CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH
OTERO COUNTY, NEW MEXICO
APRIL 2021
CITY OF ALAMOGORDO
BID NO. PW BID 2021-003
CONSTRUCTION PLAN SET
PW1606

THE CITY OF ALAMOGORDO TECHNICAL STANDARDS SHALL GOVERN THIS PROJECT

CITY COMMISSION
RICHARD BOSS - MAYOR AT-LARGE
JASON BALDWIN - DISTRICT 1
NADIA SIKES - DISTRICT 2 (MAYOR PRO-TEM)
SUSAN L. PAYNE - DISTRICT 3
JOSH RARDIN - DISTRICT 4
SHARON McDONALD - DISTRICT 5
DUSTY WRIGHT - DISTRICT 6

ELECTRIC UTILITY COMPANY
PNM ELECTRIC COMPANY
650 FAIR GROUNDS RD.
ALAMOGORDO, NM 88310
OFFICE: 1-888-342-5766

GAS UTILITY COMPANY
NEW MEXICO GAS COMPANY
2101 INDIAN WELLS
ALAMOGORDO, NM 88310
OFFICE: 1-888-664-2726

CITY OF ALAMOGORDO
UTILITIES DEPARTMENT
2600 N. FLORIDA
ALAMOGORDO, NM
OFFICE: (575) 439-4244

CITY OF ALAMOGORDO
WATER BILLING
1376 E. NINTH STREET
ALAMOGORDO, NM
MARK THREADGILL
OFFICE: (575) 439-4260

CITY OF ALAMOGORDO
PUBLIC WORKS
2600 N. FLORIDA AVE
ALAMOGORDO, NM 88062
OFFICE: (575) 439-4240

CITY OF ALAMOGORDO
WATER OPERATIONS
42 VALLEY VIEW
LA LUZ, NM
DAVE NUNNELLEY
OFFICE: (575) 430-1947

CITY OF ALAMOGORDO
WASTE WATER
3290 AIRPORT RD.
ALAMOGORDO, NM
DAVID WEYANDT
OFFICE: (575) 430-9480

ALAMOGORDO WHITE SANDS REGIONAL AIRPORT
3500 AIRPORT RD.
ALAMOGORDO, NM 88310
OFFICE: (575) 439-4110

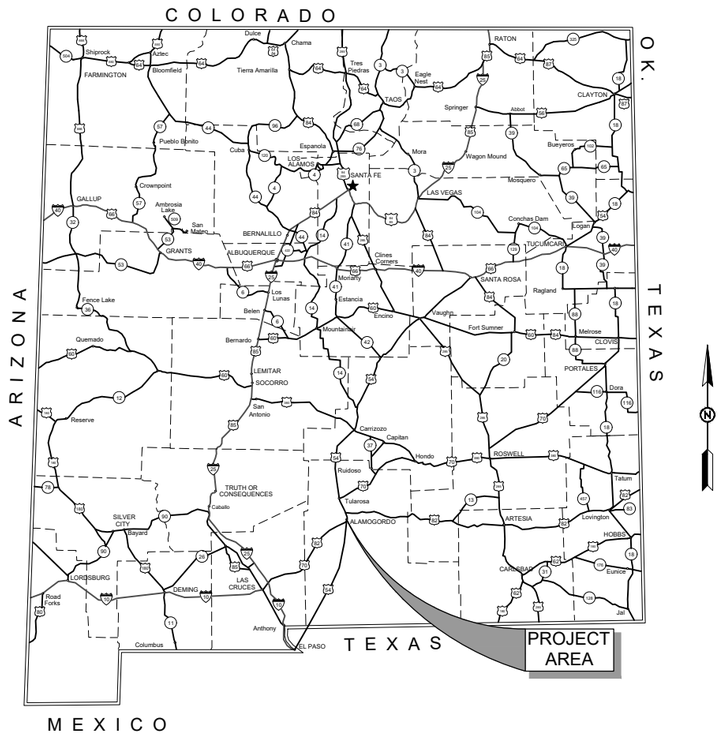
TELECOMMUNICATION
TULAROSA COMMUNICATIONS
503 ST FRANCIS DR.
TULAROSA, NM 88352
OFFICE: (575) 585-9800

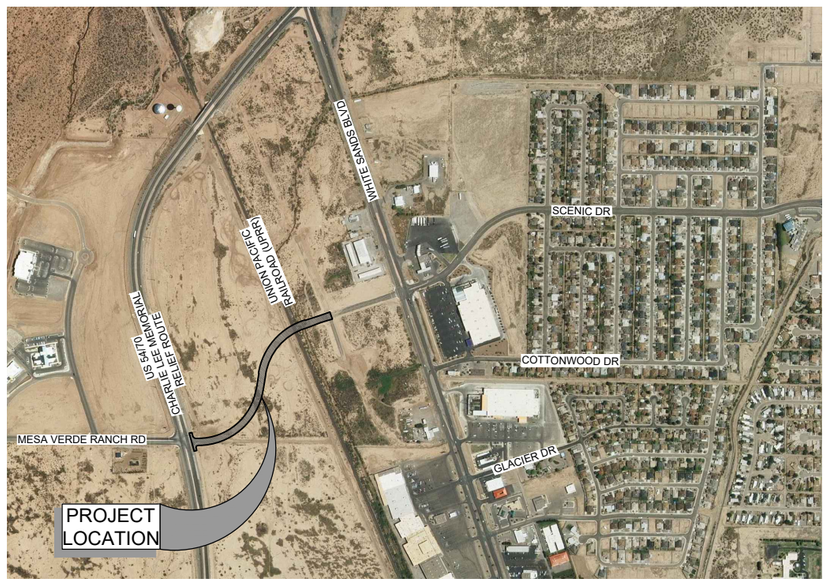
CABLE TV
TDS TELECOM
901 N FLORIDA AVE.
ALAMOGORDO, NM 88310
DARRIN SMITH
(636) 279-0086

CENTURYLINK
GARY NELSON
(575) 767-7467

PNM ELECTRIC
WILSON GUIN: (575) 430-2977
LORNE WOFFORD: (575) 430-8380

NM GAS COMPANY
TIM TURRI: (575) 443-6424
MARIO ESTRADA: (575) 430-8381
ORLANDO MARTINEZ: (575) 202-9545





LOCATION MAP
NOT TO SCALE

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NMOC
Professional Resources for Damage Prevention

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

TITLE SHEET

Solutions for Today... Vision for Tomorrow
201 N Church Street
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
www.smithengineering.pro
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 1-1

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\DPLANSET\1-1 TITLE SHEET.dwg Apr 27, 2021 - 1:57pm Saved By: rustyp

GENERAL NOTES

1. SPECIFICATIONS: THE CITY OF ALAMOGORDO TECHNICAL SPECIFICATIONS, SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS AND THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION (NMDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION 2007 EDITION (ORANGE BOOK), NMDOT SUPPLEMENTAL SPECIFICATIONS AND REVISIONS TO THE STANDARDS SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION SHALL GOVERN CONSTRUCTION OF THIS PROJECT. SEE BID DOCUMENT MANUAL, TECHNICAL SPECIFICATIONS FOR CONTRACT DOCUMENTS ORDER OF IMPORTANCE.

2. GENERAL NOTES: GENERAL NOTES SHALL APPLY TO ALL SHEETS, EXCEPT WHERE MORE SPECIFIC INFORMATION IS PROVIDED. SEE INDIVIDUAL DRAWINGS FOR ADDITIONAL ABBREVIATIONS, SYMBOLS, LEGENDS, NOTES, DETAILS, AND OTHER REQUIREMENTS. IN ALL CASES, THE INFORMATION SHOWN ON INDIVIDUAL DRAWINGS SHALL GOVERN OVER ANY GENERAL INFORMATION. NOT ALL SPECIFIED ITEMS AND/OR STANDARD DETAILS SHOWN MAY BE APPLICABLE TO THIS PROJECT.

3. MEANS, METHODS OR TECHNIQUES: THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS OR TECHNIQUES, NOR FOR THE EXECUTION OF THE WORK AS SHOWN ON THESE DRAWINGS. THE OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THE CONTRACTORS OR SUBCONTRACTORS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

4. SAFETY REQUIREMENTS: THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL WORK AREAS IN SAFE CONDITION FOR THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE FOR ALL CONTRACTOR PERSONNEL AND SUBCONTRACTOR PERSONNEL WITH APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA TRENCH SAFETY RULES AND REGULATIONS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL, AT A MINIMUM, SAFETY FENCING 48-INCHES IN HEIGHT AROUND THE PERIMETER OF OPEN TRENCHES AND REMOVAL AREAS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

5. CONTRACTOR RESPONSIBILITY: THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE CONTRACTORS PERFORMANCE OF WORK ON THIS PROJECT.

6. PROJECT DEVIATIONS: ANY PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS BY THE CONTRACTOR MUST BE ACCEPTED BY THE ENGINEER, IN WRITING, PRIOR TO THE WORK BEING DONE. ANY DEVIATIONS PERFORMED WITHOUT THE ENGINEER'S APPROVAL WILL NOT BE PAID FOR AND MAY BE REQUIRED TO BE RECONSTRUCTED OR REMOVED AT THE CONTRACTOR'S EXPENSE.

7. PUBLIC ACCESS TO LOCAL BUSINESSES & RESIDENCES: THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS TO LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE PROPERTY OWNERS AND THE ENGINEER OF ANY ACCESS MODIFICATIONS, AT LEAST 24 HOURS IN ADVANCE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

8. PERMITTING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REQUEST AND OBTAIN ALL PERMITS NECESSARY FOR THIS PROJECT PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CURRENT FEDERAL, OSHA, STATE, COUNTY, AND CITY LAWS, ORDINANCES, RULES AND REGULATIONS.

9. MAINTENANCE OF AS-BUILT PLANS: THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN ONE-WEEK, AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE ENGINEER THROUGHOUT THE PROJECT AND WILL BE REVIEWED BY THE ENGINEER FOR ACCURACY AND COMPLETENESS AT LEAST ONCE EVERY 7-DAYS. THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT. FINAL AS-BUILT PLANS SHALL BE DELIVERED IN CLEAN HARD COPY. CONTRACTOR CERTIFICATION SHALL BE CLEARLY STATED ON THE COVER SHEET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

10. WATER FOR CONSTRUCTION: THE CONTRACTOR WILL BE RESPONSIBLE FOR PURCHASING ALL OF THE RECLAIMED WATER NEEDED FOR CONSTRUCTION FROM THE CITY OF ALAMOGORDO. THE COST WILL BE DETERMINED IN ACCORDANCE WITH THE CURRENT RECLAIMED WATER RATES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TRANSPORT AND APPLY THE RECLAIMED WATER AS SPECIFIED OR AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR LOCATION OF SOURCES. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OF PAYMENT WILL BE MADE THEREFORE.

11. INTERRUPTION OF SERVICE: CONTRACTOR MUST MAINTAIN WATER SERVICE AT ALL TIMES AS DIRECTED BY THE ENGINEER. IF AN INTERRUPTION OF SERVICE IS UNAVOIDABLE, THE CONTRACTOR SHALL NOTIFY ALL AFFECTED RESIDENTS ON A DOOR-TO-DOOR BASIS OR AS AGREED WITH THE ENGINEER. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR ALL WATER SHUT-OFFS.

12. EARTHWORK HAUL: THE EARTHWORK HAUL ON THIS PROJECT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE FOR ITEMS "UNCLASSIFIED EXCAVATION", AND "BORROW", AS APPLICABLE, AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR HAUL.

13. PAVEMENT DROP-OFF POLICY: IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE ACTION IN ACCORDANCE WITH THE NMDOT'S CURRENT "DROP-OFF POLICY". THE POLICY IS AVAILABLE FROM THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

14. WARPING OF SLOPES: THE CONTRACTOR SHALL WARP SLOPES WHERE NECESSARY TO STAY WITHIN THE RIGHT OF WAY OR CONSTRUCTION EASEMENT LIMITS.

15. MATERIAL PITS: NO MATERIAL PITS HAVE BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR MAY OBTAIN SPECIFICATION BORROW OR SURFACING MATERIAL FROM ANY ACCEPTABLE SOURCE. ALL MATERIAL PITS SHALL BE GOVERNED BY SECTION 106 OF THE NMDOT STANDARD SPECIFICATIONS.

16. CONSTRUCTION EQUIPMENT & MATERIAL STORAGE: THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIAL WITHIN 28 FEET FROM THE EDGE OF THE DRIVING LANE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. ALL EQUIPMENT AND MATERIAL STORED IN STAGING YARD SHALL BE PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. IN NO CASE SHALL THE CONTRACTOR STORE EQUIPMENT OR MATERIAL IN THE DRIVING LANE. THE SAFETY DESIGN FOR SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING. THIS WORK, INCLUDING DESIGN, INSTALLATION AND REMOVAL OF THE SHIELDING, SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

17. PROTECTION OF SURVEY MONUMENTS: THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENTS AND CONTROL POINTS FROM DAMAGE PRIOR TO INITIATING CONSTRUCTION. AN INVENTORY OF THE EXISTING MONUMENTS WILL BE TAKEN BY THE ENGINEER AND THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. IF, DURING THE COURSE OF CONSTRUCTION OPERATIONS, THE CONTRACTOR DISTURBS OR DESTROYS A MARK, THE CONTRACTOR SHALL ESTABLISH A NEW MARK IN COMPLIANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE "GEODETIC MARK PRESERVATION GUIDEBOOK ", NATIONAL GEODETIC SURVEY, MARCH 1990, CONTACT: NGS MARK PRESERVATION CENTER-NOAA, TELEPHONE (505) 768-3606.

18. REMOVALS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED TO COMPLETE THE PROJECT. REMOVALS NOT SHOWN ON THE PLANS WILL BE DESIGNATED BY THE ENGINEER. THIS WORK WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE FOR ITEM "REMOVAL OF STRUCTURES AND OBSTRUCTIONS" AND THE CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR UNLISTED REMOVALS. ITEMS THAT ARE SCHEDULED TO BE REMOVED AND REPLACED SHALL BE REPLACED WITH-IN SEVEN (7) DAYS OF THEIR REMOVAL.

19. SAW CUTTING: CONTRACTOR SHALL SAW CUT PAVEMENT, CONCRETE SIDEWALK, CONCRETE DRIVE WAYS AND CURB AND GUTTER AT TIE-INS AS REQUIRED FOR A SMOOTH TRANSITION. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

20. SALVAGEABLE MATERIALS: SALVAGEABLE MATERIALS FROM THIS PROJECT ARE TO BE HAULED AND STOCK PILED AT THE CITY YARD LOCATED AT 2600 N. FLORIDA AVENUE. HAUL OF SUCH MATERIAL SHALL BE PERFORMED DURING NORMAL WORKING HOURS AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM "REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

21. WASTE MATERIALS: WASTE MATERIAL MUST BE DISPOSED OF AT A STATE APPROVED SITE.

22. PROTECTION OF EXISTING UTILITIES: THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND AND OVERHEAD UTILITIES AND SHALL COORDINATE ALL WORK WITH UTILITY OWNERS. ALL IMPROVEMENTS WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED, RECONSTRUCTED OR REPLACED WITHIN 24 HOURS TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.

23. CONTRACTOR COORDINATION WITH UTILITIES: THE CONTRACTOR IS HEREBY ADVISED THAT UTILITY RELOCATION WORK BY THE UTILITY OWNERS MAY BE PERFORMED CONCURRENT WITH CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE FOR UTILITY WORK IN CONJUNCTION WITH CONSTRUCTION OPERATIONS AND SHALL BE REQUIRED TO COORDINATE THE SCHEDULING OF WORK WITH THE RESPECTIVE UTILITY OWNERS. ANY CLAIMS FOR DELAY SHALL BE CONTROLLED BY THE TERMS AND CONDITIONS OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION.

24. VERIFY ELEVATIONS: THE CONTRACTOR SHALL EMPLOY A LICENSED NEW MEXICO SURVEYOR AND SHALL FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, AND RIGHT-OF-WAY PRIOR TO THE BEGINNING OF CONSTRUCTION. THE ELEVATIONS WERE BASED ON AS-BUILT AND FIELD SURVEY DATA. THE CONTRACTOR SHALL LIMIT ALL WORK ON THIS PROJECT TO WITHIN THE EXISTING RIGHT-OF-WAY AND EASEMENTS. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION STAKING BID ITEM AND TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

25. UTILITY DISCLAIMER: UTILITY LOCATIONS SHOWN HEREON ARE BASED ON THE BEST AVAILABLE EVIDENCE INCLUDING PHYSICAL FEATURES SUCH AS VALVES, PEDESTALS, WARNING MARKERS AND SPOTS BY UTILITY LOCATING SERVICES. THERE IS NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF THE UTILITY DATA SHOWN ON THE PLANS. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS TO VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT WITH MINIMUM DELAY. EXCAVATION TO VERIFY LOCATIONS SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

26. TRAFFIC CONTROL: THE CONTRACTOR SHALL MAINTAIN AND CONTROL TRAFFIC AS OUTLINED IN THE "MUTCD, LATEST EDITION' DURING CONSTRUCTION. ANY NECESSARY DEVIATION FROM THE "MUTCD, LATEST EDITION" SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A COPY OF TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL, PRIOR TO START OF CONSTRUCTION.

27. TRUCK WEIGHT: MAXIMUM WEIGHT OF TRUCKS SHALL CONFORM TO N.M.D.O.T. STANDARDS. CONTRACTOR TO REPLACE ANY DAMAGED STREETS USED DURING CONSTRUCTION HAULING. REPLACEMENT OF DAMAGED STREETS SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT, NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

28. WORK CONFINEMENT: THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS OR RIGHT-OF-WAY. PARKING OF EMPLOYEE'S PRIVATE VEHICLES SHALL NOT BE ALLOWED ALONG CONSTRUCTION AREAS THROUGHOUT CONSTRUCTION LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROHIBIT ASPHALT VEHICLES AND EQUIPMENT, ROLLERS, CRANES, ETC., FROM DRIVING UPON, ACROSS, OR TURNING ON PRIVATE PROPERTY ADJACENT TO PROJECT WORK AREAS.

29. SURFACE FEATURES: CONTRACTOR SHALL REPAIR OR REPLACE FENCES, BLOCK WALLS, OR SURFACE FEATURES, DAMAGED BY CONTRACTOR'S OR SUBCONTRACTOR'S OPERATIONS, TO EXISTING OR BETTER CONDITION. REPAIR OR REPLACEMENT OF FENCES, BLOCK WALLS, OR SURFACE FEATURES SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

30. PROJECT VIDEO: PRIOR TO INITIATING CONSTRUCTION OPERATIONS, CONTRACTOR, SHALL PERFORM DIGITAL VIDEO RECORDING OF THE ENTIRE PROJECT, ITS FULL LENGTH AND WIDTH. THE CONTRACTOR, SHALL ALSO INCLUDE OR ADD AS NECESSARY, ANY AREAS TO BE DISTURBED FOR MATERIAL STORAGE, EMPLOYEE PARKING OR EQUIPMENT STORAGE.

    THE VIDEO DOCUMENTATION SHALL BE COMPLETED IN DIGITAL FORMAT; IT SHALL BE A MINIMUM RESOLUTION OF 1920 X 1080 PIXELS, AT 60 FPS (FRAME PER SECOND) AND IN COLOR. THE VIDEO DOCUMENTATION SHALL BE PERFORMED BETWEEN 10:00 A.M. AND 2:00 P.M. DURING PERIODS OF FULL SUN EXPOSURE. THE ACTUAL DATE OF RECORDING SHALL BE DATE-STAMPED WITHIN EACH FRAME OF THE VIDEO. APPROVAL OF THE VIDEO MUST BE OBTAINED FROM THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CLEARING AND GRUBBING OPERATIONS.

    A DVD COPY OF THE VIDEO RECORDING SHALL BE SUBMITTED TO THE ENGINEER, IN A FORMAT COMPATIBLE WITH STANDARD DVD PLAYERS.

    ALL COST ASSOCIATED WITH THE VIDEO RECORDING SPECIFIED IN THIS ARTICLE SHALL BE CONSIDERED INCIDENTAL TO OTHER RELATED ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE UNLESS SPECIFICALLY INDICATED ELSEWHERE IN THE SPECIAL PROVISIONS.

31. SITE CLEAN UP: PROJECT SITE(S) AND YARD(S) SHALL BE MAINTAINED BY CONTRACTOR AND KEPT IN A CLEAN AND ORDERLY MANNER TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

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NMDOT STANDARD DRAWINGS

DRAWING NO.	DRAWING TITLE	REVISION DATE
511-51-1/2	METAL END SECTION WITH SAFETY GRATES FOR METAL PIPES (CIRCULAR AND ARCHES)	6/1/2018
511-51-2/2	METAL END SECTION WITH SAFETY GRATES FOR METAL PIPES (CIRCULAR AND ARCHES)	6/1/2018
511-59-1/2	CONCRETE BOX CULVERT INDEX OF SHEETS EXPLANATION OF USE OF DRAWINGS	4/9/2007
511-59-2/2	CONCRETE BOX CULVERT EXAMPLE OF US OF DRAWINGS	4/9/2007
511-62-1/2	CONCRETE BOX CULVERT DOUBLE OPENING - DESIGN FILL "A" 0-10 FT STRUCTURAL SECTIONS AND REBAR	5/31/2016
511-62-2/2	CONCRETE BOX CULVERT DOUBLE OPENING - DESIGN FILL "A" 0-10 FT DIMENSIONS AND REBAR SCHEDULE	4/9/2007
511-66-1/6	CBC HEAD/CUTOFF WALLS - ALL DESIGN FILLS-0 15 30 45 SKEWS STRUCTURAL SECTIONS AND REBAR	1/19/2018
511-66-2/6	CONCRETE BOX CULVERT HEADWALL ALL DESIGN FILLS-0 15 30 45 SKEWS DIMS AND REBAR SCHEDULE	4/9/2007
511-66-5/6	CONCRETE BOX CULVERT EXTENSION ALL DESIGN FILLS - ALL SKEWS MISCELLANEOUS DETAILS AND BACKFILL	4/9/2007
511-67-1/2	CONCRETE BOX CULVERT WINGWALL & OUTLET APRON ALL SKEWS PLAN, PERSPECTIVE, & DIMENSIONS	6/7/2018
511-67-2/2	CONCRETE BOX CULVERT WINGWALL & OUTLET APRON ALL SKEWS STRUCTURAL SECTIONS AND REBAR	6/7/2018
602-01-1/1	WIRE ENCLOSE RIPRAP CLASS "A"	11/16/2009
606-17-1/7	CONCRETE WALL BARRIER TYPE 42 GENERAL NOTES, QUANTITIES AND REBAR SCHEDULE	1/30/2014
606-17-2/7	CONCRETE WALL BARRIER TYPE 42	1/30/2014
606-17-5/7	CONCRETE WALL BARRIER TYPE 42 TRANSITION	1/30/2014
606-17-7/7	CONCRETE WALL BARRIER TYPE 42 OVER CULVERT	1/30/2014
607-20-1/4	PEDESTRIAN RAILING WITHOUT HANDRAIL	1/10/2013

NMDOT STANDARD DRAWINGS

DRAWING NO.	DRAWING TITLE	REVISION DATE
607-20-2/4	PEDESTRIAN RAILING WITH HANDRAIL	1/10/2013
607-20-3/4	PEDESTRIAN RAILING FOUNDATION DETAILS	1/10/2013
608-001-1	PEDESTRIAN ACCESS ROUTE GENERAL NOTES	1/13/2015
608-001-2	PERPENDICULAR CURB RAMPS	1/13/2015
608-001-3	PARALLEL CURB RAMPS	1/13/2015
701-02-1/3	SMALL SIGN SUPPORT INSTALLATION DETAILS	1/11/2005
701-02-2/3	SMALL SIGN SUPPORT INSTALLATION DETAILS	2/3/2005
707S-01-1/1	TYPE I POLE AND PEDESTRIAN SIGNAL DETAILS	1/19/2005
707S-02-1/1	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES GENERAL NOTES	12/21/2011
707S-03A-1/2	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES TYPE IIA AND IIIA	12/21/2011
707S-03A-2/2	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES TYPE IIA AND IIIA	12/21/2011
707S-04-1/3	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES TYPE II AND III	12/21/2011
707S-01-2/3	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES TYPE II AND III	12/21/2011
707S-04-3/3	SIGN, SIGNAL, AND LUMINAIRE SUPPORT STRUCTURES TYPE II AND III	12/21/2011
708S-01-1/1	FOUNDATION DETAILS FOR TYPE I STANDARD AND CONTROLLER CABINET	12/22/2004
708S-02-1/2	SIGN, SIGNAL AND LUMINAIRE SUPPORT STRUCTURES FOUNDATION DETAILS	12/21/2011
708S-02-2/2	SIGN, SIGNAL AND LUMINAIRE SUPPORT STRUCTURES FOUNDATION DETAILS	12/21/2011
710S-01-1/1	PULL BOX DETAILS	10/30/2014
713S-01-1/1	OPTICAL DETECTOR INSTALLATION DETAILS	12/22/2004

RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

NO	REVISION DESCRIPTION	DATE	BY
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CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

GENERAL NOTES AND
INDEX OF SHEETS

Solutions for Today...
Vision for Tomorrow
201 N Church Street
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
www.smithengineering.pro

SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 1-2

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\1-2 GENERAL NOTES.dwg Apr 27, 2021 - 8:26am Saved By: rselyp

SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
201000	CLEARING AND GRUBBING; COMPL	L.S.	1	
203000	UNCLASSIFIED EXCAVATION; COMPL	CU. YD.	4,400	
203100	BORROW; COMPL	CU. YD.	1,730	
207000	SUBGRADE PREPARATION 10"; CIP	SQ. YD.	10,200	
303180	BASE COURSE 8"; CIP	SQ. YD.	10,200	
407000	ASPHALT MATERIAL FOR TACK COAT; CIP	SQ. YD.	10,200	
408100	PRIME COAT MATERIAL; CIP	SQ. YD.	10,200	
416107	HMA SP-IV COMPLETE 4"; CIP	SQ. YD.	10,200	
502036	DRILLED SHAFT FOUNDATION 36" DIAMETER	LIN. FT.	16	
511000	STRUCTURAL CONCRETE, CLASS A	CU. YD.	2	
540060	REINFORCING BARS GRADE 60	LBS	820	
570001	DOUBLE 10'X8' CONCRETE BOX CULVERT; COMPL	L.S.	1	
570437	24" STORM DRAIN CULVERT PIPE; CIP	LIN. FT.	250	
570441	24" STORM DRAIN CULVERT PIPE END SECTION; CIP	EACH	2	
602000	RIP-RAP CLASS A; CIP	CU. YD.	200	
603100	TEMPORARY SOIL STABILANT; CIP	ACRE	1	
603281	SWPPP PLAN PREPARATION AND MAINTENANCE; COMPL	L.S.	1	
606542	CONCRETE WALL BARRIER 42"; CIP	LIN. FT.	240	
607079	PEDESTRIAN/BICYCLE RAILING; CIP	LIN. FT.	80	
608000	TACTILE WARNING SURFACE; CIP	SQ. FT	210	
608004	CONCRETE PAVEMENT 4"; CIP	SQ. YD.	1,860	
608006	CONCRETE PAVEMENT 6"; CIP	SQ. YD.	230	
608007	SIDEWALK TRENCH GRATE; COMPL	EACH	1	
608108	CONCRETE PAVEMENT 8"; CIP	SQ. YD.	195	
608204	CONCRETE MEDIAN PAVEMENT 4"; CIP	SQ. YD.	215	
609200	FLUSH HEADER CURB; CIP	LIN. FT.	110	
609424	24" CURB & GUTTER (ALL TYPES); CIP	LIN. FT.	3,720	
609478	18" RAISED MEDIAN CURB & GUTTER; CIP	LIN. FT.	2,910	
609636	36" VALLEY GUTTER; CIP	LIN. FT.	110	
614024	24" STEEL CASING FOR 12" DIAMETER UTILITY LINES; CIP	LIN. FT.	420	
618000	TRAFFIC CONTROL MANAGEMENT; COMPL	L.S.	1	
621000	MOBILIZATION; COMPL	L.S.	1	
623331	CURB DROP INLET; CIP	EACH	2	
632000	CLASS A SEEDING; COMPL	ACRE	1	
662000	MANHOLE 4' DIAMETER 0'-6' DEPTH; CIP	EACH	3	
662062	MANHOLE 4' DIAMETER 6' TO 10' DEPTH; CIP	EACH	2	
662064	MANHOLE 4' DIAMETER 10' TO 14' DEPTH; CIP	EACH	1	
662066	MANHOLE 4' DIAMETER 14' TO 18' DEPTH; CIP	EACH	1	
662066	DROP MANHOLE 4' DIAMETER 14' TO 18' DEPTH; CIP	EACH	1	
663100	FIRE HYDRANT INCLUDING TRACE WIRE AND TERMINATION POINTS; CIP	EACH	3	
663726	6" WATERLINE; CIP	LIN. FT.	100	
663728	8" WATERLINE; CIP	LIN. FT.	200	
663732	12" WATERLINE; CIP	LIN. FT.	1,500	
663748	AIR VALVE & PRECAST ENCLOSURE; CIP	EACH	2	
663784	TIE TO EXISTING 12" WATERLINE; COMPL	EACH	2	

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
663830	BYPASS PUMPING; COMPL	L.S.	1	
663896	GATE VALVE-6" w/ VALVE BOX; CIP	EACH	3	
663897	GATE VALVE-12" w/ VALVE BOX; CIP	EACH	7	
663898	GATE VALVE-8" w/ VALVE BOX; CIP	EACH	3	
663908	SANITARY SEWER LINE-8"; CIP	LIN. FT.	220	
663912	SANITARY SEWER LINE-12"; CIP	LIN. FT.	1,790	
663950	CONNECT TO EXISTING SANITARY SEWER MANHOLE; COMPL	EACH	1	
667210	LANDSCAPE GRAVEL; CIP	SQ. YD.	1,350	
667500	6" STEEL BOLLARD FOR CASING VENTS; CIP	EACH	6	
690001	RAILWAY FLAGGING; COMPL	ALLOW	1	
701000	PANEL SIGNS; CIP	S.F.	253	
701100	STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS; CIP	LIN. FT.	640	
702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION; COMPL	L.S.	1	
704700	HOT THERMOPLASTIC PAVEMENT MARKINGS 4"; CIP	LIN. FT.	1,600	
704702	HOT THERMOPLASTIC PAVEMENT MARKINGS 8"; CIP	LIN. FT.	590	
704704	HOT THERMOPLASTIC PAVEMENT MARKINGS 24"' CIP	LIN. FT.	500	
704715	HOT THERMOPLASTIC PAVEMENT MARKING COMBINATION (THRU, RIGHT) ARROW; CIP	EACH	3	
704718	HOT THERMOPLASTIC PAVEMENT MARKING LEFT ARROW; CIP	EACH	6	
704719	HOT THERMOPLASTIC PAVEMENT MARKING THRU ARROW; CIP	EACH	3	
704740	HOT THERMOPLASTIC PAVEMENT MARKING RAIL ROAD CROSSING; CIP	EACH	4	
707013	TYPE I STANDARD, 13'	EACH	2	
707335	TYPE III STANDARD, 35' ARM	EACH	1	
709020	RIGID ELECTRICAL CONDUIT 2" (DIA.)	LIN. FT.	400	
709030	RIGID ELECTRICAL CONDUIT 3" (DIA.)	LIN. FT.	530	
710000	ELECTRICAL PULL BOX (STANDARD); CIP	EACH	2	
710010	ELECTRICAL PULL BOX (LARGE); CIP	EACH	5	
711005	MULTI CONDUCTOR CABLE 5; CIP	LIN. FT.	110	
711007	MULTI CONDUCTOR CABLE 7; CIP	LIN. FT.	1,210	
711020	MULTI CONDUCTOR CABLE 20; CIP	LIN. FT.	460	
711106	SINGLE CONDUCTOR 6	LIN. FT.	1,450	
712031	3 SECTION TRAFFIC SIGNAL ASSEMBLY (LED); CIP	EACH	3	
712051	5 SECTION TRAFFIC SIGNAL ASSEMBLY (LED); CIP	EACH	5	
712202	PEDESTRIAN COUNTDOWN SIGNAL (LED)	EACH	2	
712330	3 SECTION BACKPLATE; CIP	EACH	3	
712350	5 SECTION BACKPLATE; CIP	EACH	5	
713025	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON STATION	EACH	2	
713511	OPTICAL DETECTOR, 1 DIRECTION, 1 CHANNEL	EACH	1	
713600	OPTICAL DETECTOR CABLE	LIN. FT.	290	
713807	VIDEO CABLE	LIN. FT.	290	
713810	VIDEO CAMERA	EACH	1	
716301	INTERNALLY ILLUMINATED SIGN; CIP	EACH	4	
716302	LUMINAIRES; CIP	EACH	3	
801000	CONSTRUCTION STAKING BY THE CONTRACTOR; COMPL	L.S.	1	

SUMMARY OF WORK DETAILS:

NOTE: THE SUMMARY OF WORK PROVIDED BELOW IS FOR THE CONTRACTOR'S REFERENCE AND DOES NOT MODIFY OR REPLACE CONSTRUCTION REQUIREMENTS AS SET FORTH IN THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS.

- DRILLED SHAFT FOUNDATION 36" DIAMETER SHALL MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION. THIS BID ITEM SHALL INCLUDE DRILLING OF THE FOUNDATION PIER, TYING AND PLACEMENT OF REBAR CAGE, AND CONCRETE PLACEMENT.
- DOUBLE 10'x8' CONCRETE BOX CULVERT SHALL MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION. THIS BID ITEM SHALL INCLUDE HEADWALLS, TURNDOWNS, REINFORCING STEEL, WING WALLS, APRONS, CONCRETE BARRELS, CONCRETE PLACEMENT, CONCRETE FORMS & FINISHING, STORM DRAIN PIPE PENETRATION, EXCAVATION, COMPACTION, BACKFILL, AND TIE-IN GRADING COMPLETE AND IN-PLACE.
- CONCRETE WALL BARRIER 42" SHALL MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION. THIS BID ITEM SHALL INCLUDE SUBGRADE PREPARATION, EXCAVATION, COMPACTION, REINFORCING STEEL, AND ALL NECESSARY EQUIPMENT AND APPURTENANCES REQUIRED TO COMPLETE BARRIER AS PROVIDED IN THE PLANS.
- CONCRETE PAVEMENT 4", 6", 8", AND MEDIAN PAVEMENT SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS AND DETAILS. WORK SHALL INCLUDE SUBGRADE PREPARATION, COMPACTION, AND CONCRETE PLACEMENT AND FINISHING TO MEET AND MATCH THE GRADES AS SHOWN IN THE PLANS. CONCRETE FILLETS WILL BE PAID AS 6" CONCRETE PAVEMENT. ADA COMPLIANT RAMPS AND RESPECTIVE PAY ITEMS IS SHOWN ON SHEET 2-7.
- CONCRETE CURB AND GUTTER ALL TYPES SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS AND DETAILS. WORK SHALL INCLUDE SUBGRADE PREPARATION, BASE COURSE, COMPACTION, CONCRETE PLACEMENT AND FINISHING TO MEET AND MATCH THE GRADES AS SHOWN IN THE PLANS.
- 36" VALLEY GUTTER SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS AND DETAILS. WORK SHALL INCLUDE SUBGRADE PREPARATION, COMPACTION, CONCRETE PLACEMENT AND FINISHING TO MEET AND MATCH THE GRADES AS SHOWN IN THE PLANS. VALLEY GUTTERS SHALL BE CONSTRUCTED BETWEEN CONCRETE FILLETS AT TURNOUTS AND STREETS.
- 24" STEEL CASING FOR 12" DIAMETER UTILITY LINES SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS AND DETAILS. THE STEEL CASINGS SHALL BE INSTALLED VIA BORING AND JACKING. WORK SHALL INCLUDE EXCAVATION OF THE BORE PITS, BORING/JACKING OF CASING, CASING APPURTENANCES, CASING VENTS, SPACERS/SUPPORTS SUITABLE FOR USE WITH THE SPECIFIED CASING SIZE AND CARRIER PIPE BEING SUPPORTED, CATHODIC PROTECTION, BACKFILL, COMPACTION, AND ANY MISCELLANEOUS HARDWARE FOR INSTALLATION. CASING WILL BE REQUIRED FOR 12" C-900 DR-18 WATER LINE AND 12" SDR-35 SANITARY SEWER LINE ACROSS THE ENTIRETY OF THE UNION PACIFIC RAIL ROAD (UPRR) RIGHT-OF-WAY.
- TRAFFIC CONTROL MANAGEMENT AND DEVICES - WORK SHALL INCLUDE ALL COSTS OF LABOR, MATERIALS, AND EQUIPMENT TO SET, RELOCATE, AND REMOVE TRAFFIC CONTROL DEVICES FOR CONSTRUCTION. THESE DEVICES MAY INCLUDE, BUT ARE NOT LIMITED TO SIGNING, REFLECTORIZED PAVEMENT MARKINGS, TEMPORARY REMOVABLE MARKING TAPE, BARRELS, SEQUENTIAL ARROW DISPLAYS, VERTICAL PANELS, BARRICADES, 4-WAY STOP SET-UP, TEMPORARY WALL BARRIER, FLAGMEN, AND MISCELLANEOUS TRAFFIC CONTROL DEVICES. WORK SHALL ALSO INCLUDE THE DEVELOPMENT, IMPLEMENTATION, AND MANAGEMENT OF THE TRAFFIC CONTROL PLAN. ALL WORK SHALL MEET THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. THE TRAFFIC CONTROL PLAN AND MAINTENANCE DURING CONSTRUCTION SHALL BE PERFORMED BY A PERSON CERTIFIED AS A WORK ZONE TRAFFIC SAFETY SUPERVISOR WITH THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATTSA) OR ASSOCIATED CONTRACTORS OF NEW MEXICO (ACNM).
- MOBILIZATION - ITEM CONSISTS OF, BUT NOT LIMITED TO, ALL PREPARATORY/CLEAN-UP WORK, PRELIMINARY/FINAL CLOSEOUT OPERATIONS, AND INCURRED COSTS NECESSARY FOR THE MOVEMENT OF PERSONNEL, EQUIPMENT, SUPPLIES, AND INCIDENTALS TO/FROM THE PROJECT SITE, AND FOR THE ESTABLISHMENT/REMOVAL OF ALL OFFICES, BUILDINGS, AND OTHER FACILITIES NEEDED FOR THE PROJECT TO START AND COMPLETE THE WORK. THIS ITEM SHALL BE UTILIZED FOR BOTH MOBILIZATION AND DEMOBILIZATION.
- CLASS A SEEDING AND TEMPORARY SOIL STABILANT SHALL MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION.
- 4' DIAMETER MANHOLES (ALL DEPTHS) SHALL MEET/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE EXCAVATION, PLACEMENT OF REINFORCED CONCRETE FOOTING, ERECTION OF PRE-CAST SECTION BARRELS, WATERTIGHT SEALING AND GROUTING OF THE SECTIONS WITH NON-SHRINK GROUT, DROP ASSEMBLY (ON MANHOLES WHERE THE DROP IS GREATER THAN 2.5 FEET), CONNECTIONS TO PIPING, PLACEMENT OF MANHOLE RING, TRACING WIRE ACCESS BOX CONNECTION & GROUNDING, TESTING, PLACEMENT OF COVER, BACKFILL, COMPACTION, AND PLACEMENT OF CONCRETE COLLAR MATCHING SURFACING (PAVED OR UNPAVED) ADJACENT TO THE COLLAR.
- CURB DROP INLET SHALL MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION.
- WATER LINES (ALL SIZES) SHALL MEET AND/OR EXCEED THE REQUIREMENTS SPECIFIED IN THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE EXCAVATION, TRENCHING, RESTRAINTS, FITTINGS, THRUST BLOCKING, SHORING, SUPPORT AND PROTECTION OF ANY ADJACENT UTILITIES, BACKFILLING, COMPACTION, PLACING OF TRACING TAPE, TRACING WIRE PLACEMENT, TESTING, DISINFECTION, AND ANY OTHER WORK NECESSARY TO COMPLETE THE INSTALLATION OF THE PIPE. WATER LINES SHALL BE PVC C-900 DR-18.
- AIR RELEASE VALVES FOR WATER SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATION. WORK SHALL INCLUDE EXCAVATION, AIR RELEASE/VACUUM RELIEF VALVE, MISCELLANEOUS PIPING AND FITTINGS, MANHOLE, MANHOLE RING AND COVER, BOLLARDS, FOUNDATIONS, ETC. TO COMPLETE IN PLACE PER DETAILS.
- TIE TO EXISTING WATERLINE (ALL SIZES) SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. CONNECTIONS SHALL BE NON-PRESSURE CONNECTIONS. WORK SHALL INCLUDE SPECIALS, ADAPTERS, COUPLINGS, SLEEVES, AND/OR FITTINGS REQUIRED TO COMPLETE THE CONNECTION. WORK SHALL ALSO INCLUDE EXCAVATION, TRENCHING, BACKFILL, AND COMPACTION. CONTRACTOR SHALL COORDINATE SHUT DOWN WITH THE CITY OF ALAMOGORDO PROJECT MANAGER.
- BYPASS PUMPING SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE DEVELOPMENT OF BYPASS PUMPING PLAN DEPICTING PUMP/LINE SIZES, LOCATIONS, ODOR CONTROL PROVISIONS, SCHEDULE, AND SAFE GUARD MEASURES REQUIRED FOR COMPLETION. WORK SHALL INCLUDE ALL PUMPS, PIPING, VALVES, AND OTHER REQUIRED APPURTENANCES TO COMPLETE THE BYPASS PUMPING AND SUBSEQUENT INSTALLATION AND TURNOVER TO THE NEW SANITARY SEWER SYSTEM.
- GATE VALVES (ALL SIZES) SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE EXCAVATION, TRENCHING, BACKFILL, COMPACTION, VALVE, VALVE BOX, THRUST BLOCKS, VALVE BOX CONCRETE COLLAR, AND MARKINGS COMPLETE IN PLACE PER DETAILS.
- SANITARY SEWER LINE (ALL DEPTHS AND SIZES) SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE EXCAVATION, TRENCHING AT GRADE, LAYING PIPE ON GRADE, WARNING TAPE PLACEMENT, TRACING WIRE PLACEMENT, JOINT INSPECTIONS, TEMPORARY PLUGS, TESTING, FLUSHING OF SEWER LINES, BACKFILL, AND COMPACTION. SANITARY SEWER LINES SHALL BE SDR-35 PVC.
- CONNECTION TO EXISTING MANHOLE SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS.
- LANDSCAPE GRAVEL SHALL MEET AND/OR EXCEED THE CITY OF ALAMOGORDO STANDARD SPECIFICATIONS. WORK SHALL INCLUDE HAUL, PLACEMENT, AND LEVELING OF LANDSCAPE GRADE WITHIN MEDIAN ISLANDS (TO A DEPTH OF 2" BELOW THE BACK OF MEDIAN CURB ELEVATION) AS IDENTIFIED IN THE PLANS.
- RAILWAY FLAGGING IS AN ALLOWANCE FOR UNION PACIFIC RAILROAD FLAGMEN ON SITE DURING CONSTRUCTION ACTIVITIES WITHIN RAILROAD RIGHT-OF-WAY.
- ALL WORK ASSOCIATED WITH THE TRAFFIC SIGNAL SHALL BE COMPLETED TO MEET AND/OR EXCEED THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2019 EDITION.
- CONSTRUCTION STAKING BY THE CONTRACTOR - WORK SHALL INCLUDE ALL COSTS OF LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO/FOR CONSTRUCTION STAKING ESSENTIAL FOR THE CONTROL AND COMPLETION OF ROADWAY AND UTILITY WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND IN CONFORMITY WITH THE LINES, GRADES, AND DETAILS SHOWN HEREIN. THIS ITEM ALSO INCLUDES STAKING OF ALL STRUCTURES, WATER LINES, SANITARY SEWER LINES, AND OTHER UTILITY IMPROVEMENTS. MAINTENANCE OF ALL STAKING IS ALSO REQUIRED. THIS BID ITEM ALSO INCLUDES REPLACING PROPERTY CORNERS BY A LICENSED SURVEYOR IN THE STATE OF NEW MEXICO THAT ARE DAMAGED OR THAT MUST BE REMOVED TO FACILITATE CONSTRUCTION.

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/30/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SUMMARY OF QUANTITIES

Solutions for Today... Vision for Tomorrow
201 N Church Street
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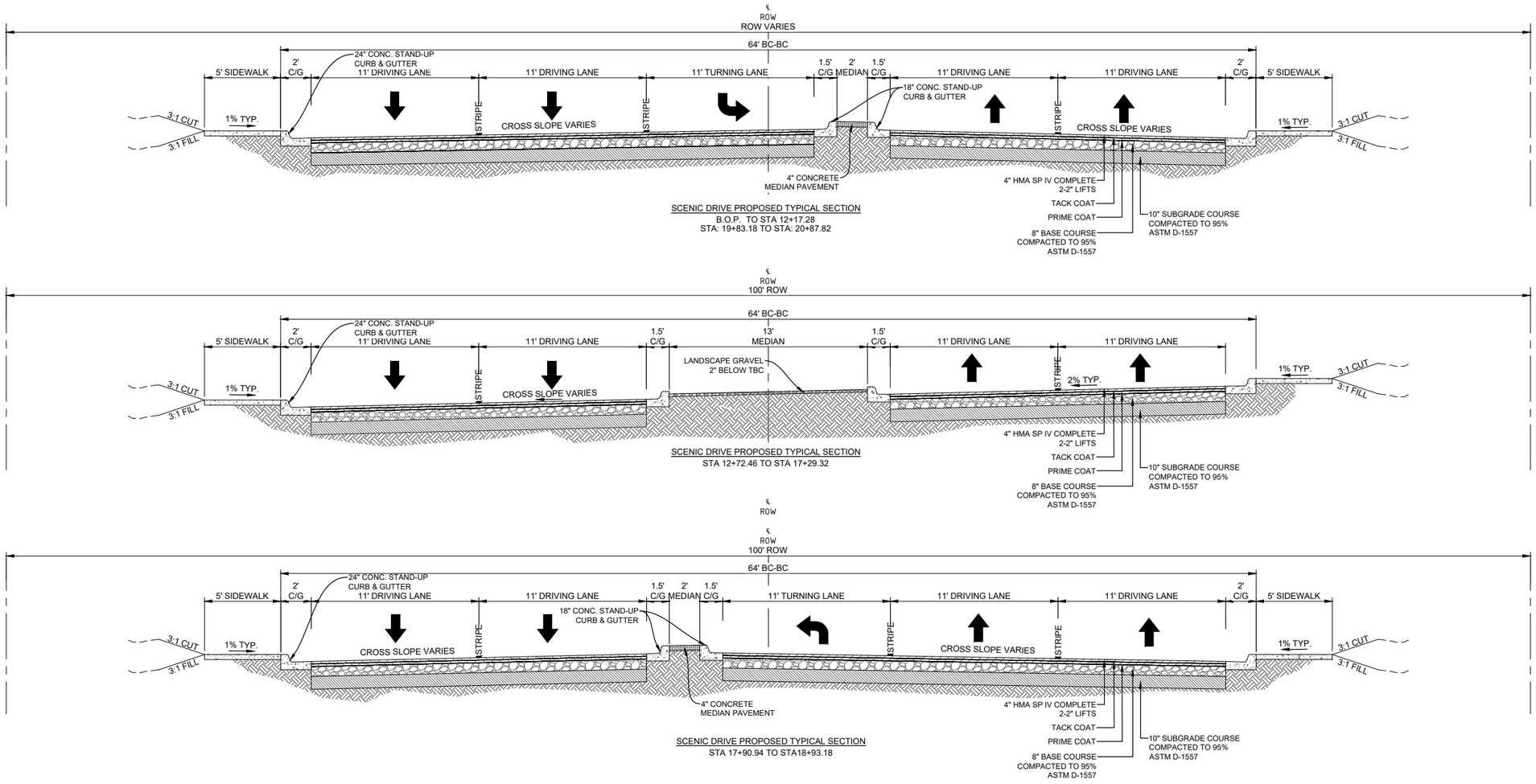
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 1-3



RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/30/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	REVISION DESCRIPTION	DATE	BY
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

PROPOSED TYPICAL SECTION

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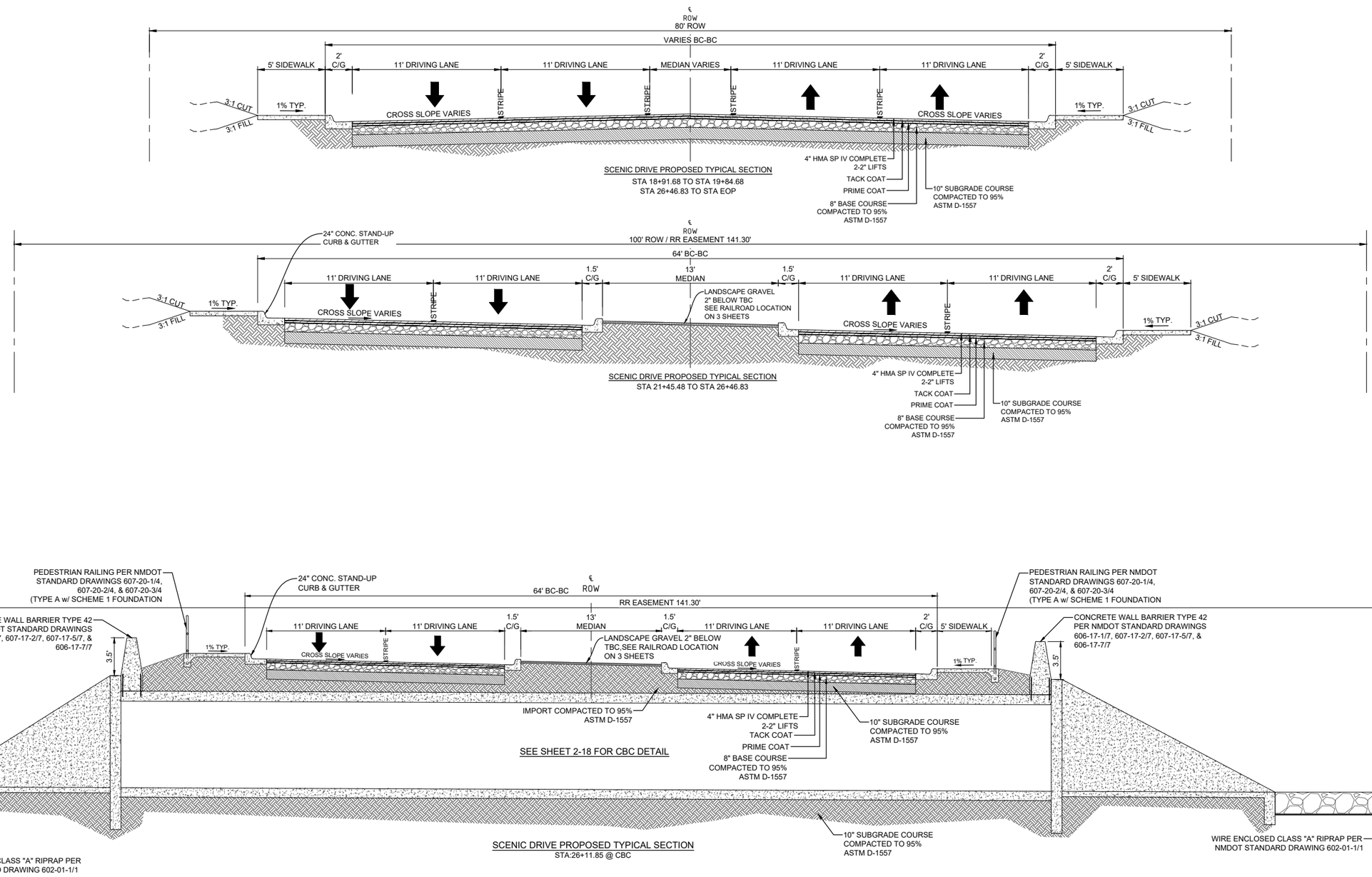
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-1

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-1 PROPOSED TYPICAL SECTION.dwg Apr 30, 2021 - 9:04am Saved By: rwhyp



RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
05/01/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO.	REVISION DESCRIPTION	DATE	BY
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

PROPOSED TYPICAL SECTION

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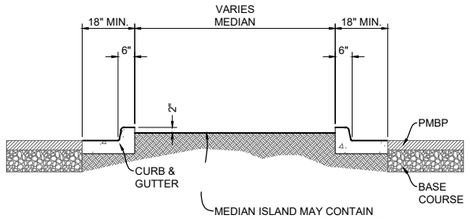
SMITH ENGINEERING

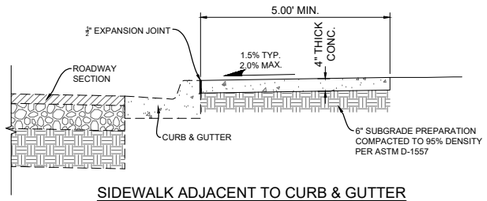
JOB NO: 816204
DATE: MAY 2021
SHEET NO: 2-2

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-2 PROPOSED TYPICAL SECTION.dwg May 01, 2021 - 12:45pm Saved By: rustyp



RAISED MEDIAN DETAIL

NOT TO SCALE



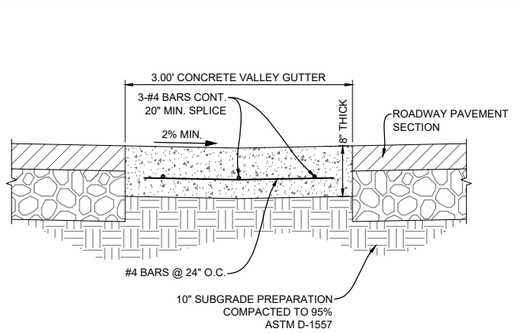
SIDEWALK ADJACENT TO CURB & GUTTER

SIDEWALK NOTES:

1. PROVIDE ¾" EXPANSION JOINT MATERIAL WHERE SIDEWALK ABUTS AN IMMOVABLE OBJECT (I.E. UTILITY POLE, WALL, CURB AND GUTTER, SIDEWALK, DRIVE APRON, STRUCTURES, ETC.).
2. PROVIDE CONTROL JOINTS EVERY 5'-0" FOR SIDEWALKS AND EVERY 10'-0" FOR CURBS; PROVIDE EXPANSION JOINTS EVERY 25'-0" MAX. FOR SIDEWALKS AND EVERY 50'-0" FOR CURBS.

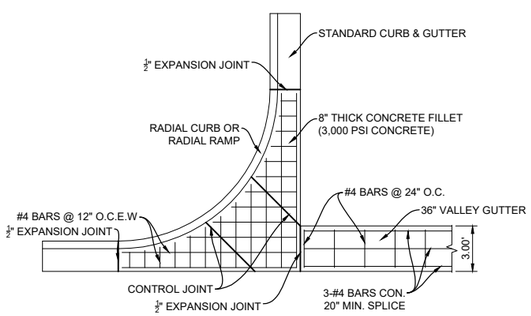
SIDEWALK DETAIL

NOT TO SCALE



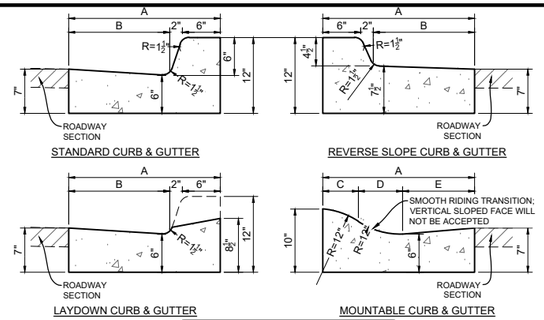
CONCRETE VALLEY GUTTER DETAIL

NOT TO SCALE



CONCRETE RADIUS FILLET DETAIL

NOT TO SCALE



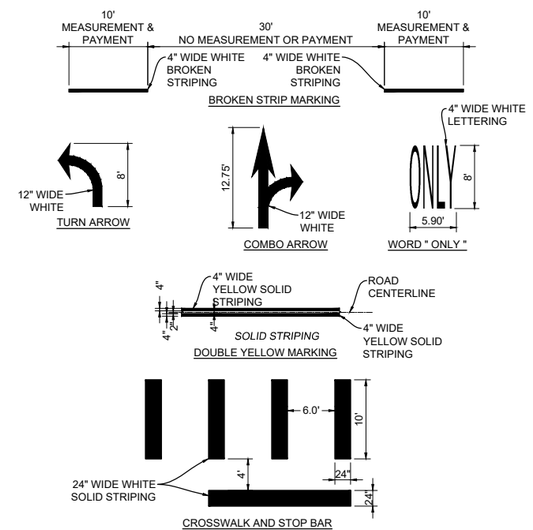
CURB AND GUTTER LEGEND			
TYPE	I	II	III
A	1'-6"	2'-0"	2'-6"
B	0'-10"	1'-4"	1'-10"
C	0'-5 5/8"	0'-5 5/8"	0'-5 5/8"
D	0'-5"	0'-7"	0'-7"
E	0'-7 3/8"	0'-11 3/8"	1'-5 3/8"

CURB & GUTTER NOTES:

1. NEW CURB & GUTTER PROFILE SHALL MATCH EXISTING ADJACENT CURB & GUTTER AND/OR STREET PROFILE.
2. NEW CURB & GUTTER SHALL INCLUDE EIGHT-INCH (8") SUBGRADE PREPARATION.
3. NEW CURB & GUTTER SHALL INCLUDE SIX-INCH (6") BASE COURSE.
4. EDGES OF CURB & GUTTER NOT SPECIFICALLY DIMENSIONS SHALL BE EDGED WITH A ⅜" EDGING TOOL.
5. DIMENSIONS AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES.
6. PROVIDE CONTROL JOINTS EVERY 5'-0". CONTROL JOINTS SHALL BE TOOL JOINTED WITH TOP ROUND EDGE OF ⅜" RADIUS, DEPTH OF ONE-INCH (1"). THE FINISHED JOINT OPENING EXCLUDING RADII SHALL NOT BE WIDER THAN ⅜".
7. PROVIDE ½" EXPANSION JOINTS EVERY 50'-0" ALONG CURB & GUTTER.
8. TACK COAT EDGE OF GUTTER PRIOR TO PLACEMENT OF NEW PAVEMENT OR PAVEMENT PATCH.
9. THE CONSTRUCTION OF CURB & GUTTER AND/OR PAVEMENT SHALL BE CONSTRUCTED SO THAT THE GUTTER FLOW WILL BE CONSTANT (NO PONDING AREAS WILL BE ACCEPTED).

CURB AND GUTTER DETAILS

NOT TO SCALE

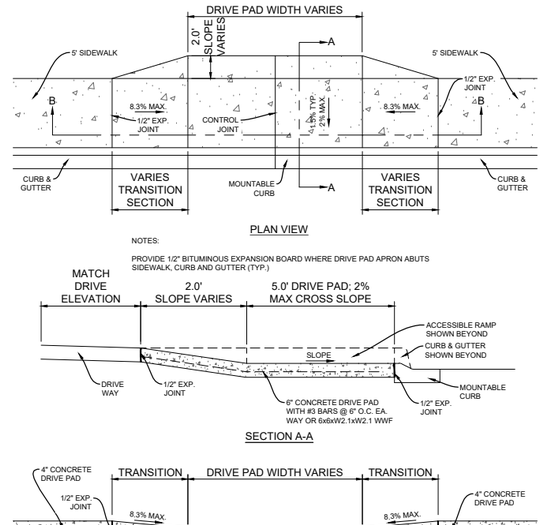


CONTRACTOR NOTE:

1. CROSSWALK AND STOP BARS SHALL BE 3M-N380 PREFORMED PATTERNED MARKING OR APPROVED EQUAL (O.A.E.).
2. ALIGN CROSSWALK WITH CENTERLINE OF WHEEL PATH, COORDINATE WITH OWNER PRIOR TO INSTALLATION.
3. SYMBOLS AND LEGENDS SHALL BE 3M-380IES PREFORMED PATTERNED MARKING O.A.E.
4. BROKEN STRIPING, DOUBLE STRIPING AND SINGLE STRIPING SHALL BE 90 MIL HOT THERMOPLASTIC PAVEMENT STRIPING.
5. MEASUREMENT AND PAYMENT FOR BROKEN STRIPING (10 LF) SHALL BE CALCULATED BY MATERIAL USED.

STRIPING DETAILS

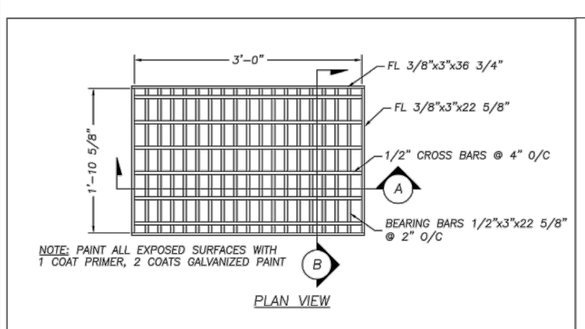
NOT TO SCALE



SLOPE CONVERSION	
10%	10:1
8.3%	12:1
2%	50:1

DRIVEPAD DETAILS

NOT TO SCALE

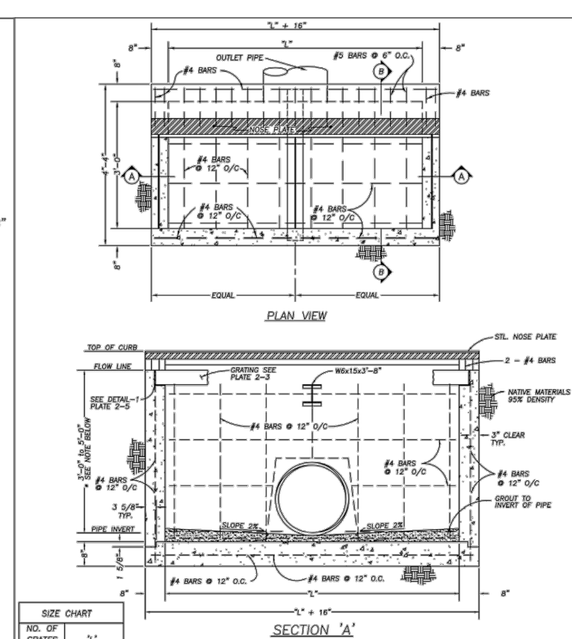


NO SCALE

TECHNICAL STANDARDS DETAIL DRAWINGS

GRATE FOR DROP INLET 2–3

Drawn by: CLM Date: 04/04



SIZE CHART	
NO. OF GRATES	"L"
1	2'–7 1/4"
2	5'–8 1/2"
3	8'–9 3/4"
4	11'–11"
5	15'–0 1/4"

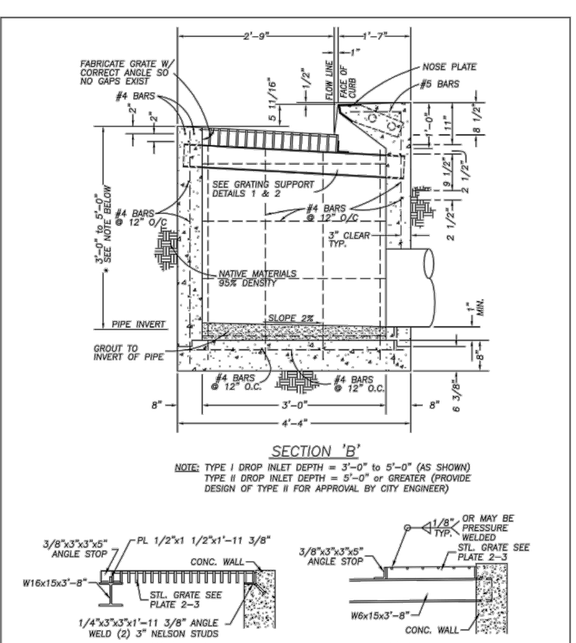
NOTE: TYPE I DROP INLET DEPTH = 3'–0" to 5'–0" (AS SHOWN)
TYPE II DROP INLET DEPTH = 5'–0" or GREATER (PROVIDE DESIGN OF TYPE II FOR APPROVAL BY CITY ENGINEER)

NO SCALE

TECHNICAL STANDARDS DETAIL DRAWINGS

CURB DROP INLET 2–4

Drawn by: CLM Date: 04/04



NO SCALE

TECHNICAL STANDARDS DETAIL DRAWINGS

CURB DROP INLET 2–5

Drawn by: CLM Date: 04/04

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	DATE	REVISION DESCRIPTION	BY
1			
2			
3			
4			
5			

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH
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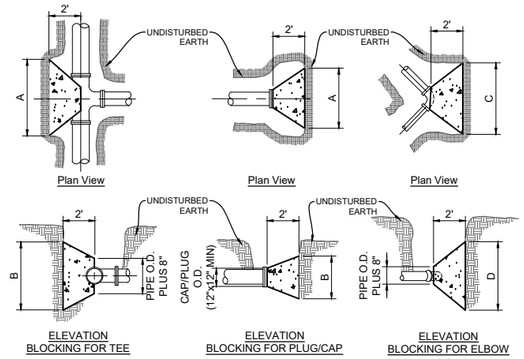
SMITH ENGINEERING

JOB NO: 816204

DATE: APRIL 2021

SHEET NO: 2-3

L:\SEC–PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\PLANSET\2-3 CITY OF ALAMOGORDO STANDARD DETAILS.dwg Apr 27, 2021 - 9:31am Saved By: rustyp



PIPE SIZE	TEE, CAP, PLUG, ELBOW ANGLE	A	B	C	D
4"	TEE OR CAP/PLUG	2'-0"	1'-0"	-	-
4"	90° 45°	-	-	2'-0"	2'-0"
4"	22 1/2" 11 1/4"	-	-	2'-0"	2'-0"
6"	TEE OR CAP/PLUG	2'-0"	2'-0"	-	-
6"	90° 45°	-	-	2'-0"	2'-0"
6"	22 1/2" 11 1/4"	-	-	2'-0"	2'-0"
8"	TEE OR CAP/PLUG	3'-0"	3'-0"	-	-
8"	90°	-	-	3'-0"	3'-0"
8"	45°	-	-	2'-0"	2'-0"
8"	22 1/2" 11 1/4"	-	-	2'-0"	2'-0"

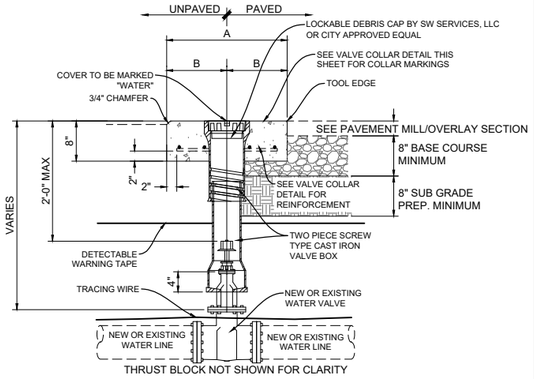
PIPE SIZE	TEE, CAP, PLUG, ELBOW ANGLE	A	B	C	D
10"	TEE OR CAP/PLUG	3'-0"	3'-0"	-	-
10"	90°	-	-	3'-6"	3'-6"
10"	45°	-	-	3'-0"	3'-0"
10"	22 1/2" 11 1/4"	-	-	2'-0"	2'-0"
12"	TEE OR CAP/PLUG	3'-6"	3'-6"	-	-
12"	90°	-	-	4'-0"	4'-0"
12"	45°	-	-	3'-6"	3'-6"
12"	22 1/2" 11 1/4"	-	-	2'-0"	2'-0"
14"	TEE OR CAP/PLUG	4'-0"	4'-0"	-	-
14"	90°	-	-	5'-0"	5'-0"
14"	45°	-	-	3'-6"	3'-6"
14"	22 1/2" 11 1/4"	-	-	3'-0"	3'-0"

GENERAL NOTES:

1. ALL FITTINGS AND BURIED DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE.
2. ALL VERTICAL BENDS SHALL BE RESTRAINED JOINTS.
3. PIPE SIZES GREATER THAN 14-INCHES REQUIRES DESIGN AND CERTIFICATION BY ENGINEER.

THRUST BLOCK DETAILS

NOT TO SCALE



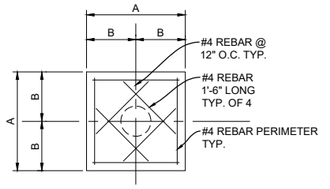
CONCRETE COLLAR TABLE		
TYPE	PAVED	UNPAVED
A	2'-0"	4'-0"
B	1'-0"	2'-0"

WATER VALVE NOTES:

1. VALVE EXTENSIONS ARE REQUIRED ON ANY VALVE NUT OVER 36-INCHES IN DEPTH. THE EXTENSION SHALL BE WITHIN 18-INCHES OF THE SURFACE.
2. INTERSECTING WATER MAINS SHALL BE EQUIPPED WITH 3 AND/OR 4 ISOLATION CONTROL VALVES.

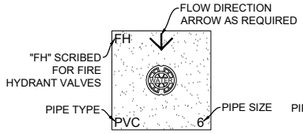
VALVE BOX DETAIL

NOT TO SCALE

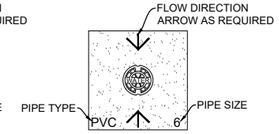


Valve Box Concrete Collar Detail

CONCRETE COLLAR TABLE		
DIMENSION	PAVED	UNPAVED
A	2'-0"	4'-0"
B	1'-0"	2'-0"



Valve Box Collar Marking Fire Hydrant Valve Detail



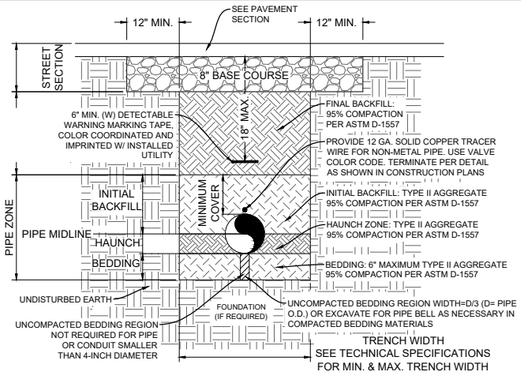
Valve Box Collar Marking Detail

GENERAL NOTES:

1. SIDES OF CONCRETE COLLAR TOP SHALL BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.
2. SCRIBE CONCRETE WITH LINE DIRECTIONAL ARROWS, PIPE SIZE AND PIPE TYPE. FIRE HYDRANT VALVES SHALL BE SCRIBED "FH" FOR FIELD IDENTIFICATION.
3. TEXT SIZE SHALL BE 4-INCHES TALL AND SCORED 3/8" DEEP IN A NEAT AND CONSISTENT MANNER, TYPICAL.

VALVE BOX CONCRETE COLLAR DETAIL

NOT TO SCALE



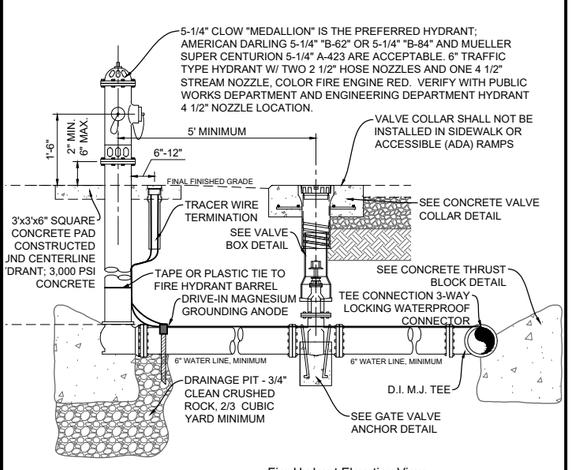
TYPE II AGGREGATE BASE BACKFILL GRADATION AND REQUIREMENTS	
SIEVE SIZE	PERCENT OF DRY WEIGHT PASSING SIEVE
1-INCH	100
3/4 - INCH	85 - 95
NO. 4	40 - 70
NO. 10	35 - 45
NO. 16	25 - 35
NO. 200	06 - 18
PLASTIC INDEX	12 MAXIMUM
LIQUID LIMITS	35 MAXIMUM
FRACTURED FACES	70% MINIMUM
TOTAL AVAILABLE WATER SOLUBLE SULFATES	35 MAXIMUM

GENERAL NOTES:

1. SEE TECHNICAL SPECIFICATIONS FOR BACKFILL MATERIAL SPECIFICATIONS AND COMPACTION REQUIREMENTS.
2. NATIVE SOIL MAY BE USED AS FINAL BACKFILL IF FREE OF ORGANIC MATTER/DEBRIS, MAXIMUM PARTICLE SIZE OF TWO-INCH (2"), LIQUID LIMIT OF <35, AND PLASTICITY INDEX OF <15. COMPACTION REQUIREMENTS FOR NATIVE MATERIAL SHALL REMAIN THE SAME AS IMPORTED MATERIALS AND PLACEMENT SHALL OCCUR WITHIN ±2% OF OPTIMUM MOISTURE CONTENT.
3. COMPACTION OF THE PIPE BEDDING MAY BE ACCOMPLISHED USING MECHANICAL TAMPING DEVICES PRIOR TO PLACEMENT OF THE PIPE OR CONDUIT. MINIMUM EXCAVATION FOR PIPE BELLS MAY BE ACCOMPLISHED AS NECESSARY TO ALLOW PROPER ALIGNMENT AND ELEVATION OF THE PIPE OR CONDUIT.
4. COMPACTION IN THE HAUNCH ZONE SHALL BE COMPLETED BY HAND WITH TAMPERS OR SUITABLE POWER COMPACTORS IN MAXIMUM LIFTS OF SIX-INCHES (6"). TAMPERS SHALL NOT CONTACT PIPE OR CONDUITS DURING THE TAMPING PROCESS.
5. THE CONTRACTOR SHALL NOT EMPLOY THE USE OF IMPACT TAMPERS DIRECTLY ABOVE THE PIPE OR CONDUIT UNTIL THE FULL LOOSE LAYER BACKFILL DEPTH ABOVE THE PIPE IS OBTAINED.
6. TRENCHING AND EXCAVATION OPERATIONS SHALL CONFORM TO THE CURRENT FEDERAL, STATE, AND LOCAL SAFETY ORDINANCES; INCLUDING OSHA REGULATIONS.

UTILITY TRENCH CROSS-SECTION DETAIL

NOT TO SCALE



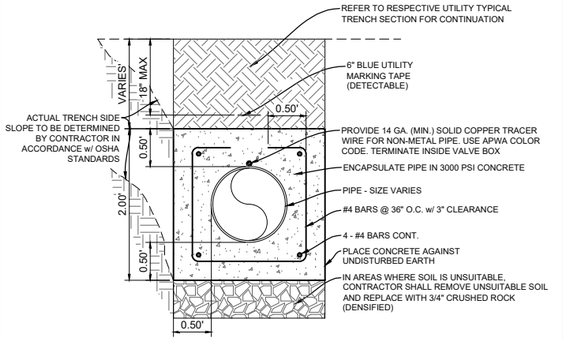
Fire Hydrant Elevation View

GENERAL NOTE:

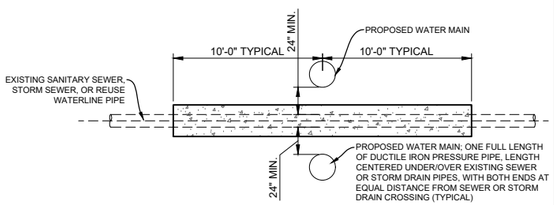
1. FIRE HYDRANT SHALL BE INSTALLED 6-FEET FROM BACK OF CURB TO CENTER OF HYDRANT OR AS SPECIFIED BY THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT.
2. ALL FITTINGS FROM WATER MAIN LINE TO FIRE HYDRANT SHALL BE M.J. FITTINGS.
3. GRIP RING PIPE RESTRAINED, OR PRE-APPROVED EQUAL, SHALL BE INSTALLED ON PIPE FROM HYDRANT VALVE TO HYDRANT BOOT WHEN VALVE IS LOCATED WITH-IN THE 5-FEET MINIMUM SEPARATION, THIS INSTALLATION MUST BE PRE-APPROVED BY PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT.
4. FIRE HYDRANT VALVE SHALL NOT BE LOCATED IN THE CURB OR THE GUTTER; CONSULT WITH PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR APPROPRIATE LOCATION.

FIRE HYDRANT DETAIL

NOT TO SCALE



CONCRETE ENCASEMENT SECTION



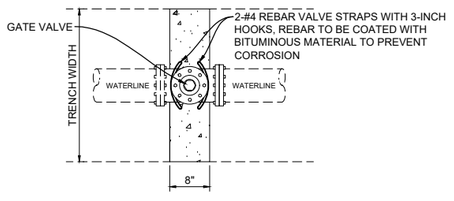
CONCRETE ENCASEMENT ELEVATION VIEW

GENERAL NOTES:

1. PROVIDE AT LOCATIONS WHERE WATERLINE CROSSES SANITARY SEWER LINE, STORM DRAIN LINE, AND/OR REUSE WATERLINE WITH A CLEARANCE LESS THAN 24-INCHES; ENCASE PIPE FOR A MINIMUM OF 10'-0" ON EACH SIDE OF THE CROSSING AND CROSSINGS TO BE ARRANGED SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SANITARY SEWER LINE, STORM DRAIN LINE, AND/OR REUSE WATERLINE JOINTS.
2. WHERE 36-INCH MINIMUM COVER CANNOT BE MAINTAINED CONSULT WITH PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT ON LOWERING OF UTILITY.

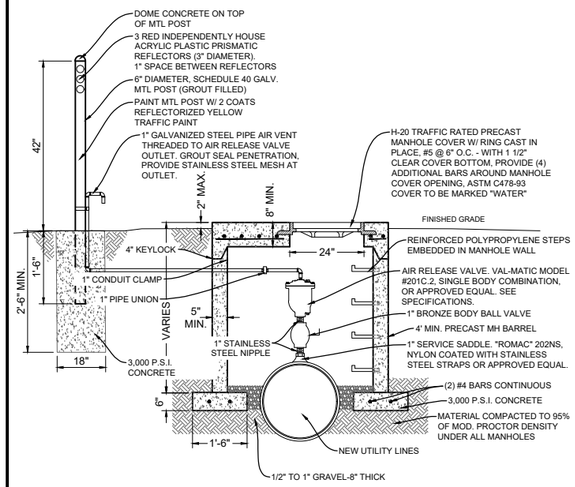
PIPE ENCASEMENT DETAIL

NOT TO SCALE



GATE VALVE ANCHOR DETAIL

NOT TO SCALE



COMBINATION AIR RELEASE VALVE DETAIL

NOT TO SCALE

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	REVISION DESCRIPTION	DATE	BY
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SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

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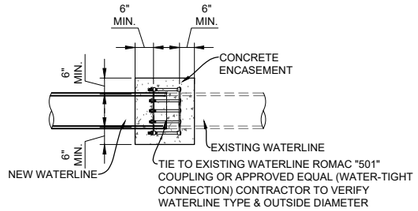
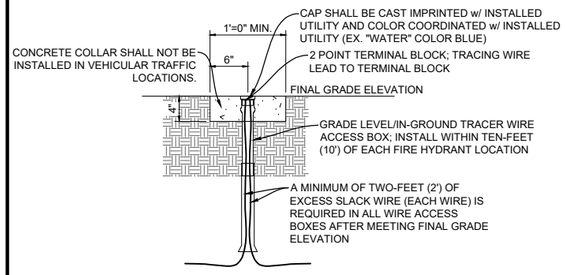
JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-4

L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-4 CITY OF ALAMOGORDO STANDARD DETAILS.dwg, Apr 27, 2021 - 9:33am, Saved By: rustyp



WATERLINE TIE-IN DETAIL

NOT TO SCALE

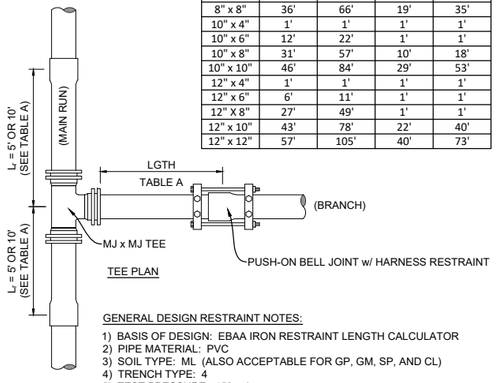


CONTRACTOR NOTES:

1. TRACER WIRE ACCESS BOXES SHALL BE LOCATED AT ALL FIRE HYDRANT LOCATIONS.
2. TRACER WIRE ACCESS BOXES SPACING SHALL NOT EXCEED 500 LINEAR FEET.
3. COORDINATE WITH PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR TRACER WIRE ACCESS BOXES FINAL LOCATION(S).

TRACE WIRE TERMINATION DETAIL

NOT TO SCALE



TEE PLAN

TABLE A				
PIPE SIZE	L_T = 5' MINIMUM		L_T = 10' MINIMUM	
	LGTH (D.I.)	LGTH (PVC)	LGTH (D.I.)	LGTH (PVC)
4" x 4"	13'	23'	1'	1'
6" x 4"	4'	8'	1'	1'
6" x 6"	24'	43'	7'	13'
8" x 4"	1'	1'	1'	1'
8" x 6"	18'	33'	1'	1'
8" x 8"	36'	66'	19'	35'
10" x 4"	1'	1'	1'	1'
10" x 6"	12'	22'	1'	1'
10" x 8"	31'	57'	10'	18'
10" x 10"	46'	84'	29'	53'
12" x 4"	1'	1'	1'	1'
12" x 6"	6'	11'	1'	1'
12" X 8"	27'	49'	1'	1'
12" x 10"	43'	78'	22'	40'
12" x 12"	57'	105'	40'	73'

GENERAL DESIGN RESTRAINT NOTES:

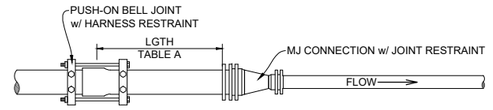
1) BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
2) PIPE MATERIAL: PVC
3) SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
4) TRENCH TYPE: 4
5) TEST PRESSURE: 150 psi
6) FACTOR OF SAFETY: 1.5 TO 1
7) DEPTH OF BURY: 3 FEET
8) ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
9) POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
10) PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

RESTRAINED TEE DETAIL

NOT TO SCALE

GENERAL DESIGN RESTRAINT NOTES:

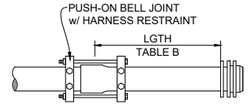
1) BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
2) PIPE MATERIAL: PVC
3) SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
4) TRENCH TYPE: 4
5) TEST PRESSURE: 150 psi
6) FACTOR OF SAFETY: 1.5 TO 1
7) DEPTH OF BURY: 3 FEET
8) ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
9) POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
10) PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.



REDUCER PLAN

TABLE A		
PIPE SIZE	D.I.	PVC
6" x 4"	21'	38'
8" x 4"	38'	70'
8" x 6"	22'	41'
10" x 4"	52'	94'
10" x 6"	39'	71'
10" x 8"	22'	39'
12" x 4"	65'	118'
12" x 6"	54'	99'
12" x 8"	40'	73'
12" x 10"	22'	40'

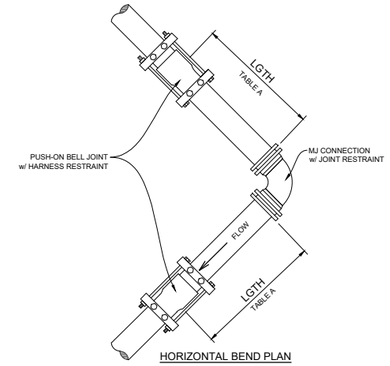
TABLE B		
PIPE SIZE	D.I.	PVC
4"	29'	53'
6"	41'	74'
8"	53'	97'
10"	63'	116'
12"	74'	136'



DEAD END PLAN

RESTRAINED DEAD END & REDUCER DETAIL

NOT TO SCALE



HORIZONTAL BEND PLAN

TABLE A (RESTRAINED LENGTH [FT] FOR PVC)				
PIPE SIZE	11.25° BEND	22.5° BEND	45° BEND	90° BEND
4"	2'	4'	8'	18'
6"	3'	5'	11'	25'
8"	4'	7'	14'	32'
10"	4'	8'	16'	38'
12"	5'	9'	19'	44'

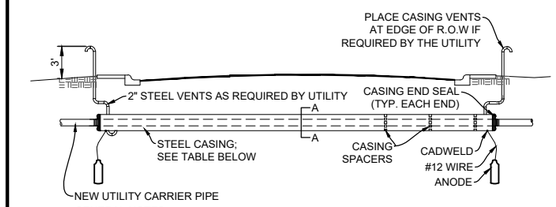
TABLE A (RESTRAINED LENGTH [FT] FOR DI)				
PIPE SIZE	11.25° BEND	22.5° BEND	45° BEND	90° BEND
4"	2'	3'	6'	14'
6"	2'	4'	8'	19'
8"	3'	5'	11'	25'
10"	3'	6'	13'	30'
12"	4'	7'	15'	35'

GENERAL DESIGN RESTRAINT NOTES:

1) BASIS OF DESIGN: EBAA IRON RESTRAINT LENGTH CALCULATOR
2) PIPE MATERIAL: PVC
3) SOIL TYPE: ML (ALSO ACCEPTABLE FOR GP, GM, SP, AND CL)
4) TRENCH TYPE: 4
5) TEST PRESSURE: 150 psi
6) FACTOR OF SAFETY: 1.5 TO 1
7) DEPTH OF BURY: 3 FEET
8) ALL JOINTS WITHIN LENGTH "LGTH" ARE TO BE RESTRAINED.
9) POLYETHYLENE WRAPPED DUCTILE IRON WILL REQUIRE SEPARATE CALCULATIONS.
10) PIPE SIZES LARGER THAN 12" DIAMETER WILL REQUIRE A SEPARATE DESIGN.

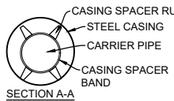
RESTRAINED HORIZONTAL BEND DETAIL

NOT TO SCALE



GENERAL NOTES:

1. CASING END SEALS SHALL BE T.D. WILLIAMSON, INC Z-SEALS OR ENGINEER APPROVED EQUAL.
2. CASING SPACERS SHALL BE ADVANCE PRODUCTS & SYSTEMS, LLC MODEL SSIM OR ENGINEER APPROVED EQUAL.
3. STEEL CASING PIPE SHALL BE SIZED TO ADEQUATELY ACCOMMODATE CARRIER PIPE AND ADHERE TO THE REQUIREMENTS PROVIDED IN THE TABLE BELOW.
4. PIPE JOINT(S) INSIDE CASING SHALL BE JOINT RESTRAINED.
5. CASING VENTS TO BE PAINTED WITH AN OIL BASE ALKYD PRIMER AND AN OIL BASE ALKYD ENAMEL TOP COAT. COLOR SHALL BE PER APWA UNIFORM COLOR CODE FOR RESPECTIVE UTILITY.



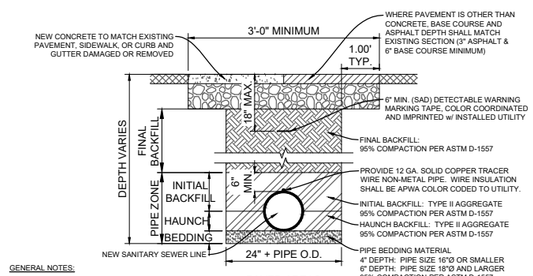
SECTION A-A

STEEL CASING MINIMUM WALL THICKNESS		
NOMINAL DIAMETER (INCHES)	MIN. WALL THICKNESS FOR COATED (INCHES)	MIN. WALL THICKNESS NON-COATED (INCHES)
14 AND UNDER	0.1880	0.1880
16	0.2190	0.2810
18	0.2500	0.3120
20 AND 22	0.2810	0.3440
24	0.3120	0.3750
26	0.3440	0.4060
28	0.3750	0.4380
30	0.4060	0.4690
32	0.4380	0.5000
34 AND 36	0.4690	0.5310
42	0.5000	0.5630
48	0.5630	0.6250

1. WALL THICKNESS DESIGNATIONS FOR STEEL CASING PIPE FOR E-80.
2. STEEL PIPE SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI.
3. CORROSION CONTROL MEASURES MUST INCLUDE CATHODIC PROTECTION.

WATER LINE BORE & CASE DETAIL

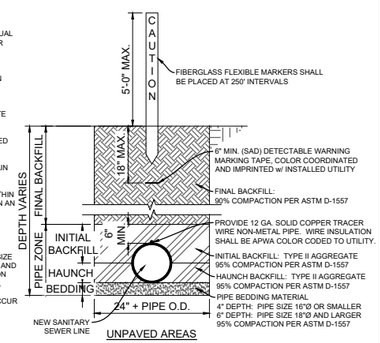
NOT TO SCALE



PAVED AREAS

GENERAL NOTES:

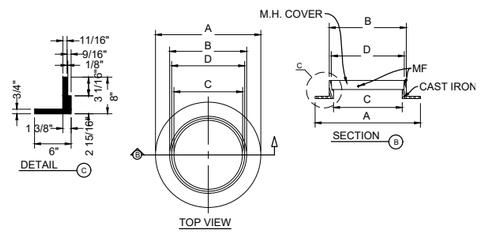
1. TRENCH WIDTHS AND CROSS SECTIONS SHALL BE IN COMPLIANCE WITH APPLICABLE SAFETY STANDARDS AND REGULATIONS.
2. TESTING REQUIREMENTS INCLUDE VISUAL TESTING OF ALL MAIN LINES LAID AT OR FLATTER THAN MINIMUM SLOPES.
3. MECHANICAL TAMPERS SHALL NOT BE USED IN THE INITIAL BACKFILL SECTION FOR FLEXIBLE PIPE.
4. HAND PREPARED PIPE BED, PROVIDE A SMOOTH UNIFORM SURFACE, EXCAVATE FOR PIPE BELL.
5. TRACING WIRE REQUIRED TO BE PLACED ABOVE ALL FORCE MAINS.
6. TRACING WIRE SHALL BE TAPED TO MAIN AT 10-FEET ON CENTER.
7. TRACING WIRE TO BE ACCESSIBLE, WITHIN VALVE BOX, SERVICE POINT, OR WITHIN AN INSTALLED TWO POINT TEST BOX, AT 500-FEET ON CENTER MAXIMUM.
8. NATIVE SOIL MAY BE USED AS FINAL BACKFILL IF FREE OF ORGANIC MATTER/DEBRIS, MAXIMUM PARTICLE SIZE OF TWO-INCH (2"), LIQUID LIMIT OF <35, AND PLASTICITY INDEX OF <15. COMPACTION REQUIREMENTS FOR NATIVE MATERIAL SHALL REMAIN THE SAME AS IMPORT MATERIALS AND PLACEMENT SHALL OCCUR WITHIN ±2% OF OPTIMUM MOISTURE CONTEXT.



UNPAVED AREAS

SANITARY SEWER TRENCH DETAIL

NOT TO SCALE



MANHOLE RING	48" MANHOLE	72" MANHOLE
WEIGHT	155 LBS.	225 LBS.
A	2'-10 1/2"	3'-6"
B	2'-1 1/4"	2'-8 3/4"
C	1'-10 1/2"	2'-6"
D	1'-11 7/8"	2'-7 3/8"

NOTE:

1. MATCHING SURFACES MARKED "MF" TO BE MACHINE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH AND FREE OF AIR VOIDS.

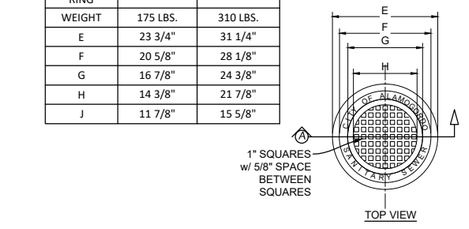
GENERAL NOTES:

1. MATCHING SURFACES MARKED "MF" TO BE MACHINE FINISHED AND BE FREE OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH AND FREE OF AIR VOIDS.
3. MANHOLE RING AND LID SHALL BE DESIGNED FOR H-20 WHEEL LOADING.
4. MINIMUM TOTAL WEIGHT (RING AND LID) SHALL BE 300 LBS.
5. TOP OF LID MAY VARY FROM DETAIL SHOWN. LID SHALL BE MARKED FOR APPROPRIATE UTILITY.

MANHOLE RING DETAIL

NOT TO SCALE

MANHOLE RING	48" MANHOLE	72" MANHOLE
WEIGHT	175 LBS.	310 LBS.
E	23 3/4"	31 1/4"
F	20 5/8"	28 1/8"
G	16 7/8"	24 3/8"
H	14 3/8"	21 7/8"
J	11 7/8"	15 5/8"



NOTE:

1. MATCHING SURFACES MARKED "MF" TO BE MACHINE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH AND FREE OF AIR VOIDS.

GENERAL NOTES:

1. MATCHING SURFACES MARKED "MF" TO BE MACHINE FINISHED AND BE FREE OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH AND FREE OF AIR VOIDS.
3. MANHOLE RING AND LID SHALL BE DESIGNED FOR H-20 WHEEL LOADING.
4. MINIMUM TOTAL WEIGHT (RING AND LID) SHALL BE 300 LBS.
5. TOP OF LID MAY VARY FROM DETAIL SHOWN. LID SHALL BE MARKED FOR APPROPRIATE UTILITY.

MANHOLE COVER DETAIL

NOT TO SCALE

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

NO	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
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CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

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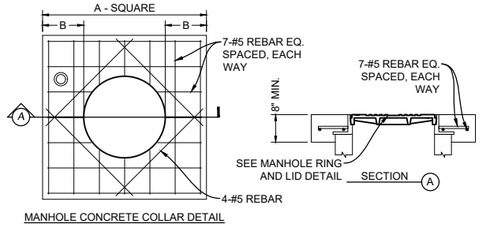
SMITH ENGINEERING

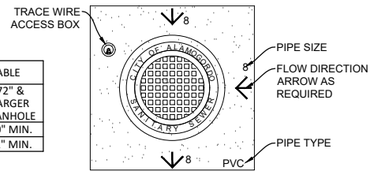
JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-5

L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\04 CITY OF ALAMOGORDO STANDARD DETAILS.dwg, Apr 27, 2021 - 9:34am Saved By: rustyp



MANHOLE CONCRETE COLLAR DETAIL

CONCRETE COLLAR TABLE		
TYPE	48" / 60" MANHOLE	72" & LARGER MANHOLE
A	48" MIN.	60" MIN.
B	12" MIN.	12" MIN.



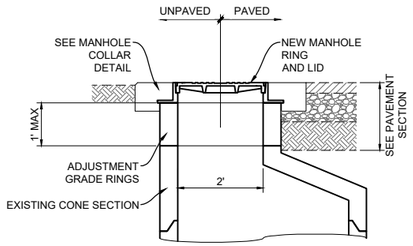
MANHOLE COLLAR MARKING DETAIL

GENERAL NOTES:

1. SIDES OF CONCRETE COLLAR TOP SHALL BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.
2. USE 3,000 P.S.I. CONCRETE FOR CONCRETE COLLAR.
3. SCRIBE CONCRETE WITH LINE DIRECTIONAL ARROWS, PIPE SIZE AND PIPE TYPE.
4. TEXT SIZE SHALL BE 4-INCHES TALL AND SCORED 3/8" DEEP IN A NEAT AND CONSISTENT MANNER, TYPICAL.

MANHOLE CONCRETE COLLAR DETAIL

NOT TO SCALE

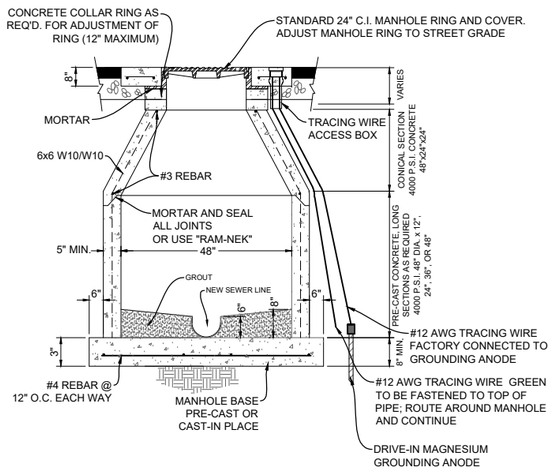


GENERAL NOTES:

1. SIDES OF CONCRETE COLLAR TOP SHALL BE PARALLEL AND PERPENDICULAR TO THE NORMAL STREET TRAFFIC FLOW.
2. USE 3,000 P.S.I. CONCRETE FOR CONCRETE COLLARS.
3. SCRIBE CONCRETE WITH LINE DIRECTIONAL ARROWS, PIPE SIZE AND PIPE TYPE.
4. TEXT SIZE SHALL BE 4-INCHES TALL AND SCORED 3/8" DEEP IN A NEAT AND CONSISTENT MANNER, TYPICAL.

MANHOLE RING AND LID ADJUSTMENT DETAIL

NOT TO SCALE

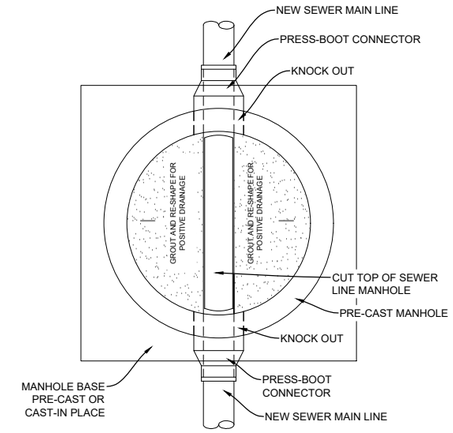


GENERAL NOTES:

1. KNOCK OUT AND PRESS-BOOT CONNECTOR AS REQUIRED. PRECAST AS PART OF MANHOLE SECTION.
2. SEE PLAN AND PROFILE FOR INVERT ELEVATIONS.
3. THE ENTIRETY OF MANHOLES EXPOSED SURFACE SHALL BE COATED, PRIOR TO PLACEMENT INTO SERVICE, TO AIDE IN CORROSION AND IMPACT RESISTANCE. MANHOLE SHALL BE COATED WITH RAVEN 175 (PRIME COAT) AND RAVEN 405 (2ND COAT) TO 100 MIL TOTAL DRY THICKNESS; ALTERNATE COATING SYSTEMS SHALL BE PRE-APPROVED BY THE CITY.

MANHOLE DETAIL

NOT TO SCALE

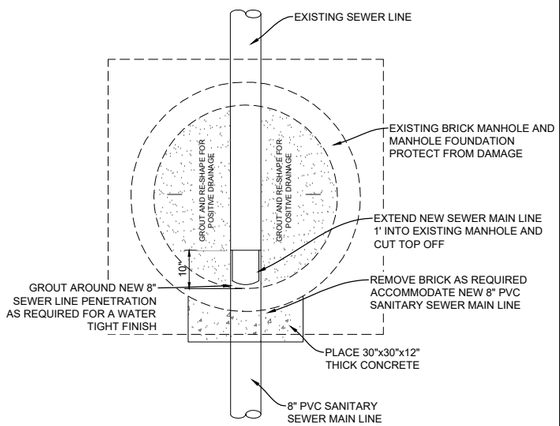


GENERAL NOTES:

1. AFTER MANHOLE HAS BEEN SET AND THE CONNECTIONS MADE CONTRACTOR SHALL CUT TOP OF SEWER LINE IN MANHOLE.

NEW MANHOLE SEWER CONNECTION DETAIL

NOT TO SCALE

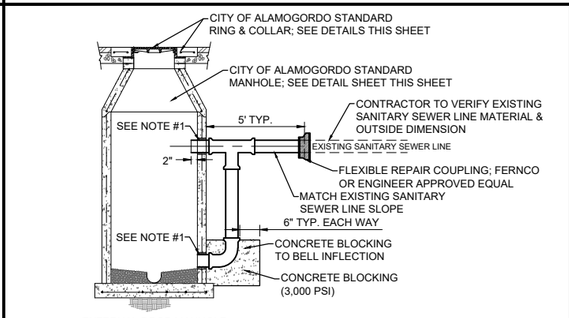


GENERAL NOTES:

1. AFTER MANHOLE HAS BEEN SET AND THE CONNECTIONS MADE CONTRACTOR SHALL CUT TOP OF SEWER LINE IN MANHOLE.
2. PER CITY ORDINANCE 28-02-080.(a) PUBLIC BUILDINGS-CONNECTIONS: NO PUBLIC SERVICE BUILDING, HOTEL, SCHOOL, PUBLIC SCHOOL, LAUNDRY OR OTHER KIND OF PUBLIC SERVICE ESTABLISHMENT SHALL BE PERMITTED TO CONNECT WITH THE PUBLIC SEWERS EXCEPT AT A MANHOLE.

EXISTING MANHOLE SEWER CONNECTION DETAIL

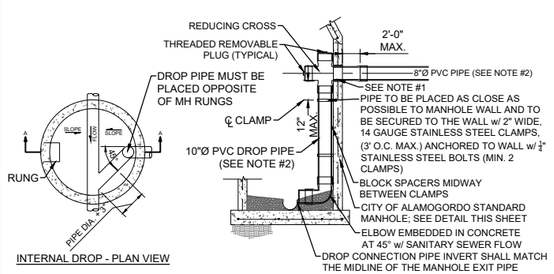
NOT TO SCALE



EXTERNAL DROP MANHOLE

NOTES:

1. MANHOLE STOP RING GASKETED AROUND NEW SEWER LINE AND SEAL COMPLETELY w/ NON-SHRINK GROUT.



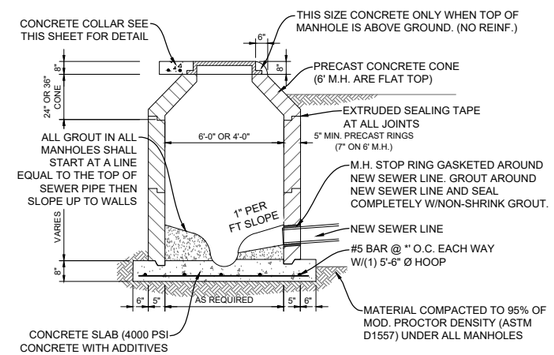
INTERNAL DROP MANHOLE

NOTES:

1. MANHOLE STOP RING GASKETED AROUND NEW SEWER LINE AND SEAL COMPLETELY w/ NON-SHRINK GROUT.
2. FOR 8"Ø PVC PIPE PROVIDE 10"Ø PVC INTERNAL DROP PIPING. FOR 10"Ø PVC PIPE PROVIDE 12"Ø PVC INTERNAL DROP PIPING.

DROP MANHOLE DETAILS

NOT TO SCALE

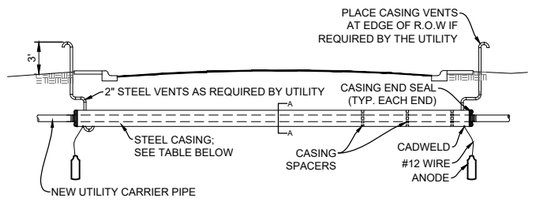


CONTRACTOR NOTES:

1. IF NEW PIPE INVERT IS BELOW EXISTING GROUTED SHELF, SHELF IS TO BE CUT OUT AS NEEDED AND RE-GROUTED.
2. PRECAST PORTION OF MANHOLES, EXCLUDING CAST IN PLACE BOTTOM, SHALL CONFORM TO ASTM C478 LATEST REVISIONS.

TAPPING INTO EXISTING MANHOLE DETAIL

NOT TO SCALE



GENERAL NOTES:

1. CASING END SEALS SHALL BE T.D. WILLIAMSON, INC Z-SEALS OR ENGINEER APPROVED EQUAL.
2. CASING SPACERS SHALL BE ADVANCE PRODUCTS & SYSTEMS, LLC MODEL SSIM OR ENGINEER APPROVED EQUAL.
3. STEEL CASING PIPE SHALL BE SIZED TO ADEQUATELY ACCOMMODATE CARRIER PIPE AND ADHERE TO THE REQUIREMENTS PROVIDED IN THE TABLE BELOW.
4. PIPE JOINT(S) INSIDE CASING SHALL BE JOINT RESTRAINED.
5. CASING VENTS TO BE PAINTED WITH AN OIL BASE ALKYD PRIMER AND AN OIL BASE ALKYD ENAMEL TOP COAT. COLOR SHALL BE PER APWA UNIFORM COLOR CODE FOR RESPECTIVE UTILITY.

STEEL CASING MINIMUM WALL THICKNESS		
NOMINAL DIAMETER (INCHES)	MIN. WALL THICKNESS FOR COATED (INCHES)	MIN. WALL THICKNESS NON-COATED (INCHES)
14 AND UNDER	0.1880	0.1880
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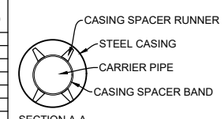
18	0.2500	0.3120
20 AND 22	0.2810	0.3440
24	0.3120	0.3750
26	0.3440	0.4060
28	0.3750	0.4380
30	0.4060	0.4690
32	0.4380	0.5000
34 AND 36	0.4690	0.5310
42	0.5000	0.5630
48	0.5630	0.6250

1. WALL THICKNESS DESIGNATIONS FOR STEEL CASING PIPE FOR E-80.
2. STEEL PIPE SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI.
3. CORROSION CONTROL MEASURES MUST INCLUDE CATHODIC PROTECTION.



SECTION A-A

SEWER LINE BORE & CASE DETAIL

NOT TO SCALE

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	DATE	REVISION DESCRIPTION	BY
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

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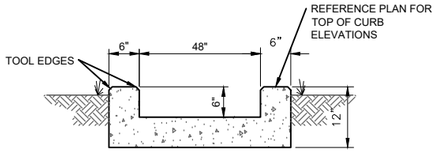
JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-6

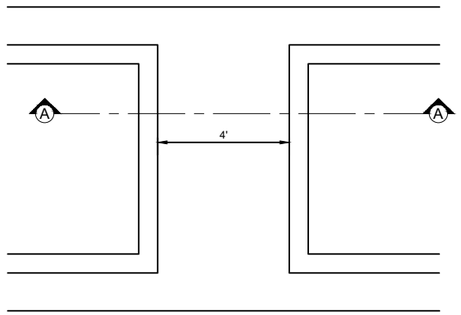
L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\PLANSET\04 CITY OF ALAMOGORDO STANDARD WATER DET AILS.dwg, Apr 27, 2021 - 9:48am Saved By: rustyp



SECTION-A

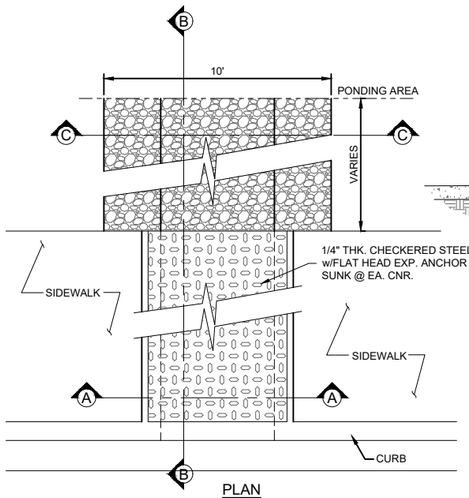
MEDIAN OPENING

NOT TO SCALE

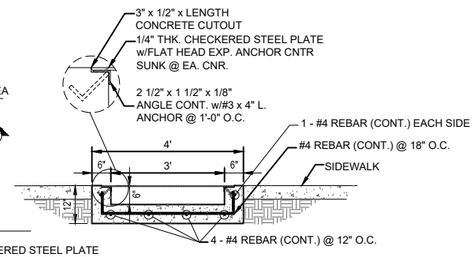


MEDIAN OPENING PLAN VIEW

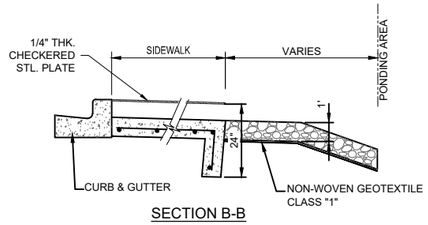
NOT TO SCALE



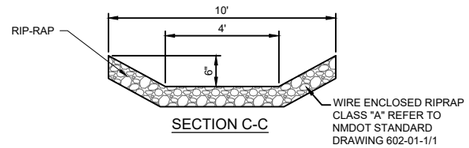
PLAN



SECTION A-A



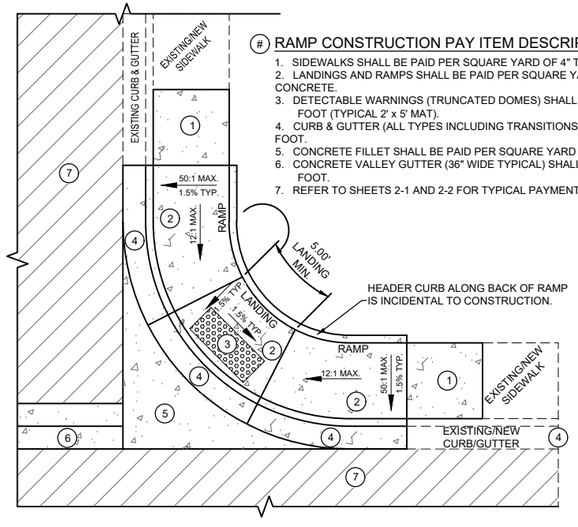
SECTION B-B



SECTION C-C

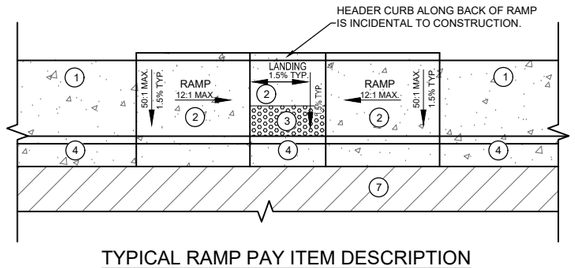
SIDEWALK TRENCH INLET

NOT TO SCALE



RAMP CONSTRUCTION PAY ITEM DESCRIPTION:

1. SIDEWALKS SHALL BE PAID PER SQUARE YARD OF 4" THICK CONCRETE.
2. LANDINGS AND RAMPS SHALL BE PAID PER SQUARE YARD OF 6" THICK CONCRETE.
3. DETECTABLE WARNINGS (TRUNCATED DOMES) SHALL BE PAID PER SQUARE FOOT (TYPICAL 2' x 5' MAT).
4. CURB & GUTTER (ALL TYPES INCLUDING TRANSITIONS) TO BE PAID PER LINEAL FOOT.
5. CONCRETE FILLET SHALL BE PAID PER SQUARE YARD OF 8" THICK CONCRETE.
6. CONCRETE VALLEY GUTTER (36" WIDE TYPICAL) SHALL BE PAID PER LINEAL FOOT.
7. REFER TO SHEETS 2-1 AND 2-2 FOR TYPICAL PAYMENT SECTIONS.



TYPICAL RAMP PAY ITEM DESCRIPTION

SCALE: NOT TO SCALE

RUSTY W. PAYNE
NEW MEXICO
23586
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO.	DESCRIPTION	DATE	BY
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2			
1			

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SHEET NO: 2-7

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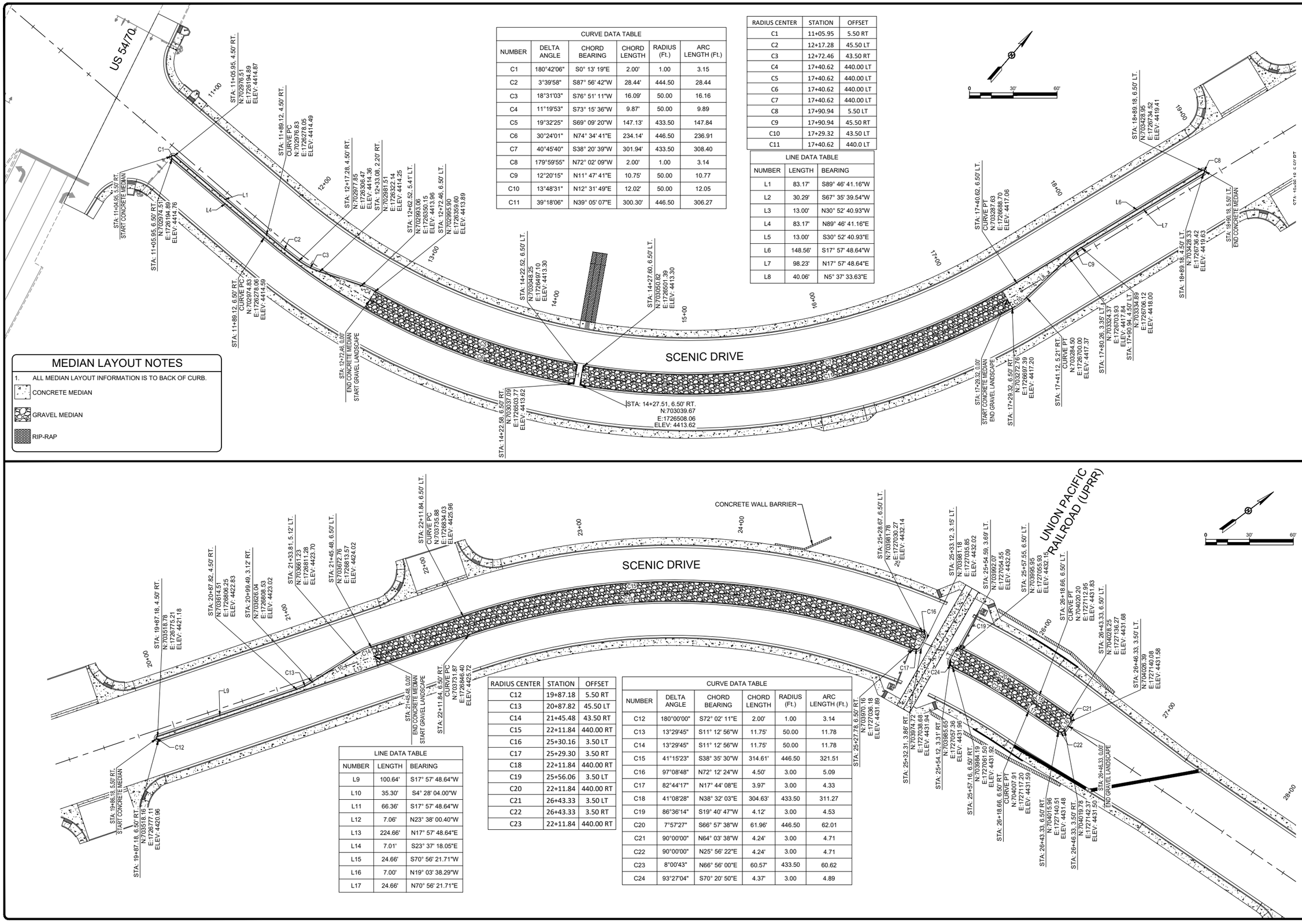

MEDIAN LAYOUT NOTES

1. ALL MEDIAN LAYOUT INFORMATION IS TO BACK OF CURB.

CONCRETE MEDIAN

GRAVEL MEDIAN

RIP-RAP

CURVE DATA TABLE					
NUMBER	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	RADIUS (Ft.)	ARC LENGTH (Ft.)
C1	180°42'06"	S0° 13' 19"E	2.00'	1.00	3.15
C2	3°39'58"	S87° 56' 42"W	28.44'	444.50	28.44
C3	18°31'03"	S76° 51' 11"W	16.09'	50.00	16.16
C4	11°19'53"	S73° 15' 36"W	9.87'	50.00	9.89
C5	19°32'25"	S69° 09' 20"W	147.13'	433.50	147.84
C6	30°24'01"	N74° 34' 41"E	234.14'	446.50	236.91
C7	40°45'40"	S38° 20' 39"W	301.94'	433.50	308.40
C8	179°59'55"	N72° 02' 09"W	2.00'	1.00	3.14
C9	12°20'15"	N11° 47' 41"E	10.75'	50.00	10.77
C10	13°48'31"	N12° 31' 49"E	12.02'	50.00	12.05
C11	39°18'06"	N39° 05' 07"E	300.30'	446.50	306.27

RADIUS CENTER	STATION	OFFSET
C1	11+05.95	5.50 RT
C2	12+17.28	45.50 LT
C3	12+72.46	43.50 RT
C4	17+40.62	440.00 LT
C5	17+40.62	440.00 LT
C6	17+40.62	440.00 LT
C7	17+40.62	440.00 LT
C8	17+90.94	5.50 LT
C9	17+90.94	45.50 RT
C10	17+29.32	43.50 LT
C11	17+40.62	440.0 LT

LINE DATA TABLE		
NUMBER	LENGTH	BEARING
L1	83.17'	S89° 46' 41.16"W
L2	30.29'	S67° 35' 39.54"W
L3	13.00'	N30° 52' 40.93"W
L4	83.17'	N89° 46' 41.16"E
L5	13.00'	S30° 52' 40.93"E
L6	148.56'	S17° 57' 48.64"W
L7	98.23'	N17° 57' 48.64"E
L8	40.06'	N5° 37' 33.63"E

RADIUS CENTER	STATION	OFFSET
C12	19+87.18	5.50 RT
C13	20+87.82	45.50 LT
C14	21+45.48	43.50 RT
C15	22+11.84	440.00 RT
C16	25+30.16	3.50 LT
C17	25+29.30	3.50 RT
C18	22+11.84	440.00 RT
C19	25+56.06	3.50 LT
C20	22+11.84	440.00 RT
C21	26+43.33	3.50 LT
C22	26+43.33	3.50 RT
C23	22+11.84	440.00 RT

LINE DATA TABLE		
NUMBER	LENGTH	BEARING
L9	100.64'	S17° 57' 48.64"W
L10	35.30'	S4° 28' 04.00"W
L11	66.36'	S17° 57' 48.64"W
L12	7.06'	N23° 38' 00.40"W
L13	224.66'	N17° 57' 48.64"E
L14	7.01'	S23° 37' 18.05"E
L15	24.66'	S70° 56' 21.71"W
L16	7.00'	N19° 03' 38.29"W
L17	24.66'	N70° 56' 21.71"E

CURVE DATA TABLE					
NUMBER	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	RADIUS (Ft.)	ARC LENGTH (Ft.)
C12	180°00'00"	S72° 02' 11"E	2.00'	1.00	3.14
C13	13°29'45"	S11° 12' 56"W	11.75'	50.00	11.78
C14	13°29'45"	S11° 12' 56"W	11.75'	50.00	11.78
C15	41°15'23"	S38° 35' 30"W	314.61'	446.50	321.51
C16	97°08'48"	N72° 12' 24"W	4.50'	3.00	5.09
C17	82°44'17"	N17° 44' 08"E	3.97'	3.00	4.33
C18	41°08'28"	N38° 32' 03"E	304.63'	433.50	311.27
C19	86°36'14"	S19° 40' 47"W	4.12'	3.00	4.53
C20	7°57'27"	S66° 57' 38"W	61.96'	446.50	62.01
C21	90°00'00"	N64° 03' 38"W	4.24'	3.00	4.71
C22	90°00'00"	N25° 56' 22"E	4.24'	3.00	4.71
C23	8°00'43"	N66° 56' 00"E	60.57'	433.50	60.62
C24	93°27'04"	S70° 20' 50"E	4.37'	3.00	4.89

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
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Phone: 575-523-2395
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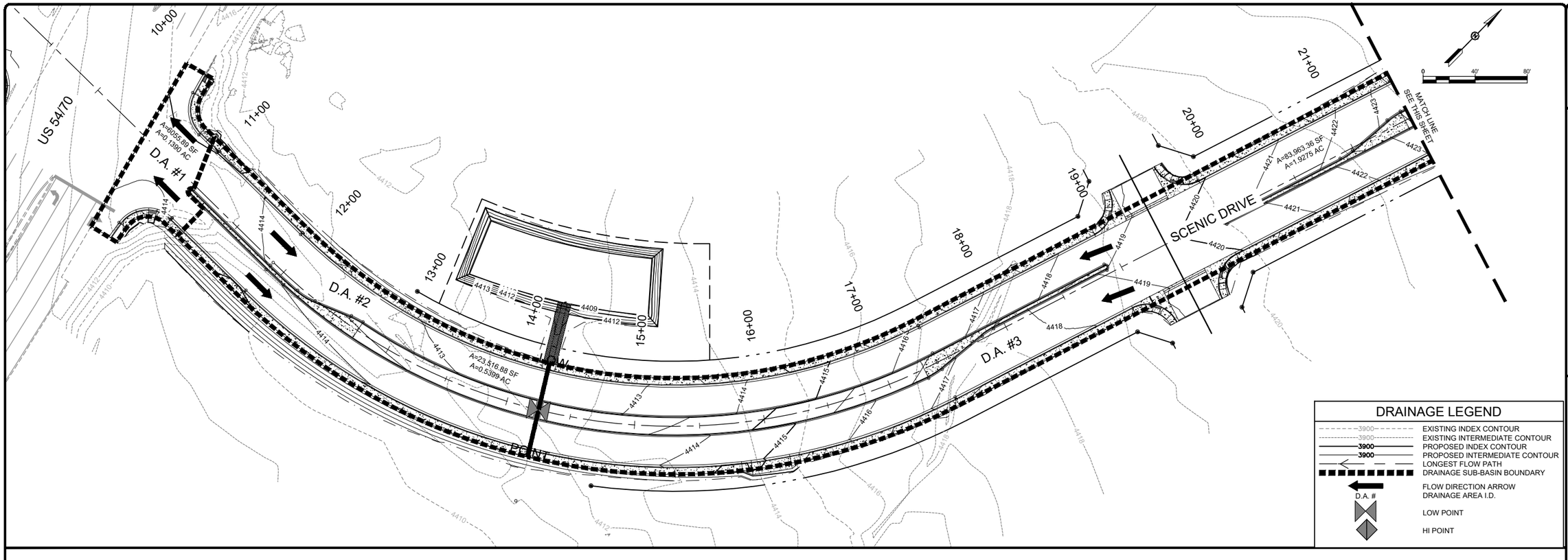
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-8

L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\DPLANSET\04 MEDIAN CURB & GUTTER LAYOUT.dwg, Apr 27, 2021 - 9:51am, Saved By: rustyp



DRAINAGE LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- LONGEST FLOW PATH
- DRAINAGE SUB-BASIN BOUNDARY
- FLOW DIRECTION ARROW
- D.A. # DRAINAGE AREA I.D.
- LOW POINT
- HI POINT

NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES (IN INCHES)									
DURATION	AVERAGE RECURRENCE INTERVAL (YEARS)								
	1	2	5	10	25	50	100	200	500
5-MIN	0.213	0.276	0.366	0.439	0.534	0.609	0.690	0.771	0.883
10-MIN	0.325	0.420	0.558	0.668	0.812	0.927	1.05	1.17	1.34
15-MIN	0.403	0.521	0.691	0.828	1.01	1.15	1.30	1.46	1.67
30-MIN	0.543	0.701	0.931	1.11	1.36	1.55	1.75	1.96	2.24
1-HR	0.671	0.868	1.15	1.38	1.68	1.92	2.17	2.42	2.78
2-HR	0.767	0.985	1.30	1.55	1.89	2.16	2.45	2.75	3.16
3-HR	0.818	1.04	1.36	1.61	1.96	2.23	2.53	2.83	3.25
6-HR	0.936	1.18	1.51	1.77	2.13	2.41	2.70	3.00	3.41
12-HR	1.07	1.35	1.71	1.99	2.36	2.65	2.94	3.24	3.64
24-HR	1.25	1.56	1.95	2.25	2.65	2.97	3.29	3.61	4.04

NOTE:
POINT PRECIPITATION ESTIMATES WERE OBTAINED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC (NOAA) WEBSITE ON JANUARY 23, 2017.
www.nws.noaa.gov

AREA SUMMARY			
DRAINAGE AREA ID	AREA (SF)	AREA (ACRES)	AREA (SQ. MI.)
D.A. #1	6,056	0.14	0.0002
D.A. #2	23,517	0.54	0.0008
D.A. #3	83,963	1.93	0.0030
D.A. #4	5,270	0.12	0.0002
D.A. #5	5,046	0.12	0.0002
D.A. #6	5,521	0.13	0.0002
D.A. #7	5,516	0.13	0.0002

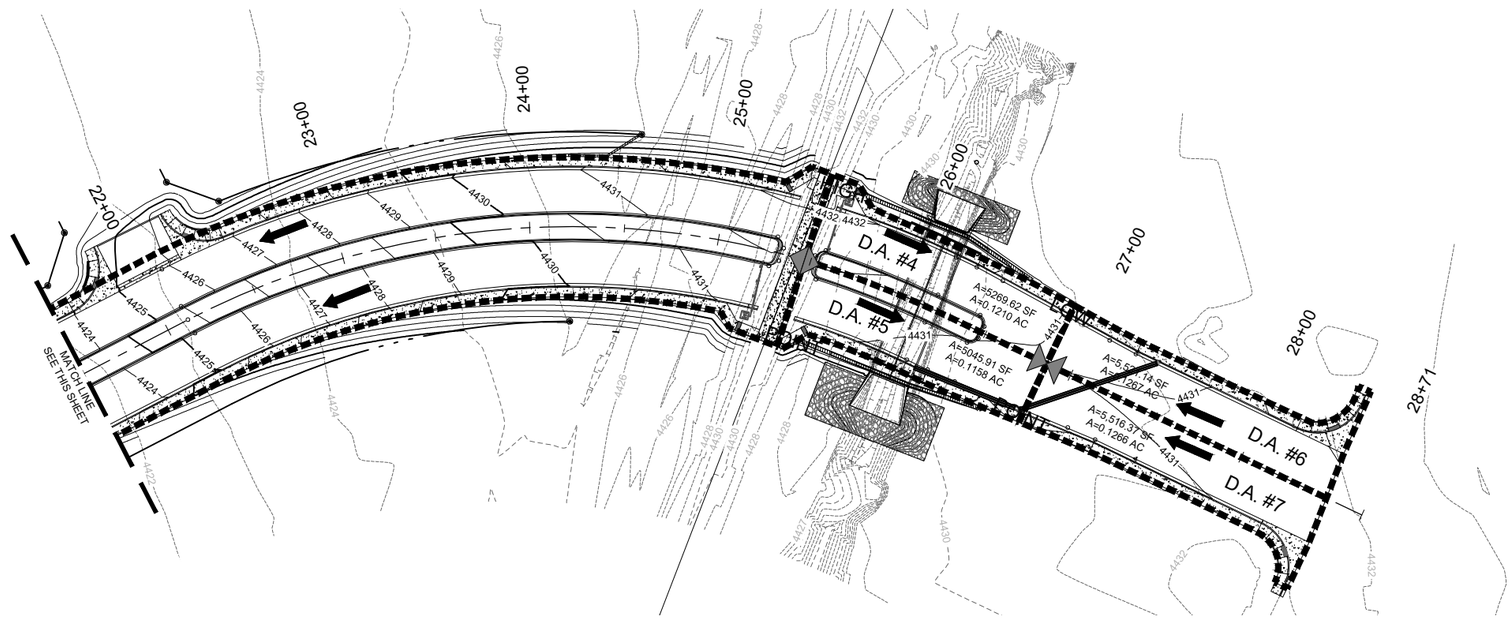
NOTE:
ROW TO ROW AREA 205,424.92 SQ. FT

GEOTECHNICAL NOTE:
GROUNDWATER WAS NOT OBSERVED IN THE TEST BORINGS AT THE TIME OF FIELD EXPLORATION. FURTHER EVALUATIONS CAN BE FOUND IN THE GEOTECHNICAL REPORT COMPLETED BY TERRACON CONSULTANTS, INC DATED JUNE 1, 2016.

NOTE:
SUBJECT ROADWAY IS PARTIALLY LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (ZONE AH) INUNDATED BY THE 100-YEAR FLOOD AS WELL AS OTHER FLOOD AREAS (ZONE X). REFERENCE FEMA FLOOD INSURANCE RATE MAPS (FIRM) 35035C0937D AND 35035C0940D WITH EFFECTIVE DATE DECEMBER 17, 2010. REFERENCE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ZONE AH - FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY AREAS OF PONDING); BASE FLOOD ELEVATIONS DETERMINED.



RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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CITY OF ALAMOGORDO
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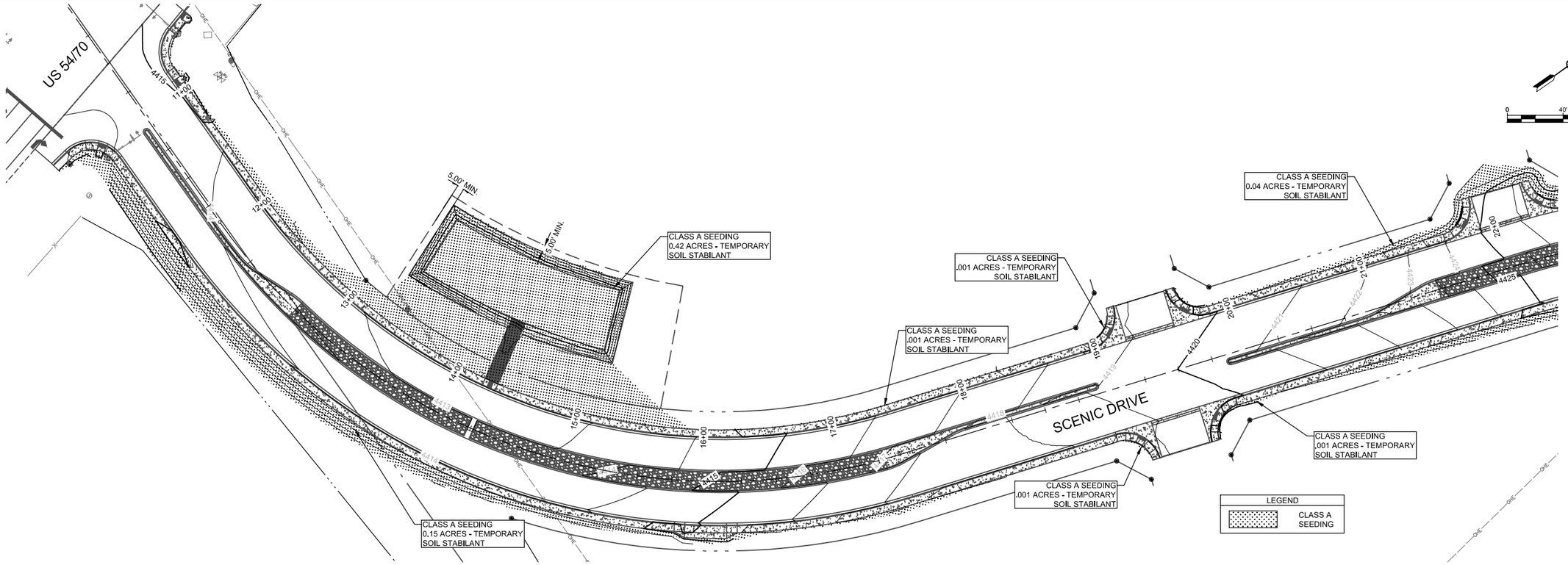
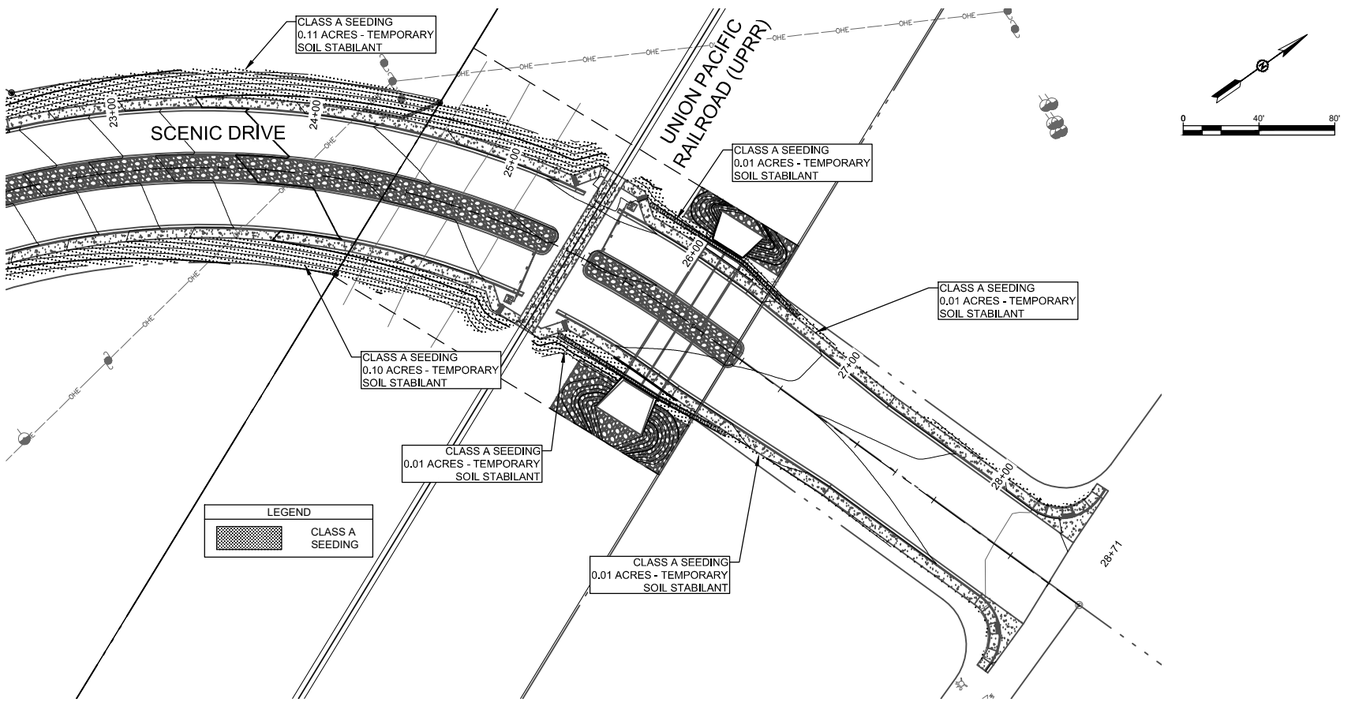
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-9

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-9 SCENIC DRIVE DRAINAGE PLAN.dwg, Apr 27, 2021 - 12:15pm Saved By: rustyp





FINAL STABILIZATION TESCP QUANTITIES

STATION	STATION	LOCATION	DESCRIPTION	603100 TEMPORARY SOIL STABILANT	632000 CLASS A SEEDING
				ACRE	ACRE
10+55.87	15+86.16	LT	FINAL STABILIZATION	0.42	0.42
10+91.93	18+34.96	RT	FINAL STABILIZATION	0.15	0.15
16+06.83	18+65.57	LT	FINAL STABILIZATION	0.001	0.001
18+99.24	19+11.45	LT	FINAL STABILIZATION	0.001	0.001
18+92.38	19+13.07	RT	FINAL STABILIZATION	0.001	0.001
19+63.01	20+20.28	RT	FINAL STABILIZATION	0.001	0.001
19+62.96	22+28.27	LT	FINAL STABILIZATION	0.04	0.04
22+28.27	25+41.99	LT	FINAL STABILIZATION	0.11	0.11
25+51.94	25+99.93	LT	FINAL STABILIZATION	0.01	0.01
20+20.28	25+31.79	RT	FINAL STABILIZATION	0.1	0.1
25+43.85	26+01.95	RT	FINAL STABILIZATION	0.01	0.01
26+25.57	28+44.67	RT	FINAL STABILIZATION	0.01	0.01
26+20.05	28+38.45	LT	FINAL STABILIZATION	0.01	0.01
			TOTAL	0.86	0.86
			PROJECT USE	**1.00**	**1.00**

RUSTY W. PAYNE
NEW MEXICO
23586
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04/27/2021

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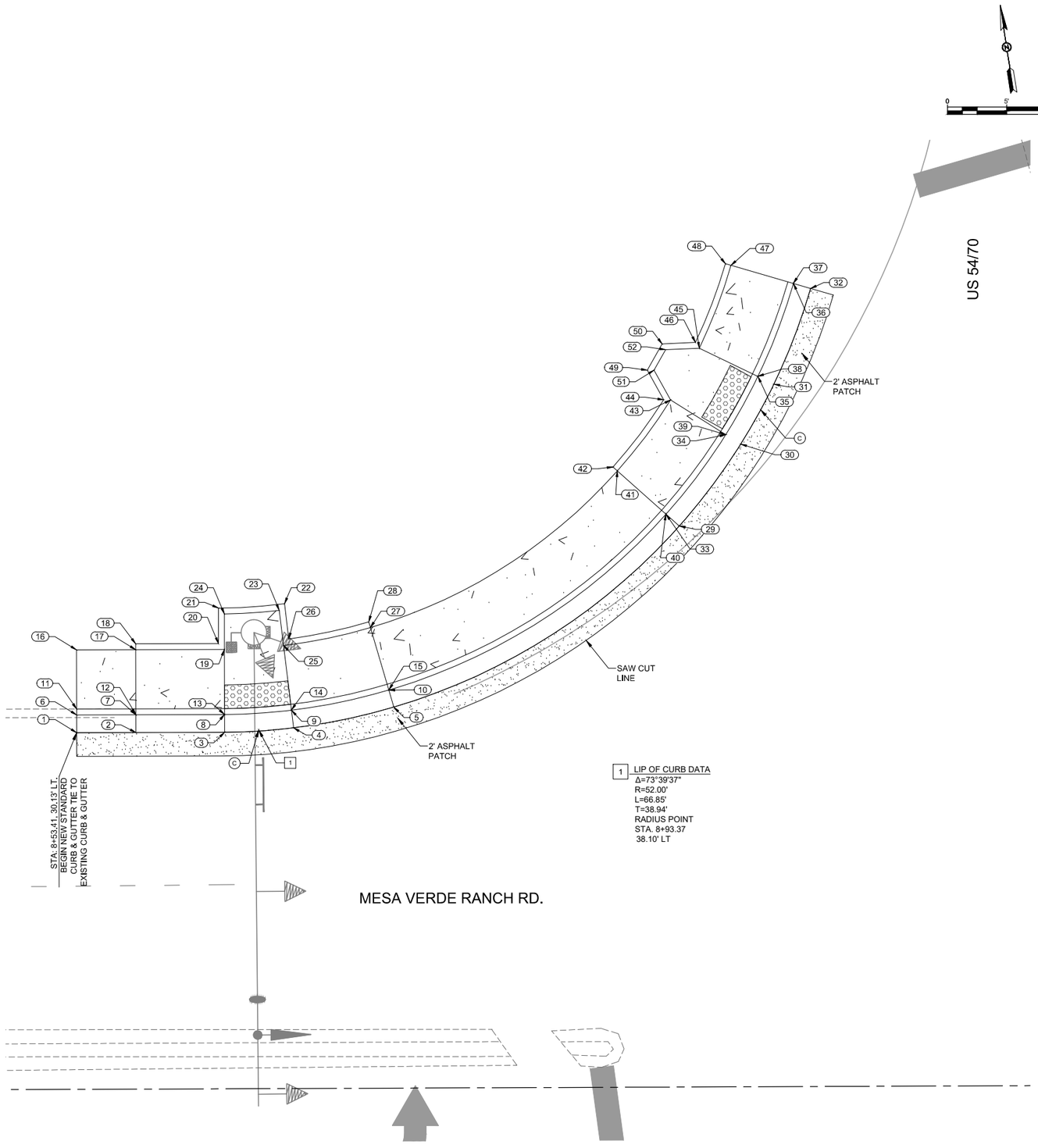
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-10

L:\ESC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\DPLANSET\2-10 SCENIC DRIVE TESCM BOP TO EOP.dwg, Apr 27, 2021 - 10:23am Saved By: rustyp

ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	8+53.41	30.13 LT	4,410.10	X-LCG
2	8+58.41	30.12 LT	4,410.26	LCG
3	8+65.91	30.11 LT	4,410.49	LCG
4	8+71.74	30.46 LT	4,410.58	LCG
5	8+80.22	32.18 LT	4,410.76	LCG
6	8+53.42	31.63 LT	4,410.10	X-FL
7	8+58.42	31.62 LT	4,410.23	FL
8	8+65.91	31.61 LT	4,410.47	FL
9	8+71.56	31.96 LT	4,410.56	FL
10	8+79.80	33.629	4,410.74	FL
11	8+53.42	32.13 LT	4,410.56	XTC
12	8+58.42	31.64 LT	4,410.73	TC
13	8+65.91	31.63 LT	4,410.47	TC
14	8+71.56	31.97 LT	4,410.56	TC
15	8+79.80	33.64 LT	4,411.24	TC
16	8+53.42	37.13 LT	4,410.64	BS
17	8+58.42	37.12 LT	4,410.81	BS
18	8+58.42	37.62 LT	4,410.81	THC
19	8+65.92	37.11 LT	4,410.55	BS
20	8+65.42	37.61 LT	4,411.04	THC
21	8+65.44	40.61 LT	4,411.06	THC
22	8+71.01	40.96 LT	4,411.11	THC
23	8+70.57	40.40 LT	4,410.61	BS
24	8+65.93	40.11 LT	4,410.57	BS
25	8+70.92	37.42 LT	4,410.63	BS
26	8+71.36	37.98 LT	4,411.13	THC
27	8+78.27	38.91 LT	4,411.24	BS
28	8+78.13	39.39 LT	4,411.24	THC
29	9+04.39	47.39 LT	4,411.67	LCG
30	9+09.62	54.30 LT	4,412.01	LCG
31	9+12.43	59.34 LT	4,412.10	LCG
32	9+15.56	67.41 LT	4,412.29	LCG
33	9+03.28	48.39 LT	4,411.65	FL
34	9+08.35	55.09 LT	4,411.99	FL
35	9+11.08	59.99 LT	4,412.08	FL
36	9+14.12	67.84 LT	4,412.27	FL
37	9+14.10	67.84 LT	4,412.77	TC
38	9+11.06	60.01 LT	4,412.08	TC
39	9+08.33	55.11 LT	4,411.99	TC
40	9+03.26	48.41 LT	4,412.15	TC
41	8+99.18	52.07 LT	4,412.22	BS
42	8+98.81	52.40 LT	4,412.22	THC
43	9+03.70	58.04 LT	4,412.07	BS
44	9+03.12	58.06 LT	4,412.52	THC
45	9+06.14	62.41 LT	4,412.15	BS
46	9+05.82	62.89 LT	4,412.61	THC
47	9+08.85	69.39 LT	4,412.77	BS
48	9+08.37	69.53 LT	4,412.77	THC
49	9+01.74	60.56 LT	4,412.55	THC
50	9+03.00	62.78 LT	4,412.58	THC
51	9+02.31	60.56 LT	4,412.06	BS
52	9+03.30	62.30 LT	4,412.08	BS



ADA RAMP NOTES:

1. ALL CURB RAMPS SHALL COMPLY w/NMDOT STD DWGS 608-001-1 THRU 608-001-8
2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED ON ALL ADA RAMPS (NOT INCLUDING DRIVEWAYS)
3. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION AND RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS.
4. SIDEWALKS AND ADA RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR A DIRECTED BY THE ENGINEER.
5. THE TOP OF THE JOINT FILLER FOR ALL ADA RAMPS TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.
6. ALL DETECTABLE WARNING SURFACE SHALL COMPLY WITH PROWAG SECTION R305
7. WET SET DOMES SHALL BE INCIDENTAL TO BID ITEM 608004-CONCRETE SIDEWALK 4"
8. FIELD CONDITIONS MAY REQUIRED CHANGES TO MEET PROWAG REQUIREMENTS. FIELD ADJUSTMENTS MAY BE NECESSARY AS APPROVED BY THE PM.

LEGEND

CR	CURB RAMP
LCG	LIP OF CURB & GUTTER
X-LCG	EXISTING LIP OF CURB & GUTTER
X-FL	EXISTING FLOW LINE
FL	FLOW LINE
TC	TOP OF CURB & GUTTER
X-TC	EXISTING TOP OF CURB & GUTTER
BS	BACK OF SIDEWALK
THC	TOP OF HEADER CURB (BACK)
TS	TOP OF SIDEWALK
EOP	EDGE OF PAVEMENT
	FLOW/SLOPE

GENERAL NOTES

1. ALL STATIONS ARE TAKEN ALONG THE BACK OF CURB AND GUTTER UNLESS OTHERWISE NOTED.
2. ALL TC ELEVATION STATIONS ARE TAKEN AT THE BACK OF CURB.
3. DIMENSIONS ARE POINT TO POINT.
4. THE SLOPES SHOWN ON CURB RAMP PLANS ARE MAXIMUM SLOPES ALLOWED. ANY DEVIATIONS TO THESE SLOPES SHALL BE APPROVED BY THE PROJECT MANAGER.

ADA RAMP NOTES

1. ALL CURB RAMPS SHALL COMPLY W/NMDOT STD DWGS 608-001-1 THRU 608-001-8
2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED ON ALL ADA RAMPS (NOT INCLUDING DRIVEWAYS)
3. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION AND RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS.
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7. FIELD CONDITIONS MAY REQUIRE CHANGES TO MEET PROWAG REQUIREMENTS. FIELD ADJUSTMENTS MAY BE NECESSARY AS APPROVED BY THE PM.

(A) KEYED NOTES

A. SAWCUT LINE

B. PARALLEL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-3 FOR ADA DETAILS

C. SINGLE DIAGONAL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-4 FOR ADA DETAILS

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
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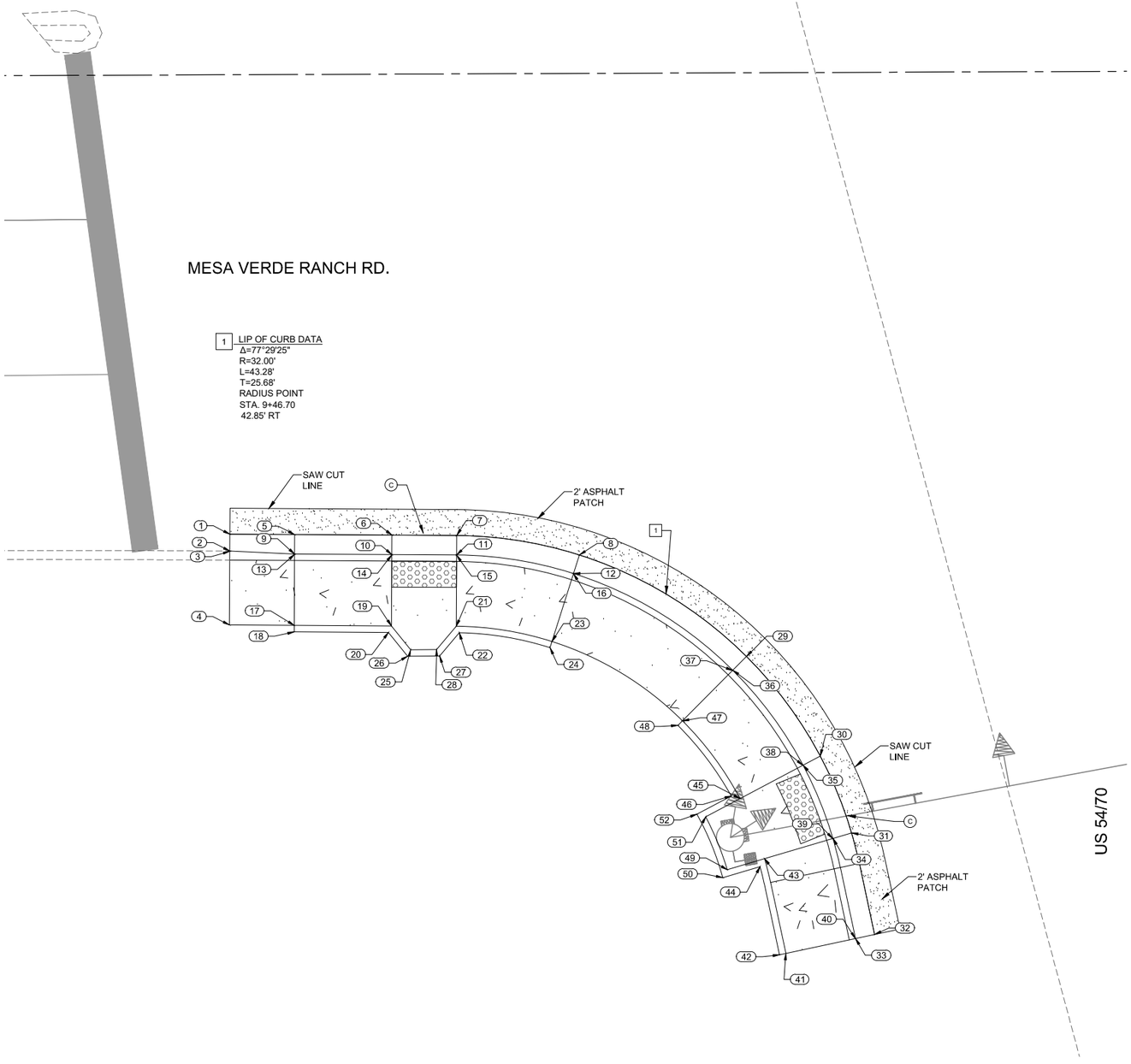
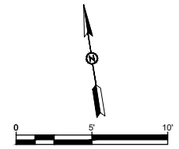
ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	9+09.27	35.44	4,411.03	X-LCG
2	9+09.26	36.735	4,411.03	X-FL
3	9+09.26	36.755	4,411.50	X-TC
4	9+09.21	42.44	4,411.58	BS
5	9+14.27	35.48 ER	4,411.00	LCG
6	9+21.77	35.55 RT	4,410.96	LCG
7	9+26.77	35.60 RT	4,410.94	LCG
8	9+36.23	37.14 RT	4,410.89	LCG
9	9+14.26	36.98 RT	4,410.99	FL
10	9+21.76	37.05 RT	4,410.94	FL
11	9+26.76	37.10 RT	4,410.92	FL
12	9+35.77	38.57 RT	4,410.87	FL
13	9+14.26	37.00 RT	4,411.48	TC
14	9+21.76	37.07 RT	4,410.94	TC
15	9+26.76	37.12 RT	4,410.92	TC
16	9+35.76	38.59 RT	4,411.37	TC
17	9+14.21	42.48 RT	4,411.48	BS
18	9+14.20	42.98 RT	4,411.48	THC
19	9+21.71	42.55 RT	4,411.02	BS
20	9+21.47	43.05 RT	4,411.51	THC
21	9+26.71	42.60 RT	4,410.99	BS
22	9+26.94	43.10 RT	4,411.48	THC
23	9+34.08	43.80 RT	4,411.44	BS
24	9+33.93	44.28 RT	4,411.44	THC
25	9+23.19	44.40 RT	4,411.01	BS
26	9+22.95	44.90 RT	4,411.50	THC
27	9+25.42	44.89 RT	4,411.49	THC
28	9+25.19	44.39 RT	4,411.00	BS
29	9+49.08	45.01 RT	4,410.81	LCG
30	9+54.75	52.72 RT	4,410.76	LCG
31	9+57.14	58.66 RT	4,410.72	LCG
32	9+58.88	66.50 RT	4,410.68	LCG
33	9+57.41	66.80 RT	4,410.66	FL
34	9+55.70	59.08 RT	4,410.70	FL
35	9+53.42	53.42 RT	4,410.73	FL
36	9+48.02	46.07 RT	4,410.78	FL
37	9+48.01	46.09 RT	4,411.28	TC
38	9+53.40	53.43 RT	4,410.73	TC
39	9+55.68	59.08 RT	4,410.70	TC
40	9+57.39	66.81 RT	4,411.16	TC
41	9+52.03	67.94 RT	4,411.23	BS
42	9+51.54	68.04 RT	4,411.23	THC
43	9+50.42	60.61 RT	4,410.78	BS
44	9+50.07	61.23 RT	4,411.27	THC
45	9+48.55	55.9 RT	4,410.81	BS
46	9+47.87	55.77 RT	4,411.30	THC
47	9+44.12	49.95 RT	4,411.36	BS
48	9+43.77	50.31 RT	4,411.36	THC
49	9+47.54	61.45 RT	4,410.79	BS
50	9+47.19	62.07 RT	4,411.28	THC
51	9+45.89	57.37 RT	4,410.80	BS
52	9+45.21	57.16 RT	4,411.29	THC

ADA RAMP NOTES:

1. ALL CURB RAMPS SHALL COMPLY w/NMDOT STD DWGS 608-001-1 THRU 608-001-8
2. DETECTABLE WARNING SURFACE SHALL BE INSTALLED ON ALL ADA RAMPS (NOT INCLUDING DRIVEWAYS)
3. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION AND RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS.
4. SIDEWALKS AND ADA RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR A DIRECTED BY THE ENGINEER.
5. THE TOP OF THE JOINT FILLER FOR ALL ADA RAMPS TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.
6. ALL DETECTABLE WARNING SURFACE SHALL COMPLY WITH PROWAG SECTION R305
7. WET SET DOMES SHALL BE INCIDENTAL TO BID ITEM 608004-CONCRETE SIDEWALK 4"
8. FIELD CONDITIONS MAY REQUIRED CHANGES TO MEET PROWAG REQUIREMENTS. FIELD ADJUSTMENTS MAY BE NECESSARY AS APPROVED BY THE PM.





LEGEND

CR	CURB RAMP
LCG	LIP OF CURB & GUTTER
X-LCG	EXISTING LIP OF CURB & GUTTER
X-FL	EXISTING FLOW LINE
FL	FLOW LINE
TC	TOP OF CURB & GUTTER
X-TC	EXISTING TOP OF CURB & GUTTER
BS	BACK OF SIDEWALK
THC	TOP OF HEADER CURB (BACK)
TS	TOP OF SIDEWALK
EOP	EDGE OF PAVEMENT
	FLOW/SLOPE

GENERAL NOTES

1. ALL STATIONS ARE TAKEN ALONG THE BACK OF CURB AND GUTTER UNLESS OTHERWISE NOTED.
2. ALL TC ELEVATION STATIONS ARE TAKEN AT THE BACK OF CURB.
3. DIMENSIONS ARE POINT TO POINT.
4. THE SLOPES SHOWN ON CURB RAMP PLANS ARE MAXIMUM SLOPES ALLOWED. ANY DEVIATIONS TO THESE SLOPES SHALL BE APPROVED BY THE PROJECT MANAGER.

ADA RAMP NOTES

1. ALL CURB RAMPS SHALL COMPLY W/NMDOT STD DWGS 608-001-1 THRU 608-001-8
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Ⓐ KEYED NOTES

A. SAWCUT LINE

B. PARALLEL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-3 FOR ADA DETAILS

C. SINGLE DIAGONAL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-4 FOR ADA DETAILS

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

NO	REVISION DESCRIPTION	DATE	BY
1			
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3			
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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-12

L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\D-12 RAMP LAYOUT SHEET.dwg Apr 27, 2021 - 10:26am Saved By: rustyp

ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	10+50.53	66.10 LT	4,415.38	FL
2	10+51.86	61.28 LT	4,415.31	FL
3	10+53.86	54.05 LT	4,415.28	FL
4	10+53.90	54.06 LT	4,415.77	TC
5	10+51.90	61.29 LT	4,415.31	TC
6	10+50.57	66.11 LT	4,415.38	TC
7	10+56.20	67.66 LT	4,415.46	BS
8	10+57.20	62.75 LT	4,415.39	BS
9	10+59.20	55.52 LT	4,415.85	BS
10	10+59.68	55.66 LT	4,415.85	THC
11	10+57.76	62.61 LT	4,415.88	THC
12	10+59.21	64.86 LT	4,415.42	BS
13	10+59.77	64.72 LT	4,415.91	THC
14	10+58.68	66.81 LT	4,415.43	BS
15	10+59.09	67.20 LT	4,415.93	THC
16	10+56.22	68.19 LT	4,415.91	THC
17	10+50.42	66.58 LT	4,415.57	THC
18	10+52.45	53.66 LT	4,415.30	LCG
19	10+50.46	60.89 LT	4,415.33	LCG
20	10+48.99	66.19 LT	4,415.36	LCG
21	10+79.56	30.00 LT	4,415.11	LCG
22	10+87.06	30.00 LT	4,415.07	LCG
23	10+92.06	30.00 LT	4,415.05	LCG
24	10+99.56	30.00 LT	4,415.01	LCG
25	10+99.56	31.46 LT	4,415.04	FL
26	10+92.06	31.45 LT	4,415.02	FL
27	10+87.06	31.45 LT	4,415.04	FL
28	10+79.56	31.458	4,415.08	FL
29	10+79.56	31.50 LT	4,415.58	TC
30	10+87.06	31.50 LT	4,415.04	TC
31	10+92.06	31.50 LT	4,415.02	TC
32	10+99.56	31.50 LT	4,415.48	TC
33	10+99.56	37.00 LT	4,415.56	BS
34	10+92.06	37.00 LT	4,415.10	BS
35	10+87.06	37.00 LT	4,415.13	BS
36	10+79.56	37.00 LT	4,415.66	BS
37	10+79.56	37.50 LT	4,415.67	THC
38	10+86.77	37.50 LT	4,415.62	THC
39	10+92.34	37.50 LT	4,415.60	THC
40	10+99.56	37.50 LT	4,415.57	THC
41	10+88.56	39.50 LT	4,415.12	BS
42	10+88.27	40.00 LT	4,415.61	THC
43	10+90.56	39.50 LT	4,415.11	BS
44	10+90.84	40.00 LT	4,415.61	THC
45	10+85.35	45.22 RT	4,413.68	LCG
46	10+91.35	37.14 RT	4,413.82	LCG
47	10+96.85	33.22 RT	4,413.92	LCG
48	11+09.61	30.00 RT	4,414.11	LCG
49	11+09.61	31.46 RT	4,414.08	FL
50	10+97.55	34.52 RT	4,413.90	FL
51	10+92.35	38.23 RT	4,413.80	FL
52	10+86.68	45.86 RT	4,413.66	FL
53	10+86.70	45.87 RT	4,414.16	TC
54	10+92.37	38.24 RT	4,413.80	TC
55	10+97.56	34.54 RT	4,413.90	TC
56	11+09.61	31.50 RT	4,414.58	TC
57	11+09.62	37.00 RT	4,414.66	BS
58	11+00.17	39.38 RT	4,413.97	BS
59	10+96.09	42.29 RT	4,413.88	BS
60	10+91.65	48.27 RT	4,414.23	BS
61	10+92.10	48.49 RT	4,414.23	THC
62	10+96.07	43.00 RT	4,414.37	THC
63	11+00.85	39.59 RT	4,414.47	THC
64	11+09.62	37.50 RT	4,414.66	THC
65	10+98.81	45.23 RT	4,413.91	BS
66	10+98.78	45.94 RT	4,414.40	THC
67	11+02.06	42.91 RT	4,413.94	BS
68	11+02.74	43.12 RT	4,414.44	THC

ADA RAMP NOTES:

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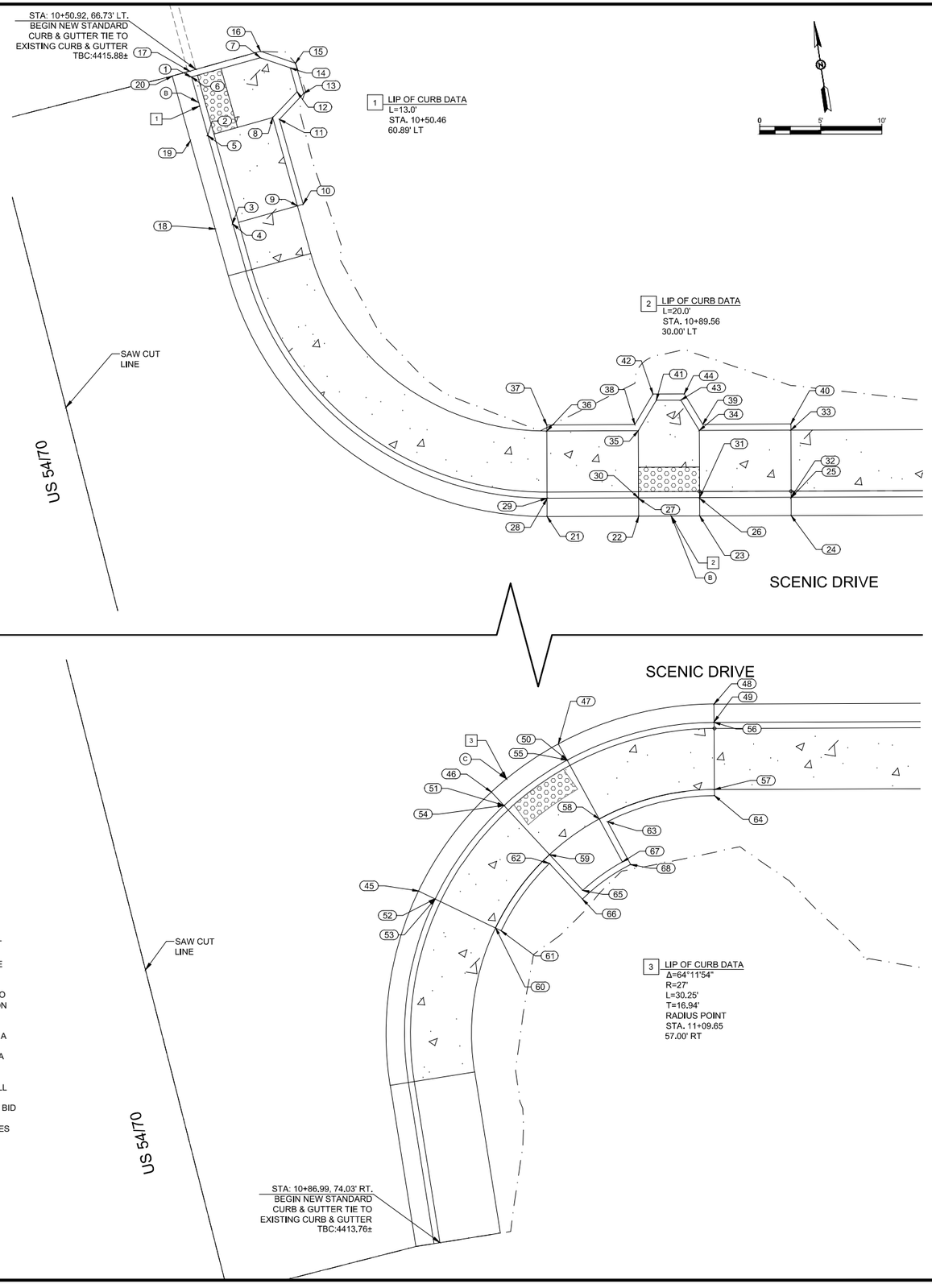

LEGEND

CR	CURB RAMP
LCG	LIP OF CURB & GUTTER
X-LCG	EXISTING LIP OF CURB & GUTTER
X-FL	EXISTING FLOW LINE
FL	FLOW LINE
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X-TC	EXISTING TOP OF CURB & GUTTER
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THC	TOP OF HEADER CURB (BACK)
TS	TOP OF SIDEWALK
EOP	EDGE OF PAVEMENT
	FLOW/SLOPE

GENERAL NOTES

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RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-13

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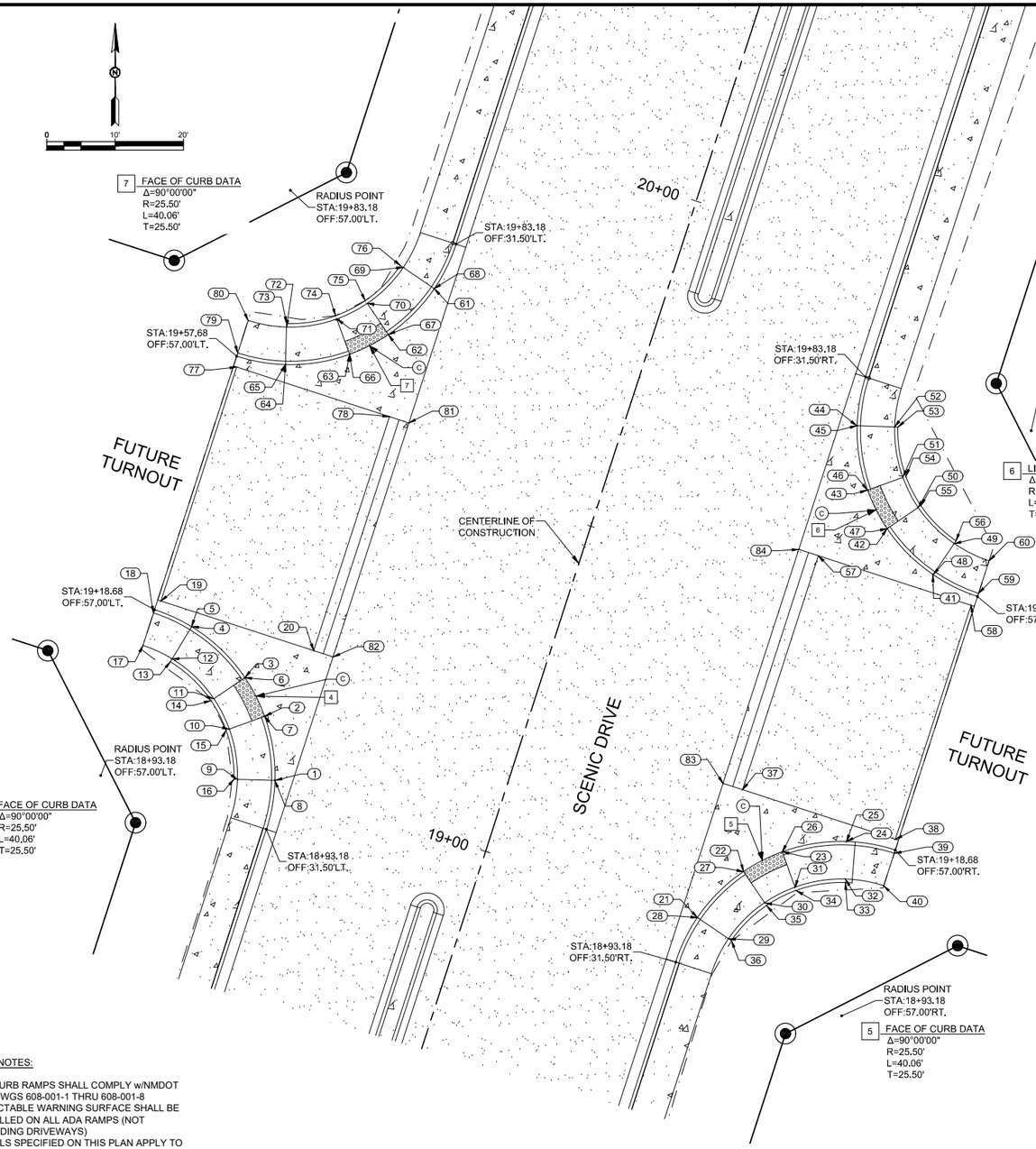
ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	19+00.37	32.49 LT	4,418.62	FL
2	19+08.84	36.82 LT	4,418.86	FL
3	19+13.35	41.33 LT	4,418.96	FL
4	19+18.01	51.04 LT	4,419.15	FL
5	19+17.97	51.05 LT	4,419.63	TC
6	19+13.31	41.35 LT	4,418.96	TC
7	19+08.82	36.86 LT	4,418.86	TC
8	19+00.35	32.53 LT	4,419.12	TC
9	18+98.81	37.80 LT	4,419.19	BS
10	19+05.44	41.20 LT	4,418.94	BS
11	19+08.97	44.73 LT	4,419.04	BS
12	19+12.62	52.33 LT	4,419.70	BS
13	19+12.14	52.45 LT	4,419.70	THC
14	19+08.58	45.03 LT	4,419.54	THC
15	19+05.14	41.60 LT	4,419.44	THC
16	18+98.69	38.27 LT	4,419.19	THC
17	19+13.18	57.00 LT	4,419.79	SW
18	19+18.18	57.00 LT	4,419.72	TBC
19	19+20.18	56.50 LT	4,419.29	EP
20	19+20.18	33.00 LT	4,418.94	EP
21	19+00.37	32.49 RT	4,418.62	FL
22	19+08.84	36.82 RT	4,418.86	FL
23	19+13.35	41.33 RT	4,418.96	FL
24	19+17.68	49.80 RT	4,419.11	FL
25	19+17.64	49.82 RT	4,419.61	TC
26	19+13.31	41.35 RT	4,418.96	TC
27	19+08.82	36.86 RT	4,418.86	TC
28	19+00.35	32.53 RT	4,419.11	TC
29	18+98.81	37.80 RT	4,419.19	BS
30	19+05.44	41.20 RT	4,418.94	BS
31	19+08.97	44.73 RT	4,419.04	BS
32	19+12.37	51.36 RT	4,419.63	BS
33	19+11.89	51.51 RT	4,419.63	THC
34	19+08.58	45.03 RT	4,419.04	THC
35	19+05.14	41.60 RT	4,418.94	THC
36	18+98.67	38.28 RT	4,419.20	THC
37	19+20.18	33.00 RT	4,418.94	EP
38	19+20.18	56.50 RT	4,419.29	EP
39	19+18.18	57.00 RT	4,419.72	TBC
40	19+13.18	57.00 RT	4,419.80	SW
41	19+58.67	49.80 RT	4,419.79	FL
42	19+63.00	41.33 RT	4,419.79	FL
43	19+67.48	36.84 RT	4,419.79	FL
44	19+75.98	32.49 RT	4,419.83	FL
45	19+76.00	32.53 RT	4,420.33	TC
46	19+67.51	36.88 RT	4,419.79	TC
47	19+63.04	41.35 RT	4,419.79	TC
48	19+58.71	49.82 RT	4,420.29	TC
49	19+63.98	51.36 RT	4,420.37	BS
50	19+67.38	44.73 RT	4,419.86	BS
51	19+70.89	41.22 RT	4,419.87	BS
52	19+77.54	37.80 RT	4,420.41	BS
53	19+77.69	38.28 RT	4,420.41	THC
54	19+71.19	41.61 RT	4,420.41	THC
55	19+67.78	45.03 RT	4,420.36	THC
56	19+64.46	51.51 RT	4,420.37	THC
57	19+56.18	33.00 RT	4,419.51	EP
58	19+56.18	56.50 RT	4,419.86	EP
59	19+58.18	57.00 RT	4,420.29	TBC
60	19+63.18	57.00 RT	4,420.37	SW
61	19+75.98	32.49 LT	4,419.83	FL
62	19+67.51	36.82 LT	4,419.79	FL
63	19+63.00	41.33 LT	4,419.79	FL
64	19+58.67	49.80 LT	4,419.79	FL
65	19+58.71	49.82 LT	4,420.29	TC
66	19+63.04	41.35 LT	4,419.79	TC
67	19+67.53	36.86 LT	4,419.79	TC
68	19+76.00	32.53 LT	4,420.33	TC
69	19+77.54	37.80 LT	4,420.41	BS
70	19+70.91	41.20 LT	4,419.87	BS
71	19+67.38	44.73 LT	4,419.87	BS
72	19+63.98	51.36 LT	4,420.37	BS
73	19+64.46	51.51 LT	4,420.37	THC
74	19+67.78	45.03 LT	4,420.36	THC
75	19+71.21	41.60 LT	4,420.37	THC
76	19+77.69	38.28 LT	4,420.41	THC
77	19+56.18	56.50 LT	4,419.86	EP
78	19+56.18	33.00 LT	4,419.51	EP
79	19+58.18	57.00 LT	4,420.29	TBC
80	19+63.18	57.00 LT	4,420.37	SW
81	19+56.18	30.00 LT	4,419.51	FL
82	19+20.18	30.00LT	4,418.94	FL
83	19+20.18	30.00 RT	4,418.94	FL
84	19+56.18	30.00RT	4,419.51	FL



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LEGEND

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LCG	LIP OF CURB & GUTTER
X-LCG	EXISTING LIP OF CURB & GUTTER
X-FL	EXISTING FLOW LINE
FL	FLOW LINE
TC	TOP OF CURB & GUTTER
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(A) KEYED NOTES

A. SAWCUT LINE

B. PARALLEL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-3 FOR ADA DETAILS

C. SINGLE DIAGONAL CURB RAMP, SEE NMDOT STANDARD DRAWINGS 608-001-4 FOR ADA DETAILS

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
05/01/2021

NO	REVISION DESCRIPTION	DATE	BY
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SMITH ENGINEERING

JOB NO: 816204
DATE: MAY 2021
SHEET NO: 2-14

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ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	21+67.18	32.49 LT	4,424.03	FL
2	21+75.65	36.82 LT	4,424.54	FL
3	21+80.16	41.33 LT	4,424.59	FL
4	21+84.49	49.80 LT	4,424.45	FL
5	21+84.45	49.82 LT	4,424.45	TC
6	21+80.12	41.35 LT	4,424.59	TC
7	21+75.63	36.86 LT	4,424.54	TC
8	21+67.16	32.53 LT	4,424.03	TC
9	21+65.62	37.80 LT	4,424.58	BS
10	21+72.25	41.20 LT	4,424.59	BS
11	21+75.78	44.73 LT	4,424.67	BS
12	21+79.18	51.36 LT	4,425.03	BS
13	21+78.70	51.51 LT	4,425.03	THC
14	21+75.39	45.03 LT	4,425.17	THC
15	21+71.95	41.60 LT	4,425.09	THC
16	21+65.48	38.28 LT	4,424.58	THC
17	21+79.99	56.93 LT	4,424.97	SW
18	21+84.99	56.92 LT	4,424.90	TBC
19	21+86.99	56.38 LT	4,424.49	EP
20	21+86.99	33.00 LT	4,424.84	EP
21	22+22.21	33.00 LT	4,426.13	EP
22	22+21.73	55.78 LT	4,425.79	EP
23	22+23.50	56.29 LT	4,424.48	TBC
24	22+27.94	56.33 LT	4,424.48	SW
25	22+23.80	49.75 LT	4,426.00	FL
26	22+27.58	41.20 LT	4,426.45	FL
27	22+31.68	36.65 LT	4,426.51	FL
28	22+39.56	32.35 LT	4,426.64	FL
29	22+39.57	32.39 LT	4,426.64	TC
30	22+31.71	36.68 LT	4,426.51	TC
31	22+27.62	41.22 LT	4,426.45	TC
32	22+23.83	49.77 LT	4,426.01	TC
33	22+28.59	51.22 LT	4,426.58	BS
34	22+31.60	44.56 LT	4,426.53	BS
35	22+34.81	41.02 LT	4,426.58	BS
36	22+40.93	37.69 LT	4,427.21	BS
37	22+41.05	38.17 LT	4,427.21	THC
38	22+35.09	41.42 LT	4,427.08	THC
39	22+31.96	44.86 LT	4,427.03	THC
40	22+29.02	51.36 LT	4,426.58	THC
41	22+22.21	30.00 LT	4,426.13	FL
42	21+86.99	30.00 LT	4,424.84	FL

ADA RAMP NOTES:

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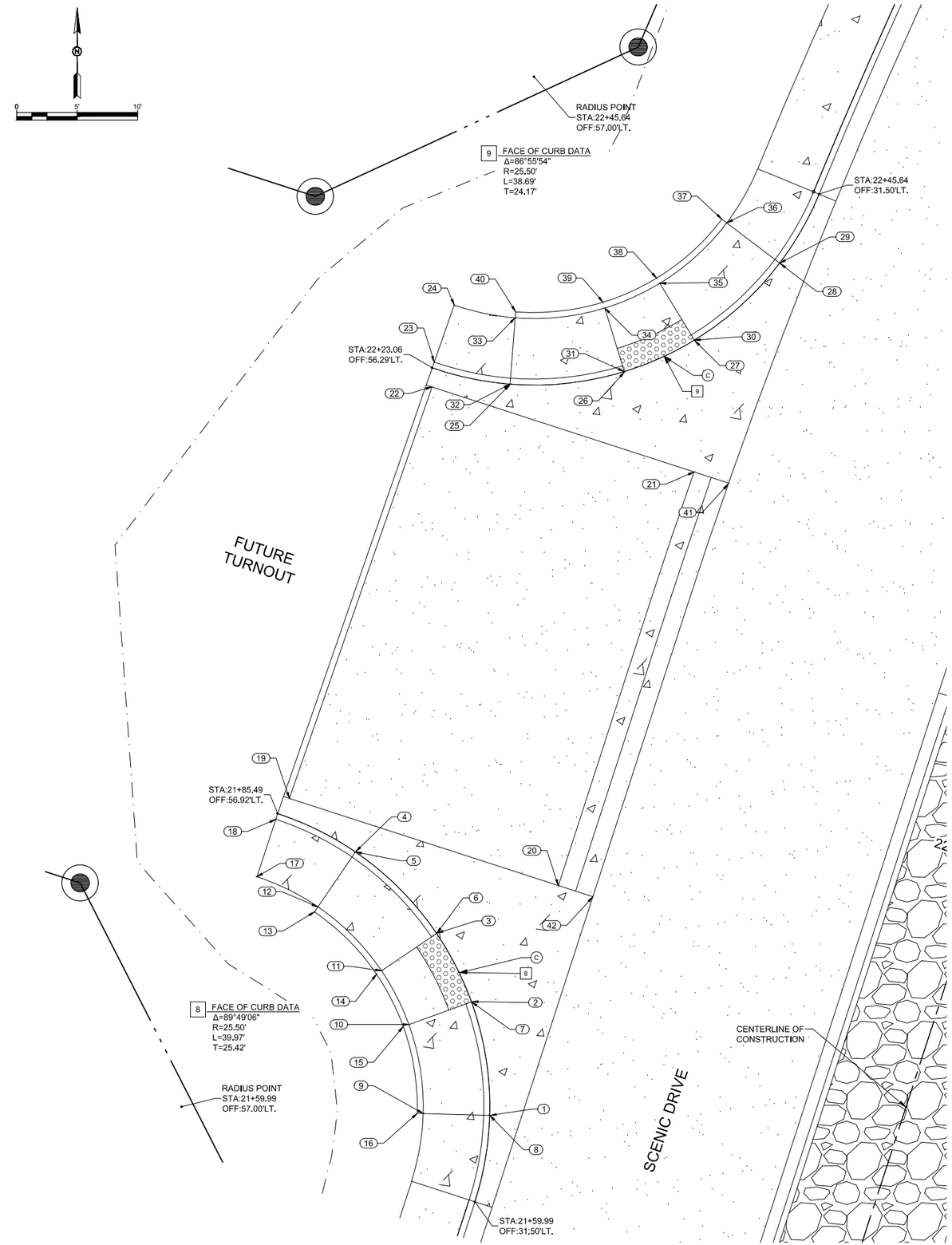

LEGEND

CR	CURB RAMP
LCG	LIP OF CURB & GUTTER
X-LCG	EXISTING LIP OF CURB & GUTTER
X-FL	EXISTING FLOW LINE
FL	FLOW LINE
TC	TOP OF CURB & GUTTER
X-TC	EXISTING TOP OF CURB & GUTTER
BS	BACK OF SIDEWALK
THC	TOP OF HEADER CURB (BACK)
TS	TOP OF SIDEWALK
EOP	EDGE OF PAVEMENT
	FLOW/SLOPE

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RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
05/01/2021

NO	REVISION DESCRIPTION	DATE	BY
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SMITH ENGINEERING

JOB NO: 816204
DATE: MAY 2021
SHEET NO: 2-15

L:\SEC---PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-15 RAMP LAYOUT SHEET.dwg May 01, 2021 - 3:35pm Saved By: manuelm

ADA RAMPS (SCENIC DRIVE)				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	25+27.43	36.99 LT	4,432.30	TS
2	25+29.92	32.00 LT	4,432.26	TS
3	25+40.06	43.16 LT	4,431.97	TS
4	25+41.87	42.97 LT	4,431.94	TS
5	25+42.30	47.94 LT	4,431.99	TS
6	25+37.82	48.44 LT	4,432.06	TS
7	25+50.96	42.12 LT	4,431.89	TS
8	25+51.29	47.11 LT	4,431.94	TS
9	25+60.07	41.48 LT	4,432.04	TS
10	25+61.97	46.38 LT	4,432.12	TS
11	25+71.31	37.00 LT	4,432.28	TS
12	25+69.52	32.00 LT	4,432.21	TS
13	25+11.13	32.00 RT	4,431.55	TS
14	25+08.58	37.00 RT	4,431.60	TS
15	25+18.52	39.99 RT	4,431.71	TS
16	25+15.65	44.66 RT	4,431.78	TS
17	25+32.33	46.69 RT	4,430.98	TS
18	25+32.97	41.73 RT	4,431.03	TS
19	25+43.45	47.73 RT	4,430.99	TS
20	25+43.96	42.75 RT	4,431.05	TS
21	25+46.92	42.98 RT	4,431.08	TS
22	25+49.05	48.15 RT	4,431.07	TS
23	25+60.95	37.00 RT	4,431.72	TS
24	25+58.60	32.00 RT	4,431.65	TS
25	25+55.81	32.00 RT	4,431.65	TC
26	25+50.42	32.00 RT	4,431.17	TC
27	25+54.93	32.00 LT	4,431.75	TC
28	25+59.59	32.00 LT	4,432.23	TC
29	25+31.56	32.00 LT	4,432.27	TC
30	25+36.22	32.00 RT	4,431.79	TC
31	25+23.36	32.00 RT	4,431.63	TC
32	25+28.76	32.00 RT	4,431.16	TC

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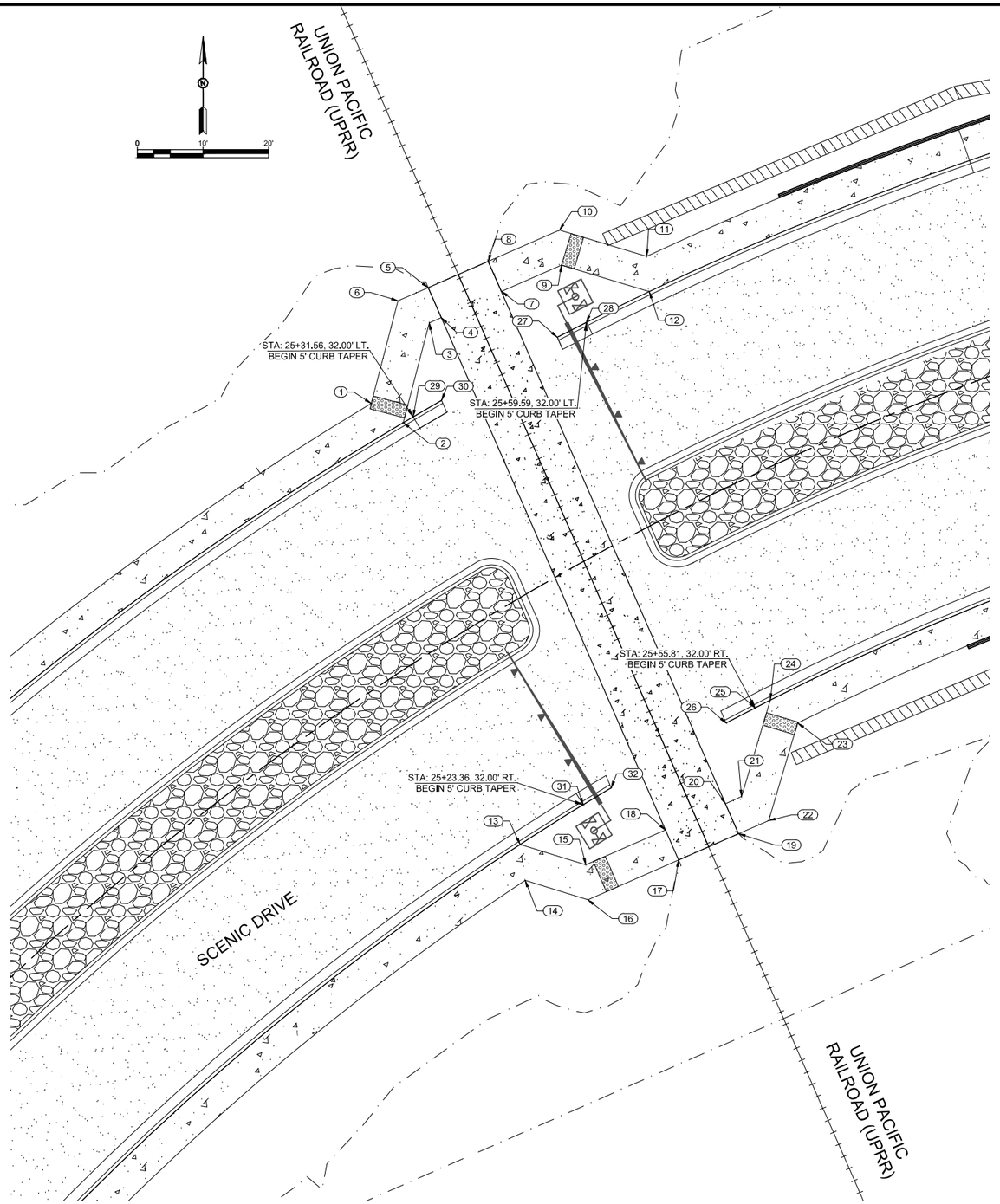

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RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
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ADA RAMPS (SCENIC DRIVE)				
1	28+19.95	25.00 LT	4,431.82	FL
2	28+19.95	26.45 LT	4,431.76	FL
3	28+27.58	27.62 LT	4,431.89	FL
4	28+35.98	32.11 LT	4,432.03	FL
5	28+40.40	36.69 LT	4,432.08	FL
6	28+44.58	45.25 LT	4,432.26	FL
7	28+45.47	52.92 L T	4,432.25	FL
8	28+45.43	52.92 LT	4,432.75	TC
9	28+44.54	45.26 L T	4,432.76	TC
10	28+40.36	36.72 LT	4,432.08	TC
11	28+35.95	32.14 LT	4,432.03	TC
12	28+27.57	27.66 LT	4,432.39	TC
13	28+19.95	26.50 LT	4,432.26	TC
14	28+19.95	32.00 LT	4,432.33	BS
15	28+25.92	32.91 LT	4,432.44	BS
16	28+32.50	36.42 LT	4,432.10	BS
17	28+35.96	40.01 LT	4,432.15	BS
18	28+39.24	46.71 LT	4,432.76	BS
19	28+39.93	52.72 LT	4,432.77	BS
20	28+38.75	46.84 LT	4,432.76	THC
21	28+35.56	40.31 LT	4,432.65	THC
22	28+32.18	36.81 LT	4,432.60	THC
23	28+25.77	33.39 LT	4,432.44	THC
24	28+47.94	25.00 LT	4,432.08	EOP
25	28+24.68	25.00 RT	4,431.24	FL
26	28+51.76	25.00 RT	4,431.42	EOP
27	28+24.68	26.45 RT	4,431.17	FL
28	28+31.89	27.49 RT	4,431.25	FL
29	28+40.36	31.83 RT	4,431.34	FL
30	28+44.86	36.34 RT	4,431.31	FL
31	28+49.19	44.82 RT	4,431.13	FL
32	28+49.15	44.83 RT	4,431.63	TC
33	28+44.83	36.37 RT	4,431.31	TC
34	28+40.33	31.87 RT	4,431.34	TC
35	28+31.87	27.53 RT	4,431.75	TC
36	28+50.22	52.03 RT	4,430.99	FL
37	28+50.18	52.03 RT	4,431.49	TC
38	28+44.68	52.02 RT	4,431.52	BS
39	28+43.87	46.38 RT	4,431.63	BS
40	28+40.48	39.74 RT	4,431.34	BS
41	28+36.96	36.21 RT	4,431.37	BS
42	28+30.32	32.81 RT	4,431.77	BS
43	28+24.68	32.00 RT	4,431.70	BS
44	28+30.18	33.29 RT	4,431.77	THC
45	28+36.65	36.60 RT	4,431.87	THC
46	28+40.09	40.04 RT	4,431.84	THC
47	28+43.39	46.52 RT	4,431.63	THC
48	28+24.68	26.50 RT	4,431.67	TC

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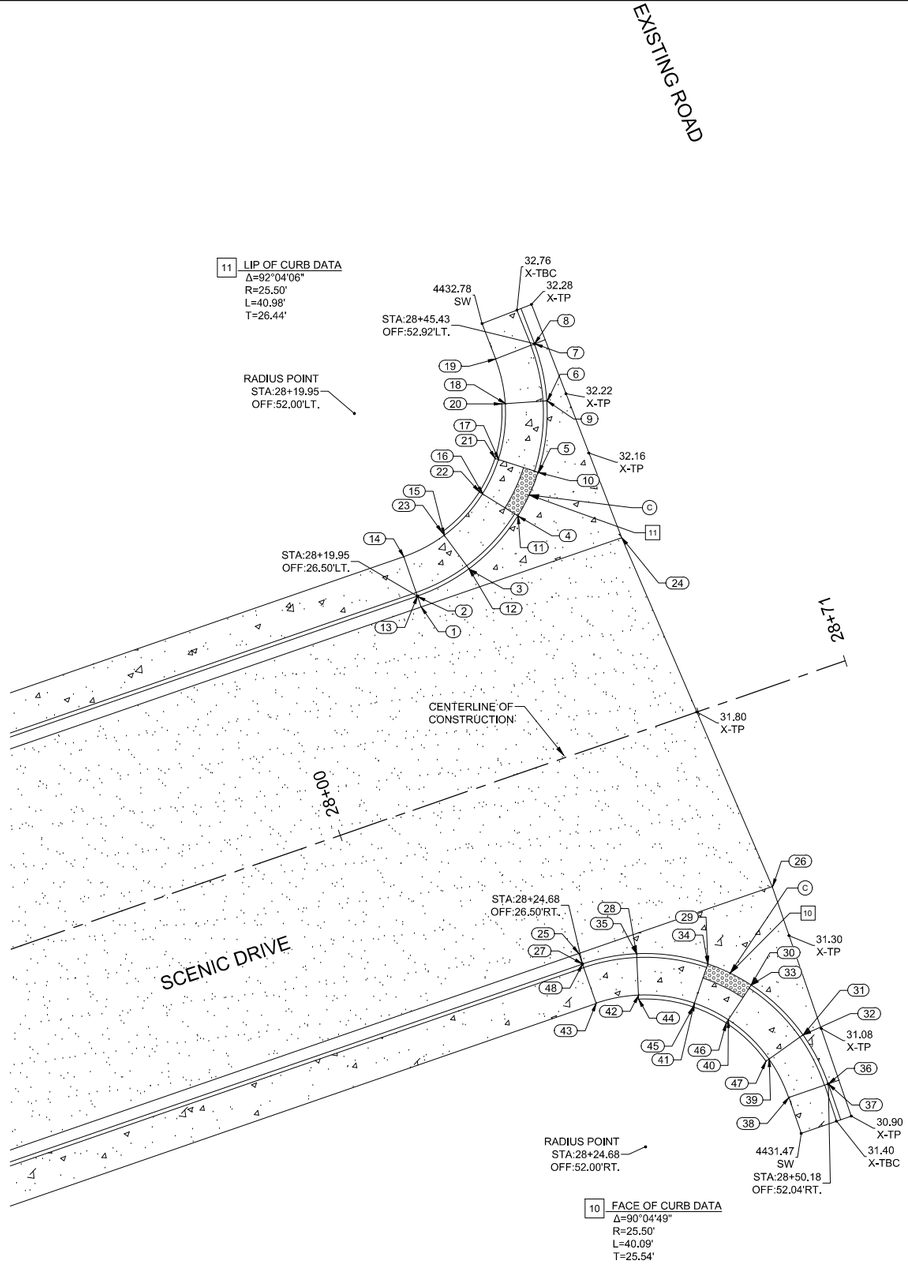

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RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-17

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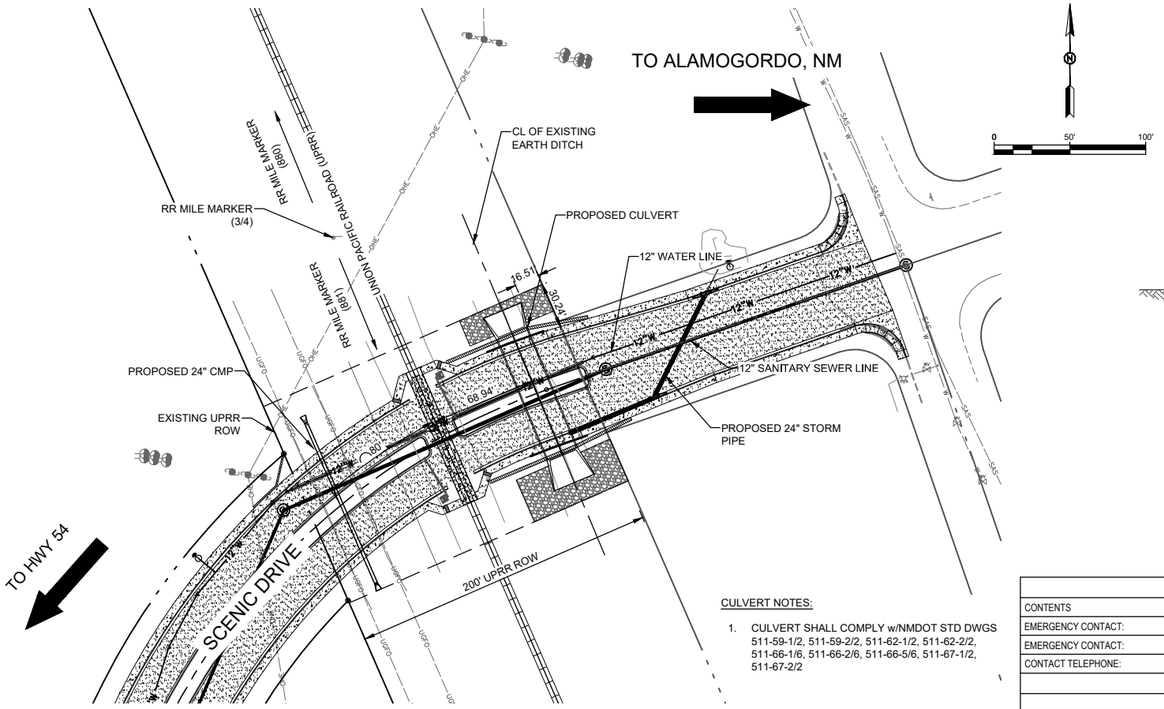
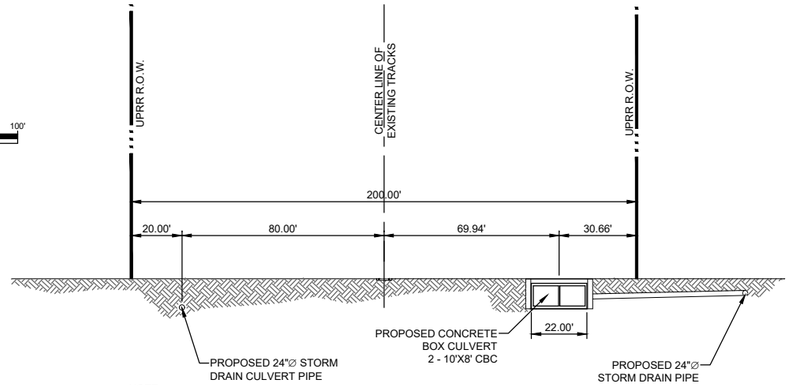


RAIL ROAD OVERALL MAP OF ENCROACHMENTS

CULVERT NOTES:

1. CULVERT SHALL COMPLY w/NMDOT STD DWGS 511-59-1/2, 511-59-2/2, 511-62-1/2, 511-62-2/2, 511-66-1/6, 511-66-2/6, 511-66-5/6, 511-67-1/2, 511-67-2/2



NOTE:
1. PROPOSED CONCRETE BOX CULVERT SHOULD HAVE A MIN. OF 1' COVER.
2. ALL DIMENSIONS ARE ALONG THE PROPOSED CENTERLINE OF CONSTRUCTION.
3. ALL PIPELINES WITHIN THE RAILROAD RIGHT OF WAY, SHALL BE BURIED A MINIMUM OF 5' BELOW NATURAL GROUND. EXCEPT FOR PROPOSED 24" CULVERT, WHICH WILL BE LAID TO MAINTAIN EXISTING DRAINAGE PATTERN.

OVERALL CROSS SECTION (ALONG ROAD CENTERLINE)

N.T.S

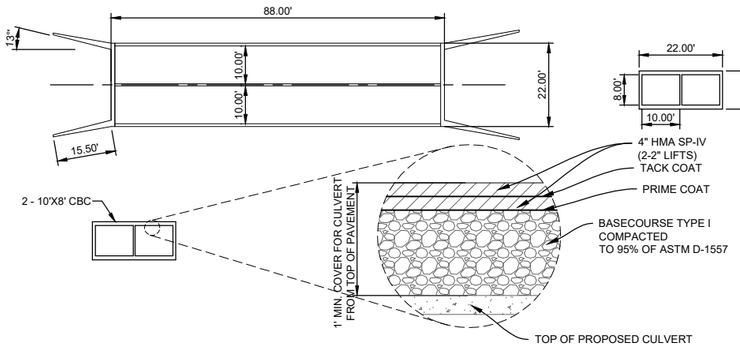
PIPE SPECIFICATIONS	
CONTENTS	MUNICIPAL POTABLE WATER / WASTEWATER
EMERGENCY CONTACT:	CITY OF ALAMOGORDO PUBLIC WORKS DEPT.
EMERGENCY CONTACT:	LARRY GARNER
CONTACT TELEPHONE:	575-491-3969

12" SANITARY SEWER LINE		
	CARRIER	CASING
TOTAL WIDTH OF RAILROAD RIGHT-OF-WAY AND/OR EASEMENT (FEET)	200	N/A
LENGTH OF PIPE ON RAILROAD COMPANY PROPERTY (FEET)	200	200
LENGTH OF CASING PIPE WITHIN RAILROAD RIGHT-OF-WAY (FEET)	200	200
INSIDE DIAMETER OF PIPE (INCHES)	12	24
PIPE MATERIAL	PVC	STEEL
SPECIFICATION & GRADE	SDR-35	GR-B
MINIMUM WALL THICKNESS IN INCHES	0.36	0.312
ACTUAL WORKING PRESSURE (PSI)	GRAVITY	N/A
TYPE OF JOINT	BELL & SPIGOT	WELDED
COATING	N/A	YES
DISTANCE FROM BASE OF RAIL TO TOP OF PIPE, MINIMUM (FEET)	N/A	14.04
MINIMUM GROUND COVER ON RAILROAD PROPERTY (FEET)	N/A	14.04
CATHODIC PROTECTION CASING	N/A	YES
TYPE OF INSULATORS OR SUPPORTS	N/A	RACI
-INSULATOR/SUPPORT SIZE (INCHES)	N/A	2.25
-INSULATOR/SUPPORT SPACING (FEET)	N/A	3
NUMBER OF CASING VENTS	N/A	2
-VENT SIZE (INCHES)	N/A	2
-VENT HEIGHT ABOVE GROUND (FEET)	N/A	3
METHOD OF CASING	N/A	JACK & BORE

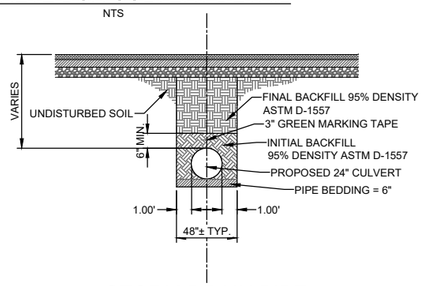
12" WATER LINE		
	CARRIER	CASING
TOTAL WIDTH OF RAILROAD RIGHT-OF-WAY AND/OR EASEMENT (FEET)	200	N/A
LENGTH OF PIPE ON RAILROAD COMPANY PROPERTY (FEET)	200	200
LENGTH OF CASING PIPE WITHIN RAILROAD RIGHT-OF-WAY (FEET)	200	200
INSIDE DIAMETER OF PIPE (INCHES)	12	24
PIPE MATERIAL	PVC	STEEL
SPECIFICATION & GRADE	C-900 (DR-18)	GR-B
MINIMUM WALL THICKNESS IN INCHES	0.733	0.312
ACTUAL WORKING PRESSURE (PSI)	235	N/A
TYPE OF JOINT	N/A	WELDED
COATING	N/A	YES
DISTANCE FROM BASE OF RAIL TO TOP OF PIPE, MINIMUM (FEET)	N/A	13.73
MINIMUM GROUND COVER ON RAILROAD PROPERTY (FEET)	N/A	13.73
CATHODIC PROTECTION CASING	N/A	YES
TYPE OF INSULATORS OR SUPPORTS	N/A	RACI
-INSULATOR/SUPPORT SIZE (INCHES)	N/A	2.25
-INSULATOR/SUPPORT SPACING (FEET)	N/A	3
NUMBER OF CASING VENTS	N/A	2
-VENT SIZE (INCHES)	N/A	2
-VENT HEIGHT ABOVE GROUND (FEET)	N/A	3
METHOD OF CASING	N/A	JACK & BORE

NOTES:

1. NEW STORM DRAIN PIPE SHALL BE CONSTRUCTED WITH SATISFACTORY JOINTS, MATERIALS AND DESIGNS WHICH WILL PROVIDE PROTECTION AND RESISTANCE TO DAMAGE FROM SULFIDE GASES AND OTHER CORROSIVE ELEMENTS TO WHICH THEY MAY BE EXPOSED.
2. UNDERGROUND INSTALLATIONS WILL BE PERFORMED BY OPEN-TRENCHING FROM THE PROPERTY LINE TO THE TOE OF THE FILL SLOPE IN FILL SECTIONS AND TO THE TOE OF THE SHOULDER SLOPE IN CUT SECTIONS BUT NO CLOSER THAN THIRTY (35) FEET OF THE CENTERLINE OF TRACK.
3. AREAS OF RAILROAD PROPERTY, DISTURBED BY THE INSTALLATION, MAINTENANCE, REMOVAL AND RELOCATION OF UTILITIES SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS SHALL BE RETURNED TO NORMAL GRADE AND ELEVATION, WITH COMPACTION OF BACKFILL MATERIAL, MEETING 95% OF ASTM D-1557.
4. CARE SHALL BE TAKEN TO AVOID ANY DISTURBANCE OF EXISTING UNDERGROUND UTILITIES.
5. UNUSED MATERIAL OR DEBRIS SHALL BE REMOVED FROM THE WORK SITE AREA. AT THE END OF EVERY CONSTRUCTION DAY, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE REMOVED AS FAR FROM THE OPERATING RAILROAD TRACKS AS POSSIBLE(MINIMUM 35 FEET FROM CENTERLINE).
6. ALL UTILITY CROSSINGS UNDER DITCHES AND RAILROAD TRACKAGE SHOULD HAVE A MINIMUM DEPTH OF COVER OF FIVE (5) FEET BELOW THE FLOW LINE OF THE DITCH OR GROUND SURFACE. THE DEPTH OF COVER SHALL NOT BE LESS THAN THAT MEETING APPLICABLE INDUSTRY STANDARDS.
7. STORAGE OF MATERIALS, PARKING OF EQUIPMENT AND VEHICLES WHEN NOT USED DURING ACTUAL UTILITY WORK WILL NOT BE PERMITTED ON RAILROAD PROPERTY.
8. MAINTENANCE OF THE UTILITY IS THE SOLE RESPONSIBILITY OF THE UTILITY OWNER. MAINTENANCE MUST BE PERFORMED TO KEEP THE FACILITY IN AN AS-CONSTRUCTED CONDITION, AND IN A GOOD STATE OF REPAIR IN ACCORDANCE WITH THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL LAWS, REGULATORY STANDARDS AND UTILITY CODES. THE UTILITY OWNER IS ALSO RESPONSIBLE FOR REPLACING AND STABILIZING ALL EARTH COVER AND VEGETATION WHEN IT HAS ERODED OVER AN UNDERGROUND UTILITY FACILITY, AS CAUSED BY ANY SETTLEMENT OF BACKFILL, FILLS, AND EMBANKMENTS.
9. FLAGGING WILL BE REQUIRED WHEN WORK IS PERFORMED WITHIN TWENTY-FIVE (25) FEET OF THE CENTERLINE OF THE TRACK OR WHEN IT IS NECESSARY FOR THE CONTRACTOR TO OPERATE EQUIPMENT IN THE VICINITY OF, OR OVER, PROPERTY WHICH MAY ENDANGER RAILROAD OPERATIONS. FLAGGING SERVICES SHALL BE PAID BY THE OWNER. A WRITTEN REQUEST FOR FLAGGING SERVICES WILL BE REQUIRED AT LEAST 3 WEEKS PRIOR TO THE TIME WHEN SUCH SERVICES ARE NEEDED.
10. UPON COMPLETION OF THE JACK AND BORE INSTALLATION, THE CONTRACTOR SHALL PROVIDE AN ACCURATE AS-BUILT DRAWING OF THE INSTALLED JACK AND BORE SEGMENT. AS-BUILT DRAWINGS WILL INCLUDE BOTH HORIZONTAL AND PROFILE PLANS WITH SURVEY MONUMENTATION COORDINATED WITH OWNER.
11. PRIOR TO ANY CONSTRUCTION, EXISTING UTILITIES SHALL BE LOCATED BY THE CONTRACTOR WITH ANY DISCREPANCIES REPORTED TO THE OWNER AND DESIGN ENGINEER.
12. HAND PREPARE PIPE BED. PROVIDE A SMOOTH UNIFORM GRADE.
13. PER OSHA STANDARDS TRENCHES SHALL BE CUT BACK ON A STABLE SLOPE OR SHEET AND BRACE AS REQUIRED TO PREVENT CAVING AND/OR SLIDING TO PROVIDE PROTECTION FOR WORKERS



CONCRETE BOX CULVERT DETAIL



STORM DRAIN PIPE TRENCH DETAIL

NTS

PIPE SPECIFICATIONS	
CONTENTS	MUNICIPAL STORM WATER
EMERGENCY CONTACT:	CITY OF ALAMOGORDO PUBLIC WORKS DEPT.
EMERGENCY CONTACT:	LARRY GARNER
CONTACT TELEPHONE:	575-491-3969

24" STORM DRAIN PIPE		
	CARRIER	CASING
TOTAL WIDTH OF RAILROAD RIGHT-OF-WAY AND/OR EASEMENT (FEET)	200	N/A
LENGTH OF PIPE ON RAILROAD COMPANY PROPERTY (FEET)	22.3	N/A
LENGTH OF CASING PIPE WITHIN RAILROAD RIGHT-OF-WAY (FEET)	N/A	N/A
INSIDE DIAMETER OF PIPE (INCHES)	24	N/A
PIPE MATERIAL	HDPE	N/A
SPECIFICATION & GRADE	ADS N-12	N/A
WALL THICKNESS IN INCHES	2	N/A
ACTUAL WORKING PRESSURE (PSI)	GRAVITY	N/A
TYPE OF JOINT	BELL & SPIGOT	N/A

24" STORM DRAIN CULVERT PIPE		
TOTAL WIDTH OF RAILROAD RIGHT-OF-WAY AND/OR EASEMENT (FEET)	141.34	N/A
LENGTH OF PIPE ON RAILROAD COMPANY PROPERTY (FEET)	135	N/A
LENGTH OF CASING PIPE WITHIN RAILROAD RIGHT-OF-WAY (FEET)	N/A	N/A
INSIDE DIAMETER OF PIPE (INCHES)	24	N/A
PIPE MATERIAL	HDPE	N/A
SPECIFICATION & GRADE	ADS N-12	N/A
WALL THICKNESS IN INCHES	2	N/A
ACTUAL WORKING PRESSURE (PSI)	GRAVITY	N/A
TYPE OF JOINT	BELL & SPIGOT	N/A

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	REVISION DESCRIPTION	DATE	BY
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

IMPROVEMENTS WITHIN RAILROAD RIGHT-OF-WAY

Solutions for Today... Vision for Tomorrow
201 N Church Street
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
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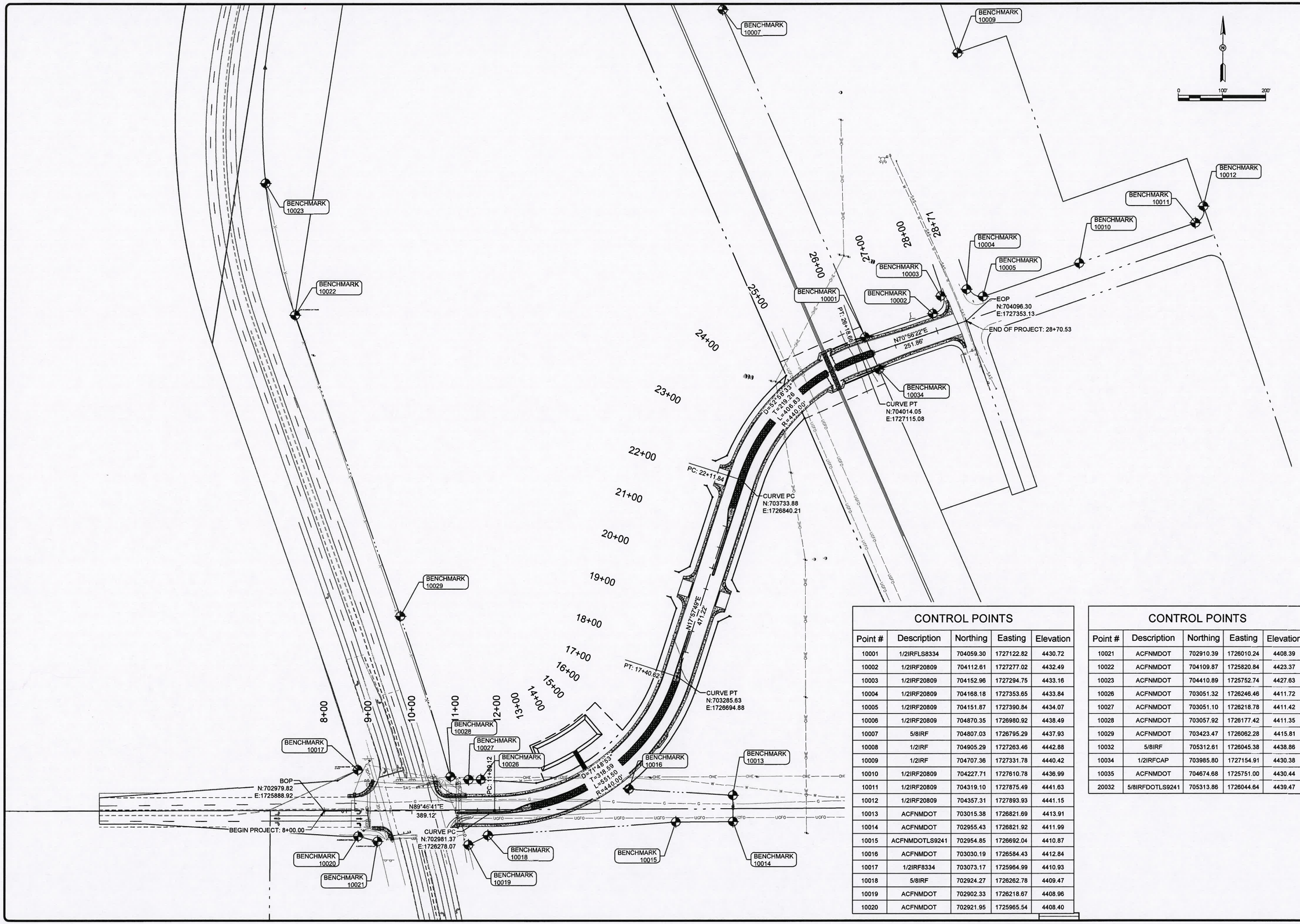
SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 2-18

L:\SEC---PROJECT\3\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\2-18 IMPROVEMENTS WITHIN RAILROAD RIGHT-OF-WAY.dwg Apr 27, 2021 - 11:14am Saved By: sami)



CONTROL POINTS				
Point #	Description	Northing	Easting	Elevation
10001	1/2IRFLS8334	704059.30	1727122.82	4430.72
10002	1/2IRF20809	704112.61	1727277.02	4432.49
10003	1/2IRF20809	704152.96	1727294.75	4433.16
10004	1/2IRF20809	704168.18	1727353.65	4433.84
10005	1/2IRF20809	704151.87	1727390.84	4434.07
10006	1/2IRF20809	704870.35	1726980.92	4438.49
10007	5/8IRF	704807.03	1726795.29	4437.93
10008	1/2IRF	704905.29	1727263.46	4442.88
10009	1/2IRF	704707.36	1727331.78	4440.42
10010	1/2IRF20809	704227.71	1727610.78	4436.99
10011	1/2IRF20809	704319.10	1727875.49	4441.63
10012	1/2IRF20809	704357.31	1727893.93	4441.15
10013	ACFNMDOT	703015.38	1726821.69	4413.91
10014	ACFNMDOT	702955.43	1726821.92	4411.99
10015	ACFNMDOTLS9241	702954.85	1726692.04	4410.87
10016	ACFNMDOT	703030.19	1726584.43	4412.84
10017	1/2IRF8334	703073.17	1725964.99	4410.93
10018	5/8IRF	702924.27	1726262.78	4409.47
10019	ACFNMDOT	702902.33	1726218.67	4408.96
10020	ACFNMDOT	702921.95	1725965.54	4408.40

CONTROL POINTS				
Point #	Description	Northing	Easting	Elevation
10021	ACFNMDOT	702910.39	1726010.24	4408.39
10022	ACFNMDOT	704109.87	1725820.84	4423.37
10023	ACFNMDOT	704410.89	1725752.74	4427.63
10026	ACFNMDOT	703051.32	1726246.46	4411.72
10027	ACFNMDOT	703051.10	1726218.78	4411.42
10028	ACFNMDOT	703057.92	1726177.42	4411.35
10029	ACFNMDOT	703423.47	1726062.28	4415.81
10032	5/8IRF	705312.61	1726045.38	4438.86
10034	1/2IRFCAP	703985.80	1727154.91	4430.38
10035	ACFNMDOT	704674.68	1725751.00	4430.44
20032	5/8IRFDOTLS9241	705313.86	1726044.64	4439.47

3/26/21
R. GERARDO IBARRA
NEW MEXICO
23259
PROFESSIONAL SURVEYOR

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SURVEY CONTROL

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401 N Pennsylvania
Roswell, NM 88201
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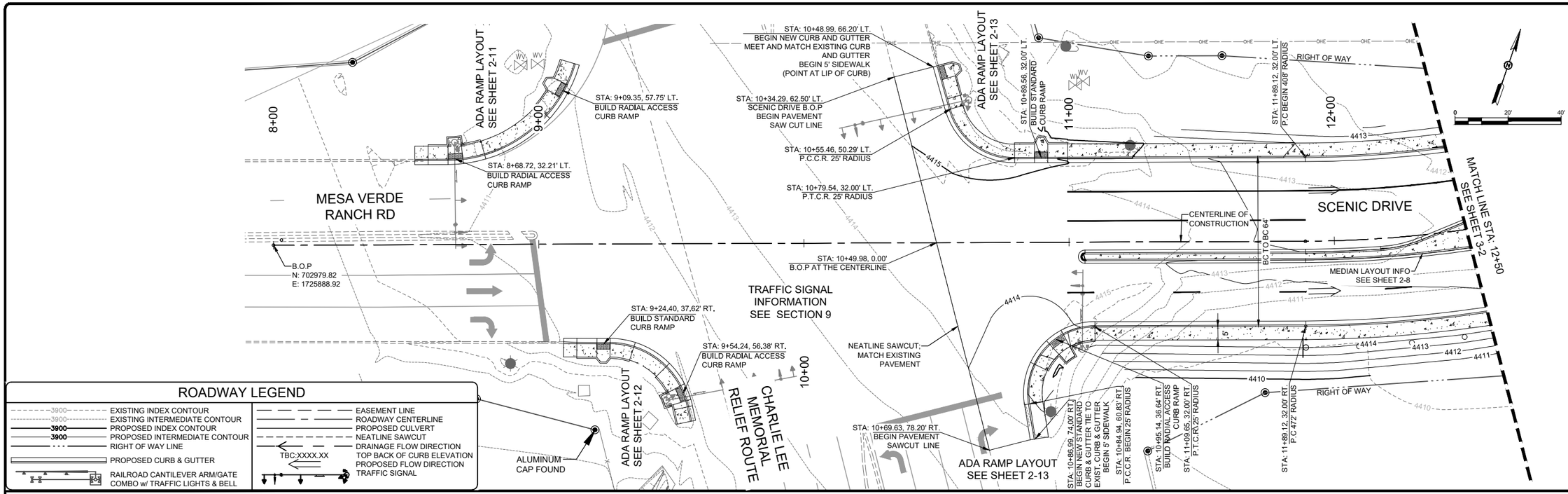
SMITH ENGINEERING

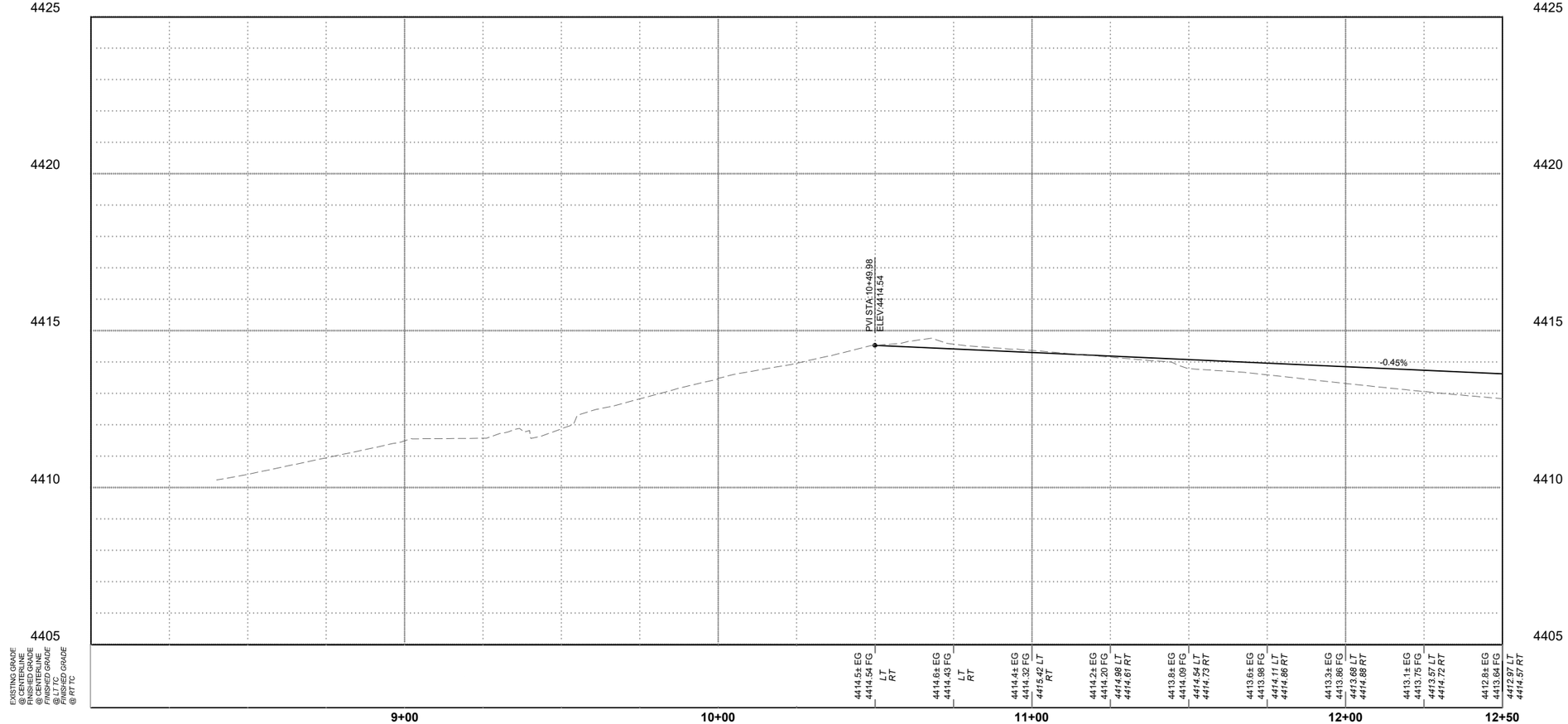
JOB NO: 816204
DATE: MARCH 2021
SHEET NO: 3-0

L:\SEC--PROJECT\9816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSETS-0 SURVEY DATA.dwg Mar 26, 2021 - 3:28pm Saved By: rustyp



ROADWAY LEGEND

3900 EXISTING INDEX CONTOUR	EASEMENT LINE
3900 EXISTING INTERMEDIATE CONTOUR	ROADWAY CENTERLINE
3900 PROPOSED INDEX CONTOUR	PROPOSED CULVERT
3900 PROPOSED INTERMEDIATE CONTOUR	NEATLINE SAWCUT
RIGHT OF WAY LINE	DRAINAGE FLOW DIRECTION
PROPOSED CURB & GUTTER	TBC:XXXX.XX TOP BACK OF CURB ELEVATION
RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL	PROPOSED FLOW DIRECTION TRAFFIC SIGNAL



RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
05/01/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO	REVISION DESCRIPTION	DATE	BY
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SCENIC DRIVE PLAN & PROFILE
BOP TO STA. 12+50

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201 N Church Street
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
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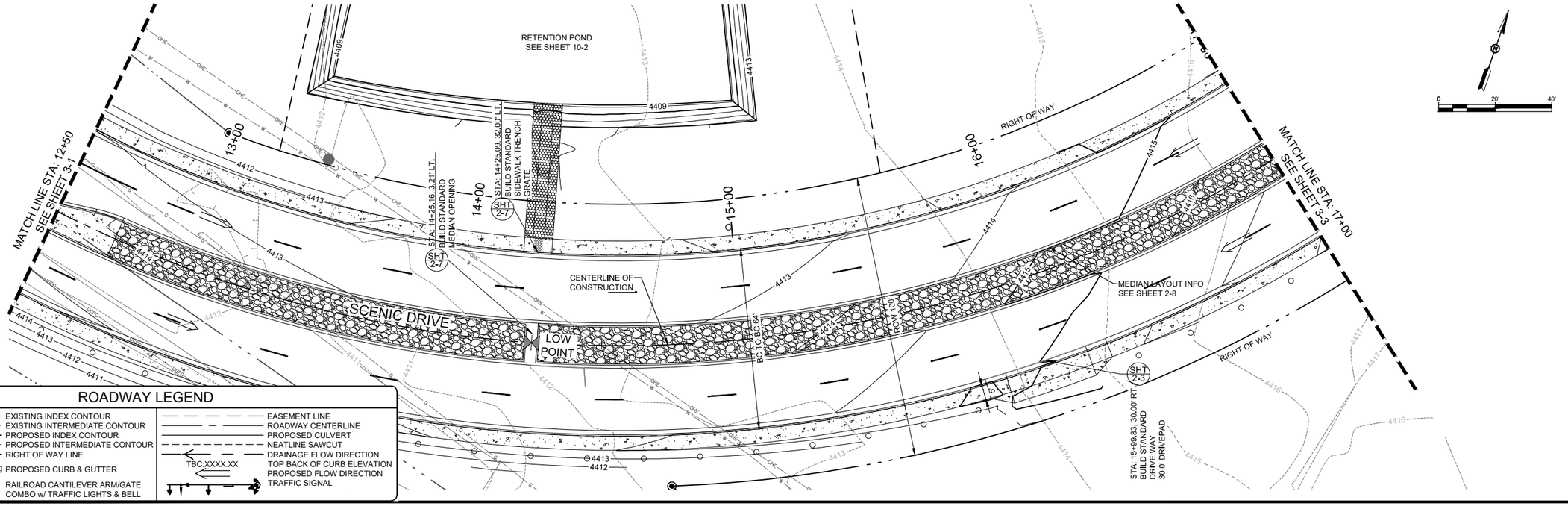
SMITH ENGINEERING

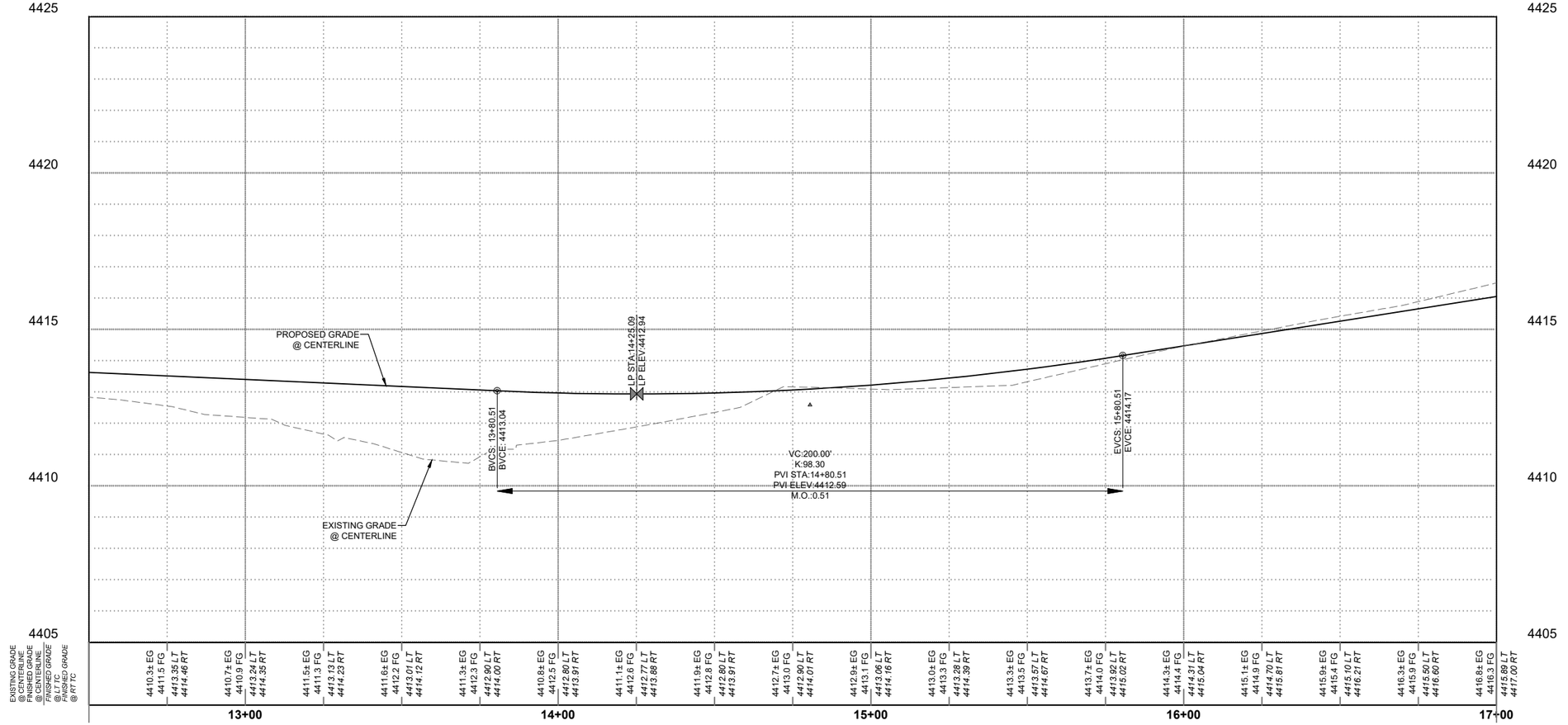
JOB NO: 816204
DATE: MAY 2021
SHEET NO: 3-1

L:\SEC---PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSETS\1 SCENIC DRIVE PLAN & PROFILE BOP TO STA. 12+50.dwg, May 01, 2021 - 7:17pm Saved By: rustyp



ROADWAY LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- RIGHT OF WAY LINE
- PROPOSED CURB & GUTTER
- RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL
- EASEMENT LINE
- ROADWAY CENTERLINE
- PROPOSED CULVERT
- NEATLINE SAWCUT
- DRAINAGE FLOW DIRECTION
- TBC:XXXX.XX TOP BACK OF CURB ELEVATION
- PROPOSED FLOW DIRECTION
- TRAFFIC SIGNAL



RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
05/01/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SCENIC DRIVE PLAN & PROFILE
STA. 12+50 TO STA. 17+00

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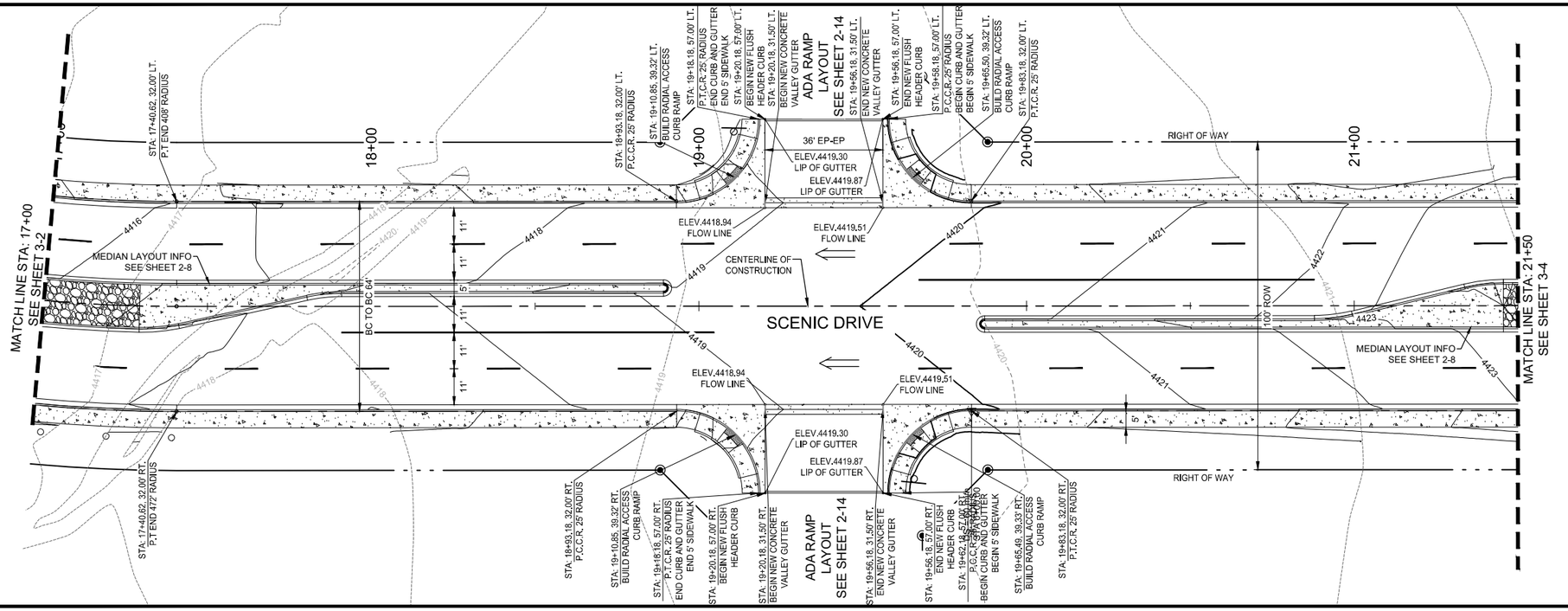
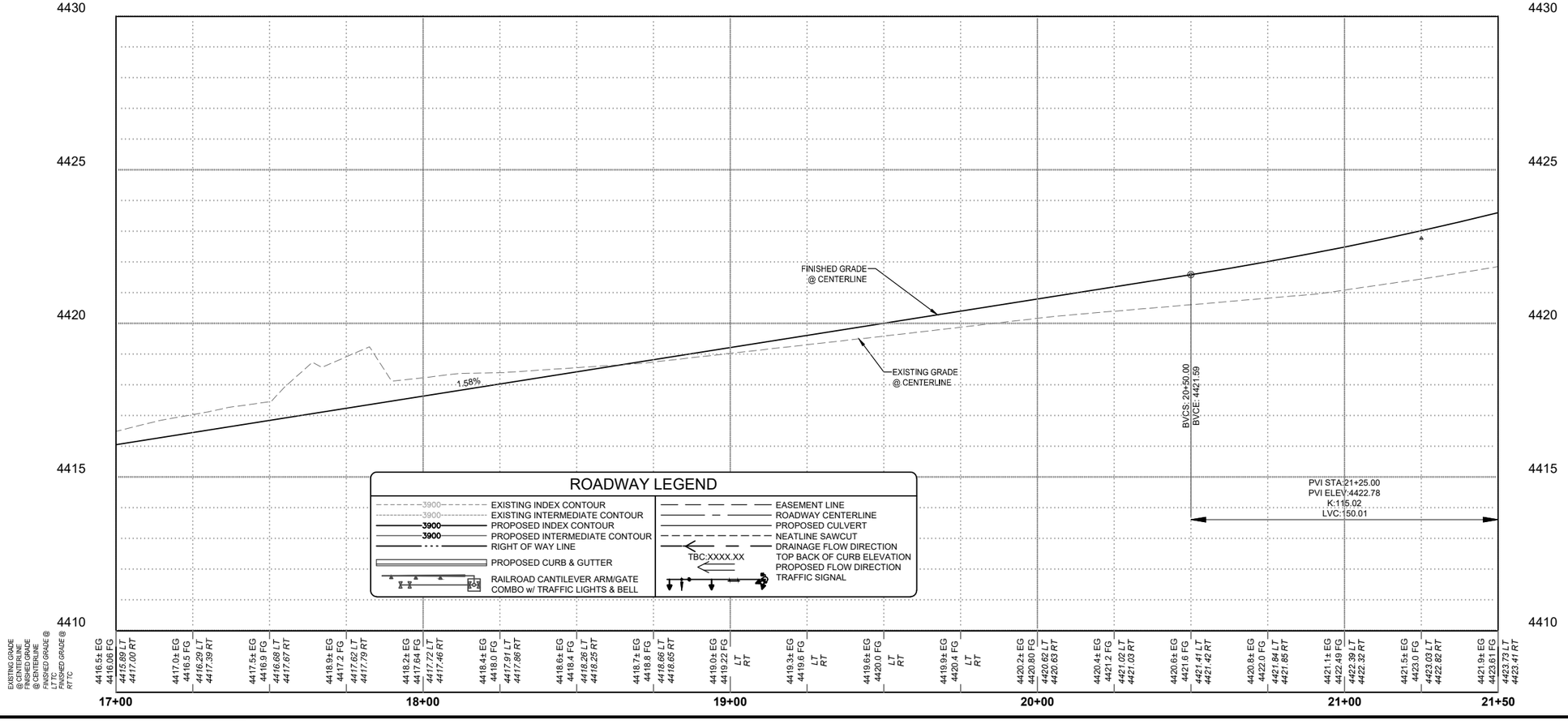
JOB NO: 816204
DATE: MAY 2021
SHEET NO: 3-2

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\DUPLANSET\3-2 SCENIC DRIVE PLAN & PROFILE STA. 12+50 TO STA. 17+00.dwg May 01, 2021 - 7:40pm Saved By: samj





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RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
05/01/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SCENIC DRIVE PLAN & PROFILE
STA. 17+00 TO STA. 21+50

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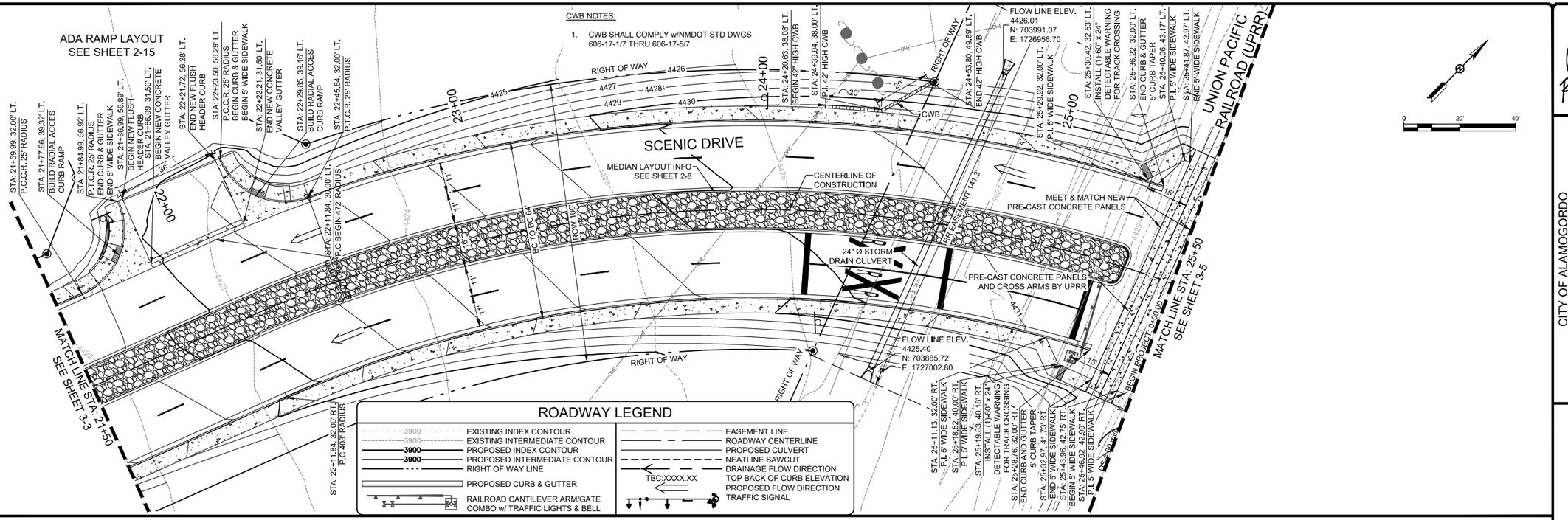
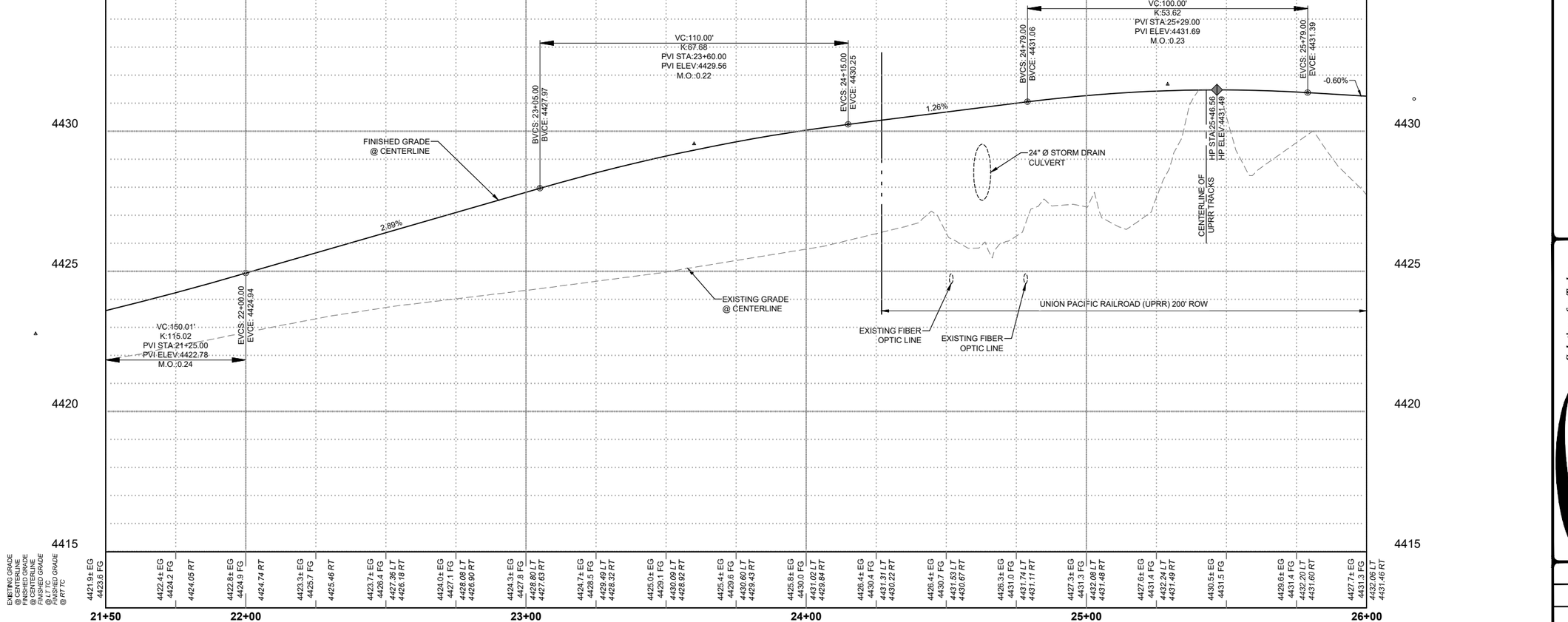
JOB NO: 816204
DATE: MAY 2021
SHEET NO: 3-3

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\PLANSET\3-3 SCENIC DRIVE PLAN & PROFILE STA. 17+00 TO STA. 21+50.dwg May 01, 2021 - 2:30pm Saved By: samj





RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
05/01/2021

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CITY OF ALAMOGORDO
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

SCENIC DRIVE PLAN & PROFILE
STA. 21+50 TO STA. 25+50

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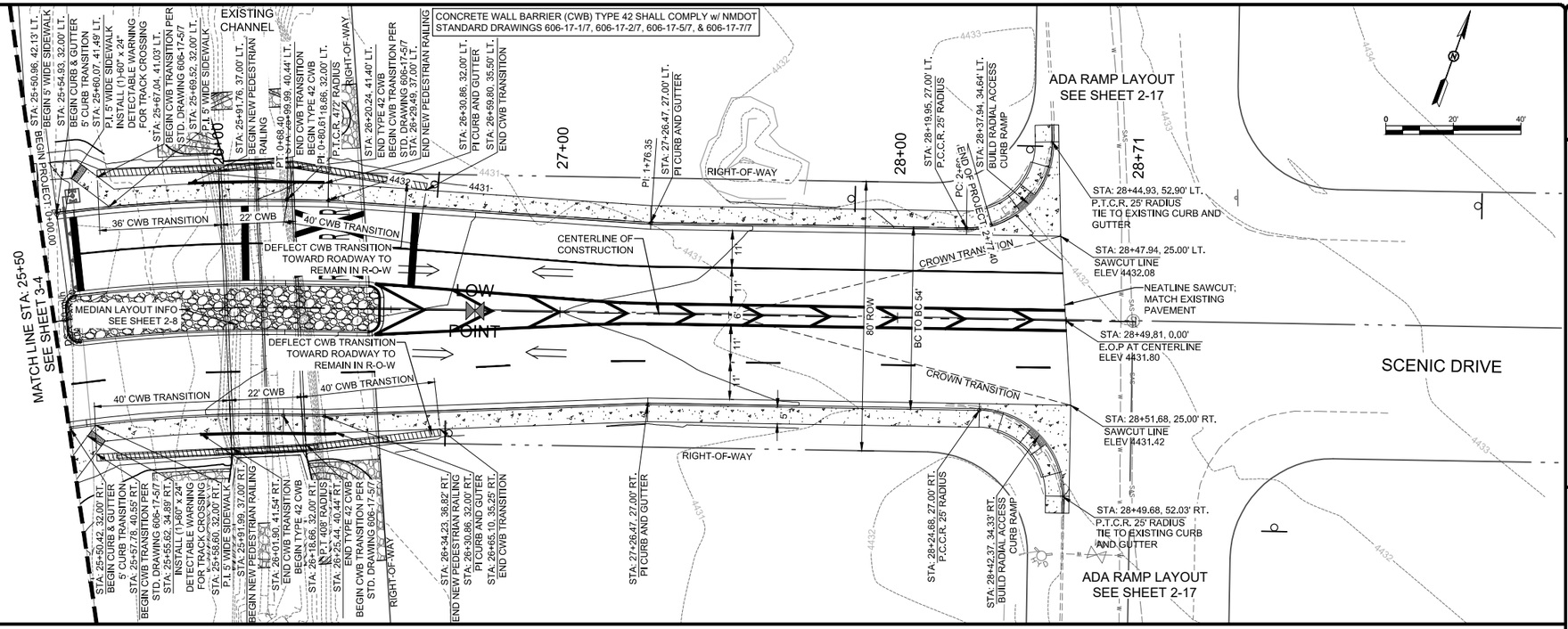
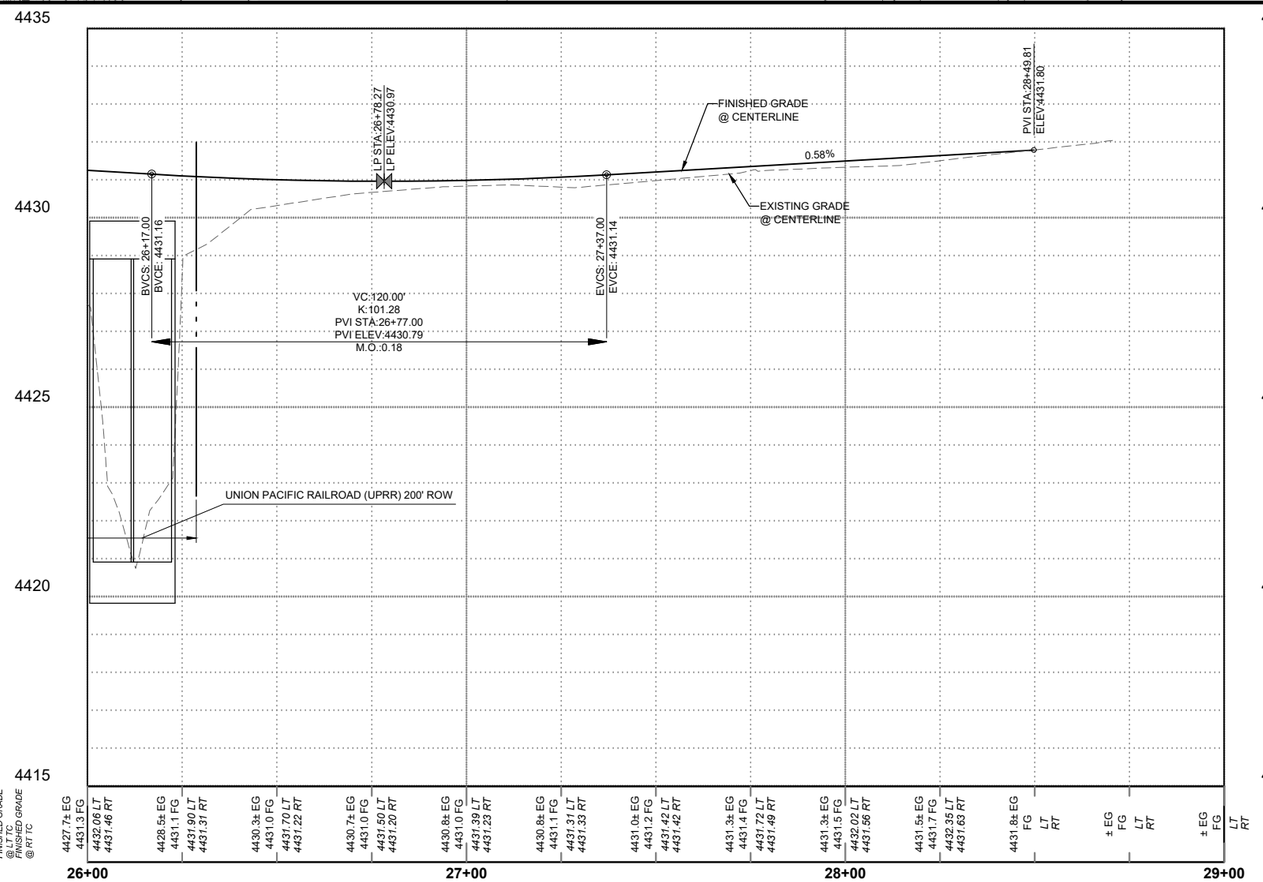
JOB NO: 816204
DATE: MAY 2021
SHEET NO: 3-4

L:\SEC--PROJECTS\81XX\204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\3-4 SCENIC DRIVE PLAN & PROFILE STA. 21+50 TO STA. 26+50.dwg May 01, 2021 - 7:37pm Saved By: manuelm



ROADWAY LEGEND

3900 EXISTING INDEX CONTOUR	EASEMENT LINE
3900 EXISTING INTERMEDIATE CONTOUR	ROADWAY CENTERLINE
3900 PROPOSED INDEX CONTOUR	PROPOSED CULVERT
3900 PROPOSED INTERMEDIATE CONTOUR	NEATLINE SAWCUT
RIGHT OF WAY LINE	DRAINAGE FLOW DIRECTION
PROPOSED CURB & GUTTER	TBC:XXXX.XX TOP BACK OF CURB ELEVATION
RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL	PROPOSED FLOW DIRECTION TRAFFIC SIGNAL



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05/01/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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SCENIC DRIVE EXTENSION TO MESA VERDE RANCH
SCENIC DRIVE PLAN & PROFILE
STA. 25+50 TO EOP

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JOB NO: 816204
DATE: MAY 2021
SHEET NO: 3-5

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\3-5 SCENIC DRIVE PLAN & PROFILE STA. 25+50 TO EOP.dwg, May 01, 2021 - 7:35pm, Saved By: rustyp

TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL PLANS AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATING, AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.
2. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION - SECTION 702 (LATEST EDITION) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) AND CURRENT REVISIONS.
3. ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE (TYPE III) ORANGE, UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE WHITE ON ORANGE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.
4. STEEL POSTS AND BASE POSTS FOR CONST. SIGNS: THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS - SN 75-1-1/2 & SN 75-1-2/2
5. TYPE III BARRICADE - 8.0 FT: ATTACHED TYPE "A" FLASHING BEACONS AND PLYWOOD SIGNS ARE TO BE INCIDENTAL TO BID PRICE.
6. FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"x18" MIN) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.
7. CHANNELIZATION DEVICE, TYPE-DRUM: SHALL BE EQUIPPED WITH BEACON ONLY ON CHANNELIZATION TAPERS, AS SPECIFIED IN THE STANDARD AND SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SECTION 702, LATEST EDITION.
8. THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE PROJECT MANAGER. SHOULD FIELD CONDITIONS WARRANT A CHANGE IN THE PLAN, THEY SHALL BE ISSUED IN WRITING TO THE CONTRACTOR AND SHALL BE CONSIDERED AN AMENDMENT TO THE PLANS AS OF THE DATE OF THE CHANGE.
9. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE PROJECT MANAGER FOR APPROVAL TWO WEEKS IN ADVANCE OF ANTICIPATED CHANGE.
10. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON-WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL AS DIRECTED BY THE PROJECT MANAGER.
11. ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.
12. WHEN DIRECTED, THE CONTRACTOR SHALL PLACE REFLECTIVE MARKINGS (ITEM 704000) ON EACH LIFT OF SURFACING (EXCEPT 5/8" OPEN GRADED FRICTION COURSE) AT THE END OF EACH DAYS OPERATION. THESE MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 2 ON THIS SHEET. IN THE EVENT THAT THE PAINTED MARKINGS CANNOT BE PLACED AS DESCRIBED ABOVE, THE CONTRACTOR SHALL WITH APPROVAL OF THE PROJECT MANAGER, PLACE NON-REMOVABLE MARKING TAPE (ITEM 704110) IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 1 ON THIS SHEET AND PAYMENT SHALL BE MADE USING THE UNIT PRICE OF REFLECTORIZED PAINTED MARKINGS - ITEM 704000
13. IN AREAS ADJACENT TO THE EXISTING TRAVEL LANE, THE CONTRACTOR SHALL ASSURE THAT NO PAVEMENT DROP-OFFS ARE LEFT EXPOSED DURING NON-WORKING HOURS. THE CONTRACTOR SHALL INITIATE CORRECTIVE MEANS PER THE "NMDOT PAVEMENT DROP-OFF GUIDELINE" TO ACHIEVE A MINIMUM 3:1 SLOPE. THIS WORK SHALL BE INCIDENTAL TO PAVEMENT OPERATIONS ADJACENT TO EXISTING TRAVELED LANES, SEE FIGURE 2.
14. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL DRIVEWAYS AND TURNOUTS AT ALL TIMES.
15. THE SEQUENTIAL ARROW SHALL BE PLACED AT OR NEAR THE BEGINNING OF THE LANE CLOSURE TAPER. IN AREAS OF INSUFFICIENT PAVEMENT WIDTH, THE SEQUENTIAL ARROW MAY BE PLACED WITHIN THE TAPER, BUT NOT TO EXCEED 1/2 THE TAPER LENGTH. IN ALL CASES, THE SEQUENTIAL ARROW SHALL BE PLACED BEHIND THE CHANNELIZATION DEVICES.
16. FLOODLIGHTS SHALL BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED. THIS SHALL BE CONSIDERED INCIDENTAL TO COMPLETION OF THE PROJECT AND THEREFORE NO PAYMENT WILL BE MADE.
17. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCED WARNING SIGNS.
18. AS PER SECTION 618 -- TRAFFIC CONTROL MANAGEMENT - OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION, THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DIARIES. THEY ARE TO BE OBTAINED FROM THE ASSOCIATED CONTRACTORS OF NEW MEXICO OFFICE.
19. TABS MAY BE USED IN LIEU OF PAINT FOR INTERIM STRIPING AND SHALL BE INCIDENTAL TO TRAFFIC CONTROL MANAGEMENT (WHITE TABS SHALL BE USED FOR LANE SEPARATION FOR TRAFFIC TRAVELING IN THE SAME DIRECTION AND YELLOW TABS SHALL BE USED TO SEPARATE OPPOSING DIRECTIONS OF TRAFFIC)
20. ALL CROSS OVERS SHALL BE MARKED WITH REMOVABLE MARKING TAPE AND RAISED PAVEMENT MARKERS.
21. THROUGHOUT THE LIFE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE LOCAL NEWS MEDIA, POLICE DEPARTMENT, FIRE DEPARTMENT, EMERGENCY SERVICES, PLANNING/ZONING PERMITTING, AND SCHOOL(S) INFORMED ON LANE CLOSURES AND CONSTRUCTION PHASES WHICH WILL RESTRICT THE NORMAL FLOW OF TRAFFIC THERE WILL BE NO DIRECT MEASUREMENT OR PAYMENT FOR THESE ADVISORIES.

CONSTRUCTION SIGNAGE

DESCRIPTION	SIGN DESIGNATION	LENGTH IN	WIDTH IN	AREA IN²	AREA FT²	# UNITS	TOTAL AREA FT²	PORTABLE SIGN SUPPORTS EACH	POST LENGTH LIN. FT.	TOTAL POSTS	BASE POSTS LENGTH LIN. FT.	TOTAL POST LENGTH LIN. FT.
LANE CLOSURE SIGNING/PEDESTRIAN CLOSURE												
SHOULDER WORK 1 1/2 MILE	W21-5-36-1 1/2	36	36	1,296	9.0	2	18.0		9	2	7.0	25.0
SHOULDER WORK 1 MILE	W21-5-36-1 1/2	36	36	1,296	9.0	2	18.0		9	2	7.0	25.0
SHOULDER WORK 1/2 MILE	W21-5-36-1/2	36	36	1,296	9.0	2	18.0		9	2	7.0	25.0
SPEED LIMIT SIGN	R2-1-24-45	30	24	720	5.0	1	5.0		9	1	3.5	12.5
ROAD WORK AHEAD	W20-1a-36	36	36	1,296	9.0	3	27.0		9	3	10.5	37.5
CENTER LANE CLOSED	W20-5	36	36	1,296	9.0	1	9.0		9	1	3.5	12.5
ROAD CLOSED	R11-2-48	48	30	1,440	10.0	3	30.0		0	0	0.0	0.0
END ROAD WORK	G20-2a-36	36	18	648	4.5	5	22.5		9	5	17.5	62.5
LEFT ARROW	W1-6-48L	48	24	1,152	8.0	1	8.0		0	0	0.0	0.0
RIGHT ARROW	W1-6-48R	48	24	1,152	8.0	1	8.0		0	0	0.0	0.0
NO LEFT TURN	R3-2	24	24	576	4.0	2	8.0		9	2	7.0	25.0
NO RIGHT TURN	R3-1	24	24	576	4.0	1	4.0		9	1	3.5	12.5
STOP SIGN	R1-1	30	30	900	6.3	2	12.5		9	2	7.0	25.0
LANE CLOSED SIGN	W20-5	48	48	2,304	16.0	1	16.0		0	0	0.0	0.0
SUBTOTAL:							**204.0**	**0.0**	**SUBTOTAL:**			**263**
						PROJECT USE:	**210**	**0**	**PROJECT USE:**			**270**

*FOR CONTRACTOR INFORMATION

CONSTRUCTION SIGNING SUMMARY OF QUANTITIES

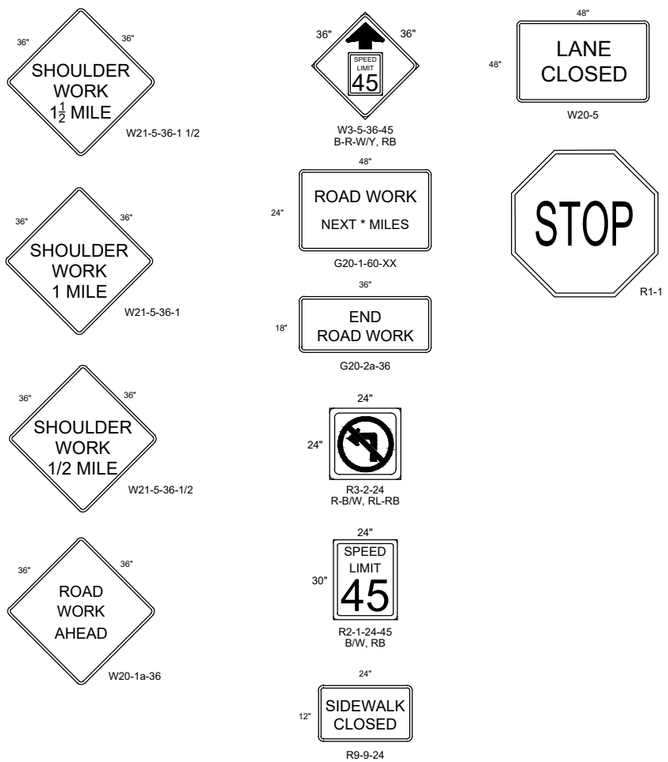
DESCRIPTION	ITEM NO.	UNIT	QUANTITY
CONSTRUCTION SIGNING	702000	SQ. FT.	210
STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	702100	LIN. FT.	270
PORTABLE SIGN SUPPORT	702110	EACH	5
BARRICADE, TYPE III-8'	702238	EACH	10
CHANNELIZATION DEVICES TYPE DRUM	702525	EACH	45
TRAFFIC CONTROL DEVICES FOR PEDESTRIANS AND BICYCLISTS	702811	L.S.	L.S.
ALL QUANTITIES ARE SHOWN FOR A SINGLE PHASE, AND ARE ONLY FOR CONTRACTORS INFORMATION			

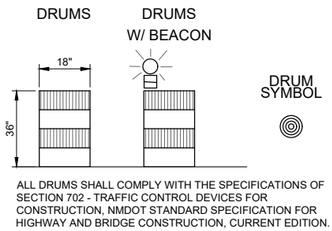
FIGURE 2

INTERIM STRIPING

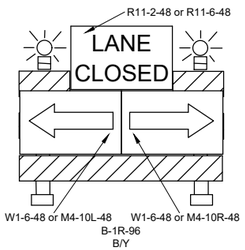
FIGURE 1

TRAFFIC CONTROL SIGN FACE DETAILS

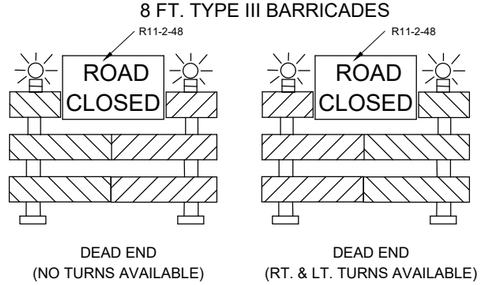




ALL DRUMS SHALL COMPLY WITH THE SPECIFICATIONS OF SECTION 702 - TRAFFIC CONTROL DEVICES FOR CONSTRUCTION, NMDOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.



8 FT. TYPE III BARRICADES



DEAD END (NO TURNS AVAILABLE)

DEAD END (RT. & LT. TURNS AVAILABLE)

BARRICADE SYMBOL

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

TRAFFIC CONTROL NOTES & DETAILS

Solutions for Today... Vision for Tomorrow
201 N Church Street
Suite 200A
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Phone: 575-523-2395
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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
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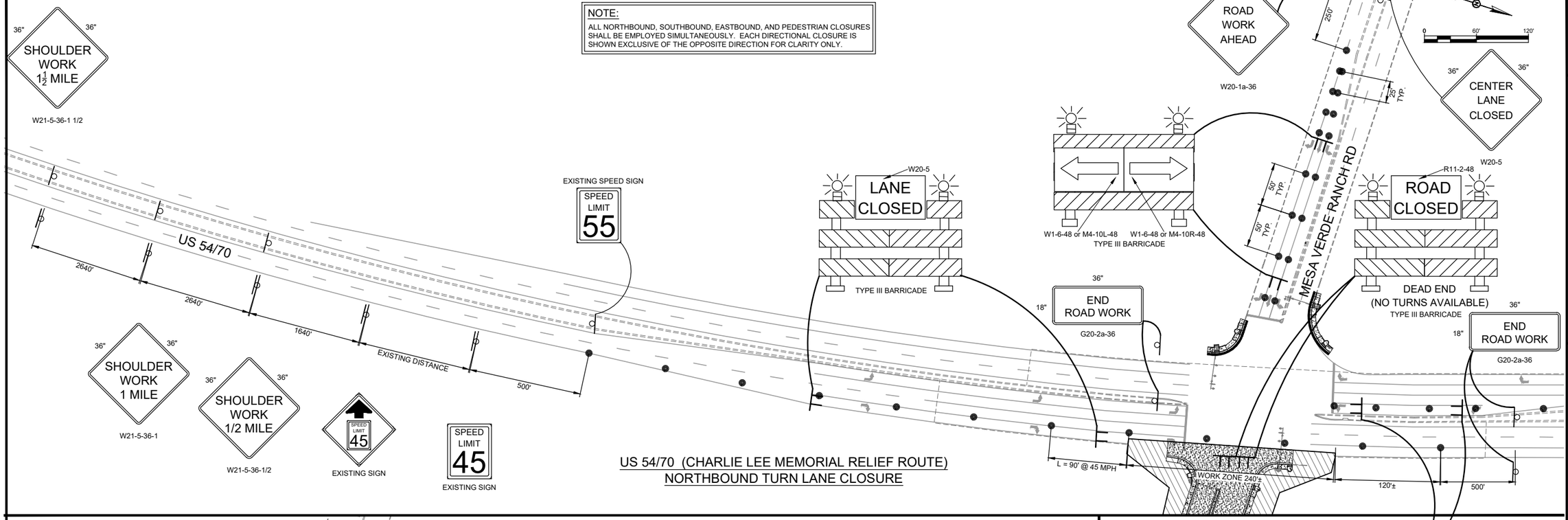
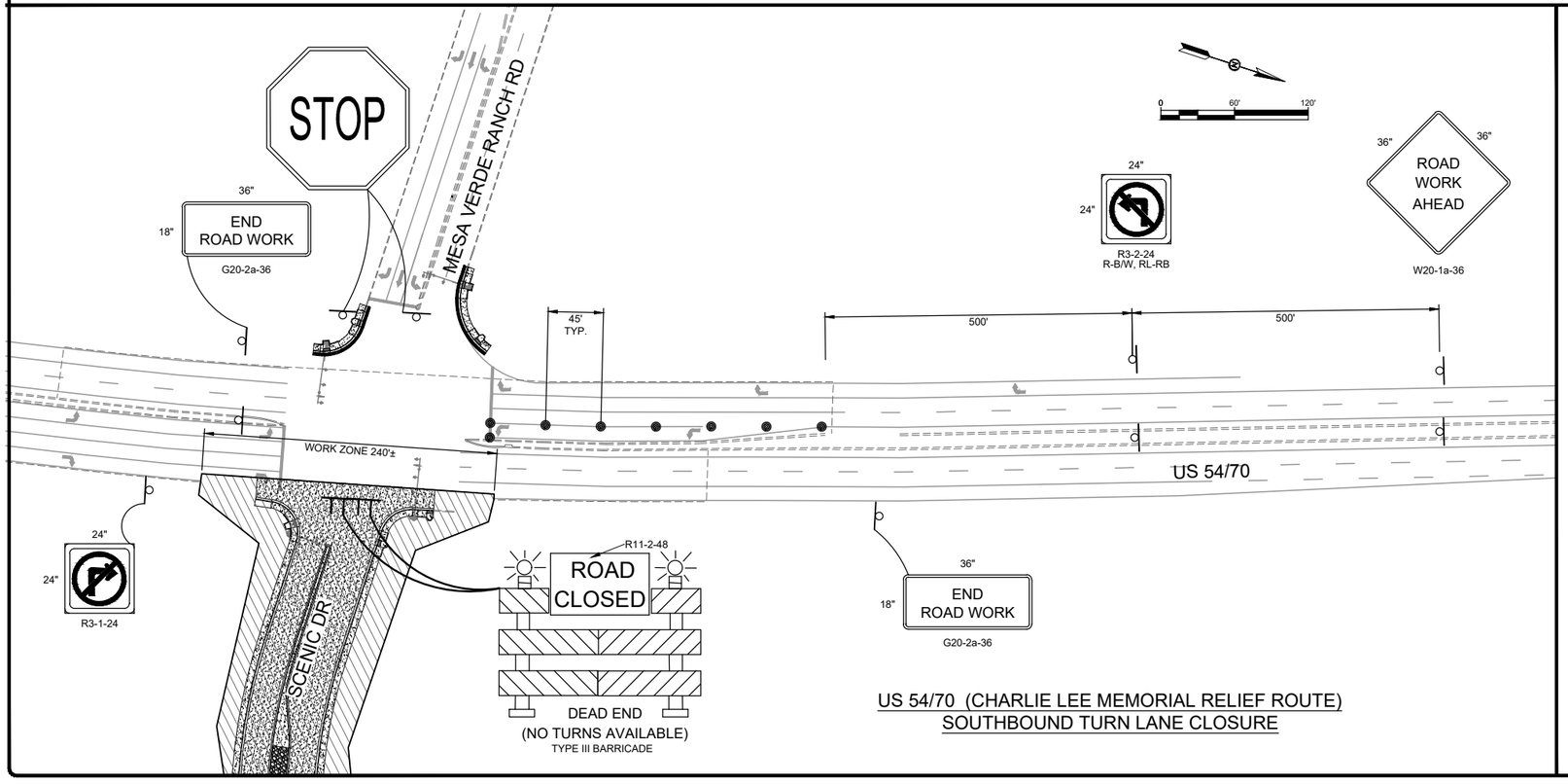
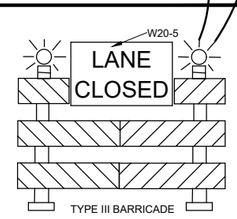
NOTE:
ALL NORTHBOUND, SOUTHBOUND, EASTBOUND, AND PEDESTRIAN CLOSURES SHALL BE EMPLOYED SIMULTANEOUSLY. EACH DIRECTIONAL CLOSURE IS SHOWN EXCLUSIVE OF THE OPPOSITE DIRECTION FOR CLARITY ONLY.



US 54/70 (CHARLIE LEE MEMORIAL RELIEF ROUTE)
NORTHBOUND TURN LANE CLOSURE



US 54/70 (CHARLIE LEE MEMORIAL RELIEF ROUTE)
SOUTHBOUND TURN LANE CLOSURE



RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

TRAFFIC CONTROL PLAN
US 70 RELIEF ROUTE

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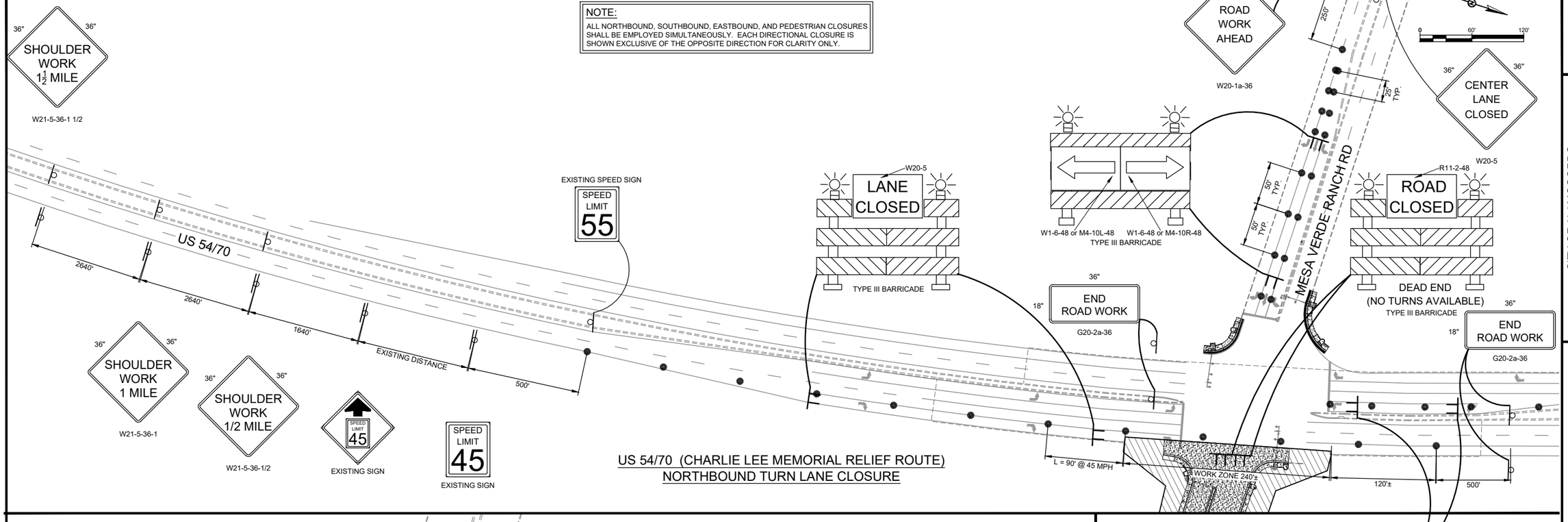
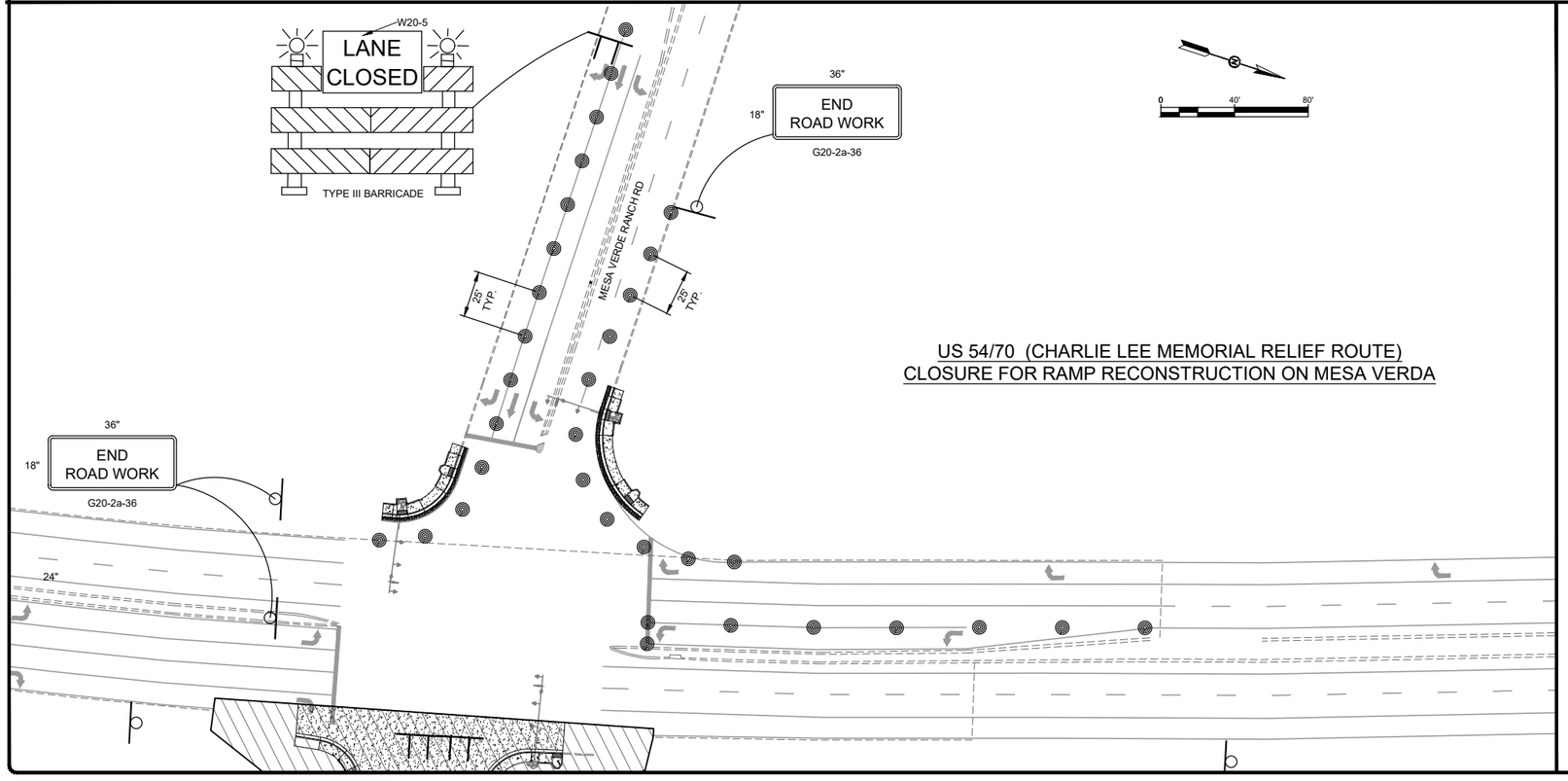
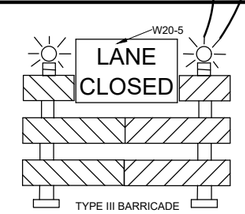


US 54/70 (CHARLIE LEE MEMORIAL RELIEF ROUTE)
NORTHBOUND TURN LANE CLOSURE



US 54/70 (CHARLIE LEE MEMORIAL RELIEF ROUTE)
CLOSURE FOR RAMP RECONSTRUCTION ON MESA VERDA



RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

TRAFFIC CONTROL PLAN
MESA VERDE RANCH ROAD

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R11-2-48
ROAD
CLOSED
DEAD END
(NO TURNS AVAILABLE)
B-1LR-96
B/Y

RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

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DATE:
APRIL 2021

SHEET NO:
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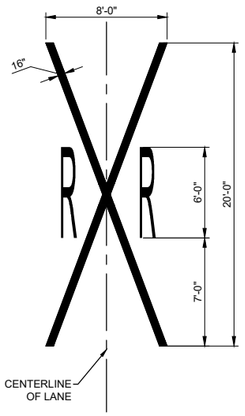
PERMANENT SIGNAGE & STRIPING NOTES

1. ALL REGULATORY, WARNING, SPECIAL, AND GUIDE SIGNS SHALL COMPLY WITH COLOR, LETTER SPACING, LETTER SHEETING AND BACKGROUND SHEETING REQUIREMENTS INDICATED ON THIS SHEET.
2. ALL NEW WARNING AND REGULATORY SIGNS SHALL BE 0.125 INCH THINK ALUMINUM PANEL.
3. ANTI-GRAFFITI COATING SHALL BE APPLIED ON ALL REGULATORY, WARNING, GUIDE, AND OTHER SPECIAL SIGNS.
4. QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR SHALL BE PAID FOR ACTUAL QUANTITIES INSTALLED.
5. EACH SIGN FACE SHOWN ON THE PLANS SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, SYMBOLS AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN PER PLANS.
6. POST LENGTHS ARE BASED ON A MINIMUM OF 5 FT FOR RURAL ROADWAY SECTIONS TO A MINIMUM OF 7 FT FOR URBAN AND INTERSTATE ROADWAY SECTIONS, THE LENGTHS ARE MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE DRIVING SURFACE.
7. THE TYPICAL LATERAL CLEARANCE OF SIGNS SHALL BE NO CLOSER THAN 6 FT FROM THE EDGE OF SHOULDER OR 12 FT FROM THE EDGE OF TRAVELED WAY FOR RURAL AREAS. IF SIGN LOCATION DOES NOT MEET THESE REQUIREMENTS THAN AS DIRECTED BY NMDOT PROJECT MANAGER.
8. ALL SIGNING HARDWARE, INCLUDING BRACKETS (FOR MOUNTING ALL STREET NAME SIGNS, W1-8-18 BACK-TO-BACK MOUNTING, ETC.) ARE CONSIDERED INCIDENTAL TO SIGN INSTALLATION. NO ADDITIONAL PAYMENT SHALL BE MADE THEREFORE.
9. THREE 4 LBS/FT SIGN POSTS INSTALLATION APPROVED ONLY IF THE SPAN BETWEEN THE OUTER POSTS EXCEEDS 84" (SIGN WIDTH OF 96" OR GREATER).
10. SIGN POSTS SHALL BE SQUARE TUBING AS APPROVED BY THE PROJECT MANAGER.
11. CONTRACTOR SHALL FIELD VERIFY ALL SIGNING INFORMATION, TEXT AND LOCATIONS PRIOR TO FABRICATION AND INSTALLATION. NEW SIGN LOCATIONS SHALL BE APPROVED BY THE PROJECT MANAGER.
12. PAVEMENT STRIPING SHALL BE THREE (3) APPLICATIONS OF "HIGH DURABLE", RETROREFLECTORIZED PAINT APPLIED AT A MINIMUM RATE OF 24.14 TO 27.42 GALLONS PER MILE OF 4" SOLID LINE. SECOND APPLICATION SHALL BE APPLIED A MINIMUM OF 14 DAYS AFTER THE FIRST APPLICATION. GLASS BEADS SHALL BE APPLIED AT A MINIMUM RATE OF 6 LBS PER GALLON OF PAINT. PAVEMENT STRIPING SHALL BE DONE AT ONE TIME FOR THE ENTIRE PROJECT.



PERMANENT SIGN FACE DETAILS

ALL REGULATORY, WARNING, SPECIAL, AND GUIDE SIGNS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:				
SIGN	SIGN CODE	COLOR	LETTER SHEETING	BACKGROUND SHEETING
STOP	R1-1	(W/RED)	TYPE VII OR IX	TYPE VII OR IX
ALL OTHER WARNING SIGNS & SUPPLEMENTAL PLAQUES	-	(BLK/FLUORESCENT YELLOW)WHEREVER BLK/YELLOW IS SPECIFIED AS COLOR IN MUTCD	TYPE VII OR IX	TYPE VII OR IX
GUIDE & DESTINATION SIGNS	ALL	(W/GREEN) EXCEPT WHERE SPECIFIED IN THE MUTCD	TYPE VII OR IX	TYPE IV
RECREATIONAL & CULTURAL INTEREST	ALL	(W/BROWN)	TYPE VII OR IX	TYPE IV
ALL OTHER PERMANENT SIGNS	-	(BLK/WHITE) EXCEPT WHERE SPECIFIED OTHERWISE IN THE MUTCD	TYPE IV	TYPE IV

PERMANENT SIGNING SUMMARY OF QUANTITIES

SHEET	LENGTH OF SIGN IN.	WIDTH OF SIGN IN.	SIGN CODE	NO. OF SIGNS	701000	702100								702100	
					TOTAL SIGN AREA SQ. FT.	POST LENGTH LIN. FT.								BASE POST	
						LEFT	CENTER	RIGHT	TOTAL	1-3/4 x 1-3/4	2 x 2	2-1/4 x 2-1/4	2-3/16 x 2-3/16	2-1/2 x 2-1/2	NO.	TOTAL LENGTH
7-2	30	24	R2-5b-30	1	5.00		10.0		10.0	X					1	3.0
7-2	36	36	W3-3-36	1	9.00		10.5		10.5		X				1	3.0
7-2	18	24	W1-8L	26	78.00		6.5		169.0		X				26	78.0
7-3	36	36	R1-1-36	3	27.00		10.5		31.5		X				3	9.0
7-3	30	24	R2-5b-30	1	5.00		10.0		10.0	X					1	3.0
7-3	18	24	W1-8L	23	69.00		6.5		149.5		X				23	69.0
7-3	36 DIA		W10-1-36	1	7.07		10.5		10.5		X				1	3.0
7-4	36 DIA		W10-1-36	1	7.07		10.5		10.5		X				1	3.0
7-4	36	36	W6-1-36	1	9.00		10.5		10.5		X				1	3.0
7-4	36	36	W6-2-36	1	9.00		10.5		10.5		X				1	3.0
7-4	36	36	R1-1-36	2	18.00		10.5		21.0		X				2	6.0
7-4	36	36	W3-5	1	9.00	-	10.5	-	10.5		X				1	3.0
					252.14	PROJECT TOTAL:			443.5	PROJECT TOTAL:						186.0
					253	**PROJECT USE:**			**450**	**PROJECT USE:**						**190**

PERMANENT SIGNING & STRIPING SUMMARY

BID ITEM NO.	DESCRIPTION	UNITS	PROJECT TOTAL
701000	PANEL SIGNS	SQ. FT.	253
701100	STEEL POSTS AND BASE POSTS FOR ALUMINUM PANEL SIGNS	LIN. FT.	640
704700	HOT THERMOPLASTIC PAVEMENT MARKINGS 4"	LIN. FT.	1,600
704702	HOT THERMOPLASTIC PAVEMENT MARKINGS 8"	LIN. FT.	590
704704	HOT THERMOPLASTIC PAVEMENT MARKINGS 24"	LIN. FT.	500
704715	HOT THERMOPLASTIC PAVEMENT MARKING COMBINATION (THRU AND RIGHT) ARROW	EACH	3
704718	HOT THERMOPLASTIC PAVEMENT MARKING LEFT ARROW	EACH	6
704719	HOT THERMOPLASTIC PAVEMENT MARKING THRU ARROW	EACH	3
704740	HOT THERMOPLASTIC PAVEMENT MARKING RAILROAD CROSSING	EACH	4

*FOR CONTRACTOR INFORMATION

HOT THERMOPLASTIC PAVEMENT MARKINGS (SCENIC DRIVE)

STATION	OFFSET	TO	STATION	OFFSET	704700	704700	704702
					HOT THERMOPLASTIC PAVEMENT MARKINGS (4 IN. SOLID)	HOT THERMOPLASTIC PAVEMENT MARKINGS (4 IN. BROKEN)	HOT THERMOPLASTIC PAVEMENT MARKING (8 IN. SOLID)
					WHITE	WHITE	YELLOW
10+99.56	19.00 LT	-	12+72.46	19.00 LT	169.43	-	-
12+72.46	19.00 LT	-	19+04.63	19.00 LT	-	611.95	-
19+67.14	19.00 LT	-	25+32.71	19.00 LT	-	579.42	-
25+59.12	19.00 LT	-	28+48.76	14.00 LT	292.35	-	-
10+99.40	8.00 LT	-	11+89.12	8.00 LT	89.72	-	-
19+67.12	8.00 LT	-	20+87.82	8.00 LT	120.70	-	-
26+45.32	7.54 LT	-	28+49.58	3.00 LT	-	-	204.40
17+90.94	8.00 RT	-	19+04.63	8.00 RT	113.69	-	-
26+45.32	7.54 RT	-	28+50.03	3.00 RT	-	-	204.85
10+99.29	19.00 RT	-	19+04.63	19.00 RT	-	829.15	-
19+67.08	19.00 RT	-	24+16.77	19.00 RT	-	440.85	-
24+16.50	19.00 RT	-	25+21.29	19.00 RT	100.26	-	-
25+52.72	19.00 RT	-	28+50.86	14.00 RT	-	295.42	-
26+45.32	7.54 LT	-	26+45.32	7.54 RT	-	-	32.71
26+68.05	6.12 LT	-	26+68.05	6.12 RT	-	-	26.54
26+90.79	4.70 LT	-	26+90.79	4.70 RT	-	-	20.37
27+13.46	3.31 LT	-	27+13.46	3.31 RT	-	-	14.36
27+34.05	3.00 LT	-	27+34.05	3.00 RT	-	-	13.02
27+54.05	3.00 LT	-	27+54.05	3.00 RT	-	-	13.02
27+74.05	3.00 LT	-	27+74.05	3.00 RT	-	-	13.02
27+94.05	3.00 LT	-	27+94.05	3.00 RT	-	-	13.02
28+14.05	3.00 LT	-	28+14.05	3.00 RT	-	-	13.02
28+34.05	3.00 LT	-	28+34.05	3.00 RT	-	-	13.02
PROJECT TOTAL:					886.15	699.20	581.35
PROJECT USE:					900.00	700.00	590.00
COMBINED PROJECT USE:					**1,600**		**590**

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
Rusty W. Payne
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

PERMANENT SIGNAGE & STRIPING
NOTES AND DETAILS

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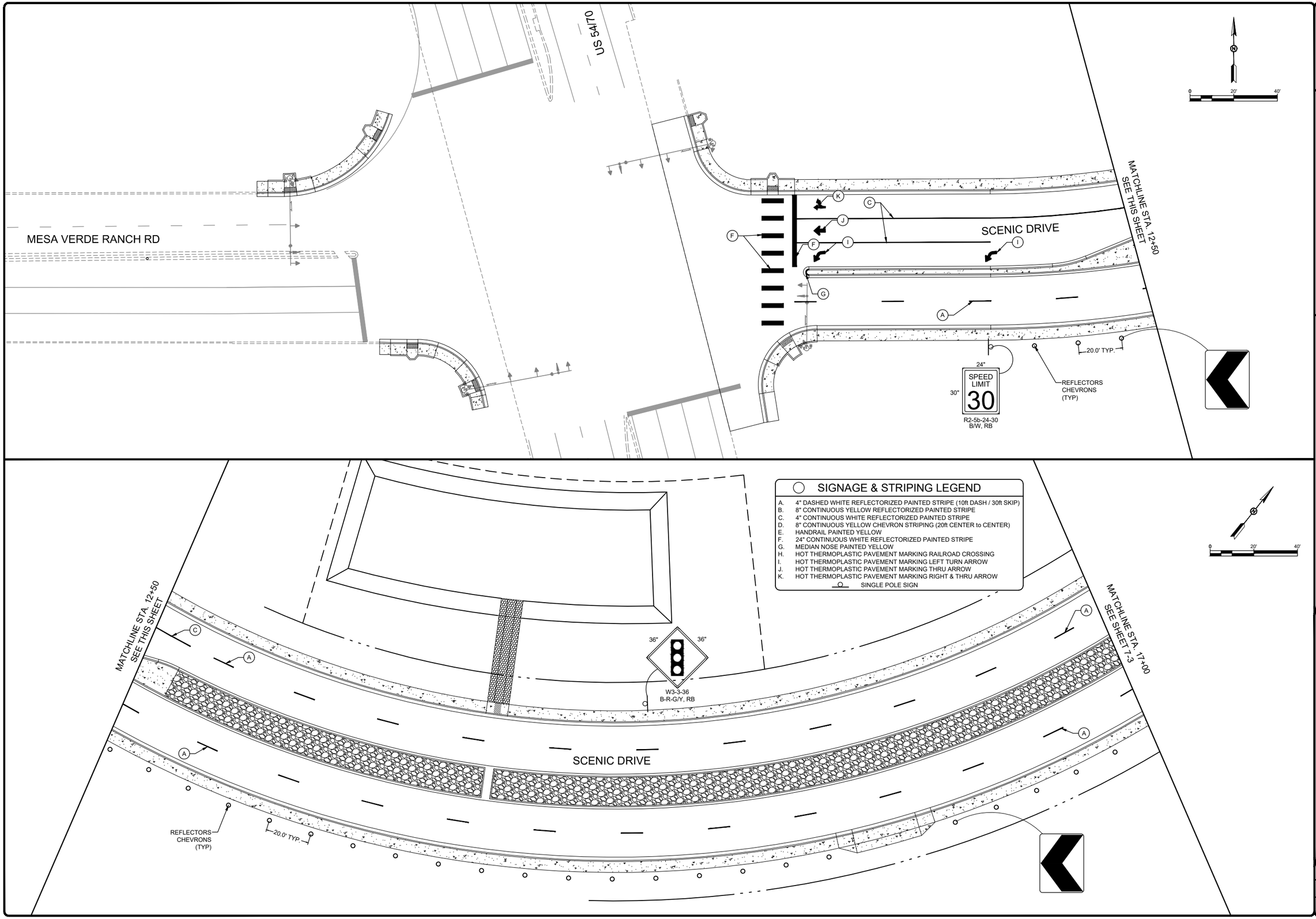

RUSTY W. PAYNE
NEW MEXICO
23586
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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OTERO COUNTY, NEW MEXICO

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PERMANENT SIGNING
& STRIPING PLAN

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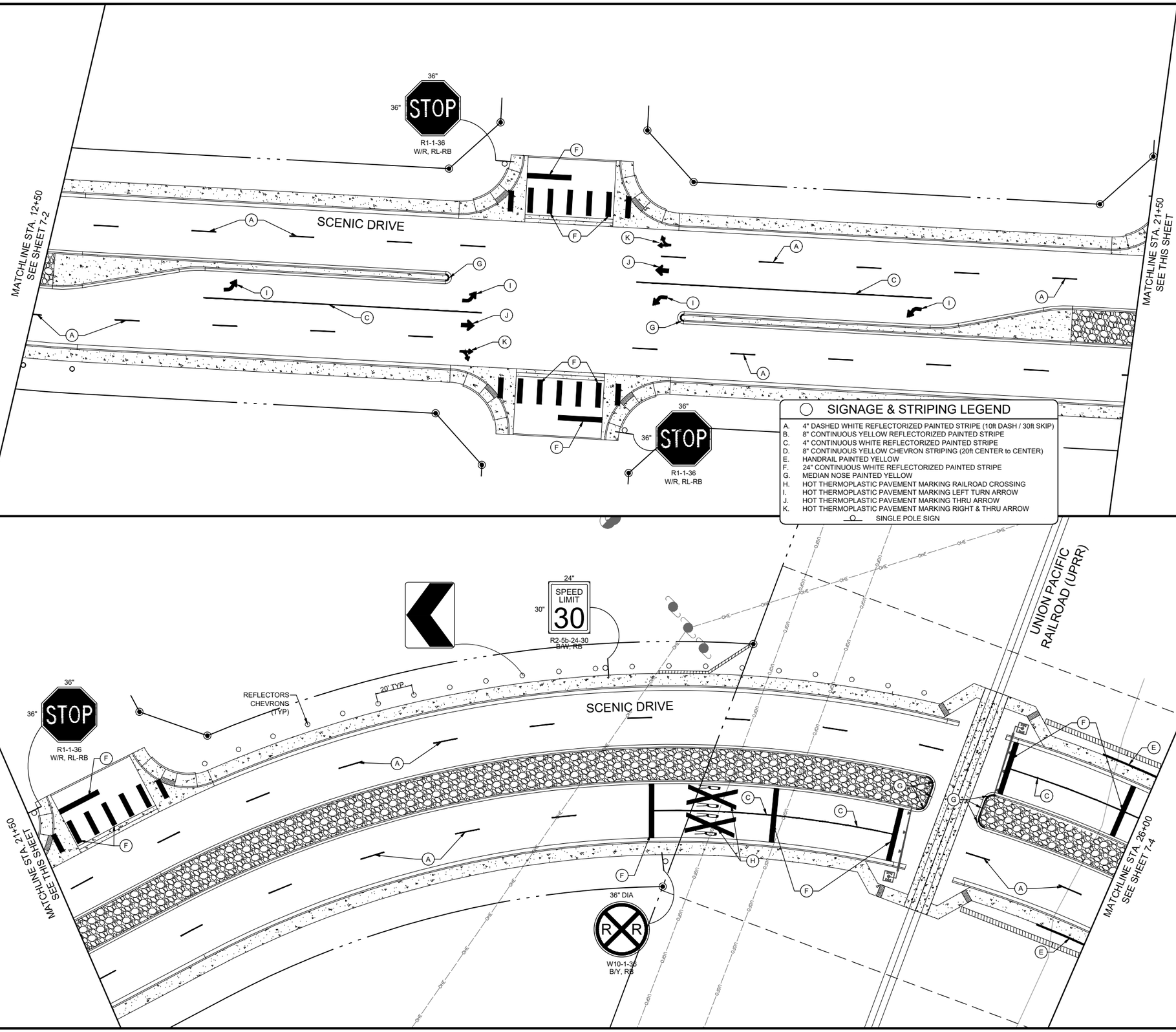

RUSTY W. PAYNE
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04/27/2021

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DATE:
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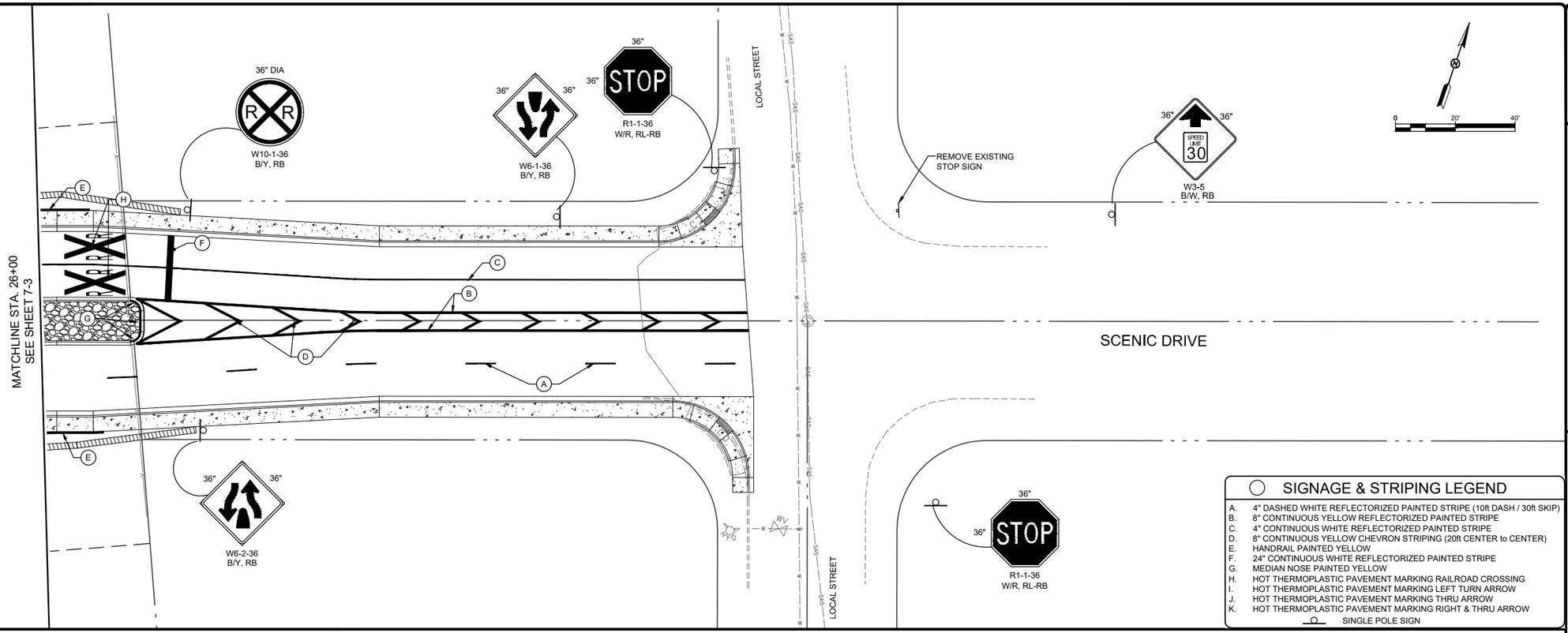
SHEET NO:
7-3

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CAD\PLANSET\7-3 PERMANENT SIGNAGE & STRIPING PLAN.dwg Apr 27, 2021 - 8:43am Saved By: rustyp



SIGNAGE & STRIPING LEGEND

- A. 4" DASHED WHITE REFLECTORIZED PAINTED STRIPE (10ft DASH / 30ft SKIP)
- B. 8" CONTINUOUS YELLOW REFLECTORIZED PAINTED STRIPE
- C. 4" CONTINUOUS WHITE REFLECTORIZED PAINTED STRIPE
- D. 8" CONTINUOUS YELLOW CHEVRON STRIPING (20ft CENTER to CENTER)
- E. HANDRAIL PAINTED YELLOW
- F. 24" CONTINUOUS WHITE REFLECTORIZED PAINTED STRIPE
- G. MEDIAN NOSE PAINTED YELLOW
- H. HOT THERMOPLASTIC PAVEMENT MARKING RAILROAD CROSSING
- I. HOT THERMOPLASTIC PAVEMENT MARKING LEFT TURN ARROW
- J. HOT THERMOPLASTIC PAVEMENT MARKING THRU ARROW
- K. HOT THERMOPLASTIC PAVEMENT MARKING RIGHT & THRU ARROW
- SINGLE POLE SIGN

RUSTY W. PAYNE
NEW MEXICO
23566
REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO.	DESCRIPTION	DATE	BY
1			
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JOB NO:
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APRIL 2021

SHEET NO:
7-4

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\7-4 PERMANENT SIGNAGE & STRIPING PLAN.dwg, Apr 27, 2021 - 8:44am Saved By: rustyp

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	ITEM
		SERVICE POLE
M	M	METER PEDESTAL
CC	CC	CONTROLLER CABINET
PP1	PP1	TRAFFIC SIGNAL PEDESTAL POLE
		LARGE PULL BOX (POWER)
PB	PB	STANDARD PULL BOX
1B	1	CONDUIT RUN (SIGNAL)
S1	S1	CONDUIT RUN (POWER SERVICE)
1C	L1	CONDUIT RUN (LIGHTING)
1A	V1	CONDUIT RUN (VIDEO)
		TYPE III STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE AND VIDEO CAMERA
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		LUMINAIRE
		VIDEO CAMERA
		LIGHTING PULL BOX (LARGE)
		EXISTING POWER POLE
		EXISTING SIGN ON POLE
		TRAFFIC SIGNAL PULL BOX (LARGE)
		ILLUMINATED STREET SIGN
		EXISTING STREET LIGHT
MA1		SIGNAL & CABINET ID

TRAFFIC SIGNAL NOTES

1. THE LOCATIONS OF CONDUITS, PULL BOXES AND MANHOLES ARE FROM RECORD DRAWINGS (SEE SHEET 9-4). THE ACTUAL FIELD LOCATION SHALL BE DETERMINED BY THE PROJECT MANAGER (NANCY BESHALER 575-439-4230) TO MAXIMIZE THE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE TYPE II STANDARDS ARE SHOWN WITH C.L. STATIONS AND OFFSETS. LOCATIONS WERE DETERMINED BY UTILIZING A WB-40 WHEEL PATH TEMPLATE. AS STATED ABOVE, THE PROJECT MANAGER (NANCY BESHALER 575-439-4230) MAY ADJUST THE LOCATION OF THE POLES, IF NECESSARY TO MAXIMIZE HANDICAP ACCESSIBILITY. THE CONTRACTOR SHALL MEET WITH THE PROJECT MANAGER (NANCY BESHALER 575-439-4230) IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
2. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
3. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND DRIVEWAYS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED; THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER (NANCY BESHALER 575-439-4230). THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR WORK WITHIN NMDOT AND CITY RIGHT-OF-WAYS
4. MASTARMS SHALL BE PLACED 90° TO THE CENTERLINE UNLESS OTHERWISE NOTED.
5. THE EXISTING CONTROLLER TO REMAIN.
6. ALL SPLICES FOR TRAFFIC SIGNAL MULTI-CONDUCTOR CABLE SHALL BE MADE ABOVE GROUND (IN CABINET OR STANDARD BASE). NO SPLICING OF MCC WILL BE PERMITTED IN PULL BOXES.
7. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BLOCKS. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED BETWEEN THE MASTARM BASE AND THE CONTROLLER CABINET.
8. SIGNAL HEADS SHALL BE COVERED WHEN NECESSARY WITH KIDS CUSTOM COVERS SIGNAL COVERS OR APPROVED EQUAL.
9. ALL WIRE ON THIS PROJECT TO BE COPPER.
10. DURING CONSTRUCTION, MAINTAIN A TWO STOP FOR THE EAST AND WEST BOUNDS, NORTH AND SOUTH BOUND TO REMAIN OPEN WITH NO STOP SIGNS.
11. ACCEPTABLE TYPE I, TYPE II, AND TYPE III STANDARDS SHALL COMPLY WITH THE NMDOT APPROVED PRODUCTS LIST (APL).
12. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
13. THE CONTRACTOR SHALL NOTIFY THE NMDOT SIGNAL LAB FIVE (5) WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON THE SIGNALS, LIGHTING, AND POWER SERVICES CONTRACTOR SHALL ALSO NOTIFY THE LOCAL POWER COMPANY - PNM (575) 882-3663 FOR ASSISTANCE IN POWER SHUTOFF AND RECONNECTIONS AS WELL AS WHEN WORKING NEAR OVERHEAD TRANSMISSION LINES.
14. THE CONTRACTOR SHALL NOTIFY THE LOCAL POWER COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE INTERRUPTIONS.
15. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES. THE REQUIREMENTS FOR SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRICAL CODE.
16. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
17. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM RECORD DRAWING (SEE SHEET 9-4) OR FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
18. IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACK FILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACK FILL. ALL TRENCHES WITHIN THE ROADWAY PRISM SHALL BE BACK FILLED WITH LEAN FILL.
19. CONTRACTOR SHALL CONTACT THE NMDOT TRAFFIC SIGNAL SHOP FOR APPROVED LISTING FOR TRAFFIC SIGNAL COMPONENTS.
20. THE CONTRACTOR SHALL FURNISH FOUNDATION ELEVATIONS TO THE PROJECT MANAGER FOR APPROVAL BEFORE INSTALLATION. THE CONTRACTOR SHALL GRADE AROUND THE FOUNDATIONS TO PROVIDE TRAVERSABLE SLOPES AS DIRECTED BY THE PROJECT MANAGER. ALL EXCAVATION AND/OR EMBANKMENT REQUIRED WILL BE CONSIDERED INCIDENTAL.
21. SIGNALS NEAR EXISTING OVERHEAD POWER LINES MUST MAINTAIN A VERTICAL CLEARANCE AND/OR A HORIZONTAL CLEARANCE FROM THE CLOSEST PHASE CONDUCTOR. THE LOCAL POWER COMPANY WILL ASSIST IN MEASUREMENT AND DETERMINATION OF CLEARANCE.
22. ALL CONDUIT INSTALLED IN A TRENCH SHALL BE FLAGGED WITH CAUTION TAPE 12" ABOVE CONDUIT.
23. SIGNAL MASTARMS, CAMERAS, AND SIGNAL HEADS REMOVED DURING CONSTRUCTION SHALL BE SALVAGED AND RETURNED TO THE CITY OF ALAMOGORDO PUBLIC WORKS YARD AT 2600 N. FLORIDA AVENUE.
24. REMOVE EXISTING LUMINARIES AND REPLACE WITH 3 - NEW 315 WATTS LED LUMINARIES WITH FULL CUT OFF FIXTURE WITH FLAT GLASS.
25. DISCONNECT INTERNALLY ILLUMINATED SIGN AND REPLACE WITH NEW INTERNALLY ILLUMINATED SIGNS AND USE SAME CONDUCTORS PROVIDED FOR THIS PROJECT ON ALL MASTARMS

INCIDENTAL ITEMS*

1. REMOVAL OF EXISTING PULL BOXES, CONDUITS, LIGHT BASES OR OTHER EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENT.
2. CABLE TESTING AND DIAGRAMS.
3. BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVE PADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, CURB & GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS), FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.
4. LOCATIONS OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
5. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.
6. COORDINATION OF PUBLIC SERVICE ANNOUNCEMENTS WITH PROJECT MANAGER.
7. EQUIPMENT MANUFACTURER'S ASSISTANCE TO INSTALL, SET UP, PROGRAM, TURN ON, FIELD TEST, AND PROVIDE TRAINING FOR VIDEO CAMERA PROGRAMING.
8. ANCHOR BOLTS FOR FOUNDATIONS.
9. GROUND RODS FOR FOUNDATIONS.
10. PULL STRINGS FOR EMPTY CONDUITS.

ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY OR MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS (STANDARD DRAWINGS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS.

TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

1. THE NMDOT AND CITY OF ALAMOGORDO MUST BE PRESENT AT THE TIME OF SETTING UP, TESTING AND PROGRAMMING OF ALL SIGNALS.
2. ALL SIGNAL ASSEMBLIES, PEDESTRIAN SIGNALS, PEDESTRIAN PUSH BUTTONS, AND FITTINGS SHALL COMPLY WITH THE NMDOT TYPE.
3. ALL NEW SIGNAL HEADS SHALL BE "LED'S", LED'S SHALL BE GEL TYPE "DIAL-LITE" OR AS APPROVED BY THE NMDOT.

ABBREVIATIONS

MA1	MASTARM NUMBER	OHE	OVERHEAD ELECTRIC LINES
PP1	PEDESTAL POLE NUMBER	OHP	OVERHEAD PHONE LINES
PPB1	PEDESTRIAN PUSH BUTTON NUMBER	SAS	SANITARY SEWER LINE
CC1	CONTROL BOX	G	GAS LINE
PB1	PULL BOX NUMBER (SIGNALS)	R/W	RIGHT OF WAY / PROPERTY LINE
PBS1	PULL BOX NUMBER (POWER)	GM	GAS METER
3M1	SIGNAL HEAD NUMBER	S	POST AND SIGN
P1	PEDESTRIAN SIGNAL NUMBER	P	COMMUNICATION PEDESTAL
BP	BACK PLATE	WM	WATER METER

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
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SIGNALIZATION
GENERAL NOTES

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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 9-1

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TRAFFIC SIGNAL SUMMARY OF QUANTITIES:

TRAFFIC SIGNAL QUANTITIES (ESTIMATED)

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY SCENIC DR/US 54	PROJECT TOTAL	**PROJECT USE**	REMARKS
502036	DRILLED SHAFT FOUNDATION 36" DIAMETER	LIN. FT.	16	16	**16**	** SEE NOTE BELOW
511000	STRUCTURAL CONCRETE, CLASS A	C.Y.	1.04	1.04	**2**	PP5 & PP6 FOUNDATION
540060	REINFORCING BARS GRADE 60	LBS.	813	813	**820**	MA2, PP5, & PP6 FOUNDATIONS
707013	TYPE I STANDARD, 13'	EACH	2	2	2	NEW PP5 & PP6
707335	TYPE III STANDARD, 35' ARM	EACH	1	1	**1**	NEW MA2
709020	RIGID ELECTRICAL CONDUIT 2" (DIA.)	LIN. FT.	400	400	**400**	---
709030	RIGID ELECTRICAL CONDUIT 3" (DIA.)	LIN. FT.	524	524	**530**	---
710000	ELECTRICAL PULL BOX (STANDARD	EACH	2	2	**2**	LIGHTING PULL BOXES
710010	ELECTRICAL PULL BOX (LARGE)	EACH	5	5	**5**	SIGNAL/VIDEO PULL BOXES
711005	MULTI CONDUCTOR CABLE 5	LIN. FT.	110	110	**110**	---
711007	MULTI CONDUCTOR CABLE 7	LIN. FT.	1,204	1,204	**1,210**	---
711020	MULTI CONDUCTOR CABLE 20	LIN. FT.	460	460	**460**	---
711106	SINGLE CONDUCTOR 6	LIN. FT.	1,450	1,450	**1,450**	---
712031	3 SECTION TRAFFIC SIGNAL ASSEMBLY (LED)	EACH	3	3	**3**	2M2, 2M4, & 6M1
712051	5 SECTION TRAFFIC SIGNAL ASSEMBLY (LED)	EACH	5	5	**5**	2M1, 2M3, 3M4, 4M1A, & 5M1
712330	3 SECTION BACKPLATE	EACH	3	3	**3**	2M2, 2M4, & 6M1
712350	5 SECTION BACKPLATE	EACH	5	5	**5**	2M1, 2M3, 3M4, 4M1A, & 5M1
712202	PEDESTRIAN COUNTDOWN SIGNAL (LED)	EACH	2	2	**2**	P6 & P7 ON MA2
713025	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON STATION	EA	2	2	**2**	PPB6 & PPB7 ON MA2
713511	OPTICAL DETECTOR , 1 DIRECTION, 1 CHANNEL	EA	1	1	**1**	OPT EB ON MA2
713600	OPTICAL DETECTOR CABLE	LIN. FT.	285	285	**290**	---
713807	VIDEO CABLE	LIN. FT.	285	285	**290**	---
713810	VIDEO CAMERA	EA	1	1	**1**	CAM 2 ON MA2
716301	INTERNALLY ILLUMINATED SIGN	EACH	4	4	**4**	REPLACE EXISTING SIGNS ON MASTARMS MA1, MA3, & MA4 NEW INSTALLATION ON MA2
716302	LUMINAIRES	EACH	3	3	**3**	REPLACE EXISTING LUMINAIRES ON LUMINAIRE ARMS MA1, MA3, & MA4 MASTARM MA2 LUMINAIRE PAID UNDER ITEM NO. 707335

**NOTE: REFERENCE IS MADE TO ITEM NO. 502036-DRILLED SHAFT FOUNDATION 36" (DIA.). THE PAYMENT FOR STRUCTURAL CONCRETE, CLASS "G", ANCHOR BOLTS AND ASSOCIATED HARDWARE SHALL BE CONSIDERED INCLUDED TO THIS ITEM.

MASTARMS, CABLE, AND CONDUIT SCHEDULES:

CONDUIT AND CONDUCTOR REQUIREMENTS

CONDUIT FILL BY CONDUCTOR LENGTH AND TYPE

ITEM NO.	SIZE/LENGTH		REMARKS	711005	711007	711020	711106	713600	713807
RUN ID	2"	3"		MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC 6 (# @ FT)	OPTICAL DETECTOR CABLE (# @ FT)	VIDEO CABLE (# @ FT)
1	-	30	CC TO PB1		4 @ 35	2 @ 35	2 @ 35		
2	-	30	CC TO PB1					1 @ 35	1 @ 35
3	-	155	PB1 TO PB2		4 @ 160	2 @ 160	2 @ 160		
4	-	155	PB1 TO PB2					1 @ 160	1 @ 160
5	-	30	PB2 TO MA2		4 @ 35	2 @ 35	2 @ 35		
6	-	30	PB2 TO MA2					1 @ 35	1 @ 35
7	-	15	MA2 TO PB3		2 @ 20				
8	-	31	PB3 TO PB4		2 @ 36				
9	-	3	PB4 TO PP5		1 @ 8				
10	-	42	PB4 TO PB5		1 @ 47				
11	-	3	PB5 TO PP6		1 @ 8				
1L	210	-	METER TO LPB1				2 @ 215		
2L	160	-	LPB1 TO LPB2				2 @ 165		
3L	30	-	LPB2 TO MA2				2 @ 35		
MA2	-	-	BASE TO 2M1		1 @ 65				
MA2	-	-	BASE TO 2M2	1 @ 50					
MA2	-	-	BASE TO 2M3		1 @ 15				
MA2	-	-	BASE TO 2M4	1 @ 15					
MA2	-	-	BASE TO PPB6		1 @ 7				
MA2	-	-	BASE TO P6	1 @ 15					
MA2	-	-	BASE TO PPB7		1 @ 7				
MA2	-	-	BASE TO P7	1 @ 15					
MA2	-	-	BASE TO OPT EB					1 @ 55	
MA2	-	-	BASE TO LUM 2				2 @ 50		
MA2	-	-	BASE TO SIGN 2				2 @ 30		
MA2	-	-	BASE TO CAM 2						1 @ 55
PP5	-	-	BASE TO 5M1		1 @ 15				
PP6	-	-	BASE TO 6M1	1 @15					
TOTALS	**400**	**524**	---	**110**	**1,204**	**460**	**1,450**	**285**	**285**

*** FOR CONTRACTORS INFORMATION ONLY ***

SIGNAL POLES & MASTARMS

ID #	TYPE	STATION	OFFSET	LUMINAIRE MOUNTING HEIGHT	LUMINAIRE ARM
MA1	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
MA2	MASTARM-35' TYPE III	10+99.34	42.54' RT	40'	20'
MA3	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
MA4	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
PP1	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
PP2	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
PP3	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
PP4	EXISTING TO REMAIN IN PLACE, RECONSTRUCT RAMPS AROUND FOUNDATION				
PP5	TYPE I STANDARD, 13'	11+06.95	5.50' RT	N/A	N/A
PP6	TYPE I STANDARD, 13'	11+06.95	38.00' LT	N/A	N/A

OPTICAL DETECTOR CABLE

FROM	TO	CONDUIT TRACE	TOTAL LENGTH
CC	MA2	2, 4, 6	230

VIDEO CABLE

FROM	TO	CONDUIT TRACE	TOTAL LENGTH
CC	MA2	2, 4, 6	230

SIGNAL CABLE

FROM	TO	CONDUIT TRACE	TOTAL LENGTH
CC	MA2	1, 3, 5	230
CC	PP5	1, 3, 5, 7, 8, 9	264
CC	PP6	1, 3, 5, 7, 8, 10, 11	309

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

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TRAFFIC SIGNAL QUANITITES AND CABLE & CONDUIT SCHEDULE

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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 9-2

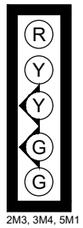
TYPICAL SIGNAL HEAD LENS ARRANGEMENT (NEW LED LIGHTS)

3 SECTION BACK PLATE

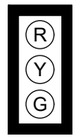
2M2 (LED)

5 SECTION BACK PLATE

2M1, 4M1A (LED)



2M3, 3M4, 5M1 (LED)

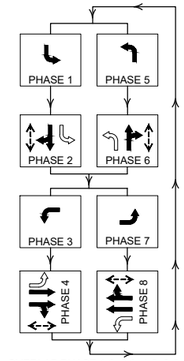


2M4 & 6M1 (LED)

PEDESTRIAN SIGNAL

P6 & P7

SIGNAL PHASING DIAGRAM

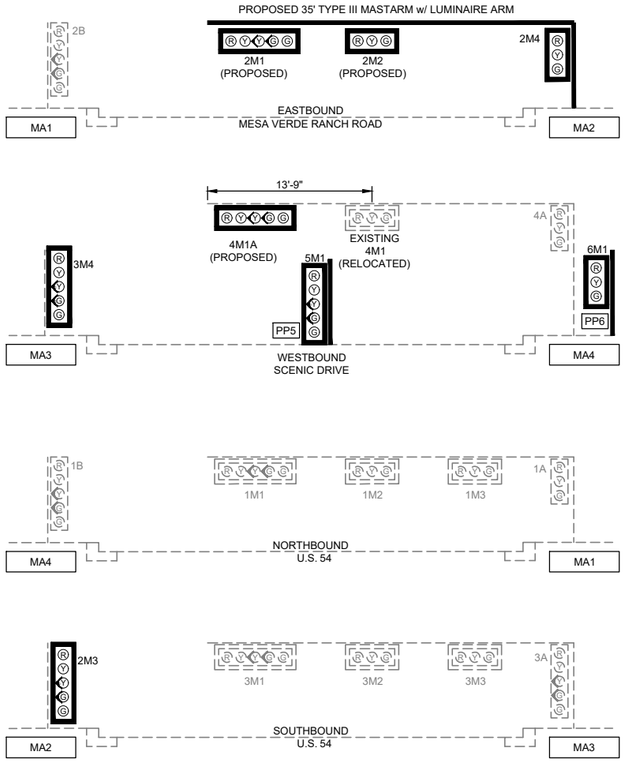


OVERLAP PHASE 1-8, 2-3, 4-5, & 5-6

PHASING DIAGRAM & SEQUENCE LEGEND

- PERMISSIVE TURNING MOVEMENT
- PROTECTED TURNING MOVEMENT
- PEDESTRIAN MOVEMENT

TRAFFIC SIGNAL CONFIGURATION BY APPROACH



TRAFFIC SIGNAL EQUIPMENT & WORK

MA1: REMOVE EXISTING LUMINAIRE AND STREET NAME SIGN. ADD NEW ILLUMINATED STREET NAME SIGN AND NEW LED LUMINAIRE.

MA2: INSTALL NEW 35' MASTARM w/ SIGNAL HEADS 2M1, 2M2, 2M3, & 2M4. INSTALL NEW PEDESTRIAN SIGNAL P6 & P7. INSTALL NEW PEDESTRIAN PUSH BUTTON STATION PPB6 & PPB7. INSTALL NEW OPTICAL DETECTOR AND NEW VIDEO CAMERA. INSTALL NEW ILLUMINATED STREET NAME SIGN AND LED LUMINAIRE.

MA3: REMOVE EXISTING 4B AND ADD NEW 3M4. REMOVE EXISTING LUMINAIRE AND STREET NAME SIGN. ADD NEW ILLUMINATED STREET NAME SIGN AND NEW LED LUMINAIRE.

MA4: ADD NEW 4M1A (LED) AND RELOCATE EXISTING 4M1. REMOVE EXISTING LUMINAIRE AND STREET NAME SIGN. ADD NEW ILLUMINATED STREET NAME SIGN AND NEW LED LUMINAIRE.

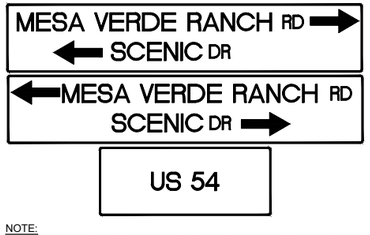
PP5: ADD NEW TYPE I STANDARD, 13' WITH NEW 5M1. NEAR SIDE SIGNAL SHALL BE SYNCHRONIZED WITH PHASES 3 AND 8.

PP6: ADD NEW TYPE I STANDARD, 13' WITH NEW 6M1. NEAR SIDE SIGNAL SHALL BE SYNCHRONIZED WITH PHASE 8.

ADD NEW LED ILLUMINATED SIGN

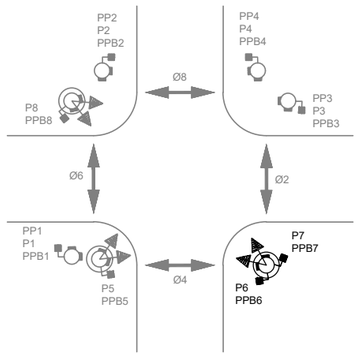
ADD NEW LED LUMINAIRES

ILLUMINATED STREET NAME SIGN LEGEND



NOTE:
1. SCENIC DR, MESA VERDE RANCH SIGNS TO BE PLACED ON THE SOUTH AND NORTH TRAFFIC SIGNALS
2. US 54 SIGNS TO BE REPLACED ON THE EAST AND WEST TRAFFIC SIGNALS.

PEDESTRIAN SIGNAL & PUSHBUTTON IDENTIFICATION



SIGNALIZATION LEGEND

MA1	SIGNAL & CABINET ID		STREET SIGN
PP1	PEDESTRIAN POLE 1		LUMINAIRE
1V	CONDUIT RUN (VIDEO)		VIDEO CAMERA
1S	CONDUIT RUN (SIGNAL)		OPTICAL DETECTOR
1P	CONDUIT RUN (POWER)	CC	CONTROL BOX
1L	CONDUIT RUN (LUMINAIRE)		TYPE III STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACKPLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
	EXISTING TRAFFIC MANHOLE		
PB	STANDARD PULL BOX		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
	EXISTING PULL BOX		
	STANDARD PULL BOX (LIGHTING)		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
	LARGE PULL BOX (SIGNAL/VIDEO)		
M	METER PEDESTAL		TYPE I STANDARD w/ TRAFFIC SIGNAL & BACKPLATE
LC	LIGHTING CONTROLLER		

ABBREVIATIONS

MA1	MASTARM NUMBER	LM1	LUMINAIRE NUMBER
PP1	PEDESTAL POLE NUMBER	S1	STREET SIGN NUMBER
PPB1	PEDESTRIAN PUSH BUTTON NUMBER	C1	CAMERA NUMBER
CC1	CONTROL BOX	OHE	OVERHEAD ELECTRIC LINES
PB1	PULL BOX NUMBER (SIGNALS/VIDEO)	OHP	OVERHEAD PHONE LINES
LPB1	PULL BOX NUMBER (LIGHT)	SAS	SANITARY SEWER LINE
3M1	SIGNAL HEAD NUMBER	G	GAS LINE
P1	PEDESTRIAN SIGNAL NUMBER	GM	GAS METER
BP	BACKPLATE	S	POST AND SIGN
R/W	RIGHT OF WAY / PROPERTY LINE	P	COMMUNICATION PEDESTAL
WM	WATER METER		

INITIALIZATION

THE SIGNALS WILL REMAIN IN OPERATIONAL WHILE THE IMPROVEMENTS ARE INSTALLED.

NOTE:
1. REFERENCE NMDOT STANDARD SERIALS FOR DRILLED SHAFT FOUNDATIONS, MASTARM DETAILS/DIMENSIONS, LUMINAIRE EXTENSION ARMS, AND OTHER MASTARM APPURTENANCES.

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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

TRAFFIC SIGNAL
DESIGN LAYOUT

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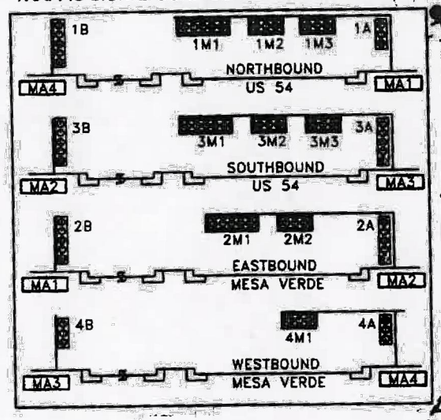
L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\9-3 SIGNAL DESIGN LAYOUT.dwg Apr 27, 2021 - 8:43am Saved By: rustyp

TRAFFIC SIGNAL CONFIGURATION BY APPROACH



TYPICAL SIGNAL FACE LENS ARRANGEMENTS

NOTE:
THE EXISTING CONDUITS SHALL BE INTERCEPTED AT EACH CORNER. PB1 TO PB7 AND 1 MANHOLE SHALL BE INSTALLED. PB1 TO PB7 ARE LARGE PULL BOXES.

NEW MEXICO PROJECT NO.	SHEET NO.
HSIP-054-4(216)6 SP-GA-7635(221)	9-10

SIGNAL PHASING

SIGNAL POLES AND MASTARMS

ID #	TYPE	STATION	OFFSET	LUMINAIRE MOUNTING HEIGHT	LUMINAIRE ARM
MA 1	MASTARM-50' TYPE III	57+51.13	47.66' LT.	40'	20'
MA 2	MASTARM-30' TYPE III	57+90.53	44.12' RT.	40'	20'
MA 3	MASTARM - 50' TYPE III	56+45.72	55.59' RT.	40'	20'
MA 4	MASTARM - 40' TYPE III	55+89.55	44.95' LT.	40'	20'

ABBREVIATIONS

MA1	MASTARM NUMBER
PP1	PEDESTAL POLE NUMBER
PPB1	PEDESTRIAN PUSH BUTTON NUMBER
CC1	CONTROL CABINET NUMBER
SC1	SPLICE CABINET NUMBER
PB1	PULL BOX NUMBER (SIGNALS)
PBS1	PULL BOX NUMBER (POWER)
3A	SIGNAL HEAD NUMBER
P1	PEDESTRAIN SIGNAL NUMBER
MH1	TRAFFIC MANHOLE NUMBER

MAX SIGNAL & CABINET ID
X CONDUIT RUN ID (SIGNALS)
SX CONDUIT RUN ID (POWER SERVICE)
CX CONDUIT RUN ID (INTERCONNECT)
FX CONDUIT RUN ID (FLASHER)

AS-BUILT RECORD FOR CONTRACTOR INFORMATION ONLY

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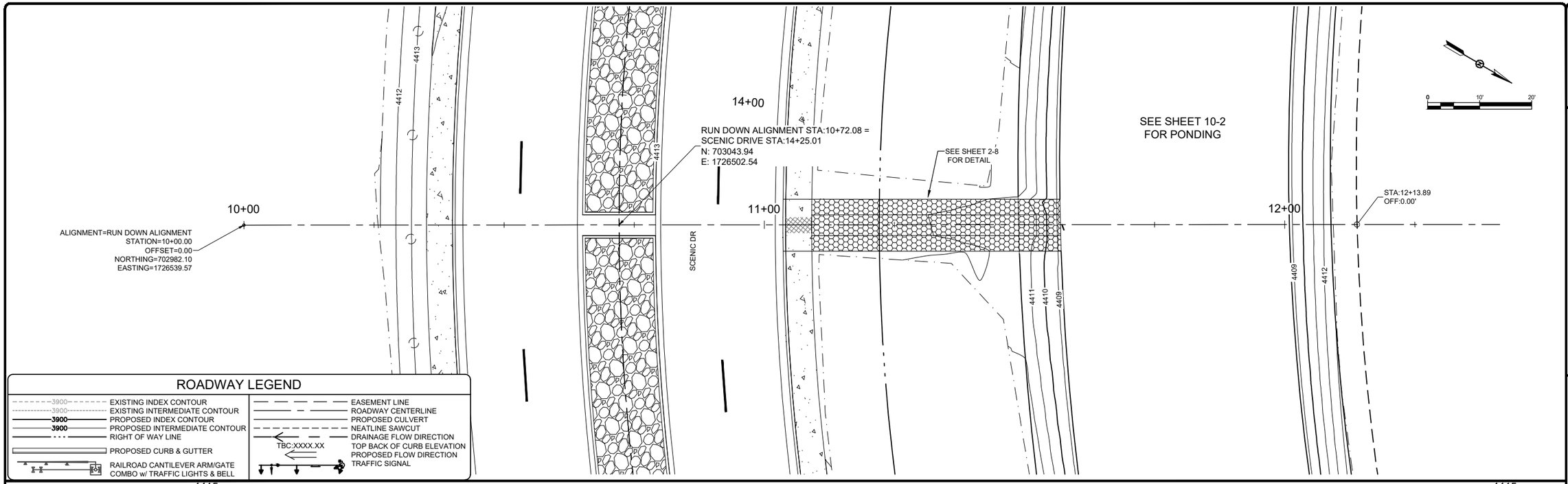
REVISIONS (OR CHANGE NOTICES)

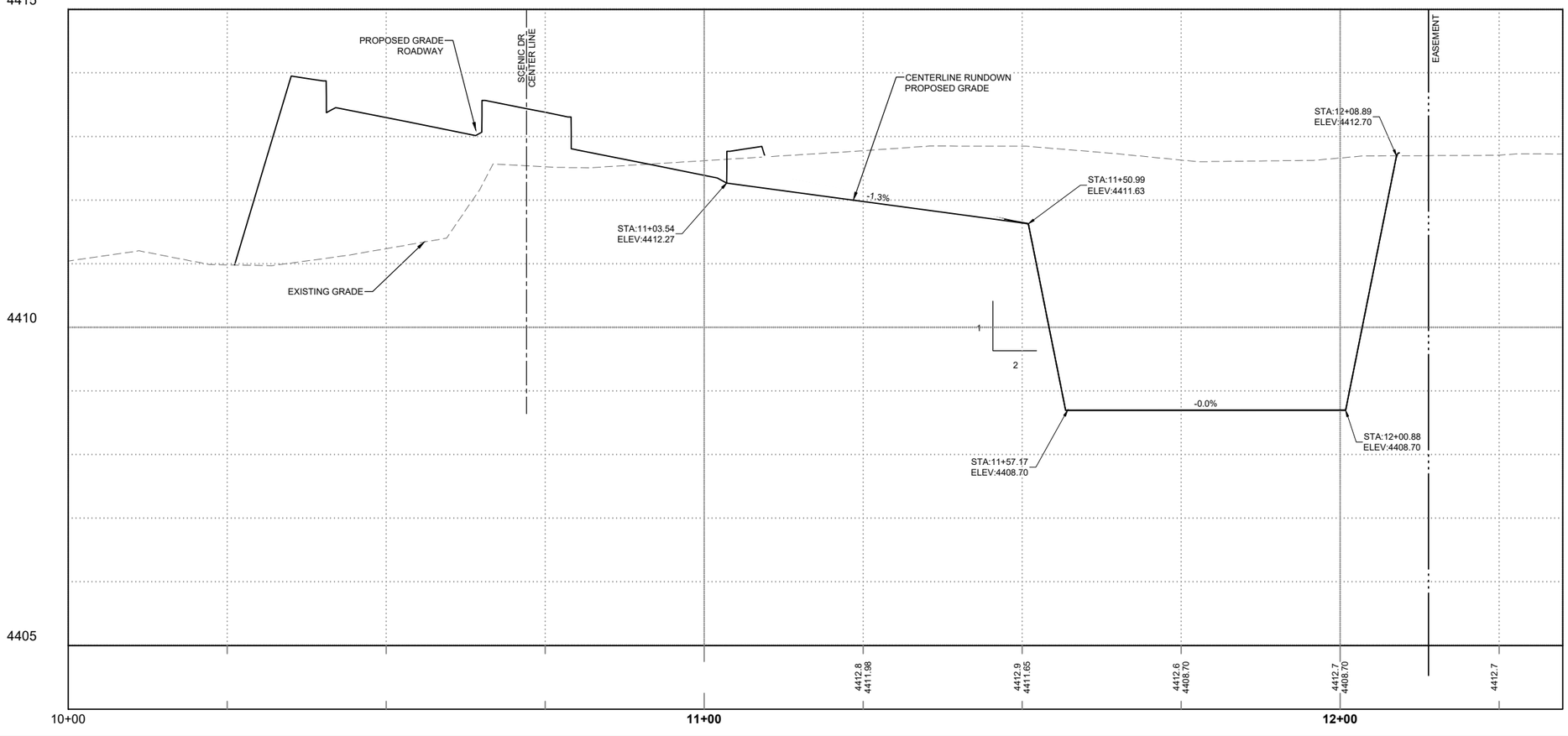
NEW MEXICO DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
US 54 / MESA VERDE

PROJECTS\OTERO_US54&10thSTREET\Design\Signals_Lighting\CN 7G809 SIGNAL PLAN.dgn

N.M. PROJECT NO. HSIP-054-4(216)6 & SP-GA-7635(221) SHEET 9-10





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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

STORM DRAIN RUNDOWN
PLAN & PROFILE

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DATE: MAY 2021
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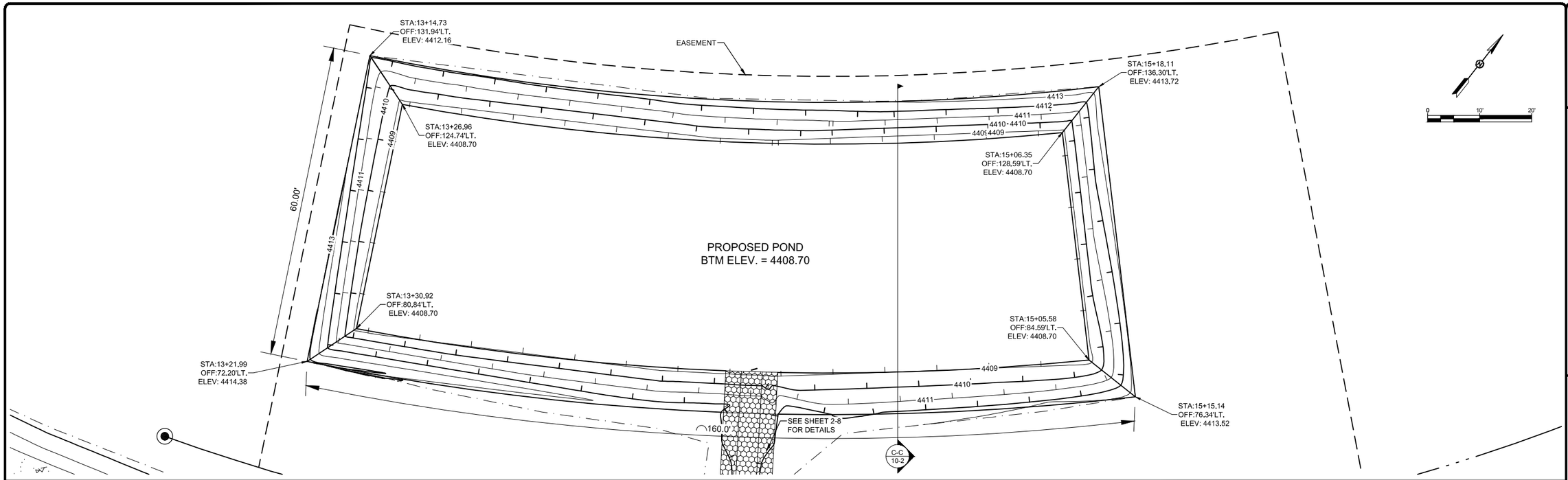
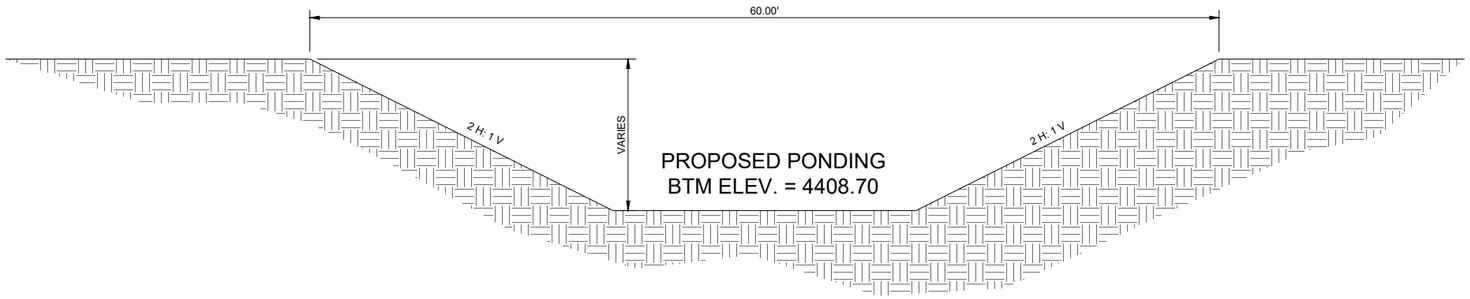


ROADWAY LEGEND

3900 EXISTING INDEX CONTOUR	EASEMENT LINE
3900 EXISTING INTERMEDIATE CONTOUR	ROADWAY CENTERLINE
3900 PROPOSED INDEX CONTOUR	PROPOSED CULVERT
3900 PROPOSED INTERMEDIATE CONTOUR	NEATLINE SAWCUT
RIGHT OF WAY LINE	DRAINAGE FLOW DIRECTION
PROPOSED CURB & GUTTER	TBC:XXXX.XX TOP BACK OF CURB ELEVATION PROPOSED FLOW DIRECTION
RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL	TRAFFIC SIGNAL



C-C / 10-2 POND CROSS SECTION
NOT TO SCALE

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POND

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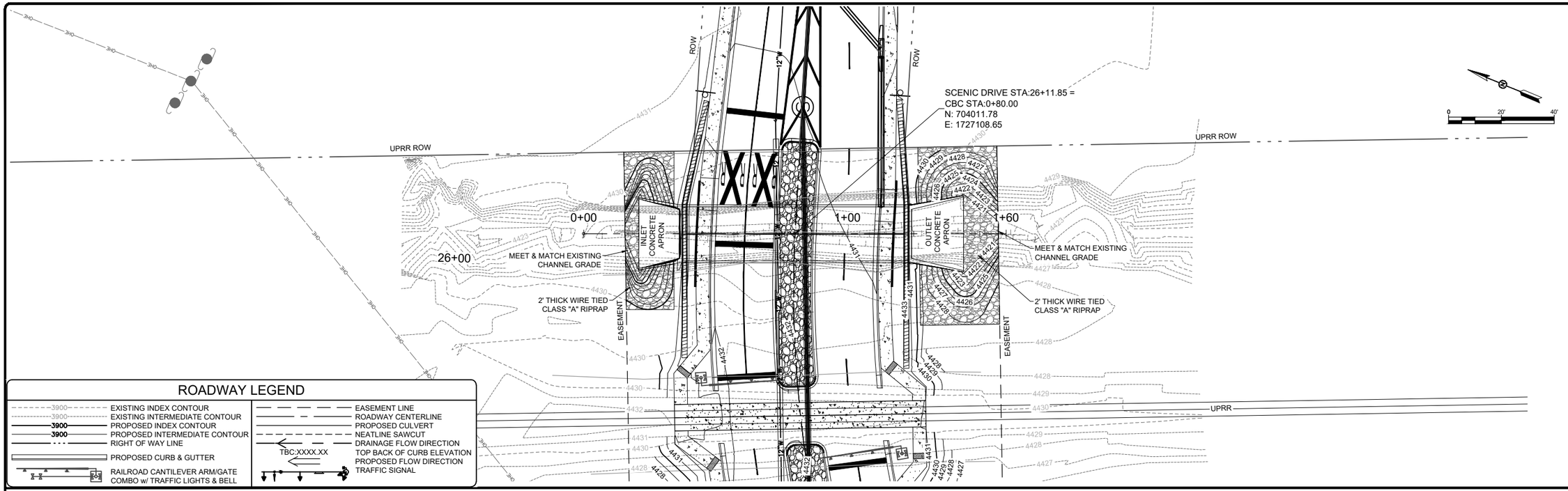
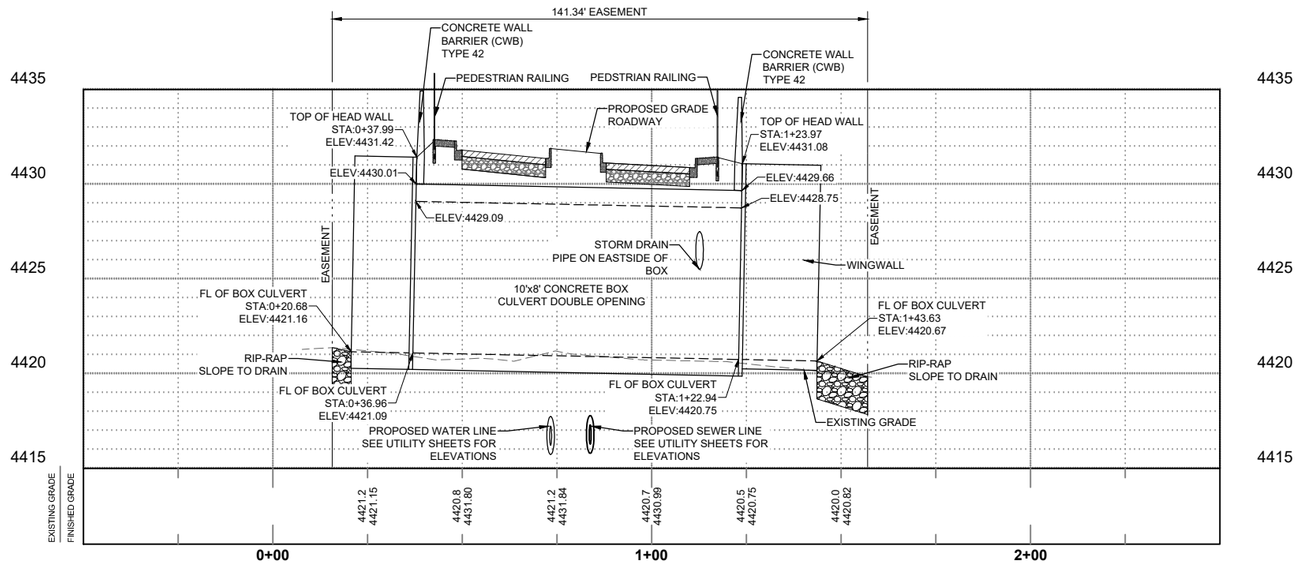


ROADWAY LEGEND

EXISTING INDEX CONTOUR	EASEMENT LINE
EXISTING INTERMEDIATE CONTOUR	ROADWAY CENTERLINE
PROPOSED INDEX CONTOUR	PROPOSED CULVERT
PROPOSED INTERMEDIATE CONTOUR	NEATLINE SAWCUT
RIGHT OF WAY LINE	DRAINAGE FLOW DIRECTION
PROPOSED CURB & GUTTER	TBC:XXXX.XX TOP BACK OF CURB ELEVATION
RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL	PROPOSED FLOW DIRECTION TRAFFIC SIGNAL



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STORM DRAIN CONCRETE BOX CULVERT
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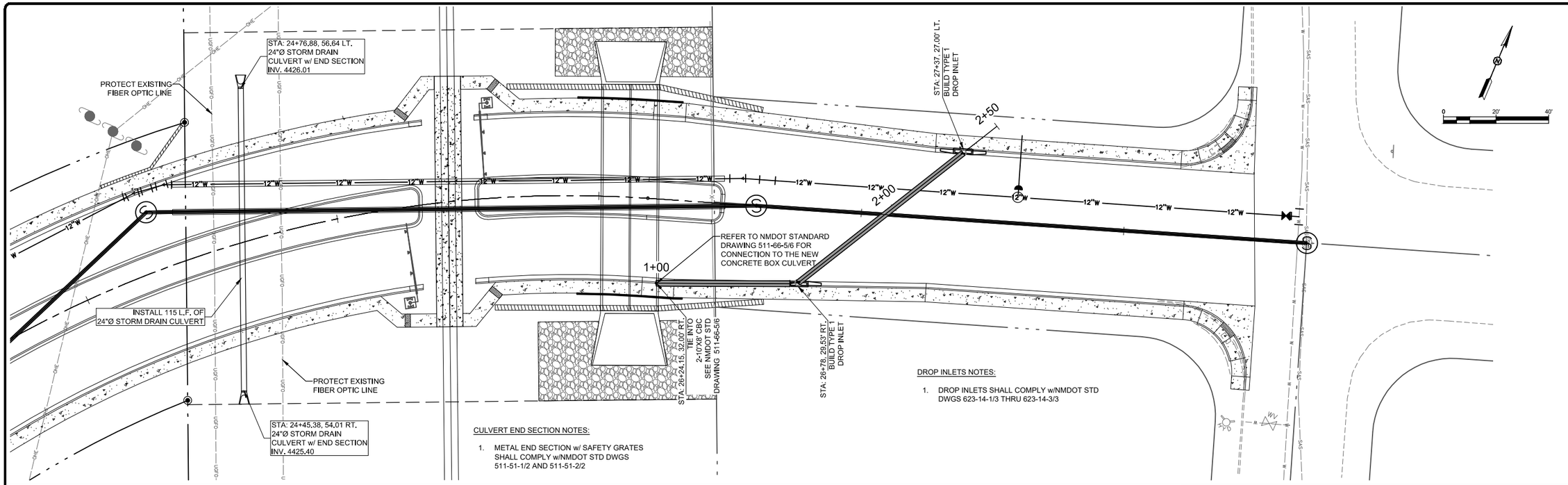


CULVERT END SECTION NOTES:

1. METAL END SECTION w/ SAFETY GRATES SHALL COMPLY w/NMDOT STD DWGS 511-51-1/2 AND 511-51-2/2

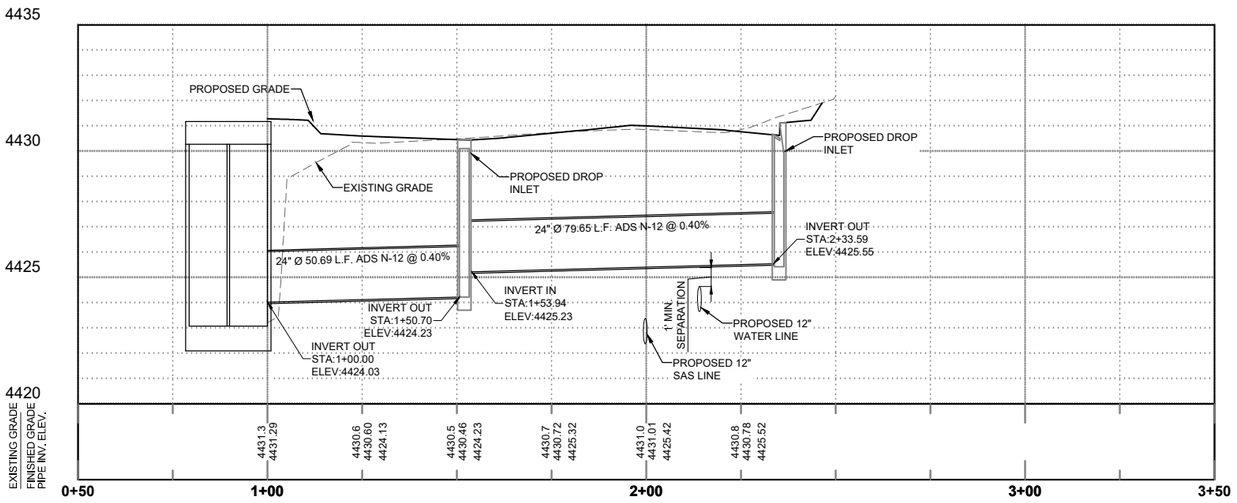
DROP INLETS NOTES:

1. DROP INLETS SHALL COMPLY w/NMDOT STD DWGS 623-14-1/3 THRU 623-14-3/3

ROADWAY LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- RIGHT OF WAY LINE
- PROPOSED CURB & GUTTER
- RAILROAD CANTILEVER ARM/GATE COMBO w/ TRAFFIC LIGHTS & BELL
- EASEMENT LINE
- ROADWAY CENTERLINE
- PROPOSED CULVERT
- NEATLINE SAWCUT
- DRAINAGE FLOW DIRECTION
- TBC:XXXX.XX TOP BACK OF CURB ELEVATION
- PROPOSED FLOW DIRECTION
- TRAFFIC SIGNAL

STORM DRAIN PIPE PROFILE



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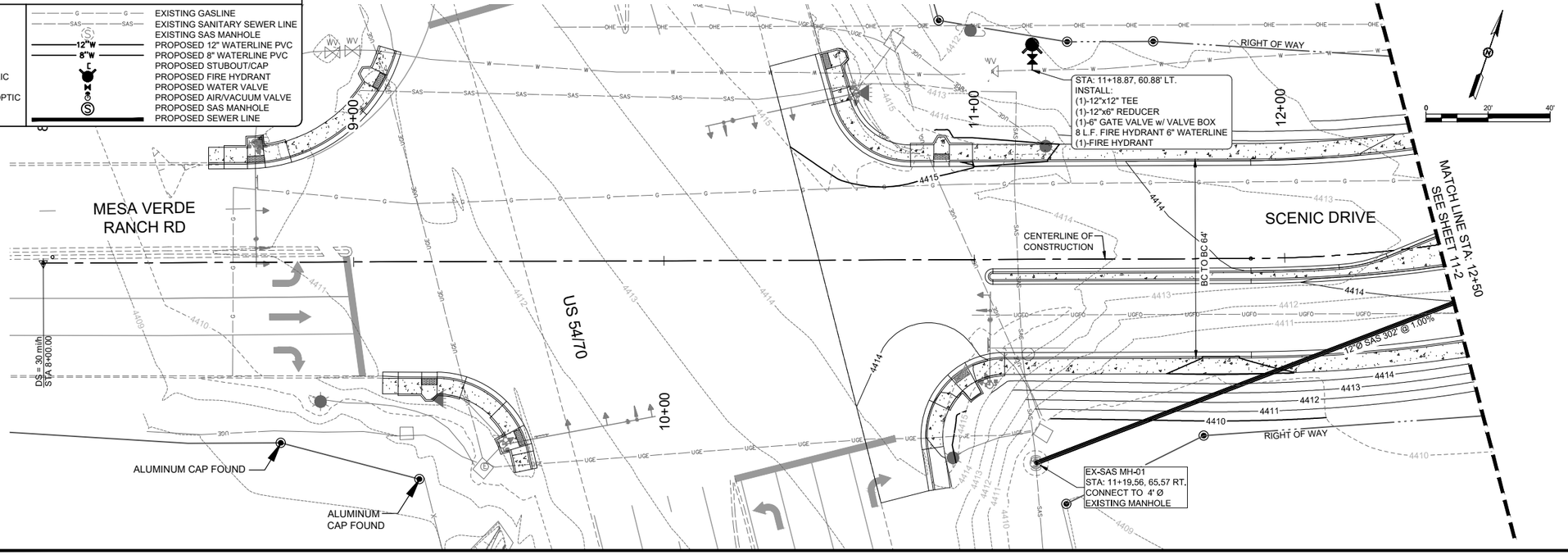
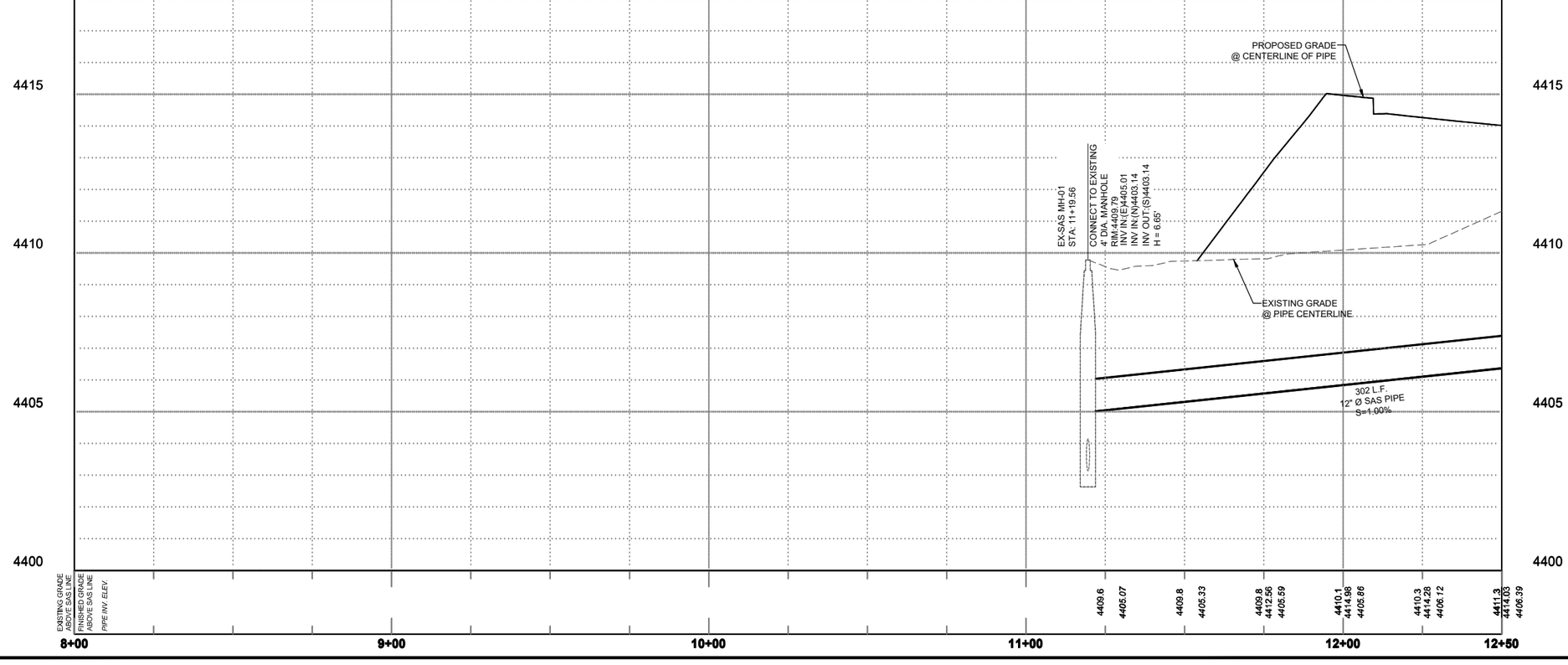
UTILITY LEGEND

ROADWAY CENTERLINE	EXISTING GASLINE
RIGHT OF WAY LINE	EXISTING SANITARY SEWER LINE
EASEMENT LINE	EXISTING SAS MANHOLE
EXISTING WATERLINE	PROPOSED 12" WATERLINE PVC
EXISTING WATER VALVE	PROPOSED 8" WATERLINE PVC
EXISTING FIRE HYDRANT	PROPOSED STUBOUT/CAP
EXISTING UNDERGROUND ELECTRIC	PROPOSED FIRE HYDRANT
EXISTING OVERHEAD ELECTRIC	PROPOSED WATER VALVE
EXISTING UNDERGROUND FIBER OPTIC	PROPOSED AIR/VACUUM VALVE
EXISTING UTILITY POLE	PROPOSED SAS MANHOLE
EXISTING LIGHT POLE	PROPOSED SEWER LINE





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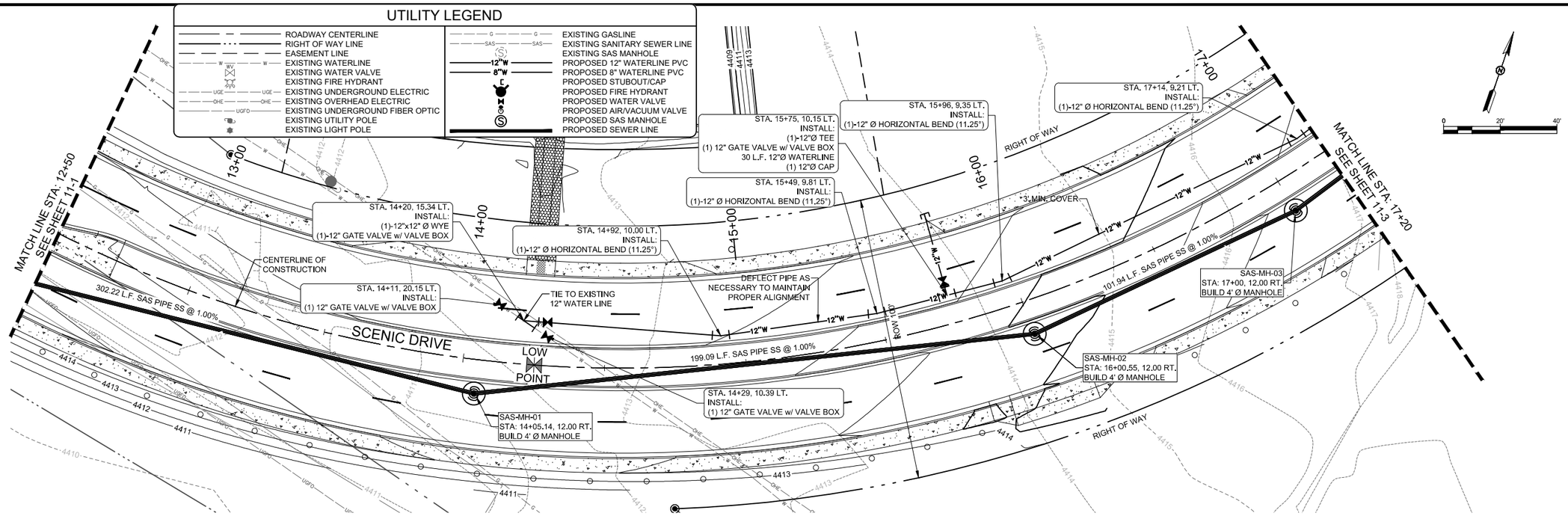
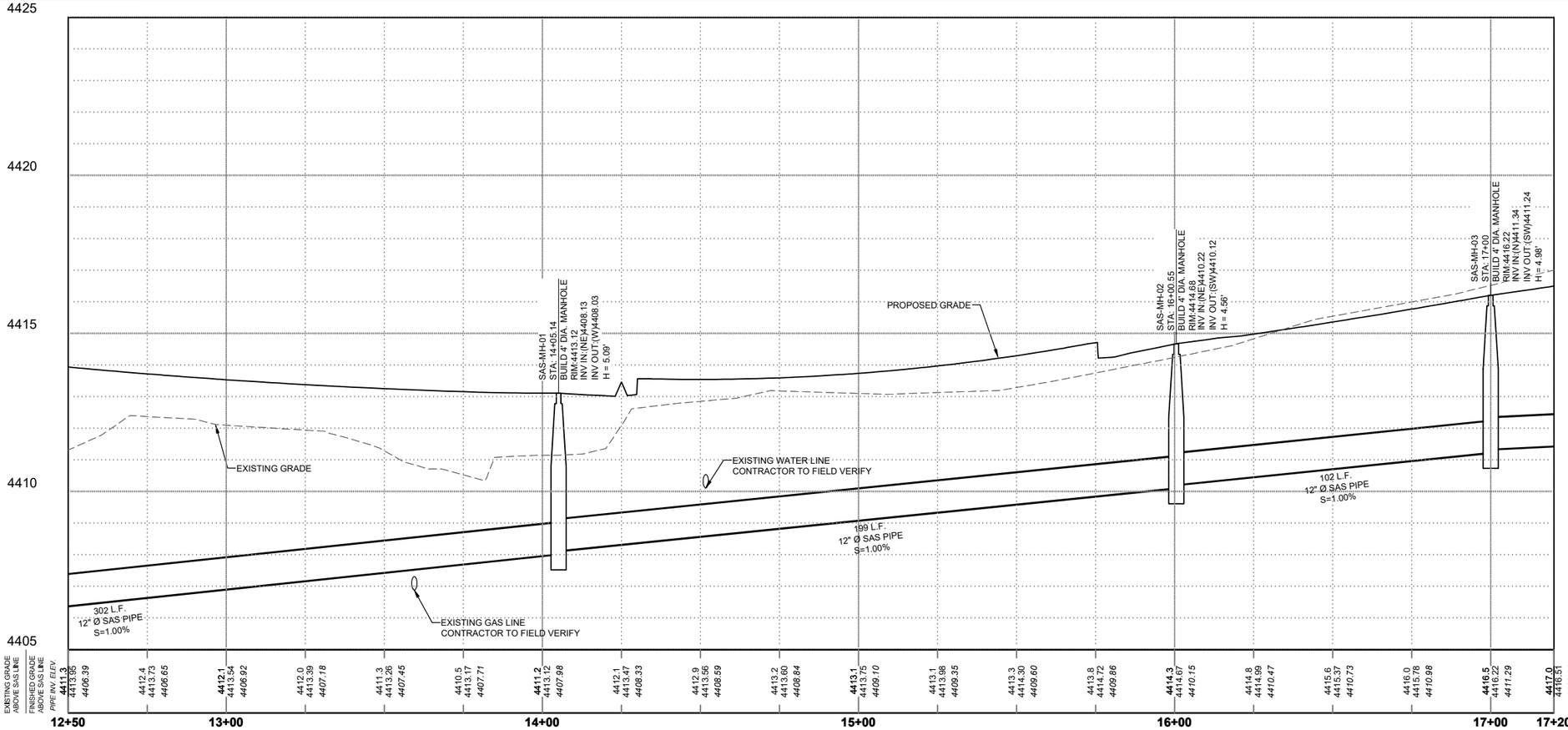
UTILITY LEGEND

ROADWAY CENTERLINE	EXISTING GASLINE
RIGHT OF WAY LINE	EXISTING SANITARY SEWER LINE
EASEMENT LINE	EXISTING SAS MANHOLE
EXISTING WATERLINE	PROPOSED 12" WATERLINE PVC
EXISTING WATER VALVE	PROPOSED 8" WATERLINE PVC
EXISTING FIRE HYDRANT	PROPOSED STUBOUT/CAP
EXISTING UNDERGROUND ELECTRIC	PROPOSED FIRE HYDRANT
EXISTING OVERHEAD ELECTRIC	PROPOSED WATER VALVE
EXISTING UNDERGROUND FIBER OPTIC	PROPOSED AIR/VACUUM VALVE
EXISTING UTILITY POLE	PROPOSED SAS MANHOLE
EXISTING LIGHT POLE	PROPOSED SEWER LINE





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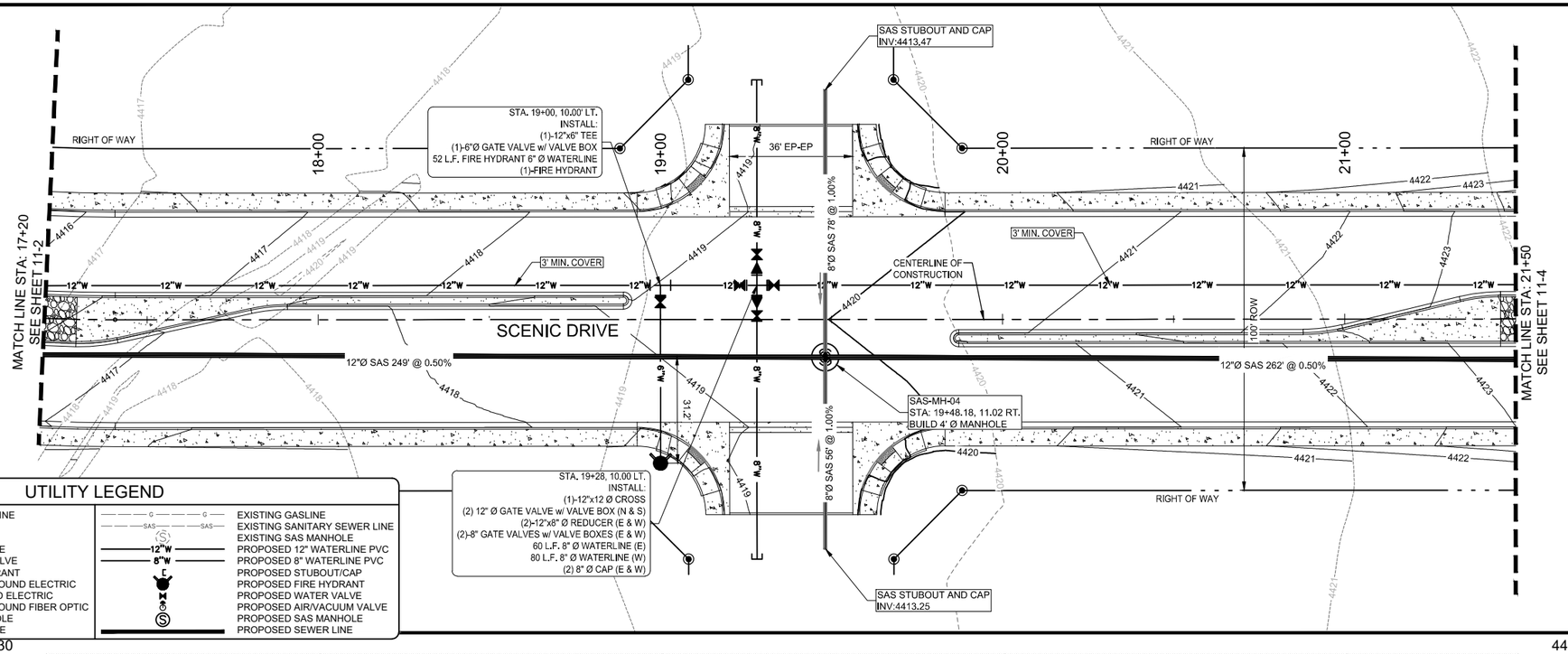

UTILITY LEGEND

ROADWAY CENTERLINE	EXISTING GASLINE
RIGHT OF WAY LINE	EXISTING SANITARY SEWER LINE
EASEMENT LINE	EXISTING SAS MANHOLE
EXISTING WATERLINE	PROPOSED 12" WATERLINE PVC
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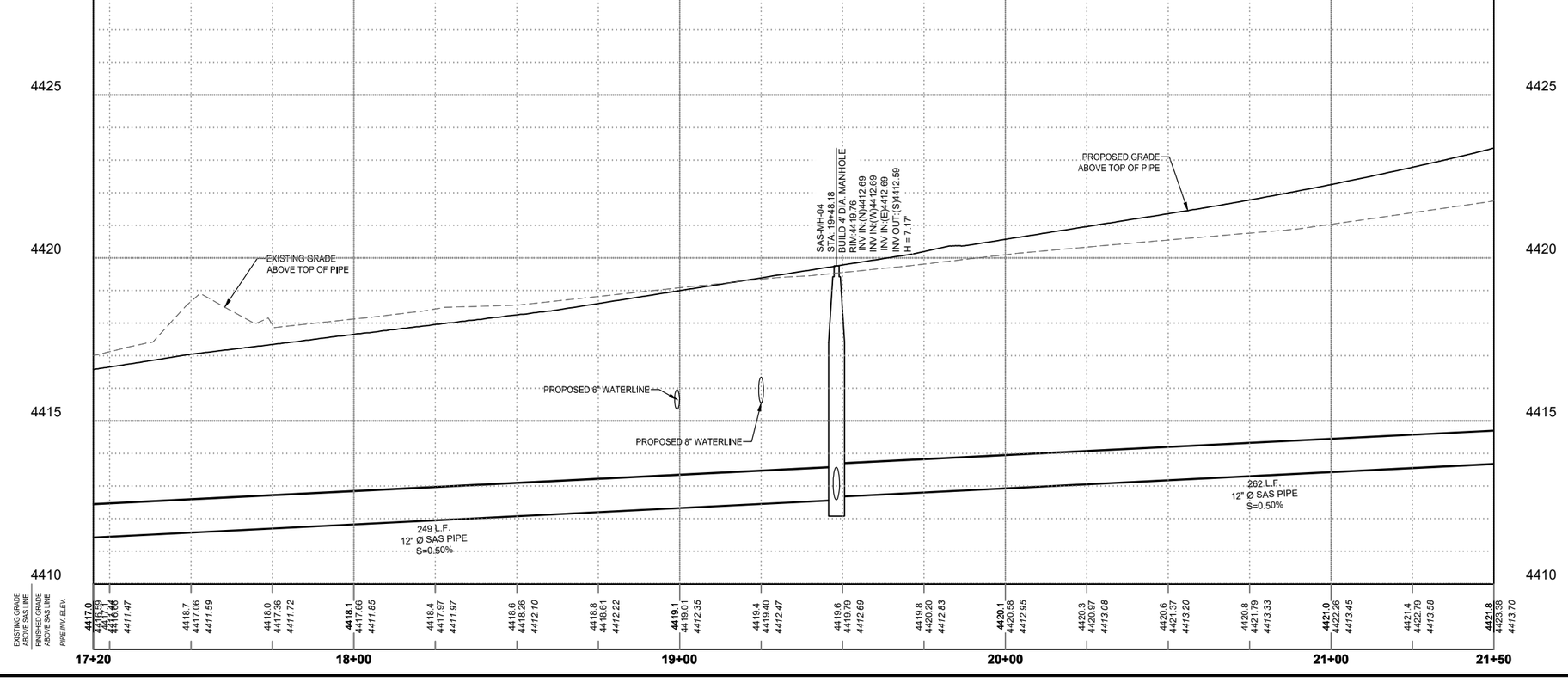
EXISTING UNDERGROUND ELECTRIC	PROPOSED FIRE HYDRANT
EXISTING OVERHEAD ELECTRIC	PROPOSED WATER VALVE
EXISTING UNDERGROUND FIBER OPTIC	PROPOSED AIR/VACUUM VALVE
EXISTING UTILITY POLE	PROPOSED SAS MANHOLE
EXISTING LIGHT POLE	PROPOSED SEWER LINE



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17+20 TO STA. 21+50

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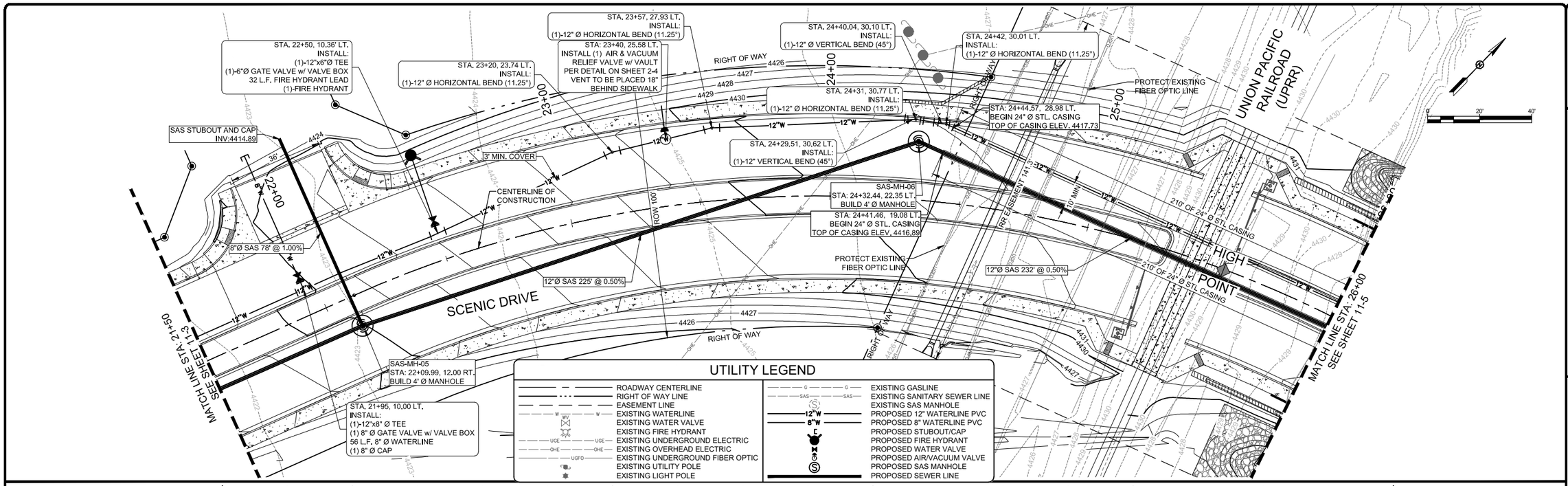

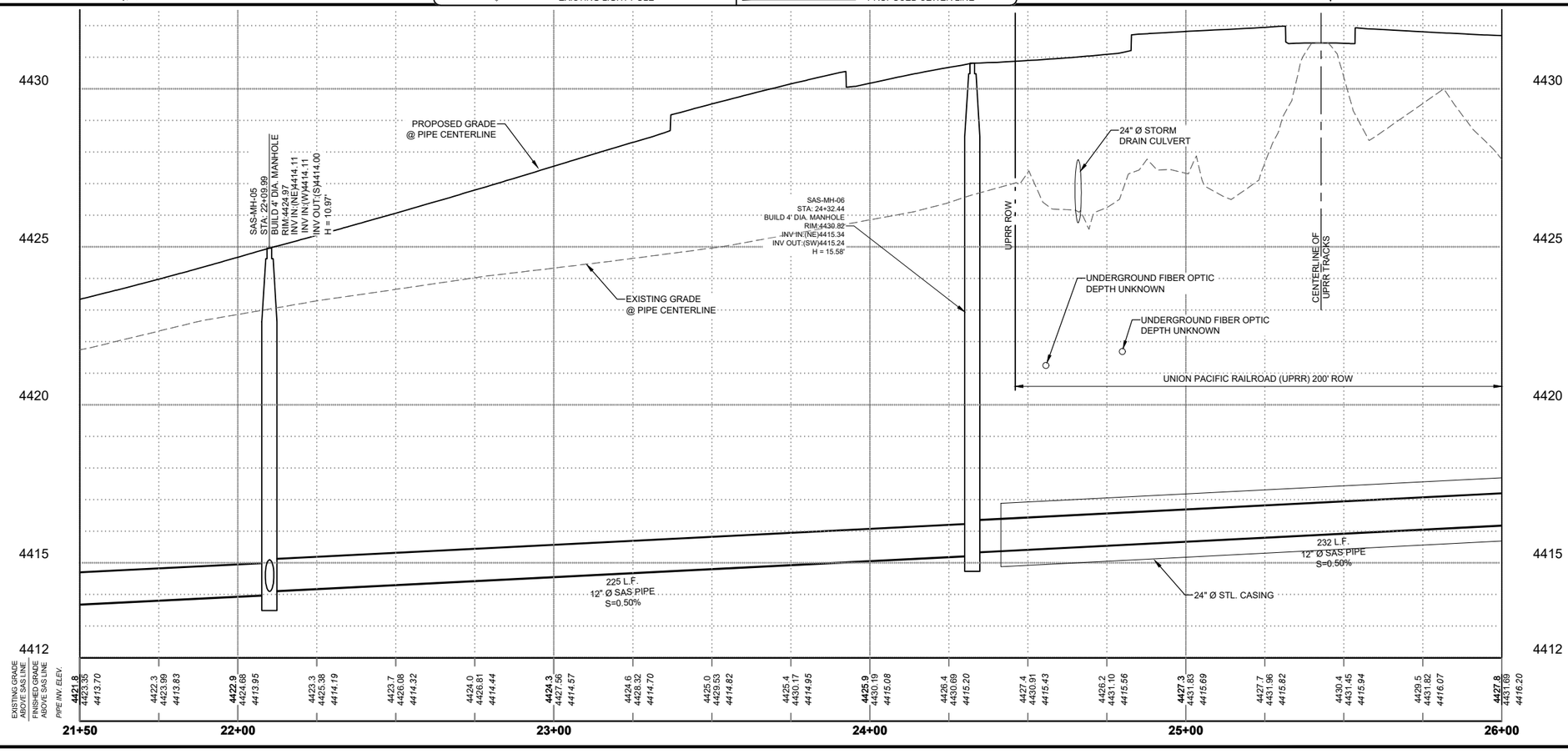

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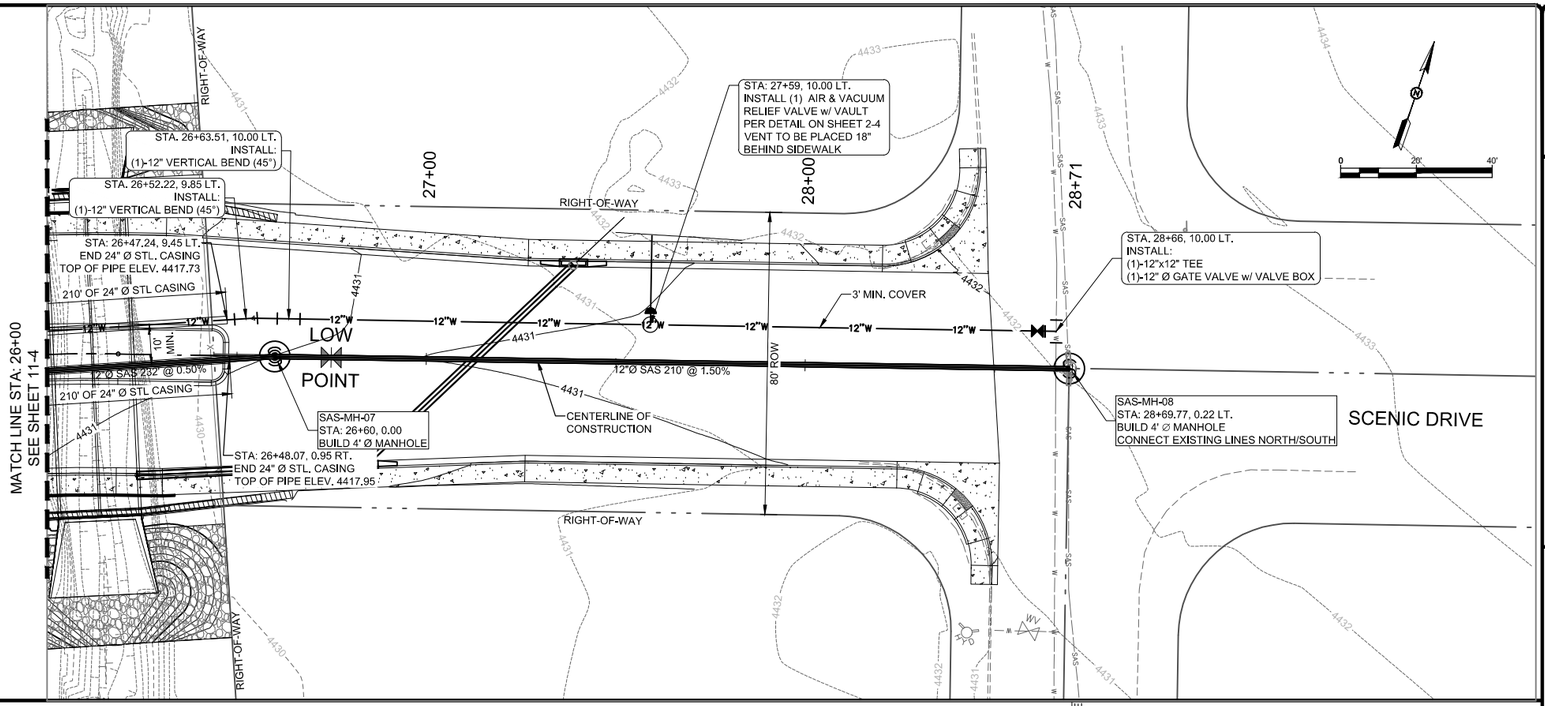
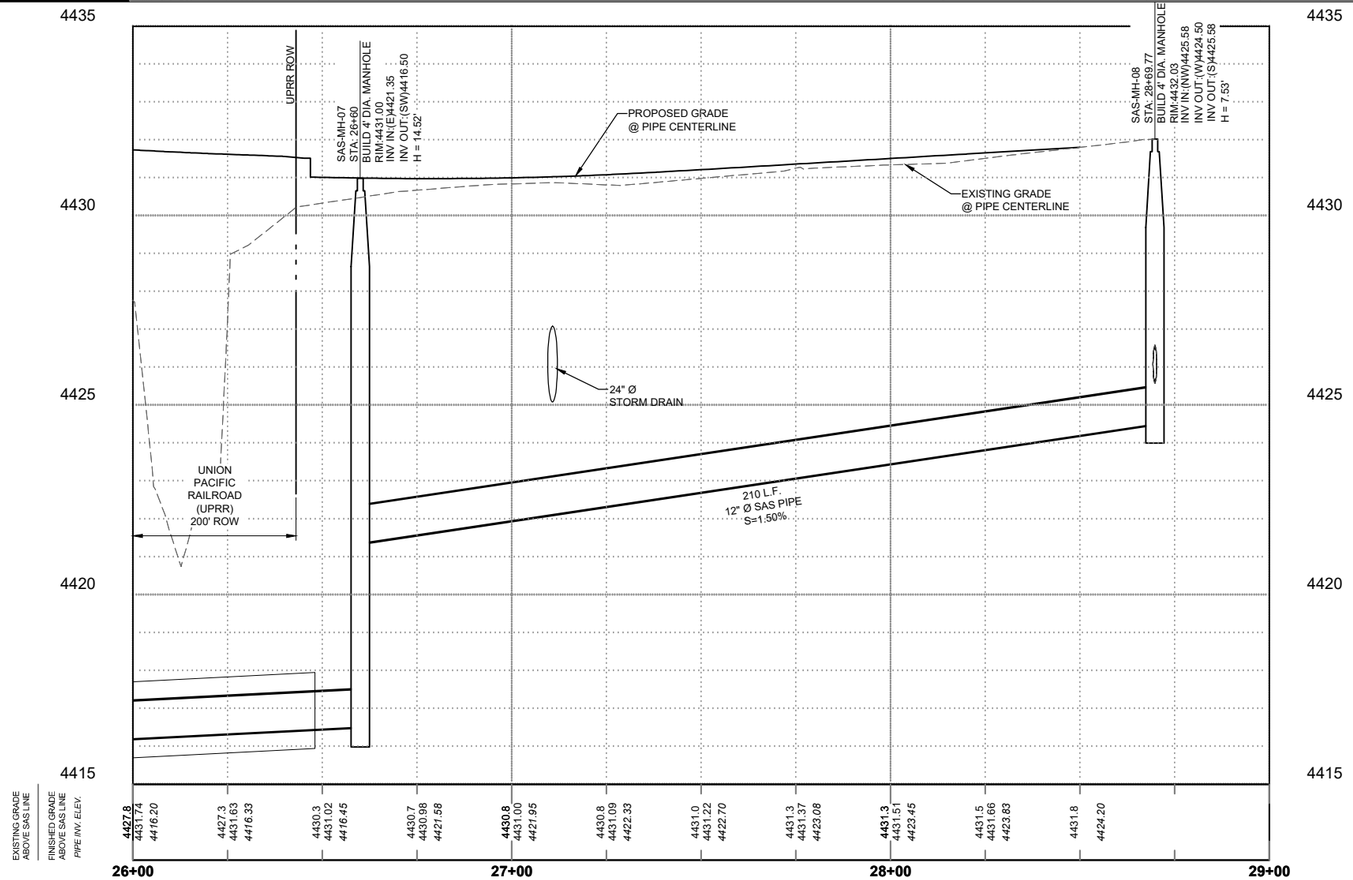
SHEET NO: 11-4

UTILITY LEGEND

- ROADWAY CENTERLINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- EXISTING WATERLINE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING GASLINE
- EXISTING SANITARY SEWER LINE
- EXISTING SAS MANHOLE
- PROPOSED 12" WATERLINE PVC
- PROPOSED 8" WATERLINE PVC
- PROPOSED STUBOUT/CAP
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED AIR/VACUUM VALVE
- PROPOSED SAS MANHOLE
- PROPOSED SEWER LINE





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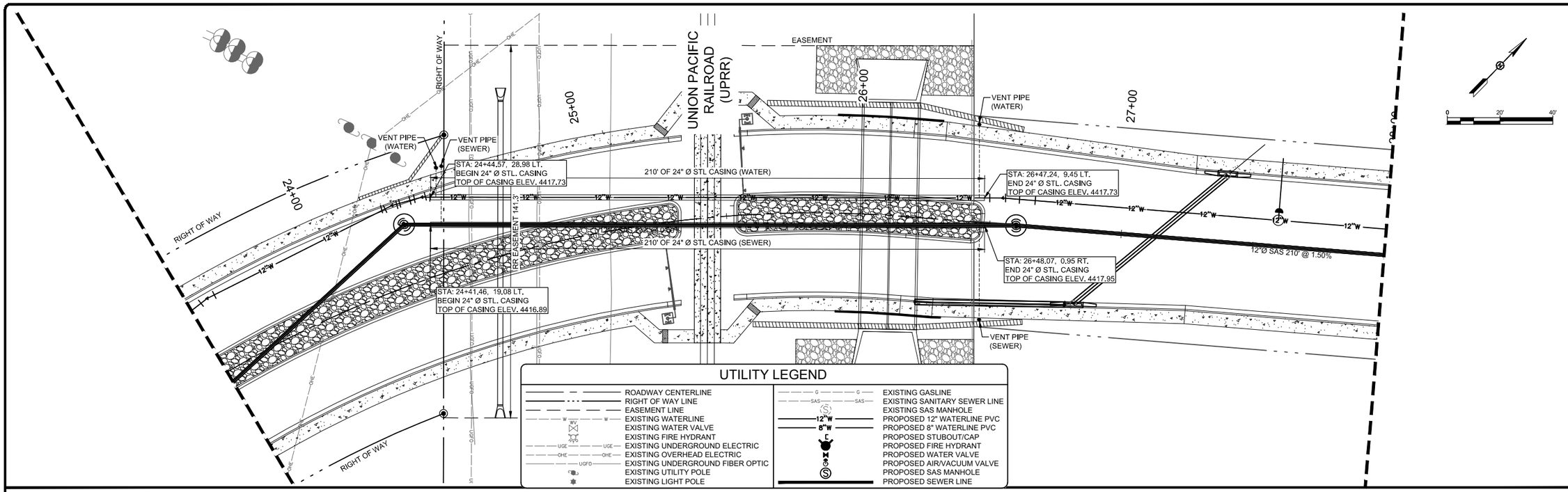
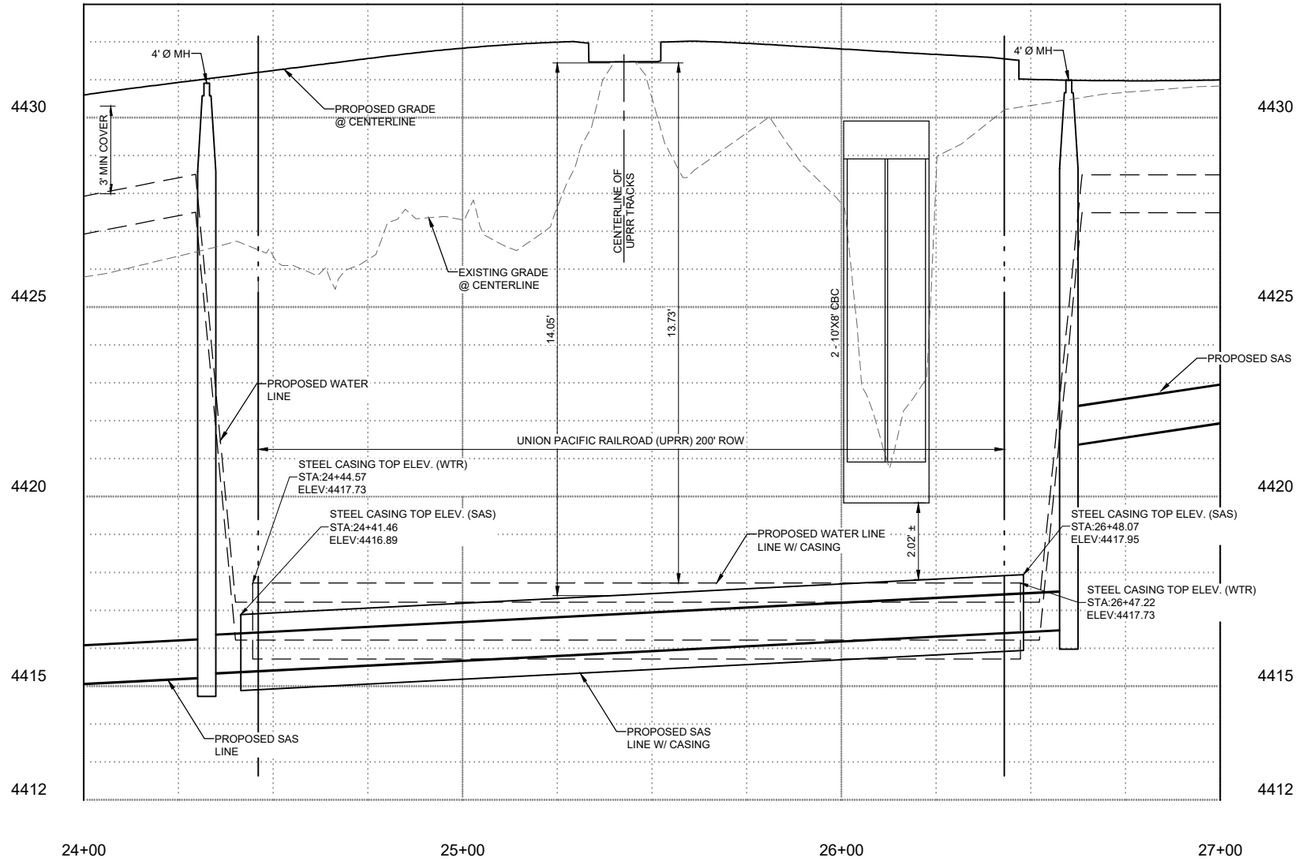
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
www.smithengineering.pro

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 11-5

L:\SEC—PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\11-5 UTILITY PLAN & PROFILE STA. 26+00 TO EOP.dwg, Apr 27, 2021 - 12:26pm Saved By: rustyp





RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
04/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

NO.	REVISION DESCRIPTION	DATE	BY
5			
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CITY OF ALAMOGORDO
SCENIC DRIVE EXTENSION TO MESA VERDE RANCH

UTILITY PLAN & PROFILE RR CROSSING

Solutions for Today...
Vision for Tomorrow
201 N Church Street
Suite 200A
Las Cruces, NM 88001
Phone: 575-523-2395
www.smithengineering.pro

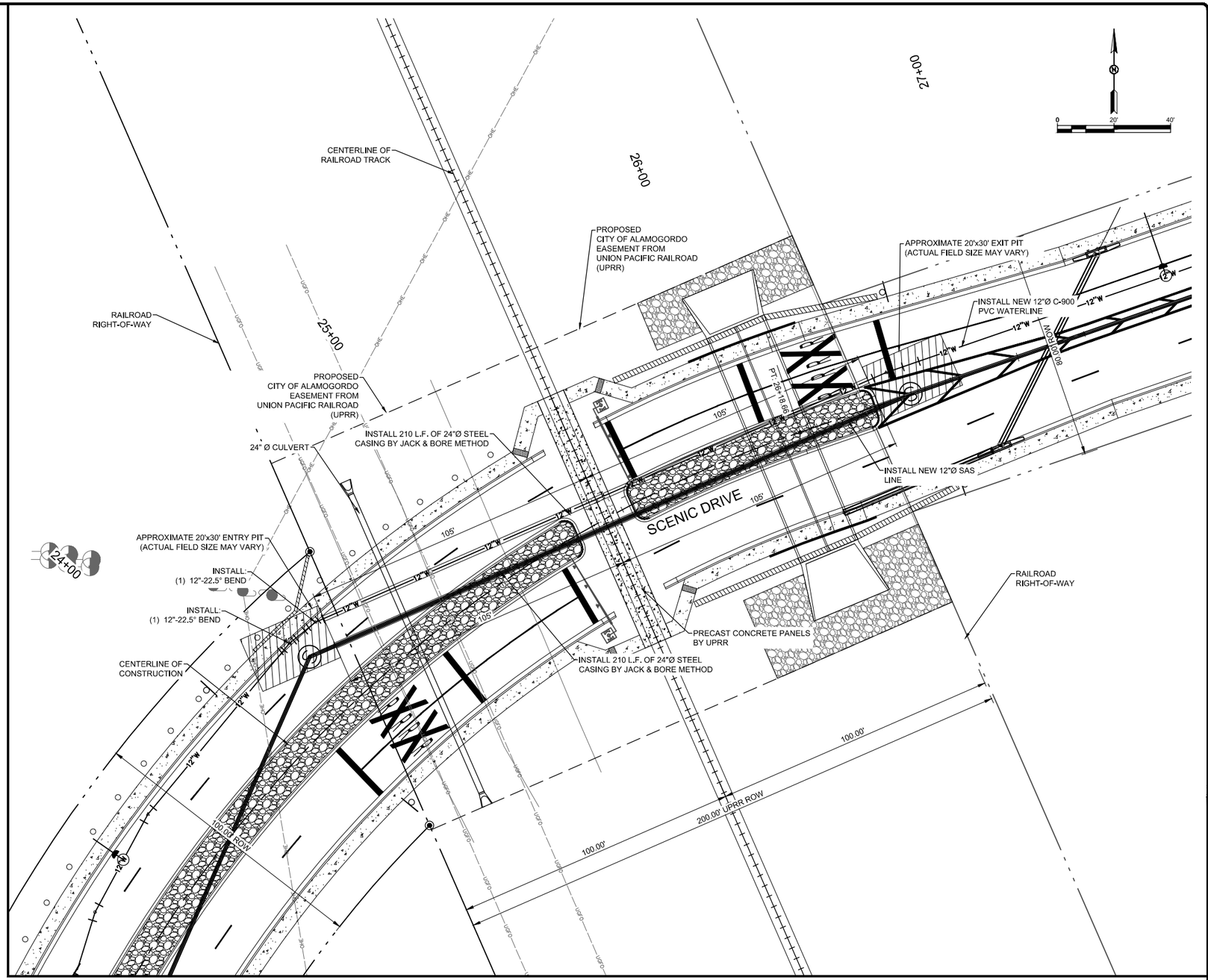
JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 11-6

L:\SEC--PROJECTS\816204 Scenic Drive Extension to Mesa Verde Ranch Road\ENGINEERING\CADD\PLANSET\11-of UTILITY PLAN & PROFILE RR CROSSING.dwg Apr 27, 2021 - 12:04pm Saved By: rustyp

NOTES:

1. ALL PIPELINES PROPOSED FOR INSTALLATION UNDER UNION PACIFIC RAILROAD (UPRR) RIGHT-OF-WAY AND TRACKAGE WILL FOLLOW JACK AND BORING METHODS.
2. CONTRACTOR MUST PROVIDE QUALIFICATIONS OF DRILLING CONTRACTOR, INCLUDING A LIST OF SIMILAR PROJECTS USING JACK AND BORING METHODS.
3. PRIOR TO COMMENCEMENT OF JACKING AND BORING, THE CONTRACTOR SHALL SUBMIT AN INSTALLATION PLAN THAT DESCRIBES THE ANTICIPATED RIG CAPACITY, THE PROPOSED EQUIPMENT AND THE METHOD FOR ADVANCING THE BOREHOLE THROUGH EXPECTED SOIL CONDITIONS, ANGLES, DEPTH AND EXACT LOCATION OF THE EXIT DITCH, THE PILOT HOLE DIAMETER, THE PROPOSED REAMING PLAN, INCLUDING THE NUMBER AND DIAMETER OF PRE-REAMS/BACK-REAMS AND DIAMETER OF THE FINAL REAMED BOREHOLE, AND THE CONTINGENCY EQUIPMENT AND PLANS FOR DEALING WITH SOIL CONDITIONS THAT A SOIL ENGINEER COULD REASONABLY EXPECT TO BE ENCOUNTERED AT THE PROPOSED JACK AND BORE INSTALLATION SITE. THE INSTALLATION PLAN WILL ALSO ADDRESS THE ANTICIPATED HOURS OF OPERATION DURING THE JACK AND BORE DRILLING AND INSTALLATION PROCESS, THE MINIMUM NUMBER OF PERSONNEL, AND THEIR RESPONSIBILITIES ON-DUTY AND ON-SITE DURING ALL JACK AND BORE OPERATIONS.
4. PLASTIC CARRIER PIPE SHALL BE INSTALLED WITHIN STEEL CASING PIPE. STEEL CASING PIPE SHALL EXTEND FORTY FEET (40') EITHER SIDE OF THE CENTERLINE OF TRACK AND CONFORM TO E-80 LOADING.
5. STEEL CASING PIPE SHALL BE DESIGNED FOR EFFECTIVE CORROSION CONTROL, LONG SERVICE LIFE AND RELATIVELY FREE FROM ROUTINE SERVICING AND MAINTENANCE. CORROSION CONTROL MEASURES MUST INCLUDE CATHODIC PROTECTION. ALL STEEL PIPE SHALL BE COATED AND CATHODICALLY PROTECTED.
6. 24-INCH NOMINAL DIAMETER STEEL CASING PIPE SHALL HAVE A MINIMUM WALL THICKNESS OF 0.312 INCHES AND COATED WITH A MINIMUM YIELD STRENGTH OF 35,000 POUNDS PER SQUARE INCH.
7. THE INSIDE DIAMETER OF THE STEEL CASING PIPE SHALL BE SUCH THAT THE CARRIER PIPE CAN BE REMOVED WITHOUT DISTURBING THE CASING. ALL JOINTS OR COUPLINGS, SUPPORTS, INSULATORS OR CENTERING DEVICES FOR THE CARRIER PIPE SHALL BE CONSIDERED IN THE SELECTION OF THE CASING DIAMETER.
8. WATER LINES: WHEN STEEL CASING PIPE IS USED, VENTING IS NOT REQUIRED; HOWEVER, SEALING WILL BE REQUIRED IF THE ENDS OF THE CASING ARE NOT ABOVE HIGH WATER. THE UTILITY OWNER SHALL PLACE A READILY IDENTIFIABLE AND SUITABLE MARKER AT EACH RAILROAD PROPERTY LINE WHERE IT IS CROSSED BY A WATER LINE.
9. THE HOLE DIAMETER RESULTING FROM JACK AND BORE INSTALLATIONS SHALL NOT EXCEED THE OUTSIDE DIAMETER OF THE UTILITY PIPE, CABLE, OR CASING (INCLUDING COATING) BY MORE THAN ONE AND ONE-HALF (1-1/2) INCHES FOR PIPES WITH AN INSIDE DIAMETER OF TWELVE (12) INCHES OR LESS, OR TWO (2) INCHES ON PIPES WITH AN INSIDE DIAMETER GREATER THAN TWELVE (12) INCHES.
10. PITS FOR BORING, TUNNELING, OR JACKING WILL NOT BE PERMITTED WITHIN THIRTY (30) FEET OF THE CENTERLINE OF TRACK; OR CLOSER TO THE TRACK THAN THE TOE OF FILL SLOPES IN FILL SECTIONS, OR TOE OF SHOULDER SLOPES IN DITCH SECTIONS WHEN PIPES ARE ALLOWED ON THE RAILROAD PROPERTY.
11. UNDERGROUND INSTALLATIONS MAY BE PERFORMED BY OPEN-TRENCHING FROM THE PROPERTY LINE TO THE TOE OF THE FILL SLOPE IN FILL SECTIONS AND TO THE TOE OF THE SHOULDER SLOPE IN CUT SECTIONS BUT NO CLOSER THAN THIRTY (30) FEET OF THE CENTERLINE OF TRACK. THE REMAINDER WILL BE TUNNELED, AUGURED, JACKED OR DIRECTIONAL-BORED THROUGH THE ROADBED.
12. AREAS OF RAILROAD PROPERTY, DISTURBED BY THE INSTALLATION, MAINTENANCE, REMOVAL AND RELOCATION OF UTILITIES SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS SHALL BE RETURNED TO NORMAL GRADE AND ELEVATION, WITH COMPACTION OF BACKFILL MATERIAL, MEETING 95% OF ASTM D-1557.
13. CARE SHALL BE TAKEN TO AVOID ANY DISTURBANCE OF EXISTING DRAINAGE FACILITIES. UNDERGROUND UTILITY FACILITIES SHALL BE BEDDED WITH PERVIOUS MATERIAL AND OUTLETS PROVIDED FOR ENTRAPPED WATER.
14. UNUSED MATERIAL OR DEBRIS SHALL BE REMOVED FROM THE WORK SITE AREA. AT THE END OF EVERY CONSTRUCTION DAY, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE REMOVED AS FAR FROM THE OPERATING RAILROAD TRACKS AS POSSIBLE(MINIMUM 25 FEET FROM CENTERLINE).
15. ALL UTILITY CROSSINGS UNDER DITCHES AND RAILROAD TRACKAGE SHOULD HAVE A MINIMUM DEPTH OF COVER OF FIVE (5) FEET BELOW THE FLOW LINE OF THE DITCH OR GROUND SURFACE. THE DEPTH OF COVER SHALL NOT BE LESS THAN THAT MEETING APPLICABLE INDUSTRY STANDARDS.
16. STORAGE OF MATERIALS, PARKING OF EQUIPMENT AND VEHICLES WHEN NOT USED DURING ACTUAL UTILITY WORK WILL NOT BE PERMITTED ON RAILROAD PROPERTY.
17. MAINTENANCE OF THE UTILITY IS THE SOLE RESPONSIBILITY OF THE UTILITY OWNER. MAINTENANCE MUST BE PERFORMED TO KEEP THE FACILITY IN AN AS-CONSTRUCTED CONDITION, AND IN A GOOD STATE OF REPAIR IN ACCORDANCE WITH THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL LAWS, REGULATORY STANDARDS AND UTILITY CODES. THE UTILITY OWNER IS ALSO RESPONSIBLE FOR REPLACING AND STABILIZING ALL EARTH COVER AND VEGETATION WHEN IT HAS ERODED OVER AN UNDERGROUND UTILITY FACILITY, AS CAUSED BY ANY SETTLEMENT OF BACKFILL, FILLS, AND EMBANKMENTS.
18. FLAGGING WILL BE REQUIRED WHEN WORK IS PERFORMED WITHIN TWENTY-FIVE (25) FEET OF THE CENTERLINE OF THE TRACK OR WHEN IT IS NECESSARY FOR THE CONTRACTOR TO OPERATE EQUIPMENT IN THE VICINITY OF, OR OVER, UPRR PROPERTY WHICH MAY ENDANGER RAILROAD OPERATIONS. FLAGGING SERVICES SHALL BE PERFORMED BY UPRR EMPLOYEES AND THE TOTAL COSTS BEING PAID BY THE UTILITY OWNER. A WRITTEN REQUEST FOR FLAGGING SERVICES WILL BE REQUIRED AT LEAST 3 WEEKS PRIOR TO THE TIME WHEN SUCH SERVICES ARE NEEDED.
19. UPON COMPLETION OF THE JACK AND BORE INSTALLATION, THE CONTRACTOR SHALL PROVIDE AN ACCURATE AS-BUILT DRAWING OF THE INSTALLED JACK AND BORE SEGMENT. AS-BUILT DRAWINGS WILL INCLUDE BOTH HORIZONTAL AND PROFILE PLANS WITH SURVEY MONUMENTATION COORDINATED WITH OWNER.
20. PRIOR TO ANY CONSTRUCTION, EXISTING UTILITIES SHALL BE LOCATED BY THE CONTRACTOR WITH ANY DISCREPANCIES REPORTED TO THE OWNER AND DESIGN ENGINEER.

12-INCH DIAMETER MUNICIPAL POTABLE WATER PIPELINE CROSSING INFORMATION		
CONTENTS TO BE HANDLED THROUGH PIPE:	MUNICIPAL POTABLE WATER	
EMERGENCY CONTACT:	CITY OF ALAMOGORDO PUBLIC WORKS DEPT.	
EMERGENCY CONTACT:	LARRY GARNER, PUBLIC WORKS DIRECTOR	
CONTACT TELEPHONE:	575-491-3969	
PIPELINE SPECIFICATIONS		
	CARRIER	CASING
TOTAL WIDTH OF RAILROAD RIGHT-OF-WAY AND/OR EASEMENT (FEET)	200	200
LENGTH OF PIPE ON RAILROAD COMPANY PROPERTY (FEET)	200	200
LENGTH OF CASING PIPE WITHIN RAILROAD RIGHT-OF-WAY (FEET)	200	200
INSIDE DIAMETER OF PIPE (INCHES)	12	24
PIPE MATERIAL	PVC	STEEL
SPECIFICATION & GRADE	C-900 (DR-18)	GR-B
WALL THICKNESS IN INCHES	0.733	0.312
ACTUAL WORKING PRESSURE (PSI)	235	N/A
TYPE OF JOINT	BELL & SPIGOT	WELDED
COATING	N/A	YES
DISTANCE FROM BASE OF RAIL TO TOP OF PIPE, MINIMUM (FEET)	N/A	6
MINIMUM GROUND COVER ON RAILROAD PROPERTY (FEET)	N/A	5
CATHODIC PROTECTION CASING	N/A	YES
TYPE OF INSULATORS OR SUPPORTS	RACI	RACI
-INSULATOR/SUPPORT SIZE (INCHES)	2.25	2.25
-INSULATOR/SUPPORT SPACING (FEET)	3	3
NUMBER OF CASING VENTS	N/A	N/A
-VENT SIZE (INCHES)	N/A	N/A
-VENT HEIGHT ABOVE GROUND (FEET)	N/A	N/A
METHOD OF CASING	N/A	JACK & BORE



PLAN NOTES:

1. STEEL CASING PIPE SHALL BE COATED AND CONFORM TO E-80 LOADING.
2. EACH END OF STEEL CASING PIPE TO BE SEALED.
3. MARKERS SHALL INDICATE LOCATION OF CARRIER PIPE AT RIGHT-OF-WAY LINE.
4. MINIMUM 5 FOOT DEPTH OF COVER FROM RAIL TO TOP OF STEEL CASING PIPE.
5. CATHODIC PROTECTION REQUIRED FOR EACH STEEL CASING PIPE.
6. STEEL CASING PIPE TO EXTEND FORTY FEET (40') BEYOND THE CENTERLINE OF TRACK ON EACH SIDE.
7. APPLICANT HAS CONTACTED 1-800-336-9193, U.P. COMMUNICATION DEPARTMENT, AND HAS DETERMINED FIBER OPTIC CABLE DOES EXIST IN VICINITY OF WORK TO BE PERFORMED. TICKET NO. 20161220021.

LEGEND

- EXISTING RAILROAD TRACKS
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- 12"W — PROPOSED 12"Ø PVC WATERLINE
- PROPOSED ROAD CENTERLINE
- PROPOSED CURB & GUTTER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED ASPHALT PAVING
- RR CANTILEVER GATE COMBO w/ TRAFFIC LIGHTS & BELL
- PROPOSED ENTRY/EXIT BORE PIT

RUSTY W. PAYNE NEW MEXICO 23566 REGISTERED PROFESSIONAL ENGINEER
5/10/27/2021

CITY OF ALAMOGORDO
OTERO COUNTY, NEW MEXICO

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SCENIC DRIVE EXTENSION TO
MESA VERDE RANCH

UNION PACIFIC RAILROAD (UPRR)
WATERLINE CROSSING EXHIBIT

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SMITH ENGINEERING

JOB NO: 816204
DATE: APRIL 2021
SHEET NO: 11-7

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