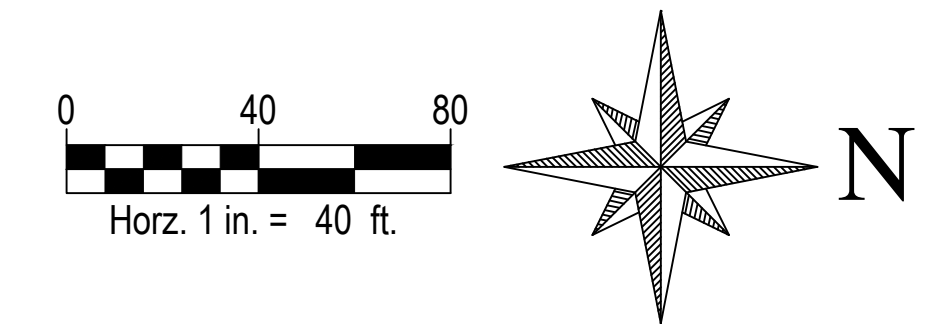




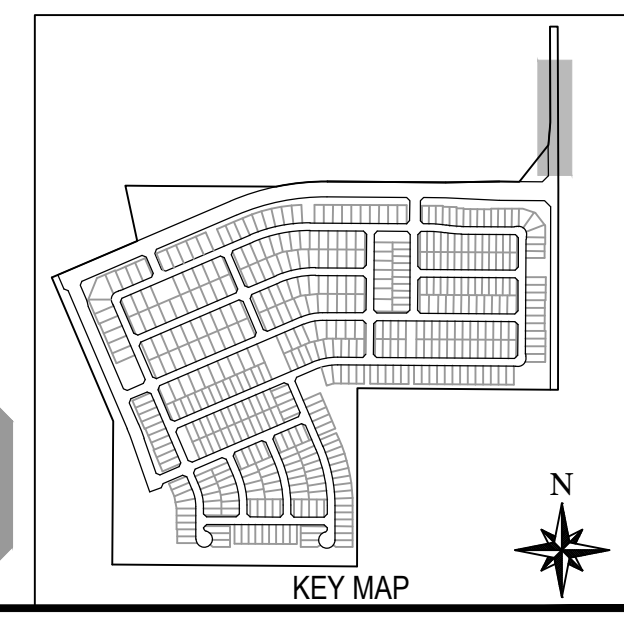
AVONDALE BOULEVARD



AVONDALE BOULEVARD



- SIGNING & STRIPING NOTES**
- 1 PAVEMENT MARKING PER CITY OF AVONDALE STANDARD DETAIL 1610. THERMOPLASTIC MARKING PER SECTION 462 OF M.C.D.O.T. SUPPLEMENT TO THE M.A.G. UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION
  - 6 OBLITERATE EXISTING STRIPING
  - 8 INSTALL "STOP AHEAD" THERMOPLASTIC PAVEMENT MARKING PER SECTION 462 OF M.C.D.O.T. SUPPLEMENT TO THE M.A.G. UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION. USE PAVEMENT LETTERS PER ADOT STD. DETAILS M-6, M-7 & M-8.
  - 9 SIGN TO INCLUDE SOLAR POWERED FLASHING PERIMETER LIGHTS AND SOLAR PANEL.



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SCALE (VERT.) 1" = 4'

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BROOKFIELD LAKIN, LLC  
ALAMAR - PHASE 1  
SIGNING AND MARKING PLAN  
AVONDALE BOULEVARD NORTH AND BROADWAY ROAD EAST



PLAN DATE  
02/13/2019  
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12 OF 12  
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