

APPENDICES















Appendix A – Design Drawings for Proposed Industrial Park









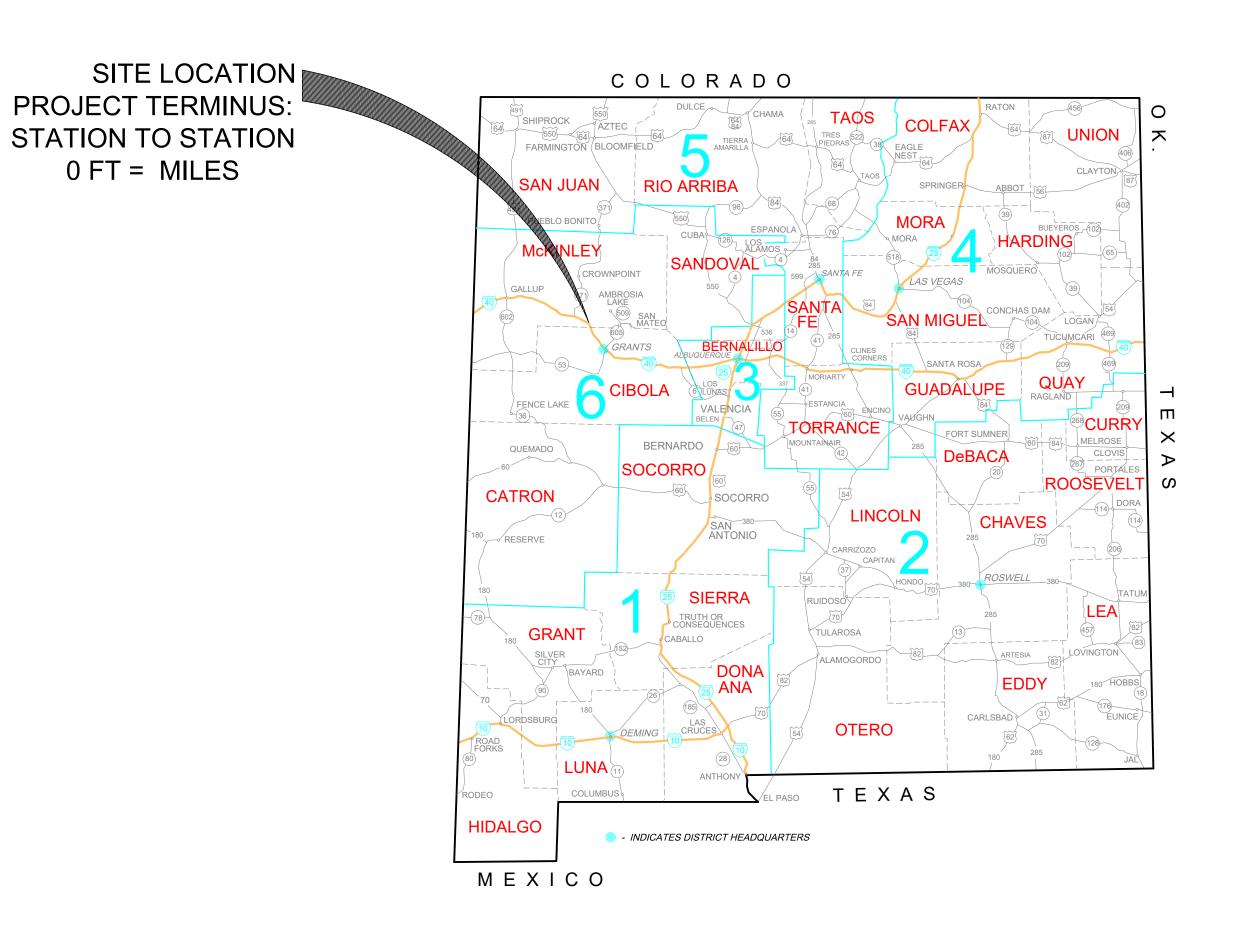




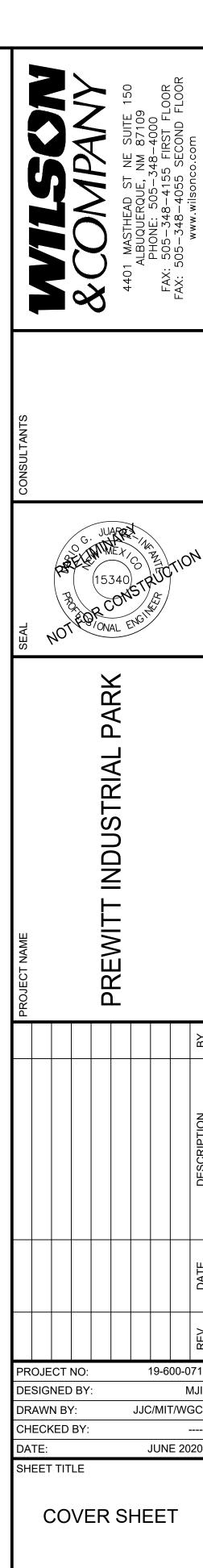
CONSTRUCTION PLANS FOR

PREWITT INDUSTRIAL PARK

PREWITT, NEW MEXICO PROJECT INFO:



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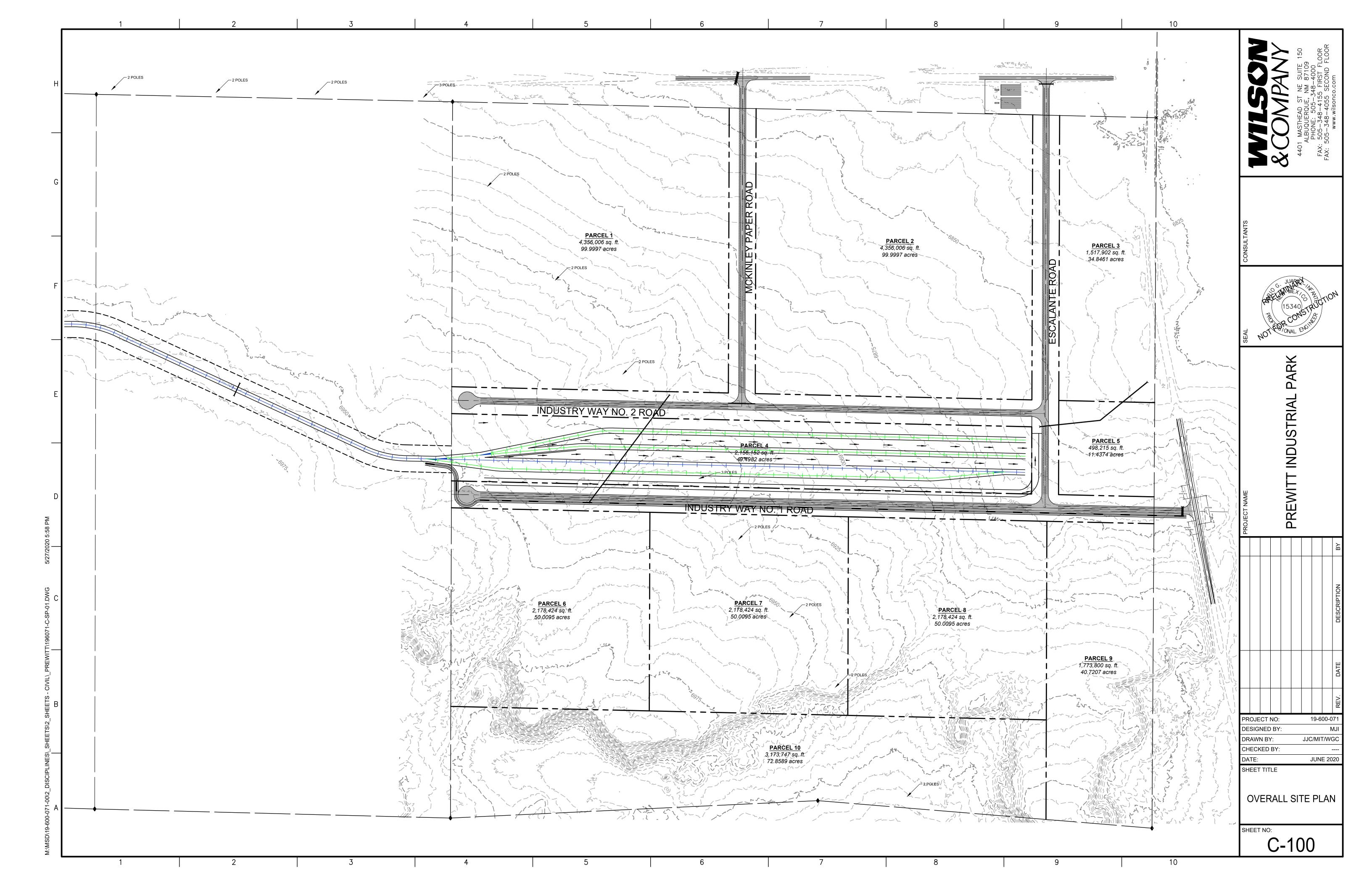
LOCATION MAP

NTS

NOTICE OF EXTENDED PAYMENT PROVISION

THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT (SECTION 57-28-5 B (2) NMSA 1978).

G-001



GENERAL NOTES:

- 1. ALL IMPROVEMENTS, UNLESS OTHERWISE MODIFIED IN THE PROJECT SPECIFICATIONS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2014 EDITION, EXCEPT WHERE OTHERWISE NOTED IN THE DRAWINGS. ADDITIONALLY, WHEN APPROPRIATE, CONTRACTOR SHALL COMPLY WITH "AMERICAN PUBLIC WORKS ASSOCIATION" NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST ADDITION.
- 2. STANDARD DRAWINGS: REFER TO STANDARD DRAWINGS FOR THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION UNLESS OTHERWISE NOTED. ADDITIONALLY, REFER TO 'APWA NM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST ADDITIONAL, WHERE INDICATED IN THE PLANS.
- 3. THE CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF PROJECT CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- 4. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE OWNER, ENGINEER AND ALL APPROVAL SIGNATORIES. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS OR TECHNIQUES OR FOR THE PROSECUTION OF THE WORK AS SHOWN ON THESE PLANS. THE 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 THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS.
- 5. UNLESS OTHERWISE PROVIDED AS PART OF THE CONSTRUCTION PLANS, A COMPLETE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR WHEN ANY PORTION OF THE WORK IS IN THE PUBLIC RIGHT-OF-WAY OR AFFECTING ON-SITE VEHICLE OR PEDESTRIAN CIRCULATION. ALL CONSTRUCTION SIGNING, BARRICADING AND CHANNELIZATION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION. THE PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL FOR ON-SITE CONSTRUCTION. TRAFFIC CONTROL WITHIN THE VILLAGE OF MILAN RIGHT-OF-WAY SHALL DEFAULT TO THE VILLAGE OF MILAN FOR APPROVAL. THE CONTRACTOR SHALL NOT IMPLEMENT THE TRAFFIC CONTROL PLAN UNTIL APPROVAL OF THE PLAN HAS BEEN RECEIVED FROM THE ENGINEER.
- 6. THE CONTRACTOR SHALL DESIGNATE AT LEAST ONE EMERGENCY CONTACT PERSON, AND SHALL PROVIDE TELEPHONE NUMBERS WHERE THIS PERSON CAN BE CONTACTED AT ANY TIME, INCLUDING WEEKENDS, HOLIDAYS AND AFTER HOURS. THIS INFORMATION SHALL BE PROVIDED TO THE OWNER AND THE ENGINEER. INCIDENTAL TO WORK, PER STANDARD SPECIFICATION 618.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS FROM ALL JURISDICTIONAL AUTHORITIES PRIOR TO START OF CONSTRUCTION. SEE STANDARD SPECIFICATION 107.2.
- 8. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY, HEALTH. AND ENVIRONMENTAL PROTECTION.
- 9. EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING DESIGNATED STAGING AREAS FOR STORAGE OF EQUIPMENT AND MATERIAL. NO MATERIAL OR EQUIPMENT MAY BE STORED OR LEFT ON—SITE AT ANY OTHER LOCATION. THE OWNER ASSUMES NO LIABILITY FOR CONTRACTOR'S EQUIPMENT AND MATERIAL IN THE STAGING AREA. SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF NO STAGING AREA IS DESIGNATED ON THESE PLANS, AN OFF—SITE STAGING AREA SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE, OR THE CONTRACTOR MAY NEGOTIATE WITH THE OWNER TO USE AN ON—SITE AREA.
- 11. ALL STATIONING REFERS TO APPARENT CENTERLINE OF STREET UNLESS OTHERWISE NOTED.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING, IN ADVANCE OF HIS/HER CONSTRUCTION OPERATIONS, IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE, SUPPORT AND RECONNECT THE UTILITY TO ACCOMMODATE NEW CONSTRUCTION. SEE 105.6 OF STANDARD SPECIFICATIONS.
- 13. NON-DESTRUCTIVE UTILITY EXPLORATION-TYPICAL TASKS BY THE CONTRACTOR LEADING TO UTILITY EXPLORATION ARE:

 A) SELECT AN APPROPRIATE METHOD OF GATHERING DATA THAT WILL ACHIEVE THE ACCURACIES AND PRECISION REQUIRED TO IDENTIFY THE EXACT X, Y AND Z LOCATION OF CONFLICT. VERTICAL AND HORIZONTAL SURVEY MAPPING ACCURACY SHALL ADHERE TO THE DESIGN SURVEY CONTROL.

- B) WHEN EXCAVATING TEST HOLES EXPOSING THE UTILITY TO BE MEASURED, IT SHALL BE EXECUTED IN SUCH A MANNER THAT IT PROTECTS THE INTEGRITY OF THE UTILITY TO BE MEASURED. EXPOSURE IS TYPICALLY PERFORMED VIA MINIMALLY INTRUSIVE EXCAVATION.
- C) NON-DESTRUCTIVE UTILITY EXPLORATION SHALL BE DONE A MINIMUM OF ONE WEEK IN ADVANCE OF PROJECT SCHEDULE DELAY.
- D) COMPLY WITH APPLICABLE UTILITY DAMAGE PREVENTION LAWS, PERMITS, AND SPECIFICATIONS, AND COORDINATE WITH UTILITY AND OTHER INSPECTORS, AS REQUIRED.
- E) DETERMINE (a) THE HORIZONTAL AND VERTICAL LOCATION OF THE TOP AND/OR BOTTOM OF THE UTILITY REFERENCED TO THE PROJECT SURVEY DATUM; (b) THE ELEVATION OF THE EXISTING GRADE OVER THE UTILITY AT A TEST HOLE REFERENCED TO THE PROJECT SURVEY DATUM; (c) THE OUTSIDE DIAMETER OF THE UTILITY AND CONFIGURATION OF NON-ENCASED, MULTI-CONDUIT SYSTEMS; (d) THE UTILITY STRUCTURE MATERIAL COMPOSITION, WHEN REASONABLY ASCERTAINABLE; (e) THE BENCHMARKS AND /OR PROJECT SURVEY DATA USED TO DETERMINE ELEVATIONS; (f) THE PAVING THICKNESS AND TYPE, WHERE APPLICABLE; (g) THE GENERAL SOIL TYPE AND SITE CONDITIONS; AND (h) SUCH OTHER PERTINENT INFORMATION AS IS REASONABLY ASCERTAINABLE FROM EACH TEST HOLE SITE.
- 14. <u>UTILITY ALLOWANCE:</u> UTILITY ALLOWANCE IS INCLUDED AS NECESSARY, SEE BID BOOK FOR SPECIFIC AMOUNT. UTILITY ALLOWANCE IS INTENDED TO COVER THAT WORK WHICH IS NOT KNOWN DUE TO COVERED AND UNFORESEEN UNDERGROUND UTILITY CONFLICTS. CONTRACTOR SHALL BE REQUIRED TO PROVIDE A DETAILED SCOPE OF WORK AND COST FOR REVIEW BY OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING. PROVISIONS OF ALLOWANCE DOES NOT GUARANTEE FULL AMOUNT TO CONTRACTOR. ONLY THAT PORTION OF MONEY USED FOR INTENDED PURPOSES WILL BE EXPENDED.
- 15. <u>AS-BUILTS:</u> CONTRACTOR SHALL DELIVER FINAL CERTIFIED AS-BUILTS IN HARD COPY AND ACAD R2005 OR BETTER. AS-BUILTS SHALL BE SUBMITTED WITH SUBSTANTIAL COMPLETION PAY APPLICATION. NO PAYMENT WILL BE MADE WITHOUT AS-BUILT SUBMITTAL. THE WORK IS INCIDENTAL TO CONSTRUCTION STAKING
- 16. NOTICE OF EXTENDED PAYMENT: THIS CONTRACT ALLOWS THE OWNER TO MAKE A PAYMENT WITHIN 45 DAY AFTER A SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT. PER NEW MEXICO STATUTES ANNOTATED 13-1-158. PAYMENTS AND PURCHASES.

ROADS:

- 1. ALL UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO SURFACING OF THE STREETS. ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISH GRADE.
- 2. ALL PERMANENT SIGNS, BARRICADES, CHANNELIZATION DEVICES, PAVEMENT MARKINGS, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION.
- 3. ALL STREET STRIPING ALTERED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR TO MATCH THE ORIGINAL CONDITIONS (I.E. TYPE, SPACING) AT THE LOCATION PRIOR TO CONSTRUCTION, OR AS SHOWN IN THIS PLAN
- 4. STREET GRADES SHALL BE RESTORED BY THE CONTRACTOR TO THE EXISTING GRADES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SMOOTH TRANSITIONS SHALL BE MADE BETWEEN EXISTING PAVEMENT WHICH REMAINS IN PLACE AND PAVEMENT WHICH IS REPLACED. WHEN ABUTTING NEW PAVEMENT TO EXISTING, SAWCUT BACK EXISTING PAVEMENT TO A NEAT, STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED PAVEMENT.
- 5. A STREET CUT PERMIT MUST BE ACQUIRED FROM THE VILLAGE OF MILAN.
- 6. ALL WORK IN PUBLIC RIGHT—OF—WAY SHALL BE CONSTRUCTED BY A LICENSED CONTRACTOR AND REQUIRES PERMIT AND APPROVAL BY THE VILLAGE OF MILAN.
- 7. ALL SAW-CUTTING WILL BE CONSIDERED INCIDENTAL TO DEMOLITION.

UTILITIES-GENERAL NOTE:

- 1. IF ANY UTILITY LINES, PIPELINES OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS. THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF OR DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS. THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- 2. THE CONTRACTOR SHALL NOTIFY NEW MEXICO ONE CALL AT 1-800-321-2537 AT LEAST TWO WORKING DAYS PRIOR TO STARTING WORK ON THIS PROJECT.
- 3. SEWER/WATER LINES SHALL BE PLACED IN SEPARATE TRENCHES SEPARATED HORIZONTALLY AS INDICATED IN 'PROPOSED TYPICAL ROADWAY SECTION' DETAIL ON SHEET G-004 AND ON CONSTRUCTION DRAWINGS. AT ALL CROSSINGS OF WATER AND SEWER LINES, THE WATER LINE SHALL BE PLACED A MINIMUM OF 1 FEET HIGHER IN ELEVATION THAN THE SEWER, OTHERWISE THE SANITARY SEWER LINE SHALL BE ENCASED IN 6 INCH THICK CONCRETE FOR AT LEAST 10 FEET ON EACH SIDE OF THE WATERLINE OR THE SEWER LINE SHALL BE C-900 PRESSURIZED PIPE.
- 4. SEWER & WATER LINE DISTANCES SHOWN IN PLANS ARE HORIZONTAL DISTANCES WITHOUT REGARD TO SLOPE OF PIPE OR PROJECT STATIONING.
- 5. "SANITARY" CAST ON COVER TO IDENTIFY SANITARY SEWER AND LETTERING SHALL BE MCKINLEY COUNTY.

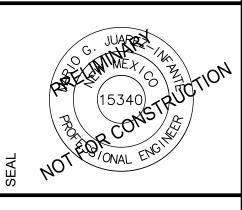
WATER:

- 1. CONTRACTOR WILL NOTIFY MCKINLEY COUNTY 5 WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.
- 2. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH APWA NM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2006 EDITION.
- 3. ALL EASEMENTS WILL BE DEDICATED, CLEARED AND GRADED, AND STAKED PRIOR TO WATER LINE INSTALLATION.
- 4. ALL STREETS WILL BE CUT TO GRADE PRIOR TO WATER LINE INSTALLATION.
- 5. ALL LOT CORNERS WILL BE STAKED PRIOR TO SERVICE LINE INSTALLATION. CURB AND GUTTER WILL BE INSTALLED PRIOR TO WATER LINE INSTALLATION.
- 6. MATERIAL SUBMITTALS SHALL BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
- 7. PRESSURE REGULATORS WILL BE INSTALLED ON ALL SERVICES DOWNSTREAM FROM THE METER.
- 8. PRESSURE REGULATOR AND PRESSURE SYSTEMS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- 9. A MINIMUM OF 3 FEET COVER TO TOP OF PIPE TO BE MAINTAINED.
- 10. CONTRACTOR TO SUBMIT VALVE TIES TO ENGINEER WITHIN 5 WORKING DAYS OF COMPLETION.
- 11. CONTRACTOR TO SUBMIT FITTING TIES AND LENGTHS BETWEEN FITTINGS TO ENGINEER 5 WORKING DAYS AFTER COMPLETION. THIS INCLUDES DISTANCES FROM CORPORATION TO CORPORATION. AS—BUILT QUANTITIES AND MEASUREMENTS SHALL BE LEGIBLE AND PROVIDED ON ENGINEER DRAWINGS OR OTHER AGREED UPON METHOD.
- 12. ALL VALVE BOXES TO BE BROUGHT UP TO GRADE AFTER FIRST COURSE OF ASPHALT AND BEFORE FINAL COURSE OF ASPHALT.
- 13. A MECHANICAL RESTRAINT SYSTEM SHALL BE UTILIZED ON FITTINGS AND PIPING FOR THRUST RESTRAINT. CONCRETE THRUST BLOCKING TO BE USED ONLY FOR SPECIAL CONDITIONS (e.g. CAPS WHERE MAIN WILL BE EXTENDED IN THE FUTURE).
- 14. ANY FIELD CHANGES TO THESE PLANS REQUIRES APPROVAL OF THE DESIGN ENGINEER. ALL CHANGE ORDERS WILL BE APPROVED BY THE FUNDING AGENCY (LOCAL GOVERNMENT DIVISION, DFA) BEFORE TAKING

SEWER:

- 1. SEWER SERVICE LATERAL LOCATIONS ARE SHOWN GRAPHICALLY. CONTRACTOR IS RESPONSIBLE FOR LOCATING "AS-BUILT" UTILITY DRAWINGS.
- 2. 30 DAYS FOLLOWING INSTALLATION AND BACKFILL OF SEWER LINES, A DEFLECTION TEST USING A HAND PULLED MANDREL SHALL BE PERFORMED IN THE PRESENCE OF THE
- 3. AIR TESTING OF SEWER LINES SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE.

NOSIM	&COMPANY	4401 MASTHEAD ST NE SUITE 150	ALBOQUERQUE, NM 6/109 PHONE: 505-348-4000	FAX: 505-348-4155 FIRST FLOOR	FAX: 505-348-4055 SECOND FLOOR
CONSULTANTS					



PROJECT NAME

PREWITT INDUSTRIAL PARK

PROJE	<u>a</u>								
									ВУ
									DESCRIPTION
									DATE
									REV.
PR	PROJECT NO:					19-600-071			
	DESIGNED BY: MJI								
	DRAWN BY: JJC/MIT/WGC					3C			
CHECKED BY: DATE: JUNE 2020									
DA	TE:						JUN	± 20	20

SHEET TITLE

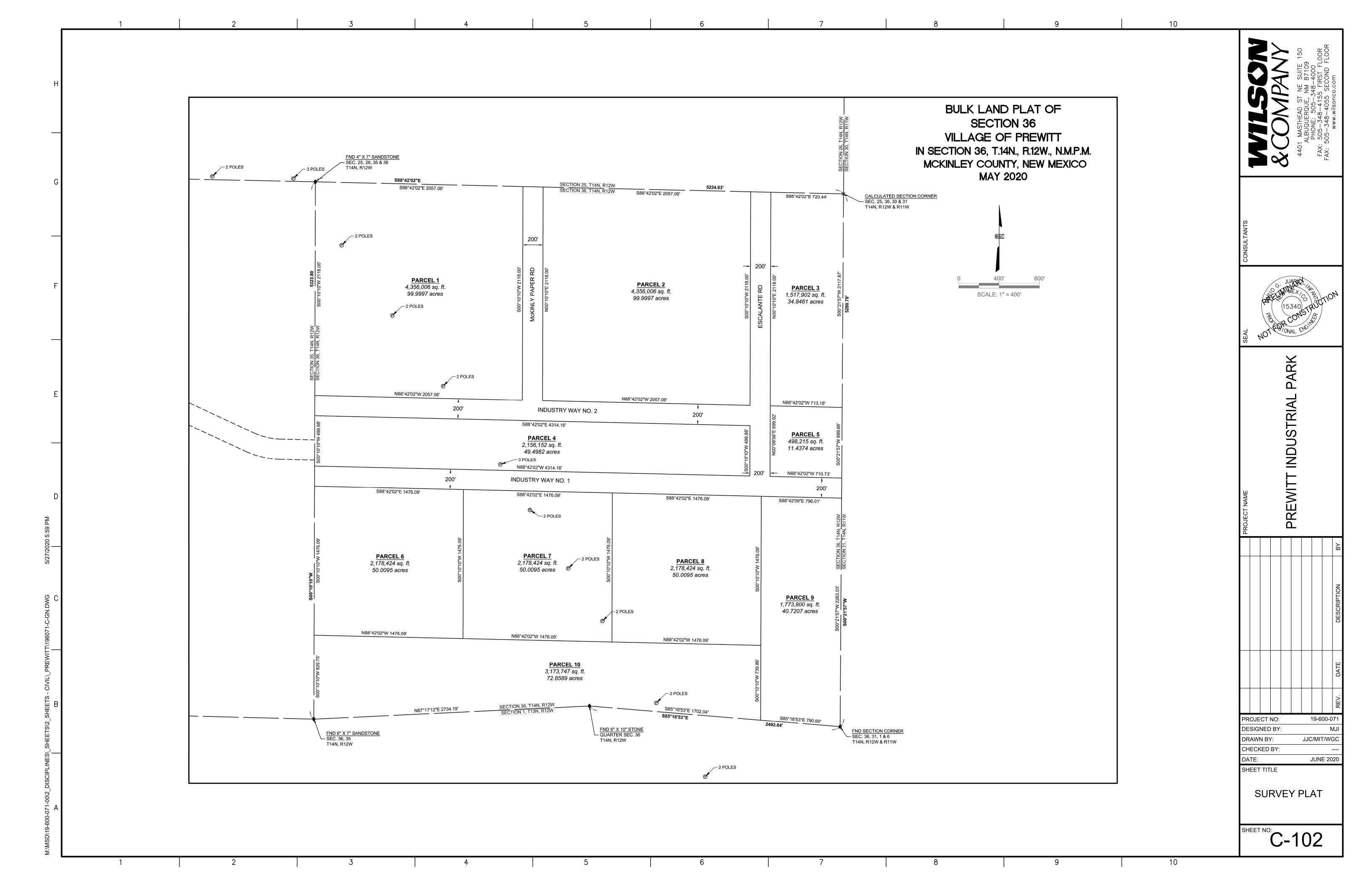
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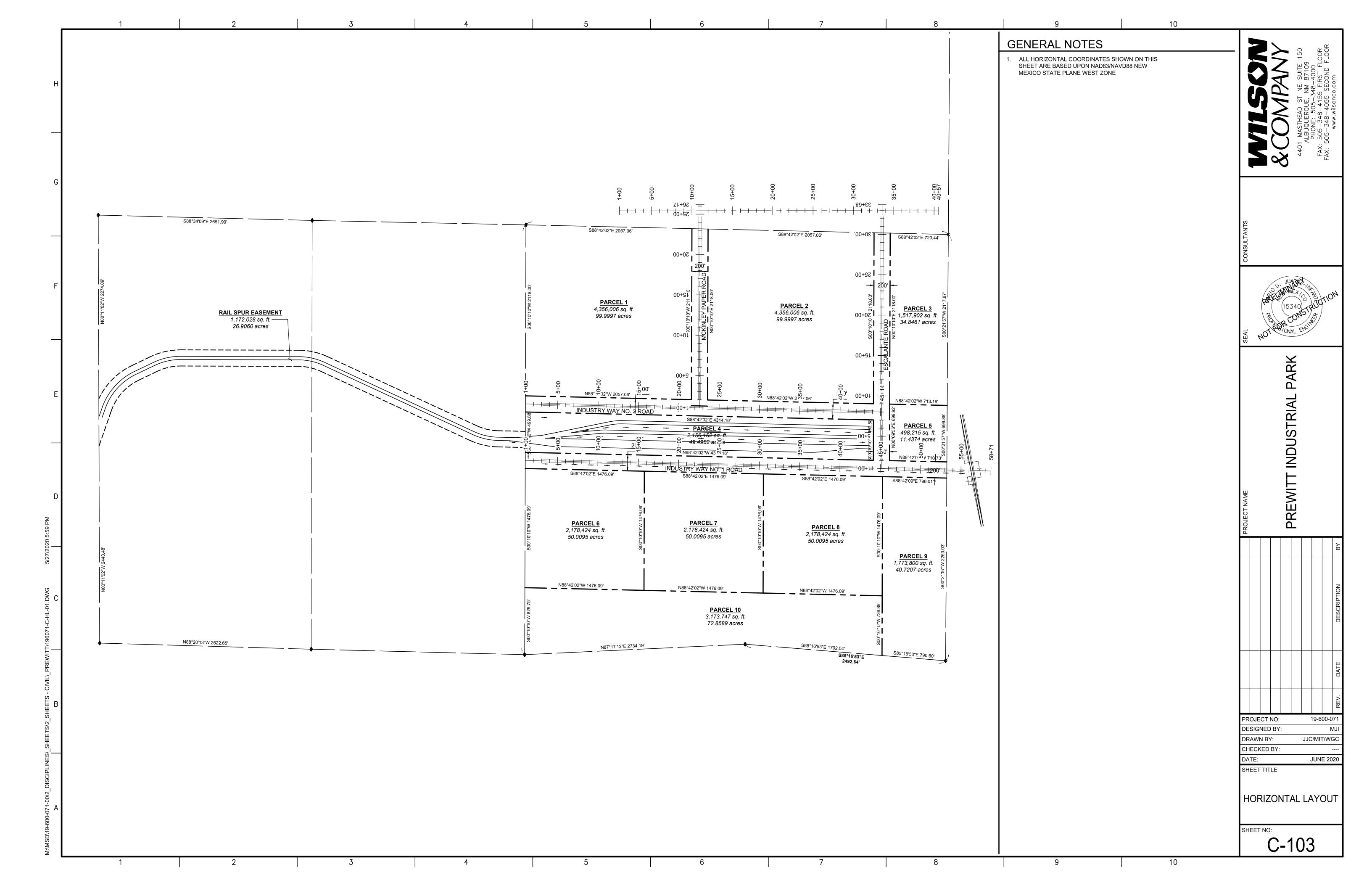
GENERAL NOTES

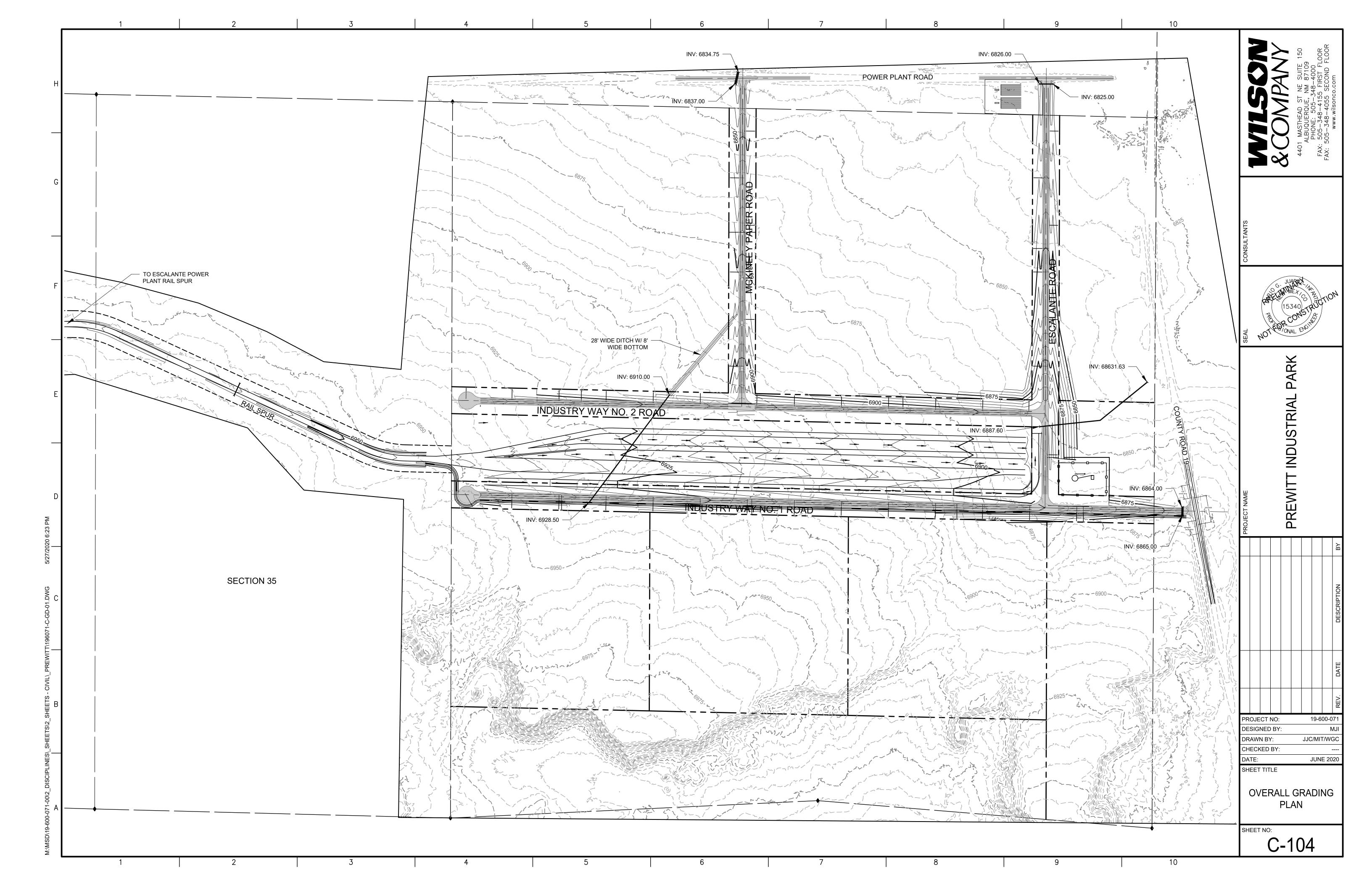
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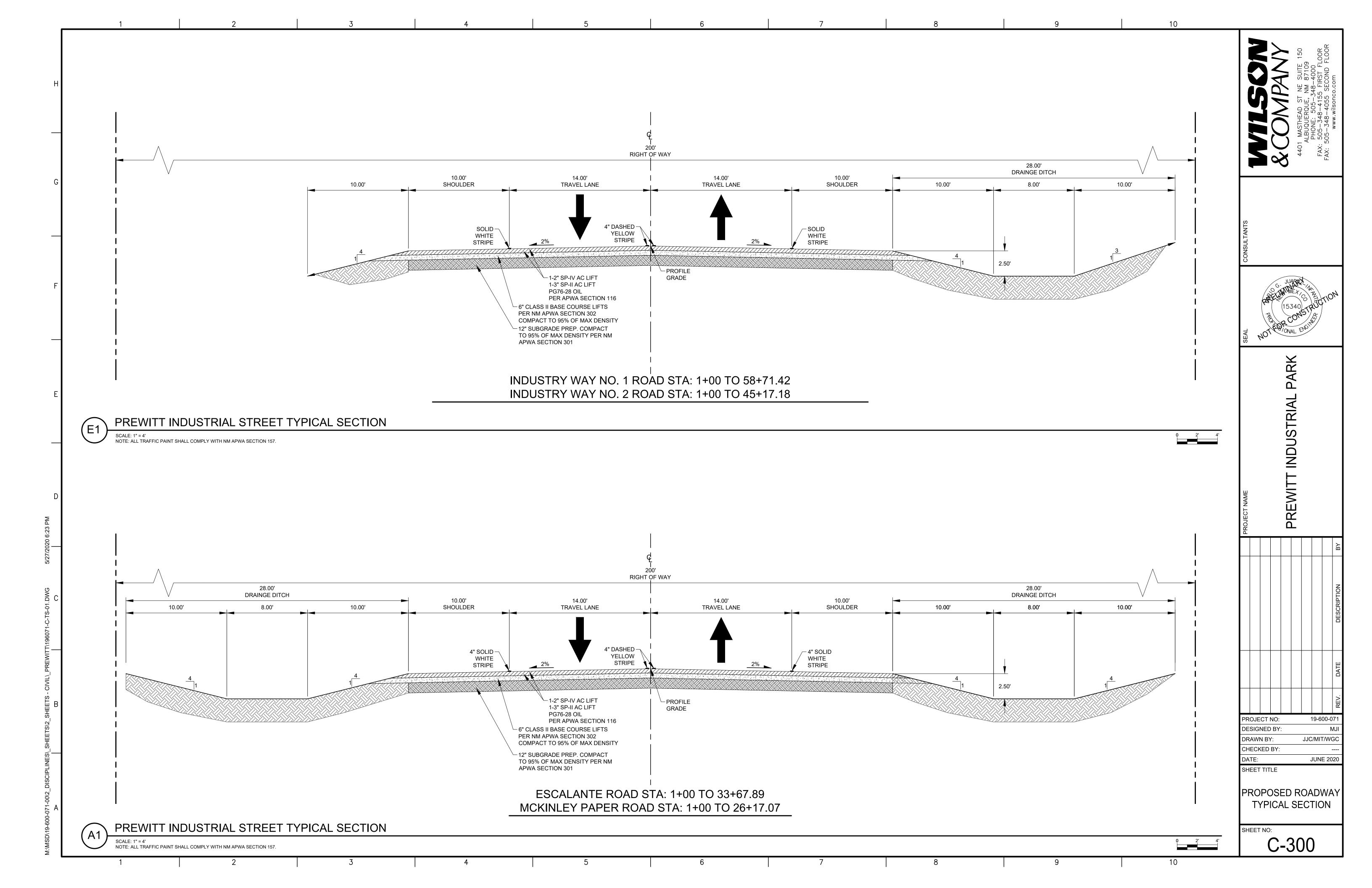
UTILITY COMPANY	CONTACT NAME	PHONE NUMBER	UTILITY SERVICE
CONTINENTAL DIVIDE ELECTRIC	JOSE MOLINA	505-285-6656	ELECTRICITY
		505-240-2235	WATER
		505-240-2235	WASTEWATER
NEW MEXICO GAS COMPANY	DAVID RIOS	505-287-0138	GAS
COMCAST	TOMMY CHAVEZ	505-287-9451	CABLE
CENTURY LINK (QWEST)	DANNY STOKES	505-285-5942	PHONE

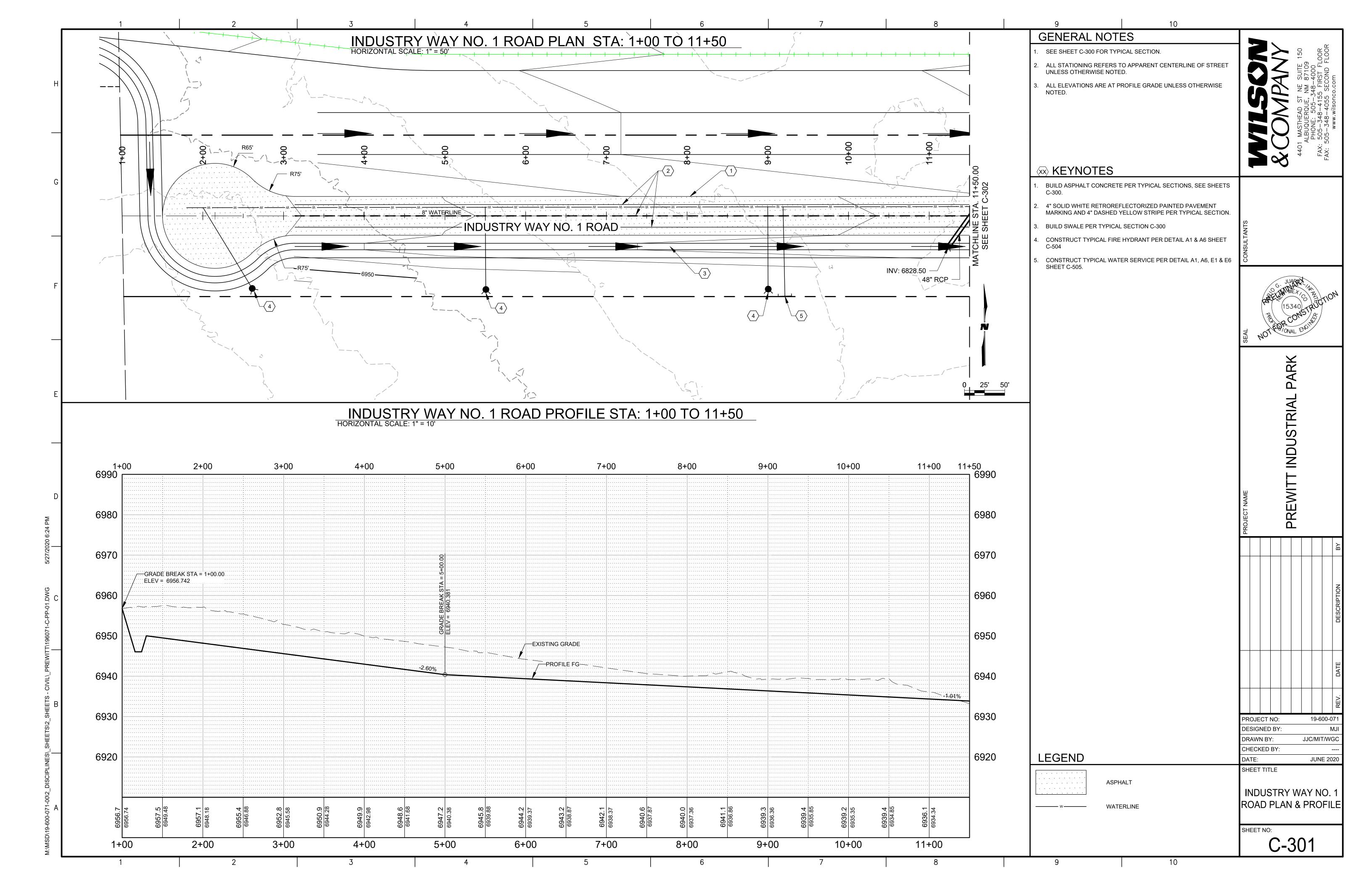
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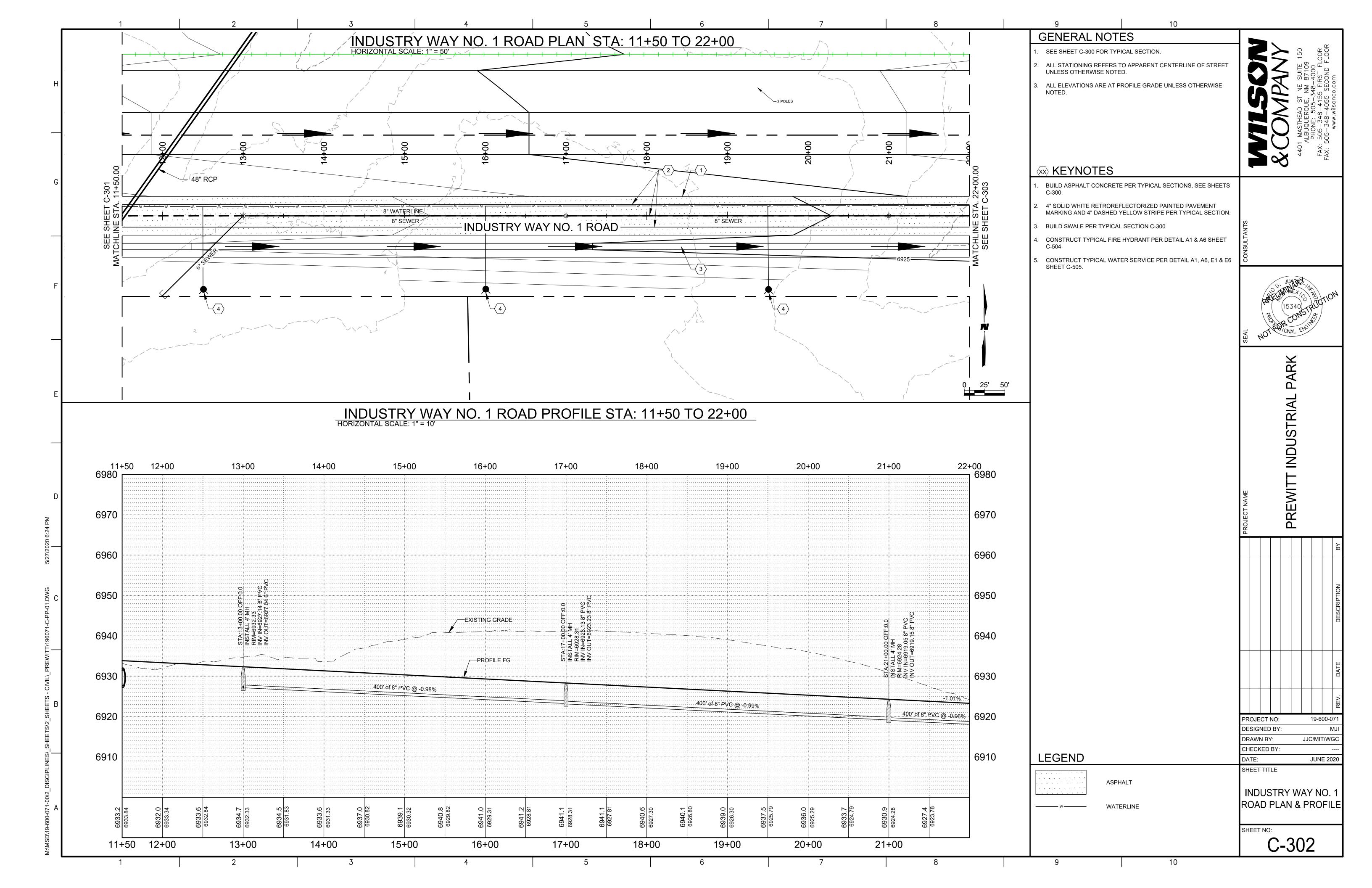


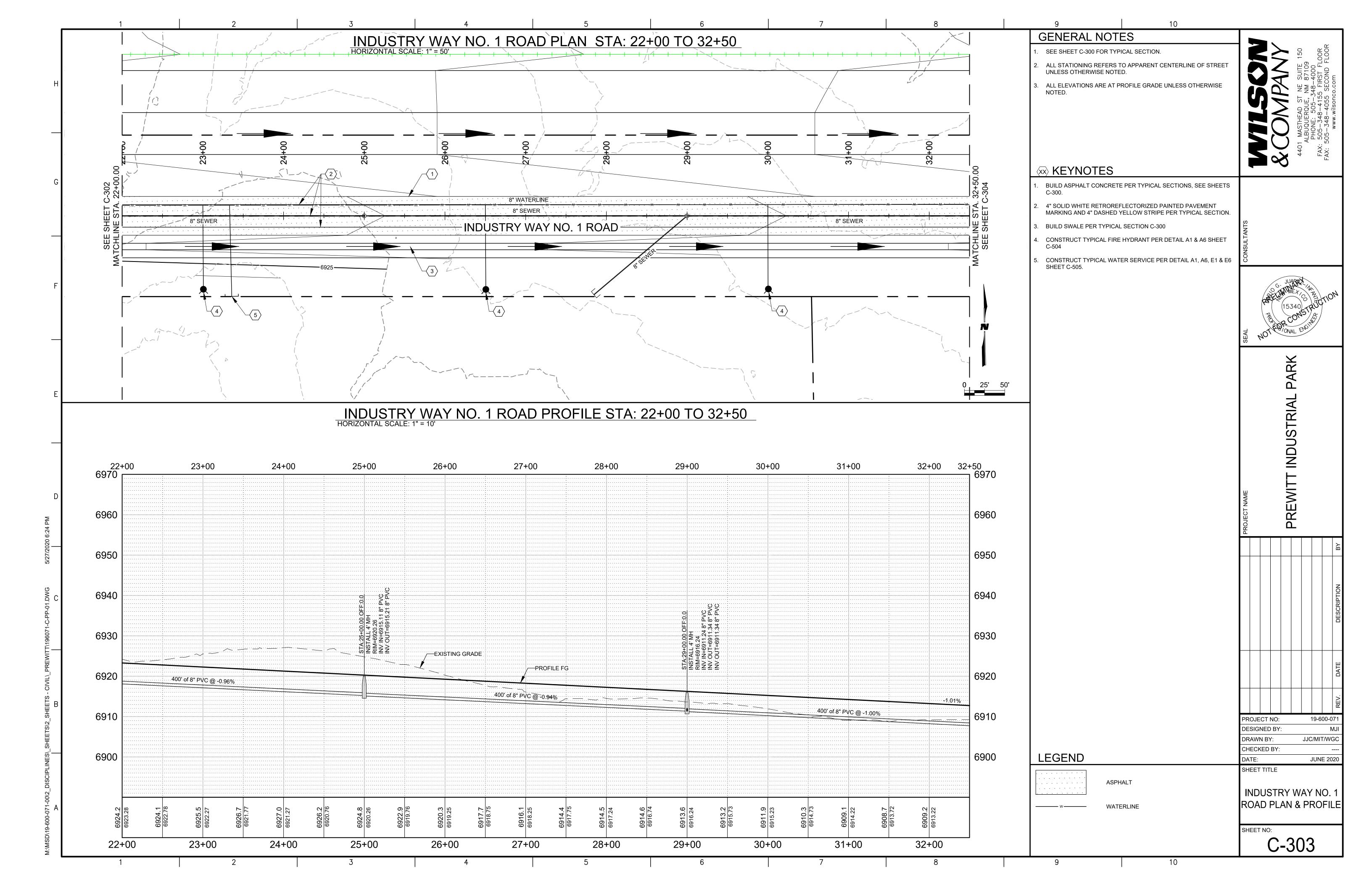


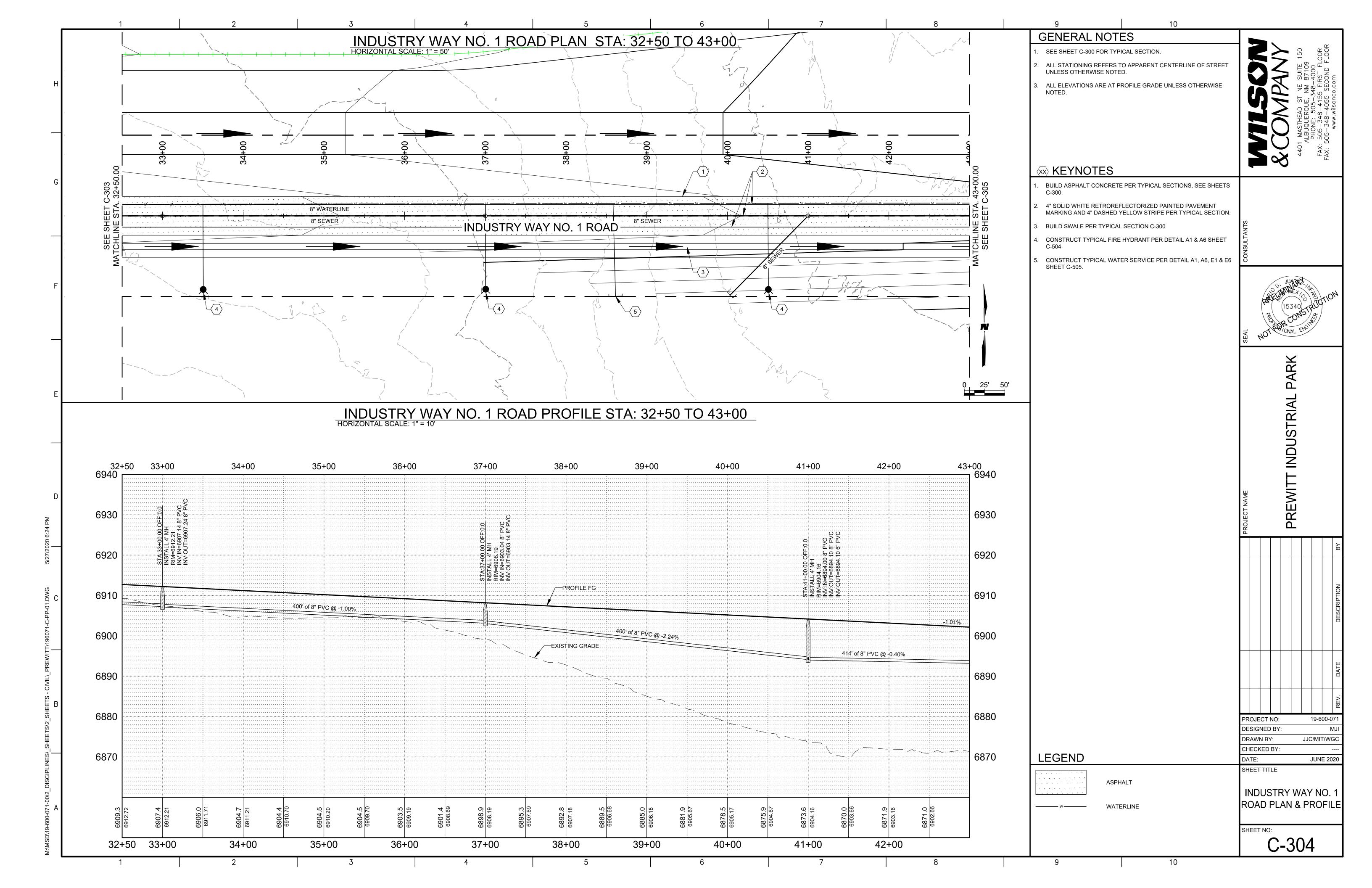


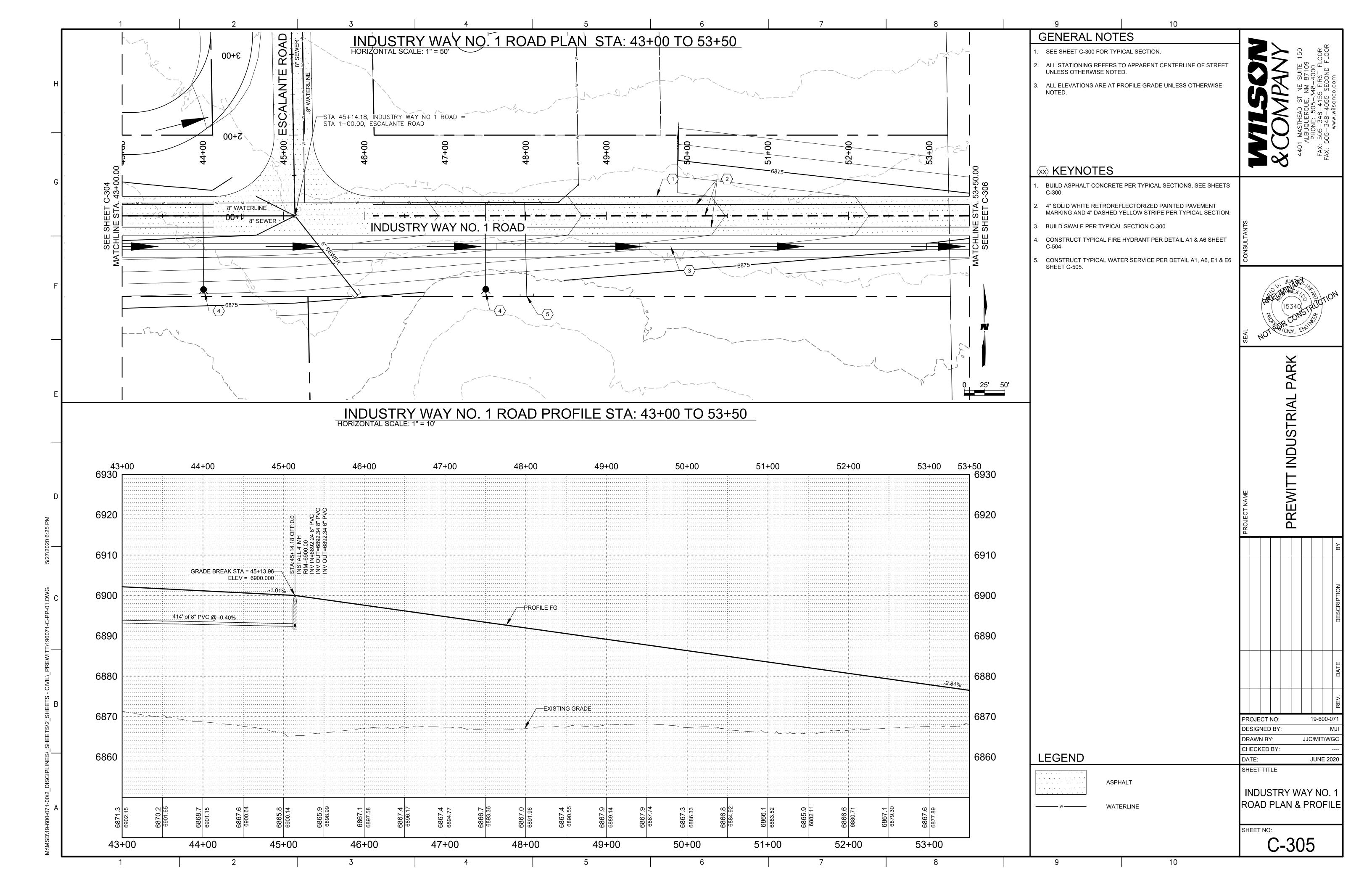


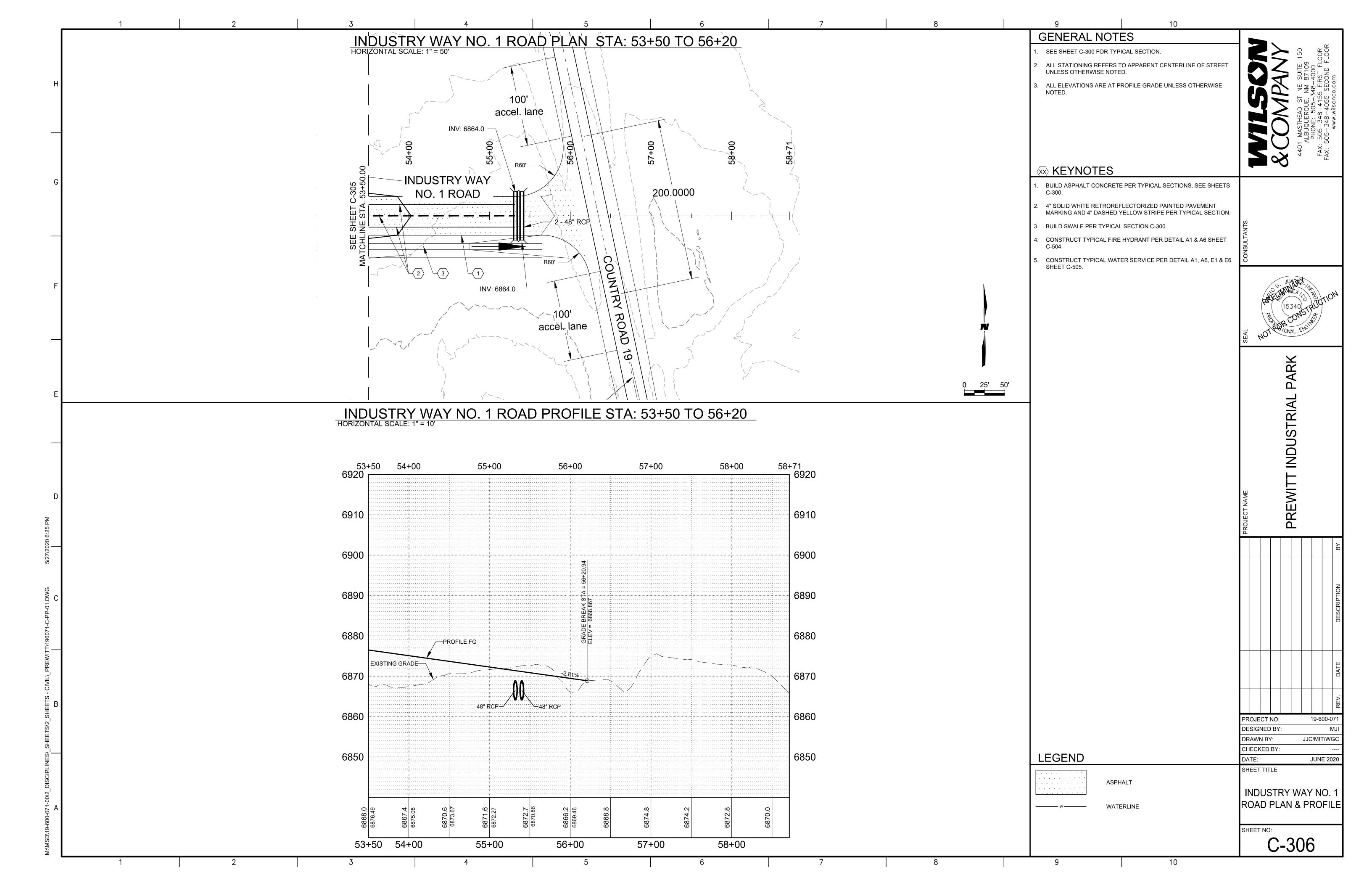


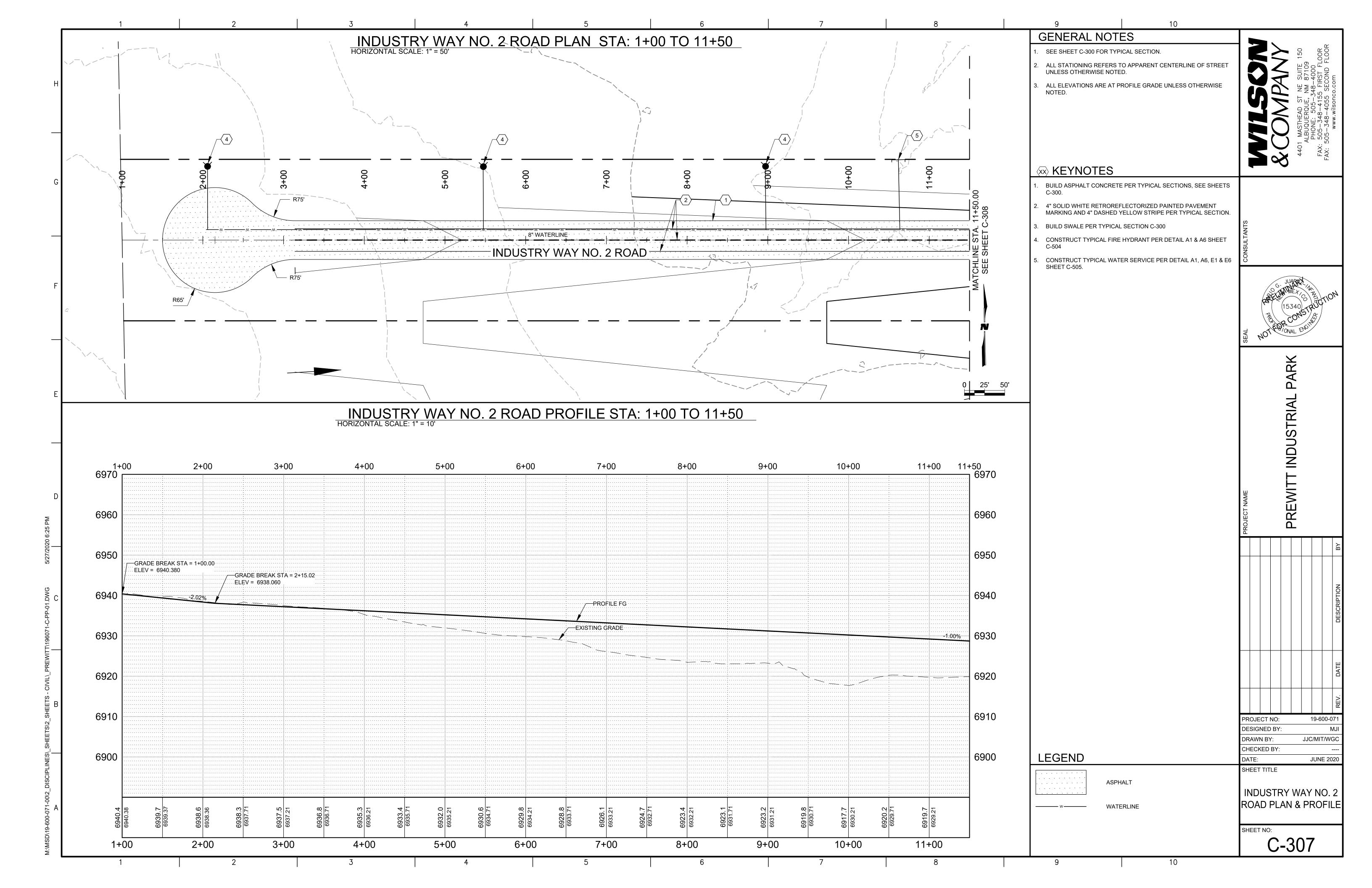


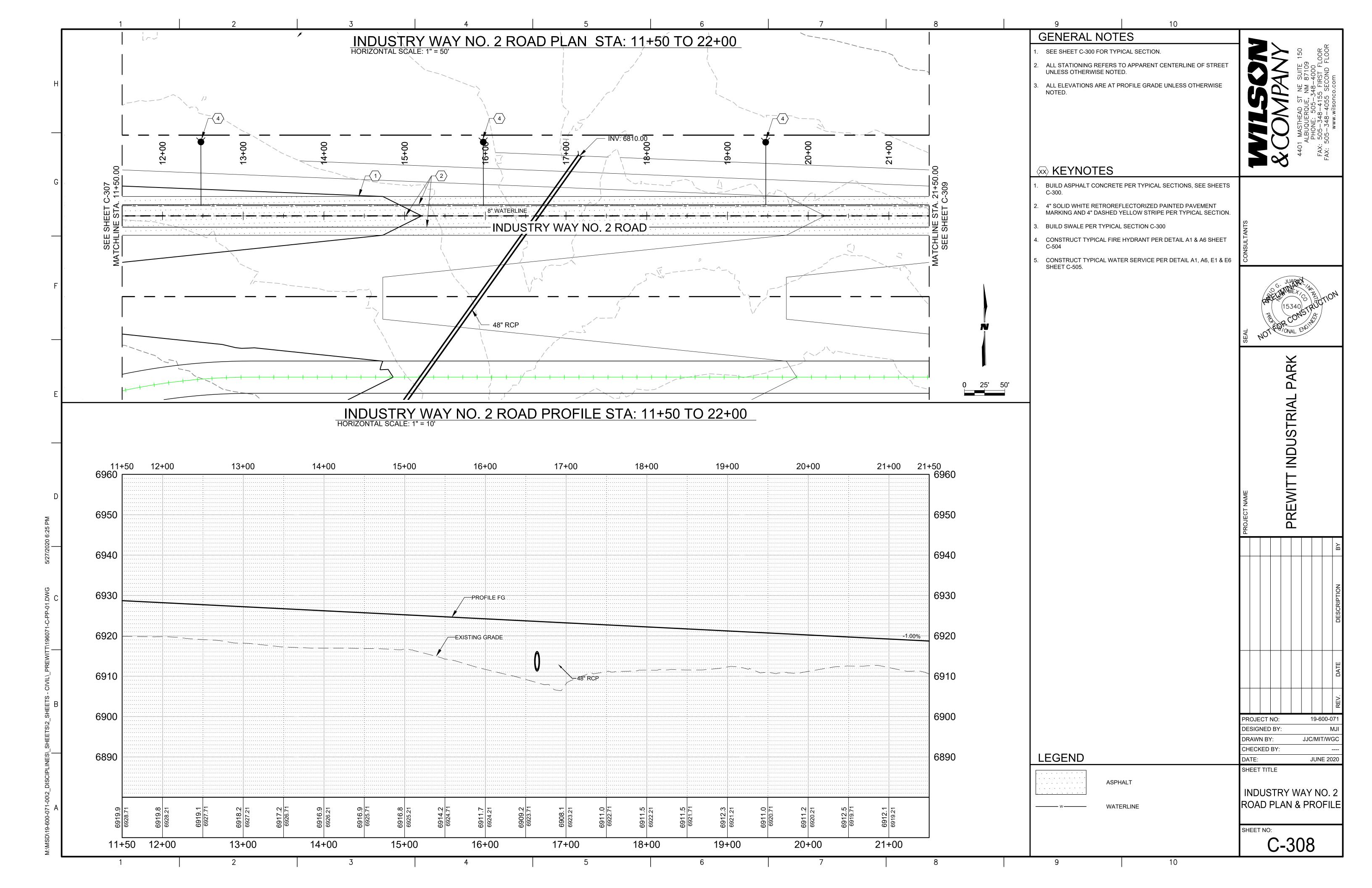


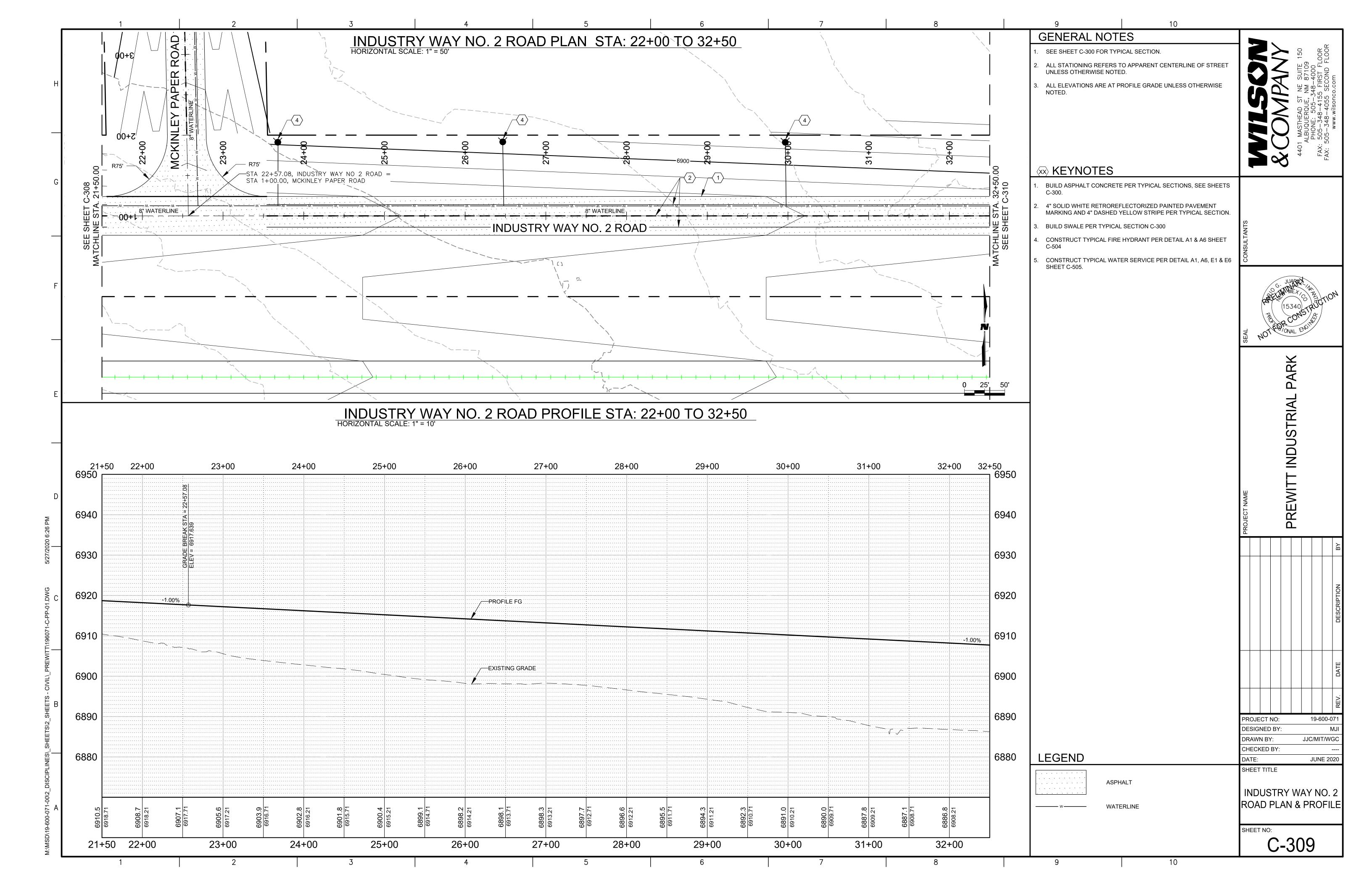


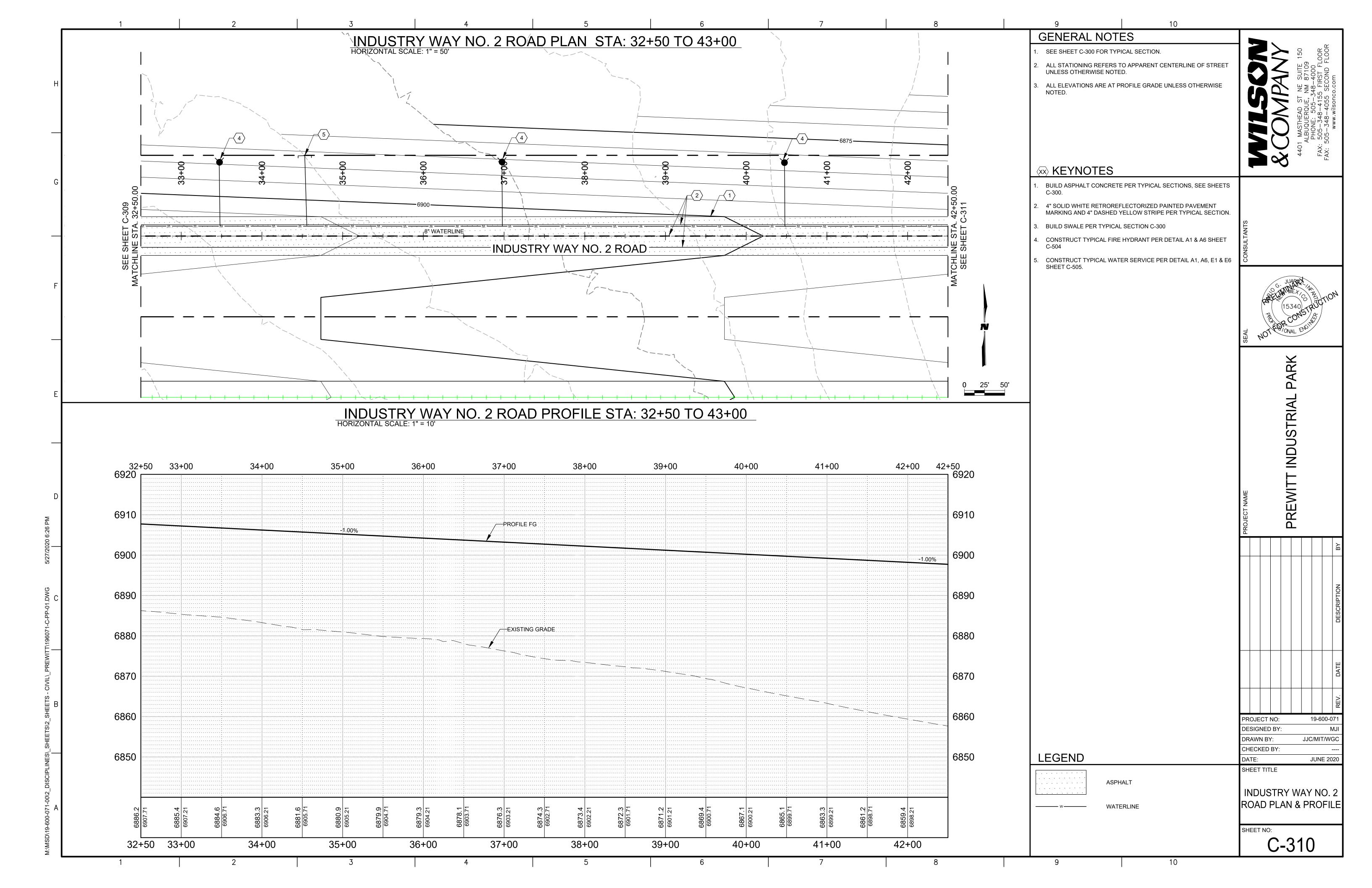


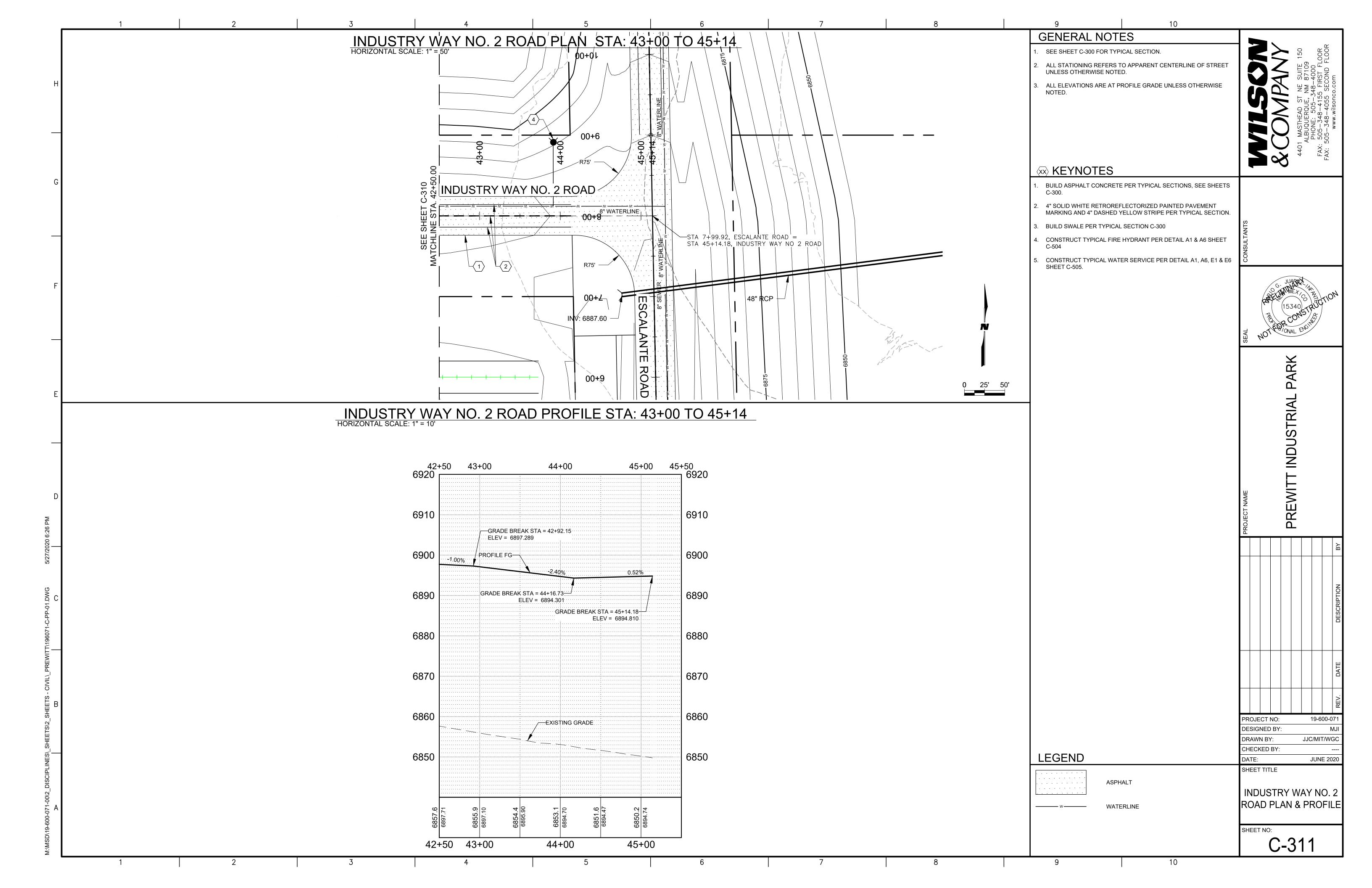


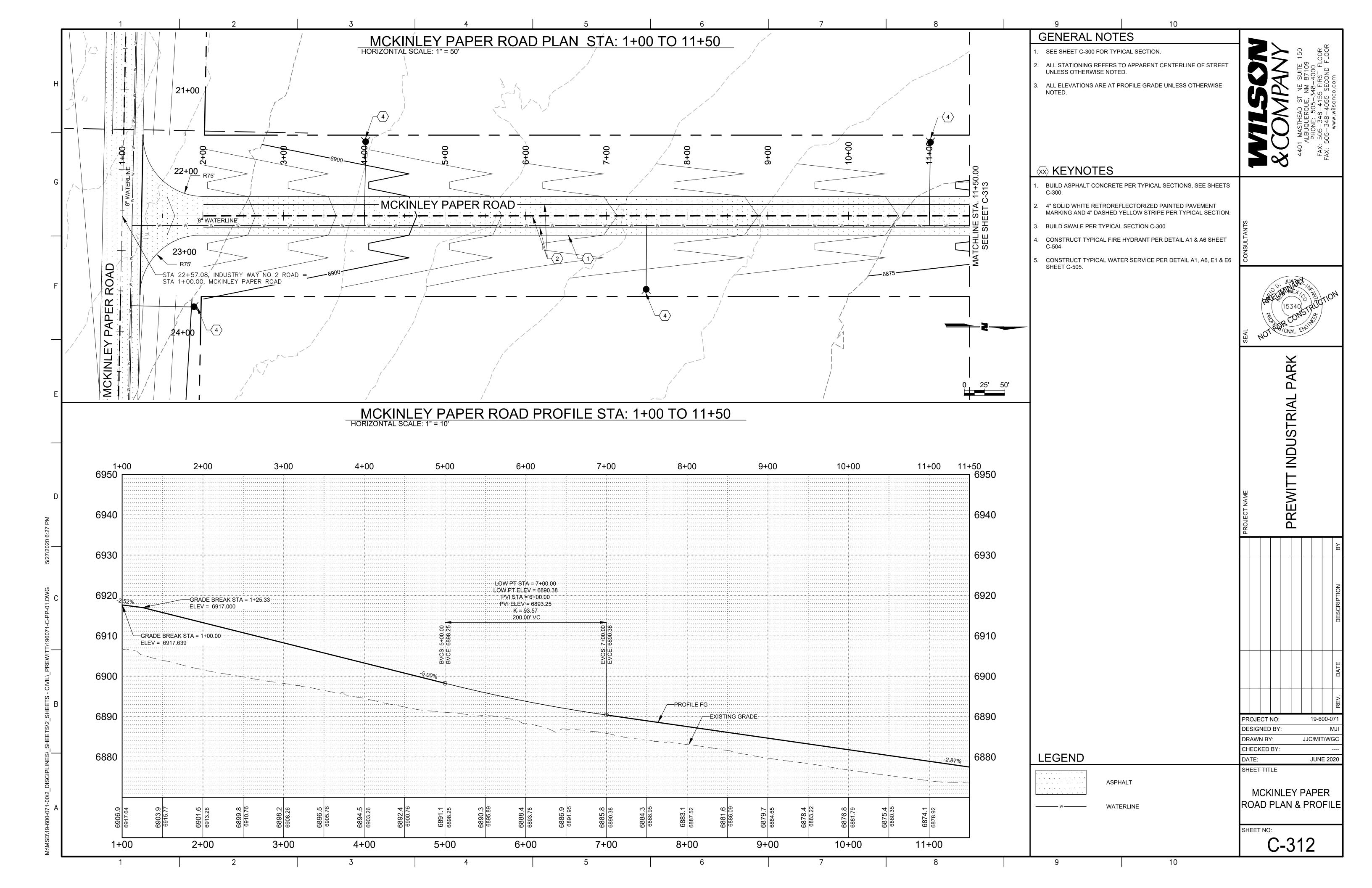


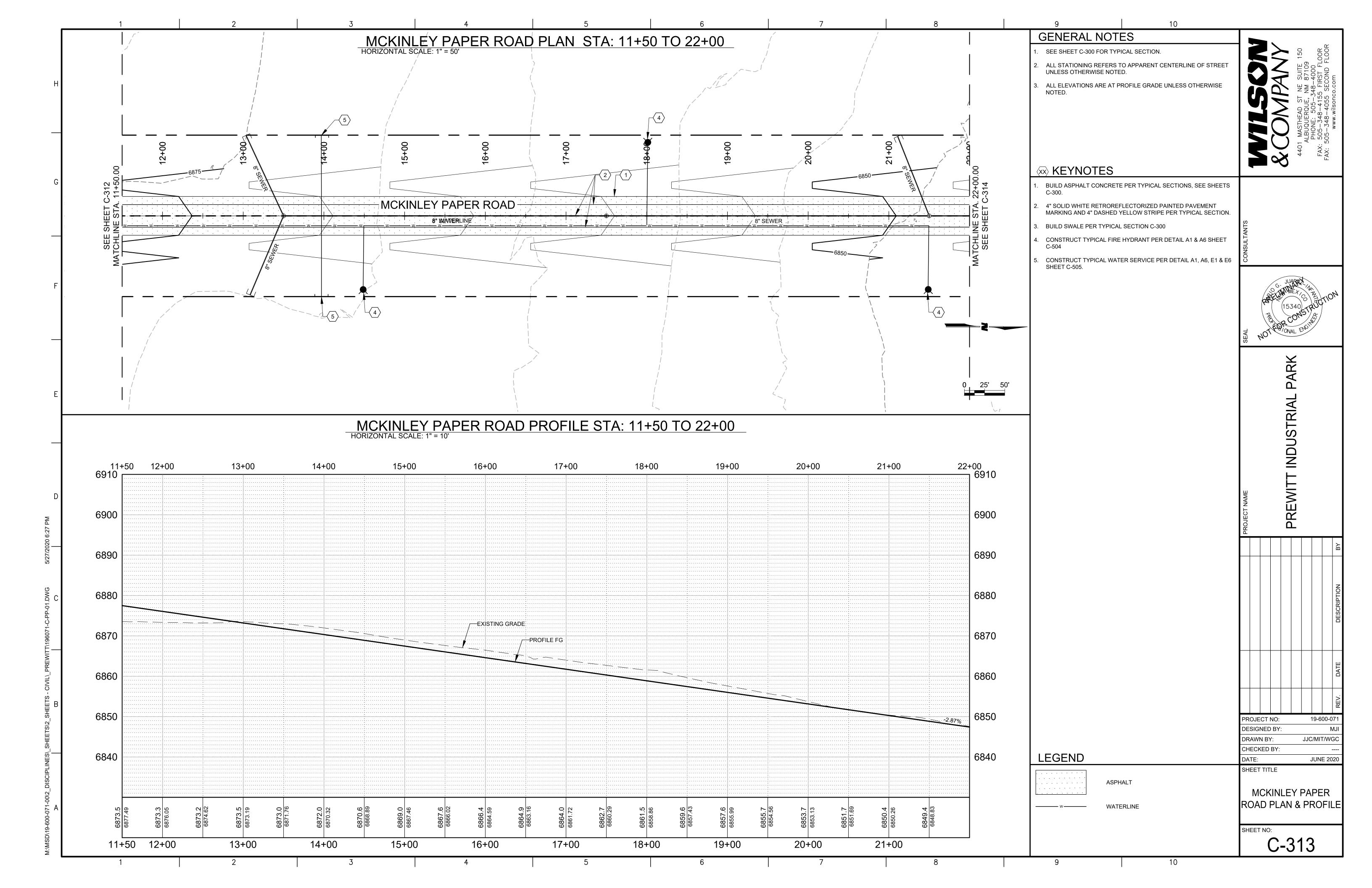


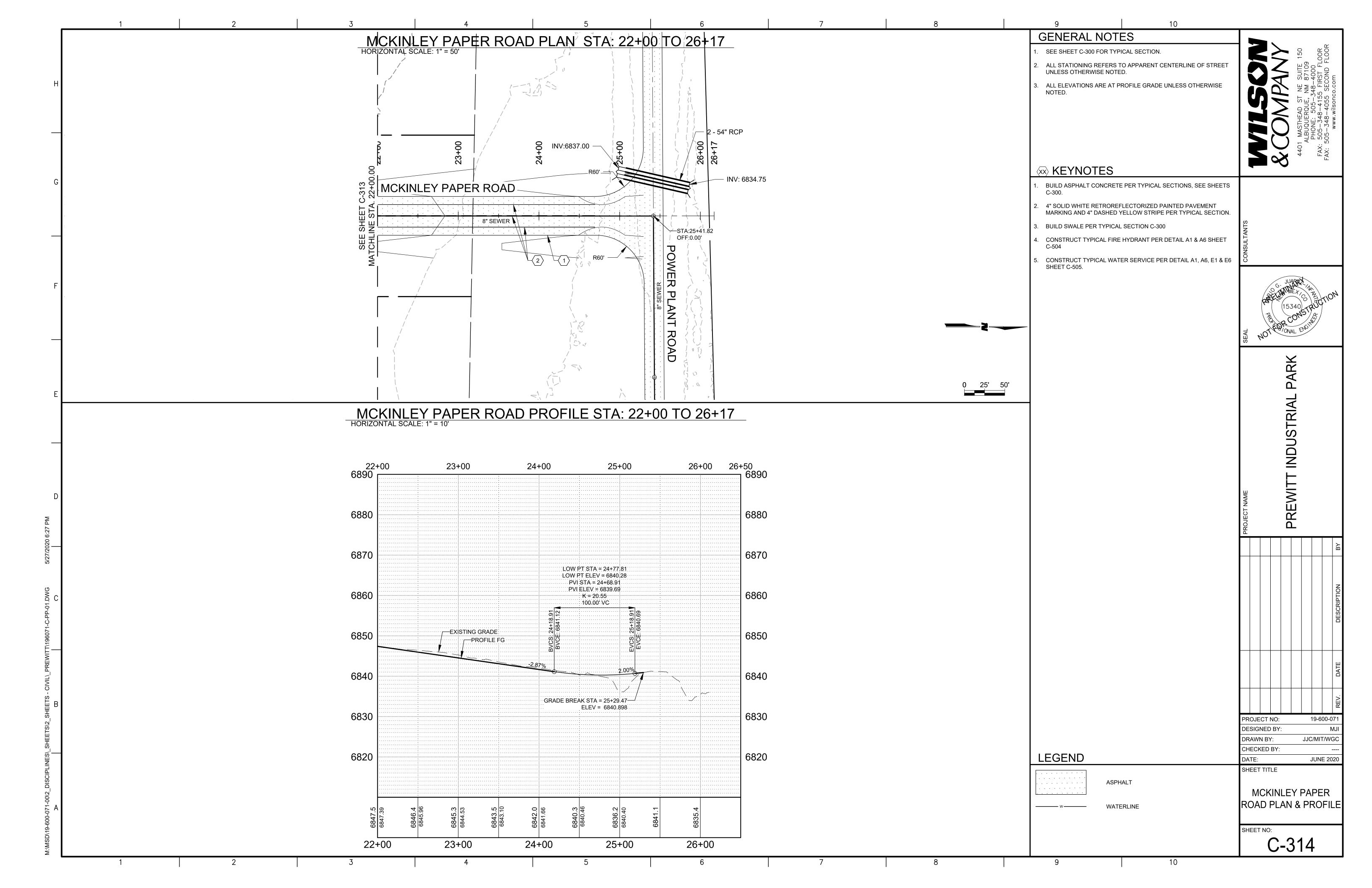


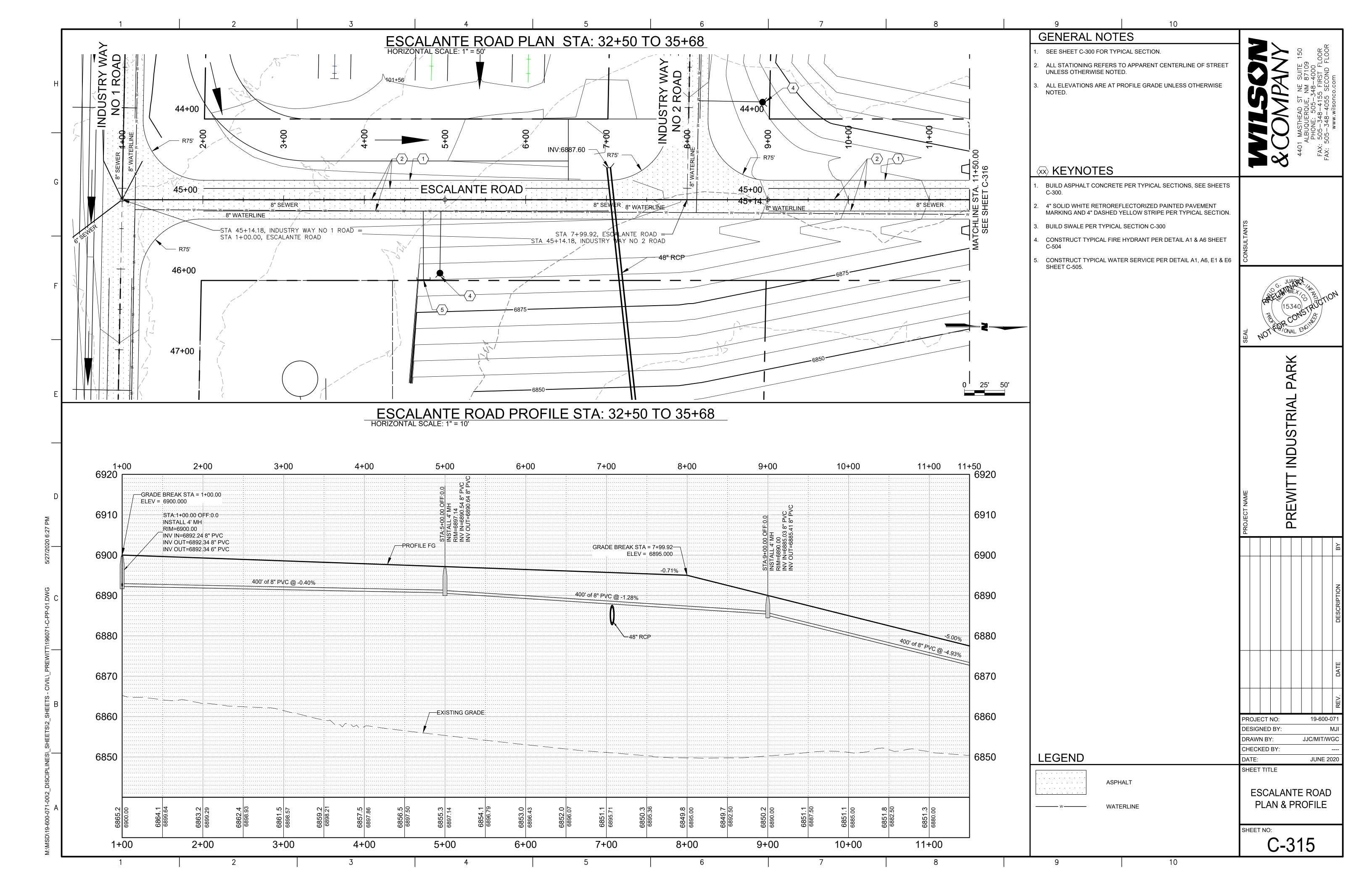


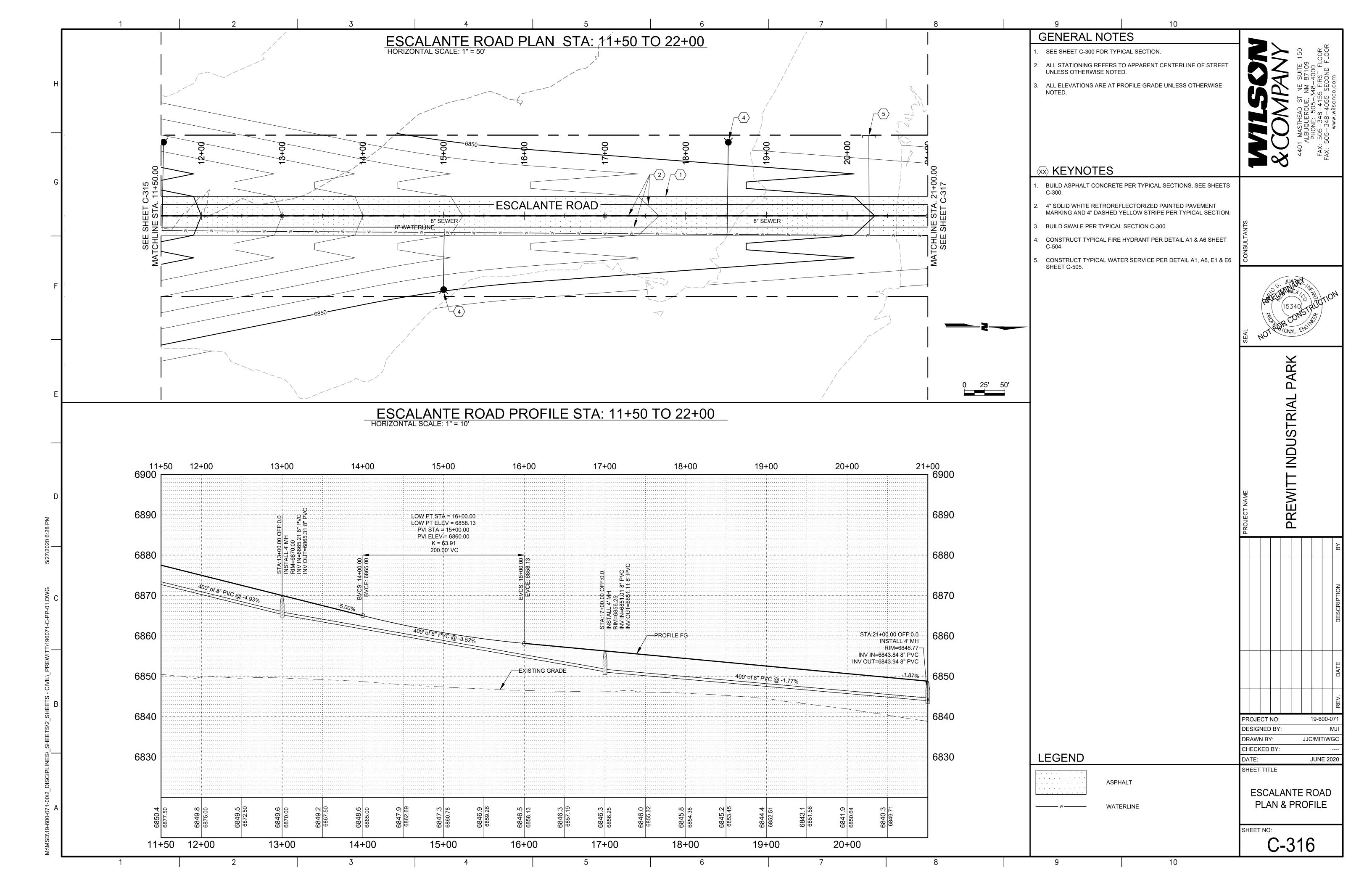


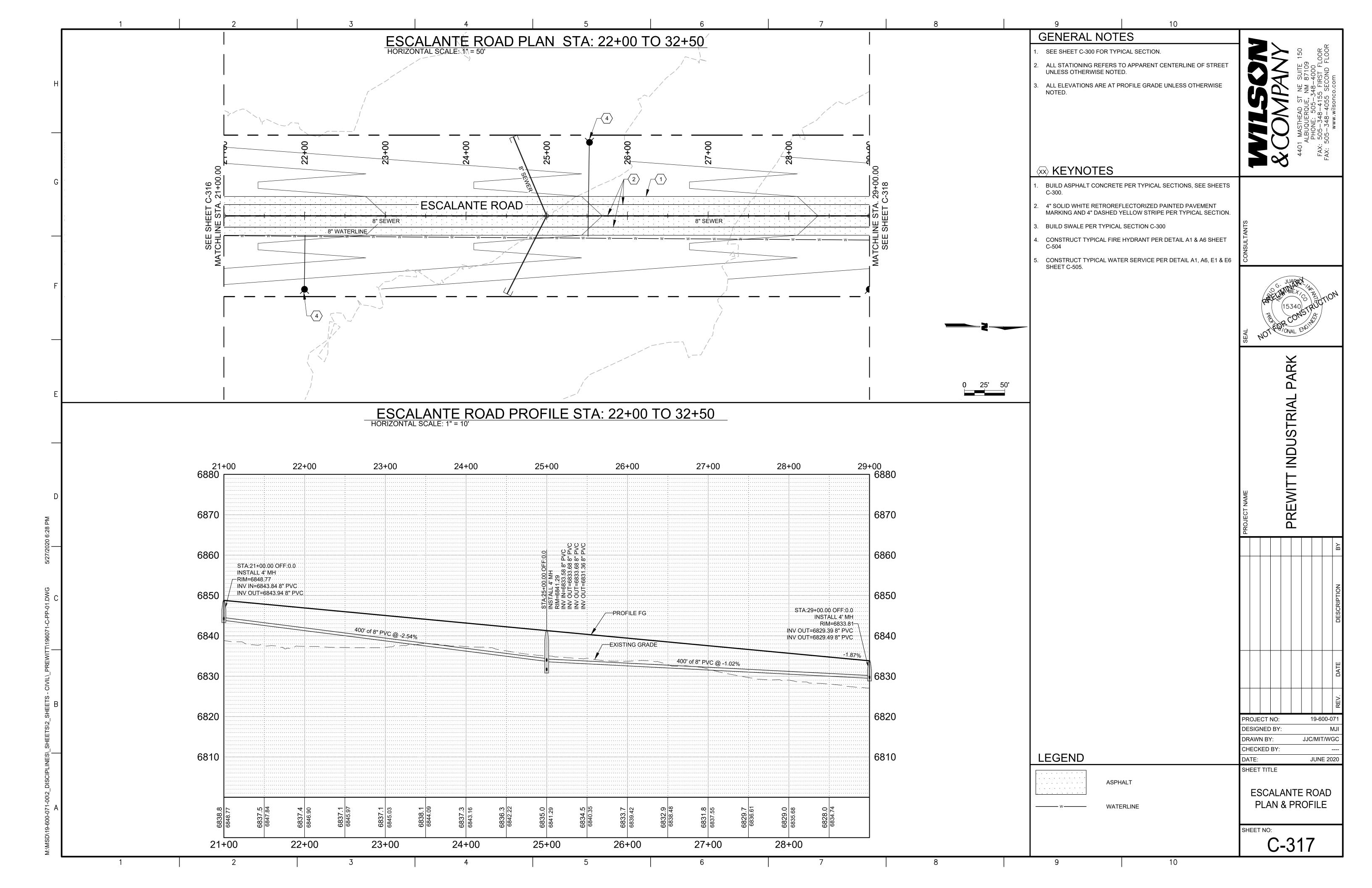


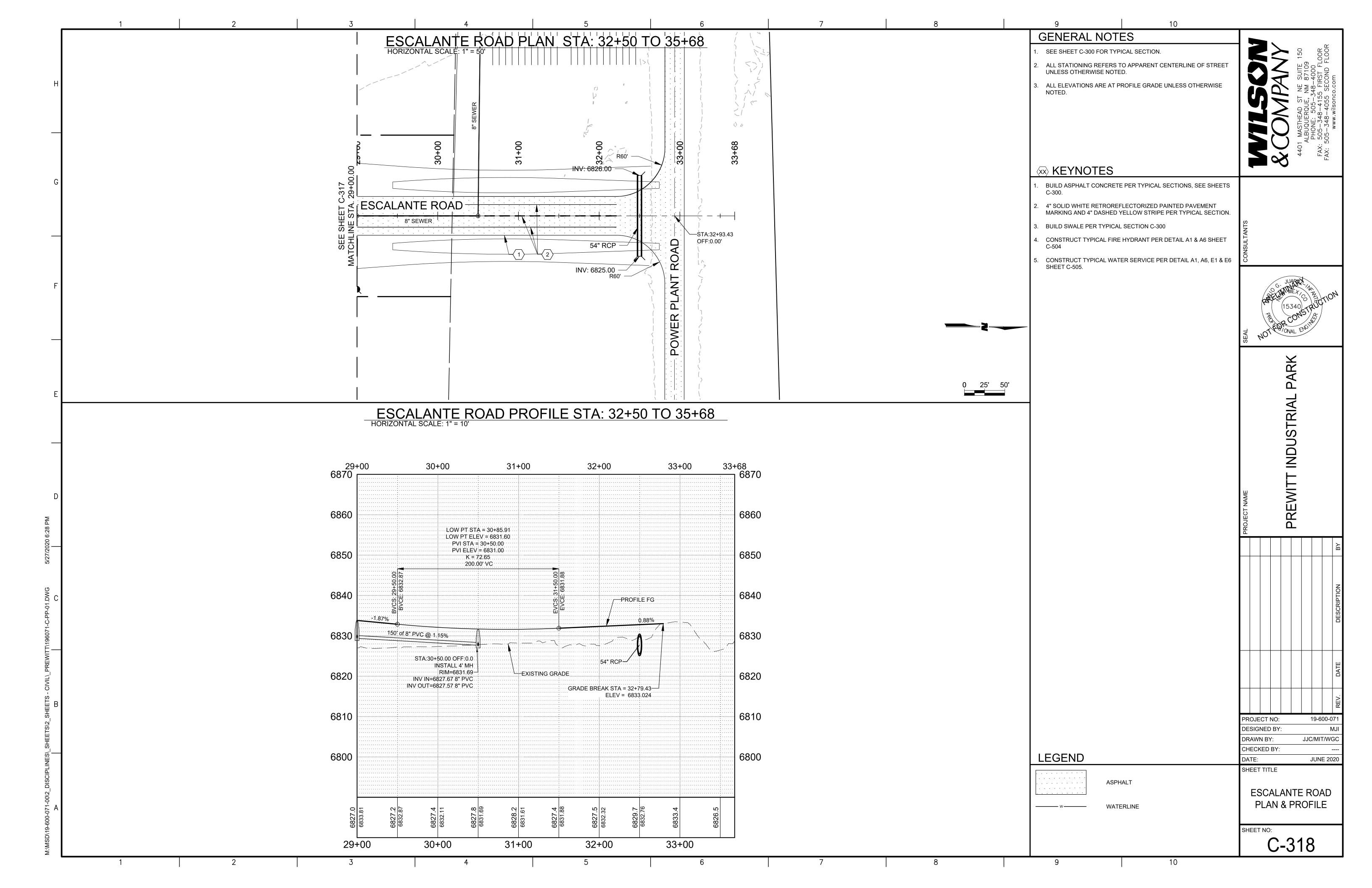


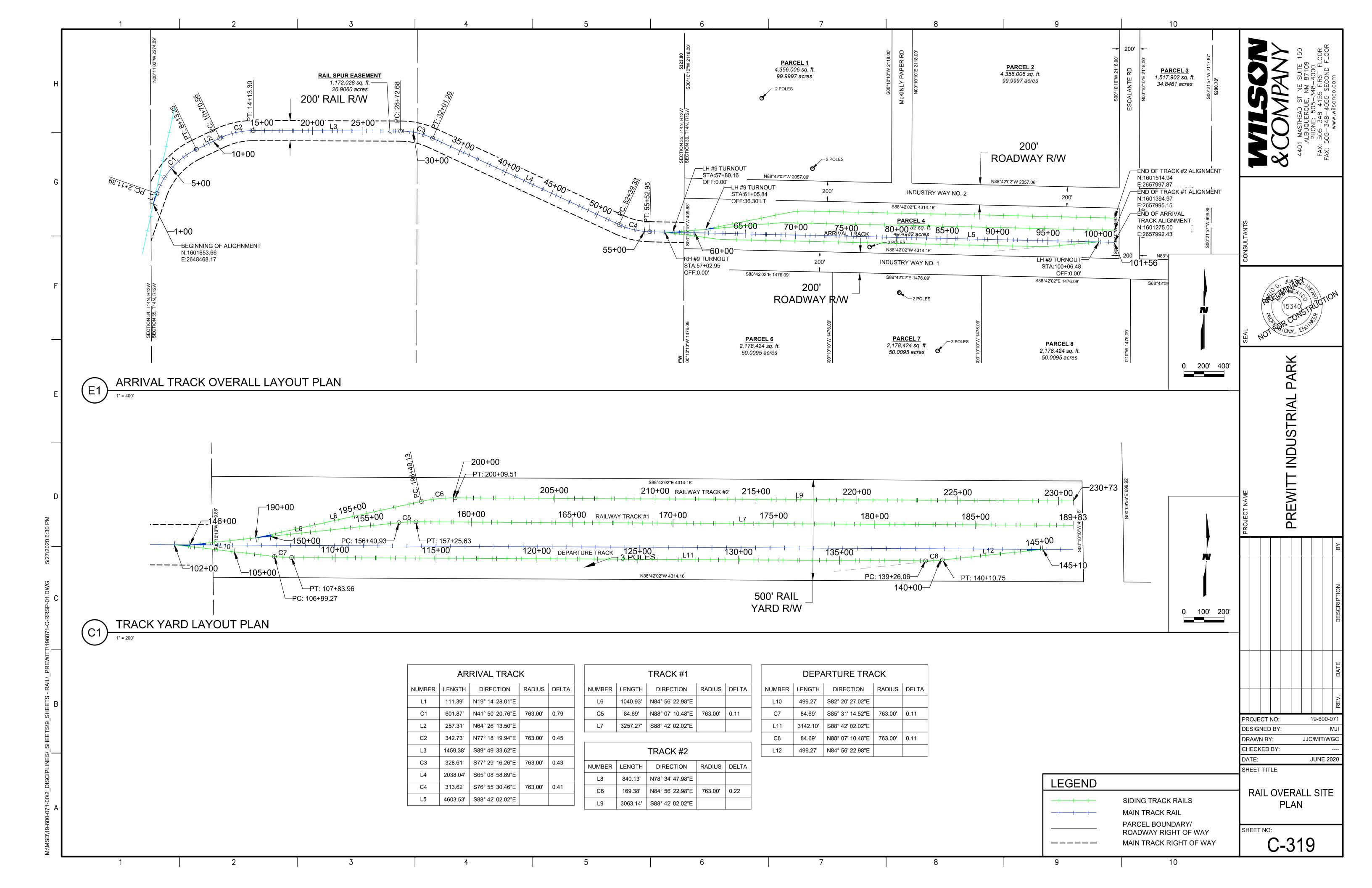


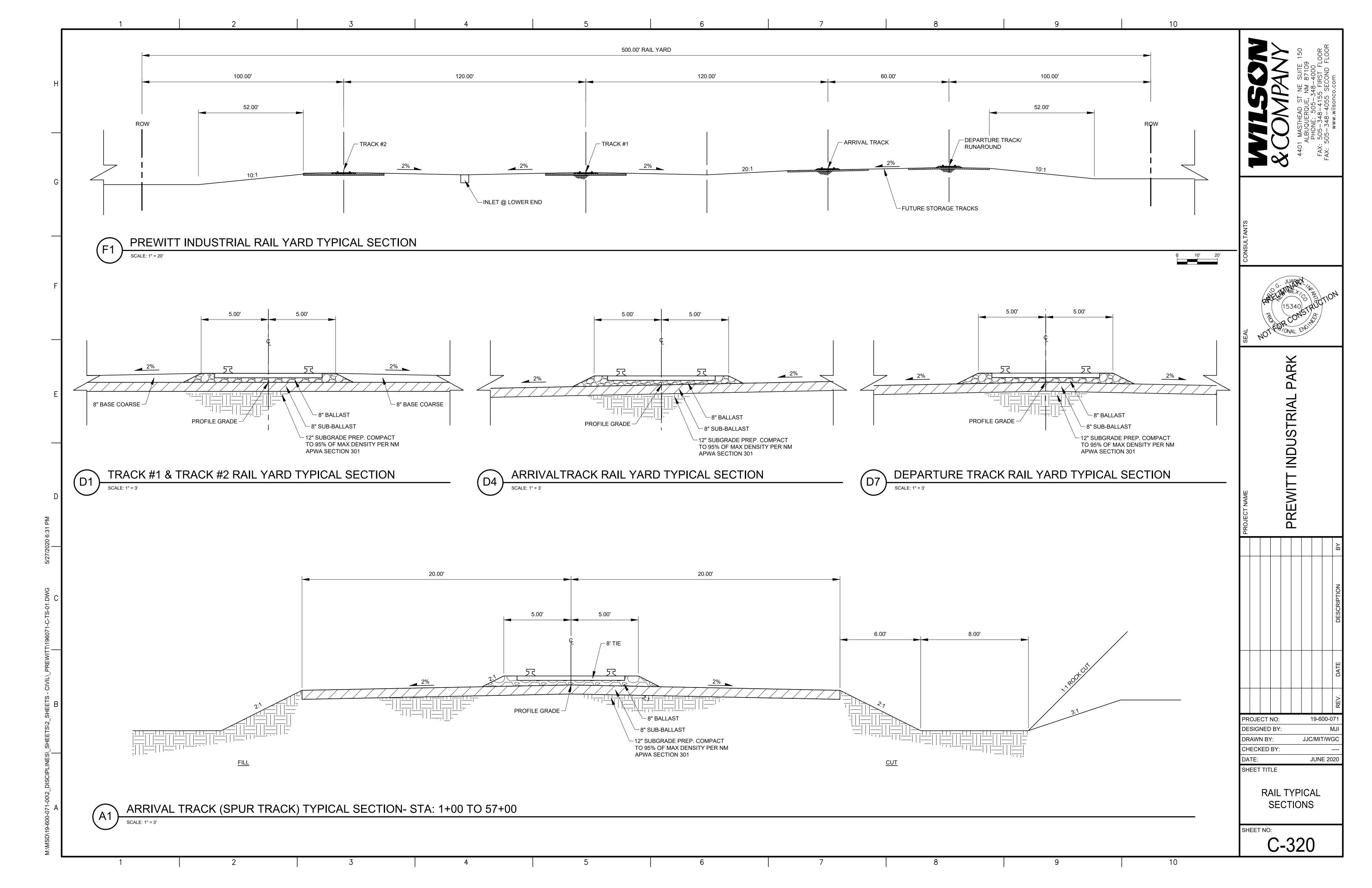


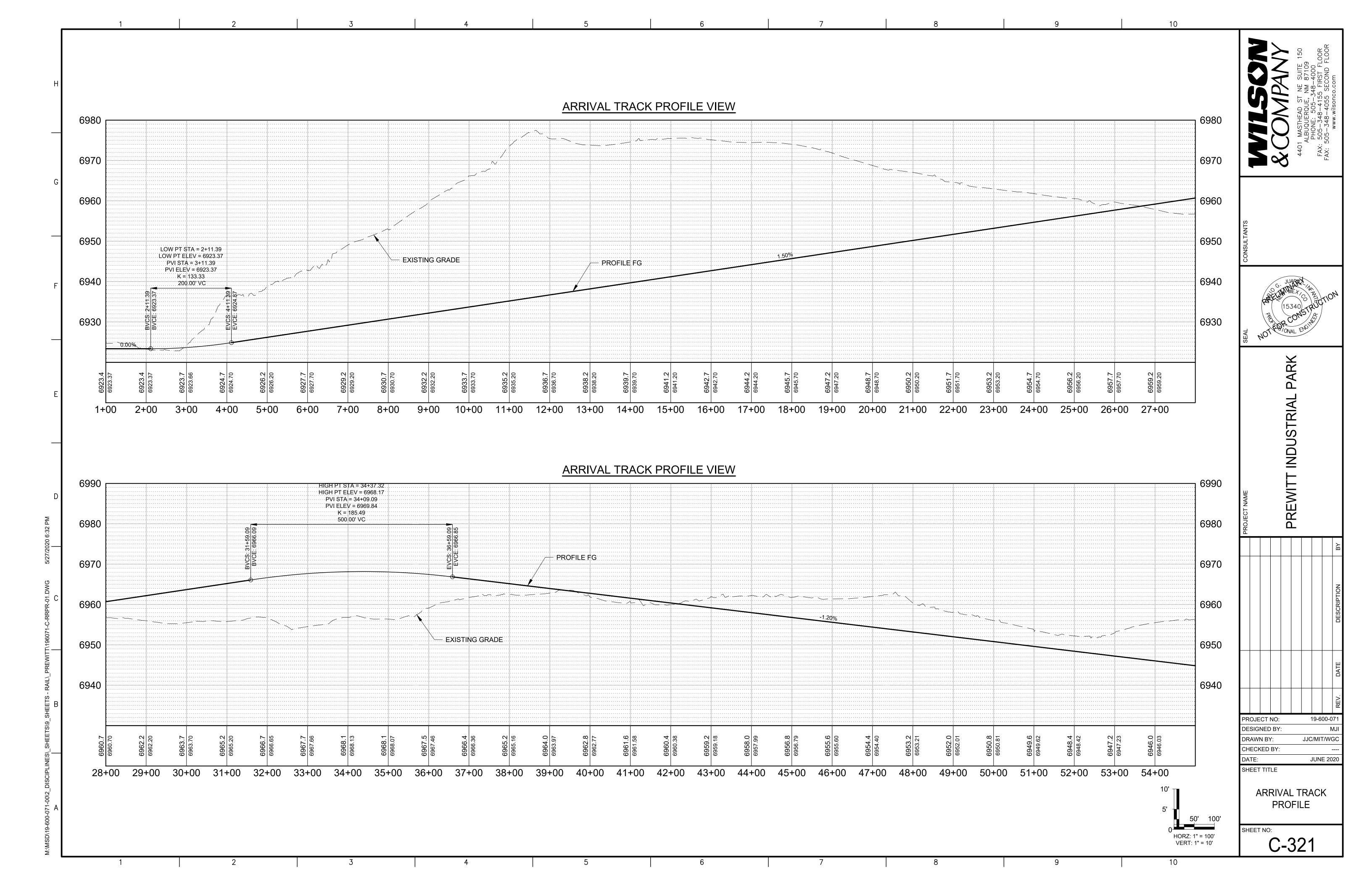


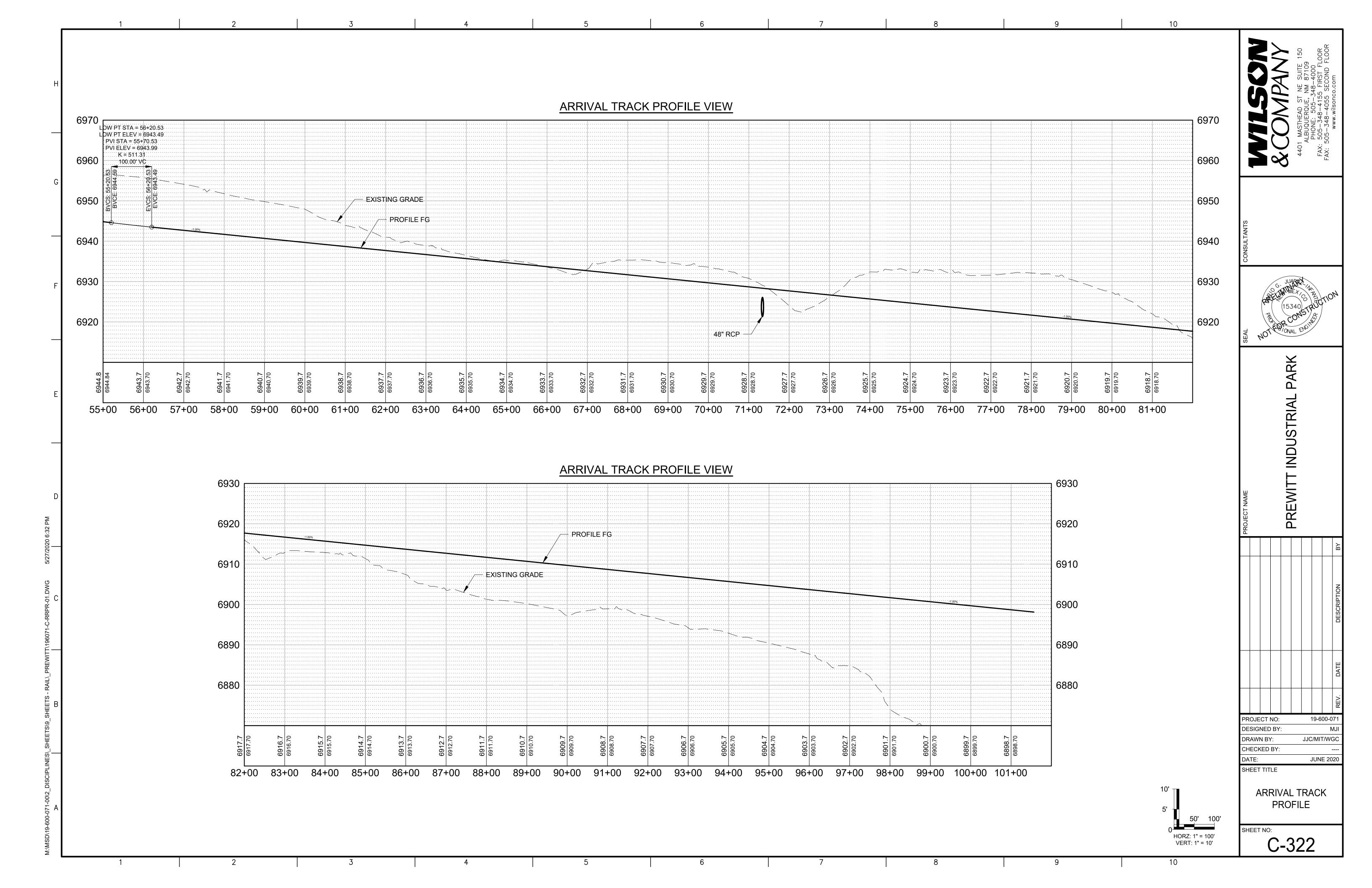


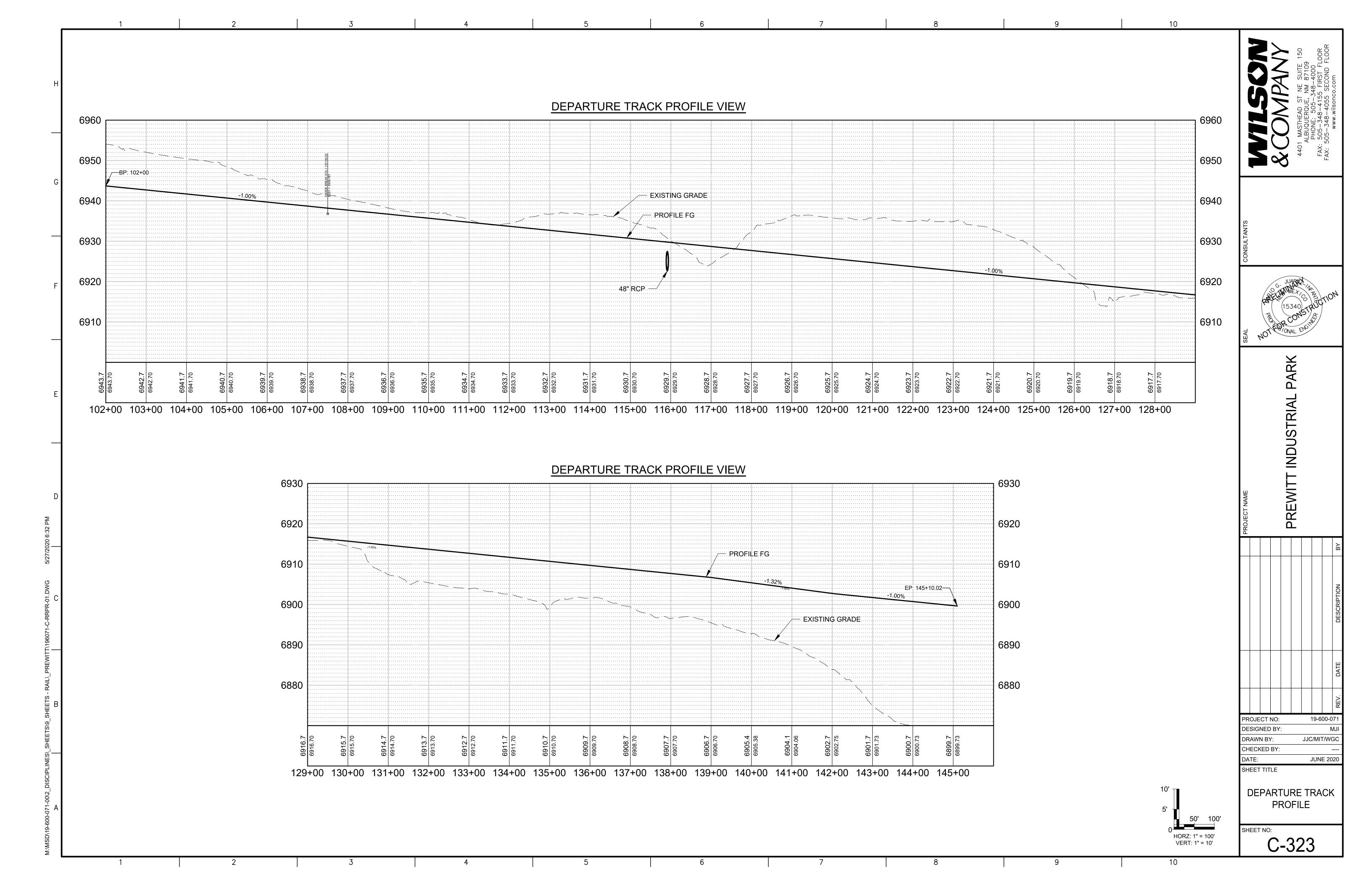


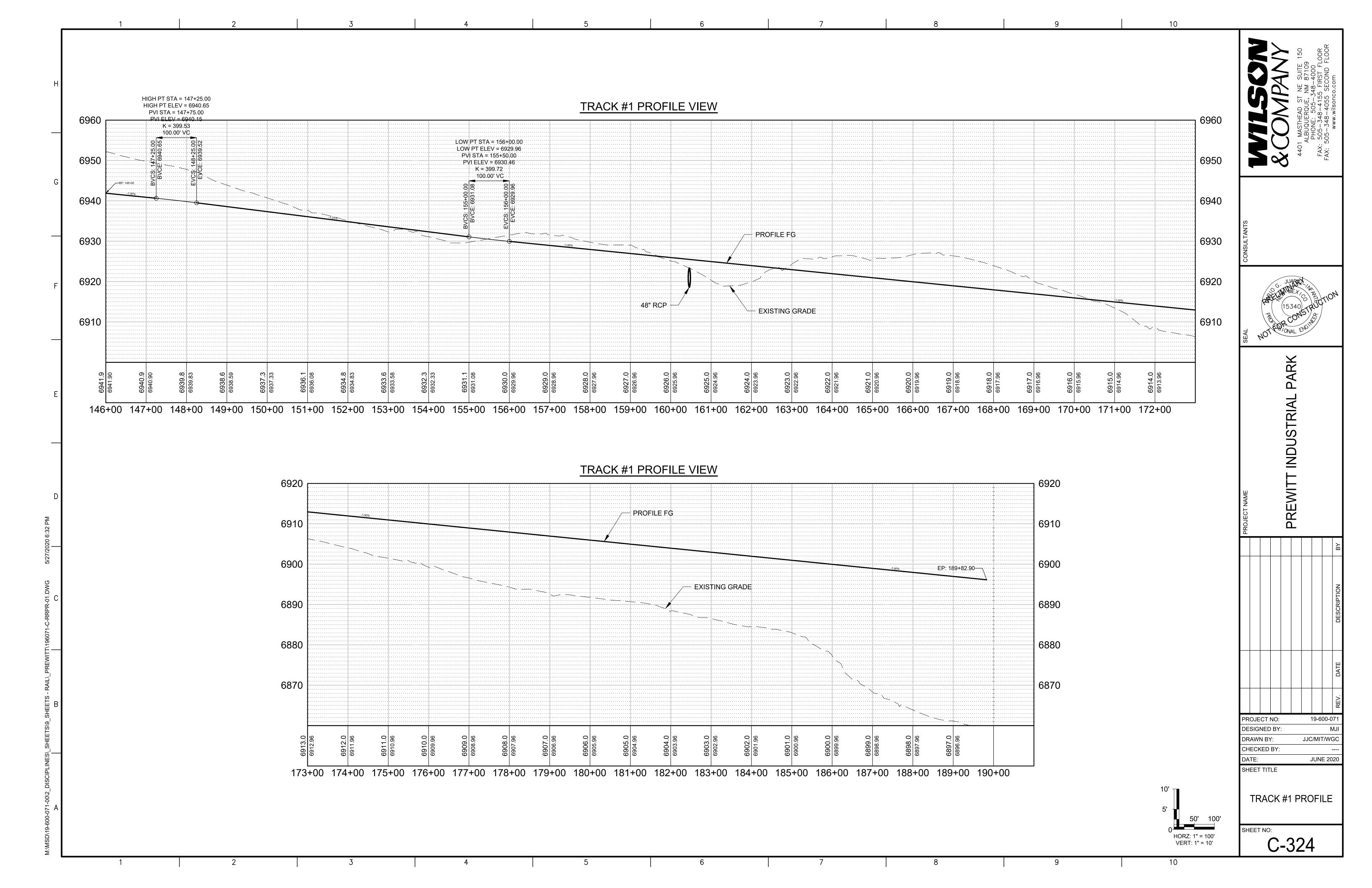


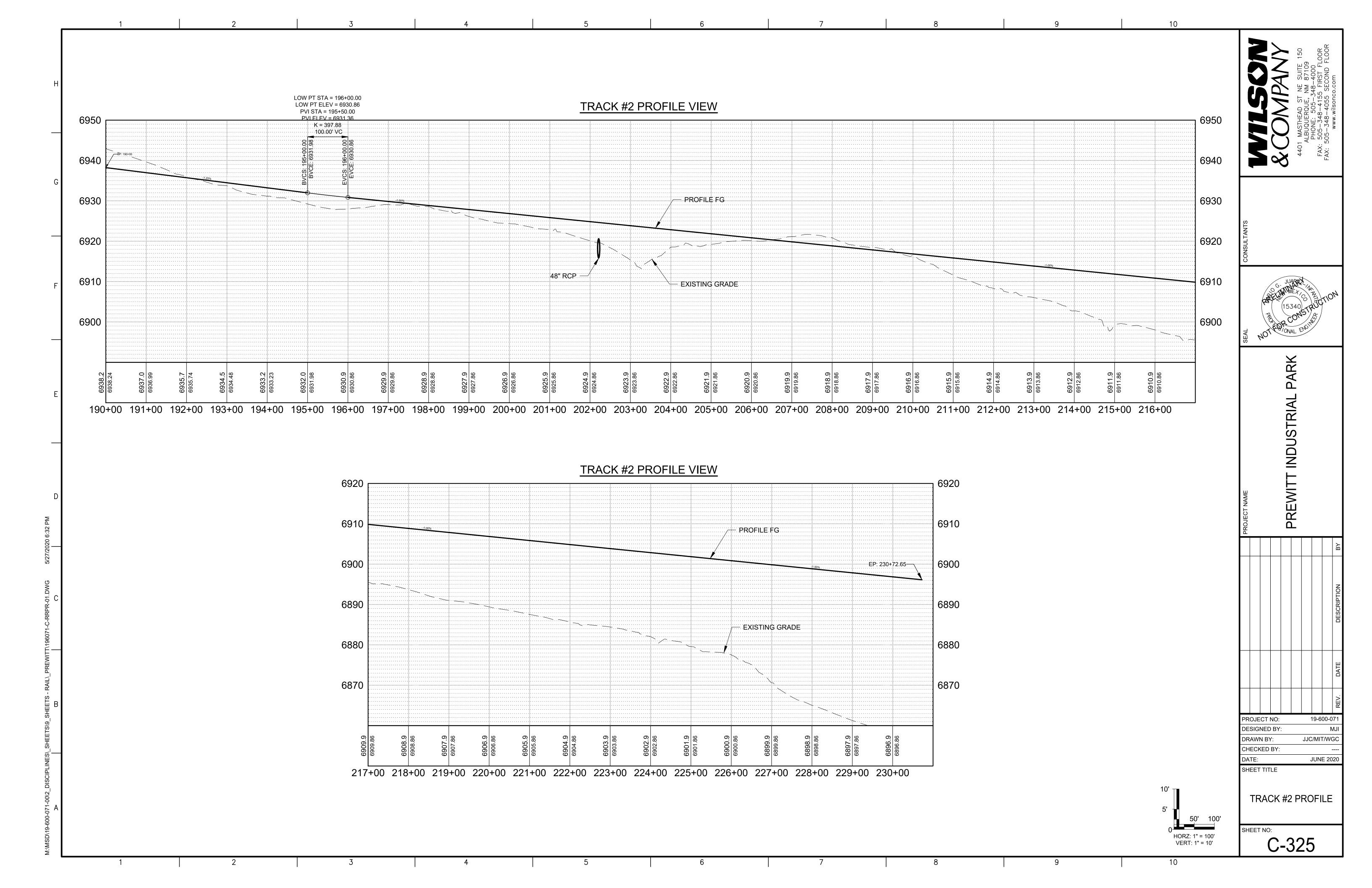


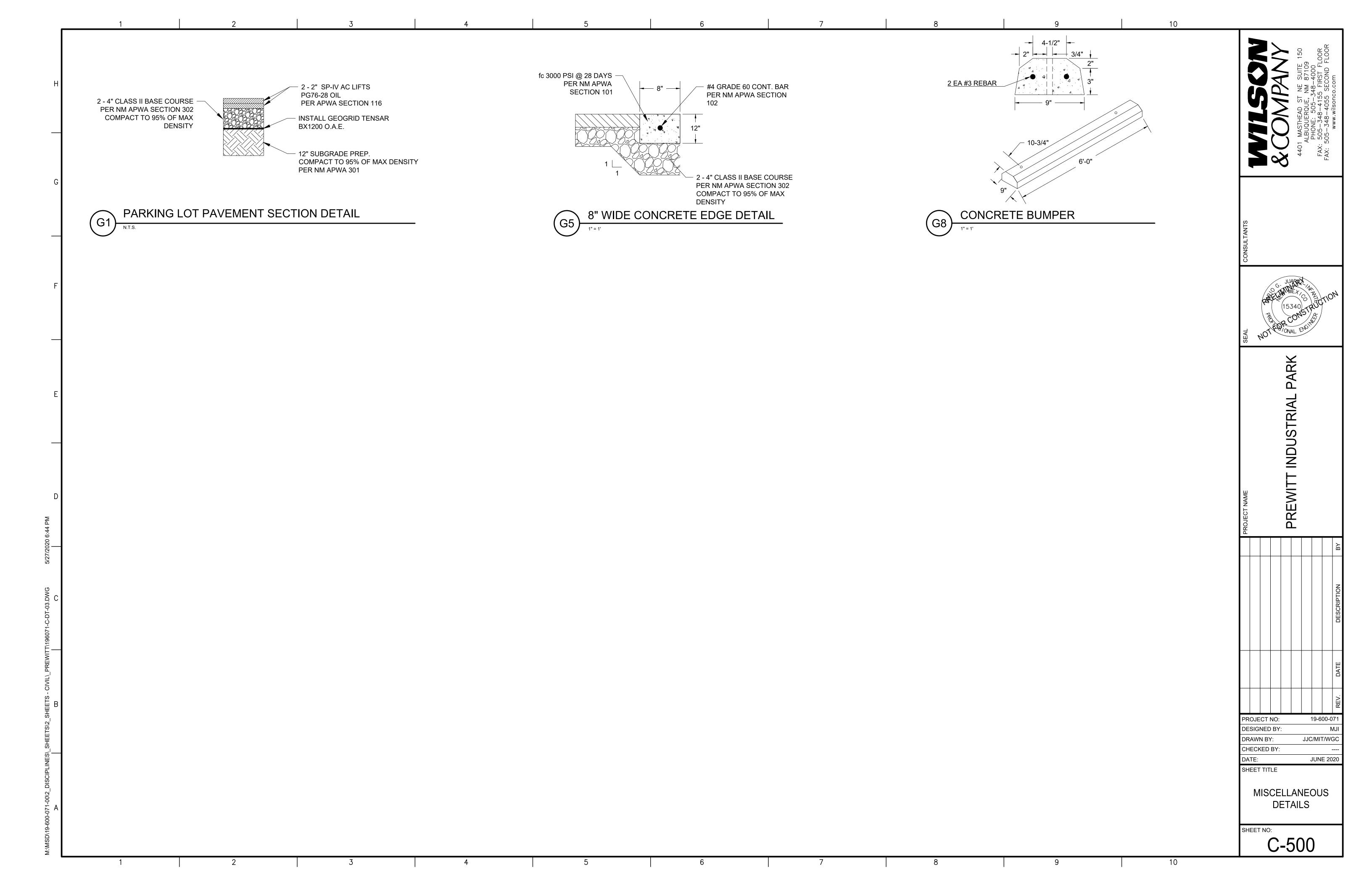


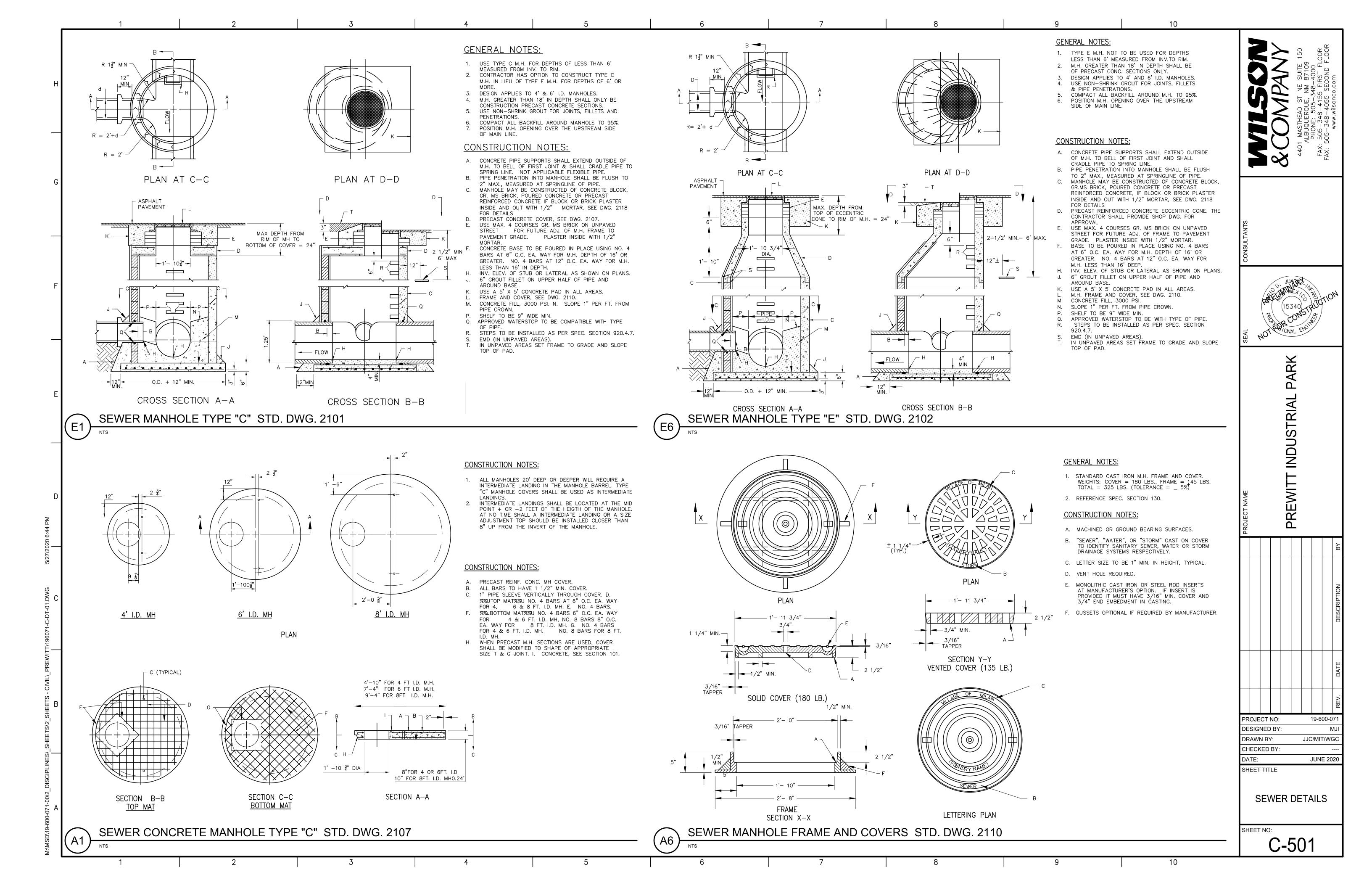


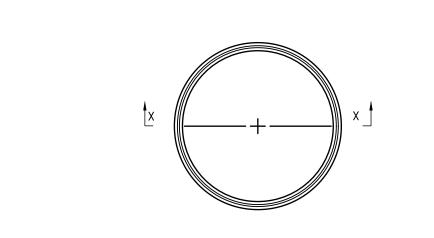


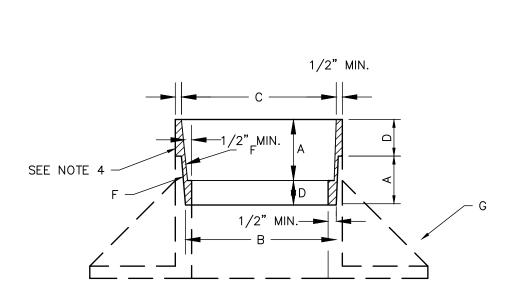












SECTION X-X

NOT TO SCALE VERTICAL SCALE EXAGERATED FOR CLARITY

COMMON NM APWA MH FRAME SIZES

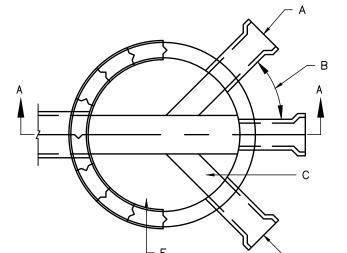
Α	В	С	D
2 3/8	23 1/2	23 5/8	
2 1/2	23 5/8	23 3/4	
2 5/8	23 5/8	23 3/4	
2	23 3/4	23 7/8	
2 1/4	23 3/4	23 7/8	
2 3/8	23 3/4	23 7/8	
2 1/2	23 3/4	23 7/8	
2 5/8	23 3/4	23 7/8	
2 3/4	23 3/4	23 7/8	
2 1/2	23 7/8	24	
1	24 7/8	25	1 1/4

GENERAL NOTES:

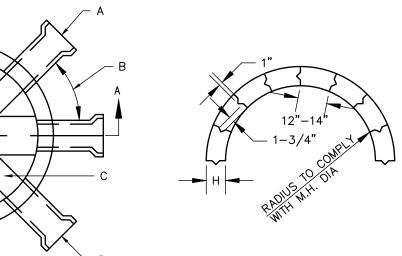
- 1. ADJUSTMENT RING MADE FROM STANDARD
- ALUMINUM CASTING, ALLOY 319. 2. I.D., O.D. AND DEPTH SHALL BE MACHINED TO
- REQUIRED DIMENSIONS. 3. DUE TO VARYING EXISTING FRAME AND COVER SIZES, ALL DIMENSIONS MUST BE FIELD
- VERIFIED PRIOR TO MACHINING. 4. ALL EDGES OF RING SHALL BE LIGHTLY GROUND AFTER MACHINING TO REMOVE SHARPNESS AND
- 5. COAT ALL SURFACES OF RING WITH CLEAR ACRYLIC RESIN AFTER MACHINING.

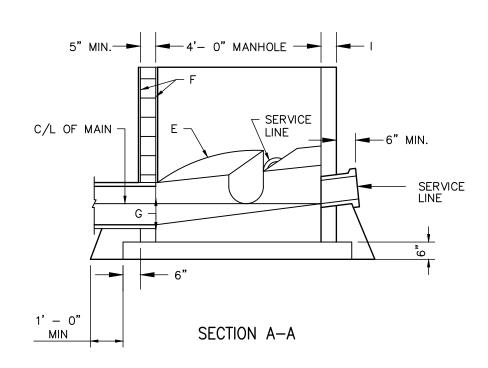
CONSTRUCTION NOTES:

- A. DIMENSION = DEPTH OF EXISTING COVER
- B. DIMENSION = RING O.D. = FRAME ID AT
- C. DIMENSION = RING I.D. = FRAME O.D. AT RIM.
- D. DIMENSION = HEIGHT OF RING ADJUSTMENT.
- E. EXISTING FRAME AND COVER SHALL BE CLEANED
- F. TAPER = 1/2 X (C-B). G. EXISTING FRAME.



SERVICE LINE AT DEAD END OR CUL-DE-SAC





GENERAL NOTES:

- 1. ALL CONC. SHELF SLOPES TO BE ONE INCH PER FT. 2. ONE FOURTH INCH PER FT. MIN. SLOPE
- FOR 4" OR 6" SERVICE LINE.
- 3. NEW SERVICE CONNECTIONS TO EXIST. MH'S. MUST BE CORE DRILLED.
- 4. 8" OR LARGER SERVICE CONNECTIONS MUST BE MADE TO A MH.

CONSTRUCTION NOTES:

- CAST IRON SERVICE STUB.
- VARIABLE WITH MAX. ANGLE OF 90°. FORM INVERT IN SHELF.
- BELL END. CONCRETE SEE SECTION 101.
- PLASTER INSIDE AND OUTSIDE WITH 1/2" MORTAR.
 INVERT ELEVATIONS OF SERVICE LINES SHALL BE THE
 SAME AS THE SPRING LINE ELEVATION OF THE SEWER
- H. MIN 5" BLOCK FOR 4' I.D. M.H., 8" BLOCK OR DOUBLEWALL OF 2-5" BLOCKS FOR 6' OR 8' DIA.
- I. PRECAST WALL THICKNESS: 4' I.D. M.H. 5" MIN. 6' I.D. M.H. - 7" MIN. 8' I.D. M.H. - 9" MIN.

SEWER MANHOLE COVER ADJUSTMENT RING STD. DWG. 2111

GENERAL NOTES:

1. ALL SERVICE LINES SHALL CONFORM TO THE PLUMBING CODE.

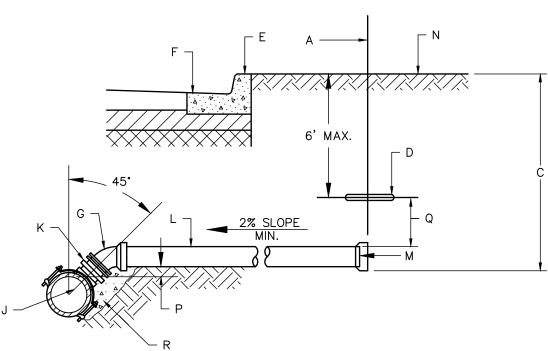
CONSTRUCTION NOTES:

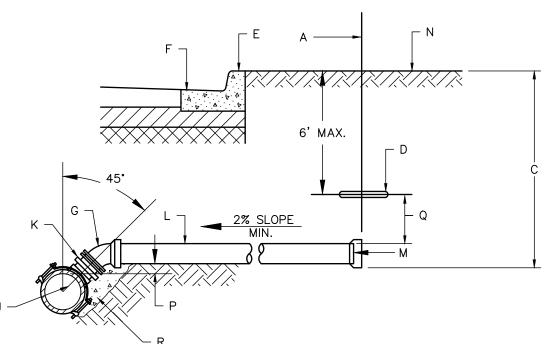
- RIGHT-OF-WAY LINE.
- CENTER LINE SERVICE LINE.
 MIN. OF 4 FT. TO 6 FT. FROM INVERT TO TOP OF CURB AT RIGHT-OF-WAY LINE. MIN. DEPTH WILL DEPEND ON THE DEPTH OF THE MAIN SEWER LINE, THE MIN. SERVICE LINE SLOPE, THE DEPTH OF THE LOT BEING SERVED, LOCATION OF THE HOUSE ON
- THE LOT, AND THE GRADE OF THE LOT. ELECTRONIC MARKER DISC, COLOR CODED GREEN,
- PLACED ONLY IF SERVICE HOOK-UP IS POSTPONED. E. STAMP OR CHISEL 3" SIZE, "S" ON TOP OF CURB
- OVER LOCATION OF SERVICE LINE, MIN. 1/4" DEEP. CURB & GUTTER.
- 22.5° OR 45° BEND. CORE DRILLED, USING FOWLER QUIK-WAY DRILL SYSTEM, OR PILOT HOLE CUTTER SYSTEM OR
- APPROVED EQUAL. J. SERVICE LINE SHALL NOT PROTRUDE INTO SEWER
- K. SANITARY SEWER TAPPING TEE, USING PIONEER OR GENERAL ENGINEERING CO. SADDLES OR APPROVED EQUAL. DO NOT OVER TIGHTEN SADDLE BOLTS WHICH WOULD PREVENT FREE PASSAGE OF REQUIRED MANDREL.
- L. SERVICE LINE, (C.I. SOIL PIPE, SERVICE WEIGHT PVC SCH 40 OR ABS SCH 40).
- M. PLUG OR CAP.
- GROUND LEVEL.
- SAME ELEVATION OR HIGHER. Q. APPROX. 6" BUT DEPTH OF BURIAL SHALL NOT BE
- MORE THAN 6'.
- R. BACKFILL UNDER SERVICE WITH MIN. 1 CUBIC FOOT OF P.C. CONCRETE ("SACKCRETE" OR EQUAL ALLOWABLE THIS INSTALLATION).

(E6)

SEWER SERVICE LINE CONNECTIONS AT MANHOLE STD. DWG. 2118

SERVICE LINE PLAN





SEWER SERVICE LINE DETAILS STD. DWG. 2125

CROSS SECTION

10

19-600-071 PROJECT NO: **DESIGNED BY:** JJC/MIT/WGC DRAWN BY: CHECKED BY: JUNE 2020 SHEET TITLE

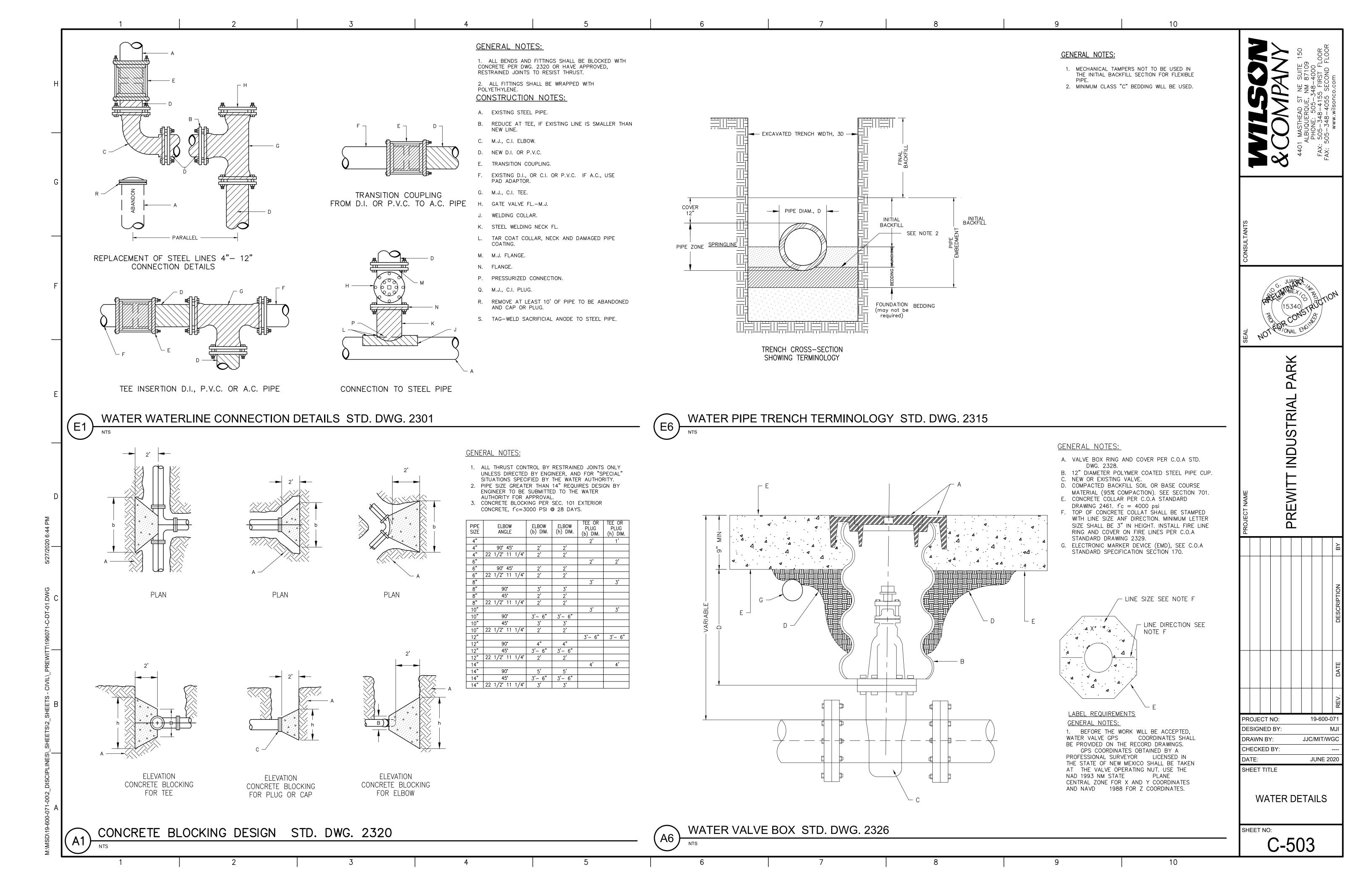
SEWER DETAILS

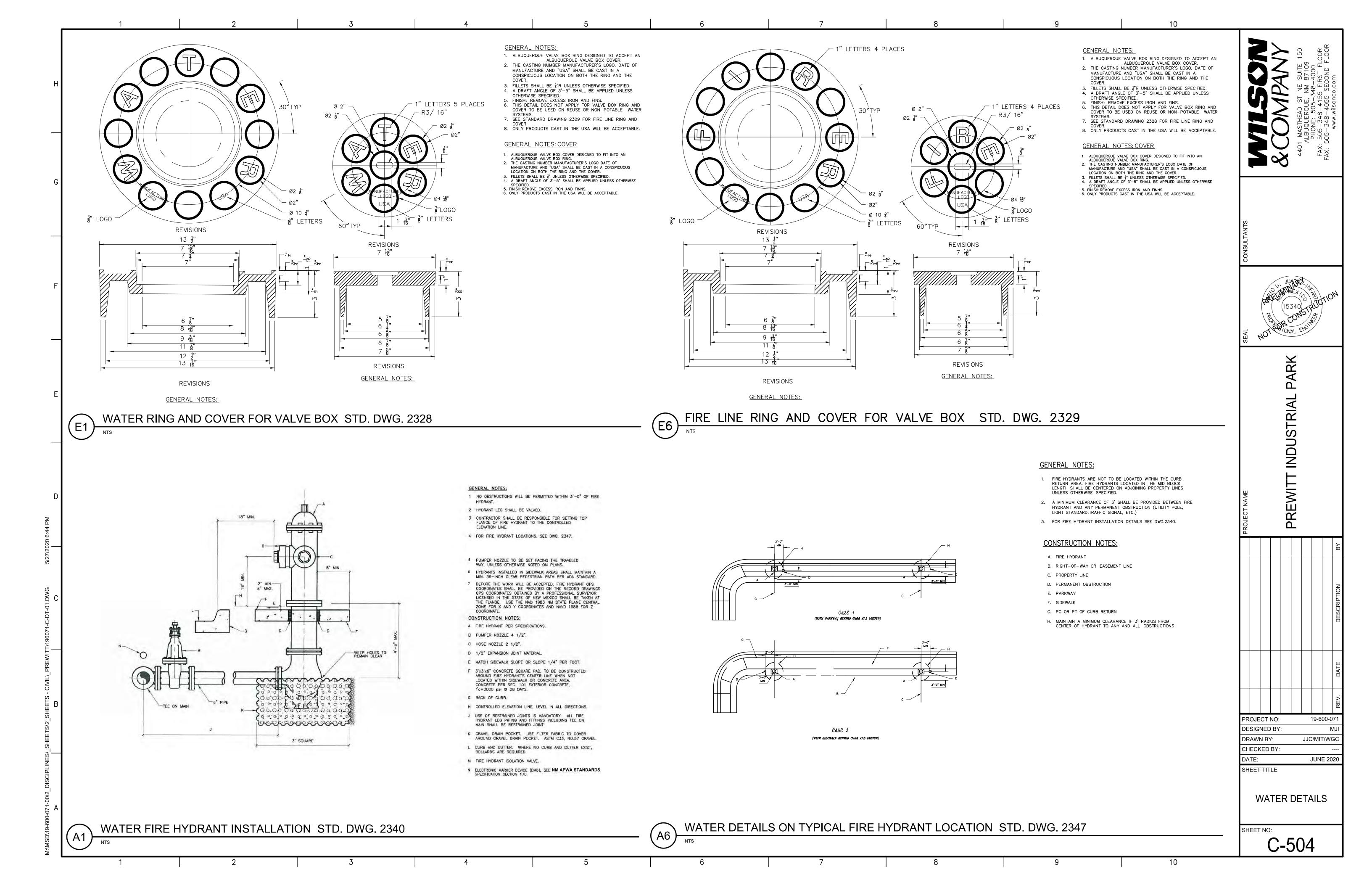
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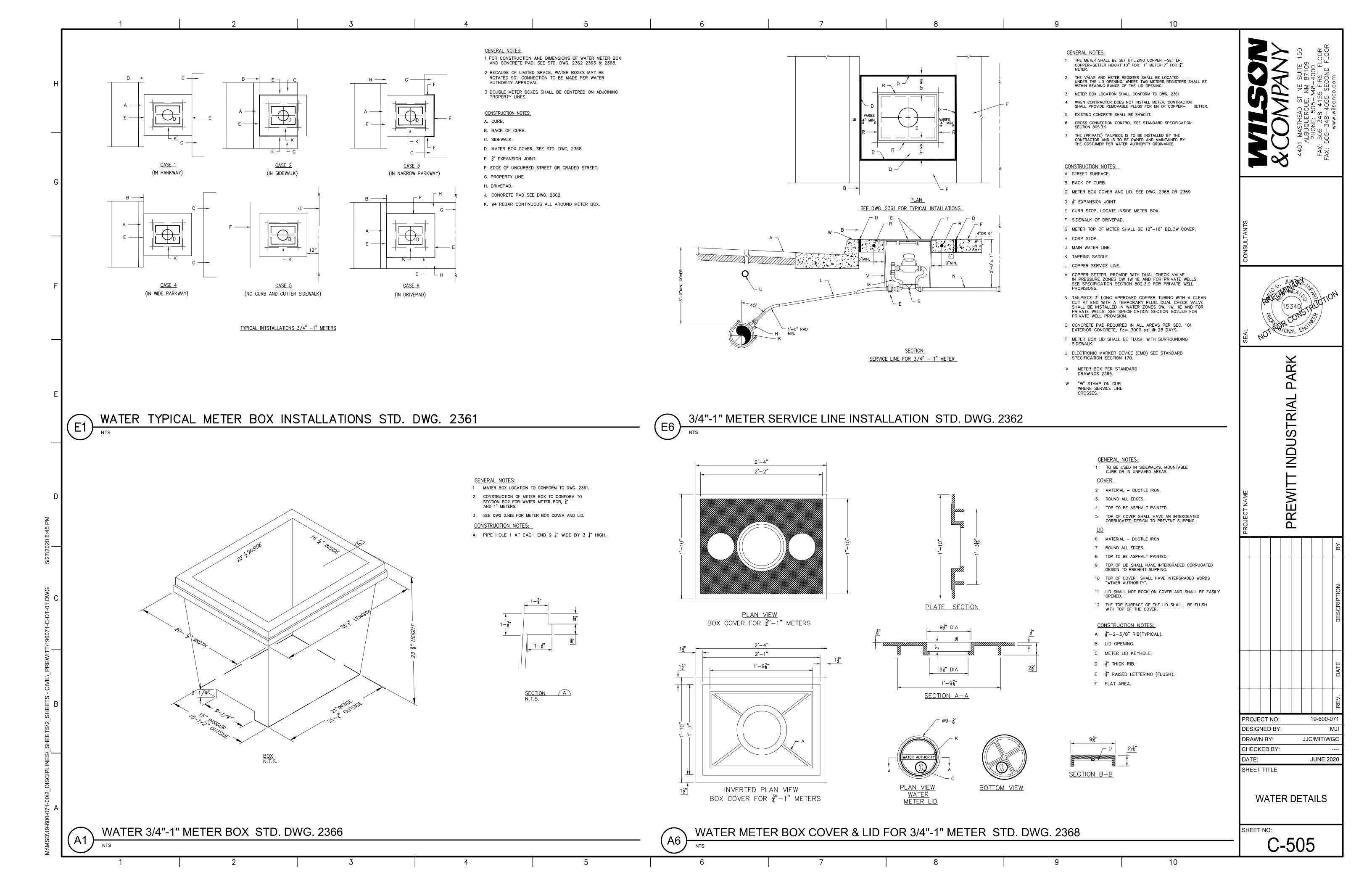
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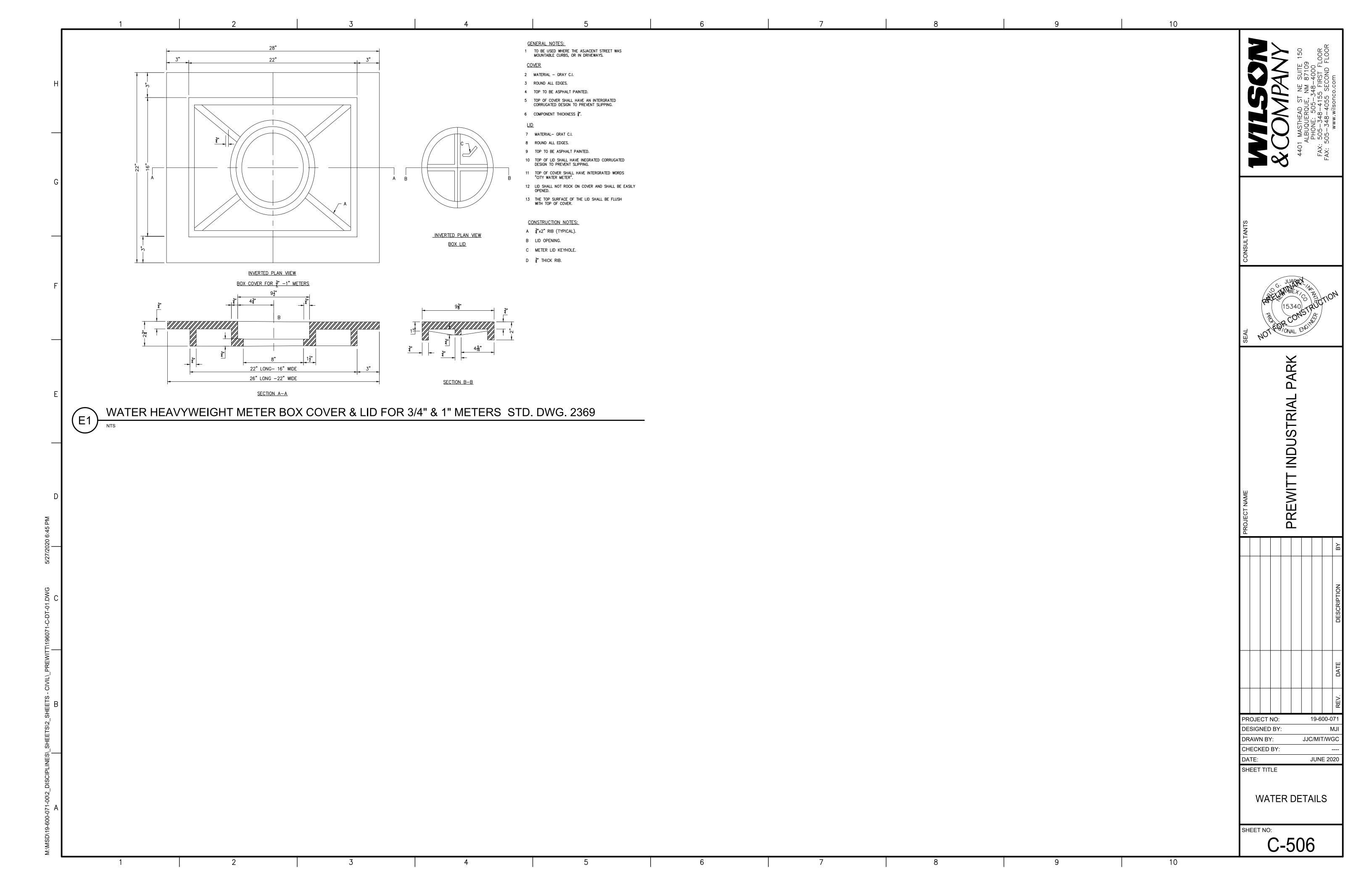
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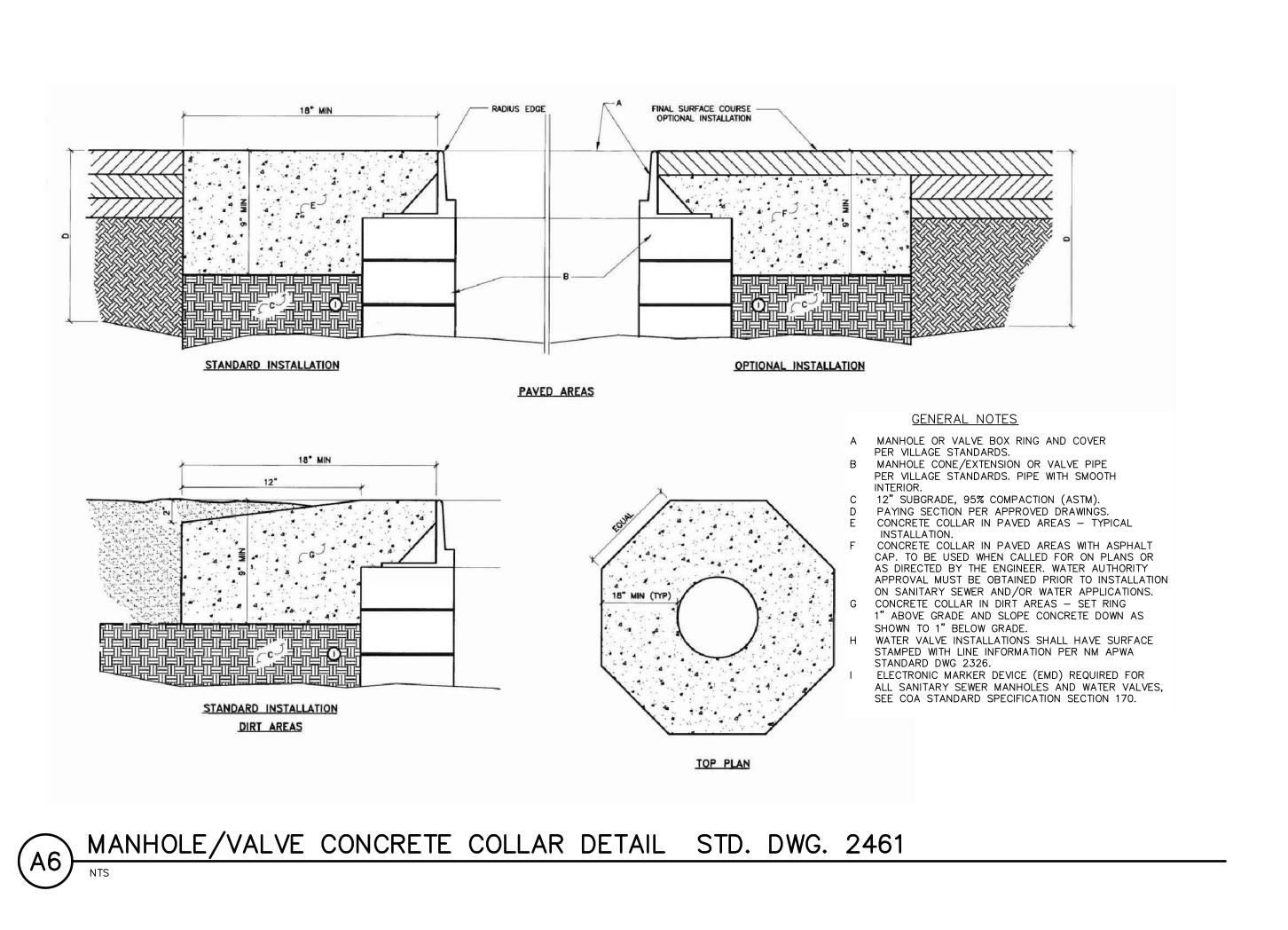
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INDUSTRIAL PROJECT NO: 19-600-071 DESIGNED BY: JJC/MIT/WGC DRAWN BY: CHECKED BY: JUNE 2020 SHEET TITLE PAVING DETAILS

SHEET NO:

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C-507



Appendix B- Design Drawings for Phase I Spec Building





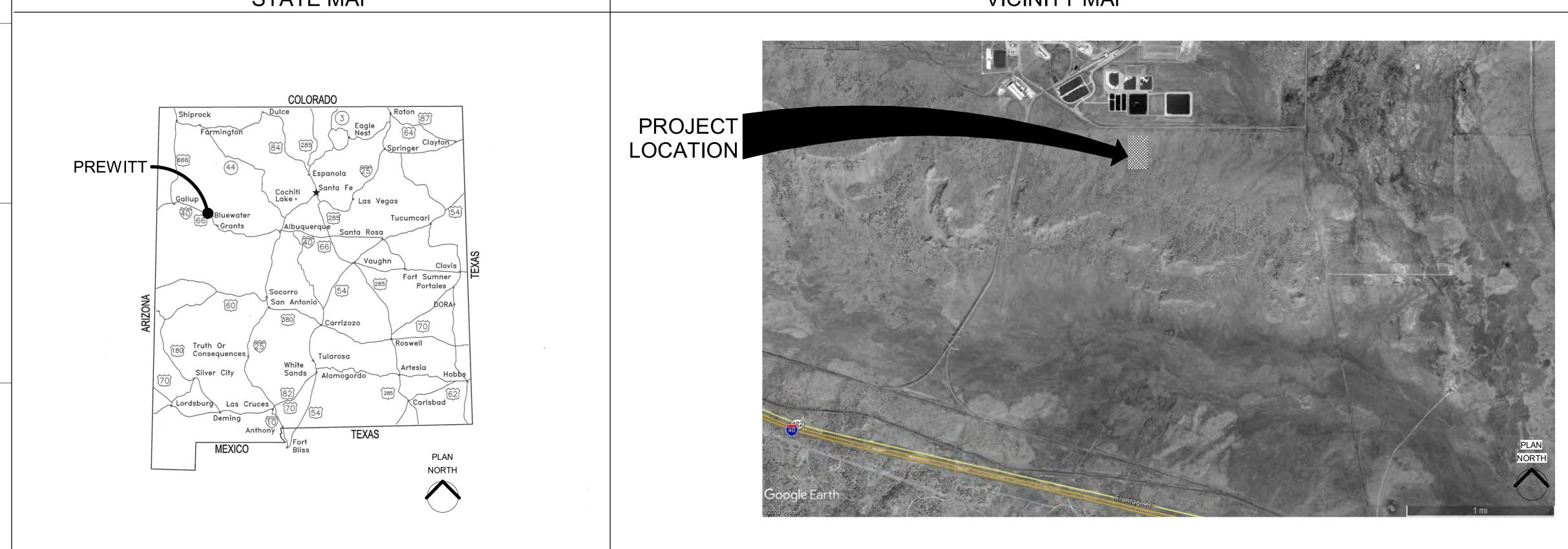












GENERAL NOTES

THESE DRAWINGS UTILIZE A REFERENCE KEYNOTE SYSTEM THAT CONSISTS OF A 6-DIGIT NUMERICAL ROOT FOLLOWED BY A PERIOD AND AN ALPHANUMERIC SUFFIX (SUCH

INFORMATION ASSOCIATED WITH EACH KEYNOTE IS LOCATED IN THAT SHEET'S RESPECTIVE NOTE BLOCK. THE ROOT OF THE REFERENCE INCLUDES MORE SPECIFIC

INFORMATION ON THE ITEM BEING IDENTIFIED. THE SUFFIX IS NOT ASSOCIATED WITH ANY SPECIFIC REFERENCE IN THE SPECIFICATION SECTION. CERTAIN REFERENCE KEYNOTES MAY CONTAIN MODIFIERS (CONTAINED WITHIN PARENTHESIS) LOCATED UNDERNEATH THE REFERENCE KEYNOTE. THE MODIFIER

IDENTIFIES TYPE, SIZE, THICKNESS, AND OTHER ADDITIONAL CHARACTERISTICS ABOUT THE REFERENCE KEYNOTING SYSTEM SHALL NOT CONTROL THE CONTRACTOR IN DIVIDING THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF

WORK TO BE PERFORMED BY ANY TRADE.

ABBREVIATIONS: REFERENCED FROM THE CONSTRUCTION SPECIFICATION INSTITUTE'S UNIFORM DRAWING SYSTEM TERMS AND ABBREVIATIONS MODULE.

OWNER NWNMCOG OWNER **GALLUP, NM 87301**

ARCHITECT

ARCHITECT **WILSON & COMPANY** 4401 MASTHEAD STREET NE ALBUQUERQUE, NM 87109 (505) 348-4055 FAX CONTACT: RICARDO MALDONADO

CONSULTANTS / ENGINEERS

WILSON & COMPANY 4401 MASTHEAD STREET NE ALBUQUERQUE, NM 87109 (505) 348-4055 FAX CONTACT: MARIO JUAREZ-INFANTE **WILSON & COMPANY** STRUCTURAL 1700 E. IRON AVE. **SALINA, KS 67401** (785 820-2622 CONTACT: JAMES A. URBAN **WILSON & COMPANY** M/E/P 4401 MASTHEAD STREET NE ALBUQUERQUE, NM 87109

PROJECT NO:

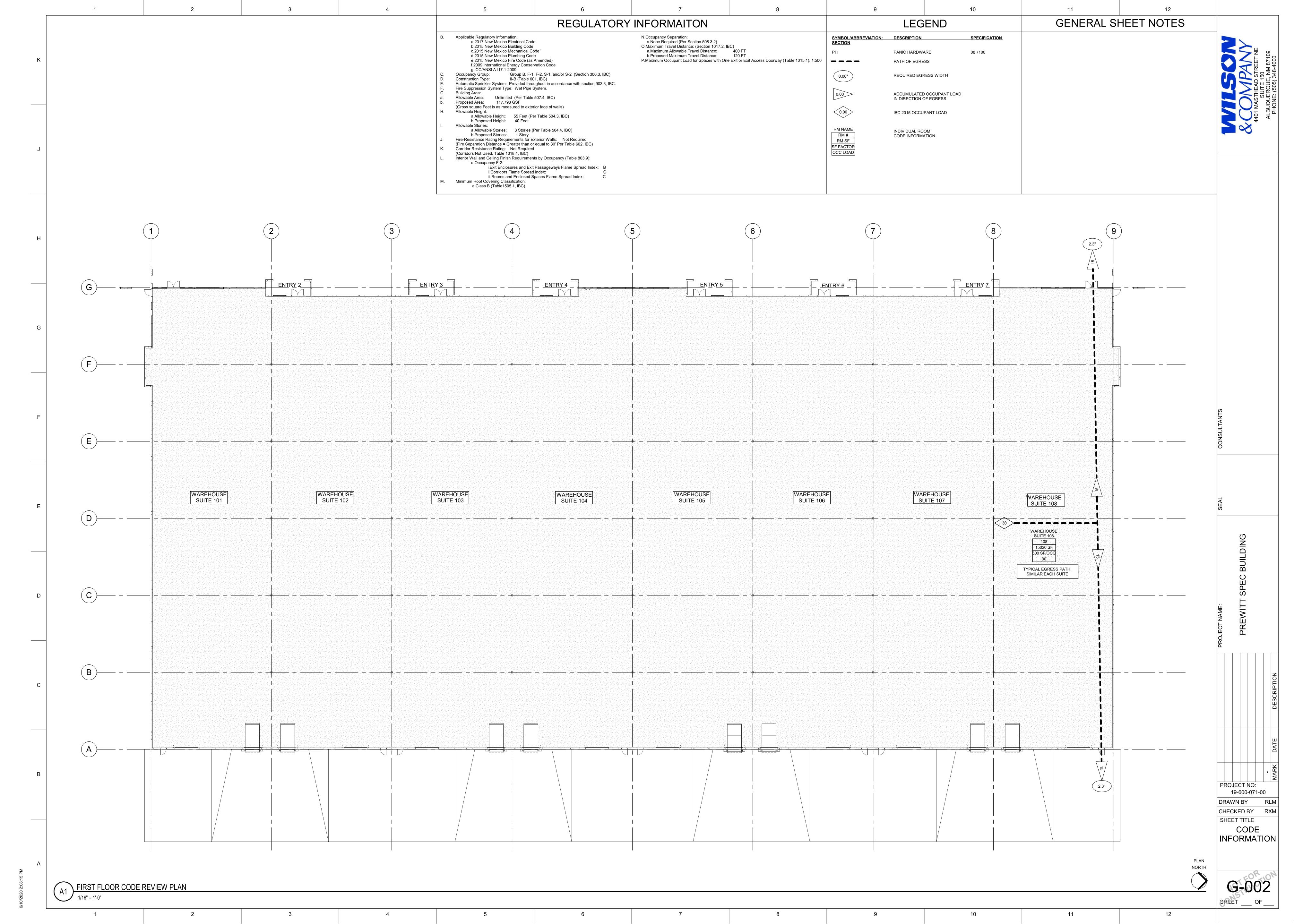
COVER SHEET

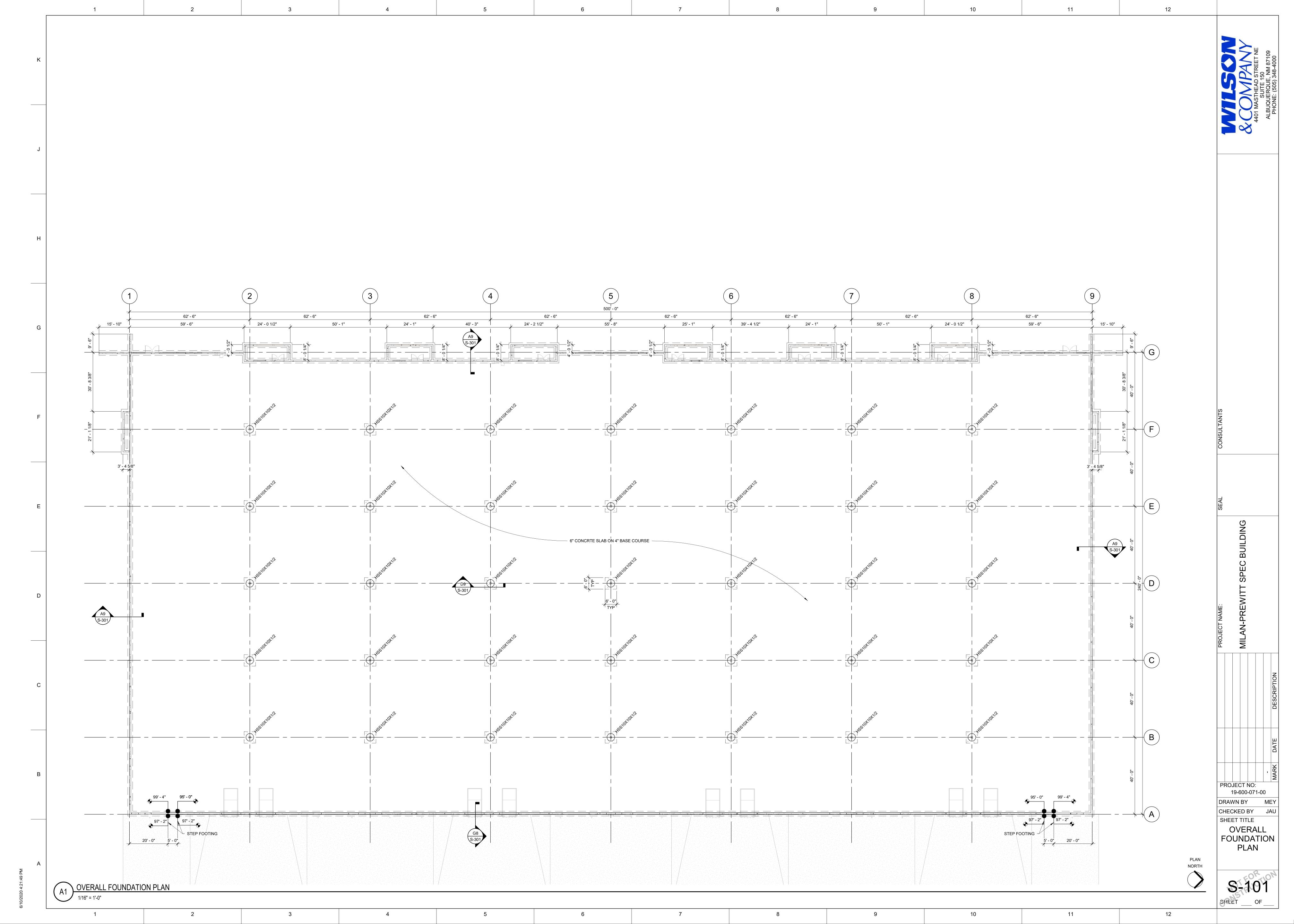
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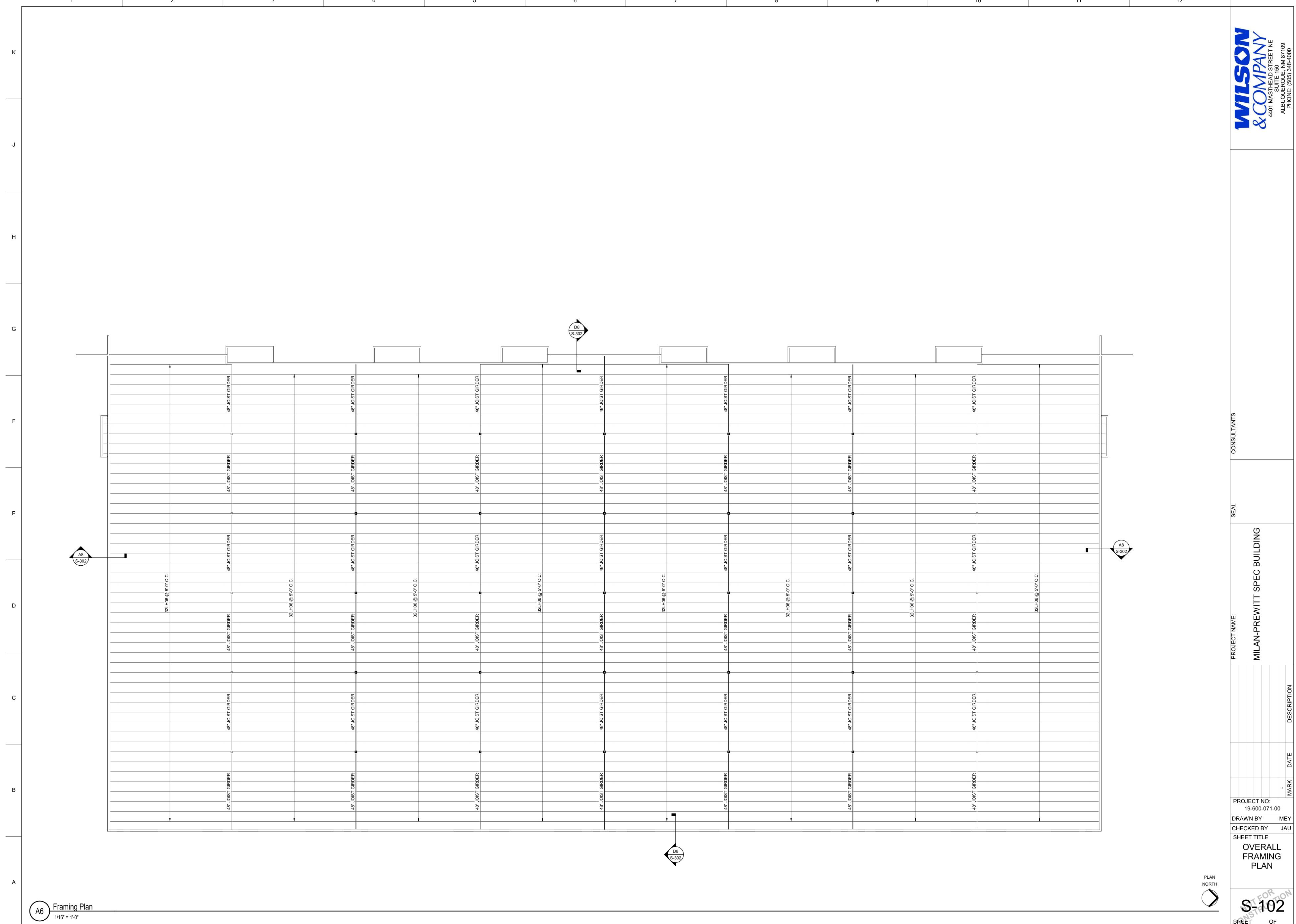
(505) 348-4055 FAX

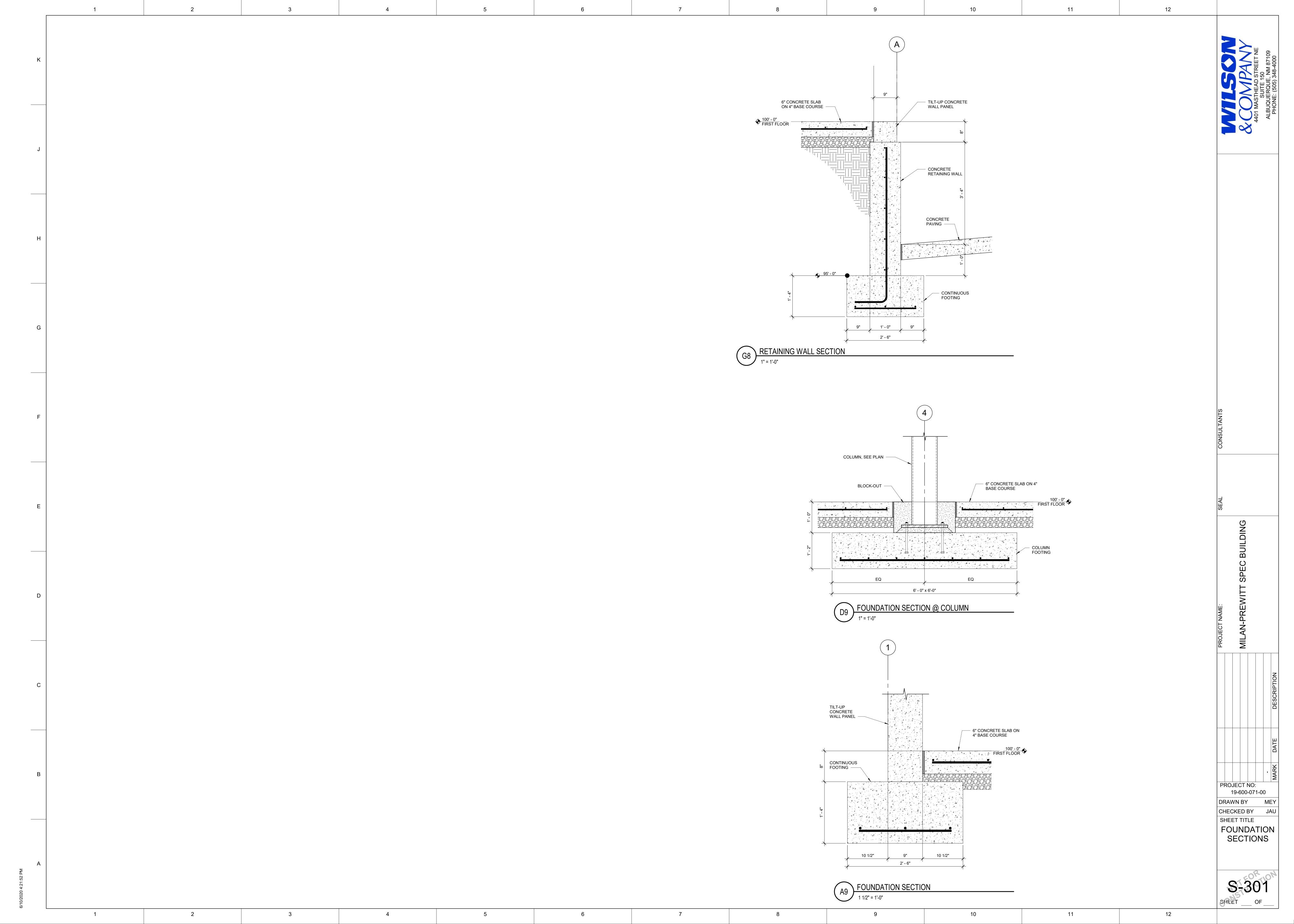
CONTACT: BRANDON HENSLEY

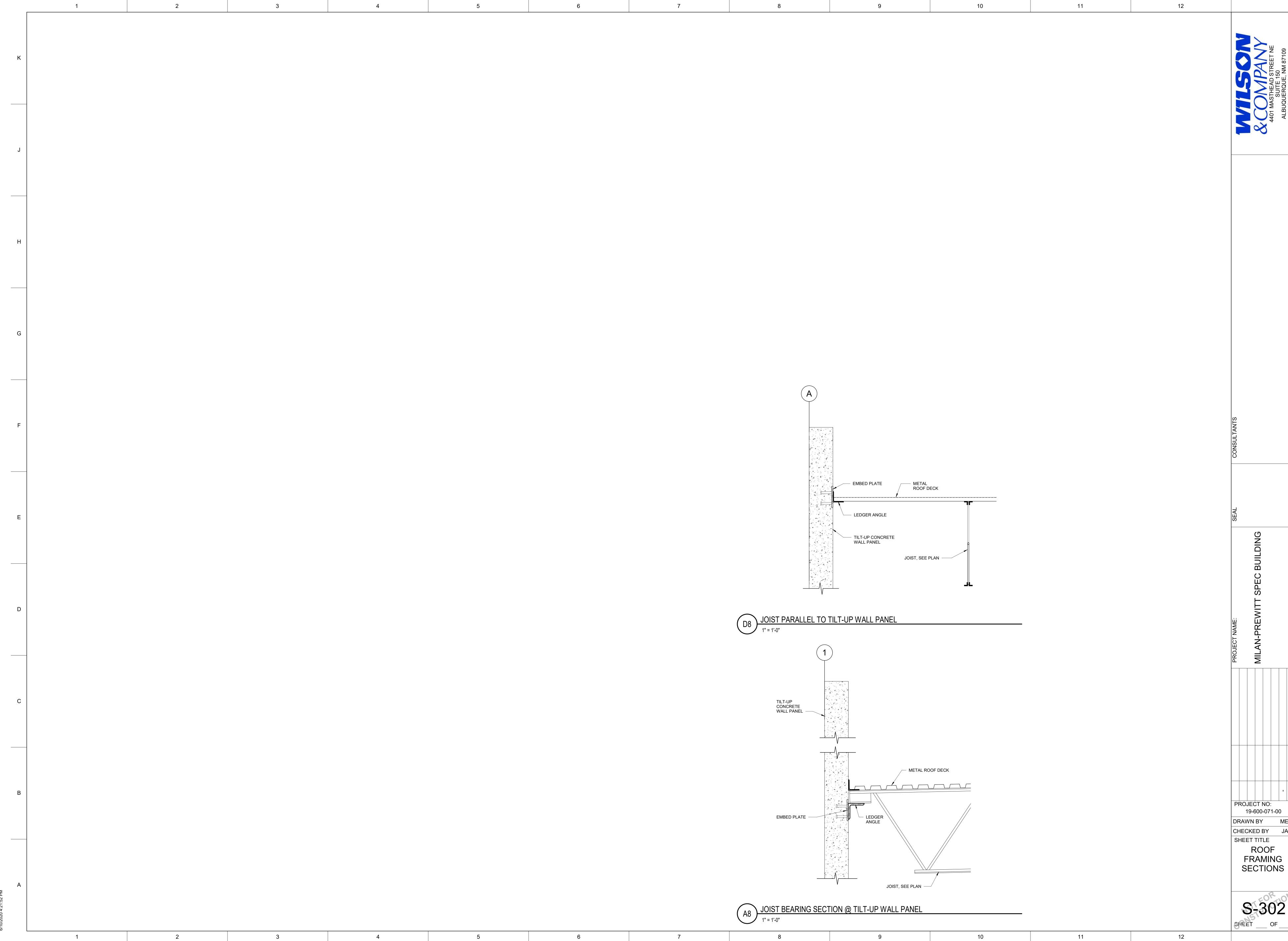
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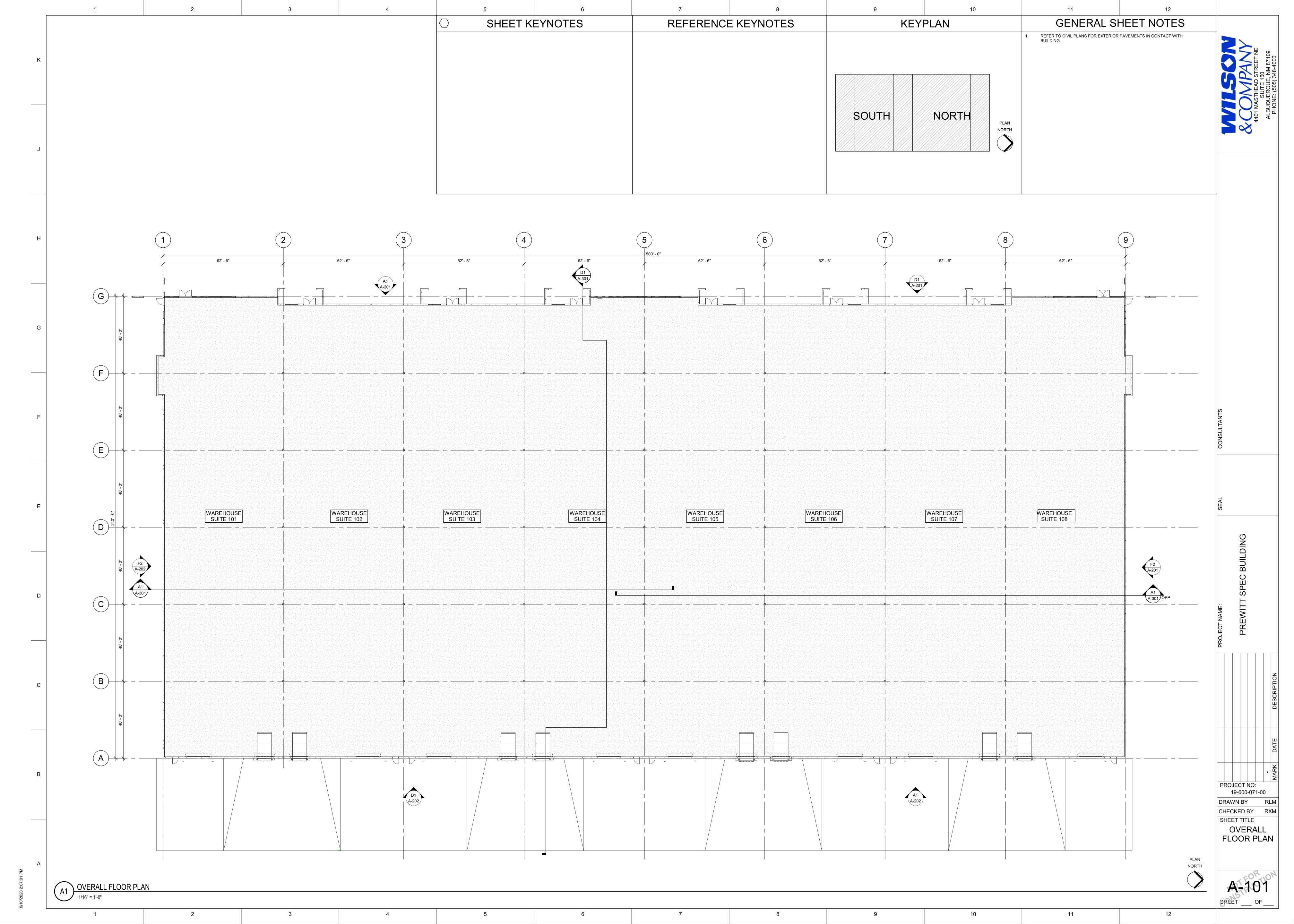


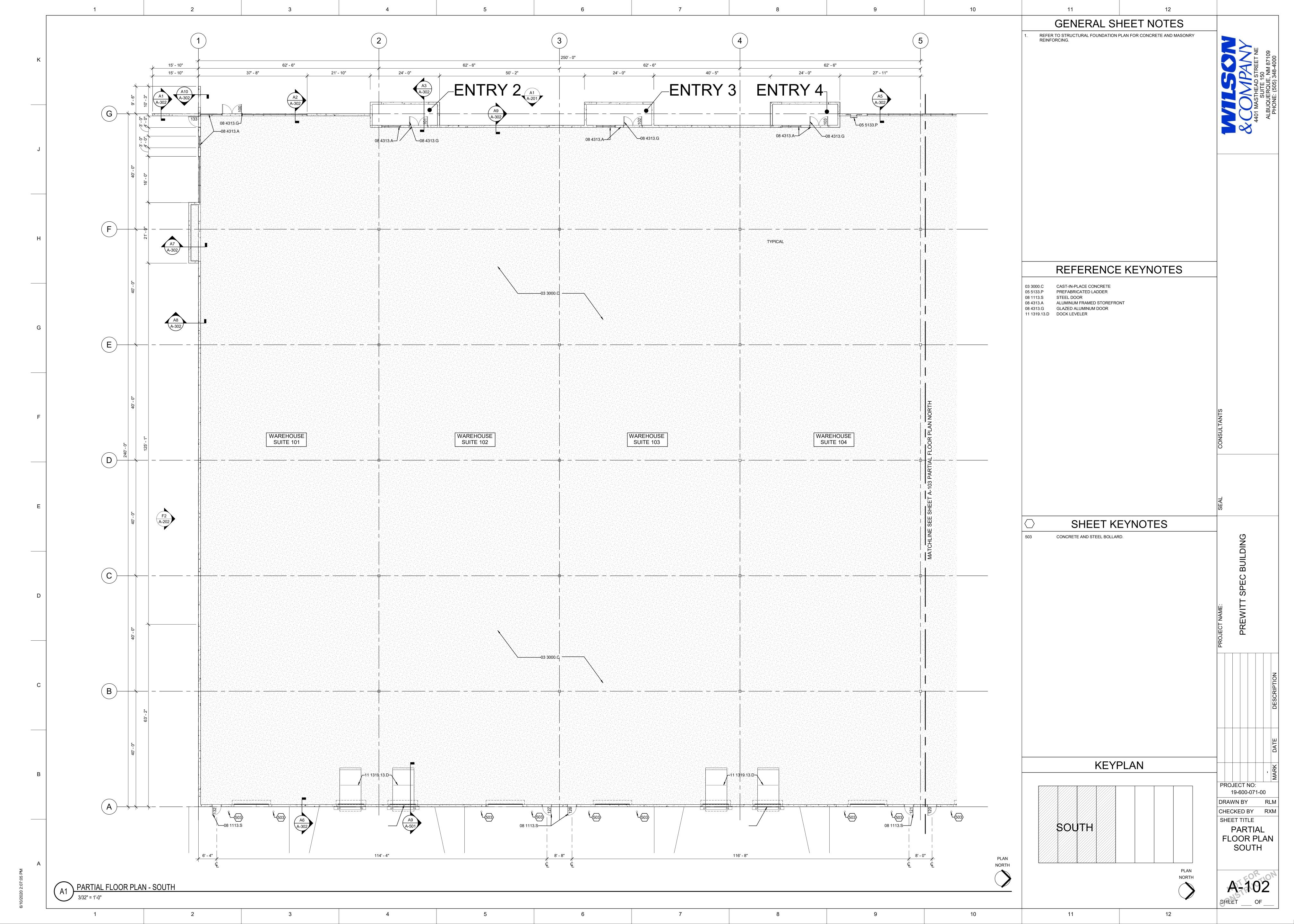


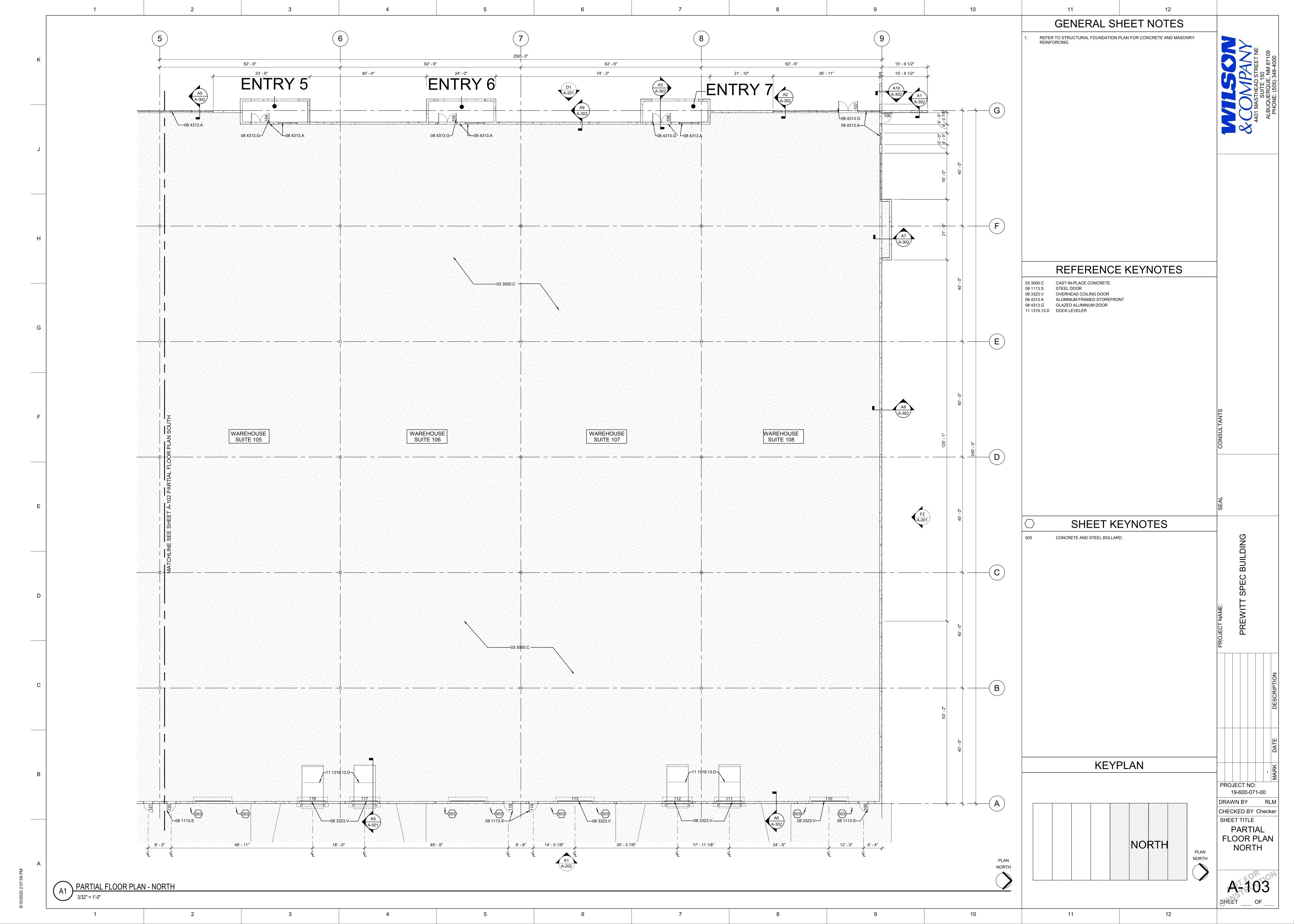


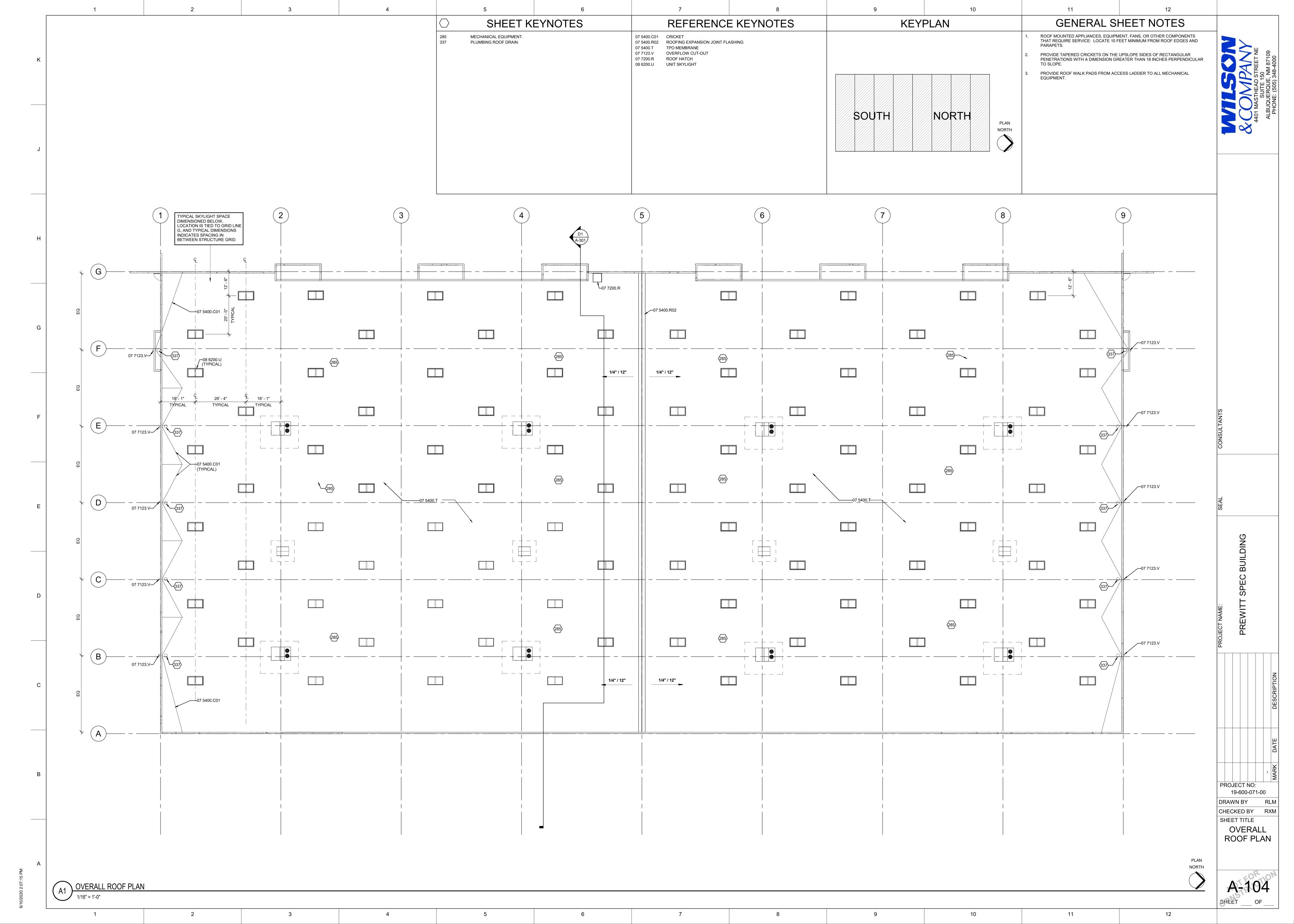


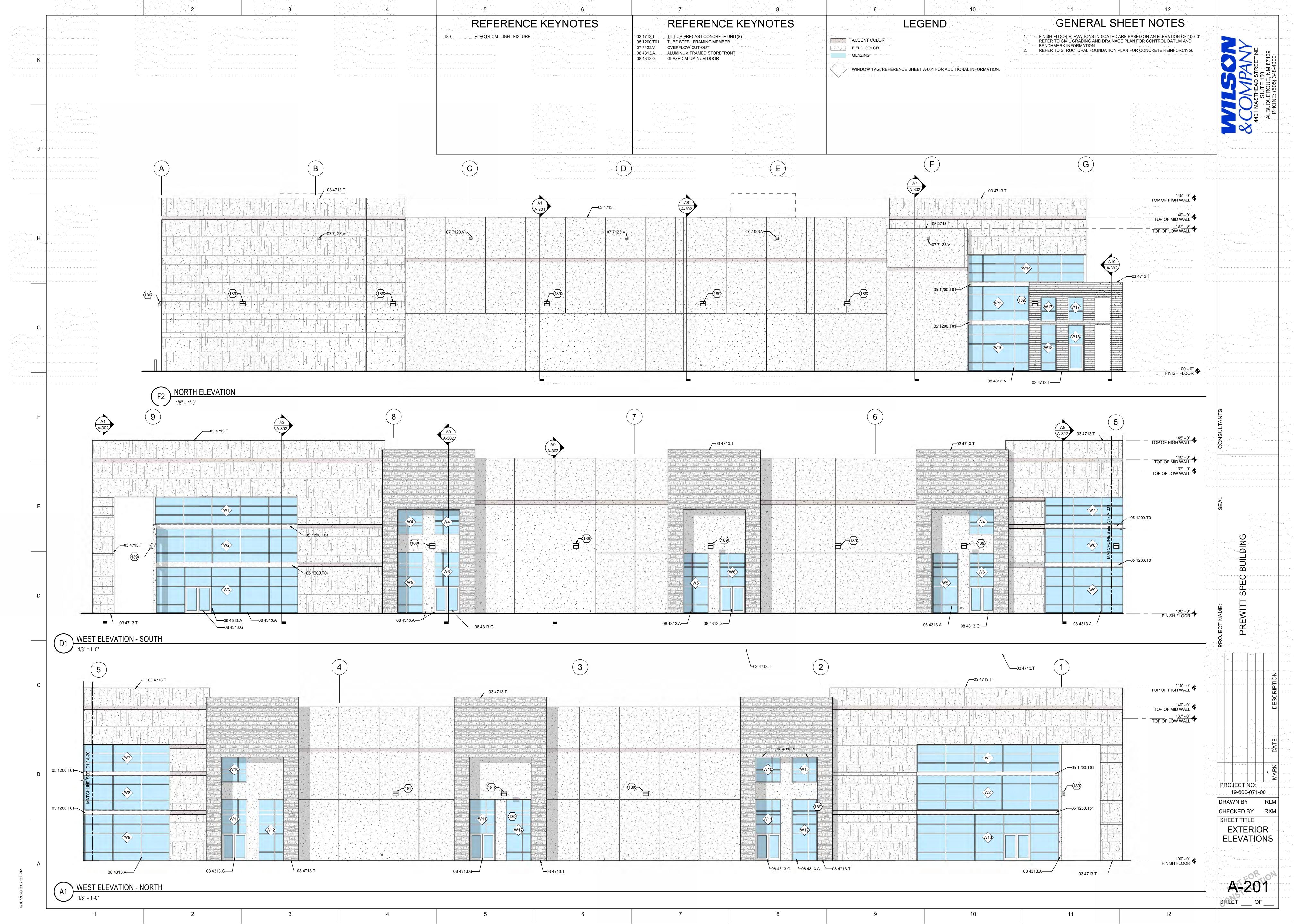
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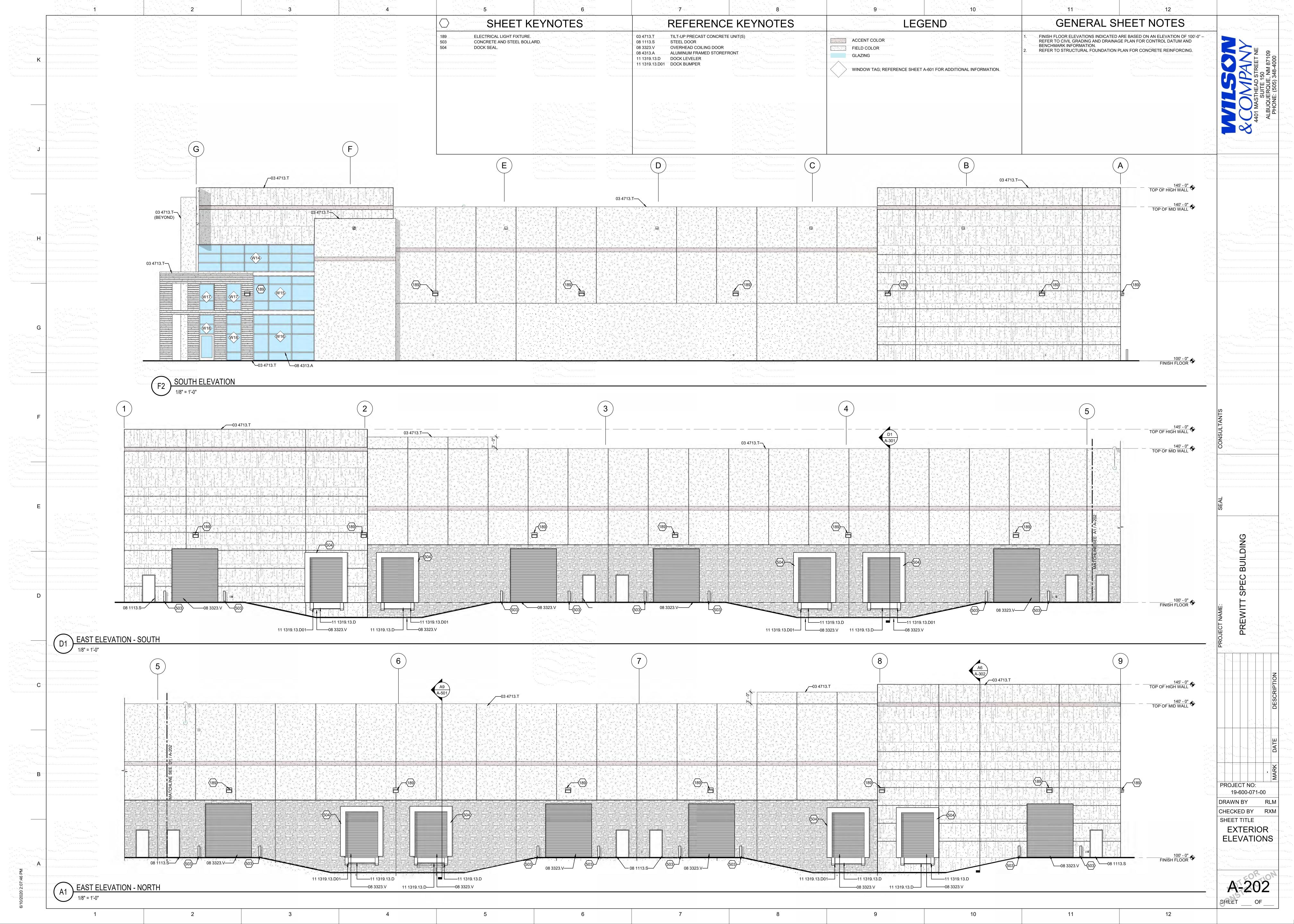


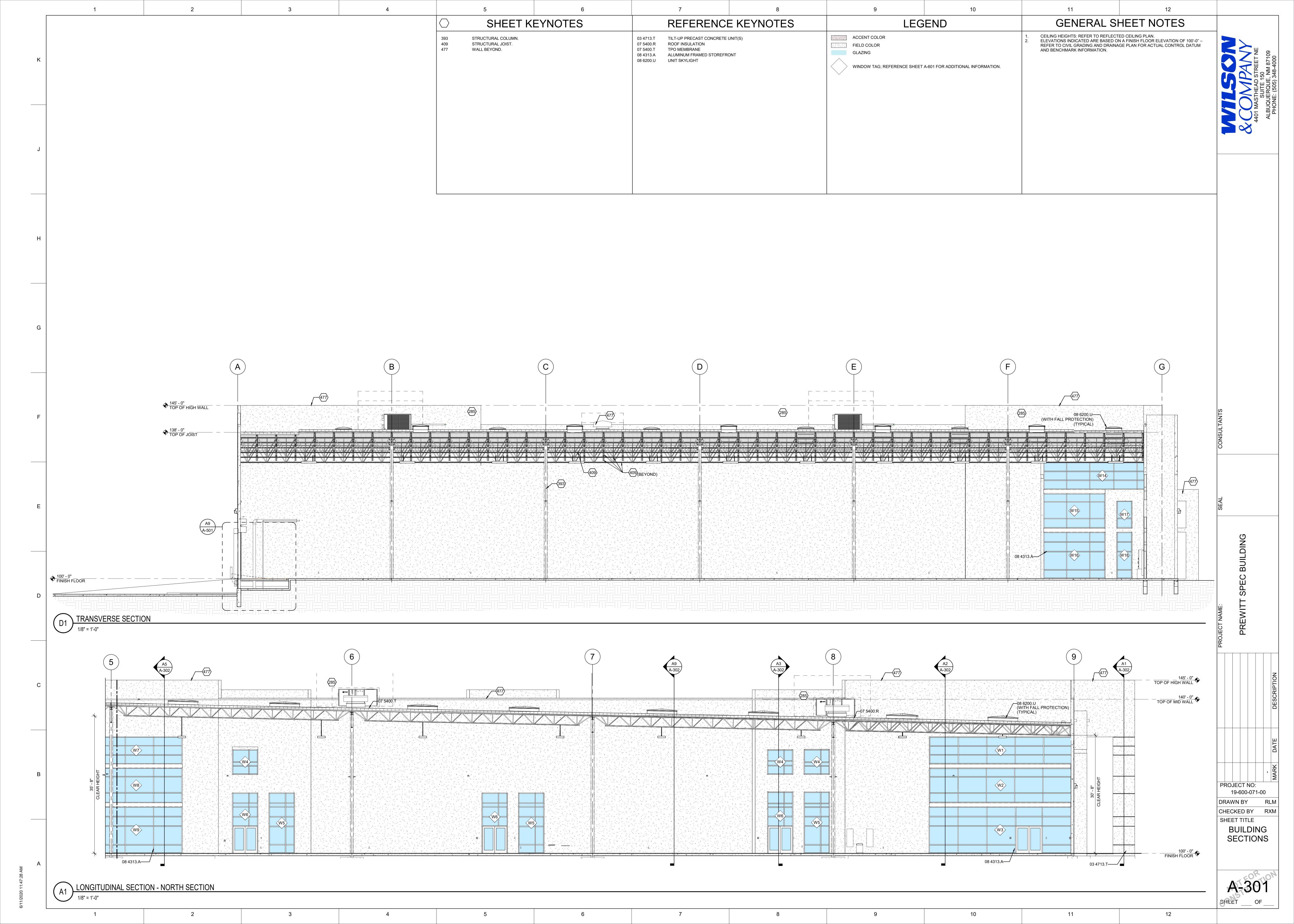


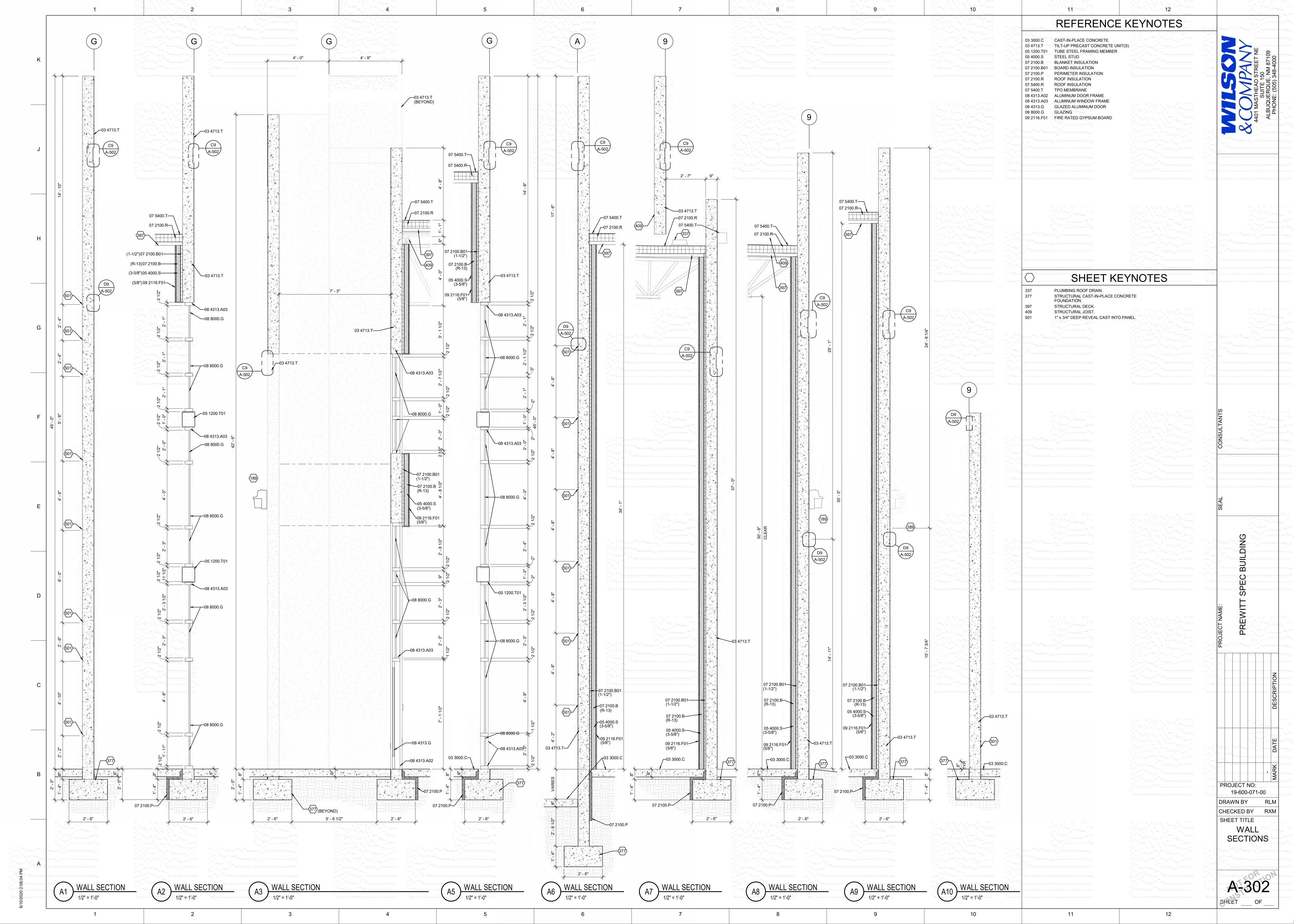


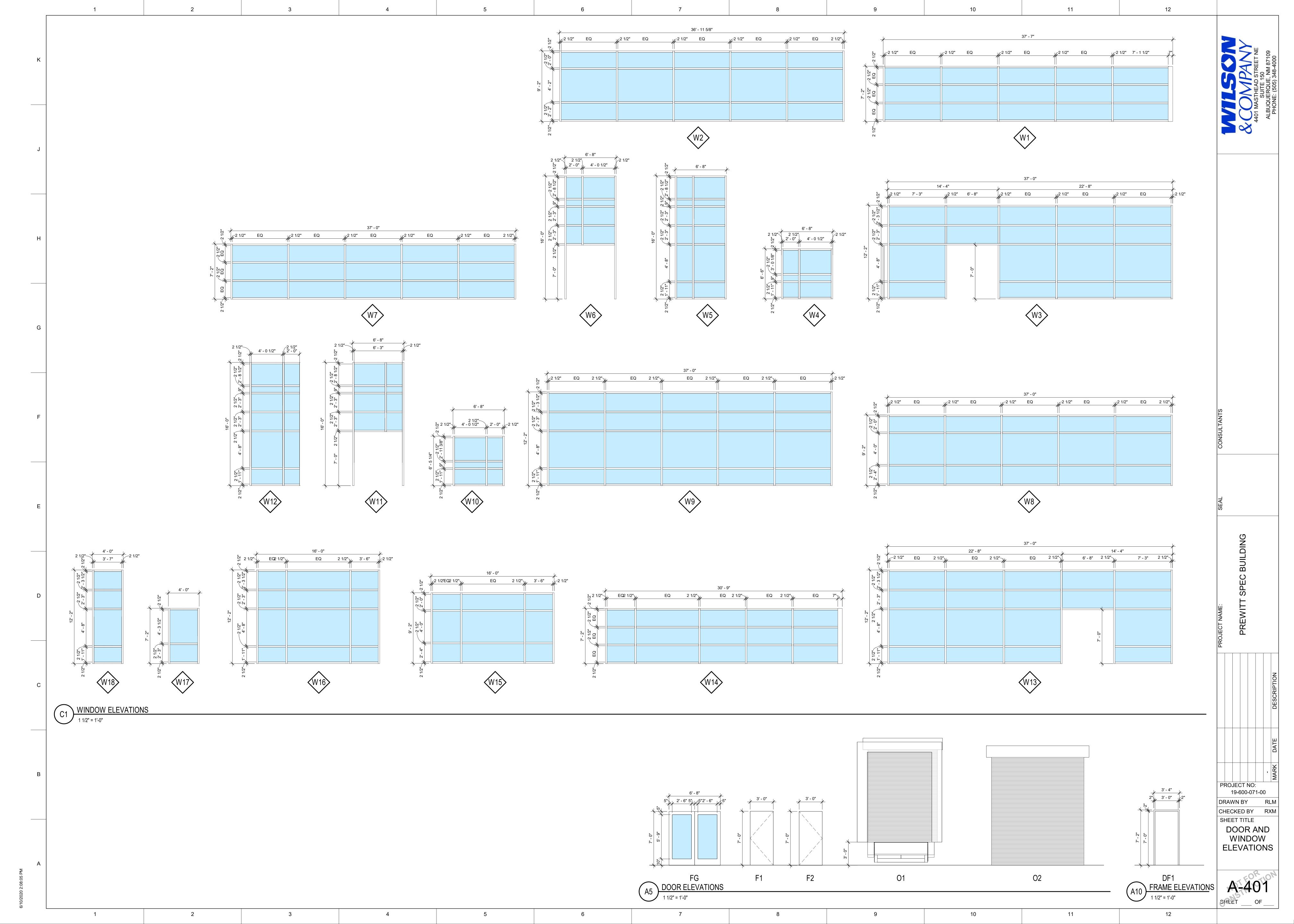


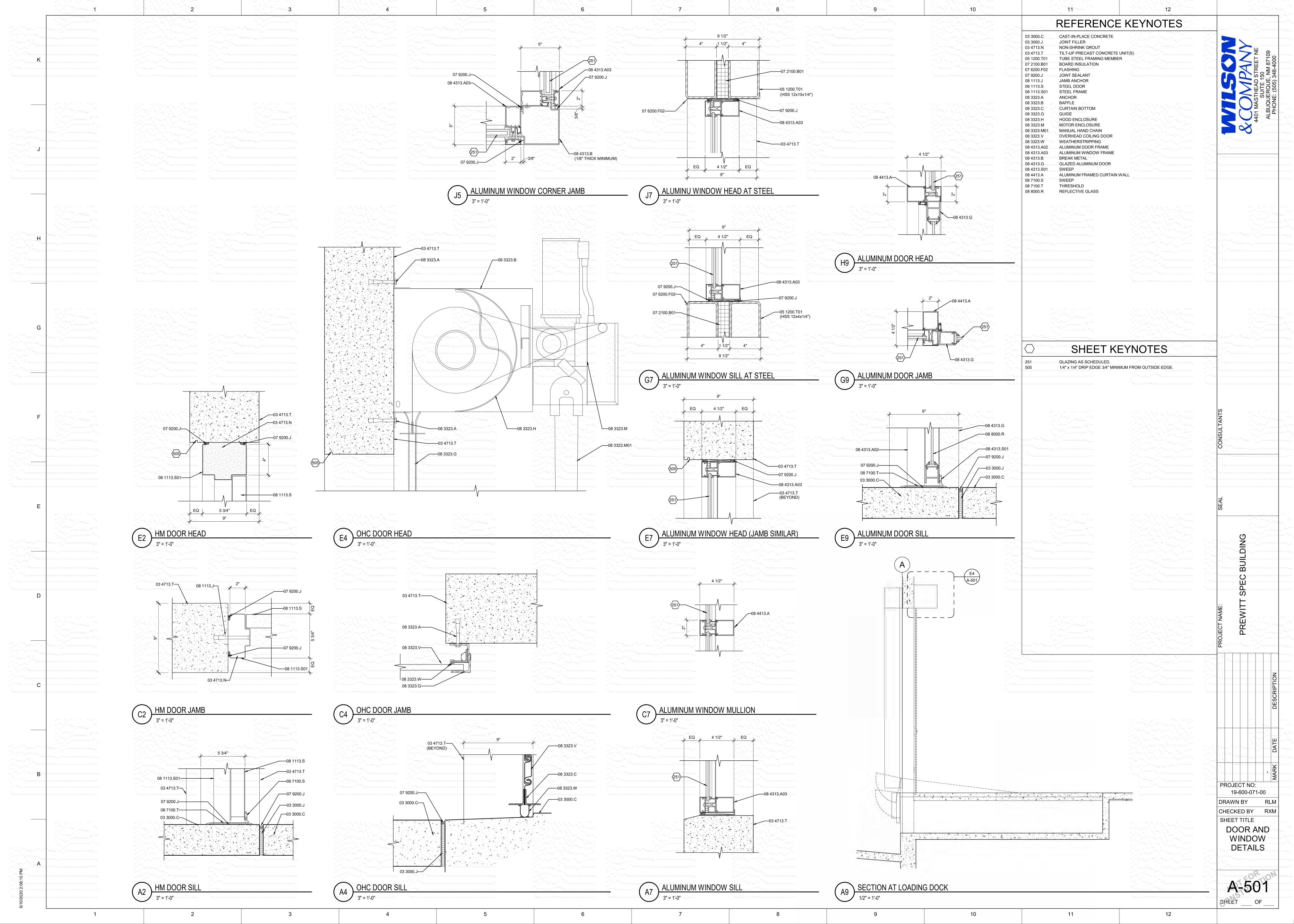


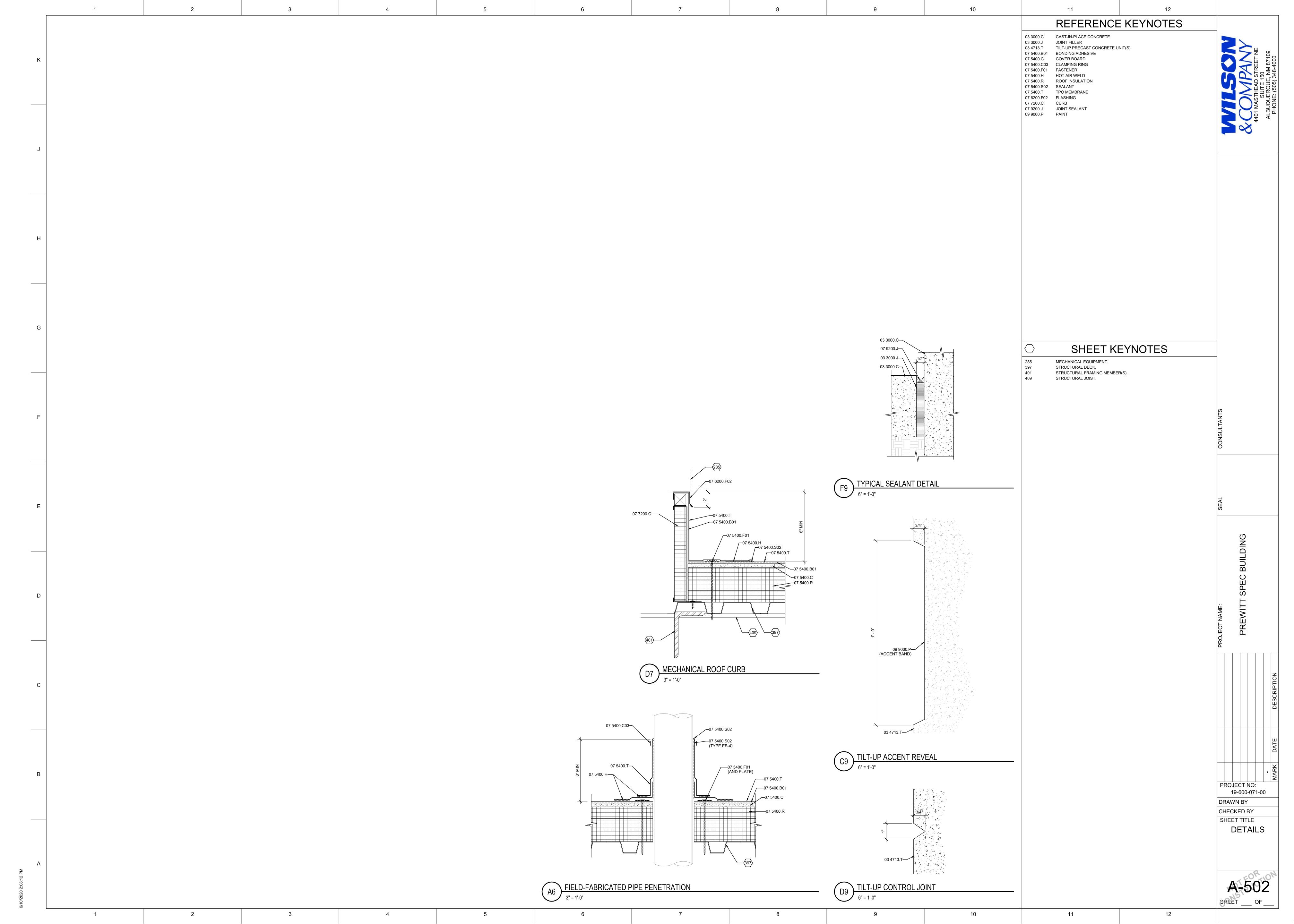


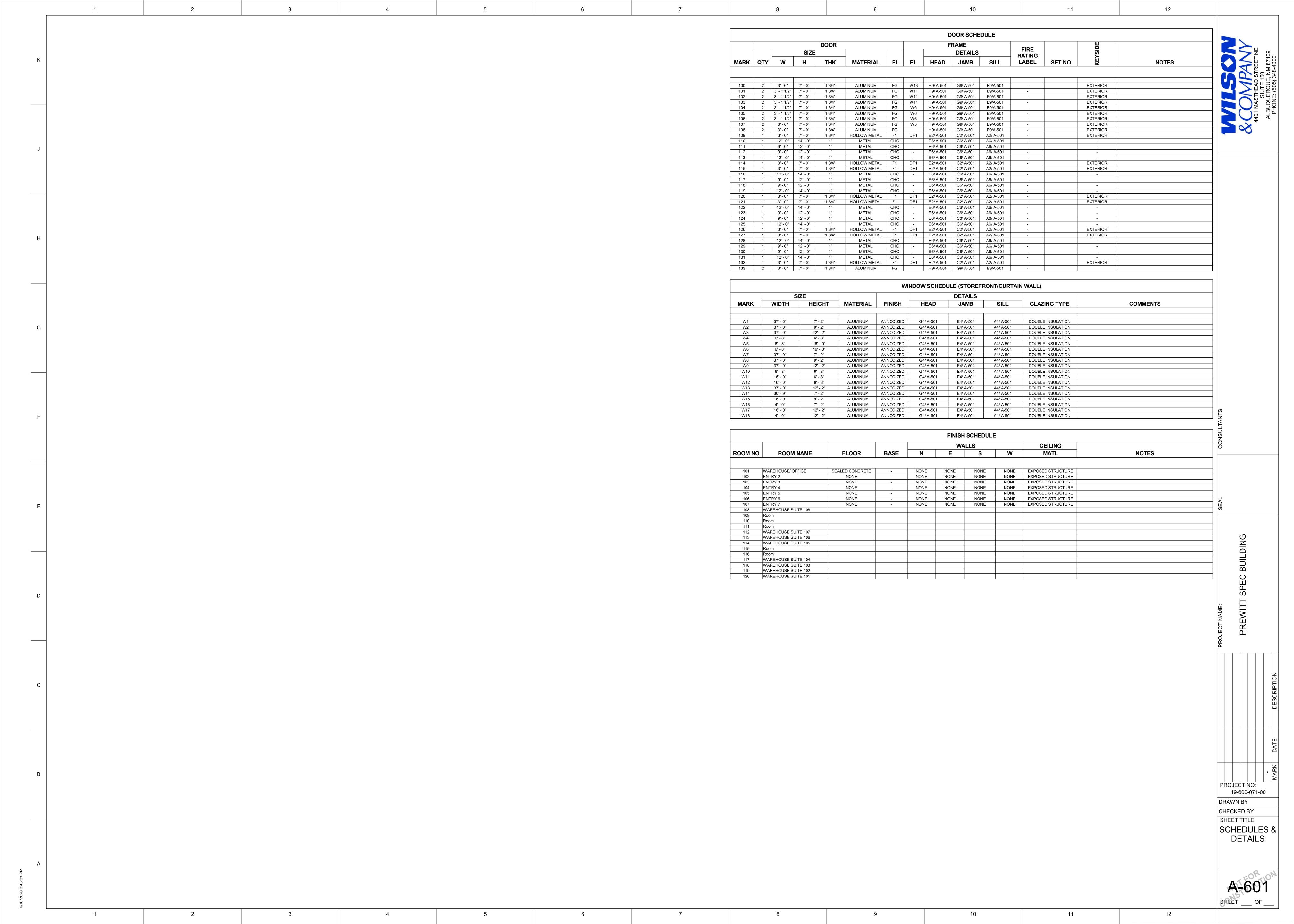


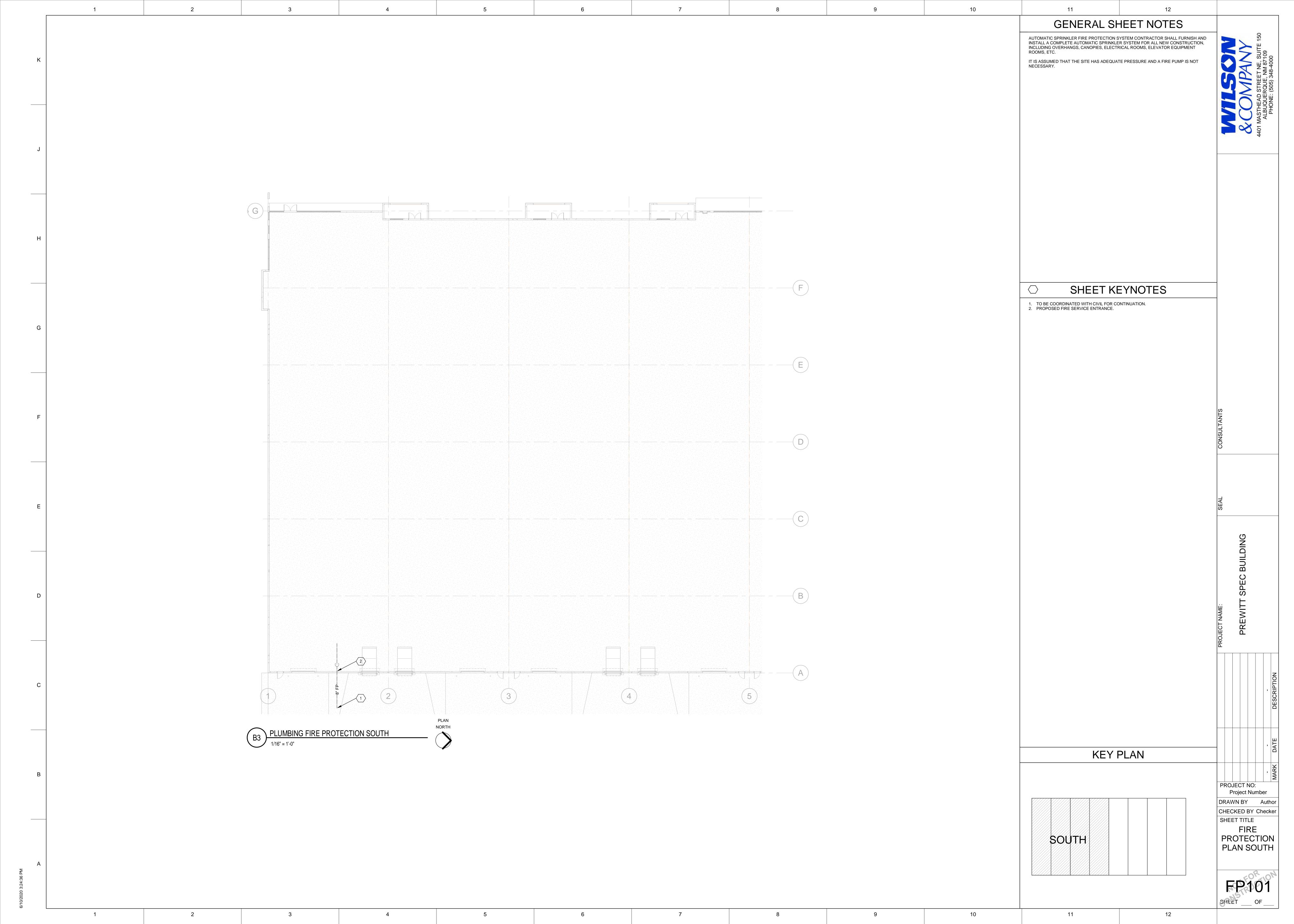


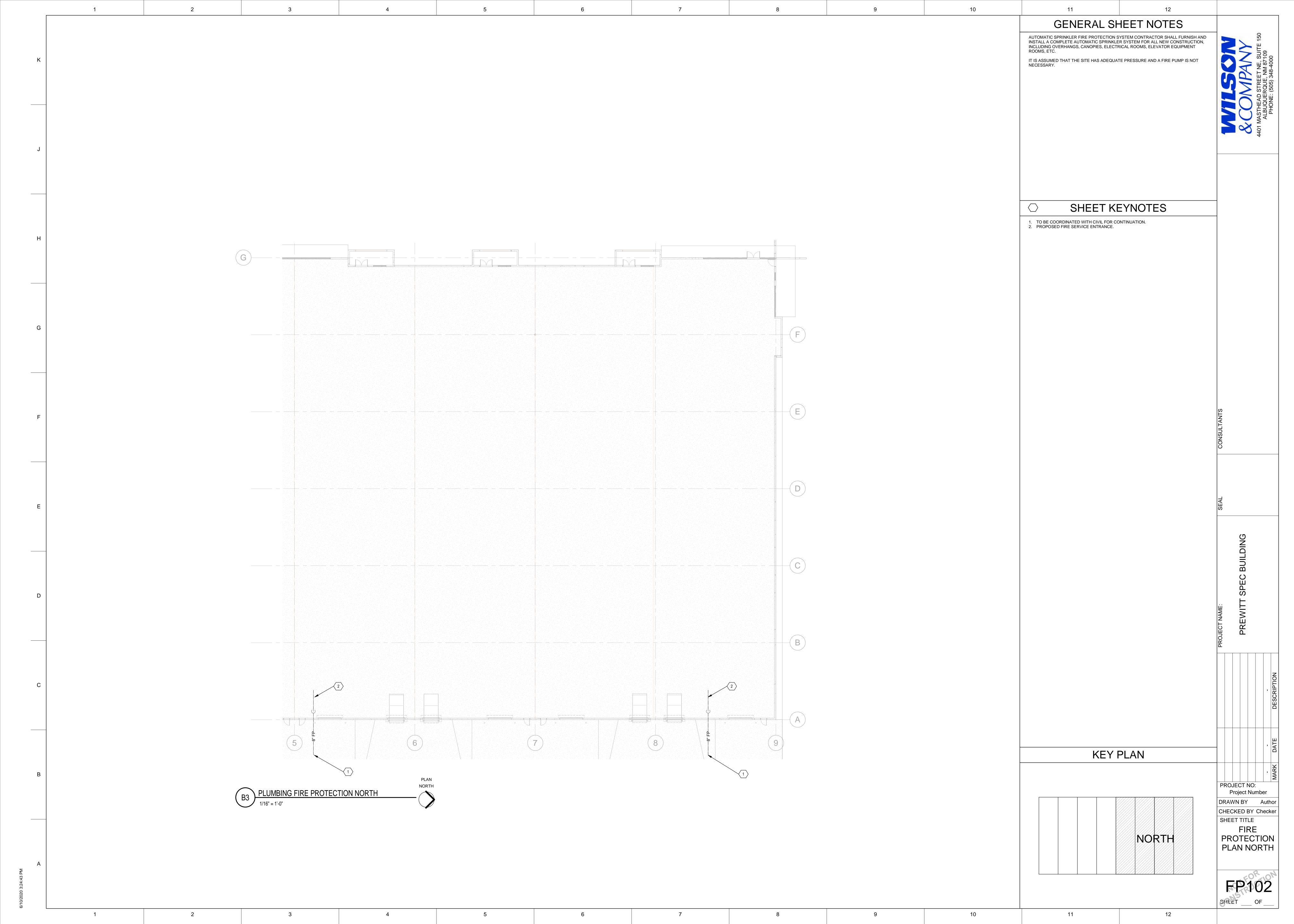












LIQUID

PLUMBING ABBREVIATIONS				
ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION	
AFF	ABOVE FINISHED FLOOR	LDBT	LEAVING DRY BULB TEMPERATURE	
AFG	ABOVE FINISHED GRADE	LWBT	LEAVING WET BULB TEMPERATURE	
AHJ	AUTHORITY HAVING JURISDICTION	LWT	LEAVING WATER TEMPERATURE	
ARCH	ARCHITECT	MAT	MIXED AIR TEMPERATURE	
C/C	COOLING COIL	MBH	THOUSAND BTU PER HOUR	
CFH	CUBIC FEET PER HOUR	MCA	MINIMUM CIRCUIT AMPACITY	
CFM	CUBIC FEET PER MINUTE	MH	MANHOLE	
CL	CENTERLINE	MISC	MISCELLANEOUS	
CLG	CEILING	MOCP	MAXIMUM OVERCURRENT PROTECTION	
CO	CARBON MONOXIDE	NC	NOISE CRITERIA	
CO	CLEANOUT	NEC	NATIONAL ELECTRICAL CODE	
COTG	CLEANOUT TO GRADE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	
CO2	CARBON DIOXIDE	NTS	NOT TO SCALE	
CU	CONDENSING UNIT	OA	OUTSIDE AIR	
CW	COLD WATER	OFD	OVERFLOW DRAIN	
DB	DRY BULB	PC	PLUMBING CONTRACTOR	
DDC	DIRECT DIGITAL CONTROLS	PPM	PARTS PER MILLION	
DEG F	DEGREES FAHRENHEIT	PRV	PRESSURE REDUCING VALVE	
DS	DOWNSPOUT	PSI	POUNDS PER SQUARE INCH	
DWH	DOMESTIC WATER HEATER	QA	QUALITY ASSURANCE	
	ELECTRICAL CONTRACTOR	QC	QUALITY CONTROL	
EC EDBT		R	RADIUS	
EF	ENTERING DRY BULB TEMPERATURE	RA	RETURN AIR	
EL	EXHAUST FAN	RAT	RETURN AIR TEMPERATURE	
ETC	ELEVATION	RD	ROOF DRAIN	
EWBT	ET CETERA	RH	RELATIVE HUMIDITY	
EWT	ENTERING WET BULB TEMPERATURE	RM	ROOM	
FCO	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE	
FD	FLOOR CLEAN-OUT	RTU	ROOF TOP UNIT	
FDC	FLOOR DRAIN	RV	RELIEF VALVE	
	FIRE DEPARTMENT CONNECTION		SUPPLY AIR	
FIN FLR	FINISHED FLOOR	SA		
FH	FIRE HYDRANT	SD	STORM DRAIN	
FPHB	FREEZE-PROOF HOSE BIBB	SF	SQUARE FOOT	
FPM	FEET PER MINUTE	SHR	SHOWER	
FPWH	FREEZE-PROOF WALL HYDRANT	SS	SANITARY SEWER	
FS	FLOOR SINK	SS	SERVICE SINK	
GALV	GALVANIZED	SUB	SUBSTITUTE	
GAS	NATURAL GAS	TG	TRAP GUARD	
GC	GENERAL CONTRACTOR	TP	TRAP PRIMER	
GCO	GRADE CLEANOUT	TSTAT	THERMOSTAT	
GPD	GALLONS PER DAY	TYP	TYPICAL	
GPM	GALLONS PER MINUTE	UNO	UNLESS NOTED OTHERWISE	
GT	GREASE TRAP	UR	URINAL	
HB	HOSE BIBB	V	VENT	
HC	HEATING COIL	VIF	VERIFY IN FIELD	
HD	HEAVY DUTY	VOLT	VOLTAGE	
HT	HEIGHT	W/	WITH	
HW	HOT WATER	W/O	WITHOUT	
HWR	HOT WATER RETURN	WB	WET BULB	
HWS	HOT WATER SUPPLY	WC	WATER CLOSET	
IBC	INTERNATIONAL BUILDING CODE	WCO	WALL CLEANOUT	
I/O	INPUT/OUTPUT	WH	WALL HYDRANT	
LAT	LEAVING AIR TEMPERATURE	WHA	WATER HAMMER ARRESTOR	
LAI	LLAVING AIR TEMPERATURE	VVHA	WATER HAWINER ARRESTOR	

GENERAL PLUMBING REQUIREMENTS:

UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS AND SPECIFICATIONS SHALL INCLUDE THE FURNISHING AND INSTALLATION OF ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL HVAC AND PLUMBING SYSTEMS. CONTRACTOR SHALL FURNISH THESE EVEN IF ITEMS REQUIRED TO ACHIEVE THIS (I.E. OFFSETS, ISOLATION AND BALANCING DEVICES, MAINTENANCE CLEARANCES, ETC.) ARE NOT SPECIFICALLY SHOWN.

2. DATA GIVEN ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED. ABSOLUTE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL OBTAIN AND VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS WITH OTHER TRADES, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT HIS WORK TO ACTUAL CONDITIONS AT THE BUILDINGS. THE DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND SHALL NOT BE SCALED. HOWEVER, THIS DOES NOT RELIEVE ANY SUB-CONTRACTOR FROM COORDINATING HIS WORK WITH ALL OTHER TRADES AND FROM ADJUSTING HIS WORK AS REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING A BID TO BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL CONDITIONS OF THE PROJECT.

3. COORDINATE AND ADJUST ALL WORK BETWEEN TRADES AND EXISTING CONDITIONS IN ORDER TO ACCOMPLISH A NEAT, INTEGRATED AND EFFICIENT INSTALLATION. EXAMINE THE CONTRACT DOCUMENTS OF ALL TRADES (I.E. THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING PLAN, ETC.). COORDINATE NECESSARY EQUIPMENT, DUCTWORK AND PIPING LOCATIONS SO THAT THE FINAL INSTALLATION IS COMPATIBLE WITH THE MATERIALS AND EQUIPMENT OF THE OTHER TRADES. PREPARE SHOP DRAWINGS FOR INSTALLATION OF ALL NEW WORK BEFORE INSTALLATION TO VERIFY COORDINATION OF WORK BETWEEN TRADES.

4. ALL CAPACITIES ARE SCHEDULED AT JOBSITE ALTITUDE OF 6,570 FT. VERIFY THE ELECTRICAL SERVICE PROVIDED BY THE ELECTRICAL CONTRACTOR BEFORE ORDERING ANY MECHANICAL EQUIPMENT REQUIRING

ELECTRICAL CONNECTIONS. 6. SUSPEND EACH TRADE'S WORK SEPARATELY FROM THE STRUCTURE. DUCTWORK SHALL BE HELD TIGHT TO STRUCTURE EXCEPT WHERE SHOWN.

7. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

8. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE ALL AROUND ALL EQUIPMENT REQUIRING SAME.

9. PROVIDE FOR SAFE CONDUCT OF THE WORK, CAREFUL REMOVAL AND DISPOSITION OF MATERIALS AND PROTECTION OF PROPERTY WHICH IS TO REMAIN UNDISTURBED.

10. PROVIDE ACCESS DOORS FOR ALL EQUIPMENT, VALVES, CLEANOUTS, ACTUATORS AND CONTROLS WHICH REQUIRE ACCESS FOR ADJUSTMENT OR SERVICING AND WHICH ARE LOCATED IN OTHERWISE UNACCESSIBLE LOCATIONS. FOR EQUIPMENT LOCATED IN "ACCESSIBLE LOCATIONS" SUCH AS LAY-IN CEILINGS: LOCATE EQUIPMENT TO PROVIDE ADEQUATE SERVICE CLEARANCE FOR NORMAL MAINTENANCE WITHOUT REMOVING ARCHITECTURAL, ELECTRICAL OR STRUCTURAL ELEMENTS SUCH AS THE CEILING SUPPORT SYSTEM, ELECTRICAL FIXTURES, ETC. "NORMAL MAINTENANCE" INCLUDES, BUT IS NOT LIMITED TO: FILTER CHANGING; GREASING OF BEARINGS; USING P/T PORTS FOR PRESSURE OR TEMPERATURE MEASUREMENTS; SERVICING CONTROL VALVES AND SERVICING CONTROL PANELS.

11. NO DOMESTIC WATER, HEATING WATER OR CONDENSER WATER LINES SHALL BE LOCATED EXPOSED IN FINISHED SPACES OR BELOW THE BUILDING SLAB UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

12. NO GAS LINES SHALL BE LOCATED BELOW BUILDING SLAB.

13. ALL CURBS, ROOF JACKS, ROOF THIMBLES, SANITARY VENTS, ROOF DRAINS, ETC. SHALL BE COMPATIBLE WITH ROOFING SYSTEM TO BE PROVIDED. REFERENCE ARCHITECTURAL DIVISION FOR REQUIRED FLASHING DETAILS.

14. THE ELECTRICAL POWER FOR CERTAIN EQUIPMENT PROVIDED UNDER MECHANICAL SPECIFICATIONS, HAS NOT BEEN SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS AND MUST BE FIELD COORDINATED BY THE DIVISION REQUIRING SUCH POWER. SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO: (A) TEMPERATURE CONTROL PANELS, AND JUNCTION BOXES FOR 24V CONTROL TRANSFORMERS. REQUIRED CONNECTION ARE INCLUDED IN MECHANICAL SPECIFICATIONS AND WILL BE SHOWN BY THAT CONTRACTOR'S CONTROL SUBMITTAL DRAWINGS. (B) CONTRACTOR SHALL PROVIDE POWER TO THESE DEVICES AT NO EXTRA COST TO THE PROJECT. COORDINATE EXACT REQUIREMENTS AND COSTS WITH ENGINEER PRIOR TO SUBMITTING BID.

15. PROVIDE ALL REQUIRED PERMITS, INSPECTIONS AND COORDINATION WITH GOVERNING AUTHORITIES.

GENERAL PLUMBING REQUIREMENTS (CONTINUED):

16. QUALITY CONTROL:

APPROVAL SIGNATURE.

(A) QUALIFICATION OF PRODUCTS: WHEN PRODUCTS ARE SPECIFIED BY MANUFACTURER AND MODEL NUMBER, EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS LISTED MAY BE PROVIDED. PRODUCT EQUIVALENCY SHALL BE DETERMINED BY ENGINEER.

(B) IF A PRODUCT SUBMITTED AS AN EQUIVALENT IS DEEMED UNACCÈPTABLE TO THE ENGINEER, THE SPECIFIED PRODUCT SHALL BE PROVIDED AT NO EXTRA COST TO THE PROJECT. (C) SUBMITTALS SHALL INCLUDE REVISED AND SUPPLEMENTED CONTROL DIAGRAMS.

(A) APPEARANCE OF INSTALLATION.

17. CONTRACTOR SHALL CREATE A LOG SHEET FOR REQUIRED TESTS. THE LOG SHEET WILL HAVE A COLUMN FOR REQUIRED TESTS, A COLUMN FOR ACCEPTANCE OF TEST, A COLUMN FOR REMARKS, AND A COLUMN FOR

(D) SUBMIT CUT-SHEETS ON ALL OF THE SPECIFIED EQUIPMENT.

18. CONTRACTOR SHALL CREATE A LOG SHEET OF REQUIRED TRAINING. THE LOG SHEET WILL HAVE A COLUMN FOR THE TRAINED ITEM, A COLUMN FOR THE TIME, DATE AND DURATION OF THE TRAINING, AND A COLUMN FOR

ACCEPTANCE OF TRAINING BY OWNER, ARCHITECT, OR ENGINEER. 19. AFTER INSTALLATION OF SYSTEM, PERFORM AN OPERATIONAL TEST IN THE PRESENCE OF THE OWNER, ARCHITECT, OR ENGINEER. THIS TEST WILL CONSIST OF SUCCESSFULLY DEMONSTRATING:

(B) FUNCTION OF ALL CONTROLS. (C) THE CONTROLS SHALL BE OPERATED IN THE FOLLOWING MODES IN EACH ZONE: OCCUPIED/UNOCCUPIED. (D) IF THE TEST IS NOT SUCCESSFUL IN THE OPINION OF THE ARCHITECT OR ENGINEER, DEFICIENCIES WILL BE REMEDIED AND THE SYSTEM WILL BE RE-TESTED UNTIL THE TEST IS SUCCESSFUL. SECOND AND SUBSEQUENT TESTS WILL RESULT IN THE CONTRACTOR'S CONTRACT PAYMENT BEING REDUCED AN AMOUNT EQUAL TO 85 DOLLARS TIMES THE NUMBER OF ADDITIONAL HOURS SPENT BY THE ARCHITECT OR ENGINEER WITNESSING THE TEST.

WHERE NEW MECHANICAL SYSTEMS ARE USED FOR TEMPORARY VENTILATION OR CLIMATE CONTROL, MECHANICAL EQUIPMENT INSTALLER SHALL PROVIDE CONSTRUCTION FILTERS, MAINTAIN EQUIPMENT, AND CLEAN, ADJUST AND PUT IN NEW CONDITION BEFORE BUILDING OCCUPANCY. PARTS AND LABOR WARRANTY SHALL NOT BE CONSIDERED TO START UNTIL ACCEPTANCE OF THE SYSTEM BY OWNER.

(A) PIPE INSTALLATION: (1) ALL PIPING SHALL BE ADEQUATELY SUPPORTED FROM THE BUILDING STRUCTURE TO PREVENT SAGGING, POCKETING, SWAYING OR DISPLACEMENT BY MEANS OF HANGERS AND SUPPORTS. PIPING IS NOT TO BE SUPPORTED BY EQUIPMENT. (2) PROVIDE DIELECTRIC UNIONS BETWEEN DISSIMILAR MATERIALS. (3) PROVIDE MANUAL AIR VENTS AND CAPPED HOSE-END DRAINS WITH ISOLATION VALVE AT PIPING HIGH AND LOW POINTS. (4) WELD PIPE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. WELDERS SHALL BE CERTIFIED FOR TYPE OF WELD BEING

(5) FLUSH OUT PIPING AND REMOVE CONTROL DEVICES BEFORE PERFORMING PRESSURE TEST. DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. PRESSURIZE PIPING AT 100 PSIG. IF LEAKAGE IS OBSERVED OR IF TEMPERATURE COMPENSATED PRESSURE DROP EXCEEDS 1% OF TEST PRESSURE, REPAIR LEAKS AND RETEST. DO NOT USE AIR PRESSURE TO TEST (6) PROVIDE SUPPORT UNDER ELBOWS ON PUMP SUCTION AND DISCHARGE LINÈS. (7) ALL STRAINERS SHALL BE FURNISHED WITH A "ROUGHING" SCREEN AND TWO (2) SCREENS FOR NORMAL OPERATION. INSTALL STRAINER WITH ROUGHING SCREEN AND OPERATE SYSTEM FOR 24 HOURS MINIMUM (RUN DOMESTIC WATER SYSTEMS AT MAX FLOW FOR A MINIMUM OF ONE HALF (1/2) HOUR. REMOVE ROUGHING SCREEN AND INSTALL NORMAL SCREEN, AFTER TWO WEEKS OF NORMAL OPERATION INSTALL NEW NORMAL SCREEN.

22. ALL MATERIALS ABOVE THE CEILINGS WHERE THIS SPACE IS USED AS A RETURN AIR PLENUM MUST BE NON-COMBUSTIBLE. ALL COMMUNICATIONS CABLE MUST BE PLENUM RATED AND ALL ELECTRICAL WIRING MUST BE IN A PLENUM RATED SHEATH OR CONDUIT. ALL PVC PIPING MUST BE ENCASED IN AN APPROVED INSULATION WITH A FLAME AND SMOKE SPREAD RATING OF

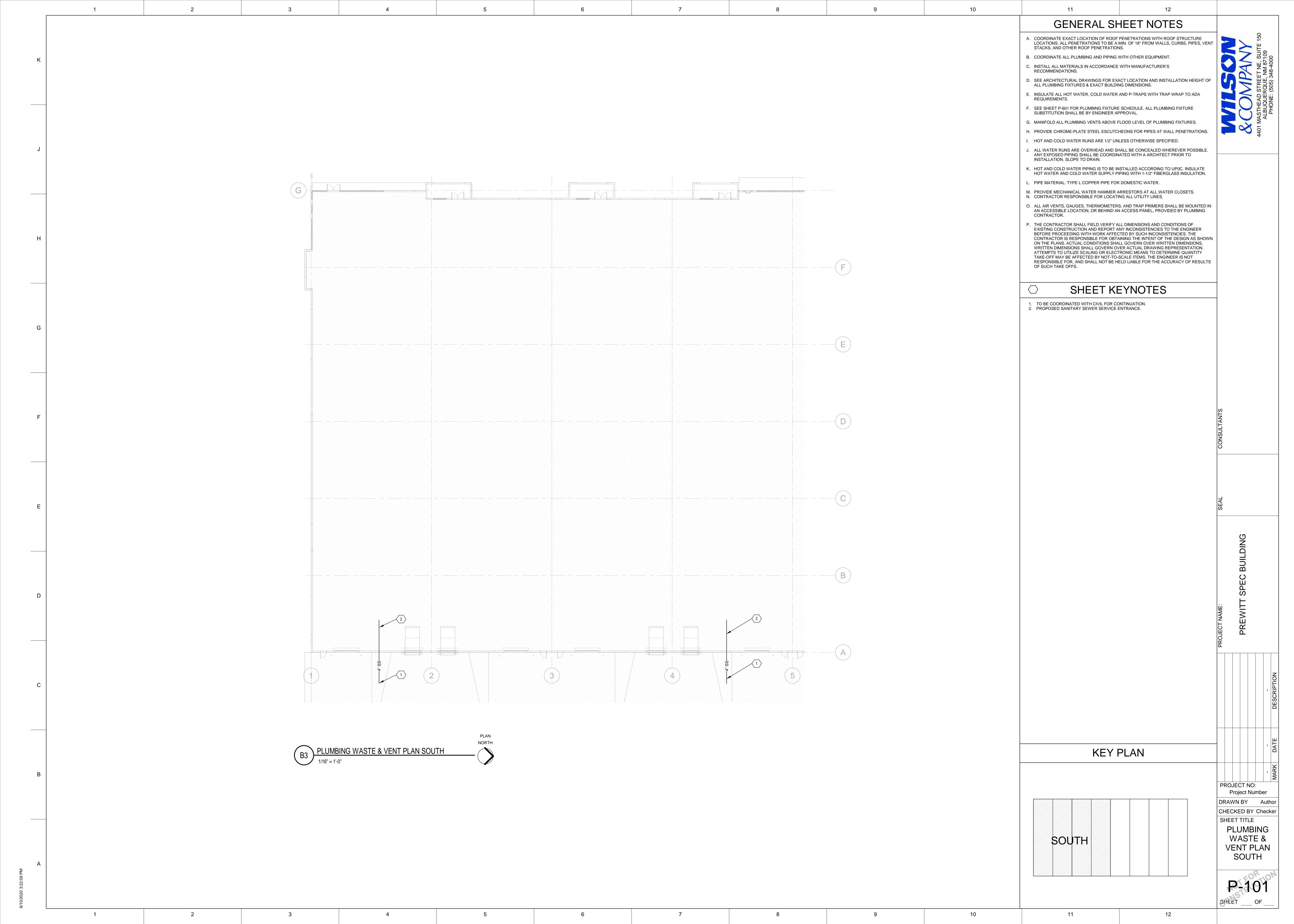
OWNER HAS FIRST RIGHT OF REFUSAL ON ALL EXISTING EQUIPMENT. FIXTURES, MATERIALS, ETC. BEING REMOVED AS PART OF THIS PROJECT.

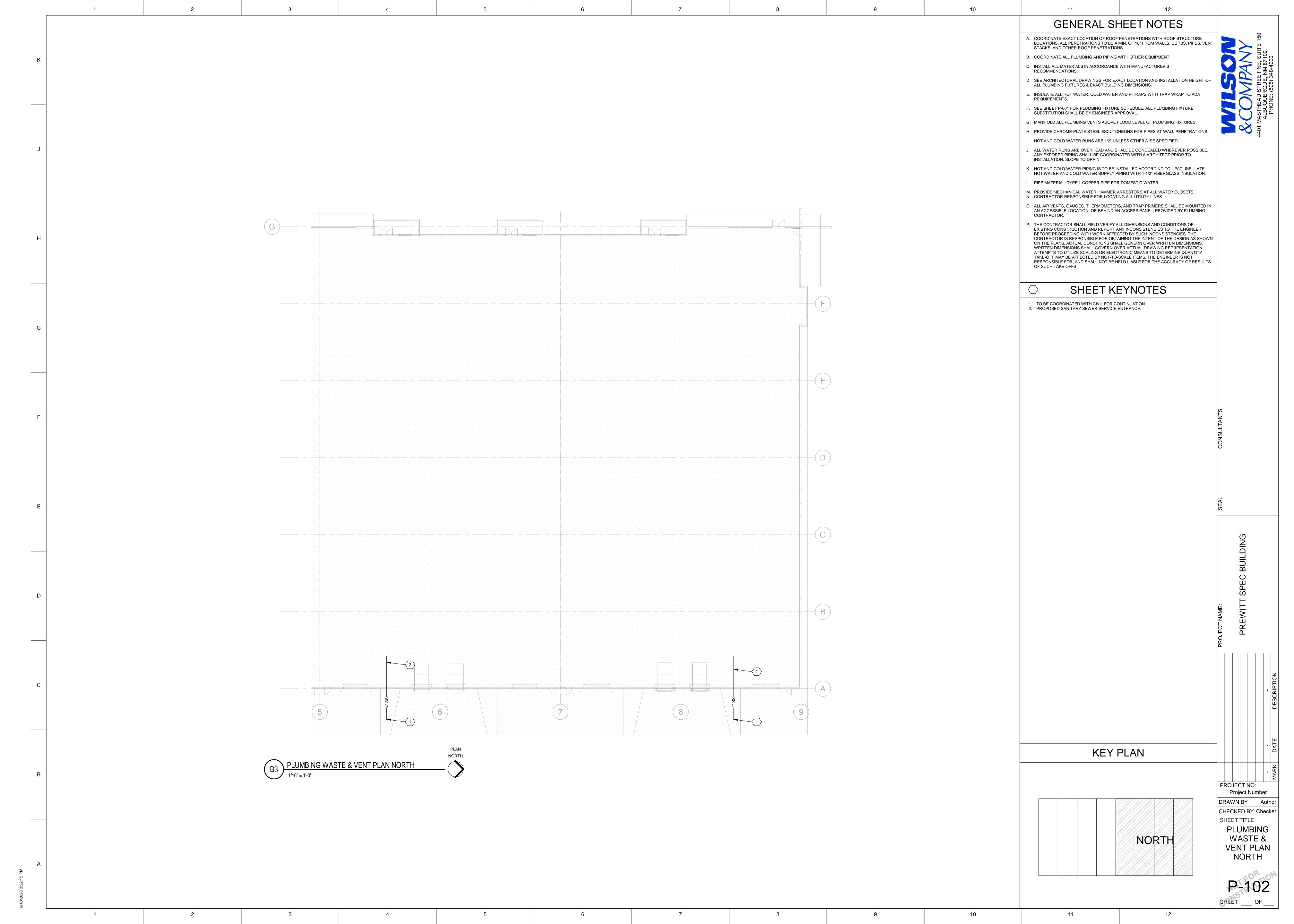
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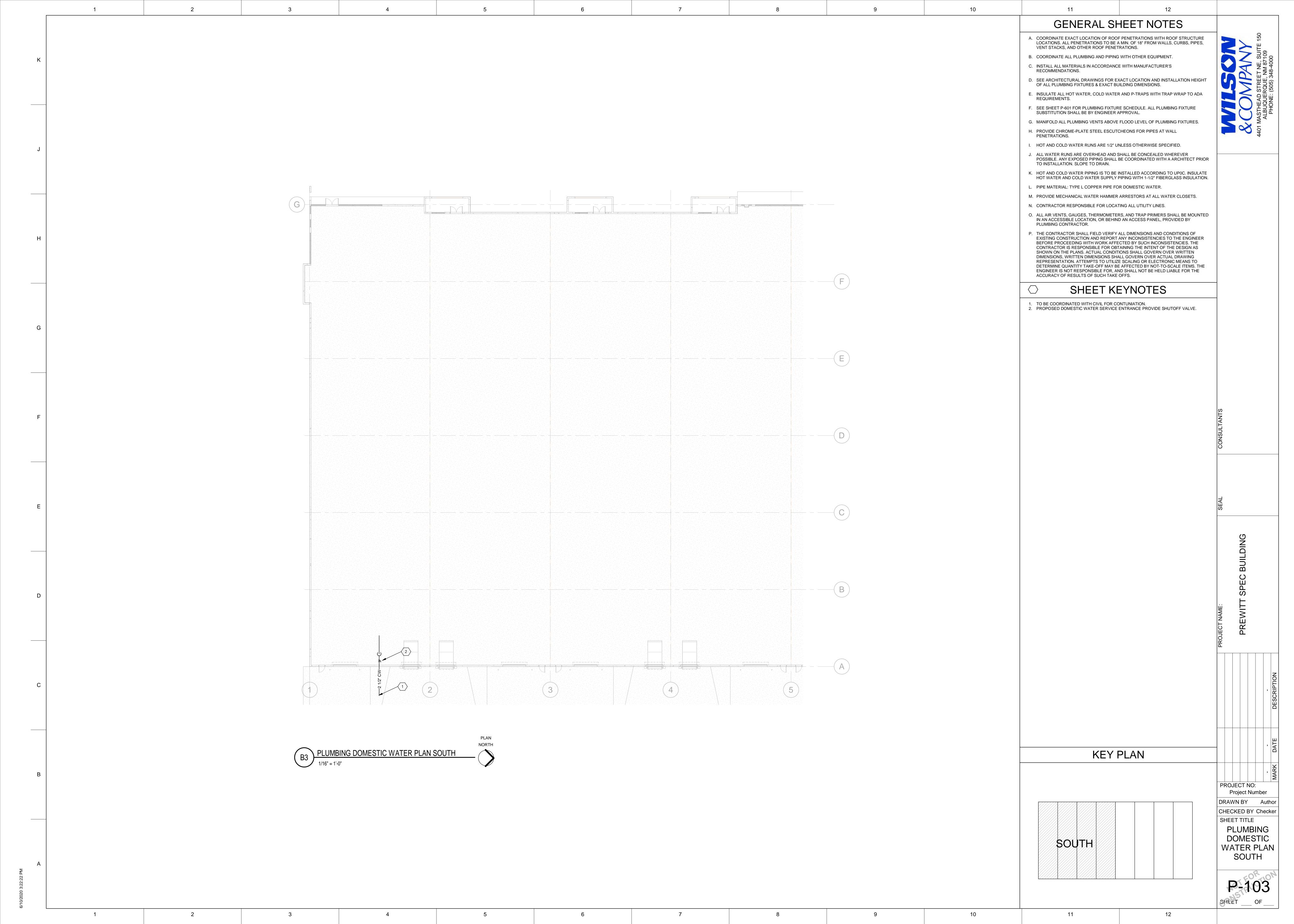
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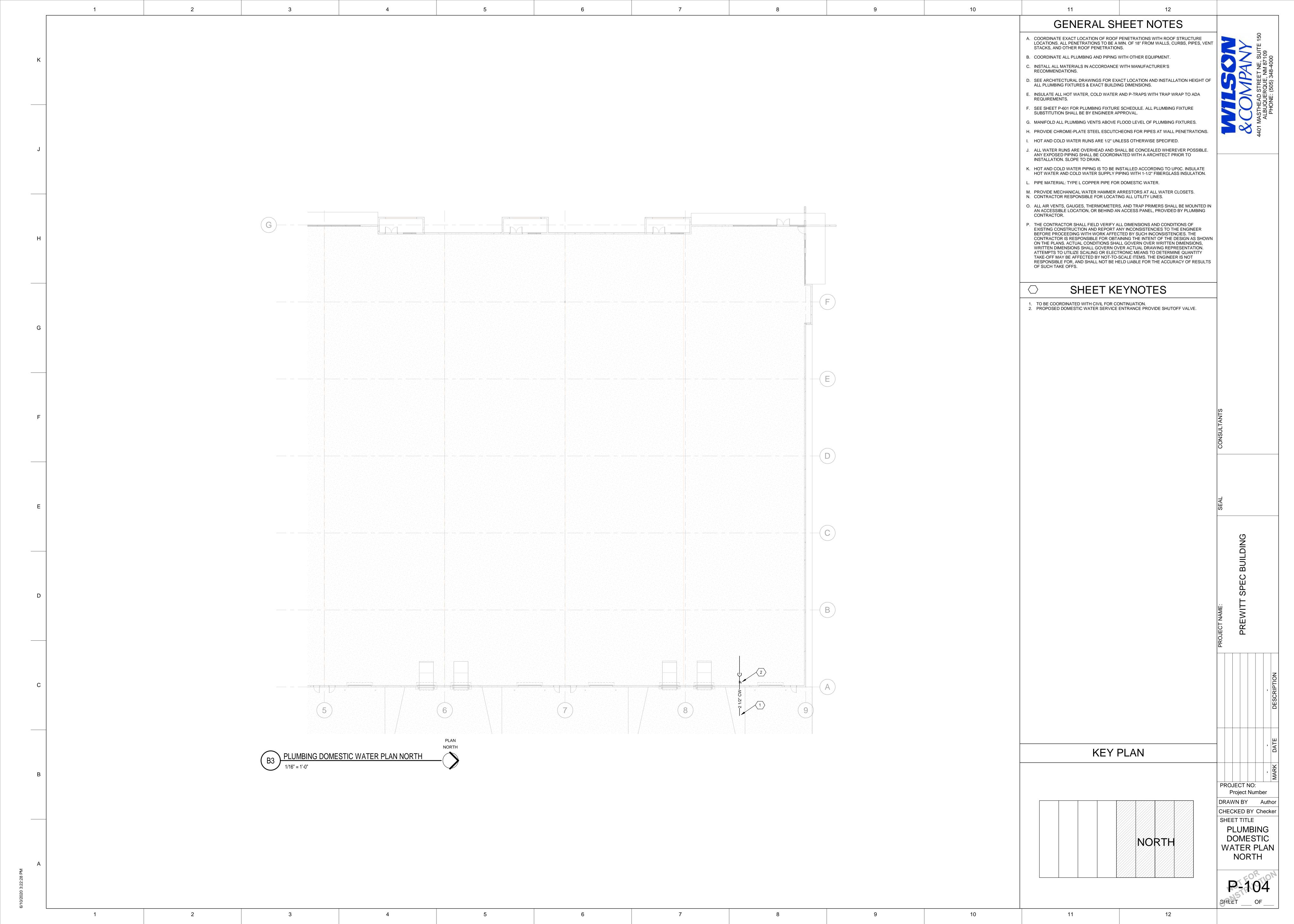
LEGENDS

10









HVAC CONTROLS LEGEND				
MARK	DEFINITION			
T	THERMOSTAT			
TS	TEMPERATURE SENSOR			
(OS)	OPERATOR STATION			

MECHANICAL ABBREVIATIONS				
ABBREVIATION	DEFINITION			
AFF	ABOVE FINISHED FLOOR			
AFG	ABOVE FINISHED GRADE			
CC	COOLING COIL			
CFH	CUBIC FEET PER HOUR			
CL	CENTERLINE			
CLG	CEILING			
CRAH	COMPUTER ROOM AIR HANDLER			
CRCU	COMPUTER ROOM CONDENSING UNIT			
CU	CONDENSING UNIT			
CW	COLD WATER			
DN	DOWN			
DS	DOWNSPOUT			
EA	EXHAUST AIR			
EC	ELECTRICAL CONTRACTOR			
EF	EXHAUST FAN			
ELEV	ELEVATION			
F	FURNACE			
FCO	FLOOR CLEAN-OUT			
FD	FLOOR DRAIN			
FD	FIRE DAMPER			
FF	FINISHED FLOOR			
FPHB	FREEZE-PROOF HOSE BIBB			
FPWH	FREEZE-PROOF WALL HYDRANT			
FS	FLOOR SINK			
FS	COMBINATION FIRE/SMOKE DAMPER			
GAS	NATURAL GAS			
GC	GENERAL CONTRACTOR			
GCO	GRADE CLEANOUT			
HLAV	LAVATORY (ADA COMPLIANT)			
HT	HEIGHT			
HUR	URINAL (ADA COMPLIANT)			
HW	HOT WATER (110°F UNO)			
HWC	WATER CLOSET (ADA COMPLIANT)			
HWR	HOT WATER RETURN (110°F UNO)			
JB	JOIST BEARING			
KF	KITCHEN FAN			
L	LOUVER			
LAV	LAVATORY			
MC	MECHANICAL CONTRACTOR			
OA	OUTSIDE AIR			
OF	OVERFLOW DRAIN			
PC	PLUMBING CONTRACTOR			
RA	RETURN AIR			
RTU SA	ROOF TOP UNIT SUPPLY AIR			
SD	SMOKE DAMPER			
SS ST	SANITARY SEWER			
ST T	STORM DRAIN THERMOSTAT			
TDL	THERMOSTAT TOTAL DEVELOPED LENGTH			
TMV	THERMOSTATIC MIXING VALVE			

TEMPERATURE SENSOR

UNLESS NOTED OTHERWISE

URINAL

VENT

WATER CLOSET

WALL CLEAN-OUT

DOMESTIC WATER HEATER

WATER HAMMER ARRESTOR

TS

UNO

UR

V

WC

WCO

WH

WHA

GENERAL MECHANICAL REQUIREMENTS:

ENGINEER(S): PERSON(S) OR FIRM PROFESSIONALLY QUALIFIED AND DULY LICENSED TO PROVIDE ENGINEERING SERVICES.

CONTRACTOR: PERSON OR ENTITY, INCLUDING SUBCONTRACTORS, RESPONSIBLE FOR PERFORMING THE WORK OF THE CONTRACT DOCUMENTS.

CONTRACT DOCUMENTS: ALL DRAWINGS, SPECIFICATIONS, CONTRACTS, AND ANY DOCUMENT WHICH NECESSITATES THE WORK TO BE PERFORMED.

DRAWINGS, PLANS: THE PORTION OF THE CONTRACT DOCUMENTS THAT GIVES A GRAPHIC AND WRITTEN REPRESENTATION OF THE SCOPE, LOCATION AND ARRANGEMENT OF CONSTRUCTION, MATERIALS, AND EQUIPMENT.

SUBCONTRACTOR: PERSON OR ENTITY WHO HAS A DIRECT CONTRACT WITH THE BUILDER TO PERFORM ANY OF THE WORK OF THE CONTRACT DOCUMENTS. THE WORK: INCLUDES LABOR, MATERIALS, EQUIPMENT AND SERVICES OF THE BUILDER NECESSARY TO PRODUCE EVERYTHING SHOWN, MENTIONED, OR REASONABLY INFERABLE AS BEING NECESSARY TO PRODUCE THE INTENDED RESULTS. THE

- ONLY THINGS NOT INCLUDED IN THE WORK ARE SPECIFICALLY MARKED "NOT-IN-CONTRACT", "BY OTHERS", "BY OWNER", "FUTURE", OR "EXISTING". UNLESS OTHERWISE NOTED, THE WORK DESCRIBED ON THE PLANS AND SPECIFICATIONS SHALL INCLUDE THE FURNISHING AND INSTALLATION OF ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE AND OPERATIONAL HVAC AND
- PLUMBING SYSTEMS. CONTRACTOR SHALL FURNISH THESE EVEN IF ITEMS REQUIRED TO ACHIEVE THIS (I.E. OFFSETS, ISOLATION AND BALANCING DEVICES, MAINTENANCE CLEARANCES, ETC.) ARE NOT SPECIFICALLY SHOWN. DATA GIVEN ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED. ABSOLUTE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL OBTAIN AND VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS.
- POTENTIAL CONFLICTS WITH OTHER TRADES, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT HIS WORK TO ACTUAL CONDITIONS AT THE BUILDINGS. THE DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND SHALL NOT BE SCALED. HOWEVER, THIS DOES NOT RELIEVE ANY SUB-CONTRACTOR FROM COORDINATING HIS WORK WITH ALL OTHER TRADES AND FROM ADJUSTING HIS WORK AS REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING A BID TO BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL CONDITIONS OF THE PROJECT.
- COORDINATE AND ADJUST ALL WORK BETWEEN TRADES AND EXISTING CONDITIONS IN ORDER TO ACCOMPLISH A NEAT, INTEGRATED AND EFFICIENT INSTALLATION. EXAMINE THE CONTRACT DOCUMENTS OF ALL TRADES (I.E. THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING PLAN, ETC.). COORDINATE NECESSARY EQUIPMENT, DUCTWORK AND PIPING LOCATIONS SO THAT THE FINAL INSTALLATION IS COMPATIBLE WITH THE MATERIALS AND EQUIPMENT OF THE OTHER TRADES. PREPARE SHOP DRAWINGS FOR INSTALLATION OF ALL NEW WORK BEFORE INSTALLATION TO VERIFY COORDINATION OF WORK BETWEEN TRADES.
- ALL CAPACITIES ARE SCHEDULED AT JOBSITE ALTITUDE OF ?,??? FT.
- VERIFY THE ELECTRICAL SERVICE PROVIDED BY THE ELECTRICAL CONTRACTOR BEFORE ORDERING ANY MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.
- SUSPEND EACH TRADE'S WORK SEPARATELY FROM THE STRUCTURE. DUCTWORK SHALL BE HELD TIGHT TO STRUCTURE EXCEPT WHERE SHOWN.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE. PROVIDE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCE ALL AROUND ALL EQUIPMENT REQUIRING SAME.
- PROVIDE FOR SAFE CONDUCT OF THE WORK, CAREFUL REMOVAL AND DISPOSITION OF MATERIALS AND PROTECTION OF PROPERTY WHICH IS TO REMAIN UNDISTURBED.
- PROVIDE ACCESS DOORS FOR ALL EQUIPMENT, VALVES, CLEANOUTS, ACTUATORS AND CONTROLS WHICH REQUIRE ACCESS FOR ADJUSTMENT OR SERVICING AND WHICH ARE LOCATED IN OTHERWISE INACCESSIBLE LOCATIONS. FOR EQUIPMENT LOCATED IN "ACCESSIBLE LOCATIONS" SUCH AS LAY-IN CEILINGS: LOCATE EQUIPMENT TO PROVIDE ADEQUATE SERVICE CLEARANCE FOR NORMAL MAINTENANCE WITHOUT REMOVING ARCHITECTURAL, ELECTRICAL OR STRUCTURAL ELEMENTS SUCH AS THE CEILING SUPPORT SYSTEM, ELECTRICAL FIXTURES, ETC. "NORMAL MAINTENANCE" INCLUDES, BUT IS NOT LIMITED TO: FILTER CHANGING; GREASING OF BEARINGS; USING P/T PORTS FOR PRESSURE OR TEMPERATURE MEASUREMENTS; SERVICING CONTROL VALVES AND SERVICING CONTROL PANELS.
- NO DOMESTIC WATER, HEATING WATER OR CONDENSER WATER LINES SHALL BE LOCATED EXPOSED IN FINISHED SPACES OR BELOW THE BUILDING SLAB UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- ALL CURBS, ROOF JACKS, ROOF THIMBLES, SANITARY VENTS, ROOF DRAINS, ETC. SHALL BE COMPATIBLE WITH ROOFING SYSTEM TO BE PROVIDED. REFERENCE ARCHITECTURAL DIVISION FOR REQUIRED FLASHING DETAILS
- THE ELECTRICAL POWER FOR CERTAIN EQUIPMENT PROVIDED UNDER DIVISIONS 21, 22 AND 23 HAVE NOT BEEN SPECIFICALLY INDICATED ON THE ELECTRICAL DRAWINGS AND MUST BE FIELD COORDINATED BY THE DIVISION REQUIRING SUCH POWER. SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO: (A) TEMPERATURE CONTROL PANELS, AND JUNCTION BOXES FOR 24V CONTROL TRANSFORMERS. REQUIRED CONNECTION ARE INCLUDED IN DIVISIONS 21, 22 AND 23 AND WILL BE SHOWN BY THAT CONTRACTOR'S CONTROL SUBMITTAL

(B) CONTRACTOR SHALL PROVIDE POWER TO THESE DEVICES AT NO EXTRA COST TO THE PROJECT. COORDINATE EXACT REQUIREMENTS AND COSTS WITH ENGINEER PRIOR TO SUBMITTING BID.

14. PROVIDE ALL REQUIRED PERMITS, INSPECTIONS AND COORDINATION WITH GOVERNING AUTHORITIES.

(D) SUBMIT CUT-SHEETS ON ALL OF THE SPECIFIED EQUIPMENT.

(C) SUBMITTALS SHALL INCLUDE REVISED AND SUPPLEMENTED CONTROL DIAGRAMS.

- (A) QUALIFICATION OF PRODUCTS: WHEN PRODUCTS ARE SPECIFIED BY MANUFACTURER AND MODEL NUMBER, EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS LISTED MAY BE PROVIDED. PRODUCT EQUIVALENCY SHALL BE (B) IF A PRODUCT SUBMITTED AS AN EQUIVALENT IS DEEMED UNACCEPTABLE TO THE ENGINEER, THE SPECIFIED PRODUCT SHALL BE PROVIDED AT NO EXTRA COST TO THE PROJECT.
- CONTRACTOR SHALL CREATE A LOG SHEET FOR REQUIRED TESTS. THE LOG SHEET WILL HAVE A COLUMN FOR REQUIRED TESTS, A COLUMN FOR ACCEPTANCE OF TEST, A COLUMN FOR REMARKS, AND A COLUMN FOR APPROVAL SIGNATURE. CONTRACTOR SHALL CREATE A LOG SHEET OF REQUIRED TRAINING. THE LOG SHEET WILL HAVE A COLUMN FOR THE TRAINING ITEM, A COLUMN FOR THE TIME, DATE AND DURATION OF THE TRAINING, AND A COLUMN FOR ACCEPTANCE OF
- TRAINING BY OWNER, ARCHITECT, OR ENGINEER. AFTER INSTALLATION OF SYSTEM, PERFORM AN OPERATIONAL TEST IN THE PRESENCE OF THE OWNER, ARCHITECT, OR ENGINEER. THIS TEST WILL CONSIST OF SUCCESSFULLY DEMONSTRATING:
- (A) APPEARANCE OF INSTALLATION. (B) FUNCTION OF ALL CONTROLS.
- (C) THE CONTROLS SHALL BE OPERATED IN THE FOLLOWING MODES IN EACH ZONE: OCCUPIED/UNOCCUPIED. (D) IF THE TEST IS NOT SUCCESSFUL IN THE OPINION OF THE ARCHITECT OR ENGINEER, DEFICIENCIES WILL BE REMEDIED AND THE SYSTEM WILL BE RE-TESTED UNTIL THE TEST IS SUCCESSFUL. SECOND AND SUBSEQUENT TESTS WILL RESULT IN THE CONTRACTOR'S CONTRACT PAYMENT BEING REDUCED AN AMOUNT EQUAL TO 85 DOLLARS TIMES THE NUMBER OF ADDITIONAL HOURS SPENT BY THE ARCHITECT OR ENGINEER WITNESSING THE TEST. THE OWNER SHALL PAY THIS AMOUNT TO THE ARCHITECT.
- WHERE NEW MECHANICAL SYSTEMS ARE USED FOR TEMPORARY VENTILATION OR CLIMATE CONTROL, MECHANICAL EQUIPMENT INSTALLER SHALL PROVIDE CONSTRUCTION FILTERS, MAINTAIN EQUIPMENT, AND CLEAN, ADJUST AND PUT IN NEW CONDITION BEFORE BUILDING OCCUPANCY. PARTS AND LABOR WARRANTY SHALL NOT BE CONSIDERED TO START UNTIL ACCEPTANCE OF THE SYSTEM BY OWNER.
- (A) PIPE INSTALLATION: (1) ALL PIPING SHALL BE ADEQUATELY SUPPORTED FROM THE BUILDING STRUCTURE TO PREVENT SAGGING, POCKETING, SWAYING OR DISPLACEMENT BY MEANS OF HANGERS AND SUPPORTS. PIPING IS NOT TO BE
 - SUPPORTED BY EQUIPMENT. (2) PROVIDE DIELECTRIC UNIONS BETWEEN DISSIMILAR MATERIALS. (3) PROVIDE MANUAL AIR VENTS AND CAPPED HOSE-END DRAINS WITH ISOLATION VALVE AT PIPING HIGH AND LOW POINTS.
 - (4) WELD PIPE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. WELDERS SHALL BE CERTIFIED FOR TYPE OF WELD BEING PERFORMED. (5) FLUSH OUT PIPING AND REMOVE CONTROL DEVICES BEFORE PERFORMING PRESSURE TEST. DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. PRESSURIZE PIPING AT 100 PSIG. IF LEAKAGE IS OBSERVED OR IF TEMPERATURE COMPENSATED PRESSURE DROP EXCEEDS 1% OF TEST PRESSURE, REPAIR LEAKS AND RETEST. DO NOT USE AIR PRESSURE TO TEST PLASTIC
- (6) PROVIDE SUPPORT UNDER ELBOWS ON PUMP SUCTION AND DISCHARGE LINES. (7) ALL STRAINERS SHALL BE FURNISHED WITH A "ROUGHING" SCREEN AND TWO (2) SCREENS FOR NORMAL OPERATION. INSTALL STRAINER WITH ROUGHING SCREEN AND OPERATE SYSTEM FOR 24 HOURS MINIMUM (RUN DÓMESTIC WATER SYSTEMS AT MAX FLOW FOR A MINIMUM OF ONE HALF (1/2) HOÙR. REMOVE ROUGHING SCREEN AND INSTALL NORMAL SCREEN. AFTER TWO WEEKS OF NORMAL OPERATION INSTALL NEW NORMAL SCREEN.
- ALL MATERIALS ABOVE THE CEILINGS WHERE THIS SPACE IS USED AS A RETURN AIR PLENUM MUST BE NON-COMBUSTIBLE. ALL COMMUNICATIONS CABLE MUST BE PLENUM RATED AND ALL ELECTRICAL WIRING MUST BE IN A PLENUM RATED SHEATH OR CONDUIT. ALL PVC PIPING MUST BE ENCASED IN AN APPROVED INSULATION WITH A FLAME AND SMOKE SPREAD RATING OF 25/50.
- FOLLOW SMACNA GUIDELINES AND ABIDE BY UPC 2015 AND UMC 2015 CODES, WITH MODIFICATIONS AS DICTATED BY NM CID.
- CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE CONTRACTOR'S BEST SKILL AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT DOCUMENTS UNLESS GIVEN OTHER SPECIFIC INSTRUCTIONS CONCERNING THESE MATTERS.
- THESE DRAWINGS ARE ALL INCLUSIVE. WHAT IS REQUIRED OF ONE IS REQUIRED OF ALL. ANY ONE PART OF THE DRAWINGS DOES NOT TAKE PRECEDENCE OVER ANOTHER PART OF THE DRAWINGS. WHERE DISCREPANCIES OCCUR THE MOST STRINGENT REQUIREMENT SHALL GOVERN. THE MOST STRINGENT REQUIREMENT GENERALLY IMPLIES THE MOST COSTLY CONDITION. IF ANY DRAWING IS NOT CLEAR OR IF THERE ARE ANY QUESTIONS ABOUT THESE DRAWINGS. NOTIFY THE ENGINEER(S). IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER(S), THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY.
- 25. ALL MATERIAL PROVIDED BY CONTRACTOR SHALL BE NEW (UNLESS OTHERWISE NOTED) AND NOT DAMAGED. CONTRACTOR SHALL NOT INSTALL MATERIAL DAMAGED DURING CONSTRUCTION, NEW OR USED, AND SHALL REPLACE DAMAGED MATERIAL AT CONTRACTOR'S EXPENSE.
- 26. ALL WORK OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS IN THE LATEST ADOPTED EDITIONS OF:

THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY.

- NEW MEXICO ADMINISTRATIVE CODE (NMAC) INTERNATIONAL BUILDING CODE (IBC) UNIFORM PLUMBING CODE (UPC)
- NATIONAL ELECTRIC CODE (NEC) INTERNATIONAL ELECTRIC CODE (IEC) ALL APPLICABLE LOCAL CODES AND ORDINANCES

UNIFORM MECHANICAL CODE (UMC)

- 27. CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS WITH EACH OTHER AND WITH INFORMATION FURNISHED BY THE ENGINEER(S), CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND NOTIFY ENGINEER(S) OF ANY DISCREPANCIES OR QUESTIONS PRIOR TO PERFORMING THE WORK. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER(S), THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY.
- CONTRACTOR SHALL NOTIFY THE ENGINEER(S) OF ANY PROPOSED REVISIONS TO THE DRAWINGS AND OBTAIN WRITTEN APPROVAL PRIOR TO PERFORMING THE WORK. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER(S),
- 29. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING CONSTRUCTION AND REPORT ANY INCONSISTENCIES TO THE ENGINEER BEFORE PROCEEDING WITH WORK AFFECTED BY SUCH INCONSISTENCIES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE INTENT OF THE DESIGN AS SHOWN ON THE PLANS. ACTUAL CONDITIONS SHALL GOVERN OVER WRITTEN DIMENSIONS, WRITTEN DIMENSIONS SHALL GOVERN OVER ACTUAL DRAWING REPRESENTATION. ATTEMPTS TO UTILIZE SCALING OR ELECTRONIC MEANS TO DETERMINE QUANTITY TAKE-OFF MAY BE AFFECTED BY NOT-TO-SCALE ITEMS. THE CONSULTING ENGINEER IS NOT RESPONSIBLE FOR, AND SHALL NOT BE HELD LIABLE FOR THE ACCURACY OF RESULTS OF SUCH TAKE OFFS.
- 30. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH. THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE DESIGN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY. THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NOR SHALL THE ENGINEER BE REQUIRED TO SUPERVISE THE CONDUCT OF THE WORK OR THE
- CONTRACTOR AGREES TO 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; THAT THIS REQUIREMENT SHALL APPLY 24 HOURS A DAY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ARCHITECT AND ENGINEER HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, ARCHITECT OR THE ENGINEER.

CONSTRUCTION PROCEDURES AND SAFETY PROCEDURES FOLLOWED BY THE CONTRACTOR OR THE SUBCONTRACTOR OR THEIR RESPECTIVE EMPLOYEES OR BY ANY OTHER PERSON AT THE JOB SITE OTHER THAN THAT OF THE ENGINEER'S

33. OWNER HAS FIRST RIGHT OF REFUSAL ON ALL EXISTING EQUIPMENT, FIXTURES, MATERIALS, ETC.

LOCATE A MINIMUM OF 10 FEET FROM ROOF EDGES AND PARAPETS.

BEING REMOVED AS PART OF THIS PROJECT. 34. ROOF-MOUNTED APPLIANCES, EQUIPMENT, FANS, OR OTHER COMPONENTS THAT REQUIRE SERVICE:

GENERAL MECHANICAL NOTES:

- A. CONTRACTOR TO VERIFY AND COORDINATE W/ ELECTRICAL ENGINEER AND CONTRACTOR FOR WIRING AND POWER REQUIRED.
- B. ALL RECTANGULAR DUCT TO BE INSTALLED PER DETAIL ??, ??, AND ??/M-501. ROUND DUCT SHALL BE SUPPORTED WITH DUCT STRAPS AND INSTALLED PER
- C. COORDINATE EXACT LOCATION OF ALL THERMOSTATS WITH MECHANICAL ENGINEER & OWNER.
- D. ALL ROUND DUCT JUNCTIONS, TEES, AND ELBOWS SHALL BE CONSTRUCTED AND CONNECTED PER DETAIL ??, AND ??/M-501. ALL RECTANGULAR DUCT JUNCTIONS, ELBOWS, AND TEES TO BE INSTALLED PER DETAILS ?? AND ??M-501. ALL RECTANGULAR 90° ELBOWS SHALL BE INSTALLED WITH TURNING VANES, PER
- ALL DUCT TRANSITIONS TO USE 30°/60° TRANSITIONS
- ALL ROUND AND RECTANGULAR DUCT SHALL HAVE 1-1/2" EXTERNAL HIGH-DENSITY DUCT WRAP INSULATION, EXCEPT WHERE EXPOSED IN SPACE. ALL INSULATION LOCATED IN BUILDING SHALL HAVE A FLAMESPREAD INDEX NOT GREATER THAN TWENTY-FIVE (25) AND A SMOKE DEVELOPED INDEX NOT GREATER THAN FIFTY (50), WHEN TESTED IN ACCORDANCE WITH NFPA 255, METHOD OF TEST OF BURNING CHARACTERISTICS OF BUILDING MATERIALS, OR IN ACCORDANCE WITH ASTM E 84, SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS, OR IN ACCORDANCE WITH THE PROVISIONS OF UL 723, TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS.
- CONTRACTOR TO PRIME AND PREP ALL EXPOSED DUCTWORK, FINAL FINISH SHALL BE DETERMINED BY ARCHITECT. ALL DUCTWORK INSTALLED ON THE BUILDING EXTERIOR SHALL HAVE 2", HIGH-DENSITY WEATHERPROOF INSULATION, SEALED AND TAPED. ACOUSTICALLY LINE FIRST 6' OF NEW SUPPLY AND RETURN DUCT FROM ROOFTOP UNITS. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE <u>AIR FLOW</u> SIZES.
- ALL JOINTS AND SEAMS ON SUPPLY AND RETURN AIR DUCTS SHALL BE SEALED AIRTIGHT WITH HEAVY MASTIC DUCT SEALANT, LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND UL 181B. MASTICS USED TO SEAL GALVANIZED AND METAL DUCTWORK SHALL BE MARKED "181A-M". MASTICS USED TO SEAL FLEXIBLE DUCTS SHALL BE MARKED "181B-FX". MASTICS USED TO SEAL FLEXIBLE NON-METALLIC DUCTS SHALL BE MARKED "181B-C". UNLISTED DUCT TAPE IS NOT
- ENSURE THAT THE INSIDE RADIUS OF ALL BENDS, USING FLEXIBLE DUCT, IS EQUAL TO OR GREATER THAN THE DUCT DIAMETER. ATTACH ALL FLEXIBLE DUCT TO HARD DUCT OR AIR TERMINAL DEVICE USING MINIMUM OF THREE (3) SCREWS TO SECURE WIRE AND MECHANICAL BAND (PANDUIT STRAP) TO SECURE INSIDE HOUSING. MECHANICAL TAPE MAY BE USED TO SEAL OUTER JACKETING FOR FINISH, DUCT TAPE IS NOT ACCEPTABLE.
- THE SHEET METAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF THE DUCTWORK TO ALLOW ADEQUATE CLEARANCE OF THE LIGHTING FIXTURES AND TO AVOID STRUCTURAL MEMBERS OR OTHER CEILING EQUIPMENT. THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS IN THE CEILING SPACE.
- INSTALL THERMOSTATS AT SWITCH HEIGHTS. WHERE THERMOSTATS ARE INSTALLED ON EXTERIOR OR COLD/HOT WALLS, THERMOSTATS SHALL BE INSTALLED ON INSULATED BASES TO ENSURE PROPER OPERATION.
- WHERE THERMOSTAT GUARD OR LOCK BOX IS REQUIRED, CONTRACTOR SHALL USE MODEL BTG-54VL BY BEKO (UNLESS NOTED OTHERWISE), OR APPROVED EQUAL. LOCK BOX SHALL BE METAL WITH HINGED COVER. COORDINATE WHERE COVERS ARE REQUIRED WITH OWNER.
- M. THE TEST AND BALANCE CONTRACTOR SHALL ADJUST AIRFLOW PER THE FLOOR PLAN DIFFUSER CALL-OUTS WITHOUT CREATING EXCESSIVE NOISE. KEEP AIR
- N. KEEP ALL NEW DUCTS TIGHT TO BOTTOM OF JOISTS. WHERE CROSS-OVERS OCCUR DUCT RUNNING PARALLEL WITH JOISTS SHALL BE INSTALLED ABOVE OTHER, IN JOIST SPACE. CEILING HEIGHTS DETERMINED MUST BE MAINTAINED.
- ALL EQUIPMENT SHALL BE INSTALLED LEVEL.
- CONTRACTOR SHALL COORDINATE ALL PROPOSED MECHANICAL EQUIPMENT, WITH OTHER TRADES, TO AVOID CONFLICTS. CONTRACTOR SHALL INSTALL MAINTAIN ADEQUATE EQUIPMENT ACCESS AND SERVICEABILITY TO ALL VALVES AND EQUIPMENT.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS AND
- COORDINATE ALL WALL & ROOF DUCT PENETRATIONS PER DETAILS ??, ?? AND ?? ON SHEET M-501. UNLESS OTHERWISE SPECIFIED.
- S. SEE M-500 SHEETS FOR HVAC DETAILS. SEE M-600 SHEETS FOR MECHANICAL DIAGRAMS, SCHEDULES AND SEQUENCES OF OPERATIONS.
- T. COORDINATE LOCATION OF ALL CEILING MOUNTED EQUIPMENT WITH ACTUAL CONDITIONS.
- ALL RECTANGULAR AND ROUND DUCT SHALL BE INSTALLED PER DETAILS ??/M-501 & ??/M-501.
- SEE DETAIL ??/M-501 FOR ALL DUCT ACCESS DOOR INSTALLATIONS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- W. CONTRACTOR TO INSTALL WEATHERPROOF, FLEXIBLE CONNECTIONS AT ALL DUCT CONNECTIONS TO AIR-MOVING EQUIPMENT. SEE ??/M-501 FOR FLEXIBLE CONNECTION DETAIL. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- X. ALL PIPING AND PIPING WALL PENETRATIONS SHALL BE INSTALLED PER DETAILS ??/M-501 & ??/M-501.
- SEE DETAIL ??/M-501 FOR FIRE DAMPER INSTALLATION.
- UNIT HEATERS SHALL BE INSTALLED PER DETAIL ??/M-501.
- AA. CABINET EXHAUST FANS SHALL BE INSTALLED PER DETAIL ??/M-501. COORDINATE WITH STRUCTURAL AND ARCHITECTURE.
- BB. CONTRACTOR SHALL INSTALL 1" INSULATION/ACOUSTICAL PIPE WRAP FOR BOTH SUPPLY AND RETURN PIPING. SUGGESTED SUPPLIER: OSHEX B-10A LAG OR
- CC. COORDINATE LOCATION OF ALL DIFFUSERS, REGISTERS AND GRILLES WITH ARCHITECTURAL CEILING PLAN.
- DD. ALL ROUND BRANCH DUCT TO DIFFUSER/GRILLES SHALL BE THE SAME SIZE AS THE DIFFUSER/GRILLE NECK, UNLESS NOTED OTHERWISE.
- EE. CONTRACTOR TO PRIME AND PREP ALL EXPOSED DUCTWORK, FINAL FINISH SHALL BE DETERMINED BY ARCHITECT. ALL DUCTWORK INSTALLED ON THE BUILDING EXTERIOR SHALL HAVE 2", HIGH-DENSITY WEATHER-PROOF INSULATION, SEALED AND TAPED. ACOUSTICALLY LINE FIRST 6' OF SUPPLY AN RETURN DUCT FROM ERV/ROOFTOP UNITS. SEE SHEET M601 FOR DUCT LINER INFORMATION. ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE AIR FLOW SIZES.
- CONTRACTOR TO TIE-IN ALL NEW CONTROLS, DEVICES, SENSORS, AND EQUIPMENT TO NEW DDC/HONEYWELL SYSTEM. CONTRACTOR SHALL PROGRAM NEW EQUIPMENT INTO NEW DATABASE AND CREATE NEW GRAPHICS FOR EACH. CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION FOR NEW SYSTEMS. CONTROLS TO TIE-IN TO NEW HONEYWELL SYSTEM VIA NEW NETWORK ROUTER(S)/GATEWAY(S). ALL DIRECT DIGITAL CONTROLS SHALL BE COMMUNICATED VIA NEW ROUTER(S) AS NECESSARY. THESE ROUTERS SHALL BE NETWORKED TO THE OPERATOR STATION LOCATED IN THE MECHANICAL ROOM AREA. ALL CONTROLS SHALL BE BACNET.
- GG. CONTRACTOR TO ENSURE VRV TERMINAL UNITS ARE INSTALLED WITH PROPER MAINTENANCE ACCESS. ACCESS PANELS SHALL BE PROVIDED WHERE UNITS ARE INSTALLED ABOVE HARD-SURFACE CEILINGS. COORDINATE WITH ARCHITECT.
- HH. CONTRACTOR IS RESPONSIBLE FOR PROVIDING, INSTALLING AND CONFIGURING ALL DEVICES AND CONTROLS, AS WELL AS ANY ADDITIONAL CONTROL/MONITORING/SENSOR DEVICES NEEDED TO INTEGRATE THE CONTROLS AS NECESSARY TO MEET THE DESIGN INTENT AND OPERATIONAL PARAMETERS.

CONTROLS SHALL BE INTEGRATED AS REQUIRED BY THE DIAGRAMS AND SEQUENCES OF OPERATIONS TO THE NEW CENTRAL PLANT DDC SYSTEM.

PROJECT NO: Project Number

CHECKED BY Checker

MECHANICAL

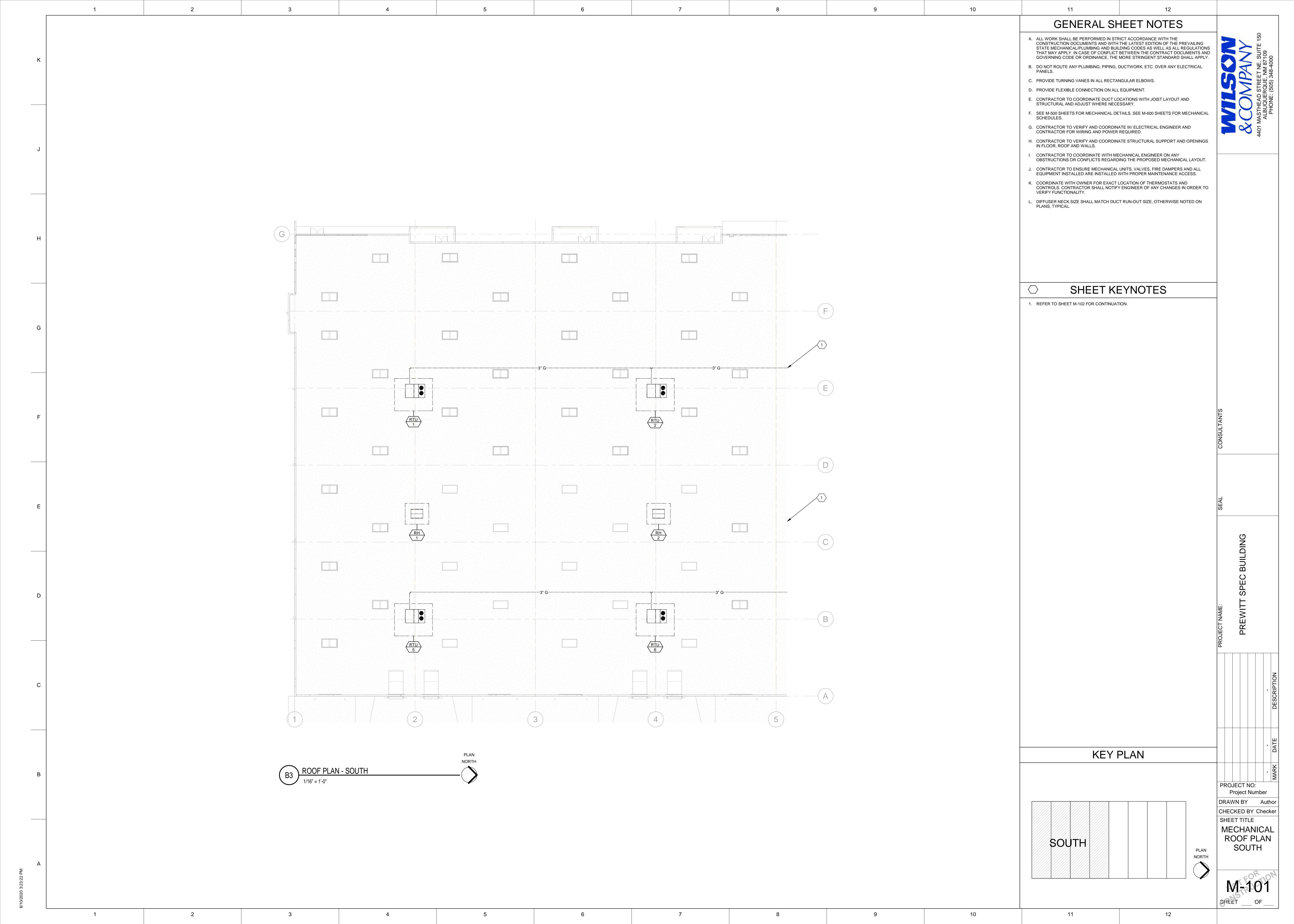
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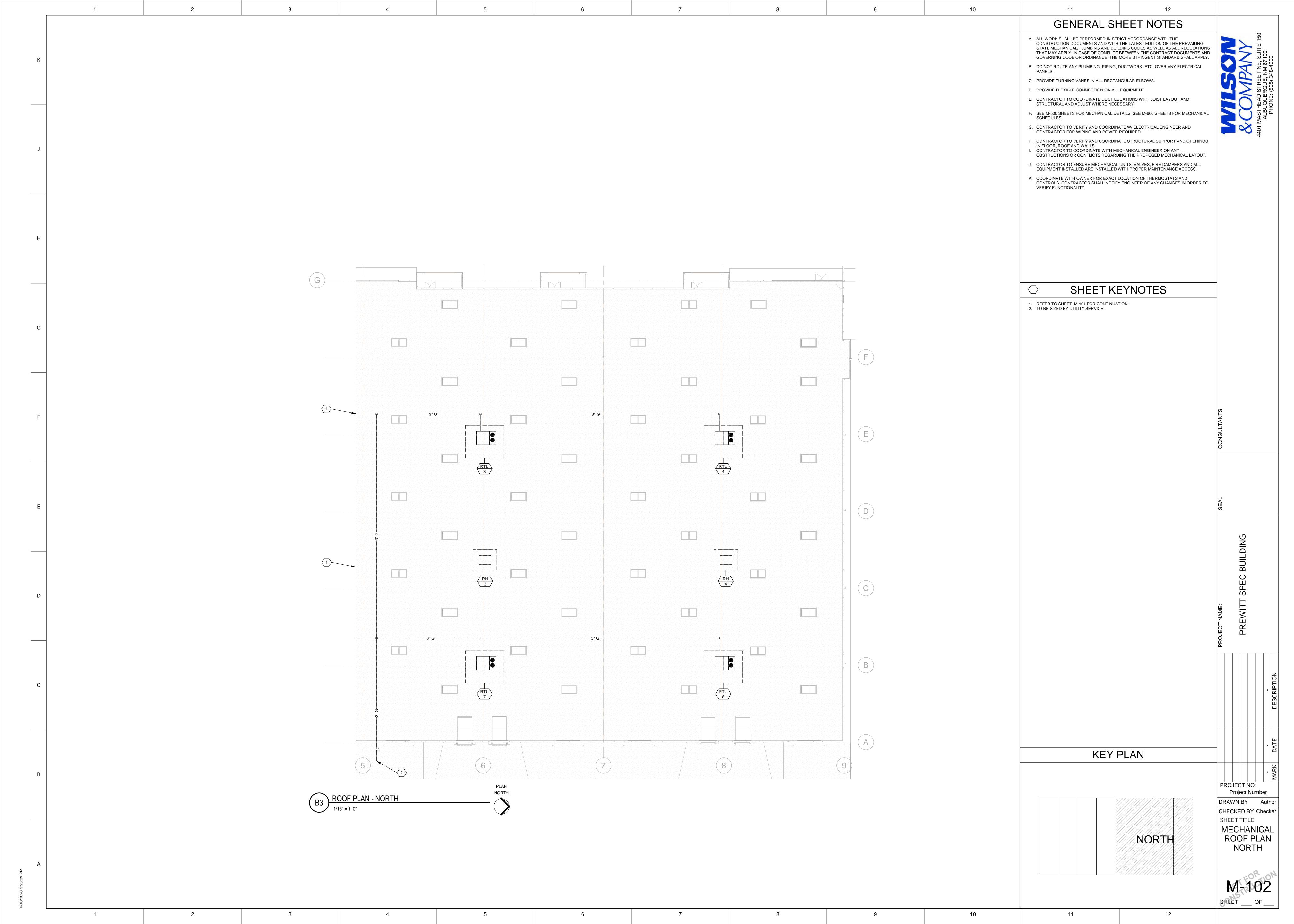
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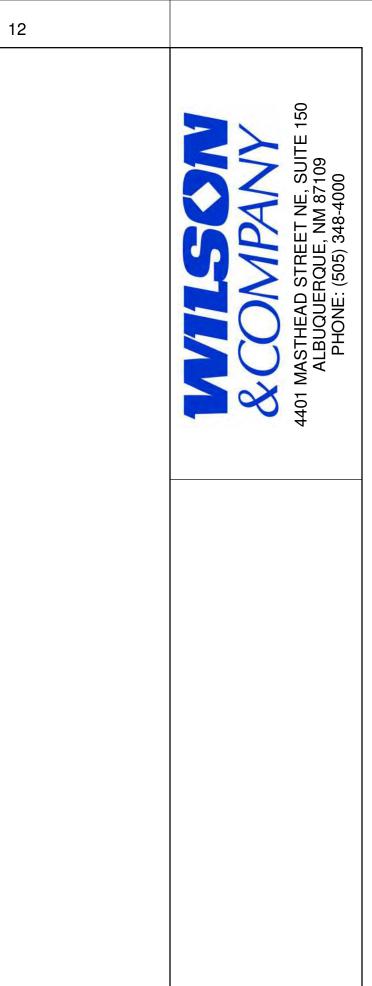
LEGENDS

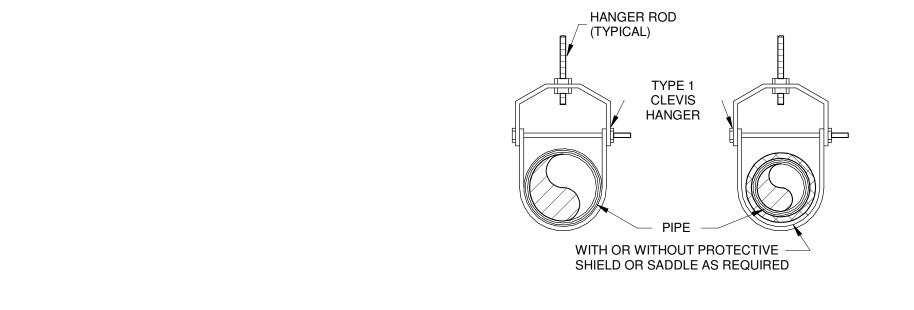
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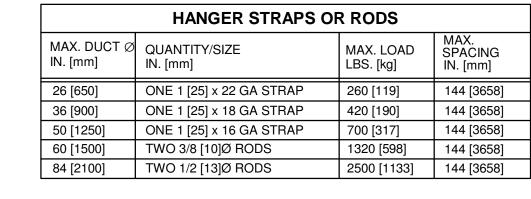
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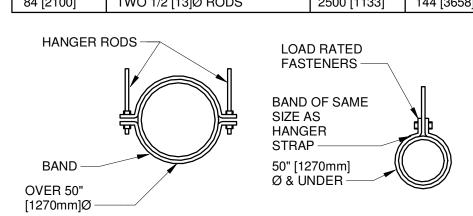








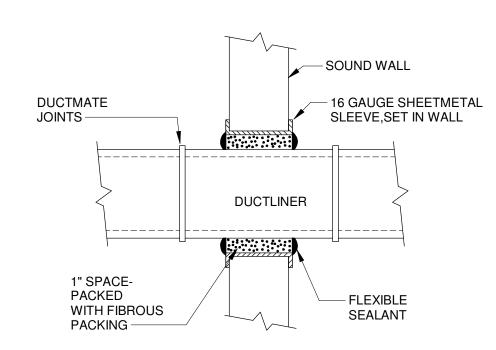


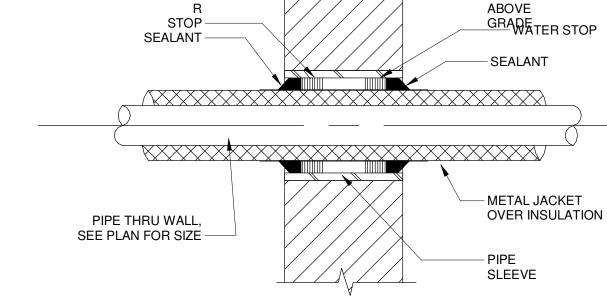


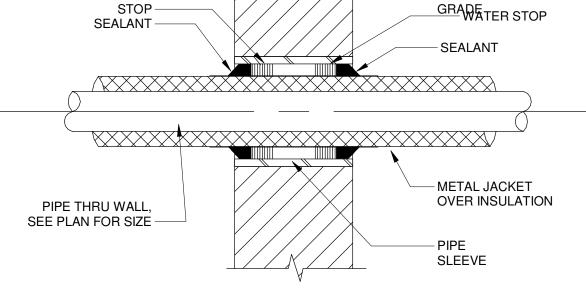


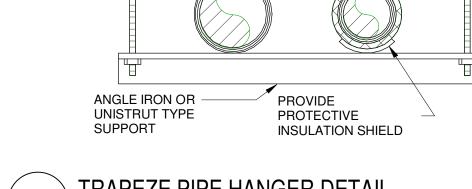
ROUND DUCT HANGER DETAIL

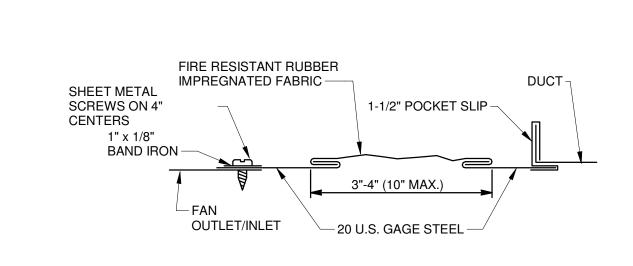
NTS











SINGLE PIPE HANGER DETAIL

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11







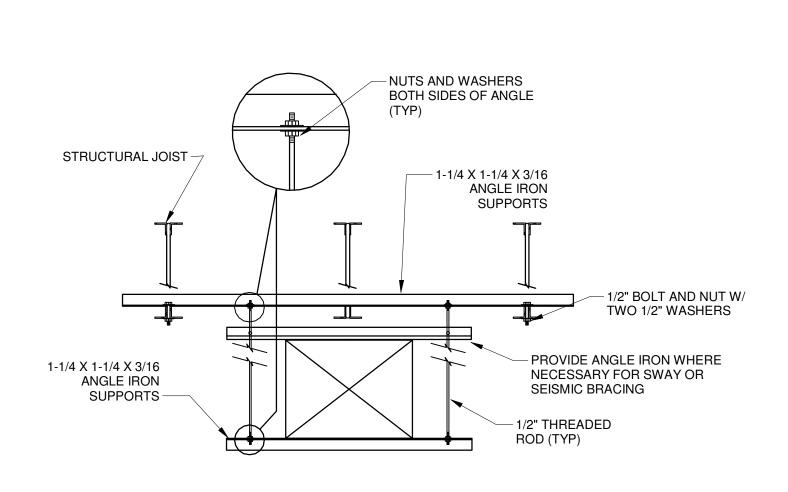
WALL



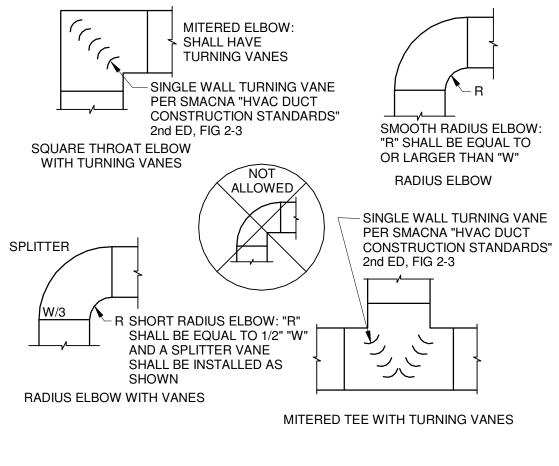
/ HANGER ROD (TYPICAL)



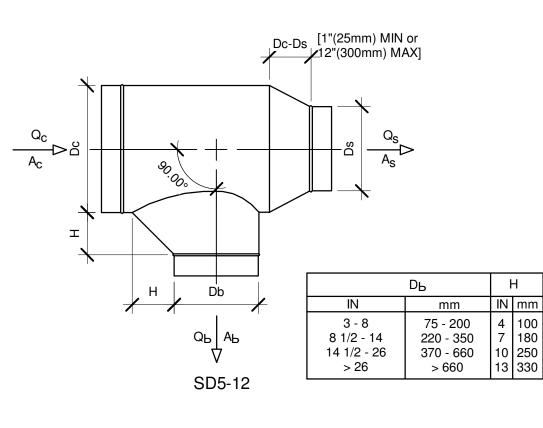
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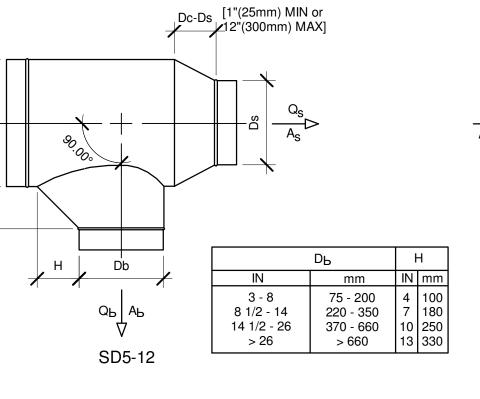


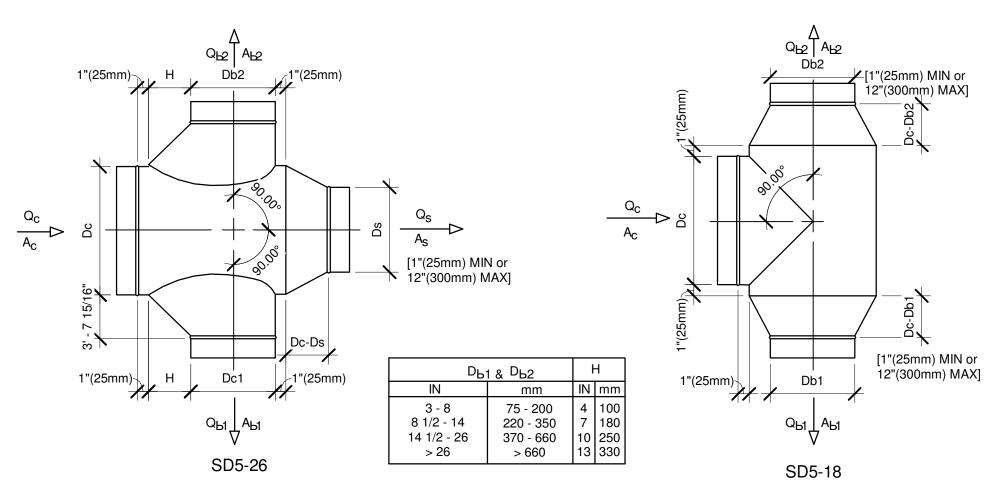




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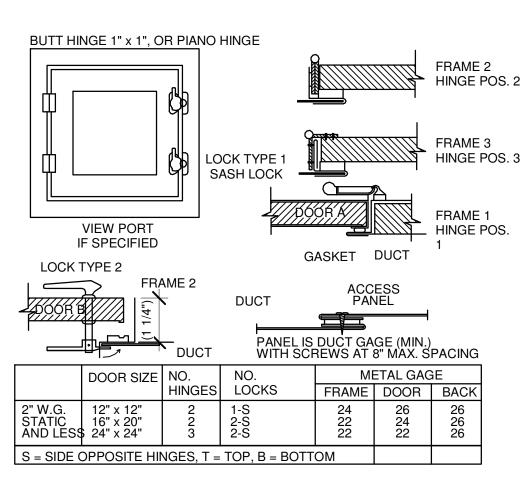


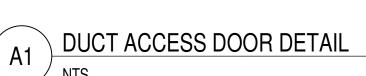


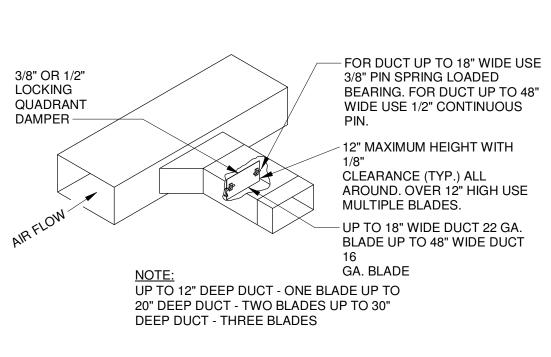


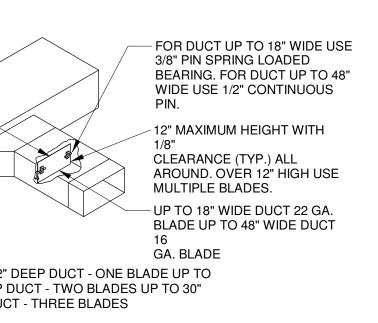


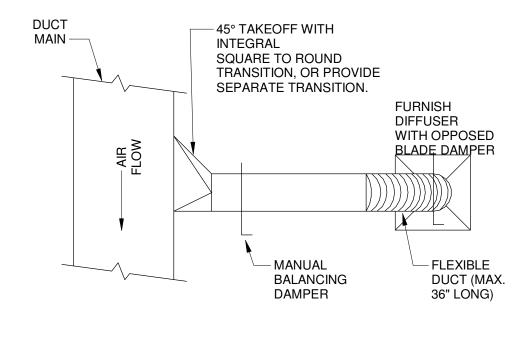












PROJECT NO: Project Number DRAWN BY Author CHECKED BY Checker

M-501

12

SHEET TITLE

MECHANICAL

DETAILS

10 12 ROOFTOP UNIT SCHEDULE (GAS/DX COOLING) PROJECT NO: 10 11 12

Project Number DRAWN BY Author CHECKED BY Checker SHEET TITLE MECHANICAL SCHEDULES

M-601

- NC	SOUND SYSTEM RACEWAY, SEE PLANS FOR SIZE AND OTHER DETAILS INTERCOM OR PAGING RACEWAY, SEE PLANS FOR SIZE AND OTHER DETAILS NURSE CALL RACEWAY, SEE PLANS FOR SIZE AND OTHER DETAILS
	NURSE CALL RACEWAY, SEE PLANS FOR SIZE AND OTHER DETAILS
SYMBOL	
SYMBOL	
SYMBOL	SYMBOL LEGEND-SPECIAL SYSTEMS
	DESCRIPTION DATA OUTLET, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF
×	MORE THAN ONE (1), MOUNT AT 18" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END MEASURED PULL STRING, SUBSTITUTE 1"CONDUIT WHEN MORE THAN 3 CABLES OR 1.25" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, PROVIDE OUTLET BOX APPROPRIATE FOR CONDUIT SIZE, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
×	TELEPHONE OUTLET, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), MOUNT AT 18" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END MEASURED PULL STRING, SUBSTITUTE 1"CONDUIT WHEN MORE THAN 3 CABLES OR 1.25" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, PROVIDE OUTLET BOX APPROPRIATE FOR CONDUIT SIZE, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
×	TELEPHONE/DATA OUTLET, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), MOUNT AT 18" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END MEASURED PULL STRING, SUBSTITUTE 1"CONDUIT WHEN MORE THAN 3 CABLES OR 1.25" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, PROVIDE OUTLET BOX APPROPRIATE FOR CONDUIT SIZE, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
\bowtie	WALL TELEPHONE OUTLET, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
FF	WALL TELEPHONE OUTLET, FIREMAN'S TELEPHONE, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
X	DATA OUTLET, FLOOR MOUNTED, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), PROVIDE 1" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, SUBSTITUTE 1.25" CONDUIT WHEN MORE THAN 3 CABLES OR 1.5" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
\square^{x}	TELEPHONE OUTLET, FLOOR MOUNTED, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), PROVIDE 1" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, SUBSTITUTE 1.25" CONDUIT WHEN MORE THAN 3 CABLES OR 1.5" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
X	TELEPHONE/DATA OUTLET, FLOOR MOUNTED, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), PROVIDE 1" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, SUBSTITUTE 1.25" CONDUIT WHEN MORE THAN 3 CABLES OR 1.5" CONDUIT WHEN MORE THAN 6 CABLES ARE INDICATED, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED.
	WIRELESS ACCESS DATA POINT OR CEILING MOUNTED DATA OUTLET, WHERE X INDICATES NUMBER OF CABLES OR OUTLETS REQUIRED IF MORE THAN ONE (1), WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE CATEGORY 5E PLENUM-RATED CABLING, UNLESS OTHERWISE INDICATED
	TELEPHONE TERMINAL BOARD (TB), PROVIDE 3/4" THICK PLYWOOD, FIRE TREATED AND PAINTED ON BOTH SIDES, MOUNT ON WALL, AS SHOWN ON PLANS, PROVIDE 3" WIDE x 6" LONG x 1/4" THICK COPPER GROUNDING BUSBAR WITH 6 AWG GROUNDING CONDUCTOR CONNECTED TO THE NEAREST BUILDING STEEL, PLYWOOD SHALL BE 4' x 4' UNLESS OTHERWISE INDICATED ON PLANS, SEE VOICE/DATA RISER DETAIL ON PLANS FOR FURTHER INFORMATION
TV L	TELEVISION OUTLET, WALL MOUNTED, MOUNT AT 72" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3/4" CONDUIT STUBBED ABOVE NEAREST ACCESSIBLE CEILING WITH PLASTIC BUSHINGS AT EACH END AND MEASURED PULL STRING, WHEN CABLING IS INSTALLED CONTRACTOR SHALL PROVIDE RG-6 CABLING, UNLESS OTHERWISE INDICATED
Р	FIRE ALARM PULL STATION , MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
X FV	FIRE ALARM HORN/STROBE, MOUNT AT 84" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
□ 4	FIRE ALARM HORN/STROBE, MOUNT AT 90" AFF TO CENTER OF DEVICE BUT NO HIGHER THAN 6" BFC TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
¤ F	FIRE ALARM STROBE, MOUNT AT 84" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
¤° E¶°	FIRE ALARM HORN/STROBE WITH CHIME, MOUNT AT 84" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
EN ^C	FIRE ALARM HORN WITH CHIME, MOUNT AT 90" AFF TO CENTER OF DEVICE BUT NO HIGHER THAN 6" BFC TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
FS	FIRE ALARM FLOW SWITCH, MOUNT AT FIRE SPRINKLER RISER
TS	FIRE ALARM TAMPER SWITCH, MOUNT AT FIRE SPRINKLER RISER
ММ	FIRE ALARM MONITOR MODULE
СМ	FIRE ALARM CONTROL MODULE
Ю	MAGNETIC HOLD-OPEN FOR DOOR, PROVIDE CONTROL MODULE FOR RELEASE BY FIRE ALARM SYSTEM, MAY ALSO REQUIRE 120V AC POWER
	SECURITY ACCESS BUZZER
	SECURITY ACCESS BELL
	SECURITY ACCESS BUZZER AND BELL COMBINATION
₽	PUSH BUTTON PANIC, MOUNT BENEATH WORKSTATION DESK TOP, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS, SEE PLANS FOR FURTHER DETAILS
© _X	SPEAKER, X INDICATES SIZE, CEILING MOUNTED, EXTEND 1/2" CONDUIT BETWEEN SPEAKERS, COORDINATE EXACT LOCATION OF SPEAKER WITH ARCHITECTURAL PLANS
⊢(S) _X	SPEAKER, X INDICATES SIZE, MOUNT AT 84" AFF OR 12" BFC WHICHEVER IS HIGHER, EXTEND 1/2" CONDUIT BETWEEN SPEAKERS, COORDINATE EXACT LOCATION OF SPEAKER WITH ARCHITECTURAL PLANS

SPEAKER WITH ARCHITECTURAL PLANS

LOCATION WITH ARCHITECTURAL PLANS

INFRARED MOTION DETECTOR, PASSIVE CEILING MOUNTED, COORDINATE EXACT

DETECTOR, HEAT, COMBINATION, PROVIDE 4" SQUARE BOX FOR MOUNTING

INFRARED MOTION DETECTOR, PASSIVE WALL MOUNTED, MOUNT AT 24" AFF, UNLESS

DETECTOR, HEAT, RATE COMPENSATION, PROVIDE 4" SQUARE BOX FOR MOUNTING

DETECTOR, HEAT, FIXED TEMPERATURE, PROVIDE 4" SQUARE BOX FOR MOUNTING

OTHERWISE INDICATED, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS

(HD) _R	DETECTOR, HEAT, RATE IF RISE, PROVIDE 4" SQUARE BOX FOR MOUNTING
② ②	DETECTOR, HEAT, RATE IF RISE, PROVIDE 4" SQUARE BOX FOR MOUNTING DETECTOR, SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
© _H	
	DETECTOR, HEAT AND SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
<u> </u>	DETECTOR, IONIZATION SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
	DETECTOR, IONIZATION AND HEAT SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
(S)	DETECTOR, IONIZATION, PHOTOELECTRIC AND HEAT SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
(S) P	DETECTOR, PHOTO ELECTRIC HEAT SMOKE, PROVIDE 4" SQUARE BOX FOR MOUNTING
	SECURITY ACCESS AND CONTROL VIDEO CAMERA AND LENS, MOUNT AS SHOWN ON PLANS
M_>PTZ	SECURITY ACCESS AND CONTROL CAMERA AND LENS WITH PTZ, MOUNT AS SHOWN ON PLANS
CU	SECURITY ACCESS AND CONTROL CARD READER, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
CI	SECURITY ACCESS AND CONTROL DOOR CONTACT OR CONTACT INDICATOR, MOUNT IN DOOR FRAME
CR	SECURITY ACCESS AND CONTROL KEY PAD READER COMBINATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING
⊣⊚	SECURITY ACCESS AND CONTROL, MHO, MOUNT ON WALL BEHIND DOOR LEAF, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS SECURITY ACCESS AND CONTROL, RTE PUSH BUTTON OR REMOTE DOOR RELEASE.
OS	MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
	NURSE CALL CORRIDOR DOME LIGHT, MOUNT IN CEILING, PROVIDE 2-GANG , DEEP BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
₽ B	NURSE CALL BATHROOM PULL CORD STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE EXCEPT IN PATIENT SHOWER MOUNT AT 72" TO CENTER OF DEVICE AND ON ADJACENT WALL TO SHOWER HEAD, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG, DEEP BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
40	NURSE CALL DUTY STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3-GANG, DEEP BOX WITH 3-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
Ē	NURSE CALL EMERGENCY ASSISTANCE CALL STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG, DEEP BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
↑ C	NURSE CALL EMERGENCY ASSISTANCE CODE BLUE CALL STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG BOX, DEEP BOX WITH 1-GANH PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
+ ¬	NURSE CALL PATIENT BED STATION J-BOX FOR PILLOW SPEAKER, MOUNT AT 24" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3-GANG, DEEP BOX WITH 1-GANG PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
P	NURSE CALL PATIENT STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 2-GANG, DEEP BOX WITH 1-GANG PLASTER RING,
	COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS NURSE CALL STAFF STATION, MOUNT AT 46" AFF TO CENTER OF DEVICE, UNLESS OTHERWISE INDICATED, PROVIDE 3-GANG, DEEP BOX WITH 1-GANG
NCM	PLASTER RING, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS NURSE CALL MASTER STATION, PROVIDE 2-GANG BOX WITH 1-GANG PLASTER RING,
	PROJECTOR, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS
<u> </u>	MICROPHONE INPUT, COORDINATE EXACT LOCATION WITH ARCHITECTURAL
<u> </u>	PLANS, PROVIDE 1-GANG BOX SPEAKER SWITCH, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS,
<u> </u>	PROVIDE 1-GANG BOX VOLUME CONTROL, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS,
FACP	PROVIDE 1-GANG BOX FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
FAAP	
AP AV	SECURITY ACCESS CONTROL PANEL
AV	AUDIO VISUAL SYSTEM CONTROL PANEL
	SYMBOL LEGEND-LIGHTING PLANS
SYMBOL	SYMBOL LEGEND-LIGHTING PLANS DESCRIPTION
SYMBOL	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE
_	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE
0	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR
0	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS
0	MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 4' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS WALL PACK LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS POLE MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS, LUMINAIRE AND POLE
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS WALL PACK LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS POLE MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS, LUMINAIRE AND POLE MONO-POINT SURFACE OR RECESSED EMERGENCY LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS WALL PACK LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS POLE MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS, LUMINAIRE AND POLE MONO-POINT SURFACE OR RECESSED EMERGENCY LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OF FLUSH MOUNTED EMERGENCY LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS
	DESCRIPTION MONO-POINT FLUSH MOUNTED OR RECESSED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS MONO-POINT SURFACE OR WALL MOUNTED LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE RECESSED OR FLUSH MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 1' WIDE SURFACE OR WALL MOUNTED SCONCE LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS 2' x 2' SURFACE OR RECESSED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS WALL PACK LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS POLE MOUNTED LUMINAIRE, SEE FIXTURE SCHEDULE FOR DETAILS, LUMINAIRE AND POLE MONO-POINT SURFACE OR RECESSED EMERGENCY LUMINAIRE (DOWNLIGHT), SEE FIXTURE SCHEDULE FOR DETAILS

2' x 4' SURFACE OR RECESSED EMERGENCY LUMINAIRE, SEE FIXTURE SCHEDULE FOR

EMERGENCY LIGHT WITH DUAL HEADS AND BATTERY, SURFACE OR FLUSH MOUNTED, SEE FIXTURE SCHEDULE FOR DETAILS, MOUNT AT 84" AFF TO CENTER UNLESS

EXIT LIGHT, CEILING OR WALL MOUNTED, ARROWS INDICATE DIRECTIONAL ARROW ON

COMBINATION EXIT AND EMERGENCY LIGHT, CEILING OR WALL MOUNTED, ARROWS

INDICATE DIRECTIONAL ARROW ON LUMINAIRE AND SHADED AREAS INDICATE FACE OF

SWITCH, SINGLE POLE, MOUNT AT 46" AFF TO CENTER OF DEVICE UNLESS OTHERWISE

SWITCH, DOUBLE POLE, MOUNT AT 46" AFF TO CENTER OF DEVICE UNLESS OTHERWISE

LUMINAIRE AND SHADED AREAS INDICATE FACE OF EXIT LIGHT, SEE FIXTURE

JUNCTION BOX ABOVE FINISHED CEILING WITH FLEXIBLE RACEWAY WHIPS TO

EXIT LIGHT, SEE FIXTURE SCHEDULE FOR DETAILS

OTHERWISE INDICATED

SCHEDULE FOR DETAILS

\$ ₃	SWITCH, 3-WAY, MOUNT AT 46" AFF TO INDICATED	O CENTER OF DE	EVICE UNLESS OTHERWISE							
\$ ₄	SWITCH, 4-WAY, MOUNT AT 46" AFF TO INDICATED) CENTER OF DE	EVICE UNLESS OTHERWISE							
\$ _C	SWITCH, TIMER OPERATED, MOUNT A OTHERWISE INDICATED	SWITCH, TIMER OPERATED, MOUNT AT 46" AFF TO CENTER OF DEVICE UNLESS OTHERWISE INDICATED								
\$ _D	SWITCH, SINGLE POLE DIMMER, MOUI	NT AT 46" AFF TO	O CENTER OF DEVICE UNLESS							
\$ _D	SWITCH, 3-WAY DIMMER, MOUNT AT 4 INDICATED	6" AFF TO CENT	ER OF DEVICE UNLESS OTHERWISE							
\$ _K	SWITCH, KEY OPERATED, MOUNT AT A INDICATED	46" AFF TO CENT	TER OF DEVICE UNLESS OTHERWISE							
\$ _M	SWITCH, SINGLE POLE MOMENTARY C CENTER OF DEVICE UNLESS OTHERW		SITIONS, MOUNT AT 46" AFF TO							
\$ _{os}	SWITCH, OCCUPANCY SENSOR, MOUI OTHERWISE INDICATED	SWITCH, OCCUPANCY SENSOR, MOUNT AT 46" AFF TO CENTER OF DEVICE UNLESS OTHERWISE INDICATED								
\$ _P	SWITCH, PILOT LIGHT, MOUNT AT 46" /	SWITCH, PILOT LIGHT, MOUNT AT 46" AFF TO CENTER OF DEVICE UNLESS OTHERWISE								
\$ _T	SWITCH, THERMAL (MOTOR), MOUNT OTHERWISE INDICATED	AT 46" AFF TO C	ENTER OF DEVICE UNLESS							
<u>(OS</u>)	OCCUPANCY SENSOR, CEILING MOUN DIRECTION, COORDINATE LOCATION									
∠ OS ^W	OCCUPANCY SENSOR, WALL MOUNTE INDICATES APPROXIMATE AIMING DIR ARCHITECTURAL PLANS AND OTHER	ECTION, COORD	" BFC TO CENTER OF DEVICE, ARROW DINATE LOCATION WITH							
PO	C PLIOTOGEL MOUNT FACING THE NORTH WHERE POSSIBLE OFF RETAIL BLANG FOR									
TC TC	TIME CLOCK, MOUNT AT MAXIMUM OF FOR WIRING	66" AFF TO TOF	P OF ENCLOSURE, SEE DETAIL PLANS							
	ABBREVIATIONS A	AND DEFI	NITIONS							
TERM	DESCRIPTION	TERM	DESCRIPTION							
٨	AMPERECOR AMPC (ALCO I)	MAV	NA A VINALINA							

	ABBREVIATIONS A	AND DEF	INITIONS
TERM	DESCRIPTION	TERM	DESCRIPTION
A	AMPERES OR AMPS (ALSO I)	MAX	MAXIMUM MAXIMUM
ABBR	ABBREVIATION	MCA	MINIMUM CIRCUIT AMPS
ADA	AMERICANS WITH DISABILITY ACT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCP	MOTOR CIRCUIT PROTECTION
AFG	ABOVE FINISHED GRADE	MEP	MECHANICAL ELECTRICAL PLUI
AHJ	AUTHORITY HAVING JURISDICTION	MH	MAN OR MAINTENANCE HOLE
ALT	ALTERNATE	МНО	MAGNETIC HOLD OPEN
ANCI	AMERICAN NATIONAL STANDARDS	MIN	MINIMUM
ANSI	INSTITUTE	MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MOCP	MAXIMUM OVER-CURRENT
AWG	AMERICAN WIRE GAUGE	MOCP	PROTECTION
BD	BOARD	MTS	MANUAL TRANSFER SWITCH
BDF	BUILDING DISTRIBUTION FRAME	NEC	NATIONAL ELECTRICAL CODE
BFC	BELOW FINISHED GRADE	NECA	NATIONAL ELECTRICAL
BLDG	BUILDING	112071	CONTRACTORS ASSOCIATION
CAT	CATEGORY	NEMA	NATIONAL ELECTRICAL
CATV	COMMUNITY ANTENNA TELEVISION		MANUFACTURERS ASSOCIATIO
CATV	(CABLE TELEVISION)	NESC	NATIONAL ELECTRICAL SAFETY
CCTV	CLOSED CIRCUIT TELEVISION	NFC	NATIONAL FIRE CODE
CFCI	CONTRACTOR FURNISHED,	NFPA	NATIONAL FIRE PREVENTION
01 01	CONTRACTOR INSTALLED	INI FA	ASSOCIATION
CEO	CONTRACTOR FURNISH, OWNER	NIC	NOT IN CONTRACT
CFOI	INSTALLED		NATIONALLY RECOGNIZED TES
CMU	CONCRETE MASONRY UNIT	NRTL	LABORATORY
00	CONVENIENCE OUTLET	NTS	NOT TO SCALE
СО	(RECEPTACLE)	OC	ON CENTER
CONT	CONTINUOUS	OCPD	OVER-CURRENT PROTECTIVE D
CT	CURRENT TRANSFORMER	0501	OWNER FURNISHED, CONTRAC
CTR	COUNTER	OFCI	INSTALLED
DEMO	DEMOLITION	0501	OWNER FURNISHED, OWNER
DET	DETAIL	OFOI	INSTALLED
DIV	DIVISION	00114	OCCUPATIONAL SAFETY AND
DIM	DIMENSION	OSHA	HEALTH ADMINISTRATION
DPDT	DOUBLE-POLE, DOUBLE THROW	PB	PULL BOX
DPST	DOUBLE-POLE, SINGLE THROW	DD 1/	PRIVATE BRANCH EXCHANGE
DWG	DRAWING	PBX	(PHONE SWITCH)
ELEC	ELECTRICAL	POE	POWER OVER ETHERNET
EMI	ELECTROMAGNETIC INTERFERENCE	DD OV //DE	FURNISH, INSTALL AND CONNE
EMT	ELECTRICAL MAGNETIC TUBING	PROVIDE	READY FUNCTIONAL USE BY OV
ENCL	ENCLOSURE	PSMH	PULSE-START MEAL HALIDE
ENT	ELECTRICAL NON-METALLIC TUBING	PT	POTENTIAL TRANSFER
EPO	EMERGENCY POWER OFF	PTZ	PAN, TILT AND ZOOM VIDEO CA
EQP	EQUIPMENT	PVC	POLYVINYL CHLORIDE
EXT	EXTERIOR	RCP	REFLECTED CEILING PLAN
FACP	FIRE ALARM CONTROL PANEL	REV	REVISION
FLA	FULL-LOAD AMPS	RM	ROOM
FMC	FLEXIBLE METAL CONDUIT	RMC	RIGID METALLIC CONDUIT
FSD	FIRE SMOKE DAMPER (OR SFD)	RNC	RIGID NON-METALLIC (PVC) COI
	SUPPLY AND DELIVER TO OWNER AT	RPM	REVOLUTIONS PER MINUTE
FURNISH	THE LOCATION OF INSTALLATION	RTE	REQUEST TO EXIT
FVNR	FULL-VOLTAGE, NON-REVERSING	SCA	SHORT CIRCUIT AMPS
	GROUND FAULT CIRCUIT	SD	SMOKE DAMPER
GFCI	INTERRUPTER (ALSO GFI)	SF	SQUARE FEET
HH	HAND HOLE		DENOTES A REQUIRED MEANS
HID	HIGH INTENSITY DISCHARGE	SHALL	PRACTICE, PROCEDURE, OR ME
HOA	HAND-OFF-AUTOMATIC		DENOTES A RECOMMENDED ME
HPS	HIGH PRESSURE SODIUM	SHOULD	PRACTICE, PROCEDURE, OR ME
HV	HIGH VOLTAGE	SPDT	SINGLE POLE, DOUBLE THROW
1 I V	HEATING, VENTILATION AND AIR	SPEC(S)	SPECIFICATION (S)
HVAC	CONDITIONING	SPST	SINGLE POLE, SINGLE THROW
IDC		STP	·
IBC	INTERNATIONAL BUILDING CODE	٥١٢	SHIELDED TWISTER PAIR
IDC	INSULATION DISPLACEMENT CONNECTOR	TGB	TELECOMMUNICATIONS GROUP BUS
IDF	INTERMEDIATE DISTRIBUTION FRAME	TO	ļ
IMC	INTERMEDIATE DISTRIBUTION FRAME	TR	TELECOMMUNICATIONS OUTLE TELECOMMUNICATIONS ROOM
IIVIC			
INICTALL	MOUNT AND CONNECT EQUIPMENT AND ASSOCIATED MATERIALS	TTB	TELEPHONE TERMINAL BOARD
INSTALL	READY FOR FULLY FUNCTIONAL USE	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	BY OWNER	TYP	TYPICAL
INT	INTERIOR	UL	UNDERWRITERS LABORATORIE
IIN I			
KAIA	KILO-AMPERES INTERRUPTING ASYMMETRICAL	UPS	UNINTERRUPTIBLE POWER SUF
10.11	KILO-VOLT-AMPERES OR 1000	TIL TY /	TELECOMMUNICATIONS, ELECT
KVA	VOLT-AMPERES	UTILITY SERVICE	POWER, CATV OR INFRASTRUC SOURCES PROVIDED EXTERNA
KW	KILOWATTS OR 1000 WATTS	SERVICE	THE SITE, FACILITY, OR BUILDIN
		LITE	
LAN	LOCAL AREA NETWORK	UTP	UNSHIELDED TWISTED PAIR
LED	LIGHT EMITTING DIODE	V	VOLTAGE OR VOLTS (ALSO E)
LF	LINEAR FEET	VAV	VARIABLE AIR VOLUME
LFMC	LIQUID-TIGHT FLEXIBLE METAL	VFC	VARIABLE FREQUENCY CONTRO
•	CONDUIT	VIF	VERIFY IN FIELD
LFNC	LIQUID-TIGHT FLEXIBLE NON-	VOIP	VOICE OVER INTERNET PROTO
	METALLIC CONDUIT	WAP	WIRELESS ACCESS POINT
	LOW PRESSURE SODIUM	WOW OR	WORKSTATION OR COMPUTER
LPS	LOW I INCOUNT OODION		NAME OF THE PROPERTY OF THE PR
LPS LRA LV	LOCKED ROTOR AMPS	COW	WHEELS

XFMR TRANSFORMER

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LV LOW VOLTAGE

ELECTRICAL GENERAL NOTES

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- A. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

 B. CONTRACTOR SHALL COORDINATE LOCATIONS FOR ALL DEVICES AND EQUIPMENT SHOWN WITH ARCHITECTURAL, PLUMBING AND MECHANICAL PLANS PRIOR TO BEGINNING ANY ELECTRICAL WORK AND VERIFY FINAL LOCATIONS. DEVICES AND EQUIPMENT MAY BE RELOCATED OR MOVED UP TO TEN (10) FEET IN ANY DIRECTION WITHOUT ADDITIONAL COST TO THE OWNER. WHERE THERE ARE ANY CONCERNS OR QUESTIONS ABOUT COORDINATION OR CLEARANCE PROBLEMS, CONTRACTOR SHALL PREPARE A WRITTEN RECOMMENDATIONS AND SUBMIT FOR REVIEW AND APPROVAL.
 - CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT ALL UTILITY COMPANIES (OWNER, GAS, WATER, SEWER, TELEPHONE, CATV, ETC.) BEFORE BEGINNING ANY TRENCHING TO IDENTIFIY ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL ALSO LOCATE ALL OTHER UNDERGROUND LINES BEFORE TRENCHING AND SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE TO ANY OF THESE UNDERGROUND SERVICES OR LINES WITHOUT ANY COST TO THE OWNER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHANNELING, UNDERGROUND TRENCHING, BACKFILL AND TAMPING NECESSARY FOR THE INSTALLATION OF A COMPLETE POWER, LIGHTING AND OTHER SYSTEMS SHOWN ON THESE DRAWINGS.
- E. CONTRACTOR SHALL COORDINATE AND VERIFY WIRING REQUIREMENTS FOR EQUIPMENT PRIOR TO ROUGH-IN USING WIRING DIAGRAMS SUPPLIED BY EQUIPMENT VENDORS AND SUPPLIERS. SUCH ROUGH-IN WORK OR WIRING INSTALLED PRIOR TO HAVING THESE WIRING DIAGRAMS SHALL BE CORECTED AT NO EXPENSE TO THE OWNER. CONTRACTOR SHALL FOLLOW WIRING INSTRUCTIONS GIVEN BY MANUFACTURER.
- F. MINIMUM RACEWAY TRADE SIZE SHALL BE 0.75 (21MM), UNLESS OTHERWISE INDICATED. EXCEPT WHERE SURFACE MOUNTED RACEWAY IS INDICATED, ALL RACEWAY SHALL BE CONCEALED WHEN INSTALLED BELOW 8"AFF. ALL EXPOSED CONDUIT SHALL BE EMT, EXCEPT WHERE EXPOSED TO PHYSICAL DAMAGE RMC OR IMC SHALL BE INSTALLED. ALL UNDERGROUND RACEWAYS SHALL BE SCHEDULE 40 PVC EXCEPT WHERE EXPOSED TO PHYSICAL DAMAGE SCHEDULE 80 PVC SHALL BE INSTALLED. RMC ELBOWS SHALL BE PROVIDED AT ANY POINT WHERE AN UNDERGROUND RACEWAY PENETRATES GRADE OR FINISHED FLOOR. PROVIDE EXPANSION FITTINGS FOR ALL RACEWAYS CROSSING EXPANSION JOINTS.
- G. RACEWAYS, LUMINARIES, ENCLOSURES, PANELBOARDS, PULL BOXES AND JUNCTION BOXES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE OR STRUCTURAL MEMBERS. DUCTS, PIPING, CEILING GRIDS OR OTHER MECHANICAL OR ARCHITECTURAL FEATURES SHALL NOT BE USED FOR SUPPORT.
- JOINTS AND SPLICES FOR CONDUCTORS SMALLER THAN #8 AWG SHALL BE MADE USING SOLDERLESS OR TWIST-ON CONNECTORS LISTED AND APPROVED FOR THE PURPOSE. JOINTS AND SPLICES FOR ALL OTHER CONDUCTORS SHALL BE MADE USING HIGH COPRESSION BARREL-TYPE SPLICING DEVICES WITH SHRINK WRAP INSULATION LISTED AND APPROVED FOR THE PURPOSE. ALL SPLICES AND JOINTS SHALL BE MADE IN LISTING AND APPROVED BOXES, ENCLOSURES, GUTTERS OR WIREWAYS AND NO SPLICES OR JOINTS SHALL BE MADE IN RACEWAYS.
- CONDUIT CONNECTIONS SHALL BE MADE USING SLEEVES, UNIONS, COUPLINGS OR CONNECTORS. CONDUIT FITTINGS SHALL BE STEEL, COMPRESSION TYPE RATED FOR THE APPLICATION. DIE CAST COUPLINGS AND CONNECTORS SHALL NOT BE USED.
- TYPES NM, NMC OR NMS (ROMEX CABLE) SHALL NOT BE USED OR PERMITTED WITHOUT HAVING SPECIFIC WRITTEN APPROVAL TO DO SO.
- K. PROPERLY IDENTIFY NEW PANELBOARDS, DISTRIBUTION BOARDS, DISCONNECTS SWITCHES, TRANSFER SWITCHES, SWITCHBOARDS AND OTHER DEVICES, AND EQUIPMENT WITH LAMINATED LABELS, AS REQUIRED BY SPECIFICATIONS. PROVIDE TYPEWRITEN SCHEDULES FOR ALL NEW PANELBOARDS, DISTRIBUTION BOARDS AND SWITCHBOARDS AND UPDATE SCHEDULES IN EXISTING GEAR WITH NEW TYPEWRITTEN SCHEDULES.
- L. ALL LIFE SAFETY SYSTEMS WITHIN THE WORK AREA SHALL REMAIN ACTIVE. SMOKE DETECTORS SHALL BE PROTECTED WITH PROTECTIVE COVERS DURING HIGH DUST GENERATION. CONTRACTOR SHALL UNCOVER ALL DETECTORS AT ALL OTHER
- M. WIRING FOR ALL THERMOSTATES ARE TO BE INSTALLED BY CONTRACTOR. CONTRACTOR SHALL COORDINATE LOCATION OF THESE DEVICES WITH MECHANICAL PLANS. REFER TO THE ABOVE NOTE REGARDING LOCATIONS OF MECHANICAL EQUIPMENT AND DEVICES.

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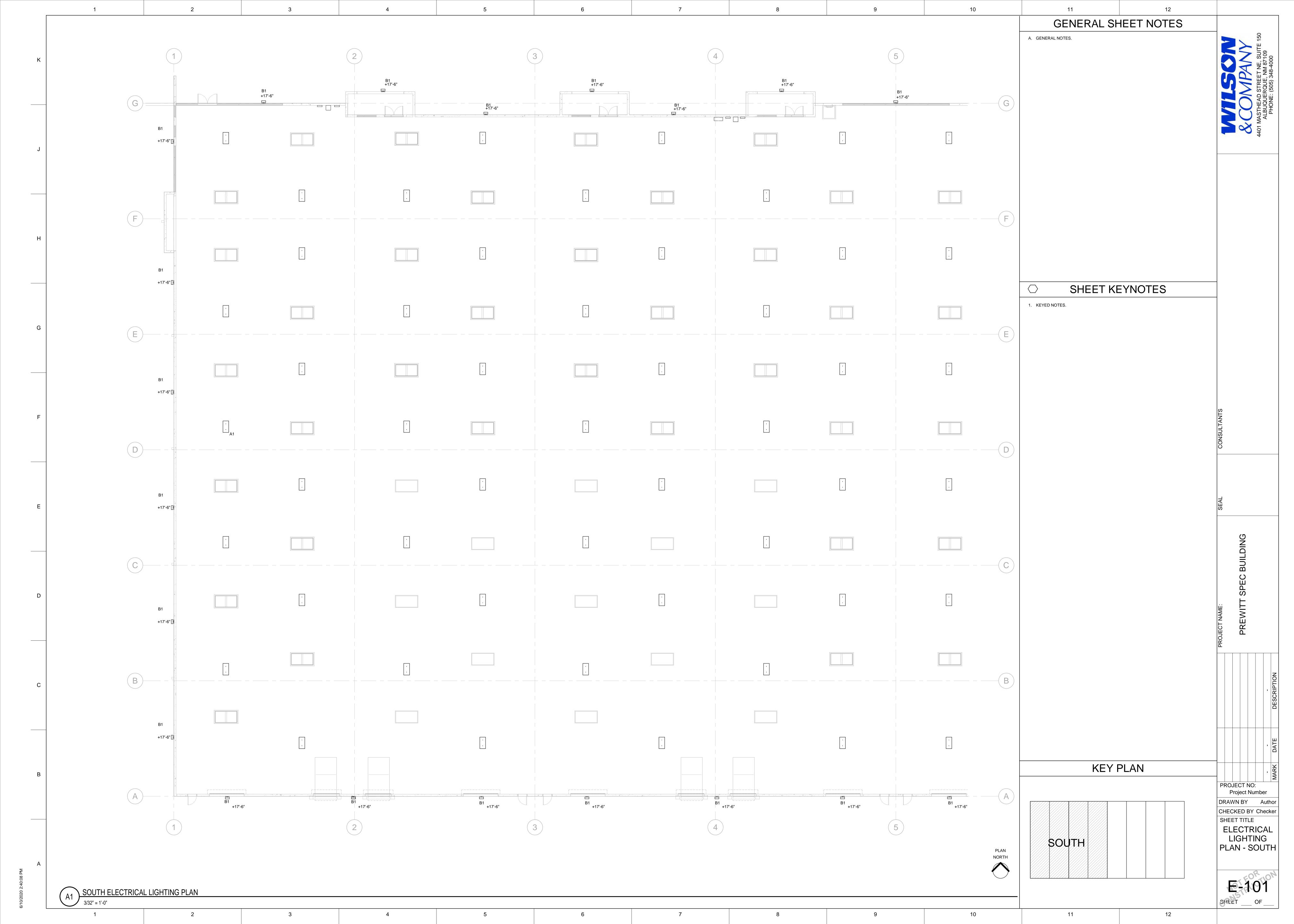
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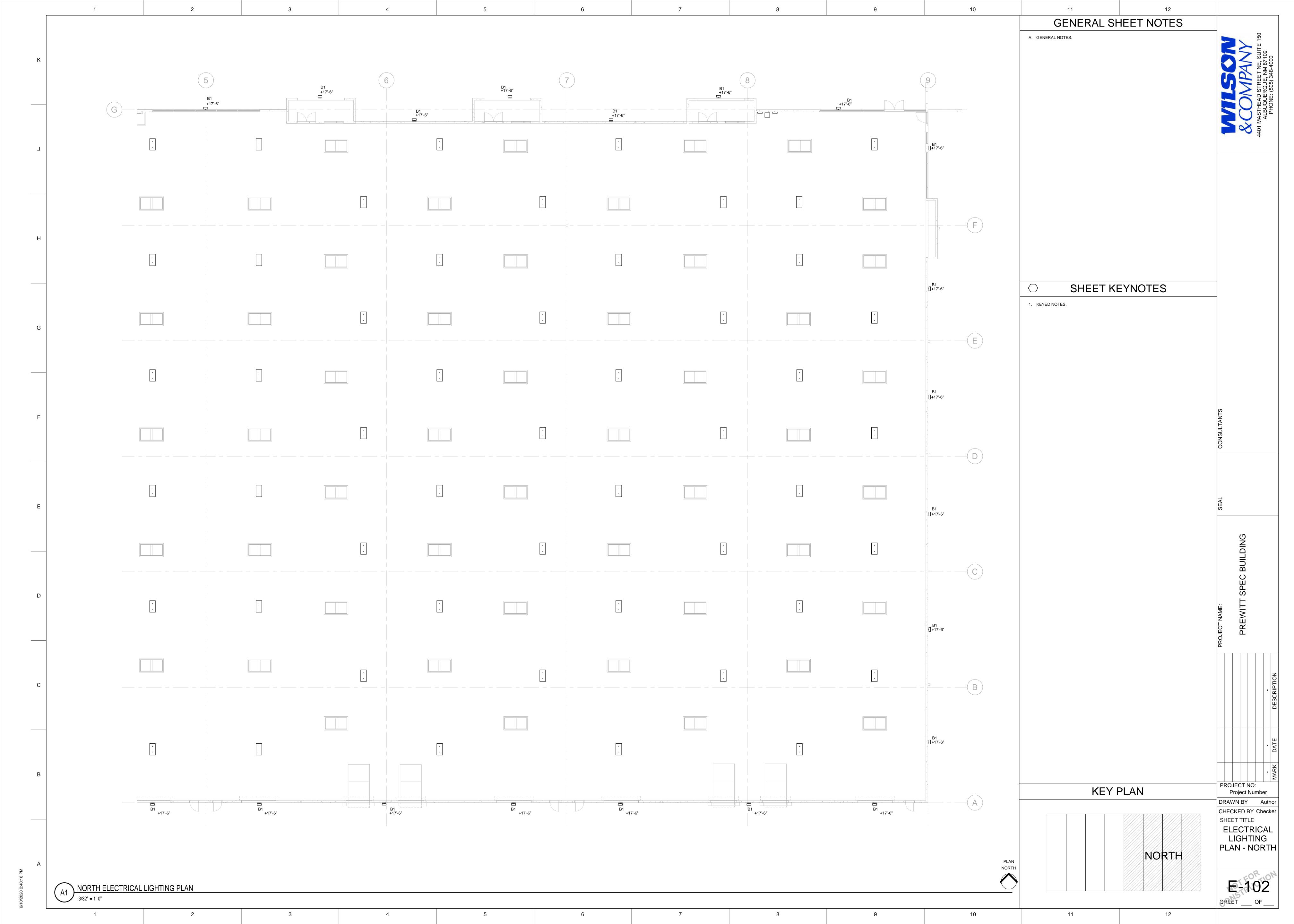
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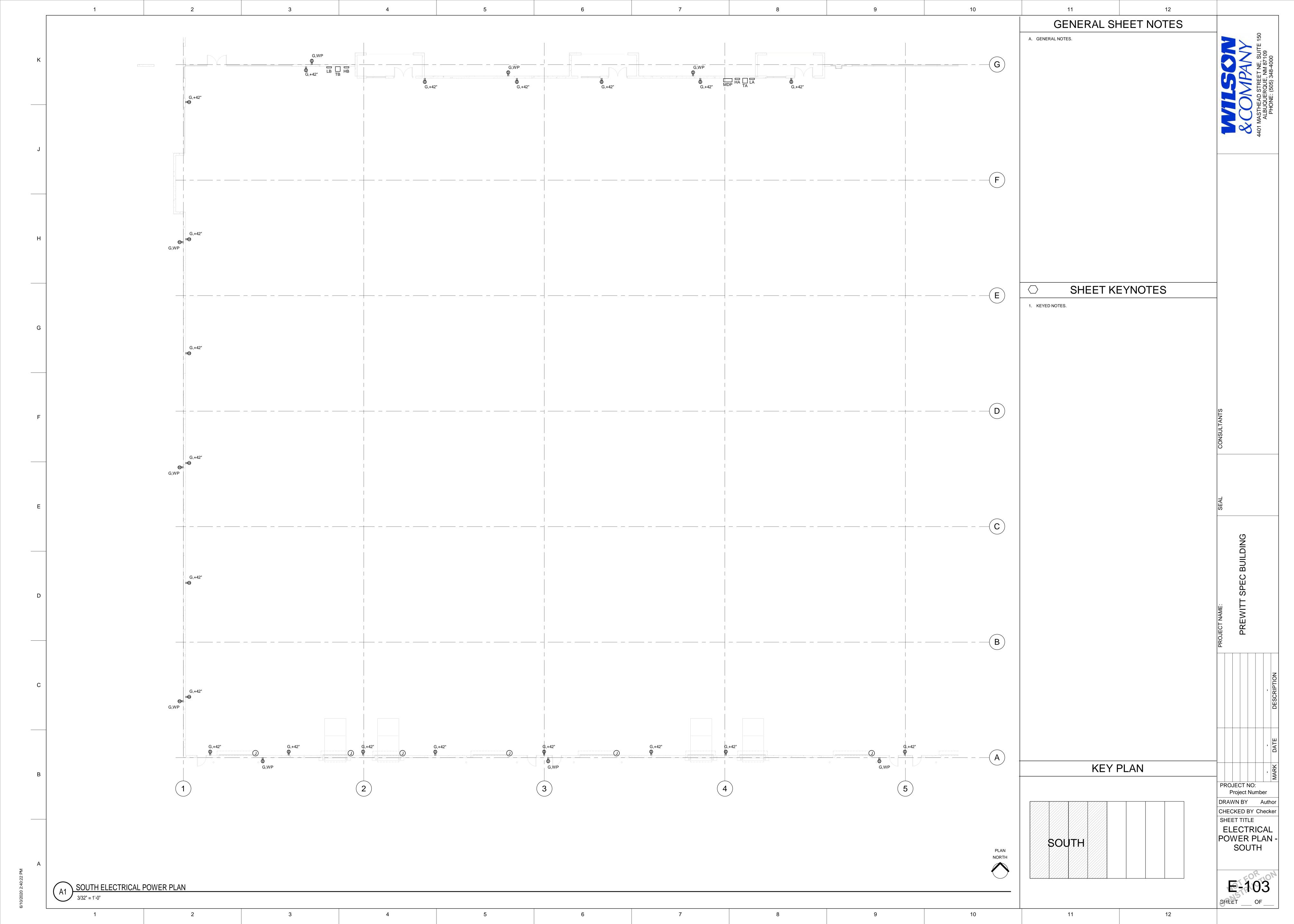
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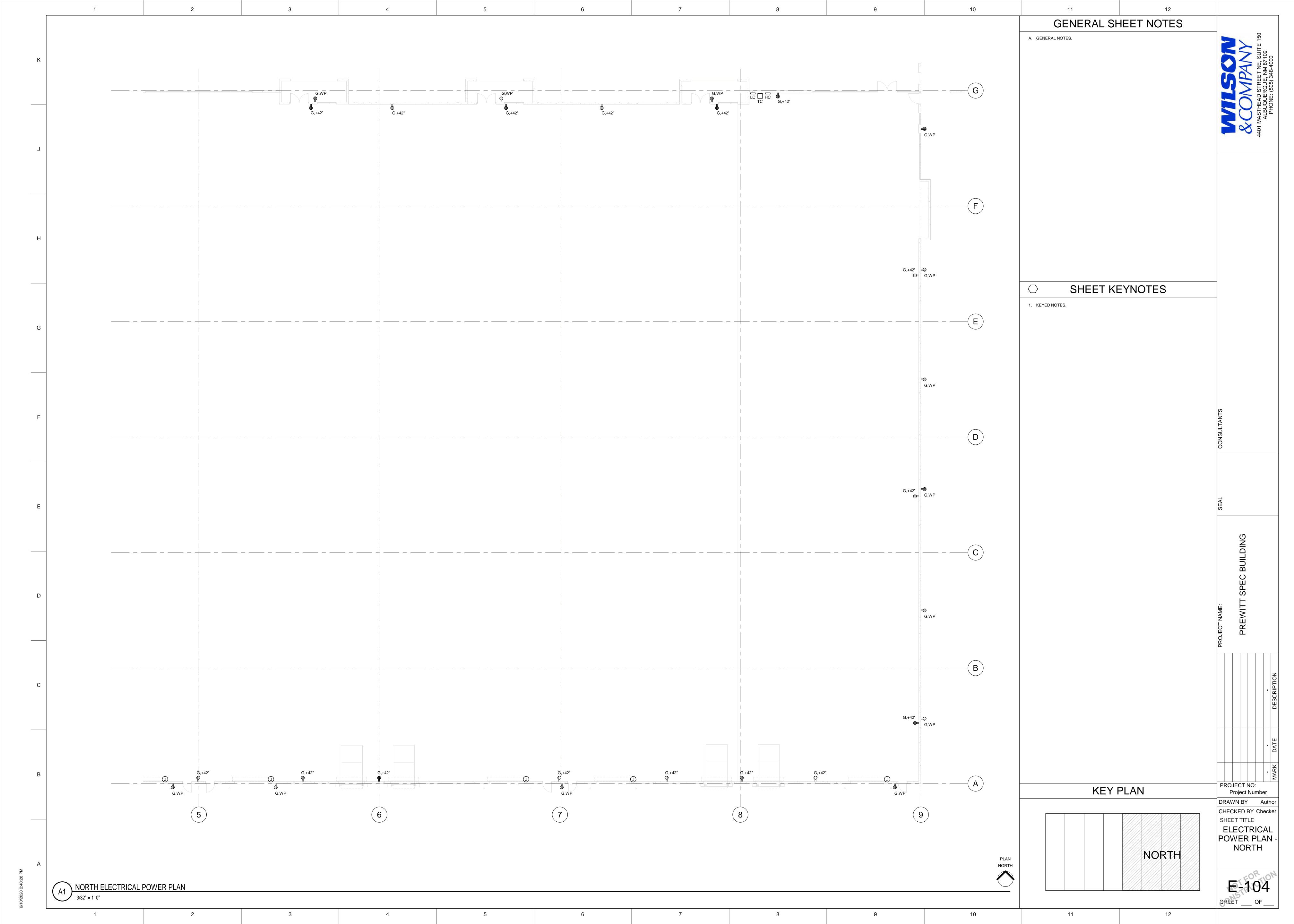
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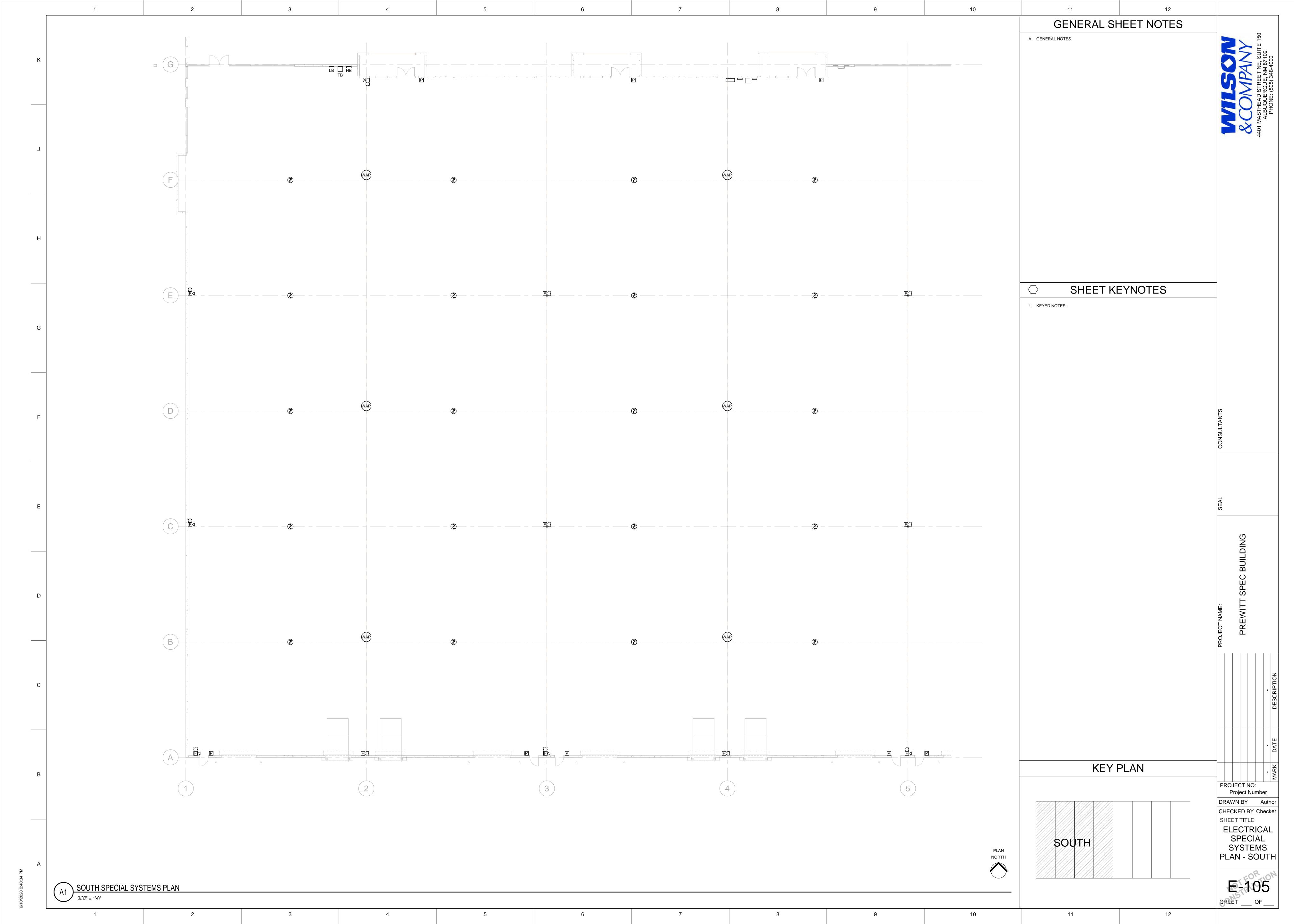
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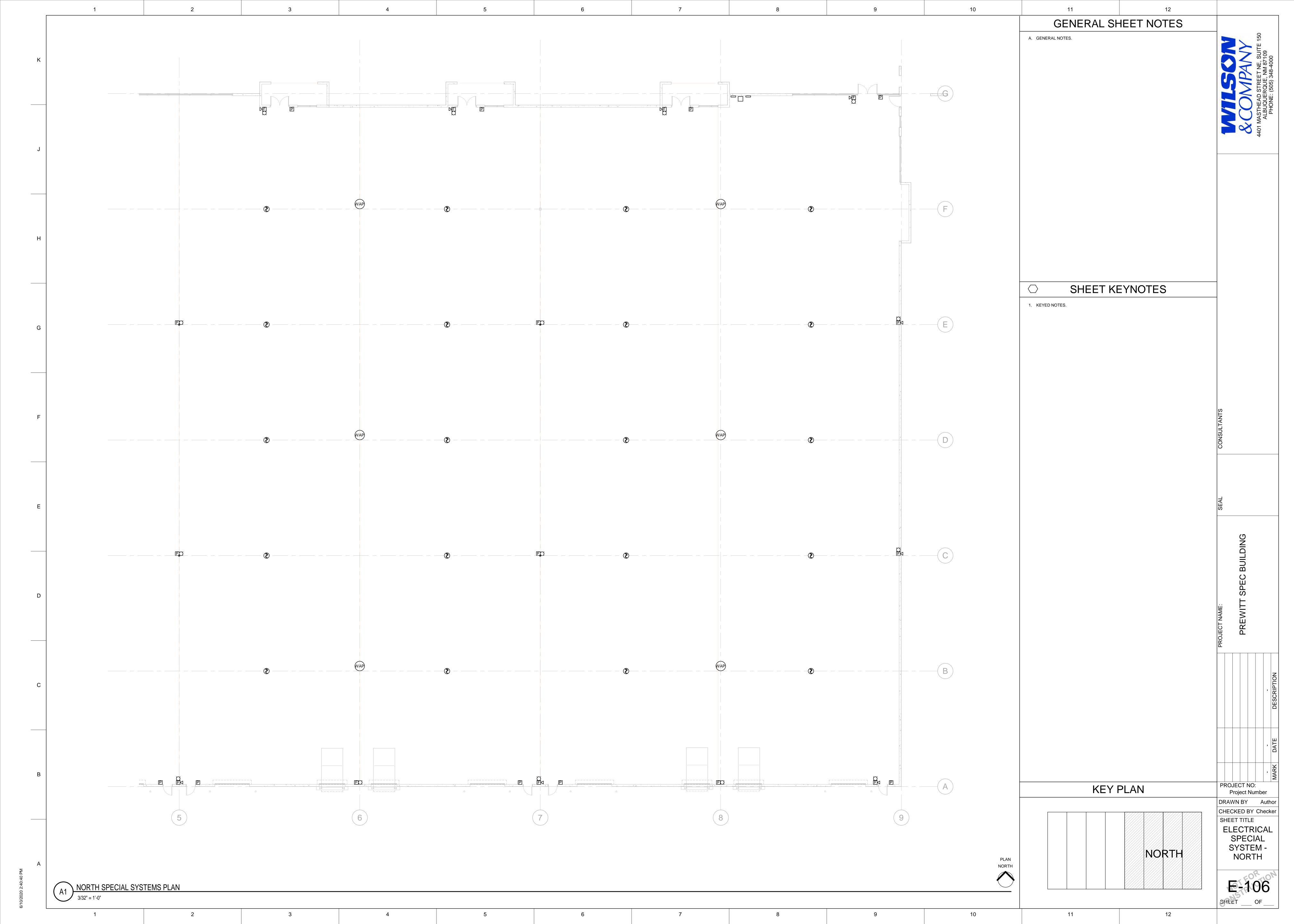


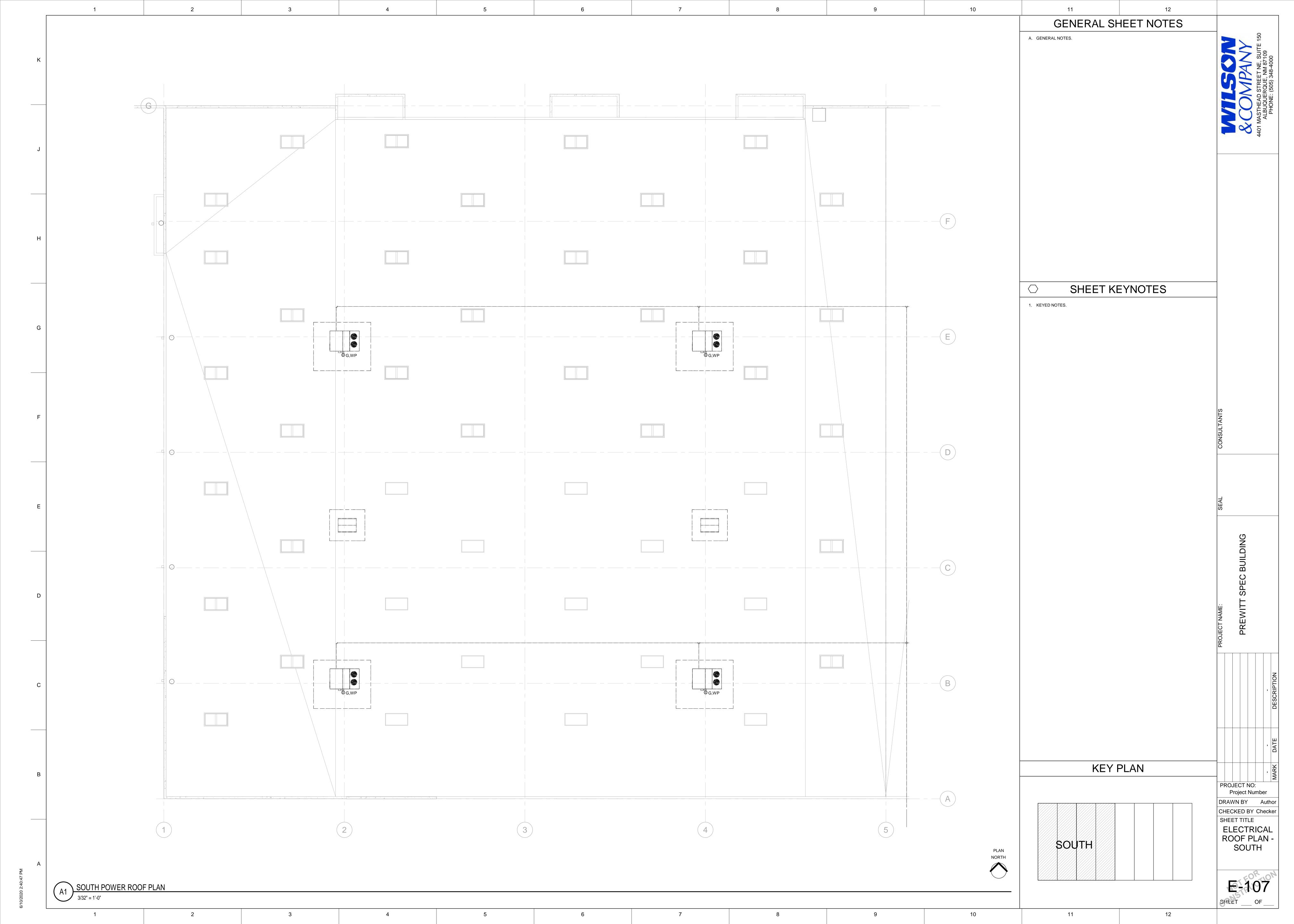


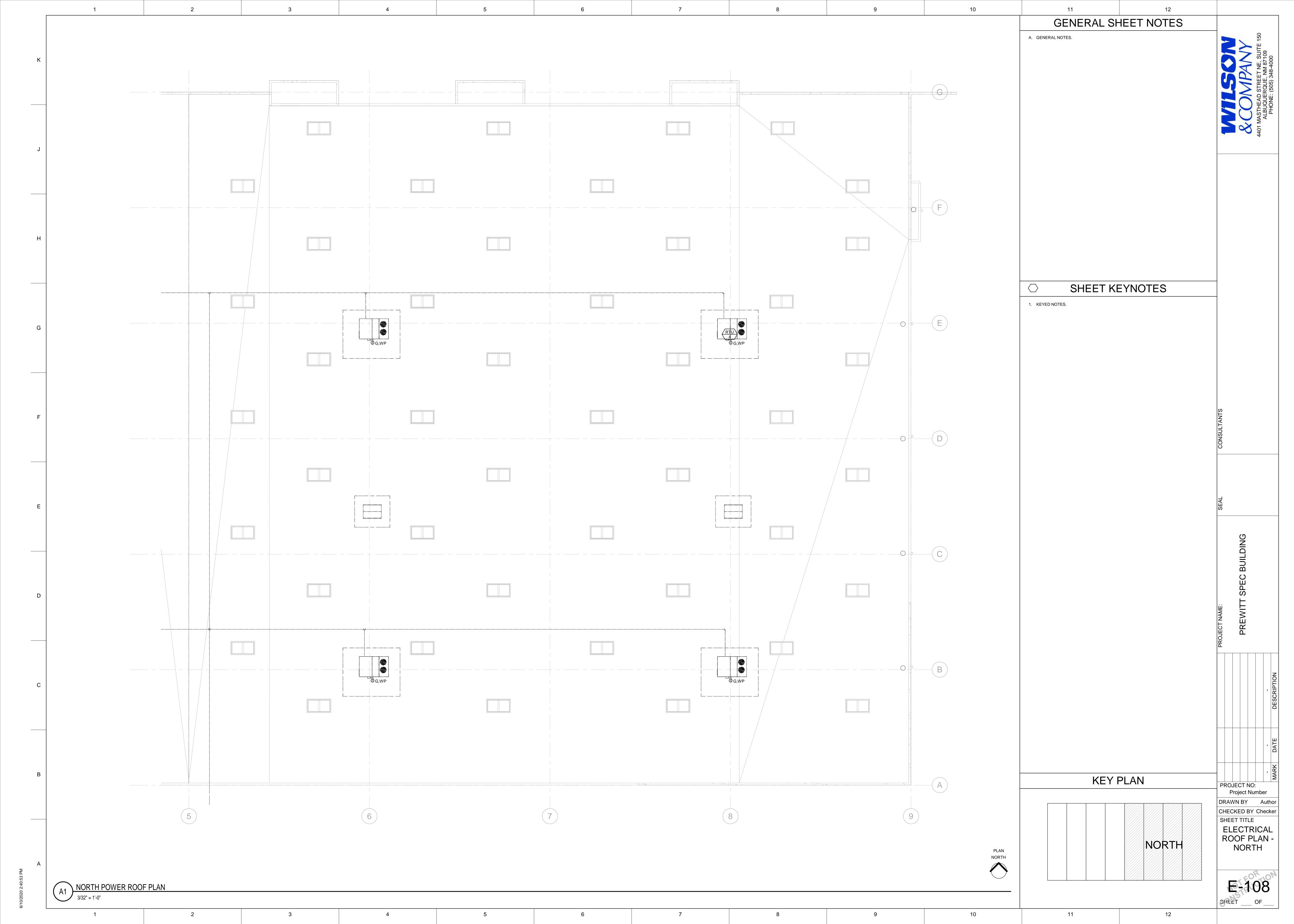


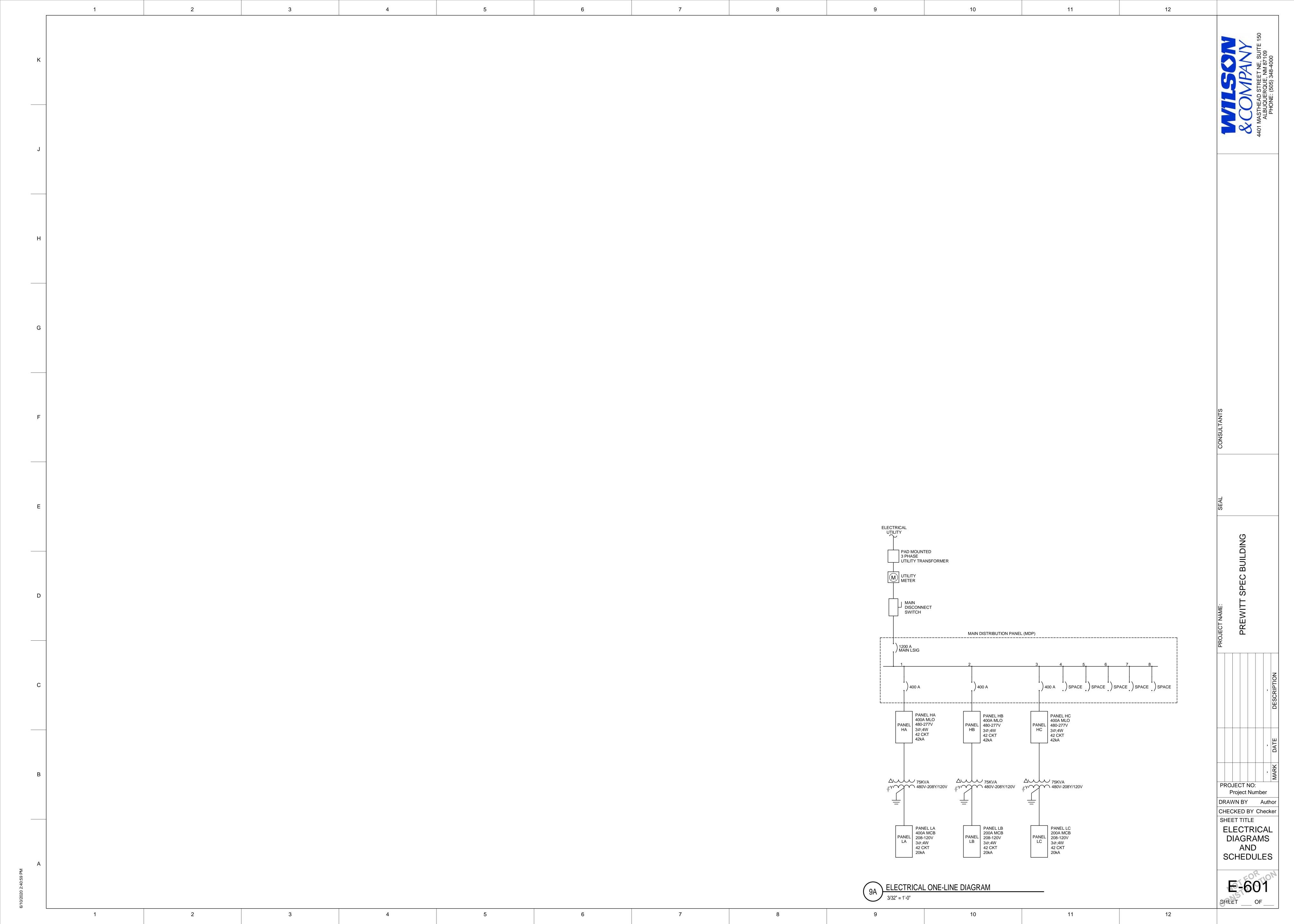


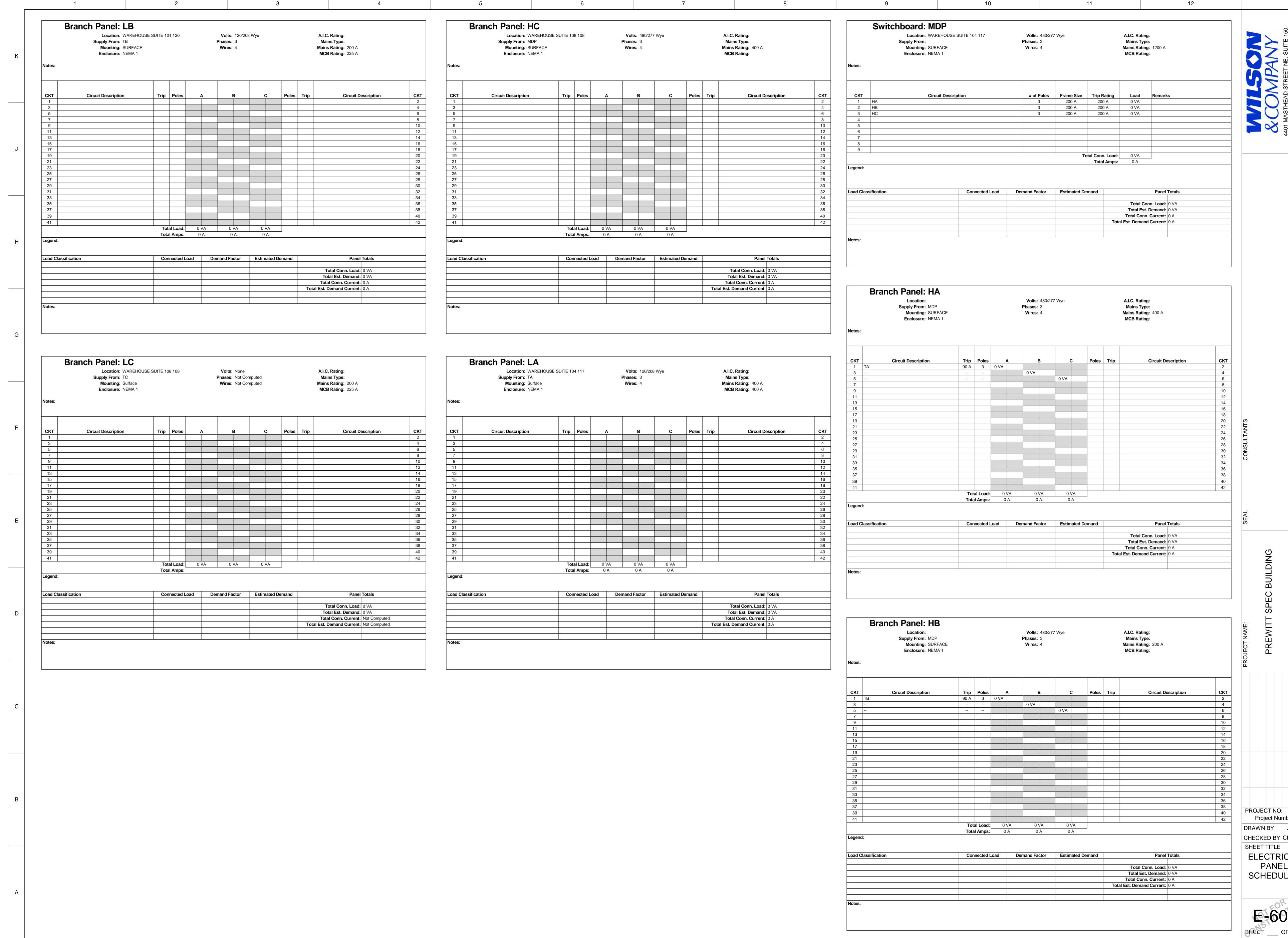












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ELECTRICAL PANEL SCHEDULES



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Appendix C – Renderings of Phase I Spec Building













Appendix C Renderings of Phase I Spec Building



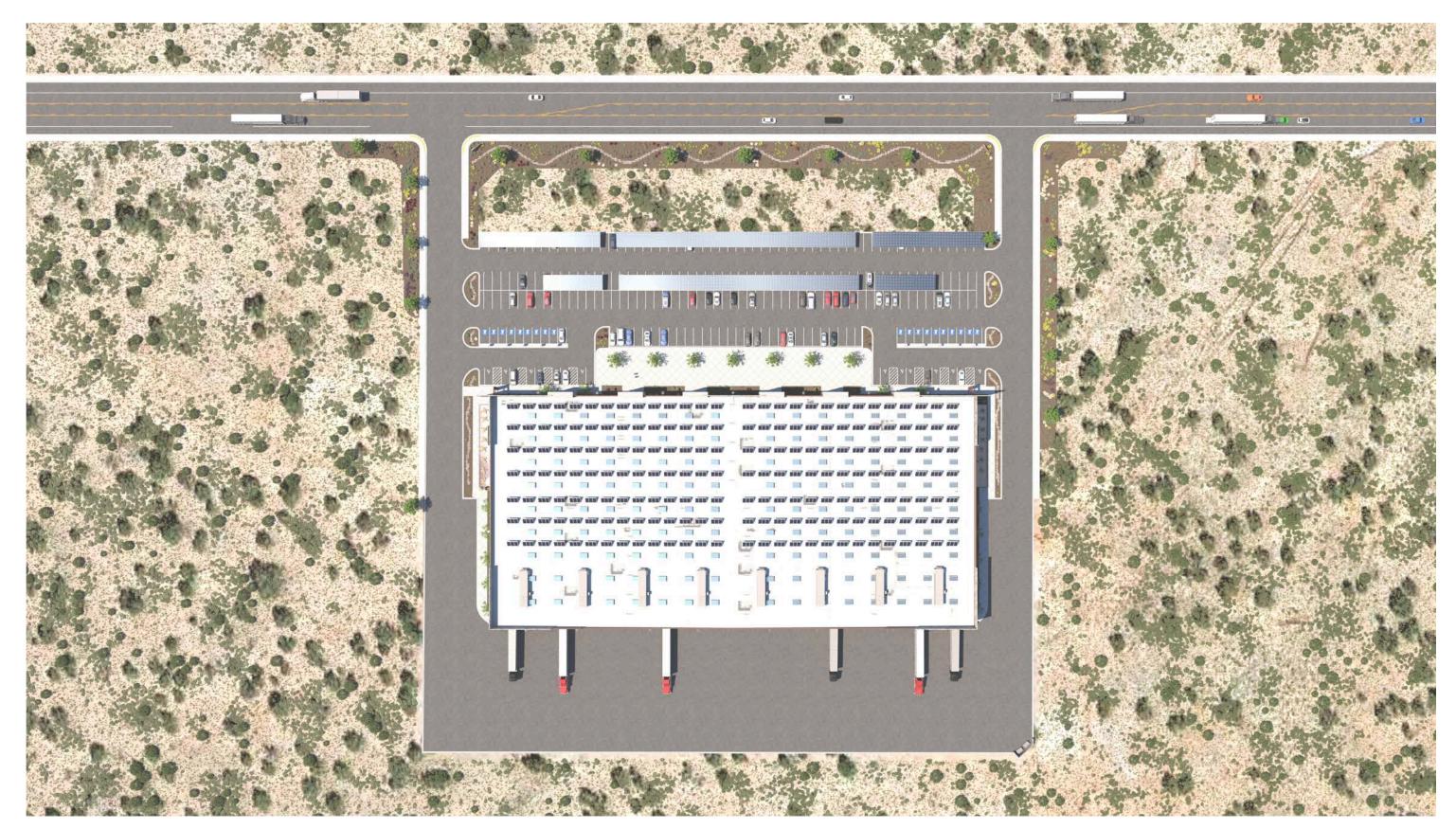
Appendix C Renderings of Phase I Spec Building



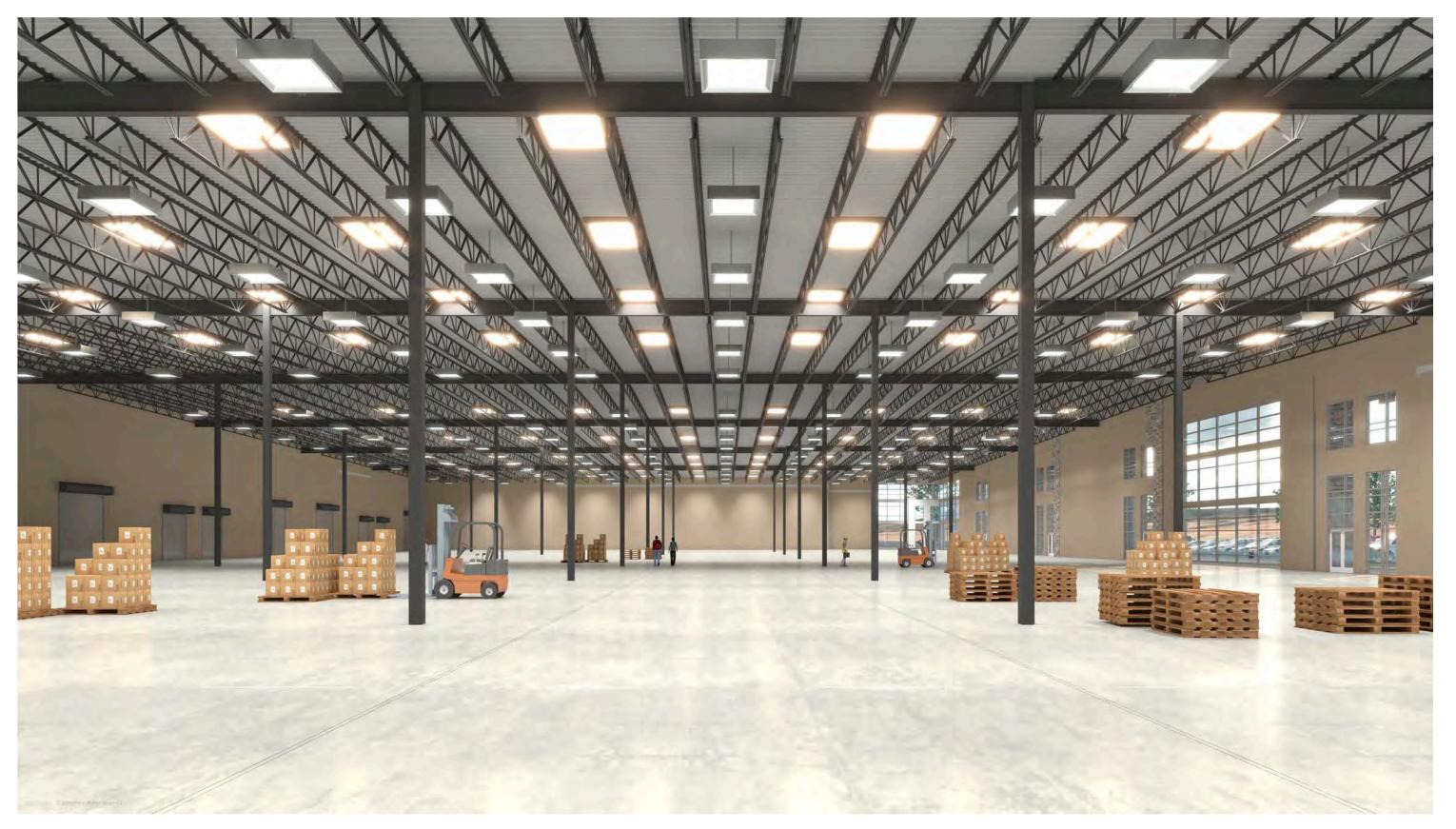


Appendix C Renderings of Phase I Spec Building





Appendix C Renderings of Phase I Spec Building



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Appendix C Renderings of Phase I Spec Building







Appendix D – Summary of Cost Estimates and Raw Data













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Appendix D: Summary of Cost Estimates and Raw Data

Summary

This section details the construction estimate for the Prewitt Industrial Park. The estimates are provided for civil (roadway and rail) and for water and wastewater utilities. Other utilities would be constructed by the relevant private utility, and costs for those are not included here. Phase I refers to implementation of the Spec Building.

The total estimated cost of full build out of the industrial park (including Phase I Spec Building) is \$67,100,000. For the Phase I Spec Building, the estimated construction cost (including infrastructure) is \$31,300,000. The costs for infrastructure are summarized below in section 1.1. The following sections provide detailed estimates for infrastructure.

Construction estimates were developed based on several assumptions and knowledge of the area, geologic setting, climatic conditions, and market cost history. These factors drove construction cost development and were compared to historical bid data to establish a base Phase I Spec Building and Full Build-out estimates. Each discipline (i.e. water, wastewater, drainage, roadway, rail, etc.) prepared a detailed estimate. Detailed estimates were converted into linear feet of road to simplify the Industrial Park development construction cost estimates.

A Consumer Price Index (CPI) of 1.70 is recommended for future out year planning. The CPI is based on the past 10-year average for the south region. CPI is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services (see https://data.bls.gov/pdq/SurveyOutputServlet).

,Prewitt Industrial Park MASTER PLAN AND PRELIMINARY DESIGN

Appendix D: Summary of Cost Estimates and Raw Data

1 Spec Building & Infrastructure (Phase I)

Spec Building	Unit	Price	Unit	Qty		LF Unit Cost		
Spec Building	\$	119.00	SF		120000.00	\$	14,375,000.00	
Fee Development @ 7%						\$	999,600.00	
NMGRT @ 7.75%						\$	1,212,818.25	
Subtotal						\$	16,027,812.50	
15% Contingency						\$	2,291,940.00	
Construction Budget (Spec Building Subtotal)						\$	18,784,358.25	

Phase I Infrastructure	\$ 12,518,754.18
TOTAL: Phase I Development Cost (Spec Building and Infrastructure)	\$ 31,303,112.43

2 Industrial Park Infrastructure (Phase II)

Prewitt Industrial Park MASTER PLAN AND PRELIMINARY DESIGN

2.1 ROADWAY & DRAINAGE

Lead-in Track (5,900)	Unit Price	Unit	Qty	Cost	
	\$				
Rock Excavation (primarily)	35.00	CY	143,000	\$	5,005,000.00
	\$				
Embankment	8.00	CY	11,000	\$	88,000.00
	\$				
8" Subballast	11.00	SY	26,000	\$	286,000.00
	\$				
Drainage / Erosion Control	30,000.00	LS	1	\$	30,000.00
	\$				
Industry track	150.00	LF	5,900	\$	885,000.00
	\$				
#9 Turnout	150,000.00	EA	2	\$	300,000.00
NMGRT @ 7.75%				\$	511,035.00
sub-total				\$	7,105,035.00
20% Contingency				\$	1,421,007.00
Construction Budget				\$	8,526,042.00

Rail Yard Civil	Unit Price	Unit	Qty	Cost	
	\$				
Excavation	5.00	CY	620,000	\$	3,100,000.00
	\$				
Embankment	8.00	CY	780,000	\$	6,240,000.00
	\$				
Drainage / Erosion Control	150,000.00	LS	1	\$	150,000.00
	\$				
Roadway - 50'	45.00	LF	82,200	\$	3,699,000.00
NMGRT @ 7.75%				\$	1,022,147.50
sub-total				\$	14,211,147.50
20% Contingency				\$	2,842,229.50
Construction Budget				\$	17,053,377.00

Rail Yard Track	Unit Price	Unit	Qty	Cost	
	\$				
8" Subballast	11.00	SY	136,000	\$	1,496,000.00
	\$				
Industry track	150.00	LF	16,400	\$	2,460,000.00
	\$				
50' Crossing Concrete	250.00	LF	-	\$	-
	\$				
#9 Turnout	150,000.00	EA	4	\$	600,000.00
NMGRT @ 7.75%				\$	353,090.00
sub-total				\$	4,909,090.00
20% Contingency				\$	981,818.00
Construction Budget				\$	5,890,908.00

CR 19 Intersection and Access Rd	Unit	Price	Uni t	Qty	Cost	:
Embankment	\$	8.00	CY	52,100	\$	416,800.00
Drainage / Erosion Control	\$50	0,000.00	LS	1	\$	50,000.00
Roadway - 50', 1,000' length	\$	45.00	SY	5,600	\$	252,000.00
CR 19 Widening	\$	45.00	SY	2,000	\$	90,000.00
Striping / Traffic Control	\$ 20	0,000.00	LS	1	\$	20,000.00
NMGRT @ 7.75%					\$	57,257.00
sub-total					\$	886,057.00
20% Contingency					\$	177,211.40
Construction Budget					\$	1,063,268.40

2.2 WATER/WASTEWATER

	Wastewater Infrastructure		EST. QTY.	UN	IIT PRICE		AMOUNT
1	10,0000-gallon Advanced Treatment Septic Tank	Ea.	2	\$ 2	\$ 28,000.00		56,000.00
2	Chamber Type Drainfield	Lf.	3,000	\$	30.00	\$	90,000.00
3	8" SAS, DR 35, including trenching, backfill and compaction, CIP	Lf.	11,400	\$	\$ 37.00		421,800.00
4	8" Main Line Terminal Clean-out	Ea.	8	\$	3,000.00	\$	24,000.00
5	Extra Depth 6' - 12' for SAS 8"	VF-LF	3,990	\$	3.00	\$	11,970.00
6	4' manhole, including trenching, backfill and compaction, CIP	Ea.	26	\$ 4,000.00		\$	104,000.00
	Subtotal (line items 1-6)					\$	707,770.00
	NMGRT (7.75%)					\$	54,852.18
	Subtotal w/ NMGRT					\$	762,622.18
	Contingency @ 20%, excl. NMGRT					\$	141,554.00
	TOTAL Wastewater Infrastructure					\$	904,176.18

Appendix D: Summary of Cost Estimates and Raw Data

Water Infrastructure		UNIT	EST. QTY.	UNIT PRICE	AMOUNT	
1	290,000 gallon Steel water tank	Gal.	290,000	\$ 1.75	\$	507,500.00
2	100 gpm Booster pump Skid (3 pump system) installed	Ea.	1	\$ 90,000.00	\$	90,000.00
3	Bladder tanks	Ea.	2	\$ 8,000.00	\$	16,000.00
4	2000 gpm Fire Pump Skid	Ea.	1	\$102,500.00	\$	102,500.00
5	Building 24X30 - Complete w/ Electrical and Plumbing	Sq.ft.	720	\$ 300.00	\$	216,000.00
6	8-5/8" Steel Cased Potable Water Well - Drilling Complete	Lf.	350	\$ 700.00	\$	245,000.00
7	Chlorination System	Ea.	1	\$ 15,000.00	\$	15,000.00
8	8" Waterline Pipe excl. fitting, (std. spec.sec 801), icl. Trench, & compacted backfill, to 6' depth, cip.	Lf.	14,400	\$ 25.00	\$	360,000.00
9	8" Gate Valve, cip SD 2333	Ea.	11	\$ 2,500.00	\$	27,500.00
10	Fire Hydrant4 1/2' bury, MJ, incl. blocking & aggregate, cip. SD 2340	Ea.	40	\$ 5,000.00	\$	200,000.00
11	6" Service Stub-Out w/ 6" Gate Valve, 100'	Ea.	10	\$ 6,000.00	\$	60,000.00
	Subtotal (line items 1-10)				\$	1,839,500.00
	NMGRT (7.75%)				\$	142,561.25
	Subtotal w/ NMGRT				\$	1,982,061.25
	Contingency @ 20%, excl. NMGRT				\$	367,900.00
	TOTAL Water Infrastructure				\$	2,349,961.25

Water/Wastewater Estimated Full Build-Out Cost: \$ 3,254,137.43

Appendix D: Summary of Cost Estimates and Raw Data

3 Total Costs

Phase		Estimated Cost		
Full-build Cost (excl. Phase I Spec Building and Infrastructure)	\$	35,787,732.83		
Phase I Spec Building Development Cost (Building and Infrastructure)	\$	31,303,112.43		
Full On-Site Build out Development Cost with Phase 1 Spec Building	\$	67,090,845.26		



Appendix E – Appraisal













APPRAISAL REPORT

Vacant Land

625.85 Acres in Prewitt
Prewitt, Cibola County, New Mexico 87045

Appraisal File #A20070



SOURCE: GOOGLE EARTH

Effective Date of Value: April 27, 2020

Date of Report: May 7, 2020

Prepared For:

Wilson & Company, Inc., Engineers & Architects, State of New Mexico Department of Finance, and Village of Milan

Attn: Mario Juarez-Infante, Vice President 4401 Masthead Street NE, Suite 150 Albuquerque, New Mexico 87109

Prepared By:



2411 Cabezon Boulevard, Suite 101 Rio Rancho, New Mexico 87124 (505) 343-0400 / FAX (505) 353-3993



May 7, 2020

Wilson & Company, Inc., Engineers & Architects, State of New Mexico Department of Finance, and Village of Milan

Attn: Mario Juarez-Infante, Vice President 4401 Masthead Street NE, Suite 150 Albuquerque, New Mexico 87109

RE: Appraisal Report
Vacant Land
625.85 Acres in Prewitt
Prewitt, Cibola County, New Mexico 87045
Appraisal File #A20070

Dear Mr. Juarez-Infante:

In accordance with your request, we have prepared an Appraisal Report on the above-referenced property. The effective date of the appraisal is April 27, 2020. The purpose of the appraisal is to provide our opinion of the "as is" market value of the fee simple interest in the subject property. The intended users of the appraisal are Wilson & Company, Inc., Engineers & Architects, State of New Mexico Department of Finance, and Village of Milan. The intended use of the appraisal is to assist the client with internal business/purchase decisions.

This letter of transmittal <u>is not</u> to be misconstrued as a complete and full narrative report, but merely indicates the final opinion of market value developed in the following Appraisal Report in Summary Format. The report provides the necessary supporting data, assumptions, and justifications for our final value opinion. The appraisal is made subject to the general assumptions and limiting conditions stated within the body of the report. The appraisal was prepared in conformance with the current requirements as set forth by the Federal Financial Institutions Reform Recovery and Enforcement Act (FIRREA), the Appraisal Foundation for Uniform Standards of Professional Appraisal Practice (USPAP), the Office of the Comptroller of the Currency's Real Estate Appraisal and Evaluation Guidelines, and with the requirements of the federal bank regulating agencies. The Certification and Assumptions and Limiting Conditions are presented in the *Addenda*, and are considered an integral part of the report. Considering analysis presented herein, the following opinion of market value for the above-referenced property has been reconciled:

FINAL OPINION OF MARKET VALUE

Property Rights	Effective Date	Value Scenario	Market Value
Fee Simple Estate	April 27, 2020	"As Is" Market Value	\$390,000

Respectfully submitted,

Shane LeMon, MAI, CCIM NM General Certified Appraiser #00193-G Kathleen E. Burmeister, MAI NM General Certified Appraiser #03025-G

American Property - Consultants & Appraisers, Inc. 2411 Cabezon Boulevard, Suite 101 • Rio Rancho, NM 87124 • (505) 343-0400 • FAX (505) 353-3993

Appraisal File #A20070

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ADDENDA

Exhibit A	Certification
Exhibit B	Assumptions & Limiting Conditions
Exhibit C	Qualifications of the Appraisers
Exhibit D	Engagement Letter
Exhibit E	Subject Information

American Property - Consultants & Appraisers

Appraisal File #A20070

SUMMARY OF IMPORTANT FACTS & CONCLUSIONS

PROPERTY TYPE Vacant Land

PROPERTY IDENTIFICATION 625.85 Acres in Prewitt

Prewitt, Cibola County, New Mexico 87045

EFFECTIVE DATE OF VALUE April 27, 2020

DATE OF REPORT May 7, 2020

PROPERTY RIGHTS APPRAISED Fee Simple Estate

OWNER OF RECORD Department of Agriculture in care of Cibola National Forest

PROPERTY DATA

SITE AREA 27,262,048± square feet, or 625.85 acres (both per client's

measurements; subject to survey)

ZONING None

FLOOD ZONE The subject site is located on Flood Insurance Rate Map

35031C2050E, dated February 17, 2010. The subject site is located in unshaded zone X. The applicable flood zone map

is presented in the Addenda.

TOPOGRAPHY Mostly level

ACCESS Accessible via the west side Highway 19.

UTILITIES Near the site

HIGHEST & BEST USE

As THOUGH VACANT Agricultural development

ESTIMATED MARKETING

/EXPOSURE TIME One to two years

RECONCILED OPINION OF MARKET VALUE

Property Rights	Effective Date of Value	Opinion of Value Scenario	Market Value
Fee Simple Estate	April 27, 2020	"As Is" Market Value	\$390,000

A20070

APPRAISAL PREFACE

We have performed an Appraisal Report of 625.85 acres of vacant land in Prewitt, Cibola County, New Mexico 87045.

An appraisal is defined as:

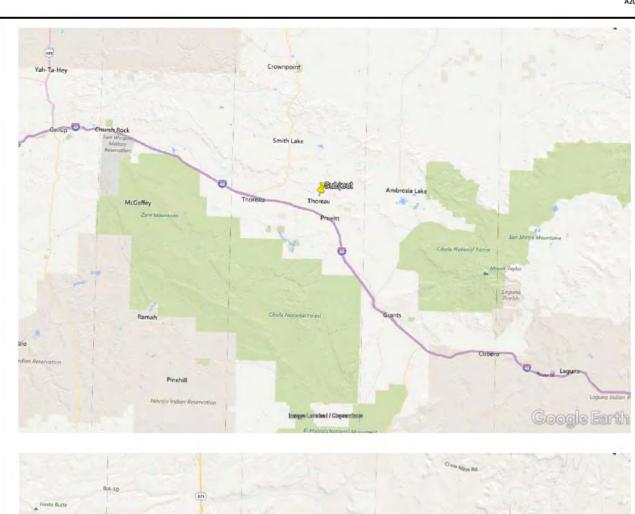
"1. The act or process of developing an opinion of value; an opinion of value."1

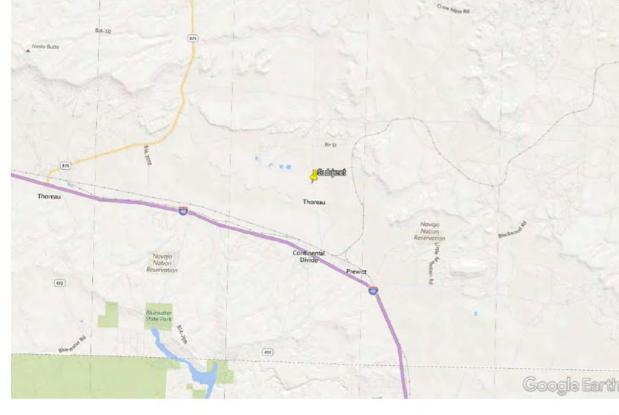
The following text is a report, defined as:

"Any communication, written or oral, of an appraisal or appraisal review that is transmitted to the client or a party authorized by the client upon completion of an assignment." Reporting requirements are set forth in the Standards Rules in Standard 2 of the Uniform Standards of Professional Appraisal Practice.

The preface contains location maps of the subject property.

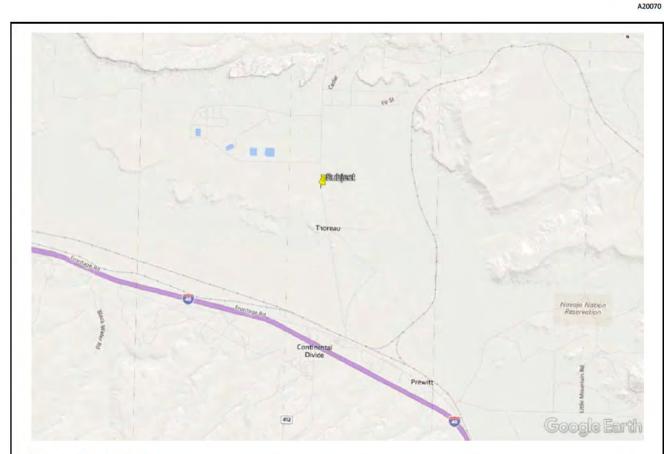
A20070





USPAP 2020-2021 Edition, The Appraisal Foundation, page 3

² Ibid., page 5



Source: Google Earth

A20070

APPRAISAL REPORT

This is an Appraisal Report, which is intended to comply with the reporting requirements set forth under Standard Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice for an Appraisal Report. As such, it presents summarized discussions of the data, reasoning, and analyses that were used in the appraisal process to develop the appraisers' opinion of value. Supporting documentation concerning the data, reasoning, and analyses is retained in the appraisers' file. The depth of discussion contained in this report is specific to the needs of the client and for the intended use stated below. The appraisers are not responsible for the unauthorized use of this report.

CLIENT Wilson & Company, Inc., Engineers & Architects, State

of New Mexico Department of Finance, and Village of

Milan

Attn: Mario Juarez-Infante, Vice President 4401 Masthead Street NE, Suite 150 Albuquerque, New Mexico 87109

Phone: (505) 722-9121

APPRAISERS Shane LeMon, MAI, CCIM and Kathleen E. Burmeister,

MAI

American Property-Consultants & Appraisers, Inc.

2411 Cabezon Boulevard, Suite 101 Rio Rancho, New Mexico 87124

SUBJECT Vacant Land

625.85 Acres in Prewitt

Prewitt, Cibola County, New Mexico 87045

EFFECTIVE DATE OF VALUE April 27, 2020

DATE OF REPORT May 7, 2020

INTENDED USE OF THE REPORT

The intended use of the appraisal is to provide our opinion of the "as is" market value of the fee simple interest in the subject site, as of the effective date noted, to assist the client with internal business/purchase decisions. Following is the definition of *market value* as defined by the Office of the Comptroller of the Currency Regulation 12 CFR Part 34:

"the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- (1) Buyer and seller are typically motivated;
- (2) Both parties are well informed or well advised, and acting in what they consider their own best interests;
- (3) A reasonable time is allowed for exposure in the open market;
- (4) Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and,

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(5) The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

INTENDED USERS OF THE REPORT

The only intended users of the report are Wilson & Company, Inc., Engineers & Architects, State of New Mexico Department of Finance, and Village of Milan.

PROPERTY RIGHTS

The subject is a vacant site. Thus, we are appraising the fee simple interest.

Fee Simple Interest:

"Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

SCOPE OF WORK

In preparing this appraisal, we...

- gathered data on comparable vacant land sales;
- · confirmed and analyzed the data;
- analyzed highest and best use;
- analyzed all sales, agreements of sale, offers, options, or listings of the subject property within three years prior to the effective date of this appraisal;
- developed the most applicable approach to value; i.e., the Sales Comparison Approach. The Cost
 Approach is not generally applicable in valuation of a property with no site or building improvements.
 Because we were asked to value the subject site as vacant, the Income Capitalization Approach is not
 applicable.

This Appraisal Report is a brief recapitulation of our data, analyses, and conclusions. Supporting documentation is retained in the appraisal file. *Understanding that New Mexico is a non-disclosure State, information used in the report is as reliable as practical.*

OWNERSHIP & HISTORY

Ownership of the subject site has been vested in the name of Department of Agriculture in care of Cibola National Forest for more than three years. The subject is a vacant site. No other transactions, offers for purchase, or listings for sale of the subject property within the last three years have been reported, or are known to us.

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CIBOLA COUNTY/GRANTS/MILAN & PREWITT AREA DATA

The subject property is located in Prewitt about 20 miles northwest of the City of Grants, New Mexico. It is about 40 miles east of Gallup and 100 miles west of Albuquerque.





REGIONAL & CITY INFLUENCES

Located in the northwestern portion of New Mexico, Cibola County is the newest county in the State. It was created by the State legislature in July 1981 by separating 4,180 square miles from the western portion of Valencia County. The County extends east to Bernalillo County and west to the Arizona border. Cibola County ranks 15th in size among the 33 counties of the State. The County is sparsely populated, with the largest community and county seat being Grants. The bordering states, Colorado to the north, Arizona to the west, and Texas to the east and south, all have major cities within a day's time or a few hours flying time.



Sandoval
McKinley
Bernalillo
Cibola
Catron
Socorro

PHYSICAL CHARACTERISTICS

The northern portion of the County is fairly mountainous, with much of this area within the Cibola National Forest. A lava flow lying east of the Continental Divide winds its way southward through the middle portion of the County. Soil conditions tend to consist of a sandy loam with a rocky lava basalt base. There are intermittent limestone deposits in the area, some with commercial value.

Cibola National Forest has over 300,000 acres of forest land comprised mainly of pinon, juniper, aspen and ponderosa pine. In contrast, El Malpais, the area's largest extinct volcano formation, is commonly referred to

³ Appraisal Institute, <u>The Dictionary of Real Estate Appraisal</u>, Sixth Edition, 2015, page 90

as the "badlands". El Malpais is located south of the Cibola National Forest in the central portion of the county.

The elevation in Cibola County ranges from 5,800 feet at Laguna to 11,301 feet at Mount Taylor. Grants Airport has an elevation of 6,520 feet, and the elevation at Fence Lake is 7,055 feet. Temperatures in July range from 55 to 87 degrees Fahrenheit, while January temperatures range from 14 to 44 degrees. Annual precipitation is 10.1 inches and the first freeze occurs around the beginning of October each year.



El Morro National Monumer



APPRAISAL FILE #A19073

La Ventana at El Malpais National Monumen

HISTORY

In 1880, three brothers, Angus, Lewis and John Grant, had contracted to build a railroad for this particular area. For several years the line ended at a camp that became known as Grants Camp. The name was later changed to Grants Station, and then shortened to Grants.

In the late 1800s the settlers were mainly sheep and cattle men. Grazing pastures were excellent and water plentiful. When a drought began in 1918, the pastures became over-grazed and settlers began to look for more lucrative means of survival. Thus, logging became the main business of the area. Grants, the largest community in the county, had a 1925 population of 250, which then swelled to 800 by 1940 when the logging business had begun to slow down. The Bluewater Valley, after completion of the Bluewater Dam in 1929, earned a reputation for vegetables of outstanding quality. Unfortunately, by 1945 plastic packaging was required in grocery stores, and stores wanted produce from closer markets. This trend ended the economic viability of the area's produce industry.

Mining had traditionally been a strong economic influence in the County. Fluorspar, copper ore, pumice and coal had been mined since the turn of the century. In 1950, uranium was discovered, which created a "boom" era. Due to the uranium industry, the population of Grants increased from 2,200 in 1950 to 7,000 in 1955, to 10,000 in 1960.

By the early 1980s, the economy in the County had taken a drastic downturn due to the poor economics of the uranium industry. Mills and mines were closed, people were laid off, and many began to leave the area. Since that time, the community has struggled diligently to bring diversified businesses to the area to boost the economy. The prison industry has become significant, the Plains Electric Generating Plant was built in Prewitt, and the New Mexico Mining Museum was constructed to attract tourists.

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APPRAISAL FILE #A19073



The Grants Mining Museum

TRANSPORTATION

Grants is located 80 miles west of Albuquerque, along Interstate 40, the nation's most traveled east-west highway. Three interchanges serve the Grants/Milan area. Grants has railroad service, and bus service from both Greyhound and Continental Trailways. There are also numerous state highways throughout Cibola County for auto travel.

UTILITIES

In the City of Grants and the Village of Milan, electricity is provided by the Continental Divide Electric Cooperative, and natural gas is provided by New Mexico Gas Company. Water and sewer service are provided by each municipality. Garbage service is provided by Waste Management of New Mexico. Police and fire protection are also provided by each city.

EDUCATION

Education is provided by the Grants/Cibola County school district, including eight elementary schools (one, Milan Elementary, within Milan), one middle school, and two high schools. There are also four private and parochial schools. Enrollment in the public schools has been consistently near 4,000 since 1983. For those interested in post-secondary education, the Grants branch of New Mexico State University offers technical/vocational training and associate degrees to approximately 300 students each year.

GOVERNMENT

Milan is an incorporated village, with a mayor-city council form of government. Council members are elected on a district basis. Zoning and planning commission members are appointed by the Village administrators. A policy of master planning and special use zoning has been, for the most part, beneficial and judicious, and land use planning is often done in concert with the Grants and Cibola County governments.

RECREATIONAL & CULTURAL

Cibola County offers many recreational and cultural opportunities. Acoma, the Sky City, is one of the oldest inhabited cities in the U. S., and Acomita Lake offers fishing nearby. Bandera Volcano is a 1,000 foot deep crater giving easy access to an erupted volcano, and Bluewater Lake State Park has year-round water sports and camping. Chaco Canyon National Monument, which is the center of the extinct Anasazi culture, is the largest excavated Indian ruin in North America, and is easily accessible via State Highway 509 from Milan.

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Other tourist attractions include El Malpais National Monument, which is an ancient lava flow, El Morro National Monument, where Spanish Conquistadors camped beginning in 1605, the Ice Caves with temperatures of 31 degrees year round, and the Rainbow Bridge which is a 309 foot high natural stone bridge in El Malpais. Zuni and Laguna Pueblos are also available for tourists to experience the Indian culture as it was before Columbus. Additionally, there are numerous County and City parks available throughout the County.

POPULATION

The following table shows population figures for each of the three jurisdictions.

Year	Cibola County	% Δ	Grants	% Δ	Milan	% ∆
1960			10,274		2,658	
1970			8,768	-14.66%	2,222	-16.40%
1980	30,346		11,439	30.46%	3,742	68.41%
1990	23,794	-21.59	8,669	-24.22%	1,967	-47.43%
2000	25,595	7.57%	8,806	1.58%	1,891	-3.86%
2010	27,213	6.32%	9,182	4.27%	3,245	71.60%
2017	27,049	-0.60%	9,094	-0.96%	3,644	12.30%

Source: U.S. Census, American Fact Finder, American Community Survey & BBER/UNM. Population change rates are straight-line.

Population fluctuations are evident, and most are the result of changes in the uranium mining industry and the prison industry. There was a significant population decline in Milan from 1980 through 1990 due to the mining bust. The population grew again through 2010. This growth was not due to resident growth, but to growth in the prison population in Milan. Ignoring the prison population, the population of Milan has been relatively stable at just under 2,000 people.

Additional data is taken from *The Site To Do Business*, and the data is from the U.S. Bureau of the Census with forecasts by Esri, which is an international supplier of geographic/demographic information. The population forecast for Cibola County in 2023 is 26,426, which is a slight decline from the 2017 population of 27,049 and the 2010 population of 27,213. For Grants, the forecast is for the 2023 population of 9,488, which is about a one quarter of one percent per year increase from the 2010 population of 9,182. For Milan, the 2023 population forecast is 2,017 (does not include prison population). In general, the forecast is for little to no growth in population in all three jurisdictions.

EMPLOYMENT

EMPLOYMENT STATISTICS

Labor force and employment figures have varied over the last 10 years. The following table reflects employment information obtained from the Department of Workforce Solutions (State of New Mexico):

EMPLOYMENT - CIBOLA COUNTY

Year	Labor Force	Employment	Unemployment Rate
2006	12,093	11,542	4.6%
2007	11,968	11,463	4.2%
2008	12,357	11,786	4.6%
2009	12,336	11,492	6.8%

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2010	9,201	8,332	9.4%
2011	9,179	8,338	9.2%
2012	9,245	8,480	8.3%
2013	9,112	8,365	8.2%
2014	8,992	8,241	8.4%
2015	9,151	8,427	7.9%
2016	9,296	8,540	8.1%
2017	9,081	8,408	7.4%
2018	8,927	8,366	6.3%
Q2 2019	9,082	8,479	6.6%

APPRAISAL FILE #A19073

SOURCE: New Mexico Department of Workforce Solutions (current

When the economy took a turn for the worst, unemployment in the City of Grants increased dramatically. It was not until 2012 that the unemployment rate began to decrease at a slow pace. The current unemployment rate is 6.6% as of August 2019. This was much higher than the state-wide average of 5.1%. Although this was an increase in unemployment, it is projected that unemployment rates will continue to drop at a steady pace in the City. Listed below are the major employers in Cibola County:

MAJOR EMPLOYERS - CIBOLA COUNTY

Employer	# Employed
Pueblo of Laguna	507
Grants/Cibola County Schools	500 Contract/71 Substitute
Sky City Casino	357
Laguna Industries	320
Pueblo of Acoma	302
NM State Highway Department	287
Lee Ranch Coal Mine	263
ACL Hospital	240
Western NM Correctional Facility	206 State/30 Contract
Plains Electric	130
NM Women's Correctional Facility-CCA	120
McKinley Paper Company	115
Cibola County Corrections-CCA	110
Cibola General Hospital	105
City of Grants	100 Full-time/130 Part-time
Milan Supermarket	90
Cibola County	70 Full-time/11 Temps
Continental Divide Electric	60
Mt. Taylor Millwork	55
Smith's Food & Drug	55
Casa Blanca Commercial Center	43
NMSU-Grants Branch	40 Full-time/60 Part-time
Grants State Bank	38
Quivira Mining Company	30

Esri data (Business Summary) taken from The Site to do Business breaks down business by NAICS codes. At the county level, the largest concentration of employees is in the Healthcare & Social Assistance category (16.5%) followed by Public Administration (15.6%), Educational Services (14.9%) and Retail Trade (12.3%). Combined, these four categories account for nearly 60% of all employment. For the Village of Milan, the

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largest concentration of employees is in Public Administration (40.8%) followed by Retail Trade (16.9%), Accommodations & Food Service (14.2%) and Gasoline Stations (14.0%).

The two jurisdictions are quite different in their employment profiles. Public Administration is government, which is far and away the largest category in Milan. The last three categories reflect the substantial influence of I-40 as it bisects the Village.



Cibola County Courthouse

HOUSING

Milan - Esri shows Milan had 837 housing units in 2010, and by 2019, there were still 837, and the forecast is for 845 housing units by 2024. From 2010 to 2024, the inventory will increase by less than 1 unit per year. The following table shows owner-occupied units by value in 2019.

	20	19	20	24
Owner Occupied Housing Units by Value	Number	Percent	Number	Percen
Total	537	100.0%	539	100.09
<\$50,000	87	16.2%	62	11.59
\$50,000-\$99,999	155	28.9%	127	23.69
\$100,000-\$149,999	145	27.0%	157	29.19
\$150,000-\$199,999	49	9.1%	57	10.69
\$200,000-\$249,999	47	8.8%	59	10.99
\$250,000-\$299,999	44	8.2%	63	11.79
\$300,000-\$399,999	6	1.1%	9	1.79
\$400,000-\$499,999	1	0.2%	0	0.09
\$500,000-\$749,999	3	0.6%	5	0.99
\$750,000-\$999,999	0	0.0%	0	0.09
\$1,000,000-\$1,499,999	0	0.0%	0	0.09
\$1,500,000-\$1,999,999	0	0.0%	0	0.09
\$2,000,000+	0	0.0%	0	0.09
Median Value	\$109,138		\$125,637	
Average Value	\$125,885		\$143,878	

Nearly 16% of the owner-occupied housing stock (87 units) is under \$50,000 in value, with 45.1% of the stock less than \$100,000, and 72.1% of the stock less than \$150,000. The average home value in Milan is \$125,885, and the median is \$109,885. The 2012 – 2016 American Community Survey shows that 39.7% of the housing stock was built between 1970 and 1979, and nearly 88% between 1960 and 1999; a period of time when the mining industry was still active in the area. Mobile homes account for about 50% of the total housing stock.

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Appraisal File #A19073

Prewitt - Esri shows Prewitt had 445 housing units in 2010, and by 2019, there were 451, and the forecast is for 452 housing units by 2024. The following table shows owner-occupied units by value in 2019.

	20	19	20	24
Owner Occupied Housing Units by Value	Number	Percent	Number	Percent
Total	310	100.0%	313	100.0%
<\$50,000	100	32,3%	79	25.2%
\$50,000-\$99,999	67	21.6%	59	18.8%
\$100,000-\$149,999	86	27.7%	97	31.0%
\$150,000-\$199,999	28	9.0%	36	11.5%
\$200,000-\$249,999	22	7.1%	30	9.6%
\$250,000-\$299,999	2	0.6%	3	1.0%
\$300,000-\$399,999	2	0.6%	3	1.0%
\$400,000-\$499,999	3	1.0%	6	1.9%
\$500,000-\$749,999	0	0.0%	0	0.0%
\$750,000-\$999,999	0	0.0%	0	0.0%
\$1,000,000-\$1,499,999	0	0.0%	0	0.0%
\$1,500,000-\$1,999,999	0	0.0%	0	0.0%
\$2,000,000+	0	0.0%	0	0.0%
Median Value	\$91,045		\$109,536	
Average Value	\$99,113		\$115,495	

Nearly 32% of the owner-occupied housing stock (100 units) is under \$50,000 in value, with 53.9% of the stock less than \$100,000, and 81.6% of the stock less than \$150,000. The average home value in Prewitt is \$99,113, and the median is \$91,045.

Grants - Esri shows Grants had 3,804 housing units in 2000, and by 2019, there were 3,926 (average of 6.4 new units per year), and the forecast is for 3,988 housing units by 2024. From 2010 to 2024, the inventory will increase by 184 units or 7.7 units per year on average. The following table shows owner-occupied units by value in 2019.

	20	019	20	24
Owner Occupied Housing Units by Value	Number	Percent	Number	Percen
Total	2,288	100.0%	2,281	100.09
<\$50,000	289	12.6%	209	9.29
\$50,000-\$99,999	673	29.4%	565	24.89
\$100,000-\$149,999	502	21.9%	495	21.79
\$150,000-\$199,999	370	16.2%	416	18.29
\$200,000-\$249,999	206	9.0%	262	11.59
\$250,000-\$299,999	119	5.2%	139	6.19
\$300,000-\$399,999	101	4.4%	154	6.89
\$400,000-\$499,999	11	0.5%	15	0.79
\$500,000-\$749,999	17	0.7%	26	1.19
\$750,000-\$999,999	0	0.0%	0	0.0
\$1,000,000-\$1,499,999	0	0.0%	0	0.0
\$1,500,000-\$1,999,999	0	0.0%	0	0.0
\$2,000,000+	0	0.0%	0	0.0
Median Value	\$118,127		\$137,020	
Average Value	\$137,762		\$156,225	

About 29.4% of the owner-occupied housing stock (2,292 units) ranges from \$50,000 to \$99,000, followed by 21.9% in the \$100,000 to \$149,999 range, and 16.2% in the \$200,0000 to \$249,999 range. About 12.6% of the owner-occupied housing stock is less than \$50,000. The average home value in Grants is \$137,762, and median is \$118,127.

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INCOME

Milan - Esri shows Milan had 725 households in 2019. The following table shows income disribution within these households.

	20	19	2024	
Households by Income	Number	Percent	Number	Percer
<\$15,000	139	19.1%	141	19.69
\$15,000 - \$24,999	165	22.7%	162	22.5
\$25,000 - \$34,999	54	7.4%	54	7.5
\$35,000 - \$49,999	105	14.5%	104	14.5
\$50,000 - \$74,999	142	19.6%	139	19.3
\$75,000 - \$99,999	55	7.6%	52	7.2
\$100,000 - \$149,999	66	9.1%	67	9,3
\$150,000 - \$199,999	0	0.0%	0	0.0
\$200,000+	0	0.0%	0	0.0
Median Household Income	\$35,512		\$35,256	
Average Household Income	\$44,583		\$46,255	
Per Capita Income	\$16,987		\$17,593	

Approximately 19% of all households in Milan have an income of less than \$15,000, and nearly 64% have income less than \$50,000. About 9% have household incomes over \$100,000. In 2019, the average household income was \$44,583, and the median was \$35,512.

Prewitt - Esri shows Prewitt had 330 households in 2019. The following table shows income disribution within these households.

	20	119	20	024
Households by Income	Number	Percent	Number	Percen
<\$15,000	118	35.8%	113	33.99
\$15,000 - \$24,999	62	18.8%	60	18.09
\$25,000 - \$34,999	68	20.6%	72	21.69
\$35,000 - \$49,999	32	9.7%	34	10.29
\$50,000 - \$74,999	9	2.7%	10	3.09
\$75,000 - \$99,999	9	2.7%	10	3.09
\$100,000 - \$149,999	17	5.2%	19	5.79
\$150,000 - \$199,999	15	4.5%	15	4.5
\$200,000+	Ò	0.0%	0	0.0
Median Household Income	\$21,718		\$23,453	
Average Household Income	\$35,468		\$38,236	
Per Capita Income	\$10,432		\$11,298	

Nearly 36% of all households in Prewitt have an income of less than \$15,000, and nearly 85% have income less than \$50,000. Only 9.7% have household incomes over \$100,000. In 2019, the average household income was \$35,468, and the median was \$27,718.

Grants - Esri shows Grants had 3,374 households in 2019. The following table shows income distribution within these households.

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	20	19	20	124
Households by Income	Number	Percent	Number	Percent
<\$15,000	714	21.2%	689	20.5%
\$15,000 - \$24,999	497	14.7%	471	14.09
\$25,000 - \$34,999	407	12.1%	410	12.29
\$35,000 - \$49,999	444	13.2%	451	13.49
\$50,000 - \$74,999	551	16.3%	564	16.89
\$75,000 - \$99,999	383	11.4%	380	11.39
\$100,000 - \$149,999	246	7.3%	262	7.89
\$150,000 - \$199,999	99	2.9%	99	2.99
\$200,000+	33	1.0%	37	1.19
Median Household Income	\$36,760		\$37,879	
Average Household Income	\$51,211		\$54,310	
Per Capita Income	\$19,218		\$20,386	

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Approximately 21% of all households in Grants have an income of less than \$15,000, and 61.2% have incomes less than \$50,000. Nearly 11.2% have household incomes over \$100,000. In 2019, the average household income is shown at \$51,211, and the median was \$36,760.

SUMMARY

Overall, Cibola County, Grants, Milan, and Prewitt are slowly recovering from the decline in the mining industry and the Great Recession. Employment has been improving, but the area lags the state and most other counties in New Mexico. The nature of employment has also changed as mining, which was once a major source of employment, has diminished to only 2.4% (NAICS Code) at the county level. For Milan, mining accounts for only 0.5% of the total number of employees, and in Grants it accounts for 4.7%. Within the Grants/Milan area, there were 6,000 workers in the mines in 1979. By 1980, 3-Mile Island had occurred, which triggered a collapse in the uranium market, and escalated unemployment in the area by 35%. Population and housing growth have been very slow in all three jurisdictions. The forecast for the area is essentially one of stability with very slow growth. Cibola County is rich in tradition with a blend of three cultures. It is also rich in natural recreational spaces including Mount Taylor, El Morro and El Malpais National Monuments, Cibola National Forest, Bluewater Lake and the Acoma, Laguna, and Zuni Pueblos, as well as the Ramah Navajo Chapter. Nearly 70% of the land acreage in Cibola County is composed of Federal/State land (38.3%) and Acoma, Laguna, Zuni, Ramah reservations (30.5%). The Grants-Milan area accounts for nearly 50% of the county population, and this area accounts for the highest concentration of residential and commercial development providing jobs, shopping and services.

McKinley County and the Navajo Nation have reported numerous cases of COVID-19. The area is a "hotspot" in New Mexico for COVID-19 with the virus spreading rapidly. Government officials have imposed temporary regulations in an attempt to slow the spread of the virus. The most recent ordinance limits alcohol sales and established a self-curfew, encouraging people to stay home between 8:00 pm and 5:00 am. Due to the large number of COVID-19 cases in the area, Miyamura High School is being utilized as an additional hospital. Considering this information, McKinley County and the Navajo Nation will likely experience significant effects from the COVID-19 pandemic.

The mayor of Grants has allowed businesses to open in the city against the governor's orders.

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NEIGHBORHOOD DESCRIPTION

In the context of appraisal practice, a neighborhood is defined as "a group of complementary land uses; a congruous grouping of inhabitants, buildings, or business enterprises," (The Dictionary of Real Estate Appraisal, 6th Edition, Page 156). For purposes of this report the broader neighborhood is defined as the Prewitt, the Village of Milan and its outskirts.

Prewitt is an uncorporated community in McKinley County. The subject sits just outside Prewitt in Cibola County.

Linkage – The subject is approximately four miles north of Interstate 40. NM 19 runs north and south through Prewitt. The interstate provides regional linkage to the east and west.

Planning – The Cibola County Comprehensive Plan was adopted in January 2015, and it governs land use at the county level. The county does not currently have a planning and zoning department. Thus, there is no formal zoning at the county level, but there are subdivision regulations and permits are required to build in a flood zone. Prewitt does not have any zoning in place.

Immediate Area Land Use – The immediate area is rural residential in character. The majority of the land surrounding the subject is undeveloped.

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DESCRIPTION OF REAL ESTATE APPRAISED

Location – The maps presented in the Preface show the location of the subject within Cibola County, and near Prewitt, New Mexico. The subject is located on the west side of NM 19, northwest of Old Landfill Road. The maps presented in the *Preface* identify the location of the subject.

Legal Description – The subject site is legally identified as follows:

Portions of Sections 35 and 36: Township 12 North, Range 14 West, and portion of Section 2.

Topography & Soils – The subject site appears to be at street grade NM 19 and is mostly level. Absent a soil analysis, the soil bearing capacity is assumed to be adequate. However, no warranty is made to this effect (see *Environmental Statement* forthcoming).

Zoning – The subject is in an unincorporated area of Cibola County and does not have any zoning.

Flood Zone – The subject site is located on Flood Insurance Rate Map 35031C2050E, dated February 17, 2010. The subject site is located in unshaded zone X. Areas in unshaded zone X are areas of minimal flood hazard.

Easements/Encroachments – No apparent adverse easements were noted or assumed that would negatively affect the marketability of the subject site. This assumption is subject to a current legal survey and title search of the property.

Access & Visibility – The site is accessible via the west side of NM 19. The site has average visibility from the arterial.

Utilities – All public utilities including electricity, gas, water, sewer and telephone services are in the neighborhood and near the subject. According to the client (Wilson & Company, Inc., Engineers & Architects) there is a power line on the subject site.

Site Shape & Size – According to information provided by the client, the subject site is irregular in shape and contains 625.85 acres, or 27,262,048 square feet (subject to survey). The subject's borders and size were defined by the client.

Real Estate Taxes – The subject property is taxed by the authority of Cibola County under the account number R11540. The subject site is assessed with other surrounding properties. Due to the nature of ownership, the subject is exempt from property taxes. Based on the conclusion of market value derived in this appraisal report, the subject is under assessed, which is not unusual in Cibola County.

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ENVIRONMENTAL STATEMENT

No apparent or obvious signs of hazardous materials were noted. Hazardous materials may or may not be present on the subject property, but we are not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, leaking oil or gas tanks, or other potentially hazardous materials may affect the value of the property. The opinion of value is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in these fields, if so desired.

HIGHEST & BEST USE HIGHEST & BEST USE ANALYSIS

Alternatively, it is the most profitable likely use to which a property can be developed. An additional implication is that the determination of highest and best use results from our judgment and analytical skills, and that the use determined from this analysis represents an opinion, not necessarily a fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based.

HIGHEST & BEST USE AS VACANT

Based on the four highest and best use criteria (legally permissible, physically possible, financially feasible, and maximally productive), it is our opinion that given current market conditions and supply and demand relationships, the highest and best use for the property as vacant, would be for agricultural development. The design, utility, and specific improvements would be dictated by the needs of the user.

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SUMMARY OF ANALYSIS & VALUATION

SALES COMPARISON APPROACH

An in-depth search was conducted for vacant site sales and listings in the subject's area which exhibit similar locational and physical characteristics to the subject site. Adjustments have been made to the comparable sales based on dissimilarities compared to the subject. Upward adjustments have been made to the sales for inferior characteristics, while downward adjustments have been made for superior characteristics. Following is a detailed summary identifying the most recent sales determined to be most comparable for our analysis.

		Chart	of Comparable	Vacant Land Sa	les		
	Subject	Sale 1	Sale 2	Sale 3	Sale 4	Sale 5	Listing 1
Property ID		902278	903507	880699	879623	879625	909598
Address	625.85 Acres west of NM 19	Laguna 117	Tract 7, James Valley	Lot 8, Red Canyon Ranches	Lot 6, Red Canyon Ranches	Lot 7, Red Canyon Ranches	Lots 6, 11, 12, Chimney Rock Ranch
City	Prewitt	Laguna	Grants	Prewitt	Prewitt	Prewitt	Prewitt
Sale Date		Oct-18	Jan-18	Jul-17	Jun-17	Jun-17	
Sale Price		\$80,000	\$52,000	\$115,000	\$65,500	\$79,000	\$185,000
Site Position	Interior	Interior	Interior	Interior	Interior	Interior	Interior
Topography	Mostly Level	Mostly Level	Slightly Rolling	Terraced	Terraced	Terraced	Slightly Rolling
Zoning	None	A-1	R-1	A-1	A-1, R-1	A-1, R-1	A-2, R-2
Use		Speculative	Speculative	Speculative	Speculative	Speculative	Speculative
Utilities	Near Site	None	None	None	None	Well on site	None
Site Area (AC)	625.8500	117.3900	50.8300	140.6100	140.0000	140.0000	191.0000
Site Area (SF)	27,262,048	5,113,508	2,214,155	6,124,972	6,098,400	6,098,400	8,319,960
Sale Price/Acre		\$681	\$1,023	\$818	\$468	\$564	\$969
Property Rights		0%	0%	0%	0%	0%	0%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Adjusted Price/SF	(-	\$681	\$1,023	\$818	\$468	\$564	\$969
Financing Terms		0%	0%	0%	0%	0%	0%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Adjusted Price/AC		\$681	\$1,023	\$818	\$468	\$564	\$969
Conditions of Sale		0%	0%	0%	0%	0%	-15%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$145,29
Adjusted Price/SF		\$681	\$1,023	\$818	\$468	\$564	\$823
Expenditures		0%	0%	0%	0%	0%	0%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Adjusted Price/SF		\$681	\$1,023	\$818	\$468	\$564	\$823
Market Conditions		0%	0%	0%	0%	0%	0%
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Adjusted Price/AC	III.	\$681	\$1,023	\$818	\$468	\$564	\$823
			Property Ad	ustments			
Location		0%	0%	0%	0%	0%	0%
Physical							
Size		-10%	-20%	-10%	-10%	-10%	-10%
Utilities		0%	0%	0%	0%	0%	0%
Topography		0%	5%	10%	10%	10%	5%
Zoning		0%	0%	0%	0%	0%	-20%
Net Property Adj.	-	-10%	-15%	0%	0%	0%	-25%
		-\$68	-\$153	\$0	\$0	<u>\$0</u>	-\$206
Adjusted Price/Ac		\$613	\$870	\$818	\$468	\$564	\$617

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Smith Lake

Smith Lake

Smith Lake

Smith Lake

Thorisia Lake

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ANALYSIS OF SALES

Real Property Rights Conveyed

All sales represent the transfer of fee simple interests, and as such, adjustments for real property rights conveyed are not warranted.

Financing Terms

The sales represent cash equivalent transactions. Adjustments for financing terms are not warranted.

Conditions of Sale

All of the sales were reported to be arm's-length transactions with no distress conditions evident. Listings typically sell for less than their asking price. As such, Listing 1 was adjusted downward by 15%.

Market Conditions (Time)

All of the sales are sufficiently recent to represent current market conditions. No adjustments are necessary.

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Location Characteristics

Location refers to arterial linkage, access, frontage, traffic volume, and surrounding developments. The sales all have similar locations in rural areas like the subject.

Physical Characteristics

Size, utilities, topography, and zoning are primary components in analysis of physical characteristics of the tracts as they compare to the subject.

Size: Due to economies of scale, smaller sites tend to sell for more per square foot than larger sites. Sales 1, 3, 4, 5, and Listing 1 are all much smaller than the subject and were adjusted downward by 10% each. Sale 2 is significantly smaller than the subject and was adjusted downward by 20%.

Utilities: The subject and Sales 1, 2, 3, 4, and Listing 1 all have utilities near the sites; thus, no adjustments were made. Sale 5 has a well on the site; however, no adjustment is evident for utilities.

Topography: The subject has mostly level topography. Sale 2 and Listing 1 have slightly rolling topography and were adjusted upward by 5% each. Sales 3, 4, and 5 have terraced topography and were adjusted upward by 10% each.

Zoning: The subject site does not have any zoning. No adjustment is evident under this category.

Conclusion

The sales and listing present a range from \$468 to \$870 per acre, with a mean of \$658, a median of \$615, and a midpoint of \$669. Based on the locational and physical characteristics of the subject, we estimate a value of \$625 per acre.

PRICE PER SQUARE FOOT METHOD		
Total Site Area	625.85 Acres	
Price Per Acre	\$625/Acre	
Indicated Value	\$391,156	
Rounded to	\$390,000	

Sales Comparison Approach
"As Is" Opinion of Fee Simple Market Value
April 27, 2020
\$390,000

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FINAL RECONCILED OPINION OF MARKET VALUE

As previously mentioned, the client requested we value the site "as if vacant". Thus, only the Sales Comparison Approach was utilized. The Income Capitalization Approach is not applicable to the property as we were appraising the site as though vacant. The Cost Approach is not generally applicable in valuation of a property with no site or building improvements.

There were sufficient, recent, similar sales for a strong Sales Comparison Approach. A reasonably tight range of values was indicated. The data presented within the Sales Comparison Approach was considered extremely strong for analysis of the subject, and definitely provides a good indication of what buyers are willing to pay for vacant sites. From our analysis, we conclude the following opinion of market value for the subject property:

"As Is" Opinion of Fee Simple Market Value April 27, 2020 \$390,000

EXPOSURE & MARKETING TIME

We estimate the exposure time (i.e., the length of time the subject property would have been exposed for sale in the market had it sold at the market value concluded in this analysis as of the date of this valuation) to be one to two years. The estimated marketing time (i.e., the amount of time it would probably take to sell the subject property if exposed in the market beginning on the date of this valuation) is also estimated to be one to two years.

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ADDENDA

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We certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and have no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report, or to the parties involved with this assignment.
- · Our engagement in this assignment was not contingent upon developing or reporting predetermined
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- Jamie Ridley (license #03335-A) provided significant real property appraisal assistance to the persons signing this certification. Ms. Ridley researched the history of the subject, comparable sales, and comparable rental rates, and assisted in the valuation in this report.
- As of the date of this report, Shane LeMon and Kathleen E. Burmeister have completed the continuing education program for the Designated Members of the Appraisal Institute.
- As of the date of this report, Shane LeMon and Kathleen E. Burmeister have completed the continuing education program for the State of New Mexico.
- We have performed no other services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

Respectfully submitted,

AMERICAN PROPERTY

AMERICAN PROPERTY - Consultants & Appraisers, Inc.

Shane LeMon, MAI, CCIM NM General Certified Appraiser #00193-G Kathleen E. Burmeister, MAI

NM General Certified Appraiser #03025-G

Assumptions & Limiting Conditions

AMERICAN PROPERTY

The certification of the appraisers appearing in this appraisal report is subject to the following assumptions and limiting conditions:

- 1. This report is intended to comply with the reporting requirements set forth under Standard Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice for an Appraisal Report. Supporting documentation concerning the data, reasoning, and analyses is retained in the appraisers' file. The information contained in this report is specific to the needs of the client and for the intended use stated in this report. We are not responsible for unauthorized use of this report.
- 2. This report is an appraisal of the real estate only, with no consideration to the value of the liquor license, business enterprise, fixtures, furnishings or equipment.
- 3. No responsibility is assumed for the legal description or for matters including legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated.
- 4. The property is appraised free and clear of any or all liens or encumbrances unless otherwise stated.
- 5. Responsible ownership and competent property management are assumed.
- 6. The information furnished by others is believed to be reliable. However, no warranty is given for its accuracy.
- 7. All engineering is assumed to be correct. The plot plans and illustrative material in this report are included only to assist the reader in visualizing the property.
- 8. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
- 9. It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless noncompliance is stated, defined, and considered in the appraisal report.
- 10. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a nonconformity has been stated, defined, and considered in the report.
- 11. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
- 12. It is assumed that the utilization of the site and improvements is within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in the report.
- 13. Possession of this report, or a copy thereof, does not carry with it the right of publication.
- 14. The appraisers, by reason of this appraisal, are not required to give further consultation or testimony, or be in attendance in court, with reference to the property in question unless arrangements have been previously made.
- 15. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or the firm with which the appraisers are connected) shall be disseminated to the public through advertising, public relations, news, sales, or other media without prior written consent and approval from the appraisers.
- 16. The forecasts, projections, or operating estimates contained herein are based upon current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are, therefore, subject to changes in future conditions.

17.	Any value estimates provided in the report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in the report.
18.	Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, but was not observed by the appraisers. The appraisers have no knowledge of the existence of such materials on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation or other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.

Exhibit C Qualificationsof the Appraisers

SHANE LeMON, MAI, CCIM

PROFESSIONAL ASSOCIATIONS

Member of the Appraisal Institute: MAI No. 8662

State of New Mexico General Certified Real Estate Appraiser: #193-G

Individual Member of the Commercial Investment Real Estate Institute: CCIM No. 8029 State of New Mexico Licensed Broker: License No. 13725 I (Curtis Shane LeMon)

President of the FBI Citizens' Academy of New Mexico (2014-2015, 2017)

President of the Rotary Club of Albuquerque (2004/2005)

Chairman of the Board - Better Business Bureau of New Mexico & SW Colorado (2006/2007, 2017/2018); Board

member since 2002

President - New Mexico Corvette Association (2002 & 2007)

President – Interstate Commerce Industrial Center (2007 - 2018)

PROFESSIONAL EXPERIENCE

President

American Property - Consultants & Appraisers, Inc., Albuquerque, New Mexico Office, March 1990 to Present

President

Estate Valuation Consultants, Inc., Albuquerque, New Mexico Office, December 2002 to Present

President

BPOXpress, Inc., Albuquerque, New Mexico Office, 2015 to Present

Fee Appraiser

Stiebler & Associates, Albuquerque, NM, April 1985 to February 1990

Stiebler, Smith & Assoc., Albuquerque, NM, June 1984 to March 1985

Tax Accountant

Deloitte, Haskins & Sells, Albuquerque, NM, January 1983 to May 1984

SPECIALIZED APPRAISAL EXPERIENCE

Since June 1984, Mr. LeMon has served as a fee appraiser concentrating in the following areas:

Hotels & motels Vacant Land Condominiums Right-of-way Multi-family residences Office buildings Industrial buildings Farm & ranch **Retail Centers** Aircraft facilities Restaurants Special use properties Car washes Movie Theaters Subdivisions Golf courses

EDUCATION

University of Albuquerque, 1984; Accounting

Albuquerque Technical-Vocational Institute, 1980-1982; Business Management/Accounting

University of New Mexico, 1976-1980; Civil Engineering/Accounting

American Institute of Real Estate Appraisers Courses:

2; Standards of Professional Practice; 7/85

1A-1; Real Estate Appraisal Principles; 9/86

1B; Capitalization Theory & Techniques Part B; 9/87

1B-A; Capitalization Theory & Techniques Part A; 2/87

1A-2; Basic Valuation Procedures; 3/87

2-1; Case Studies in Real Estate Valuation; 3/88

2-2 Valuation Analysis & Report Writing; 6/88

MAI Comprehensive Examination; 8/89

New Mexico Real Estate Institute / KAPLAN Courses:

Real Estate Law; 2/96

Real Estate Practice: 2/96

Real Estate Broker Basics: 3/96

Real Estate Appraisal: 4/96

Real Estate Finance: 5/96

Real Estate Math: 5/96

NM Broker Examination: 6/96

NM Real Estate Commission - Mandatory; Albuquerque, New Mexico: 7/99, 4/02, 7/04, 11/07, 7/11, 4/14, 5/16

NM Advance Map Reading & Surveys; 8/05 - Albuquerque, New Mexico

NM Decision Making with the HP-10B Calculator; 9/05 - Albuquerque, New Mexico

NM Qualifying Broker Refresher Course; 12/07, 9/11, 5/14, 5/17 – Albuquerque, New Mexico

Leasing and Managing Residential Real Estate; 7/11 - Albuquerque, New Mexico

Successful Business Planning; 8/11 - Albuquerque, New Mexico

Negotiating and Completion of an Exchange; 8/11, 4/14 – Albuquerque, New Mexico

Understanding Residential Real Estate Investments; 3/14 - Albuquerque, New Mexico

Business Ethics in Real Estate; 10/15, 4/18 – Albuquerque, New Mexico

Property Management Essentials; 4/17 - Albuquerque, New Mexico

2017 NMREC Core Course A; 5/17 - Albuquerque, New Mexico

ANSI Square Footage Method of Measuring; 6/17 - Albuquerque, New Mexico

Real Estate & Taxes: What Ever Agent Should Know; 6/17 - Albuquerque, New Mexico

Easements and Access for the Non-lawyer; 7/17 - Albuquerque, New Mexico

Property Red Flags; 8/17 - Albuquerque, New Mexico

Mechanic's Liens: Law & Strategy; 8/17 - Albuquerque, New Mexico

Solar PV Value? Questions to Ask; 8/17 - Albuquerque, New Mexico

2018 NMREC Core Course B: 11/18 – Albuquerque, New Mexico

2019 NMREC Core Course C; 12/19 - Albuquerque, New Mexico

Surveys from A to Z; 2/20 - Albuquerque, New Mexico

Legal Descriptions & Survey Maps; 3/20 - Albuquerque, New Mexico

Commercial Investment Real Estate Institute

CI 101 - Financial Analysis for Commercial Investment Real Estate; 8/97 - Albuquerque, New Mexico

CI 201 - Market Analysis for Commercial Investment Real Estate; 2/98 - Albuquerque, New Mexico

CI 301 - Decision Analysis for Commercial Investment Real Estate; 5/98 - Albuquerque, New Mexico

CI 408 - Core Concepts Review - CCR; 6/98 - San Diego, California

Comprehensive Examination; 6/98 - San Diego, California

NAR Code of Ethics; 7/11, Albuquerque, New Mexico

Business Ethics in Real Estate 10/12, 10/15, 4/18 - Albuquerque, New Mexico

CONTINUING EDUCATION – Appraisal Related

American Institute of Real Estate Appraisers / Appraisal Institute

Standards of Professional Practice Update; 6/89 - Santa Fe, New Mexico

Reviewing Appraisals; 10/90 - Santa Fe, New Mexico

Accrued Depreciation; 1/91 - El Paso, Texas

Hotel/Motel Valuation Seminar; 6/91 - Dallas, Texas

Preparation and Use of the U.C.I.A.R. Form; 10/91 - Dallas, Texas

FHWA Course #14126; 12/91 - Santa Fe, New Mexico

Appraising Troubled Properties; 1/92 - El Paso, Texas

The Appraiser's Legal Liabilities; 9/92 - Las Cruces, New Mexico Appraisal Regulations of the Federal Banking Agencies; 3/93 - Albuquerque, New Mexico

Standards of Professional Practice, Parts A & B; 4/93 - Albuquerque, New Mexico

Appraisal Office of the Future; 2/94 - San Diego, California

Understanding Limited Appraisals; 6/94 - Los Angeles, California

Fair Lending and the Appraiser; 4/95 - Las Cruces, New Mexico

Course 520; Highest & Best Use and Market Analysis; 9/97 - Phoenix, Arizona

Small Hotel/Motel Valuation Seminar; 9/98 - Ruidoso, New Mexico

Standards of Professional Practice, Part A (USPAP); 6/99 - Albuquerque, New Mexico

Standards of Professional Practice, Part B; 6/99 - Albuquerque, New Mexico

Valuation of Detrimental Conditions; 9/99 - Albuquerque, New Mexico

Real Estate Fraud; 1/01 - Albuquerque, New Mexico

Report Writing & Valuation Analysis; 6/01 - San Diego, California

General Applications; 10/01 - Salt Lake City, Utah

USPAP Course 401; 3/03 - Albuquerque, New Mexico

Rates and Ratios: Making Sense of GIMs, OARs and DCF; 7/04 - Albuquerque, New Mexico

USPAP Update Course 400; 1/05 - El Paso, Texas

Site to Do Business; 10/05 - Albuquerque, New Mexico

What Clients Would Like Their Appraisers to Know; 10/05 - Albuquerque, New Mexico

FHA and the New Residential Appraisal Form; 1/06 - Albuquerque, New Mexico

Subdivision Valuation Seminar; 4/06 – Santa Fe, New Mexico

Appraisal Consulting; A Solutions Approach for Professionals; 7/06 - Albuquerque, New Mexico

USPAP Course; 11/06 - Albuquerque, New Mexico

Business Practices & Ethics; 12/06 - Albuquerque, New Mexico

Cool Tools: New Technology for Real Estate Appraisers; 10/07 - Albuquerque, New Mexico

USPAP Course; 1/08 - Albuquerque, New Mexico

Office Valuation: A Contemporary Perspective 1/08 - Albuquerque, New Mexico

An Introduction to Valuing Green Buildings 9/08 - Albuquerque, New Mexico

Appraisal Tools Tune-Up 10/09 - Ruidoso, New Mexico

Appraising in 2009 10/09 - Ruidoso, New Mexico

Appraisal in Litigation 10/09 - Ruidoso, New Mexico

Appraising the Appraisal Business 10/09 – Ruidoso, New Mexico

Uniform Appraisal Standards for Federal Land Acquisitions 12/09 - Albuquerque, New Mexico

USPAP Course; 1/10 - Albuquerque, New Mexico

Business Practice & Ethics; 9/10 – Albuquerque, New Mexico

The Lending World in Crisis – What Clients Need Their Appraisers to Know Today; 11/10 – Albuquerque, New Mexico

Appraisal Review Seminar - General; 1/11 - Albuquerque, New Mexico

IRS Seminar: Conservation Easements & Your Taxes: 6/11 – Albuquerque, New Mexico

Appraisal Curriculum Overview (2-Day General): 9/11 – Albuquerque, New Mexico

Real Estate Finance, Value and Investment Performance; 10/11 – Albuquerque, New Mexico

Supervisor/Trainee Class - NM Real Estate Appraisers Board: 1/12 - Santa Fe, New Mexico

2012-2013 USPAP Course; 1/12 - Albuquerque, New Mexico

Evaluating Commercial Construction (2 days); 9/12 – Albuquerque, New Mexico

Practical Regression Using Microsoft Excel (2 days); 10/12 - Albuquerque, New Mexico

Fundamentals of Separating Real Property, and Intangible Business Assets (SBA Required) (2 days); 6/13 -

Albuquerque, New Mexico

Supervisor/Trainee Class - NM Real Estate Appraisers Board; 12/13 - Albuquerque, New Mexico

Business Practices & Ethics; 1/14 - Albuquerque, New Mexico

2014-2015 USPAP Course; 1/14 – Albuquerque, New Mexico

Litigation Appraising: Specialized Topics & Applications; 10/14 - Ruidoso, New Mexico

NM Real Estate Appraisers Board Mandatory Renewal Class; 12/15 - Albuquerque, New Mexico

Business Practices & Ethics; 2/16 - Albuquerque, New Mexico

2016-2017 National USPAP Update Course; 2/16 - Albuquerque, New Mexico

Condemnation Appraising: Principles & Applications; 10/16 – Albuquerque, New Mexico

Contract or Effective Rent: Finding the Real Rent; 11/17 – Albuquerque, New Mexico

Examining Property Rights and Implications in Valuation; 11/17 - Albuquerque, New Mexico

2018-2019 National USPAP Update Course; 12/17 - Albuquerque, New Mexico

Business Practices & Ethics; 2/18 - Albuquerque, New Mexico

Supervisory Appraiser/Trainee Appraiser Course; 3/18 – Albuquerque, New Mexico (online)

Integrated Development Ordinance (IDO) Training; 5/18 - Albuquerque, New Mexico

Residential and Commercial Valuation of Solar; 1/19 - Albuquerque, New Mexico

Integrated Development Ordinance Training; 5/18 – Albuquerque, New Mexico

2020-2021 National USPAP Update Course; 1/20 - Albuquerque, New Mexico

COURT TESTIMONY - Appraisal Related

Mr. LeMon has provided his services as an Expert Witness in a variety of courts in New Mexico since 1990. He has been involved in litigation for over 50 cases involving real estate found in various areas of the state. Most often he provides secondary appraisal services, deposition testimony, and on a few occasions when cases are not settled out of court, court testimony.

State of New Mexico



PO Box 25101

Santa Fe, NM 87505

(505) 476-4622

This is to certify that

Curtis S LeMon #193-G

Having complied with the provisions of the New Mexico Real Estate Appraisers Act is hereby granted a license to practice as a

General Certified Appraiser

This appraiser is eligible to perform in Federally Related Transactions

Issue Date: 12/01/1990 Date Expires: 04/30/2022

THIS LICENSE MUST BE CONSPICUOUSLY POSTED IN PLACE OF BUSINESS



This Vertifies That

the American Institute of Real Estate Appraisers

has awarded

Curtis Shane LeMon

the Professional Designation

MAI

subject to the limiting conditions of membership as set forth in the By-Paws and Regulations of the American Institute of Real Estate Appraisers.



In Witness Whereof, the Governing Council of the American Institute of Real Estate Approxises has authorized this certificate to be signed in its behalf by the President and Executive Vice President, and the Corporate Seal to be hereunto affixed on this 12 th day of December 1990.

PRESIDENT

James R. Langley scing EXECUTIVE VICE PRESIDENT

Cer firete No

Commercial Investment Real Estate Institute

An Affiliate of the NATIONAL ASSOCIATION OF REALTORS®

By election of the Governing Council has designated

Shane LeMon

as a

CERTIFIED COMMERCIAL INVESTMENT MEMBER



Devisy Struble, CCIM

CERTIFICATE NO. 8029 June 10, 1998

KATHLEEN E. BURMEISTER, MAI BACKGROUND AND EXPERIENCE

PRESENT POSITION

Vice President, Dominion Property Advisors, Albuquerque, New Mexico 2005-present Associate, American Property Consultants & Appraisers, Inc., Santa Fe, New Mexico

CONTACT INFORMATION

505.688.8789 – Cell kathleenm@dominionproperty.com kathleenmclb@gmail.com

EDUCATION

Bachelor of Science-Biology and Earth and Planetary Sciences University of New Mexico, Albuquerque, NM 87131 Master of Business Administration-Marketing and International Business University of New Mexico, Albuquerque, NM 87131 Bilingual

REAL ESTATE COURSE WORK

Uniform Standards of Professional Appraisal Practice

Advanced Land Valuation: Sound Solutions to Perplexing Problems

Contract or Effective Rent: Finding the Real Rent

Examining Property Rights and Implications in Valuation

Analyzing Operating Expenses

Advanced Spreadsheet Modeling for Valuation Applications

Introduction to the Appraisal Profession Appraisal Techniques

Real Property Interest & Legal Descriptions for Appraisers

How to Use the Uniform Residential Appraisal Report

Basic Income Capitalization

Advanced Income Capitalization

General Appraiser Market Analysis and Highest and Best Use

Appraisal of Nursing Home Facilities

Business Practice and Ethics

Introduction to Valuing Commercial Green Buildings

Advanced Internet Search Strategies

Advanced Concepts & Case Studies

General Appraiser Report Writing and Case Studies

Comprehensive Examination Preparation Courses

ACADEMIC POSITIONS

Research Assistant/Instructor, Graduate Assistant, Anderson School of Business, University of New Mexico 2001-2002

Research Assistant, Earth and Planetary Sciences Department, University of New Mexico

Research Assistant MBRS, School of Medicine, University of New Mexico, 1996-1999

EXPERIENCE

Kathleen Mc Leroy has worked on various commercial appraisal assignments located throughout New Mexico and Colorado. Ms. McLeroy has worked independently and with various MAI

designated appraisers. She has shown a superior aptitude for commercial appraisal as a result of an intense workload often involving complex properties with unique components of value. Clients served included individuals, Fortune 500 corporations, banks and other lending institutions, government agencies, life insurance companies and attorneys. Estates appraised included fee simple, leased fee, leasehold and subleasehold. Property types include the following:

Office Buildings - Professional, Medical and Dental Retail Buildings - Freestanding, Strip and "Big Box" Multi-Family Residential Apartment Properties LIHTC Apartment Properties Storage Yards Light Industrial Properties - Office/Warehouses, Distribution Warehouses Assisted Living, Nursing Home and Special Care Facilities Vacant Land - Commercial, Residential, Agricultural, Ground Lease Section 8 Apartments Houses of Worship Single Family Residential Subdivisions Hotels-Limited and Full Service Bed & Breakfast Facilities (Rural and Urban) Gas Station & Convenience Stores Mortuaries and Cemeteries

AFFILIATIONS

Member, Appraisal Institute-MAI Rio Grande Chapter of the Appraisal Institute - President (2018) LDAC - 2017 NM General Certified Real Estate Appraiser (No. 03025-G) Hispanic MBA Association Marketing Association Honors Graduate Golden Key National Honor Society SPURS, Honor Society Deans List American Geological Institute Scholar

Prior Professional Experience

2003-2005

Assistant General Manager/General Manager Mastro's Corporation, Albuquerque, NM

Responsibilities:

Managed a staff of + 60 Employees. Assisted with payroll, inventory controls, purchasing, ordering, accounting, marketing and financing for a restaurant with gross annual sales of + \$3,000,000. Organized public events for +8000 people which consist of one of the major events ever done by a private organization in downtown Albuquerque



Jamie L. Ridley

PROFESSIONAL ASSOCIATIONS

State of New Mexico Registered Real Estate Apprentice Appraiser: No. 03335-A

PROFESSIONAL EXPERIENCE

Associate

American Property – Consultants & Appraisers, Inc., Albuquerque, New Mexico; October 2013 to Present

Associate

Estate Valuation Consultants, Inc., Albuquerque, New Mexico; October 2013 to Present

New Mexico Works, Los Lunas, New Mexico; June 2011 to October 2013

State of New Mexico, Human Services Department, Belen, New Mexico; August 2008 to June 2011

EDUCATION

University of New Mexico, Bachelor of Arts in Communication; 2007

APPRAISAL EDUCATION

Appraisal Institute courses:

General Appraiser Sales Comparison Approach; 10/14 – Aurora, Colorado Real Estate Finance Statistics and Valuation Modeling; 11/15 – San Diego, California General Appraiser Income Approach Part 1; 4/16 – Aurora, Colorado General Appraiser Income Approach Part 2; 5/16 – Aurora, Colorado General Appraiser Site Valuation and Cost Approach; 3/17 – Austin, Texas Integrated Development Ordinance (IDO) Training; 5/18 – Albuquerque, New Mexico General Appraiser Market Analysis and Highest and Best Use; 8/18 – Aurora, Colorado

Other appraisal courses:

Basic Appraisal Principles; 10/13 – Albuquerque, New Mexico Basic Appraisal Procedures; 10/13 – Albuquerque, New Mexico USPAP (15-hour); 10/13 – Albuquerque, New Mexico USPAP (7-hour update), 1/15 – Albuquerque, New Mexico State of New Mexico Mandatory Update Course, 2/15 USPAP (7-hour update), 3/17 – Albuquerque, New Mexico USPAP (7-hour update), 1/19 – Albuquerque, New Mexico

State of New Mexico REAL ESTATE APPRAISERS BOARD

PO Box 25101

Santa Fe, NM 87505

(505) 476-4622

This is to certify that

Jamie Ridley

#03335-A

Having complied with the provisions of the New Mexico Real Estate Appraisers

Act is hereby authorized to practice as a

APPRENTICE APPRAISER

Issue Date: 12/19/2013

Date Expires: 04/30/2021

This appraiser is NOT eligible to perform in Federally Related Transactions

THIS LICENSE MUST BE CONSPICUOUSLY POSTED IN PLACE OF BUSINESS





Appendix F - Building Permit Application & Checklist













The following pages contain forms and checklists related to approval of construction projects in McKinley County and in the State of New Mexico. While McKinley County does not require building permits for construction, it does require a Subdivision Improvement Agreement (SIA), laying out responsibility for construction of different infrastructure related to a proposed development These are provided to prospective developers as they begin navigating the process of developing within the industrial park.

The documents on the following pages are the following:

- 1. Draft McKinley County Subdivision Improvements Agreement (SIA)
- 2. Building Permit Guide for Commercial Construction Construction Industries Division, Regulation and Licensing Department, State of New Mexico (page 6 of this appendix)
- 3. Multi-Purpose State Building Application Regulation and Licensing Department, State of New Mexico (page 7 of this appendix)

Appendix F Building Permit Forms & Checklist

1

Village of Milan Tract Farms Rail-Served Industrial Park MASTER PLAN AND PRELIMINARY DESIGN

Figure 1

Nearest Major Streets:	
No. of Parcel:	

SUBDIVISION IMPROVEMENTS AGREEMENTPUBLIC AND/OR PRIVATE

AGREEMENT TO CONSTRUCT PUBLIC AND/OR PRIVATE DEVELOPMENT IMPROVEMENTS

THIS AGREEMENT is made	e this	day of		, 20), by
and between the McKinley County, 1	New Mo	exico ("Count	y"), a political	sub-division,	, whose
address is 207 W. Hill Ave., Gallup,	NM 87	305, and			
address is 207 W. Hill Ave., Gallup, ("Developer"), a [state the type of but	ısiness e	entity, for insta	ance, "New M	exico corpora	ition,"
"general partnership," "joint venture,				whose addres	
telephone number is	, is n	nade in Albuq	uerque, New I	Mexico, and is	s entered
into as of the date of final execution	of this A	Agreement.			
1. <u>Recital</u> . The Developer is	develop	oing certain la	nds within Pre	witt, McKinle	ey Count
New Mexico, known as [existing leg	al desci	ription:]			
,recorded on		in Book	, pages	throug	gh
as Document No.		_in the records	of the McKinle	y County Clerk	x, State of
New Mexico (the "Subdivision"). The D					
the present real property owner exactly	as showi	n on the real est	tate document c	onveying title i	in the
Subdivision to the present owner:]					
				("Ow	vner").
	, , ,	G 1	1	1	
The Developer has submitted		•	11	•	
Development Plan identified as			(lescribing Dev	veloper's
Property ("Developer's Property").					
As a result of the development	nt of the	e County's Sul	bdivision, the	Subdivision C)rdinance
("S.O.") requires the Developer, at n	o cost to	o the County,	to install certa	in public and/	or private
improvements, which are reasonably	related	to the develop	pment of the P	arcel, or to fir	nancially
guarantee the construction of the pub	olic and	or private imp	provements as	a prerequisite	e to
approval of the final building permit	or the S	Site Developm	ent Plan for th	ne Parcel.	
2. Improvements and Constr	uction I	Deadline. The	Developer agr	rees to install	and
complete the public and/or private in					
infrastructure listing ("Improvements					
, 20, ("Construction					
Improvements are shown in greater of					
which have been filed with the Coun		-			-
which have been thed with the Coun	, 5 111	Sillour alla arc	identified as i	. 10,000 110	

County Clerk's Recording Label

1 of 7

Note: To compute the Construction Completion Deadline: If a final plat <u>will</u> be filed after Developer meets the requirements of this Agreement, the Construction Completion Deadline can be no later than two years after execution of this Agreement. If this Agreement, with any amendments does not utilize the maximum time allowed for completion of construction, the Developer may obtain an extension of the Construction Completion Deadline if Developer shows adequate reason for the extension.

3. Work Order Requirements. The County agrees to issue a Work Order after:

A. The Developer causes to be submitted all documents, and meets all requirements listed **Exhibit A**, including submitting a Certificate of Insurance in a form acceptable to the County. The certificate must establish that the Developer has procured, or has caused to be procured, public liability insurance in the amount of not less than One Million Dollars (\$1,000,000) combined single limit for accidents or occurrences which cause bodily injury, death or property damage as a result of any condition of the Site Development, the Improvements, or the Developer's construction activities within, or related to the Developer's Project. The insurance policy must name the McKinley County, its employees and elected officials, as their interest may appear, as additional insured. The Developer must maintain the insurance until the County accepts the public Improvements and/or approves the private Improvements. The cancellation provision must provide that if the policy is either canceled prior to the expiration date of the policy or is materially changed or not renewed, the issuing company will mail thirty (30) days written notice to the County, attention County Engineer.

B. The Developer complies with all applicable laws, ordinances and regulations, and pays the following required engineering, staking, testing fees, and other related County fees and County Clerk recording fees:

Type of Fee	Amount
Engineering Review and Project	3.25%
Oversight Fee	

Note: The Developer must pay the County all County fees which have been incurred during construction before the County will accept the public Improvements.

4. <u>Surveying, Inspection and Testing</u>. The Improvements shall be inspected, surveyed and tested in accordance with all applicable laws, ordinances, and regulations, and according to the following terms:

A. Construction Surveying. Consti	ruction surveying for the construction of the
public Improvements shall be performed by	
	, and construction surveying of the private
mprovements shall be performed by	If the construction
surveying is performed by an entity other than the	County, the County may monitor the
construction surveying and the Developer shall en	sure that the construction surveying entity
provides all construction surveying field notes, pla	ats, reports and related data to the County
which the County requires for review. Record draw	wings shall be provided by the entity

Industrial Park Development Agreement

2 of 7 05/28/2020

The Developer shall pay the County a reasonable fee for any construction surveying performed by the County.
by the county.
B. <u>Construction Inspection Methods</u> . Inspection of the construction of the public
Improvements shall be performed by and inspection of the private Improvements shall be performed by,
inspection of the private Improvements shall be performed by,
both New Mexico Registered Professional Engineers. If the inspection is performed by an entity
other than the County, the County may monitor the inspection and the Developer shall ensure
that the inspecting entity provides all inspection results, reports and related data to the County
which the County requires for review. The County retains the right to perform its own general overall inspection of the construction project at any time prior to final acceptance of the
Improvements, if deemed necessary or advisable by the County Engineer. The Developer shall
pay the County a reasonable fee for the level of inspection performed by the County.
pay the County a reasonable rection the level of hispection performed by the County.
C. Field Testing. Field testing of the construction of the public Improvements
shall be performed by, and field testing of the
private Improvements shall be performed by
certified testing laboratories under the supervision of a New Mexico Registered Professional
Engineer, in accordance with the current McKinley County Standard Specifications for Public
Works Construction. If any field testing is performed by an entity other than the County, the
County may monitor the field testing and the Developer shall ensure that the field testing entity
provides all field testing results, reports and related data to the County which the County requires for
review. The Developer shall pay the County a reasonable fee for any field testing performed by the
County.
D. <u>Additional Testing</u> . The County retains the right to perform all additional testing which the County Engineer deems is necessary or advisable, and the Developer shall pay the County a reasonable fee therefore.
5. <u>Financial Guaranty</u> . If final Construction Plan approval is requested, the Developer must provide the County with a financial guaranty in an amount of not less than 125% of the estimated cost of constructing the Improvements, as approved by the County Engineer. The financial guaranty must be irrevocable and may be in the form of a letter of credit, escrow deposit, or loan reserve letter issued by a Federally Insured Financial Institution; a bond issued by a surety qualified to do business in New Mexico; or other pledge of liquid assets which meets all County requirements. The County must be able to call the financial guaranty at any time within the sixty (60) days immediately following the Construction Completion Deadline. To meet the County's development agreement requirements, the Developer has acquired, or is able to acquire, the following Financial Guaranty:
Type of Financial Guaranty:
Amount: \$Name of Financial Institution or Surety providing Guaranty:
Name of Financial Institution or Surety providing Guaranty:
Date County first able to call Guaranty (Construction Completion Deadline):
Industrial Park Development Agreement 3 of 7 05/28/2020

performing the survey.

If Guaranty other than a Bond, last day County able to call Guaranty is:
Additional information:

- 6. Notice of Start of Construction. Before construction begins, the Developer shall deliver an acceptable Notice to Proceed to the County and shall arrange for a preconstruction conference and all required inspections.
- 7. Completion, Acceptance and Termination. When the County receives Developer's final acceptance package, the County shall review it for completeness and accuracy. If the package is acceptable, the County shall approve the package and issue a Certificate of Completion and Acceptance for the public Improvements and a Certificate of Completion for the private Improvements. Thereafter, the Developer's obligations to the County pursuant to this Agreement shall terminate, with the exception of the bond or other guarantee which the Developer has provided to assure the materials and workmanship, as required by this Agreement. After the County approves the final acceptance package, the County will promptly release this Agreement and the Financial Guaranty.
- 8. Conveyance of Property Rights. When the Improvements are completed, if the County does not own the real property upon, or in which, the public Improvements are constructed, the Developer will convey to the County all real and personal property rights which the County deems reasonably necessary, and all public Improvements, free and clear of all claims, encumbrances and liens before the County will accept the public Improvements. Conveyance may be made by appropriate dedication on the final plat of the Subdivision.
- 9. Reduction of Financial Guaranty Upon Partial Completion. The Developer shall be entitled to a reduction of the Financial Guaranty as a result of completing construction of part of the Improvements if the following conditions are met:
- A. Non-Loan Reserve Financial Guaranty. If a Financial Guaranty other than a loan reserve letter has been provided, the completed Improvements must be free-standing, functionally independent of any Improvements which have not yet been completed, and completed in substantial compliance with the approved construction plans, as determined by County on-site inspection in order to qualify for a Financial Guaranty reduction. If the Improvements which have been completed meet all County requirements, the County Engineer will estimate the cost of completing the remaining Improvements. Thereafter, the Developer must submit the following documents to the County for review and approval:
- (1) A revised Financial Guaranty in an amount of not less than 125% of the cost of completing the remaining Improvements, as estimated by the County;
- (2) A bond or other instrument acceptable to the County, which guarantees the completed Improvements against defective materials and workmanship for twelve months.
 - (3) Conveyance of real and personal property rights which meet the

requirements of section 8 of this Agreement.

After the County receives and approves the required documents, the County shall issue a Partial Certificate of Completion and Acceptance for the completed public Improvements and a Certificate of Partial Completion for the completed private Improvements.

- 10. <u>Indemnification</u>. Until the Improvements are accepted by the County, the Developer shall be solely responsible for maintaining the premises upon which the Improvements are being constructed in a safe condition. The Developer agrees to indemnify and hold harmless the County and its officials, agents and employees from any claims, actions, suits or other proceedings arising from or out of the acts or omissions of the Developer, its agents, representatives, contractors or subcontractors or arising from the failure of the Developer, its agents, representatives, contractors or subcontractors to perform any act or duty required of the Developer herein. The indemnification required hereunder shall not be limited as a result of the specifications of any applicable insurance coverage. Nothing herein is intended to impair any right or immunity under the laws of the State of New Mexico.
- 11. <u>Assignment</u>. This Agreement shall not be assigned without the prior written consent of the County and the Developer and the express written concurrence of any financial institution or surety which has undertaken to guarantee the completion of the Improvements. The County's approval will not be withheld unreasonably. If so assigned, this Agreement shall extend to and be binding upon the successors and assigns of the parties hereto.
- 12. Release. If the Site Development is sold, conveyed or assigned, the County will not release the Developer from its obligations under this Agreement and will continue to hold the Developer responsible for all Improvements until a successor in interest to the Developer has entered into a Development Improvements Agreement with the County. Thereafter, if the Developer's successor in interest has provided a substitute financial guaranty acceptable to the County, the County will release this Agreement and any related Financial Guaranty.
- 13. Payment for Incomplete Improvements. If the Developer fails to satisfactorily complete construction of the Improvements by the Construction Completion Deadline, the County may construct or cause the Improvements to be constructed as shown on the final plat and in the approved plans and specifications. The Developer shall be jointly and severally liable to pay to, and indemnify the County for the total cost, including, but not limited to, engineering, legal, and contingent costs, together with any damages, either direct or consequential, which the County may sustain as a result of Developer's failure to perform as required by this Agreement. If the direct or indirect costs and damages to the County exceed the amount of the County's Claim of Lien or any Financial Guaranty, the Developer shall be liable to, and shall pay, the County for all such costs and damages. The surety or sureties shall be jointly and severally liable to pay to and indemnify the County for the total cost to the extent of their obligations pursuant to any Financial Guaranty.
- 14. <u>Binding on Developer's Property</u>. The provisions of this Agreement constitute covenants running with Developer's Property for the benefit of the County and its successors and assigns until terminated, and are binding on the Developer and the Owner and their heirs, successors and assigns.

- 15. <u>Notice</u>. For purposes of giving formal written notice, including notice of change of address, the Developer's and the County's addresses are as stated in the first paragraph of this Agreement. Notice may be given either in person or by certified U.S. mail, postage paid. Notice will be considered to have been received within six (6) days after the notice is mailed if there is no actual evidence of receipt.
- 16. <u>Entire Agreement</u>. This Agreement contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.
- 17. <u>Changes to Agreement</u>. Changes to this Agreement are not binding unless made in writing, signed by both parties.
- 18. <u>Construction and Severability</u>. If any part of this Agreement is held to be invalid or unenforceable, the remainder of the Agreement will remain valid and enforceable if the remainder is reasonably capable of completion.
- 19. <u>Captions</u>. The captions to the sections or paragraphs of this Agreement are not part of this Agreement and will not affect the meaning or construction of any of its provisions.
- 20. <u>Form not Changed</u>. Developer agrees that changes to this form are not binding unless initialed by the Developer and signed by the County Legal Department on this form.
- 21. <u>Authority to Execute</u>. If the Developer signing below is not the Owner of the Subdivision, the Owner must execute the Power of Attorney below.

Executed on the date stated in the first paragraph of this Agreement.

DEVELOPER:	MCKINLEY COUNTY
By [Signature]:	By:
Name [Print]:	Anthony Dimas, County Manager
Γitle:	Dated:
Dated:	

DEVELOPER'S NOTARY	
STATE OF)) ss.	
COUNTY OF MCKINLEY) ss.	
This instrument was acknowledged before me on this_by [name of person:]	day of
(SEAL)	
My Commission Expires:	
Notary Public	
COUNTY'S NOTARY	
STATE OF NEW MEXICO)	
COUNTY OF MCKINLEY) ss.	
This instrument was acknowledged before me on this, by <u>Anthony Dimas, County Manager</u> of McKinley behalf of said corporation.	day of, County, a political sub-division, on
(SEAL)	
My Commission Expires:	

Notary Public

Appendix F Building Permit Forms & Checklist

BUILDING PERMIT GUIDE FOR COMMERCIAL CONSTRUCTION

State of New Mexico Regulation and Licensing Department Construction Industries Division

Albuquerque Office: 5500 San Antonio Dr NE Las Cruces Office: 505 S. Main, Ste 103

505 S. Main, Ste 103 2550 Cerrillos rd Albuquerque, New Mexico 87113
P.O. Box 939
Las Cruces, New Mexico 88004-0939
P.O. Box 25101
Santa Fe, New Mexico 87504

(505) 222-9800 FAX (505) 765-5670 (505) 524-6320 FAX (505) 524-6319 (505) 476-4700 FAX (505) 476-4619

PERMIT APPLICATION DATA

Santa Fe Office:

To obtain a permit, the applicant shall fill out an APPLICATION for STATE BUILDING PERMIT supplied by the Construction Industries Division office. Applicant must supply description of work, building address, construction material, total square footage, specific use of building, project owner's name and address, contractor's business name, address and license number, architect's name, address and license number. The licensed contractor requesting the permit must sign the application. Call (505) 476-4869 for more information.

ZONING APPROVAL

Your project may be located in an area requiring zoning approval from a city or county zoning authority. You must obtain zoning approval and a signature on the APPLICATION for STATE BUILDING PERMIT before applying to this office for the building permit. Contact the Construction Industries Division for zoning requirements in your area.

VALUATION AND FEES

Valuation of your project is based CID Rules New Mexico Administrative code 14.5.5.10 . The project does need the <u>signed contract</u> between the project owner and contractor. The fee, which covers plan review, the permit notice and required inspections, is based on the valuation amount. Our office will calculate the valuation and fee for you. If you are mailing the application and plans to the nearest CID office, call any of the offices listed above for the fee prior to mailing.

PLAN SUBMITTAL

Two complete sets of plans and specifications must be submitted to Construction Industries Division for permit and must be sufficiently clear to show the project in its entirety. Following is a minimum standard of required drawings for review by Construction Industries Division for new commercial construction, additions, and remodels (use as a checklist when preparing your submittal):

I. _COVER SHEET.

- A. Project identification
- B. Project address and a location map
- C. All design professionals identified
- D. The prime design professional (the professional responsible for project coordination) must be identified. All communications should be directed through this individual
- E. Design Criteria list:
 - I. Type of building construction (IBC Chapter 6)
 - Square Footage area of each floor or wing and total building square footage
 - Group or use and occupancy (IBC CHAPTER 3) including mixed occupancies if applicable
 - 4. Occupant load (IBC Chapter 10, Table 10004.1.1)
 - 5. Allowable area calculations
 - 6. Exiting requirements
 - 7. Plumbing fixture requirements based on IBC Chapter 29,
 - 8. Fire sprinklers
 - 9. Height and number of stories
 - 10. Land use zone
 - II. Location of property
 - 12. Seismic location
- 2. ___ SITE PLAN. Show proposed new structures and any existing buildings or structures on site, all property lines with dimensions, all streets, easements and setbacks. Show all water, sewer, electrical points of connection, proposed service routes and existing utilities on

the site. Show all required parking per New Mexico Building Code, including accessible parking, access aisles and ramps per ANSI. Show drainage and grading information. Indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes. When appropriate, include a topographical survey. Show north arrow.

- 3. __ FOUNDATION PLAN. Show all foundations and footings. Indicate size, location, thickness, materials and strengths (including concrete strength) and reinforcing. Show all imbedded anchoring such as anchor bolts, hold-downs, post bases, etc. Provide a geotechnical report, including soil-bearing capacity, for the purposed structure at that site.
- 4. ___ FLOOR PLAN. Show all floors including basements. Show all rooms, with their use, overall dimensions and locations of all structural elements and openings. Show all doors and windows. Provide door and window schedules. All fire assemblies, door label ratings, area and occupancy separations and draft stops shall be shown. Include exiting requirements.
- FRAMING PLANS AND ROOF FRAMING PLANS. Show all structural members, their size, methods of attachment, location and materials for floors and roofs. Show roof plan.
- 6. ___ EXTERIOR ELEVATIONS. Show all views. Show all vertical dimensions and heights. Show all openings and identify all materials and show lateral bracing system, where applicable.
- 7. ___ BUILDING SECTIONS AND WALL SECTIONS. Show & label materials of construction, non-rated and fire-rated assemblies and fire-rated penetrations. Show dimension of all heights.
- 8. ___ MECHANICAL SYSTEM. Show the entire mechanical system. Include all units, their sizes, mounting details, all duct work and duct sizes. Indicate all fire dampers where required. Provide equipment schedules. The State Fire Marshall's Office shall approve sprinkler systems plans. Submit energy conservation calculations per 2009 Model Energy Code requirements.
- PLUMBING SYSTEM. Show plumbing riser diagrams, all fixtures, piping, slopes, materials and sizes. Show points of connection to utilities, septic systems, pre-treatment sewer systems and water wells.
- IO. __ELECTRICAL SYSTEM. Show electrical riser diagrams, all electrical fixtures (interior, exterior and site) wiring sizes and circuiting, grounding, panel schedules, single line diagrams, instantaneous fault current, load calculations and fixture schedules. Show lighting calculations and point of connection to utility.
- II. __STRUCTURAL CALCULATIONS. Where required, provide structural calculations for the entire structural system of the project. Include wind, roof and floor design loads.
- I2. ___ SPECIFICATIONS. Either on the drawings or in booklet form, further define construction components, covering materials and methods of construction, wall finishes and all pertinent equipment. Schedules may be incorporated into a project manual in lieu of drawings.
- 13. __ADDENDA AND CHANGES. It shall be the responsibility of the individual identified on the cover sheet as the prime design professional to notify the building official of any and all changes throughout the project and provide revised plans, calculations and other appropriate documents prior to actual construction.
- 14. __REVISIONS. For clarity, all revisions should be identified with a delta symbol and clouded on the drawings or resubmitted as a new plan set.

REQUIREMENTS FOR PROFESSIONAL SEALS

When any professional seal is required for a building permit, every standard page of the construction documents must bear a professional seal with original signature and date, certifying professional responsibility for every aspect of the project. Referenced serial drawings do not require a seal.

SINGLE SEAL REQUIREMENT

The single seal of either a New Mexico registered engineer (structural) or architect meets the requirement for professional certification on projects that do not exceed a construction valuation of four hundred thousand dollars (\$400,000) and do not exceed a total occupant load of fifty (50).

Nonresidential buildings, as defined in the 2015 International Building Codes, or additions having a total occupant load of ten (10) or less and not more than two (2) stories in height, which shall not include E-3, H, or I occupancies, will not require the seal of either an architect or engineer, unless the Construction Industries Division determines such seal is necessary to protect public life, safety and welfare.

Plans, specifications and calculations stamped by an Electrical Engineer licensed to practice in New Mexico shall be required for any installation with a calculated service capacity over 100 kVA single-phase or over 225 kVA three-phase. This requirement shall NOT apply to remote installations such as single irrigation pumps.

Plans, specifications and calculations stamped by a Mechanical Engineer licensed to practice in New Mexico may be required on mechanical permits of \$50,000.00 or more in value and/or commercial buildings three stories and higher

MULTIPLE SEALS REQUIREMENT

The professional seals of both an architect and an engineer (structural) (or engineers) are required on projects with either a construction valuation greater than four hundred thousand dollars (\$400,000.00) or a total occupant load greater than fifty (50). Occupant load shall be in accordance with Table 1004.1.2 of 2015 International Building Code.

REQUIRED INSPECTIONS

To request an inspection e-mail us at CID.Inspection@state.nm.us our call 505-222-9813 or 877-243-0979

- I. FOUNDATION INSPECTION. To be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. All materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with approved nationally recognized standards, the concrete need not be on the job. Where the foundation is to be constructed of approved treated wood, additional inspections may be required by the building official.
- CONCRETE SLAB or UNDER-FLOOR INSPECTION. To be made after all in-slab or under-floor building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.
- FRAME INSPECTION. To be made after the roof, all framing, fire blocking and bracing are in place and all pipes, chimneys and vents are complete and the rough electrical, plumbing, and heating wires, pipes and ducts are approved.
- WEATHER-RESISTIVE BARRIER INSPECTION. To be made after installation of the appropriate weather-resistive barrier and before such barrier is covered.
- **5. FINAL INSPECTION.** To be made after finish grading and the building is completed and ready for occupancy. Final electrical, plumbing and mechanical inspections must be conducted prior to final general

- construction inspection. The Construction Inspector will issue the Certificate of Occupancy to the contractor after approving final general construction inspection.
- 6. OTHER INSPECTIONS. In addition to the called inspections specified above, the Construction Inspector may make or require other inspections of any construction work to ascertain compliance with provisions of the New Mexico Building Code and other laws which are enforced by the code enforcement agency. The licensed plumber and electrician performing the work under the appropriate permits are responsible for coordinating plumbing, mechanical and electrical inspections.

CERTIFICATE OF OCCUPANCY

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certification of occupancy as provided.

COMMERCIAL DEMOLITION AND RENOVATION

Call the Air Pollution Control bureau for information regarding the handling of asbestos containing materials at 1-800-224-7009 prior to demolition and renovation of existing commercial structures. The Air Pollution Control Bureau must be notified 10 days in advance of any demolition and renovation of commercial structures.

APPLICABLE CODES

The Construction Industries Division currently enforces the following codes:

- 2015 New Mexico Commercial & Residential Building Code
- 2015 International Building Code
- 2015 International Residential Code
- 2015 International Existing Building Code
- 2012 Solar Energy Code (IAPMO)
 2009 NM Energy Conservation Code
- ICC/ANSI A117.1-2009
- 2015 New Mexico Plumbing and Mechanical Code
- 2015 Uniform Mechanical Code (IAPMO)
- 2015 Uniform Plumbing Code (IAPMO)
- 2012 Uniform Swimming Pool, Spa and Hot Tub Code
- 2012 Uniform Solar Energy Code
- 2017 New Mexico Electrical Code
 2017 National Electrical Code
- 2012 National Electrical Safety Code
- Liquefied Petroleum Gas Standards
- 2017 NFPA 58
- 2012 NFPA 57
- 2015 NFPA 54
- 2010 NFPA 522011 NFPA 1192

ACCESSIBILITY

Accessibility requirements are detailed in Chapter 11, Accessibility, of the New Mexico Building Code, and supercede Chapter 11, Accessibility, of the International Building Code. The adopted standard of quality for accessible design is the ICC/ANSI A117.1-2009 "Accessible and Usable Buildings and Facilities".

CONSTRUCTION INDUSTRIES DIVISION WEB SITE

CID has developed a new information web site with "view only" information at www.state.nm.us/rld/cid. This site includes information of interest to consumers, business and the regulated community.

CONTRACTOR LICENSE LOOK-UP

A license web site has been developed at WWW.CONTRACTORSNM.COM. This site includes the names, addresses and telephone numbers of licensed contractors and their license classification. It also includes information on licensing and required qualifications for license examination.

SHE STATE		N	Multi- Purpose State E	Building Application		G	
	State of New Mexico Regulation and Licensing Department Construction Industries Division						
SEA A	Santa Fe 2550 Cerrillos Rd Santa Fe, NM 87505 Phone: (505) 476 - 4700 Fax: (505) 476 - 4685						
300 9312.005	Albuquerque	5500 San Anto		erque, NM 87109	(505) 222 - 9800	(505) 765 - 5670	
	Las Cruces	505 S. Main St	t. Ste. 103 Las Cru	uces, NM 88004	(575) 524 - 6320	(575) 524 - 6319	
Building Per	rmit (Commercial includes el	ectrical/mechanical/plumb	ing reviews) Reside	ential Commercial	Pre-Bid 1	rade Review Only	
New Constru		ion/Repairs/Demolition		Foundation only	Reroof	lectrical Review	
wood	metal frame m	asonry adobe	rammed earth	metal structure other	N	lechanical/Plumbing Review	
Destripction of w	vork:				-11		
THE FOLLOWING	G INFORMATION MU	JST BE PROVIDED)				
Physical Address of jo	bb site (must provide a phy	/sical address)	Neares	t City/Town/Village	Zip Code	County	
GPS Coordinates		, ,		t only romm i mage	_р -		
optional	X Coordinate		Y Coordinate				
MUST provide w	ritten Directions						
-							
Property Owner	or Homeowner Infor	mation:					
First Name			Last Name		E-mail address:		
Address No. & Str	reet / PO Box / Rural I	Route	City	State 2	Zip Code Phone		
Contractor Inform	mation (must provid	e proof of contrac	t):				
Company Name					NM State License #	and classification	
Address No. & Str	reet / PO Box / Rural I	Route	City	State	E-Mail Address:		
Contact Information	on (Name)			Phone		X	
	onal Information:					^	
Design Froiessie	onal information.						
Company Name					NM State License #		
	. / DO D / D II						
Address No. & Sti	reet / PO Box / Rural I	Route	City	State			
Contact Information	on (Name)		Phone	E-mail address:			
Type of Construct		II IV V A	В	Energy Compliance	Climate Zor	Je.	
Occupancy Group				Prescriptive	1 2	3 4 5 6 7	
Division		3 4 5		Trade-off	لـــــا لـنــا		
Square Footage:	ا لـــا لـــا	ت ت ت		Performance	Enero	y Code Not Applicatable	
Valuation / Sign C	Contract:		Fire Sprinklers A	<u> </u>		/ N	
		THE FOLLOWING:		my signature below that I ha		n and state	
that the above is	correct. I agree to com	nply with the require	ments for the New Mexico	Building Code. I waive my	right to require any ins	pector to	
				ered by this permit. Howeve			
•	•			Division and this inspection mises complies with the New			
				tries Division from requiring (
of the New Mexic					,		
X							
	S	ignature				Date	
5			Official Use	•			
Date Issued:		Processe	ed By:	Tracking I			
Received By:				Total Fee			
Walk In	n Mail	E-Mail:		Partial Pa			
Paid By: Check		loney Order	Credit Ca	Balance Dard Purchase Order			
			Credit Ca	ruichase Order			
FLAINING/ZUNIN	IG APPROVED BY:	Signature				Date:	
FLOOD PLAIN APF	PROVED BY:	3.9				24.0.	
		Signature				Date:	
GENERAL BUILDI	NG APPROVED BY:	Cianatura				Doto	
UPC/UMC APPRO	VED BY:	Signature				Date:	
S. O, SIVIO AFFRO	· 20 01.	Signature				Date:	
NEC APPROVED E	BY:					=	
		Signature				Date:	

Revised 10/25/18

Appendix F Building Permit Forms & Checklist

Village of Milan Tract Farms Rail-Served Industrial Park MASTER PLAN AND PRELIMINARY DESIGN





Appendix G – BNSF Site Certification Information













BNSF Certified Sites are industrial parks that have gone through a vigorous review process to guarantee the site is ready for development. The Prewitt Industrial Park parcel sites offer direct rail service for customers looking to locate along BNSF Transcon. This appendix provides a copy of the application (see following page) with support documentation, including conceptual track plan. BNSF has indicated that the Site Certification process does not have a defined timeline and is often driven by number of applicants and timing that may take up to a year, before any decision is made.

The forms and information provided are the following:

- 1. BNSF Site Certification Pre-Application
- 2. Conceptual rail layout
- 3. Prewitt Industrial Park Site Boundary Limits

Appendix G BNSF Site Certification Information

BNSF SITE CERTIFICATION PRE-APPLICATIO

Phase 1 Environmental Site Assessment: Yes No

Cultural Resources & Threatened/Endangered Species Study: Yes
No

Rail Provider:

Geotechnical Investigation: Yes No

Rail On-Site: Yes
No

BNSF SITE CERTIFICATION PRE-APPLICATION							
Requestor's Name:	Phone & Email:		SITE				
Site Location (City, State):							
Site Name:		Total Site Size (Acres):					
Any Limits on Site Use (water/wetlands, roads, other obstructions):							
Current Zoning:							
Site Owner:	Publicly Owned						
Owner is prepared to make two year commitment on sale/lease terms and price: Yes \(\scale \) No \(\scale \)							
Utilities can be available at site within six months: Electricity Natural Gas Water Waste Water							

Year Completed:

Year Completed:

Year Completed:

NOTE: A recent aerial photo which clearly shows the site boundaries and proposed connection to BNSF Railway must be submitted with the BNSF Site Certification Pre-Application. Please return the completed form with an updated aerial to Shauna.Stagner@BNSF.com.

This application is to assist in determining the availability of certain data and level of readiness of industrial sites being proposed for certification. Submittal of this form does not assure that any site will be accepted into the program. If the site is selected then you may be required to submit a \$500 fee to continue the certification process.

Pre-Application Information

Total Site Size: 625.85 acres Limits on SIte Use: None

Current Zoning: None. McKinley County does not have zoning regulations.

Site owner: New Mexico State Land Office

Owner is prepared to make two-year committment on sale/lease terms and price (yes)

Utilities can be available at site within six months: (yes)

Phase I Environmental Site Assessment: Completed May 2020

No geotechnical investigation has been completed.

Full Cultural Resources & Threatened/Endangered Species studies have not been completed.

Rail On-Site: No



Appendix H – Site Marketing Brochure















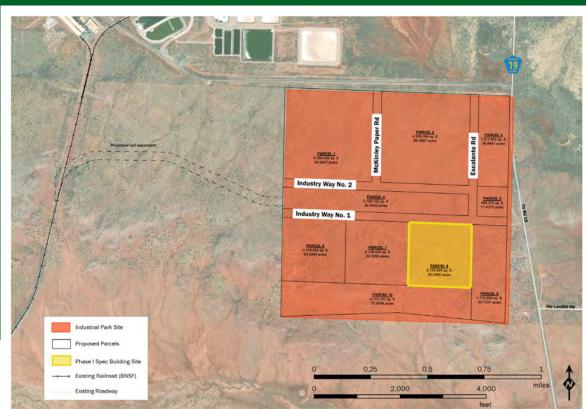




COMING JULY 2020

ECONOMIC DEVELOPMENT INCENTIVES

- Job Training Incentive Program (JTIP)
- Local Economic Development Act (LEDA) promotes Public Private Partnership for an economic benefit
- Rural Jobs Tax Credit













CONTACT INFORMATION

102 W. Hill Avenue, PO Box 1795 Gallup, NM 87301

505 772 2980 (p) 505 722 2987 (f) gallupedc.com





PREWITT

INDUSTRIAL **PARK**

PREWITT INDUSTRIAL PARK

Prewitt Industrial Park is a 625.85-acre, master-planned industrial development located in Prewitt, New Mexico with direct access to Interstate 40 (I-40) and the BNSF Southern Transcon. The Prewitt Rail-Served Industrial Rail Park offers a great location with easy access to transportation logistics, low front-end capital investment, development incentives, and quick space move-in. Prewitt Industrial Park is designed to support warehouse/logistics, energy supply, and manufacturing operations.

ADVANTAGES

- Access to I-40, is a major east-west Interstate Highway running through the south-central portion of the United States.
- I-40 runs through or near many major cities including Albuquerque, New Mexico; Amarillo, Texas; Oklahoma City, Oklahoma; Little Rock, Arkansas; Memphis, Tennessee; Nashville, Tennessee; Knoxville, Tennessee; Greensboro, North Carolina; and Raleigh, North Carolina.
- Access to the Southern Transcon, which is a railroad corridor between Southern California and Chicago, Illinois and serves as a BNSF Railway main line made up of 11 rail lines between Southern California and Chicago.
- Easy access to utilities and supported by quality roadway and drainage infrastructure.







- Tilt-up concrete construction for cost effective and time sensitive solutions
- Facilitated permitting process
- Preliminary Spec Building Design Plans available

ACCESS

- Major Highway I-40
- BNSF Southern Transcon
- Nestled midway between Gallup and Grants, NM

WORKFORCE SOLUTIONS

- New Mexico State University (NMSU) grants available for workforce development
- Accessible local workforce supported by Albuquerque which is approximately 1 hour and 30 minutes away
- Job Training Incentive Program (JTIP) funds classroom and on-the-job training for newly-created jobs















1 Overview

This appendix includes information on private utilities provided to the project team. This information includes details on the process, cost, and specifications needed to expand these utilities to new developments within the Industrial Park site. Information is provided for electric and internet. Natural gas information was not available but can be obtained from New Mexico Gas Company. Potable water would be provided by wells, and wastewater service would be available through onsite septic or evapotranspiration systems.

2 Electric

Continental Divide Electric Cooperative is the power provider in both Milan and Prewitt. The rules of engagement vary depending on the power supply needs, which in turn will require Primary or Secondary line tie-in. Using the notes outlined below, contractors will be expected to prepare and provide a sketch or set of plans showing the installation. Where contractor is specified the intent of this memo is that it is a licensed electrical contractor doing the work. CDEC will review the proposed sketch or plans and approve or specify specific changes that need to be made. The approval will need to be done prior to and work being done. The procedures for underground line installation are detailed in Section 2.2 "Contractor Specifications."

2.1 HIGH-LEVEL COST ESTIMATE

A build-out scenario using the 120,000 SF Spec Building is the basis of cost estimating the necessary power supply investment. A service agreement with Continental Divide Electric Cooperative will be required.

Prewitt Site			
Load	Voltage Regulator BANK Capac	itor Bank	Cost
"I MW	100A VR	\$	60,000
^2 MW	(2) 100A VR 900 K	VAR S	190,000
>4 MW	More information and further an	allysis is required	
		-	*****
Right of Way	Survey & Maps	S	15,000
	EA	5	7,000
	Arch	\$.	10,000
	RID	\$	4,000
	ROW fees for State Land	S	5,000
	Total ROW	5	41,000

1

2.2 CONTRACTOR SPECIFICATIONS

5 December 2002 Amended 15 January 2004 Amended 17 March 2006 Amended 11 April 2007

MEMO

To: Contractors

From: Continental Divide Electric Co-op.

Subject: Underground Installation

Using the notes outlined below in this memo, contractors will be expected to prepare and provide a sketch or set of plans showing the installation. Where contractor is specified the intent of this memo is that it is a <u>licensed electrical contractor</u> doing the work. CDEC will review the proposed sketch or plans and approve or specify specific changes that need to be made. The approval will need to be done prior to and work being done. In order to have underground line installations that go smoothly the following are the procedures that need to be followed:

Primary Line

- □ Contractor will trench and place conduit's minimum of 36" deep (from top of conduit). Backfill will be free of large rocks (none in excess of ½"). Warning tape to be installed 12" above electrical conduit. One tape for every conduit installed in the trench.
- One conduit per phase. One spare conduit will be installed in the trench, regardless of phasing required. Conduit shall be 3" PVC SCD 40 if there is no traffic crossing the line or SCD 40 with 4" concrete covering /encasement.
- Pull boxes will be required for any distances greater than 400'.
- Direct burial of the primary cables is at the discretion of CDEC only.
- All sweeps shall be long rigid sweeps (24" or greater).
- The first joint (stick) of conduit will be installed by contractor out of the ground up the pole. Reducers from 3" to 2" will be furnished by contractor if required by CDEC. CDEC will furnish standoffs
- CDEC will furnish and install Primary conductor.
- CDEC requires a 24hr. advance notice to inspect the trench prior to back filling. If notice is given on Friday, the inspection date will begin 24 hours from Monday or the first work day following a holiday.
- ☐ Trench will be recompacted to 95% original
- □ Pull Strings to be installed by contractor

Secondary and Service Lines

- Contractor will trench and place conduit(s) minimum 34" deep (from top of conduit). Backfill will be free of rocks, nothing in excess of ½"in size.
 Warning tape to be installed 12" above electrical conduit. One tape for every conduit installed in the trench.
- Conduit shall be 3" PVC SCD 40 if there is no traffic crossing the line or SCD 40 with 4" concrete covering /encasement.
- All sweeps shall be long rigid sweeps (18" or greater).
- The first joint (stick) of conduit will be installed by contractor out of the ground up the pole. Reducers from 3" to 2" will be furnished by contractor if required by CDEC. CDEC will furnish standoffs
- CDEC or contractor will install secondary conductor, this will be agreed to prior to starting work. Generally for large amp, particularly three-phase service, the contractor will install conductor.
- Direct burial of the electrical cables is at the <u>discretion of CDEC only</u>.
- CDEC requires a 24hr. advance notice to inspect the trench prior to back filling. If notice is given on Friday, the inspection date will begin 24 hours from Monday or the first work day following a holiday.
- Pull Strings to be installed by contractor
- Trench will be recompacted to 90% original.

Transformer or Switch Pad

- CDEC will furnish specs for all pad mount transformers or switches.
- □ CDEC requires a 24hr. advance notice to inspect the pad form prior to placing concrete. If notice is given on Friday, the inspection date will begin 24 hours from Monday or the first work day following a holiday.
- Concrete Testing, 3000 pounds min., 4% to 6% entrained air, 3/4" max. size aggregate
- Pad to have 3" buffer from re-bar steel to edge of pad
- Tool or Chamfer edges
- Minimum concrete cover over steel re-bar 3" unless noted other wise
- □ Wood float finish, leaving no depressions
- Conduit sweeps in and out of pad to be even with top of pad, free of sharp points and ends to be smooth
- The space between the primary and secondary conduits in the pad trough to be not less than 12"
- Trough to be free from excess concrete

2

Pull Boxes

- CDEC will furnish specs and size requirements for pull boxes/splice box.
- Contractor will install pull boxes per manufacture's specs. A minimum of 6" but no more than 8" of the box will be exposed the above finished grade.
- CDEC requires a 24hr. advance notice to inspect the around the pull boxes prior to back filling. If notice is given on Friday, the inspection date will begin 24 hours from Monday or the first work day following a holiday.
- Compaction around the box will be complete and at 90%.

Metering

- Contractor will furnish and install correct meter and correct C.T. cans per CDEC specs. Note that both cans are required to have 3/4" plywood to mount meters and C.T.s on.
- CDEC will furnish C.T.s and metering equipment.
- Contractor will contact CDEC metering department for correct metering installation and make arrangements for picking up C.T.s and furnishing backboard from meter can for CDEC to mount metering equipment.
- Contractor will install C.T.'s
- □ CDEC will install metering; service can not be energized until metering is installed.

Energize Service

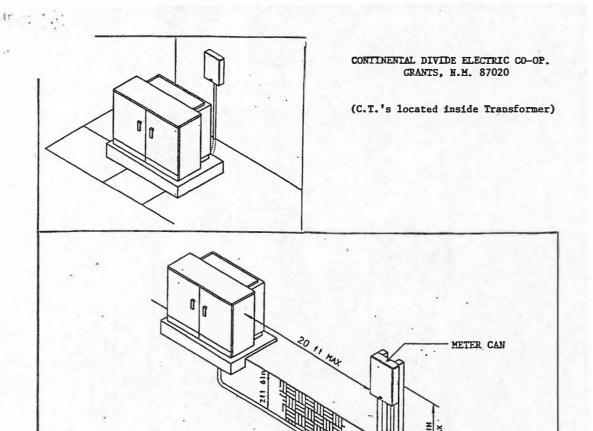
All electrical work must be inspected and approved by the N.M. State inspector or a letter of compliance from the licensed electrical contractor certification that the installation complies with the NEC; this must have the contractor's signature and license number. A letter of compliance is accepted only if the service is not under state jurisdiction, i.e. on Indian Lands or no state funds are being used in the project. The service can not be energized until these conditions are met.

Attachment Drawings

- Concrete Transformer Pad Sample only for the purpose to see lay out of conduits. Dimensions could be different depending on manufacture of the transformer
- Metering Sketch for C.T.'s located on the inside the Transformer
- Guard Post to be located around the transformer for protection against traffic or other large objects that could hit the transformer and cause damage

For any questions regarding this memo please call the Grants office at (505) 285-6656 or Gallup Office at (505) 863-4137or 3641.

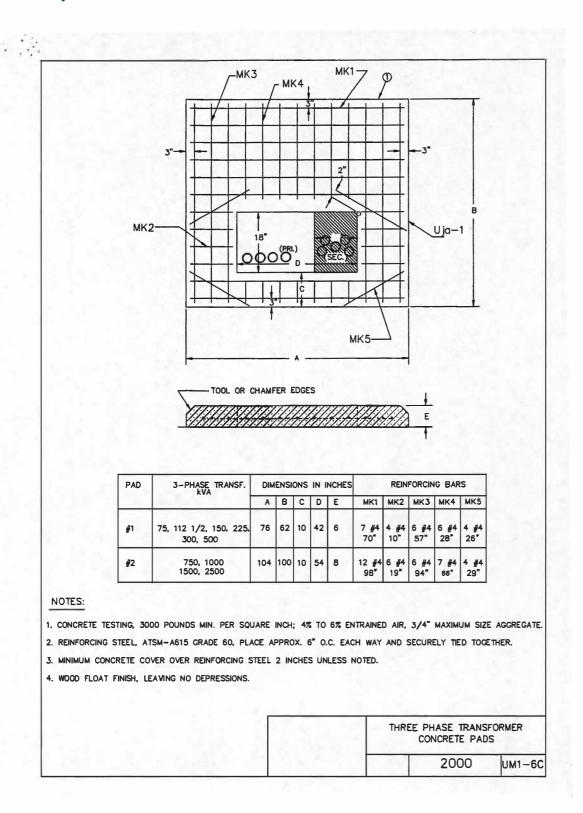
Appendix I Utility Information

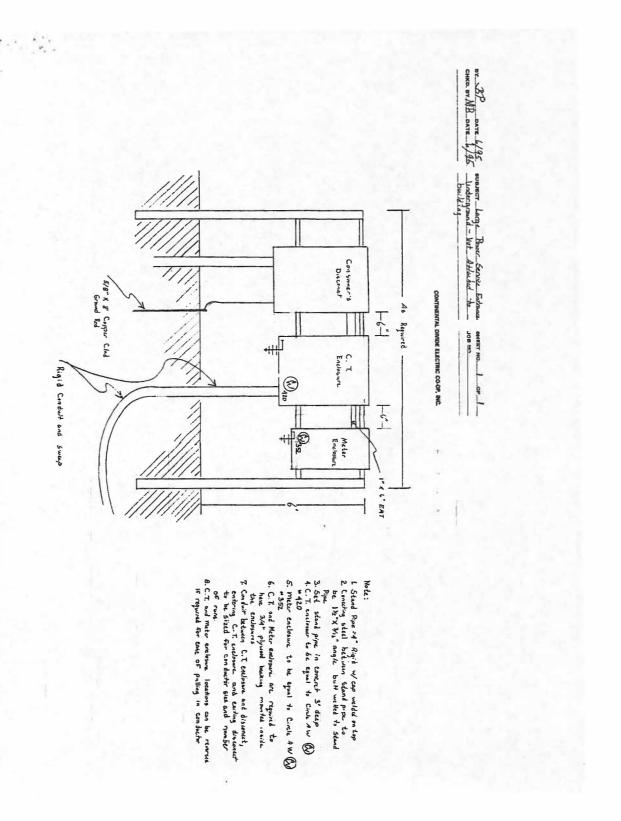


- Meter Can to be Circle AW #352 or equivalent.
- Acceptable Support Members are as Follows: 3in X 3in 1/2in Angle

 - 3in X 4.11bs/ft Channel
 - 2in X 2in 3/16in Box Steel
 - 2-1/2in Standard Pipe
- Equipment shall be Securely attached to support members either bolted directly or mounted to metal channel or unistrut cross members.
- Contact CDEC customer service representative to assure proper location. The conduit must be lim Rigid Galvanized or 1 in. PVC SCD 40.
- Minimum #6 CU Ground wire. Connector and Rod per NEC Article 250. A separate copper grounding electrode conductor sized in accordance with NEC Table 250-94 must be provided for connection to CDEC Transformer and need 8' foot ground rod.

Prewitt Industrial Park MASTER PLAN AND PRELIMINARY DESIGN

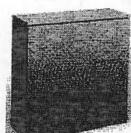




\$2/07/04 TUE 11:47 FAX 505 + 778 5385

R&P Electric Co.QUIPMENT

Utility/Current Transformer Metering Utility Enclosures



352 & 353D

Arm Caner

 Used primarily in special metering applications involving self-contained or CT metering

- Type 3R construction
 28H x 28W x 11D
- Door hinged on right with padlock provision at left 352 only
 Hinged, utility sealable meter window(s): 1 in 352 3 in 353D

ANSI 61 gray acrylic electrocoat finish

SINGUA

Not UL listed





420 & 415H

AF-UCATE T

Used primarily in special metering applications involving CT metering

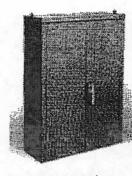
- Type 3R construction
 48H x 34W x 13D
- Double-doors with sealable 3-pt latch handle
- · 3/4 Inch plywood backboard

ANSI 61 gray acrylic electrocoat finish

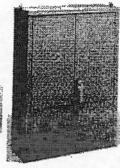
Equipment mounting racks, caralog #415 (33 x 36), 415H (26 x 26)

· Not UL listed





420 & 415H ...



421 & 422

AHTUCAFITY

 Used primarily in special metering application involving CT metering

Contemporario

- Type 3R construction
 48H x 34W x 13D
- Double-doors with scalable 3-pt latch handle
 Hirged, utility sealable meter window(s): 1 in
 421 2 in 422
- J/4 inch plywood backboard

ANSI 61 gray acrylic electrocoat finish

· Not UL listed

Data subject to change without notice. Consult local utility for area acceptance. All dimensions in inches.

COOPER B-Line

Appendix I Utility Information

WATTHOUR METERS AND WATTHOUR DEMAND METERS-SOCKETS

Type SV-60 Polyphase Ringless Sockets

100-ampere Self-contained and 20-ampere Transformer-rated

WHERE TO USE

Page 62

These outdoor Type SV-60 sockets are for use with self-contained and transminal polyphase meters, see page 60. former-rated polyphase watthour meters having 7, 8, or 13 terminals. The socket copper or aluminum wire.

The Type SV-60 sockers listed below connectors are suitable for use with either have interchangeable hubs. Models with hub opening only are also available.

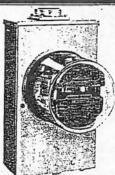
These CANBE PURCHASED

[Photo 11941S

[N-300 AMP Fig. 1. Type SV-60 so

Type V-64.5 months

Fig. 1. Type SV-60 socket with Type V-64-5 meter installed



	ATA	TA	DI	•
U	AΤΑ	IA	RL	E

TYPE OF SERVICE		METER SELECTION		SOCKET SELECTION						
		ANSI			Screw-type		Jows	Hua	Sreel Case	Aluminum Co:
Circuit	Application	C12.10 Form No.	Class	GE Type	By-pass or Automatic Circuit Claser	Ory	Arrangements (See Page 56)	Size in Inches	Cat. No.	Cat. No.
WITHOUT UL LIS	TING									
3-phose, 3-wire	Self-contained	135	100	V-63	None	8	D	1 1/4	741X18G35	741X18G41
delto					8y-pass	8	F	11/4	741X18G37 741X18G47	741X18G43 741X18G53
	Trans-rated	55	10 or 20	V-63	Circuit doser	8	ε	11/4	741X18G49 741X18G138	741X18GSS 741X18G14
						7Œ		154		741X18G17
3-phose, 4-wire wys	Self-cantained	165	100	A-94	None	70	Α	2	741X18G11 741X18G13	741X18G19
**/-					By-pass	70	c	11/4	741X18G23	741X18G29
								2	741X18G25	741X18G31
	Trans-rated	95	10 or 20	V-64	Circuit doser	13	Ģ	174	741X18G144	741X18G14
	Self-contained	145	100	V-65	None	70	A	11/4	741X18G11 741X18G13	741X18G17
					By-pass	- 7Œ	c	11/4	741X18G13	741X18G29
					07-p013	•		2	741X18G25	741X18G31
	Trans-rated	6\$	10 or 20	V-65	Circuit closer	13	G	194	741X18G144	741X18G14
	Trans-rared	75	10 or 20	V-65	Circuit closer	7	8	11/4	741X18G151	741X18G15
3-phase, 4-wire	Self-contained	155	100	V-66	None	7①	A	11/4	741X18G11	741X18G17
delta								2	741X18G13	741X18G19
					By-poss	70	c	11/4	741X18G23	741X18G29
								2	741X18G25	741X18G31
	Trans-rated	85	10 or 20	V-66	Circuit closer	13	G	134	741X18G144	741X18G14
WITH UL LISTING	V									
3-phase, 3-wire	Self-contained	135	100	V-63	None	8	D	11/4	741X21G3	******
delta					1	144	2 2	2	741X21G4	*****
					8y-pass	. 6		174	741X21G7	*****
	Trans-rated	55	10 or 20	V-63	Circuit claser	8		11/4	741X21GB 741X21G29	1,111.
								11/4		
3-phase, 4-wire	Self-cantained	165	100	V-64	None	7	A		741X2.IG1 741X2.IG2	*****
Wye					By-poss	7	С	11/4	741X21G5	
					by-poss			2'*	741X21G6	
	Trans-rated	95	10 or 20	V-64	Circuit closer	13	G	11/4	741X21G31	
	Self-contained	145	100	V-65	None	7	Ā	11/4	741X21G1	*******
-								2	741X21G2	*****
					By-pass	7	С	11/4	741X21G5	*****
								2	741X21G6	2000000
	Trons-rated	65	10 or 20	V-65	Circuit closer	13	G	1%	741X21G31 741X21G33	******
	Trans-rated	75	10 or 20	V-65	Circuit closer	_				
3-phose, 4-wire	Self-contained	155	100	V-66	None	7	A	11/4	741X21G1	279933
						-		2	741X21G2	
3-phose, 4-wire delto										
			0.5		By-pass **	7	С	11/4	741X21G5 741X21G6	

These 7-jaw. 100-ampere sockets are normally used on 4-wire Y or delta circuits. A lead is pre-wired from the lower right inside terminal to the socket ground/neutral connector, providing a common voltage connection.

Sockets

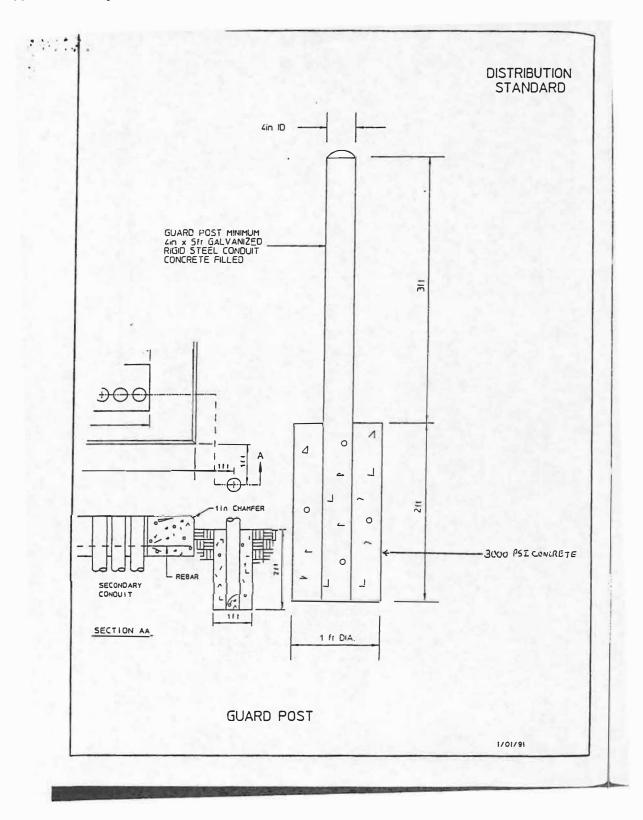
Weight in Lbs

Sockets	Weight in Lbs			
per Corton	Sreel	Aluminum		
1 1	12.5	9		

HB 7872:1, July 12, 1982.



Prewitt Industrial Park MASTER PLAN AND PRELIMINARY DESIGN



3 Internet

Sacred Winds communication is the internet provider for both Milan and Prewitt. Sacred Winds Communications is capable of delivering up to 100 MB per customer. For those customers that require greater bandwidth, Sacred Winds Communications is capable of extending fiber within the platted Prewitt Industrial Park right-of-way and serve the respective tenants. Tenants may contact Misty Willock, sales department, at 720-629-5445 for rates. Sacred Winds Communications encourages developers to schedule a pre-development meeting to discuss wireless and internet communication needs so that accurate estimates for services can be developed.