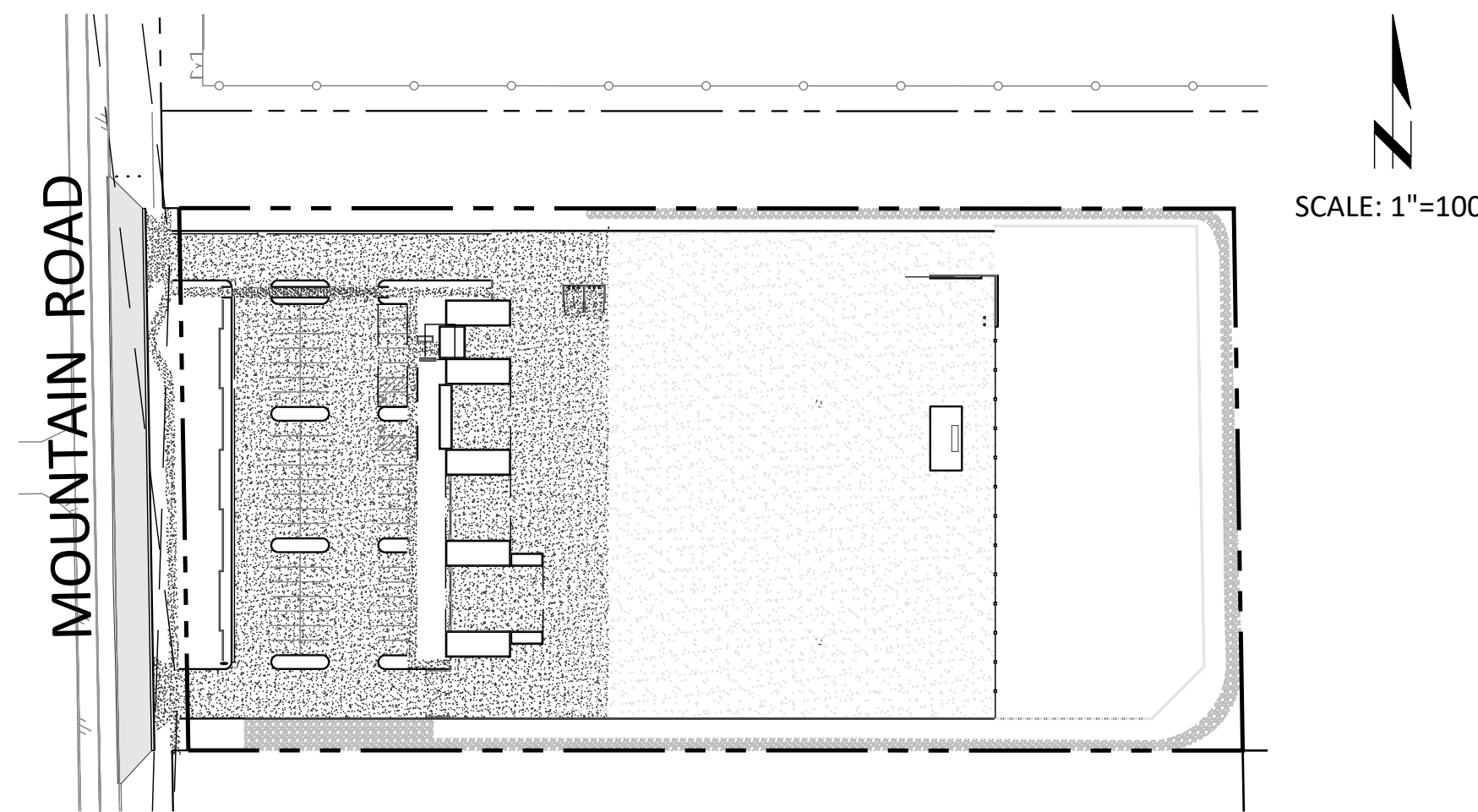
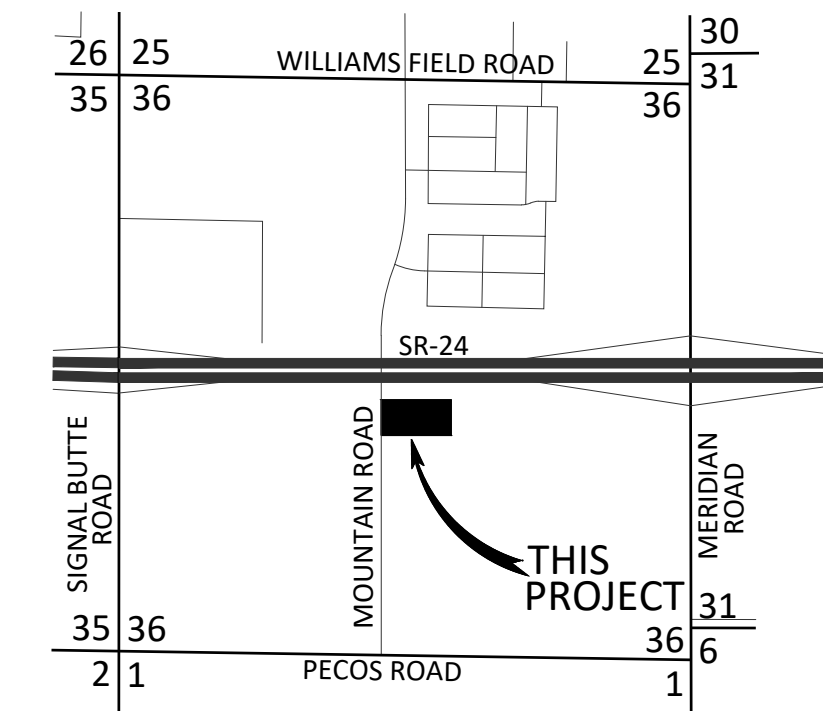


# PRELIMINARY IMPROVEMENT PLAN for THE WALL COMPANY - MOUNTAIN ROAD

6447 SOUTH MOUNTAIN ROAD MESA, ARIZONA  
A PORTION NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

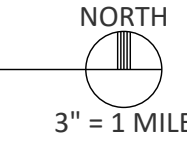


PROJECT OVERVIEW



IN THE NW 1/4 OF THE SE 1/4 OF SECTION 36,  
T. 1 S., R. 7 E., G.&S.R.M.,  
CITY OF MESA, MARICOPA COUNTY, ARIZONA

LOCATION MAP



**CYPRESS CIVIL**  
4450 north 12th street  
suite 228  
phoenix, arizona 85014  
p: 623.282.2498  
e: jphunt@cypresscivil.com

NO.	DATE	REVISION

## PROJECT INFORMATION

PROJECT DESCRIPTION:  
THE PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW SINGLE-STORY BUILDING WITH ALL REQUIRED GRADING & DRAINAGE, UTILITY AND PAVING IMPROVEMENTS.

ADDRESS:  
6447 SOUTH MOUNTAIN ROAD  
MESA, ARIZONA 85212

APN: 304-34-928A

ZONING:

AREA  
NET: 217,079 SF (4.98 AC)  
DISTURBED: 231,273 SF (5.31 AC)

## SURVEY NOTES

- THE SURVEY FOR THIS PROJECT WAS PERFORMED BY:  
ALLIANCE LAND SURVEYING, LLC  
7900 NORTH 70TH AVENUE, SUITE 104  
GLENDALE, ARIZONA 85303  
PH: 623-972-2200
- THE BASIS OF BEARINGS FOR THIS PROJECT IS THE MONUMENT LINE OF PECOS ROAD, USING A BEARING OF NORTH 89°58'10" EAST, PER THE DEED RECORDED IN RECORDING NUMBER 2007-0057119.
- THE BASIS OF ELEVATION FOR THIS PROJECT IS THE BENCHMARK NGS MONUMENT "2C01" LOCATED NEAR THE INTERSECTION OF PECOS ROAD AND MERIDIAN ROAD. THE MONUMENT HAS AN ELEVATION OF 1,442.559 NAVD88 DATUM, PER THE "MCDOT SURVEY PRIMARY CONTROL DATA SHEET" AVAILABLE ONLINE.

## BENCHMARK

THE BENCHMARK USED FOR THIS PLAN IS THE BENCHMARK NGS MONUMENT "2C01" LOCATED NEAR THE INTERSECTION OF PECOS ROAD AND MERIDIAN ROAD. THE MONUMENT HAS AN ELEVATION OF 1,442.559 NAVD88 DATUM, PER THE "MCDOT SURVEY PRIMARY CONTROL DATA SHEET" AVAILABLE ONLINE.

## LEGAL DESCRIPTION

THAT PORTION OF THE SOUTH HALF OF SECTION 36, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 36;  
THENCE NORTH 89°58'10" EAST ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 36, A DISTANCE OF 2419.61 FEET TO THE CENTERLINE OF MOUNTAIN VIEW ROAD AS DESCRIBED IN RECORDING NO. 90-265473, RECORDS OF MARICOPA COUNTY, ARIZONA;  
THENCE NORTH 00°58'00" WEST, ALONG THE CENTERLINE OF SAID MOUNTAIN VIEW ROAD, 1984.07 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN PROPERTY DESCRIBED IN RECORDING NO. 96-373402, RECORDS OF MARICOPA COUNTY, ARIZONA;  
THENCE SOUTH 89°59'26" EAST, ALONG THE NORTH LINE OF SAID PROPERTY 45.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF MOUNTAIN VIEW ROAD AS DESCRIBED IN RECORDING NO. 90-265473, RECORDS OF MARICOPA COUNTY, ARIZONA, AND THE POINT OF BEGINNING;  
THENCE NORTH 00°58'00" WEST ALONG SAID RIGHT-OF-WAY, 394.23 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PROPERTY DESCRIBED IN RECORDING NO. 2006-901168, RECORDS OF MARICOPA COUNTY, ARIZONA;  
THENCE ALONG THE SOUTH LINE LAST SAID PARCEL, SOUTH 89°58'04" EAST, A DISTANCE OF 1051.89 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL;  
THENCE SOUTH 01°02'42" EAST, A DISTANCE OF 393.82 FEET TO THE NORTHEAST CORNER OF SAID PROPERTY DESCRIBED IN RECORDING NO. 96-373402, RECORDS OF MARICOPA COUNTY, ARIZONA;  
THENCE NORTH 89°59'26" WEST ALONG THE NORTH LINE OF LAST SAID PROPERTY 1052.36 FEET TO THE POINT OF BEGINNING;

EXCEPT THE FOLLOWING DESCRIBED PROPERTY:  
THAT PORTION OF THE SOUTH HALF OF SECTION 36, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULAR DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 36;  
THENCE NORTH 89°58'10" EAST, ALONG THE SOUTH LINE OF SAID SECTION 36, A DISTANCE OF 2419.61 FEET TO THE INTERSECTION OF THE CENTERLINE OF MOUNTAIN VIEW ROAD AS DESCRIBED IN RECORDING NO. 96-373402, BEING THE CENTERLINE OF A 110.00 FOOT WIDE STRIP, BEING 55.00 FEET ON EACH SIDE OF SAID CENTERLINE, AS MEASURED AT RIGHT ANGLES PER EXHIBIT "A" MARICOPA COUNTY HIGHWAY DEPARTMENT NO. 65623;  
THENCE NORTH 00°58'00" WEST, ALONG SAID CENTERLINE 2,378.25 FEET TO THE NORTHERLY LINE OF PARCEL "E" AS SHOWN ON SURVEY MAP OF PINNACLE ENGINEERING, INC., JOB NO. 86-P118;  
THENCE SOUTH 89°58'04" EAST, ALONG SAID NORTHERLY LINE 45.01 FEET TO THE EAST RIGHT-OF-WAY LINE OF SAID MOUNTAIN VIEW ROAD AS DESCRIBED IN RECORDING NO. 90-265473 AND IN RECORDING NO. 90-270665 AND THE POINT OF BEGINNING;  
THENCE SOUTH 89°58'04" EAST, CONTINUING ALONG SAID NORTHERLY LINE 1,051.83 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "E";  
THENCE SOUTH 01°03'20" EAST, ALONG THE EAST LINE OF SAID PARCEL "E" 1,402.20 FEET TO A POINT WHICH BEARS FORTH 01°03'59" WEST 974.88 FEET FROM THE SOUTH LINE OF SAID SECTION 36;  
THENCE SOUTH 89°59'55" WEST, 394.57 FEET;  
THENCE NORTH 00°57'10" WEST, 1,342.38 FEET;  
THENCE NORTH 89°58'04" WEST, 659.82 FEET TO THE EAST RIGHT-OF-WAY LINE OF SAID MOUNTAIN VIEW ROAD;  
THENCE NORTH 00°58'00" WEST, ALONG SAID RIGHT-OF-WAY, 60.01 FEET TO THE POINT OF BEGINNING;

EXCEPT ALL MINERALS, ORES AND METALS OF EVERY KIND AND CHARACTER, AND ALL COAL, ASPHALTUM, OIL, GASES, FERTILIZERS, FOSSILS AND OTHER LIKE SUBSTANCES IN OR UNDER SAID LAND AS RESERVED TO THE STATE OF ARIZONA IN PATENT(S) RECORDED IN BOOK 147 OF DEEDS, PAGE 283 AND RECORDED IN BOOK 152 OF DEEDS, PAGE 119.

(NOTE: THE EXCEPTION AREA SHOWN IN THE TITLE COMMITMENT AND IN DEED 2008-1030437, M.C.R. CONTAIN A TYPOGRAPHICALLY ERROR AND THE DESCRIPTION SHOWN HEREON HAS BEEN CORRECTED TO READ "THENCE NORTH 89 DEGREES 58 MINUTES 10 SECONDS EAST, ALONG THE SOUTH LINE OF SAID SECTION 36...")

## PROJECT RETENTION

REQUIRED RETENTION (100-YEAR, 2-HOUR)

$$V = Cw \times (d/12) \times A$$

OFFSITE MOUNTAIN ROAD + ONSITE BASIN 1 AT FRONTAGE:  
 $V = 0.76 \times (2.21/12) \times 20,745 \text{ SF}$   
 $V = 2,904 \text{ CF}$

ONSITE AREAS:  
 $Cw = (0.5 \times 47,468 \text{ SF}) + (0.85 \times 71,844) + (0.95 \times 67,930) / 187,242 \text{ SF}$   
 $Cw = 0.80$

$$V = 0.80 \times (2.21/12) \times 187,242 \text{ SF}$$

$$V = 27,587 \text{ CF}$$

TOTAL REQUIRED RETENTION: 2,904 + 27,587 = 30,491 CF

PROVIDED:  
31,085 CF VIA TWO NEW SURFACE RETENTION BASINS (2,195 CF IN BASIN 1 + 28,890 IN BASIN 2), WHICH SHALL BE EQUALIZED WITH THE SAME HIGHWATER ELEVATION. THEY SHALL DRAIN TOGETHER VIA TWO OR THREE NEW DRYWELLS. SHOULD STORM DRAIN BE CONSTRUCTED WITHIN MOUNTAIN ROAD IN THE FUTURE, THE DRYWELLS SHALL BE REMOVED AND THE BASIN SHALL BE CONNECTED TO DRAIN TO THE PUBLIC STORM DRAIN.

## DRYWELL CALCULATIONS

TOTAL VOLUME = 30,491 CF\*  
\*EXCLUDES 1 FOOT DEEP SURFACE BASIN ALONG MOUNTAIN ROAD THAT SHALL DRAIN BY NATURAL PERCOLATION.

DRYWELL DISSIPATION RATE = 0.24 CFS TOTAL COMBINED FOR ALL DRYWELLS. IF DRYWELL PERCOLATION RATES FOR 2 DRYWELLS IS AT LEAST 0.24 CFS, THIRD DRYWELL MAY BE ELIMINATED.

$$\text{TIME [SEC]} = \text{VOLUME [CF]} / \text{RATE [CFS]}$$

$$t = 30,491 / 0.24 = 127,045 \text{ SEC} = 35.3 \text{ HOURS}$$

## DRAINAGE STATEMENT

- SITE IS NOT IN A SPECIAL FLOOD HAZARD AREA
- OFFSITE FLOW AFFECTS THIS SITE FROM ADOT ROW AND SITE TO THE NE. FLOW SHALL BE ROUTED AROUND THE SITE VIA A NEW DRAINAGE CHANNEL. OFFSITE FLOW FROM 1/2 ROW OF MOUNTAIN ROAD SHALL BE RETAINED ONSITE.
- RETENTION PROVIDED IS 100-YEAR, 2-HOUR
- EXTREME STORM OUTFALLS THE SITE AT THE SOUTHWEST DRIVEWAY AT THE ELEVATION OF 1434.90.

## FLOODPLAIN INFORMATION

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL NUMBER 04013C2790L, DATED OCTOBER 16, 2013 THE PARCEL IS LOCATED IN THE ZONE X (SHADED) AREA, WHICH IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

## LEGEND

---	PROJECT RIGHT-OF-WAY	⊙	NEW SEWER MANHOLE
- - - -	EXISTING RIGHT-OF-WAY	⊙	NEW SEWER CLEANOUT
---	PROJECT/NEW PROPERTY LINE	W	NEW WATER METER
- - - -	EXISTING PROPERTY LINE	BF	NEW BACKFLOW PREVENTER
---	ROADWAY CENTERLINE	⊙	NEW FIRE HYDRANT
- - - -	EXISTING EASEMENT	⊙	NEW FIRE BACKFLOW PREVENTER
---	EXISTING CONTOUR	⊙	NEW DRYWELL
---	NEW CONTOUR	⊙	SURVEY MONUMENT AS NOTED
---	NEW ASPHALT	⊙	SPOT ELEV. (EXIST. GRADE)
---	NEW CONCRETE	⊙	SPOT ELEV. (NEW GRADE)
---	NEW RIP RAP	⊙	RIGHT-OF-WAY
---	NEW WALL	(R)	RECORDED VALUE
---	COMBINATION SCREEN/RETAINING WALL	(M)	MEASURED VALUE
---	EXISTING PAVEMENT EDGE	P	PAVEMENT (ASPHALT)
---	EXISTING FENCE	C	CONCRETE
---	NEW CURB	G	GUTTER
---	NEW FENCE	TC	TOP OF CURB
---	EXISTING UNDERGROUND ELECTRIC	FG	FINISHED GRADE
---	EXISTING COMMUNICATION LINE	TF	TOP OF FOOTING
---	EXISTING SEWER LINE	LP	LOW POINT
---	EXISTING WATER LINE	HP	HIGH POINT
---	EXISTING FIRE SERVICE	GB	GRADE BREAK
---	EXISTING GAS LINE	FFE	FINISHED FLOOR ELEVATION
---	NEW STORM DRAIN PIPE	R:	RIM
---	NEW SEWER LINE		
---	NEW WATER LINE		
---	NEW FIRE SERVICE		
⊙	EXISTING SEWER MANHOLE		
⊙	EXISTING SEWER STUB		
W	EXISTING WATER METER		
⊙	EXISTING TRANSFORMER		

## OWNER/DEVELOPER

THE WALL COMPANY  
1476 WEST HARVARD AVENUE  
GILBERT, ARIZONA 85233  
PH: 480-686-9347  
ATTN: SCOTT McDONALD

## CIVIL ENGINEER

CYPRESS CIVIL DEVELOPMENT  
4450 NORTH 12TH STREET, #228  
PHOENIX, ARIZONA 85014  
PH: 623-282-2498  
ATTN: JEFF HUNT, PE

## ARCHITECT

ARCHICON  
5055 EAST WASHINGTON STREET, SUITE 200  
PHOENIX, ARIZONA 85034  
PH: 602-222-4266  
ATTN: JERE PLANCK

## UTILITIES

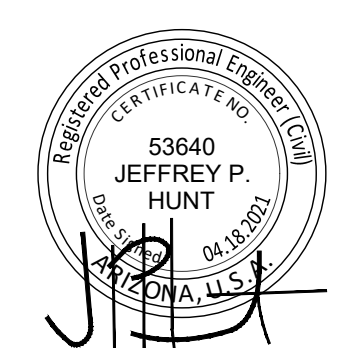
WATER: CITY OF MESA  
SEWER: CITY OF MESA  
ELECTRIC: ARIZONA PUBLIC SERVICE  
GAS: SOUTHWEST GAS  
TELEPHONE: CENTURYLINK  
CABLE: COX COMMUNICATIONS

## SHEET INDEX

- COVER SHEET
- GRADING AND DRAINAGE PLAN
- ONSITE UTILITY PLAN

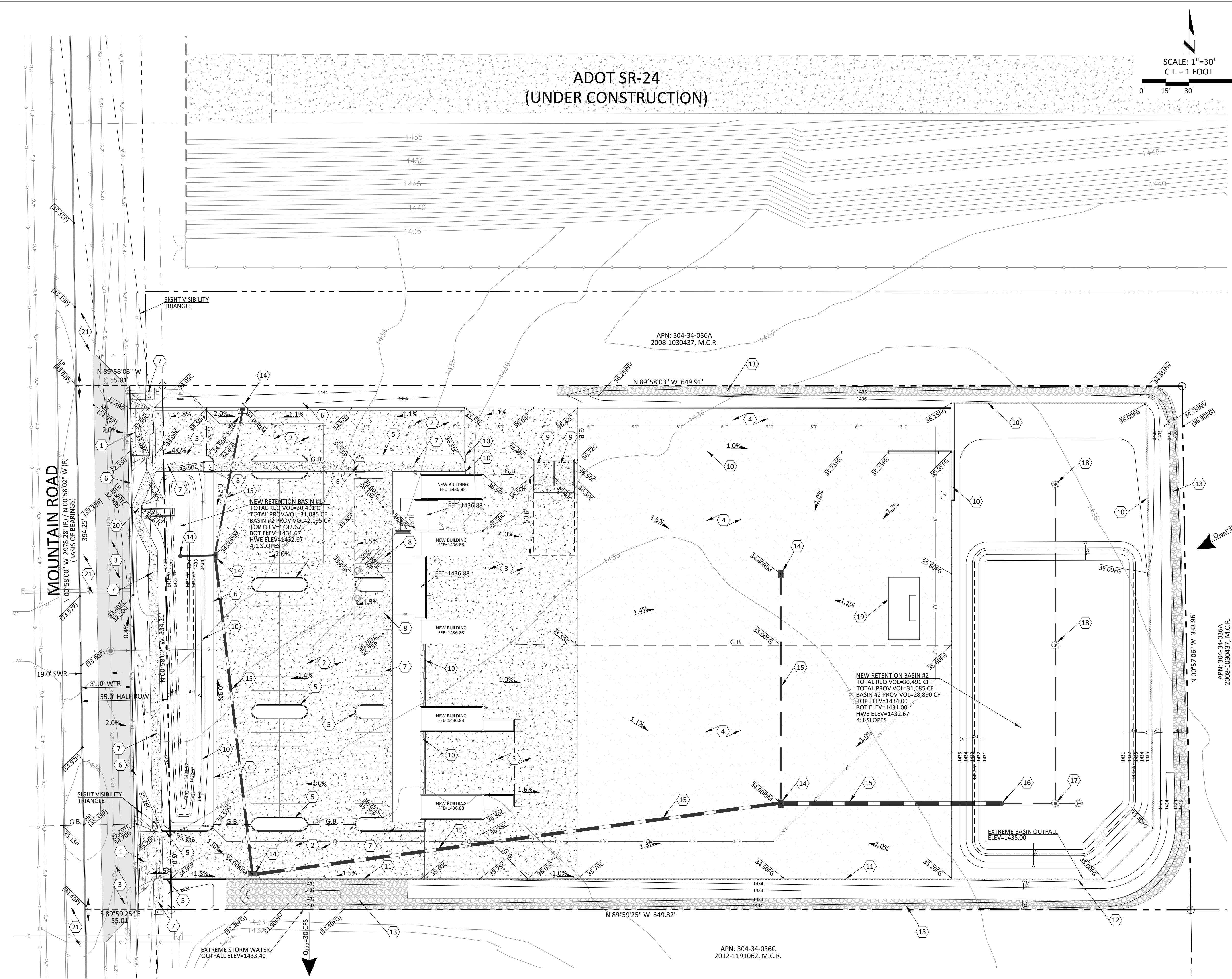
PRELIMINARY IMPROVEMENT PLAN for THE WALL COMPANY - MOUNTAIN ROAD 6447 SOUTH MOUNTAIN ROAD MESA, ARIZONA

Cover



DRAWN: PT  
DESIGNED: DS  
CHECKED: JH  
DATE: 04-18-2021  
JOB NO: 21.116  
SHEET NUMBER





**KEYNOTES**

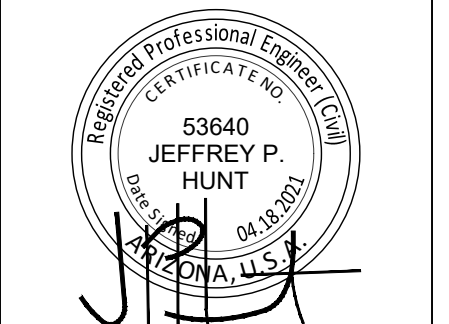
- 1 NEW COMMERCIAL DRIVEWAY PER CITY OF MESA DETAIL M19.01.
- 2 NEW ASPHALT PAVEMENT.
- 3 NEW CONCRETE PAVEMENT.
- 4 NEW COMPACTED RECYCLED ASPHALT MILLINGS.
- 5 NEW CONCRETE VERTICAL CURB.
- 6 NEW CONCRETE VERTICAL CURB AND GUTTER.
- 7 NEW CONCRETE SIDEWALK.
- 8 NEW ACCESSIBLE RAMP.
- 9 NEW TRASH ENCLOSURE.
- 10 NEW MASONRY SCREEN WALL.
- 11 COMBINATION RETAINING WALL/SCREEN WALL.
- 12 NEW DRAINAGE WALL OPENING.
- 13 NEW RIP RAP EROSION PROTECTION.
- 14 NEW STORM DRAIN INLET.
- 15 NEW STORM DRAIN PIPE.
- 16 NEW BUBBLE-UP STRUCTURE.
- 17 NEW DUAL-CHAMBER DRYWELL.
- 18 NEW SINGLE-CHAMBER DRYWELL.
- 19 NEW FUEL ISLAND.
- 20 NEW SCUPPER AND CONCRETE SPILLWAY.
- 21 EXISTING ASPHALT PAVEMENT TO REMAIN.

**CYPRESS CIVIL**  
 4450 north 12th street  
 suite 228  
 phoenix, arizona 85014  
 p: 623.282.2498  
 e: jphunt@cypresscivil.com

NO.	DATE	REVISION

**PRELIMINARY IMPROVEMENT PLAN for  
 THE WALL COMPANY - MOUNTAIN ROAD  
 6447 SOUTH MOUNTAIN ROAD MESA, ARIZONA**

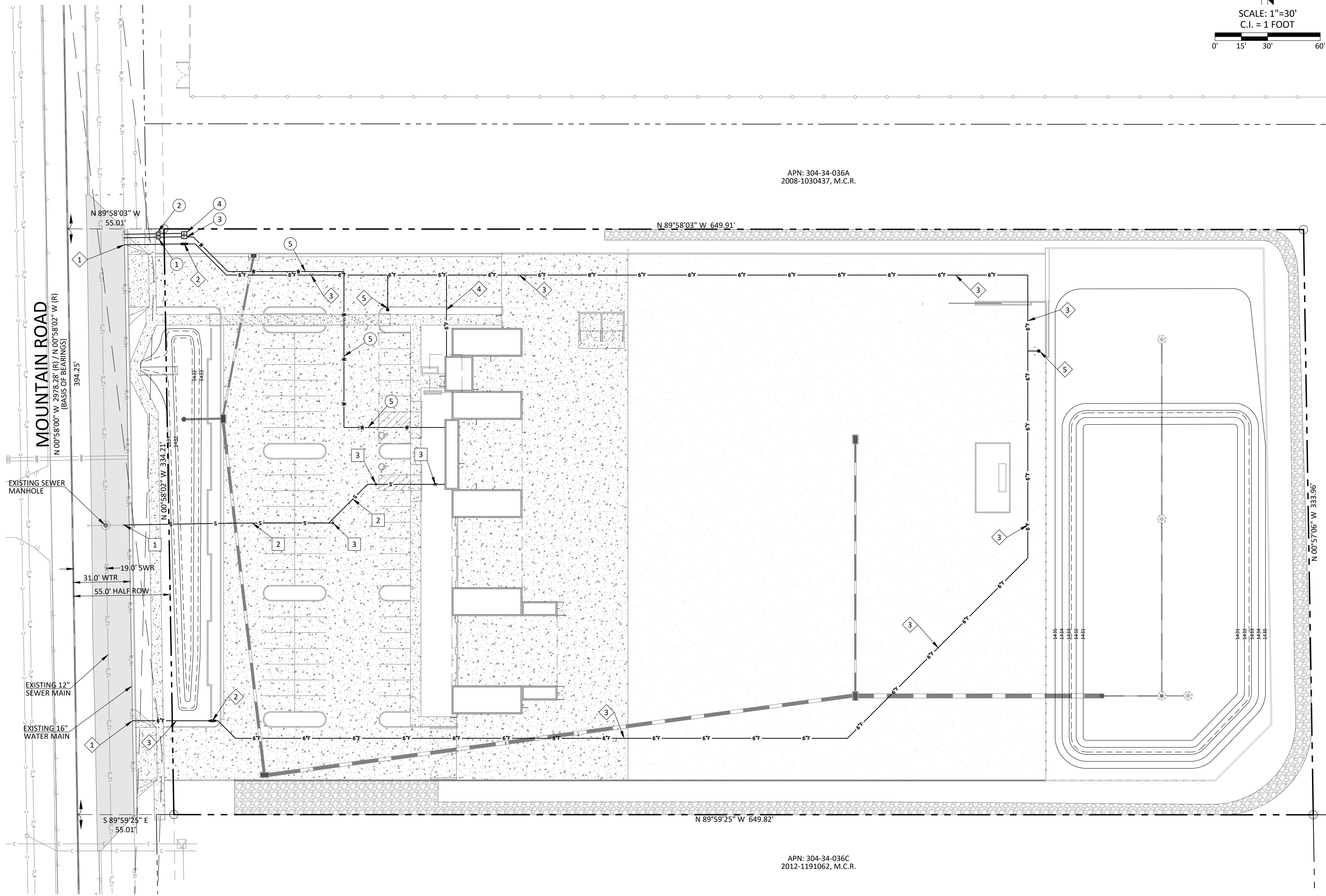
**grading and drainage plan**



DRAWN: PT  
 DESIGNED: DS  
 CHECKED: JH  
 DATE: 04-18-2021  
 JOB NO: 21.116  
 SHEET NUMBER

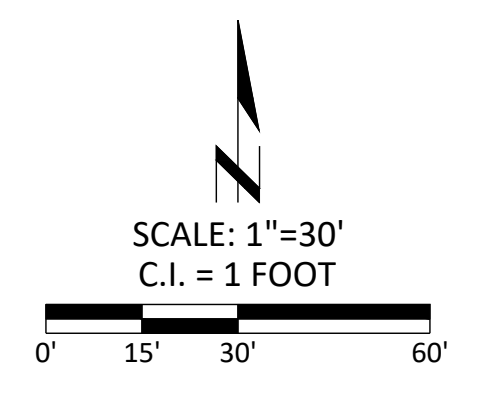


THESE PLANS ARE PRELIMINARY AND ARE NOT FOR CONSTRUCTION OR RECORDING



APN: 304-34-036A  
2008-1030437, M.C.R.

APN: 304-34-036C  
2012-1191062, M.C.R.



**PRIVATE WATER KEYNOTES**

- ① NEW 2" SERVICE AND METER FOR DOMESTIC WATER SERVICE.
- ② NEW 1" SERVICE AND METER FOR LANDSCAPE WATER SERVICE.
- ③ NEW DOMESTIC BACKFLOW PREVENTER.
- ④ NEW IRRIGATION BACK FLOW PREVENTER.
- ⑤ NEW DOMESTIC WATER LINE.

**PRIVATE FIRE LINE KEYNOTES**

- ① TAP EXISTING 16" WATER FOR FIRE SERVICE.
- ② NEW 8" BACKFLOW PREVENTER.
- ③ NEW 8" FIRE LINE.
- ④ NEW 6" FIRE LINE.
- ⑤ NEW FIRE HYDRANT ASSEMBLY.

**PRIVATE SEWER KEYNOTES**

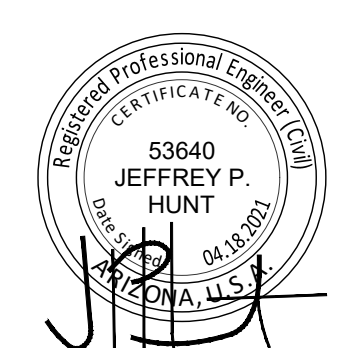
- ① CONNECT TO EXISTING SEWER STUB.
- ② NEW 6" PVC SDR-35 SEWER LINE.
- ③ NEW SEWER CLEAN OUT.

APN: 304-34-036A  
2008-1030437, M.C.R.

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NO.	DATE	REVISION

**PRELIMINARY IMPROVEMENT PLAN for  
THE WALL COMPANY - MOUNTAIN ROAD  
6447 SOUTH MOUNTAIN ROAD MESA, ARIZONA**  
onsite utility plan



DRAWN:	PT
DESIGNED:	DS
CHECKED:	JH
DATE:	04-18-2021
JOB NO:	21.116
SHEET NUMBER	



THESE PLANS ARE PRELIMINARY AND ARE NOT FOR CONSTRUCTION OR RECORDING