# CITY OF GRAND JUNCTION 2022 WATERLINE REPLACEMENT - PHASE 1 GRAND JUNCTION, COLORADO BID DOCUMENTS

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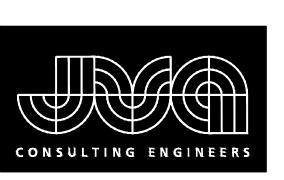
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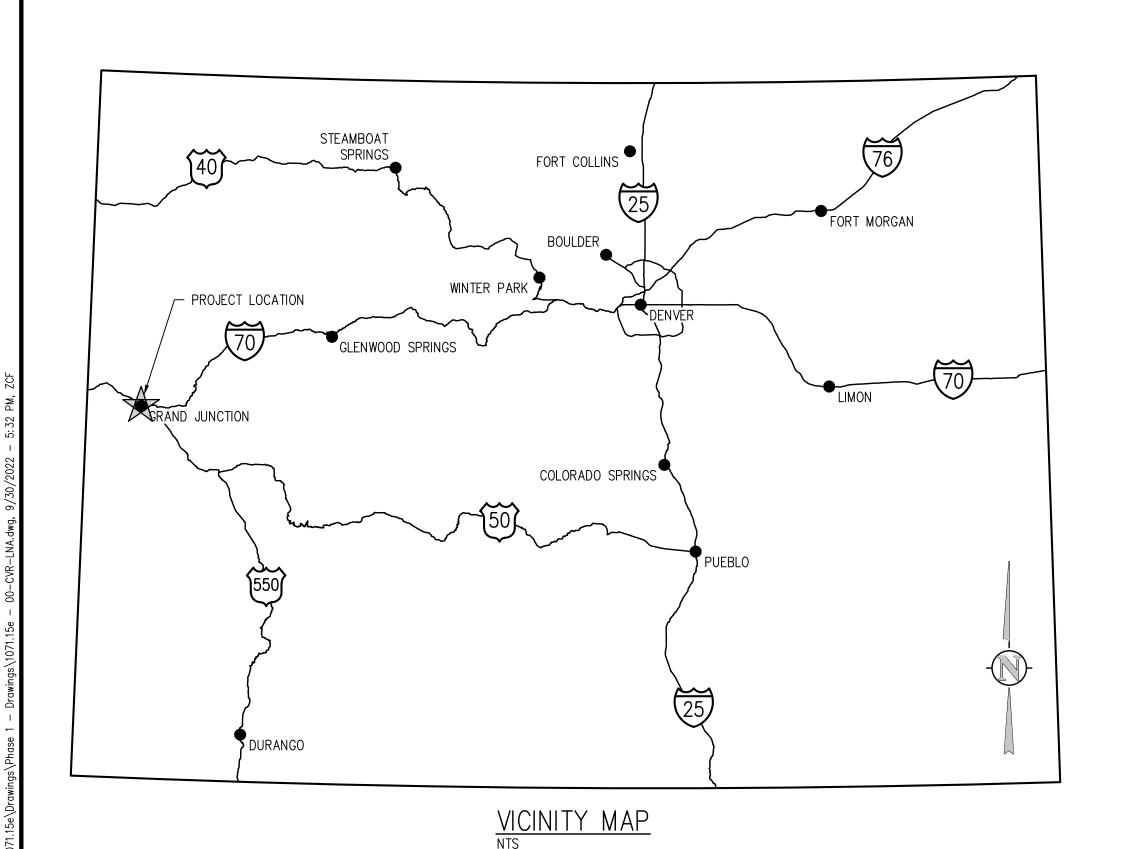
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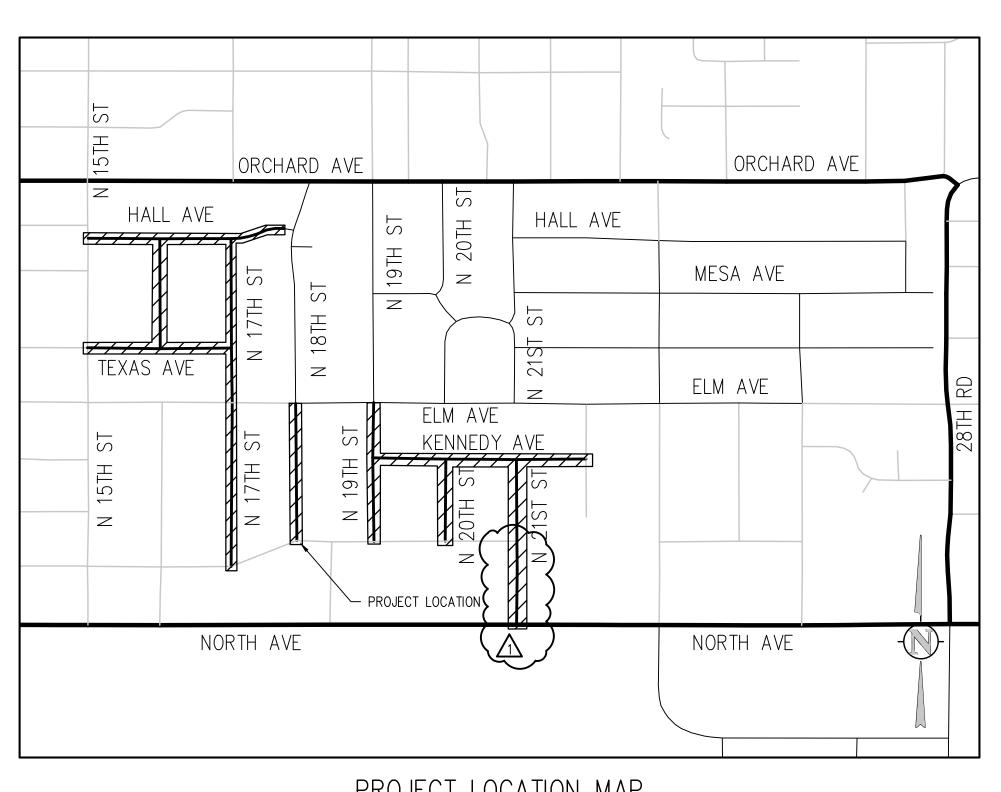
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## AUGUST 2022

PREPARED UNDER THE SUPERVISION OF

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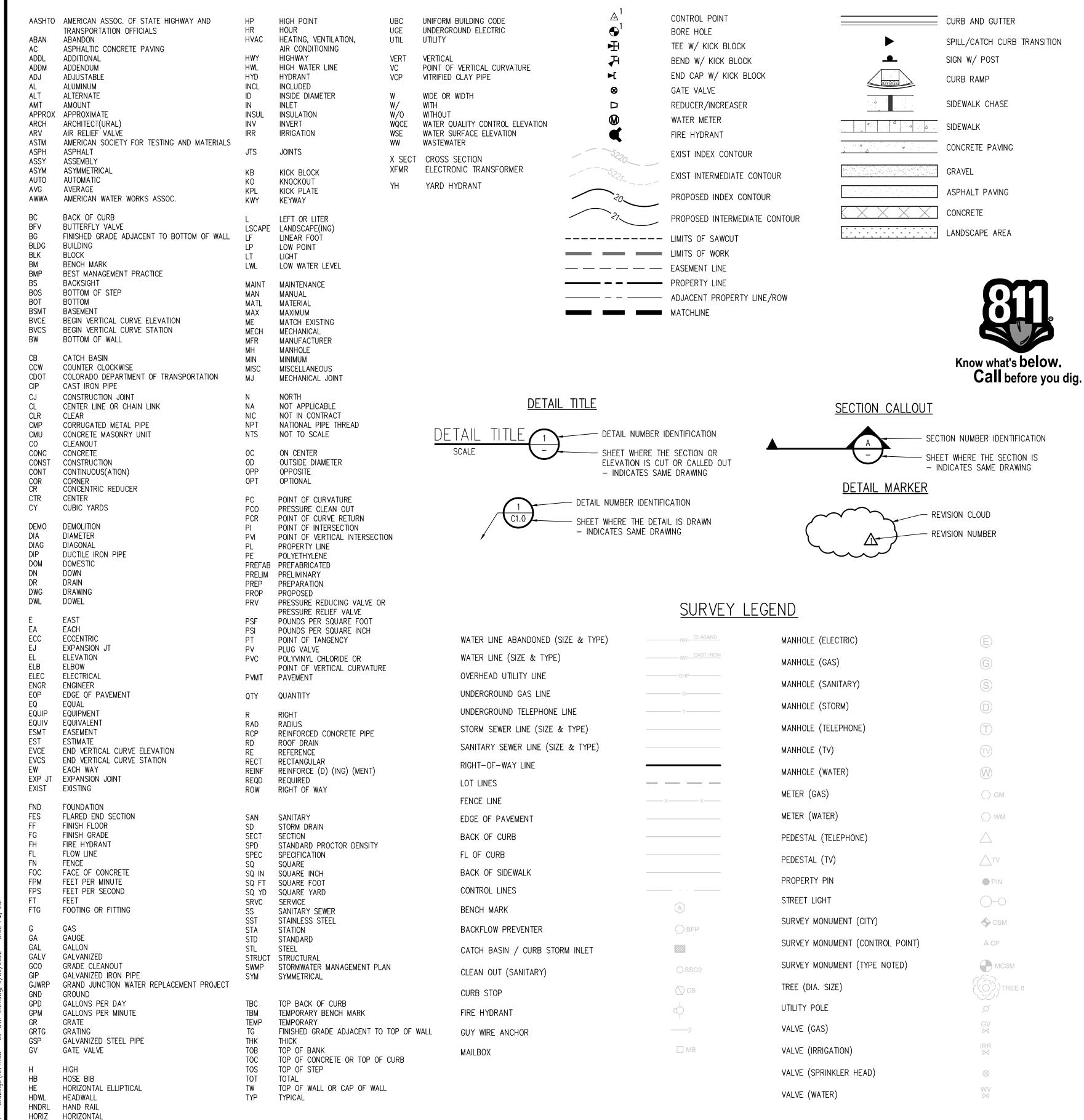


PROJECT LOCATION MAP

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<u>ABBREVIATIONS</u> <u>DESIGN\_LEGEND</u>



DRAWN BY <u>ZCF</u> DATE <u>07 18, 2022</u>

DESIGNED BY <u>LAL/ZCF</u> DATE <u>07 18, 2022</u>

CHECKED BY <u>JJM</u> DATE <u>07 18, 2022</u>

APPROVED BY \_\_\_\_\_ DATE \_

PLAN & PROFILE

DESCRIPTION

REVISION 1.

REVISION 🛆

REVISION 3

REVISION 🕰

### GENERAL NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF GRAND JUNCTION, COLORADO DEPARTMENT OF TRANSPORTATION, GRAND JUNCTION FIRE PROTECTION REQUIREMENTS, AND APPLICABLE STATE AND LOCAL STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN POSSESSION AT THE JOB SITE AT ALL TIMES ONE (1) SIGNED COPY OF APPROVED PLANS STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EMERGENCY ACCESS ROUTES TO THE SITE AND STRUCTURE AT ALL TIMES PER THE APPLICABLE GRAND JUNCTION FIRE PROTECTION DISTRICT REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS. NOTIFY ENGINEER OF ANY CONFLICTING STANDARDS OR SPECIFICATIONS. IN THE EVENT OF ANY CONFLICTING STANDARD OR SPECIFICATION, THE MORE STRINGENT OR HIGHER QUALITY STANDARD, DETAIL OR SPECIFICATION SHALL APPLY.
- 2. THE CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARD SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, INCLUDING, BUT NOT LIMITED TO A LOCAL AND STATE GROUNDWATER DISCHARGE AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT (CDPHE) STORMWATER DISCHARGE PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE REQUIRED PARTY OWNER AND ENGINEER AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION, PRIOR TO BACKFILLING, AND AS REQUIRED BY JURISDICTIONAL AUTHORITY AND/OR PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL CONTINUE WITH NOTIFICATIONS THROUGHOUT THE PROJECT AS REQUIRED BY THE STANDARDS AND SPECIFICATIONS.
- 4. THE LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION BASED ON INFORMATION BY OTHERS. NOT ALL UTILITIES MAY BE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT SIZE, LOCATION AND TYPE OF ALL EXISTING UTILITIES WHETHER SHOWN OR NOT BEFORE COMMENCING WORK. THE ENGINEER AND/OR OWNER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS SHOWN ON PLANS. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO PROCEEDING WITH GRADING AND CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF UTILITIES SHALL BE PERFORMED AND INSPECTED ACCORDING TO THE REQUIREMENTS OF THE UTILITY OWNER. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MAPPING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION, AND FOR RELOCATING ENCOUNTERED UTILITIES AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL CONTRACT SHALL CONTRACT SHALL CONTRACT OR SHALL PUBLITY OWNER AND LOCATING AND RECONNECTING ANY ENCOUNTERED UTILITIES. (TELEPHONE, GAS, CABLE, ETC., WHICH SHALL BE COORDINATED WITH THE UTILITY OWNER). THE CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER UPON DISCOVERY OF A UTILITY DISCREPANCY OR CONFLICT. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1987, WWW.UNCC.ORG). SEE SURVEY UTILITY LOCATION INFORMATION BELOW.
- 5. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR OWNER AND/OR CITY APPROVAL AND PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR AGREES TO COMPLY WITH THE PROVISIONS OF THE TRAFFIC CONTROL DEVICES," PART VI, FOR CONSTRUCTION SIGNAGE AND TRAFFIC CONTROL. ALL TEMPORARY AND PERMANENT TRAFFIC SIGNS SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REGARD TO SIGN SHAPE, COLOR, SIZE, LETTERING, ETC. UNLESS OTHERWISE SPECIFIED. IF APPLICABLE, PART NUMBERS ON SIGNAGE DETAILS REFER TO MUTCD SIGN NUMBERS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. GROUNDWATER TO BE PUMPED SHALL BE TESTED, PERMITTED, AND PUMPED PER THE STATE OF COLORADO AND LOCAL GROUNDWATER DISCHARGING PERMIT REQUIREMENTS.
- 7. RIM AND GRATE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL ADJUST RIMS AND OTHER IMPROVEMENTS TO MATCH FINAL PAVEMENT AND FINISHED GRADE ELEVATIONS.
- 8. THE EXISTING AND PROPOSED ELEVATIONS OF FLATWORK, SIDEWALKS, CURBS, THRESHOLDS, PAVING, ETC. AS SHOWN HEREON ARE BASED ON EXTRAPOLATION OF FIELD SURVEY DATA, EXISTING CONDITIONS, AND DATA PROVIDED BY OTHERS. AT CRITICAL AREAS HYDRANT LATERALS AND SITE FEATURES, CONTRACTOR SHALL HAVE FORMWORK INSPECTED AND APPROVED BY OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER PRIOR TO PLACING CONCRETE. MINOR ADJUSTMENTS, AS APPROVED, TO PROPOSED GRADES, INVERTS, ETC. MAY BE REQUIRED TO PREVENT PONDING OR SLOPE NOT IN CONFORMANCE WITH MUNICIPAL STANDARDS. ALL FLATWORK MUST PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE AWAY FROM EXISTING AND PROPOSED BUILDINGS, WALLS, ROOF DRAIN OUTFALLS, ACROSS DRIVES AND WALKS, ETC., TOWARDS THE PROPOSED INTENDED DRAINAGE FEATURES AND CONVEYANCES.
- 9. FINAL LIMITS OF REQUIRED ASPHALT SAWCUTTING AND PATCHING MAY VARY FROM LIMITS SHOWN ON PLANS. CONTRACTOR TO PROVIDE SAWCUT AND PATCH WORK TO ACHIEVE POSITIVE DRAINAGE AND A SMOOTH TRANSITION TO EXISTING ASPHALT WITHIN SLOPES ACCEPTABLE TO THE ENGINEER AND WITHIN MUNICIPAL STANDARDS. CONTRACTOR SHALL PROVIDE ADDITIONAL SAWCUTTING AND PATCHING AT UTILITY WORK, CONNECTION POINTS TO EXISTING PAVEMENT AND FEATURES, ETC. THAT MAY NOT BE DELINEATED ON PLANS.
- 10. ANY EXISTING MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC. TO BE PROTECTED AND TO REMAIN IN SERVICE. IF FEATURES EXIST, EXTEND OR LOWER TO FINAL SURFACE WITH LIKE KIND CAP WITH STANDARD CAST ACCESS LID WITH SAME MARKINGS. IN LANDSCAPED AREAS PROVIDE A CONCRETE COLLAR (18"x18"x6" THICK) AT ALL EXISTING AND PROPOSED MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC.
- 11. OWNER TO APPROVE ALL PRIVATE CONCRETE FINISHING, JOINT PATTERNS AND COLORING REQUIREMENTS PRIOR TO CONSTRUCTION. SUBMIT JOINT LAYOUT PLAN TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- 12. PIPE LENGTHS AND HORIZONTAL CONTROL POINTS SHOWN ARE FROM CENTER OF STRUCTURES, END OF FLARED END SECTIONS, ETC. SEE STRUCTURE DETAILS FOR EXACT HORIZONTAL CONTROL LOCATION. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ACTUAL PIPE LENGTHS TO ACCOUNT FOR STRUCTURES AND LENGTH OF FLARED END SECTIONS.
- 13. ALL SURPLUS MATERIALS, TOOLS, AND TEMPORARY STRUCTURES, FURNISHED BY THE CONTRACTOR, SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR. ALL DEBRIS AND RUBBISH CAUSED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE REMOVED, AND THE AREA OCCUPIED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL CONDITION, WITHIN 48 HOURS OF PROJECT COMPLETION, UNLESS OTHERWISE DIRECTED BY THE MUNICIPALITY OR OWNER'S REPRESENTATIVE.
- 14. THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL JURISDICTION, THE STATE OF COLORADO, MILE HIGH FLOOD DISTRICT "URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3", THE M-STANDARD PLANS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, AND THE APPROVED EROSION CONTROL PLAN. JURISDICTIONAL AUTHORITY MAY REQUIRE THE CONTRACTOR TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES AT THE CONTRACTOR'S EXPENSE DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE PLANS DO NOT FUNCTION AS INTENDED. THE CONTRACTOR IS RESPONSIBLE FOR PROHIBITING SILT AND DEBRIS LADEN RUNOFF FROM LEAVING THE SITE, AND FOR KEEPING ALL PUBLIC AREAS FREE OF MUD AND DEBRIS. THE CONTRACTOR IS RESPONSIBLE FOR RE—ESTABLISHING FINAL GRADES AND FOR REMOVING ACCUMULATED SEDIMENTATION FROM ALL AREAS INCLUDING SWALES AND DETENTION/WATER QUALITY AREAS. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AND REPAIR AREAS AS REQUIRED AFTER VEGETATION IS ESTABLISHED AND ACCEPTED BY OWNER AND MUNICIPALITY.
- 15. ADA COMPLIANCE: THE CROSS—SLOPE OF ALL WALKS MUST BE LESS THAN 1:48 (2.0%) PERPENDICULAR TO DIRECTION OF TRAVEL. RUNNING SLOPE OF ACCESSIBLE WALKS MUST BE NOT STEEPER THAN 1:20 (5.0%) IN DIRECTION OF TRAVEL. MAXIMUM GRADE OF ACCESSIBLE CURB RAMPS AND RAMPS IS 1:12 (8.3%). CURB RAMPS SHALL PROVIDE A LANDING AT THE TOP AND RAMP RUNS PROVIDE LANDINGS AT THE BOTTOM AND TOP OF EACH RAMP RUN AT A SLOPE NOT TO EXCEED 1:48. RAMPS RUNS EXCEEDING SIX INCHES SHALL INCLUDE HANDRAILS. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO PLACEMENT OF FLATWORK OF SITE CONDITIONS OR DISCREPANCIES WHICH PREVENT TYPICAL REQUIRED GRADES FROM BEING ACHIEVED. ALL RAMPS, STAIRS, EDGE PROTECTION, AND RAILINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA STANDARDS. ACCESSIBLE CURB RAMPS SHALL CONFORM TO THE CDOT M—STANDARDS (SEE DETAIL M—608—1, ETC). ACCESSIBLE FEATURE WITHIN THE PUBLIC RIGHTS—OF—WAY SHALL BE CONSTRUCTED TO CONFORM TO THE LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- 16. PROTECT ALL TREES AND VEGETATION. PLACE CONSTRUCTION FENCING AT DRIP LINE OF TREES AND PLANTS NEAR THE WORK ZONE. DEEP WATER TREES WEEKLY. HAND EXCAVATION REQUIRED AT ROOT ZONES WHERE PROPOSED PAVING OR UTILITY WORK IS WITHIN DRIPLINE OF TREES.
- 17. LOCATIONS OF CLEANOUTS, LIGHTS, SIGNAGE, JUNCTION BOXES, AND OTHER SIGNIFICANT SITE FEATURES TO BE STAKED FOR ENGINEER AND OR OWNER APPROVAL PRIOR TO WORK. CLEANOUTS, JUNCTION BOXES, AND ADJACENT GRADES TO BE RAISED ONE—HALF INCH AT ASPHALT/CONCRETE (OR 1" AT LANDSCAPING) TO PROVIDE POSITIVE DRAINAGE AWAY FROM FEATURES.

### 18. SURVEY INFORMATION:

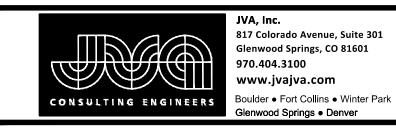
BENCHMARK INFORMATION: TOPOGRAPHIC INFORMATION WAS PROVIDED BY THE CITY OF GRAND JUNCTION. SEE EXISTING CONDITIONS SURVEY 2021 WATER LINE REPLACEMENTS — PHASE 1 DATED 12/20/2021. CONTROL POINTS SHOWN ON PLANS. THE FIELD SURVEYS AND PROCESSING OF DATA WAS MADE IN THE MESA COUNTY LOCAL COORDINATE SYSTEM (MCLCS) GRAND VALLEY AREA (GVA) ZONE AND NAVD88 VERTICAL DATUM WITH GEOID 12A MODEL TO CONVERT ELLIPSOID HEIGHTS TO ORTHOMETRIC ELEVATIONS. THE MCLCS USED THE IN THE SAID WHS SURVEY ARE BASED UPON REFERENCE FROM:

MESA COUNTY CONTROL POINT P310 - PRECISION B-5PPM MESA COUNTY CONTROL POINT P318 - PRECISION B-5PPM NORTH 28231.71 SFT (MCGVA) NORTH 19671.32 SFT (MCGVA) EAST 92054.57 SFT (MCGVA) EAST 110221.18 SFT (MCGVA) NAVD 88, G12A ELEVATION: 4631.32 SFT NAVD 88, G12A ELEVATION: 4793.43 SFT LATITUDE: 39° 02' 47.60643" N LATITUDE: 39° 01' 23.00622" N LONGITUDE: 108° 33' 42.12299" W LONGITUDE: 108° 29' 51.95172" W FLLIPSOID HEIGHT: 1394,760 METER FILIPSOID HEIGHT: 1444.23 METERS COMMENT: NGS 9/16" STAINLESS STEEL ROD IN MONUMENT WELL COMMENT: NGS 9/16" STAINLESS STEEL ROD IN MONUMENT WELL

- 18.1 BEARINGS ARE BASED ON GRID NORTH OF THE MESA COUNTY LOCAL COORDINATE SYSTEM IN THE GVA ZONE, LOCALLY DETERMINED BY GNSS OBSERVATIONS ON THE SHOWN INTERIOR ALIQUOT CORNER MONUMENTS RECOVERED IN SECTION 18., TOWNSHIP 1 NORTH AT RANGE 1 EAST FOR ITS CENTER NORTH 1/16TH CORNER AND THE NORTH 1/4 CORNER AS HAVING A MEASURED BEARING OF N 0° 00' 57" E AND A MEASURED DISTANCE OF 1319.22'.

  COORDINATE AND VERIFY ALL VERTICAL AND HORIZONTAL DATA SHOWN IN SURVEY AND REPORT ANY IRREGULARITIES OR DISCREPANCIES TO ENGINEER PRIOR TO CONSTRUCTION.
- 18.2 HORIZONTAL CONTROL INFORMATION: HORIZONTAL CONTROL COORDINATES ARE BASED ON THE REFERENCED SURVEY AND ARE PROVIDED ON SHEET C2.0 OF THE PLANS.
- SURVEY UTILITY LOCATION INFORMATION PER THE SURVEYOR: SUBSURFACE UTILITIES ARE SHOWN IN APPROXIMATE HORIZONTAL AND VERTICAL LOCATIONS CONSISTENT WITH ASCE 38-02 QUALITY LEVEL "B" (INFORMATION OBTAINED BY THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF VIRTUALLY ALL UTILITIES WITHIN THE PROJECT LIMITS. THE INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE—GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D; INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS), AND BASED ON FIELD MEASUREMENTS PROVIDED BY THE OWNER AND THE CONTRACTOR. SUBSURFACE UTILITIES ARE NOT DEPICTED TO THE EXTENT SET FORTH IN ASCE 38-02 QUALITY LEVELS "A" (INFORMATION OBTAINED THROUGH THE NONDESTRUCTIVE EXPOSURE OF UNDERGROUND UTILITIES, AND ALSO PROVIDES THE TYPE, SIZE, CONDITION, MATERIAL AND OTHER CHARACTERISTICS OF UNDERGROUND FEATURES.). TO THE EXTENT DEEMED NECESSARY FOR THE PROTECTION OF PERSONS AND PROPERTY, POTHOLING OR OTHER PRECISE MAPPING MAY BE COMPLETED TO CONFIRM THE EXACT LOCATION OF ANY SUBSURFACE UTILITIES. NOTIFY OWNER AND ENGINEER WITH ALL UTILITY INFORMATION PRIOR TO CONSTRUCTION. VISIT HTTPS: //WWW.FHWA.DOT.GOV/PROGRAMADMIN/SUEINDEX.CFM FOR MORE INFORMATION.
- 18.4 SERVICE TAP LOCATIONS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND RESTORING ALL SERVICE CONNECTIONS.
- 19. THE CONTRACTOR AT THE CONTRACTORS EXPENSE SHALL FURNISH THE OWNER AND ENGINEER OF RECORD A COMPLETE SET OF CONSTRUCTION RECORD DRAWINGS ("AS-BUILTS") FOR THE CONSTRUCTED IMPROVEMENTS. THE AS-BUILT SET SHALL SHOW SUFFICIENT DIMENSION TIES TO PERMANENT SURFACE FEATURES OR NORTHING/EASTING POINTS FOR ALL BURIED FACILITIES TO ALLOW FOR FUTURE LOCATING. THE AS-BUILT SET SHALL SHOW AS-BUILT CONTOURS AND ELEVATIONS OF ASPHALT AND CONCRETE FLATWORK, FLOWLINES, GRADE BREAKS, STAIRS, CROSS-SLOPES, HIGH AND LOW POINTS, AND ADDITIONAL ELEVATIONS TO DEMONSTRATE IMPROVEMENTS WERE CONSTRUCTED PER PLANS. THE AS-BUILT SET SHALL SHOW ELEVATIONS OF ALL DETENTION/WATER QUALITY FACILITIES, INCLUDING BUT NOT LIMITED TO BERMS, SPILLWAYS, BASIN BOTTOM, PIPE INVERTS, AND CONTROL STRUCTURE FEATURES (AS SURVEYED AND STAMPED BY A CERTIFIED P.L.S.). THE AS-BUILT SET SHALL ALSO INCLUDE ELEVATIONS OF MANHOLES, PIPES, INLETS, GRATES, AND SIZES OF ALL UTILITIES. THE AS-BUILT SET SHALL SHOW ANY AND ALL VARIATIONS FROM THE APPROVED PLAN. ENGINEER WILL PRODUCE FINAL RECORD DRAWINGS.





2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
NOTES, LEGENDS, AND ABBRIVIATIONS

### STORMWATER MANAGEMENT PLAN (SWMP)

THIS STORMWATER MANAGEMENT PLAN IS TO BE RETAINED AND MAINTAINED ONSITE INCLUDING FINAL LANDSCAPING PLANS AND ANY OTHER EROSION CONTROL DOCUMENTATION. A SWMP ADMINISTRATOR WILL BE DESIGNATED BY THE CONTRACTOR AND IS RESPONSIBLE FOR DEVELOPING, IMPLEMENTING, MAINTAINING, AND REVISING THIS SWMP. THE SWMP ADMINISTRATOR IS THE CONTACT FOR ALL SWMP-RELATED ISSUES AND IS RESPONSIBLE FOR ITS ACCURACY, COMPLETENESS, AND IMPLEMENTATION. THE FOLLOWING HAS BEEN DESIGNATED AS THE SWMP-ADMINISTRATOR FOR THIS PROJECT:

IAME:	
CONTACT INFO:	

THE SITE IS LOCATED CONTAINED BY ORCHARD AVE AND BUNTING AVE ON THE NORTH AND SOUTH RESPECTIVELY AND BY N 15TH ST AND N 22ND ST ON THE WEST AND EAST RESPECTIVELY, AND AT APPROXIMATELY 39° 4' 51.5" N LATITUDE, 108° 32' 43.4" W LONGITUDE. THE PROPOSED PROJECT CONSISTS OF UTILITY INFRASTRUCTURE, UTILITY SERVICE CONNECTIONS, PAVING OF SIDEWALKS AND ROADWAYS, CONSTRUCTION IN THE CITY OF GRAND JUNCTION, COLORADO. THE TOTAL SITE AREA IS APPROXIMATELY 8.5 ACRES WITH AT TOTAL DISTURBANCE OF 1.1 ACRES. NO AREAS GREATER THAN 40 ACRES SHALL BE DISTURBED AT ANY GIVEN TIME. NO CONSTRUCTION ACTIVITIES SHALL OCCUR OFFSITE OR OUTSIDE OF THE CONSTRUCTION LIMITS SHOWN ON THE CONSTRUCTION DOCUMENTS. THE SEQUENCE OF CONSTRUCTION STARTS IS AS FOLLOWS:

<u>PHASE</u>	<u>ESTIMATED</u>	<u>ACTUAL</u>
CONSTRUCTION START	AUGUST, 2022	
UTILITY CONSTRUCTION	AUGUST, 2022	
PAVING	OCTOBER, 2022	
SITE RESTORATION	DECEMBER, 2022	

THE EXISTING SITE CONSISTS OF DEVELOPED LAND AND VEGETATION AND IS APPROXIMATELY 1% COVERED WITH VEGETATIVE GROUND COVER. A DRAINAGE REPORT WAS NOT COMPLETED AS HISTORIC AND DEVELOPED RUNOFFS WERE NOT ALTERED.

OFFSITE RUNOFF FLOWS ONTO THE PROPERTY FROM 15TH ST FROM THE WEST AND ELM STREET FROM THE NORTH. ONSITE FLOWS ARE DIRECTED TO THE GUTTERS AND STORM DRAINS. THERE ARE NO ONSITE DETENTION SITES. STORMWATER IS DISCHARGED FROM THIS SITE TO INDIAN WASH WHICH ULTIMATELY DRAINS INTO THE COLORADO RIVER. A DRAINAGE REPORT FOR THIS DEVELOPMENT HAS BEEN SUBMITTED TO THE ENGINEER OF THE CITY OF GRAND JUNCTION.

OTHER POTENTIAL POLLUTION SOURCES SUCH AS VEHICLE FUELING, VEHICLE WASHING, LOADING / UNLOADING AREAS ARE LOCATED ONSITE. NON-STORMWATER COMPONENTS OF THE DISCHARGE LANDSCAPE IRRIGATION RETURN FLOW ARE LOCATED ONSITE.

### BEST MANAGEMENT PRACTICES FOR STORMWATER MANAGEMENT

NON STRUCTURAL BMPS WILL BE IMPLEMENTED TO THE MAXIMUM EXTENT POSSIBLE. THE UTILIZATION OF NON STRUCTURAL BMPS WILL BE AN ONGOING PROCESS DIRECTED AT PREVENTING EROSION. THE NON STRUCTURAL BMPS WILL RECEIVE CONTINUOUS EMPHASIS THROUGHOUT CONSTRUCTION BECAUSE THEY AVERT PROBLEMS BEFORE THEY OCCUR AND REDUCE THE NEED FOR STRUCTURAL BMPS. NON STRUCTURAL BMPS WILL CONSIST PRIMARILY OF PRESERVATION OF EXISTING MATURE VEGETATION AND TREES, PLANNING AND SCHEDULING CONSTRUCTION ACTIVITIES AIMED AT ACHIEVING THE GOAL OF MINIMIZING EROSION. FURTHERMORE, CONSTRUCTION PERSONNEL WILL BE INSTRUCTED AND SUPERVISED IN CONSTRUCTION METHODS CONSISTENT WITH EROSION PREVENTION PRACTICES.

PLANNED STRUCTURAL BMPS FOR EROSION AND SEDIMENT CONTROL ARE SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN. IMPLEMENTING THESE MEASURES SHOULD MINIMIZE NUISANCE SILT AND SEDIMENTATION EXITING THE SITE AND PREVENT CLOGGING EXISTING STORM SEWERS AND STREET GUTTERS.

APPLICATION OF THESE BMPS FOR STORMWATER MANAGEMENT ARE FOR CONSTRUCTION PERIODS AND ARE CONSIDERED TEMPORARY. POST-DEVELOPMENT STORMWATER MANAGEMENT IS PROVIDED THROUGH STORM COLLECTION SYSTEM.

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED AT ALL ENTRANCES AND EXITS TO THE CONSTRUCTION SITES. THE CONSTRUCTION ACCESS AND PARKING WILL BE GRADED AND COVERED WITH A CRUSHED STONE BASE COURSE DURING CONSTRUCTION. THE VEHICLE TRACKING CONTROL WILL BE RELOCATED WITH THE CONSTRUCTION ACCESS AS NECESSARY.

### SEDIMENT CONTROL LOGS (SCL):

SEDIMENT CONTROL LOGS SHALL BE INSTALLED WITH RESPECT TO PROPOSED DRAINAGE PATTERNS. SEDIMENT CONTROL LOGS SHALL BE CONSTRUCTED IN THE GUTTERS AND ALONG ANY DRAINAGE AREAS SUBJECT TO EROSION. THE SEDIMENT CONTROL LOGS SHALL BE INSTALLED AT THE DOWNHILL SIDE OF THE EXISTING SLOPES ACROSS THE SITE AND AT ALL POINT DISCHARGE AREAS WHETHER SHOWN OR NOT, SEDIMENT CONTROL LOGS SHALL BE MAINTAINED AS NEEDED THROUGHOUT THE CONSTRUCTION PROCESS. SEDIMENT CONTROL LOGS WILL REMAIN UNTIL THE STORM SEWER STRUCTURES ARE COMPLETED AND GROUND COVER IS EFFECTIVE.

THE INLET PROTECTION WILL BE INSTALLED AS THE STORM SEWER STRUCTURES ARE CONSTRUCTED. EACH INLET ON THE PROPOSED STORM SEWER SYSTEM WILL HAVE A TEMPORARY INLET SEDIMENT TRAP CONSTRUCTED AROUND IT. IN PAVED AREAS, THIS TRAP CONSISTS OF WIRE MESH SOCKS, CONCRETE BLOCKS, AND GRAVEL BAGS TO FILTER THE STORM RUNOFF AND ALLOW ANY SILT TO SETTLE OUT.

### CONCRETE WASHOUT AREA:

CONCRETE WASHOUTS SHALL BE USED ON SITE DURING THE CONSTRUCTION OF FLATWORK SHOWN ON THE PLANS. CONTRACTOR TO USE ONLY ROLL-OFF/PORTABLE STYLE WASHOUT CONTAINERS, PIT STYLE CLEANOUTS WILL NOT BE ACCEPTED ON THIS SITE.

### **DUST CONTROL MEASURES:**

DISTURBED AREAS NOT YET READY TO BE SEEDED, LANDSCAPED, PAVED, OR OTHERWISE STABILIZED SHALL BE WATERED, OR RIPPED AS NECESSARY TO PRECLUDE VISIBLE DUST EMISSIONS.

ITEMS ARE SCHEDULED TO BE IMPLEMENTED ACCORDING TO THE CONSTRUCTION SCHEDULE. AS WORK PROCEEDS, IMPLEMENTATION OF INDIVIDUAL BMPS IS TO COINCIDE WITH THE CONSTRUCTION THEREBY MINIMIZING THE EXPOSURE OF UNPROTECTED AREAS. INLET PROTECTION (FOR EXISTING INLETS), AND GRAVELING OF THE CONSTRUCTION ENTRANCE WILL BE PERFORMED WHEN THE GROUND IS DISTURBED AND THE PROJECT EXCAVATION BEGINS. FUGITIVE DUST EMISSIONS RESULTING FROM GRADING ACTIVITIES AND/OR WIND SHALL BE CONTROLLED USING THE BEST AVAILABLE CONTROL TECHNOLOGY AS DEFINED BY THE COLORADO DEPARTMENT OF HEALTH AT THE TIME OF GRADING. THE GRAVELING IS TO BE MAINTAINED AND EXTENDED CONSTRUCTION PROGRESSES ESPECIALLY AROUND THE BUILDING SITE. THE STRUCTURAL BMPS ARE TO BE REMOVED, AS THE PERMANENT LANDSCAPING INSTALLATIONS ARE COMPLETED.

THE EROSION AND SEDIMENT CONTROL PLAN MAY BE MODIFIED BY THE DEPARTMENT OF HIGHWAYS AND TRANSPORTATION, OWNER'S ENGINEER, CITY OF GRAND JUNCTION OR ITS AUTHORIZED REPRESENTATIVE AS FIELD CONDITIONS WARRANT.

### STORMWATER DETENTION AND WATER QUALITY:

STORMWATER DETENTION AND WATER QUALITY IS ACHIEVED THROUGH THE EXISTING STORMWATER COLLECTION SYSTEM.

### TEMPORARY SEEDING AND MULCHING:

ALL SEEDS FURNISHED SHALL BE FREE FROM NOXIOUS SEEDS SUCH AS RUSSIAN OR CANADIAN THISTLE, COURSE FESCUE, EUROPEAN BINDWEED, JOHNSON GRASS, KNAPWEED, AND LEAFY SPURGE. THE FORMULA USED FOR DETERMINING THE QUALITY OF PURE LIVE SEED (PLS). SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS). SEEDING RECOMMENDATIONS ARE PROVIDED BELOW, BUT MAY BE MODIFIED WITH THE OWNER'S APPROVAL TO MAKE THE BEST USE OF EXISTING CLEARINGS AND GRUBBINGS:

SPECIES	COMMON NAME	VARIETY	PLS RATE(%)/A
AGROPYRON CRISTATUM	CRESTED WHEATGRASS	EPHRAIM	6
AGROPYRON SMITHI	WESTERN WHEATGRASS	ARRIBA	16
BROMIS INERMIS	SMOOTH BROME	LINCOLN	12
SPOROBOLUS AIROIDES	ALKALI SACATON		0.5
PLEURAPHIS JAMESII	VIVA GALLETA GRASS		12
DACTYLIS GLOMERATA	ORCHARD GRASS	PAIUTE	4
ARRHENATHERUM ELATES	TALL OATGRASS		ADD IN
LOLIUM PERENNE	PERENNIAL RYEGRASS	TETRAPLOID	8

ALL SEEDS SHALL BE DRILLED NOT HYDROSEEDED. ALL DISTURBED AREAS SHALL BE SEEDED AND CRIMP MULCHED IF PERMANENT VEGETATION IS NOT IMMEDIATELY INSTALLED. AFTER SEEDING HAS BEEN COMPLETED, A RATE OF 4,000 LBS. OF STRAW PER ACRE SHALL BE APPLIED UNIFORMLY, CRIMPED IN WITH A CRIMPER OR OTHER APPROVED EQUIPMENT OR OTHERWISE ATTACHED. A TACKIFIER OR JUTE NETTING TO ATTACH MULCH MAY BE USED WITH THE OWNER'S APPROVAL. THE SEEDED AREA SHALL BE CRIMPED MULCHED AND THE MULCH ATTACHED WITHIN TWENTY-FOUR (24) HOURS AFTER SEEDING. AREAS NOT MULCHED AND ATTACHED WITHIN TWENTY-FOUR (24) HOURS AFTER SEEDING MUST BE RESEEDED WITH THE SPECIFIED MIX AT THE CONTRACTOR'S EXPENSE, PRIOR TO MULCHING AND ATTACHING. ON STEEP SLOPES OR OTHER SPECIFIED AREAS AS SHOWN ON THE PLANTING PLAN, WHICH ARE DIFFICULT TO MULCH AND ATTACH BY CONVENTIONAL METHOD, BURLAP OR OTHER BLANKETING MATERIALS PROPERLY ANCHORED AND SECURED MAY BE USED WHEN APPROVED BY THE CITY OF GRAND

### PERMANENT STABILIZATION MEASURES:

PERMANENT LANDSCAPING WILL INCLUDE SEEDING TO OPEN AREAS. NATIVE PERENNIAL SEEDING WILL BE ESTABLISHED IN NON-IRRIGATED AREAS AND SOD OR OTHER VEGETATIVE COVER WILL BE ESTABLISHED IN IRRIGATED OPEN AREAS. ALL PERMANENT STABILIZATION MEASURES WILL BE SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER.

### MATERIALS AND SPILL PREVENTION:

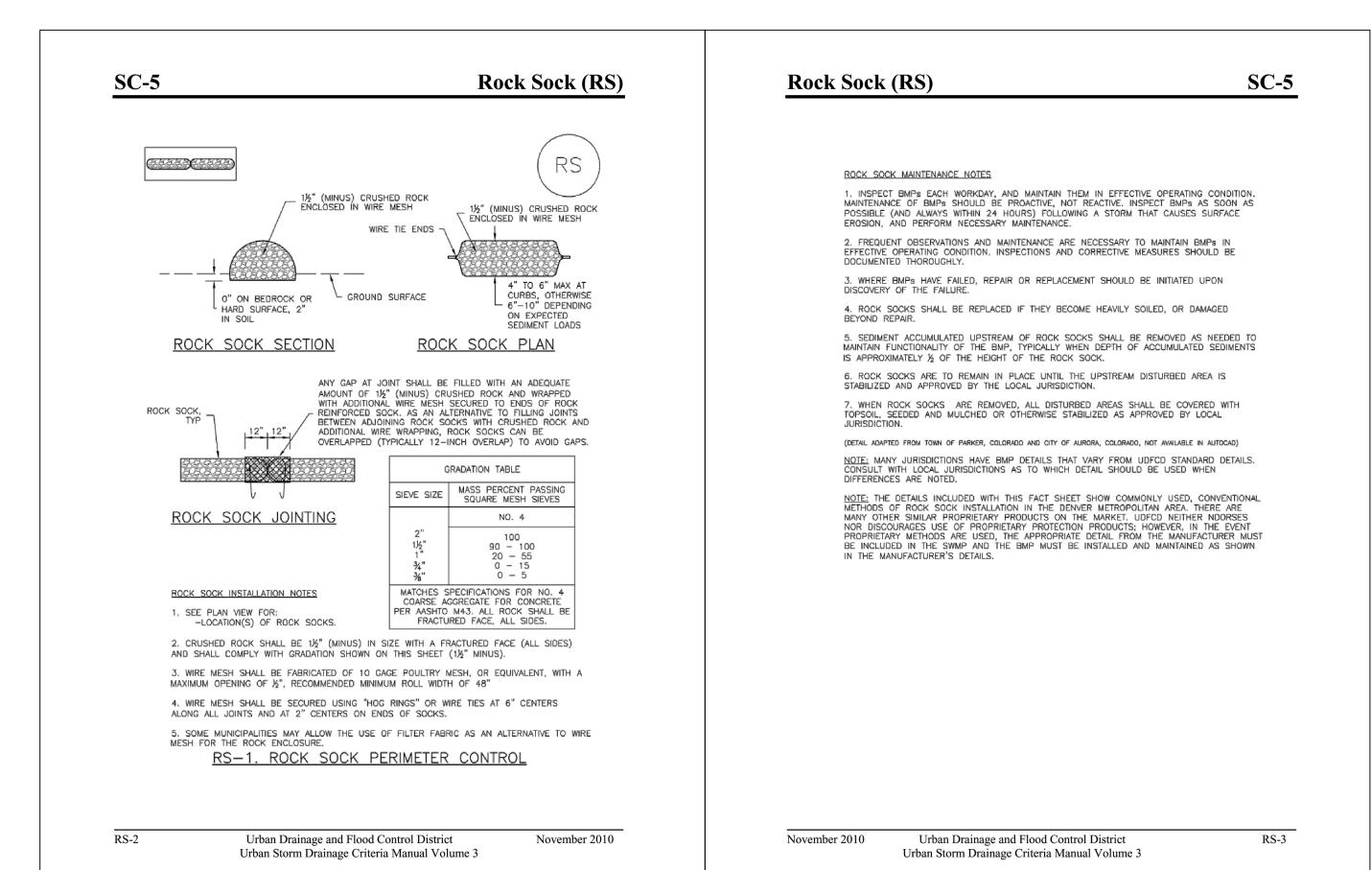
THE CONTRACTOR WILL STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN CONFINED AREAS ON SITE FROM WHICH RUNOFF WILL BE CONTAINED AND FILTERED. MATERIALS WILL BE STORED OFF THE GROUND AND PROTECTED FROM THE WEATHER BY A COVER OR STORED IN A CONTAINER SUCH AS A VAN OR TRAILER. AN EARTHEN DIKE WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE FUEL STORAGE AREA TO PREVENT MATERIALS FROM CONTACT WITH SURFACE RUNOFF. EQUIPMENT MAINTENANCE WILL BE PERFORMED IN A DESIGNATED AREA AND STANDARD MAINTENANCE PROCEDURES, SUCH AS THE USE OF DRIP PANS, WILL BE USED TO CONTAIN PETROLEUM PRODUCTS.

### INSPECTION AND MAINTENANCE:

THE EROSION CONTROL MEASURES WILL BE INSPECTED DAILY DURING CONSTRUCTION BY THE CONTRACTOR AND AFTER EACH RAIN EVENT. ALL INSPECTIONS SHALL BE DOCUMENTED AND SHALL INCLUDE THE DATE OF INSPECTION, ANY INCIDENCE OF NON-COMPLIANCE, SIGNED CERTIFICATION THAT THE SITE IS IN COMPLIANCE, AND ANY NOTES, DRAWINGS, MAPS, ETC. PERTAINING TO REPAIRS. COPIES OF ALL DOCUMENTATION SHALL BE DISTRIBUTED TO MUNICIPALITIES AND OWNER ON A REGULAR BASIS AS SPECIFIED BY OWNER. STRAW BALE BARRIERS WILL BE CHECKED FOR UNDERMINING AND BYPASS AND REPAIRED OR EXPANDED AS NEEDED. SEDIMENT SHOULD BE REMOVED FROM INLET FILTERS BEFORE ONE HALF OF THE DESIGN DEPTH HAS BEEN FILLED. SEDIMENTS DEPOSITED IN THE PUBLIC RIGHTS-OF-WAY WILL BE REMOVED IMMEDIATELY. THE TEMPORARY VEGETATION OF BARE SOILS WILL BE CHECKED REGULARLY AND AREAS WHERE IT IS LOST OR DAMAGED WILL BE RESEEDED. AT MINIMUM THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMPS EVERY 14 DAYS AND AFTER SIGNIFICANT PRECIPITATION OR SNOWMELT EVENTS. INSTALLATIONS AND MODIFICATIONS AS REQUIRED BY THE CITY OF GRAND JUNCTION WILL BE IMPLEMENTED WITHIN 48 HOURS OF NOTIFICATION. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AND REPAIR AREAS AS REQUIRED AFTER VEGETATION IS ESTABLISHED AND ACCEPTED BY OWNER AND MUNICIPALITY.

### FINAL STABILIZATION AND LONG-TERM STORMWATER QUALITY:

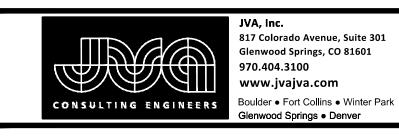
FINAL STABILIZATION IS REACHED WHEN ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED WITH A DENSITY OF AT LEAST 70% OR PRE-DISTURBANCE LEVELS OR EQUIVALENT PERMANENT, PHYSICAL EROSION REDUCTION METHODS HAVE BEEN EMPLOYED. FINAL STABILIZATION WILL BE ACHIEVED USING SOD, NATIVE SEEDING, PERMANENT BMP'S, AND OTHER METHODS. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL STABILIZATION REGARDLESS OF ACCEPTANCE BY OWNER OF THE CONTRACTOR ITEM.

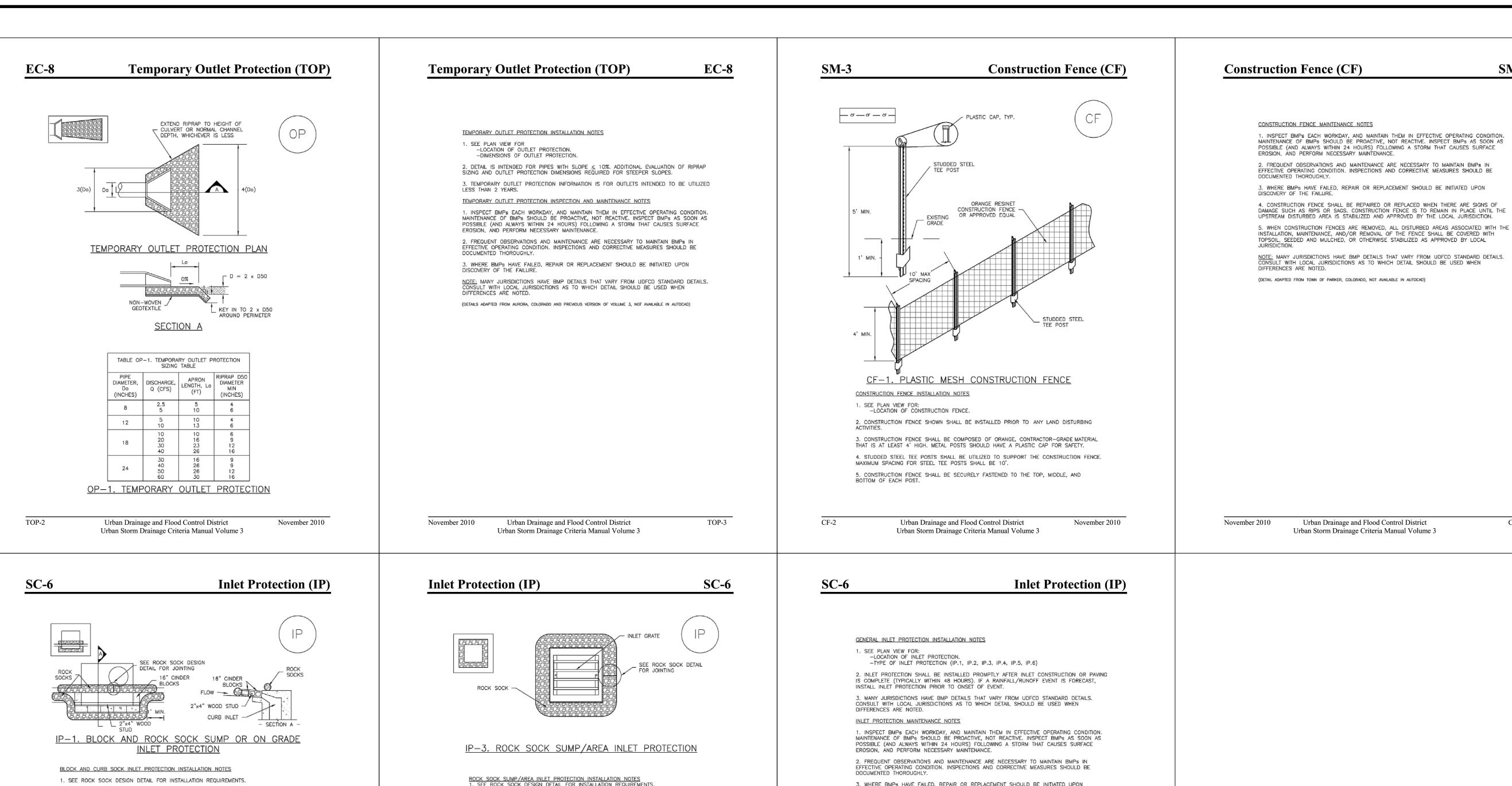


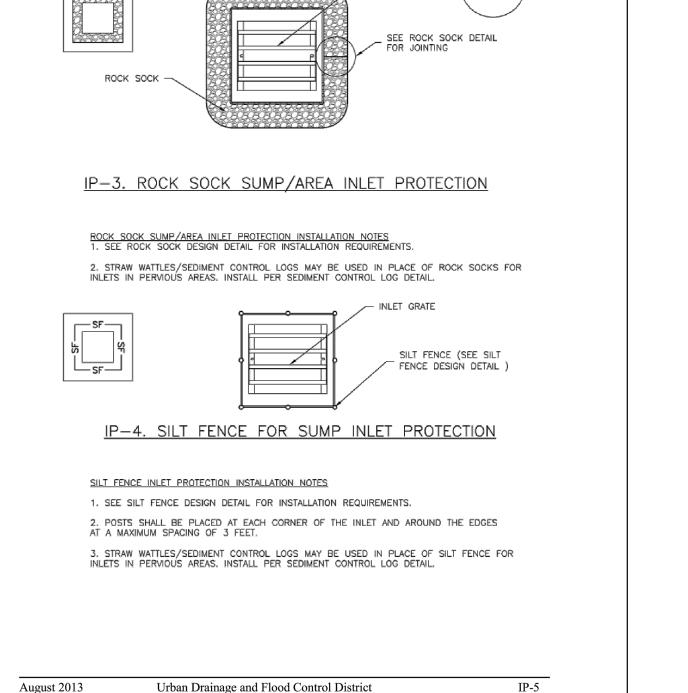
DESCRIPTION DRAWN BY <u>ZCF</u> DATE <u>07 18, 2022</u> REVISION 🛆 . DESIGNED BY <u>LAL/ZCF</u> DATE <u>07 18, 2022</u> REVISION **A** CHECKED BY <u>JJM</u> DATE <u>07 18, 2022</u> REVISION 3 REVISION 🕸 APPROVED BY \_\_\_\_\_ DATE \_



PLAN & PROFILE







3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/4 OF THE HEIGHT FOR

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD) NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

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August 2013

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2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

5' MIN 3'-5' TYP.

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

IP-2. CURB ROCK SOCKS UPSTREAM OF

**INLET PROTECTION** 

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW. 3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART. 4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

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SOCKS APPROX 30 DEG. BLOCK AND ROCK SOCK INLET

PROTECTION(SEE DETAIL IP-1)

August 2013

TWO CURB

*L L* =

CURB SOCK -

IP-4

FLOW -



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**SM-3** 

CF-3

SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

-LOCATION OF STAGING AREA(S). -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE  ${\rm BMPs}$  HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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50 FOOT (MIN.)

**Stabilized Staging Area (SSA) SM-6** 

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE—ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED. NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

SSA-4

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### **Vehicle Tracking Control (VTC)**

SIDEWALK OR OTHER

PAVED SURFACE

INSTALL ROCK FLUSH WITH

COMPACTED SUBGRADE -

OR BELOW TOP OF PAVEMENT

November 2010

**SM-4** 

(WIDTH CAN BE

VEHICLES ARE PHYSICALLY CONFINED ON

BOTH SIDES)

UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE CDOT SECT. #703, AASHTO #3

NON-WOVEN GEOTEXTILE

COARSE AGGREGATE OR 6"

NON-WOVEN GEOTEXTILE FABRIC

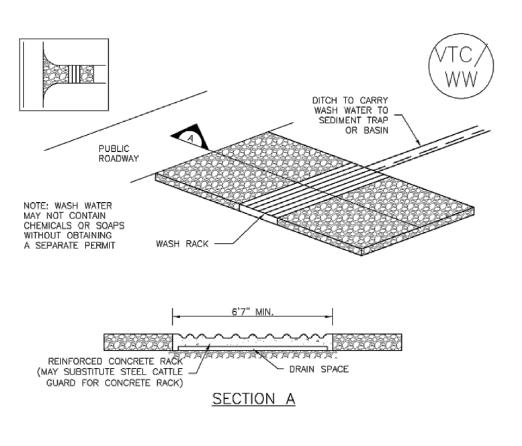
UNLESS OTHERWISE SPECIFIED BY LOCAL

#3 COARSE AGGREGATE

OR 6" MINUS ROCK

JURISDICTION, USE COOT SECT. #703, AASHTO

**SM-4 Vehicle Tracking Control (VTC)** 

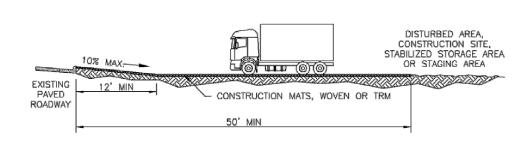


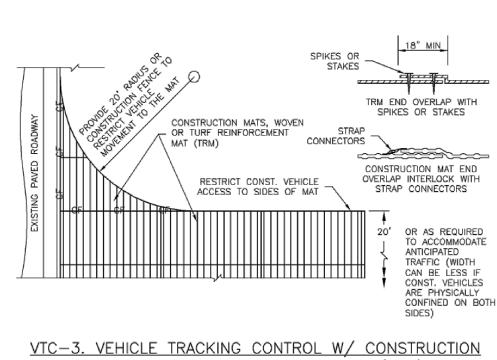
VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

Urban Drainage and Flood Control District November 2010 Urban Storm Drainage Criteria Manual Volume 3

**Vehicle Tracking Control (VTC)** 

**SM-4** 





MAT OR TURF REINFORCEMENT MAT (TRM)

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ARE PHYSICALLY CONFINED ON BOTH

**SM-4** 

### **Vehicle Tracking Control (VTC)**

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM),

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE JSED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING, SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

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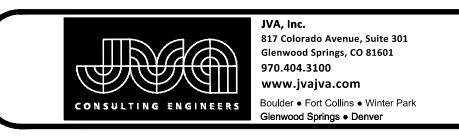
VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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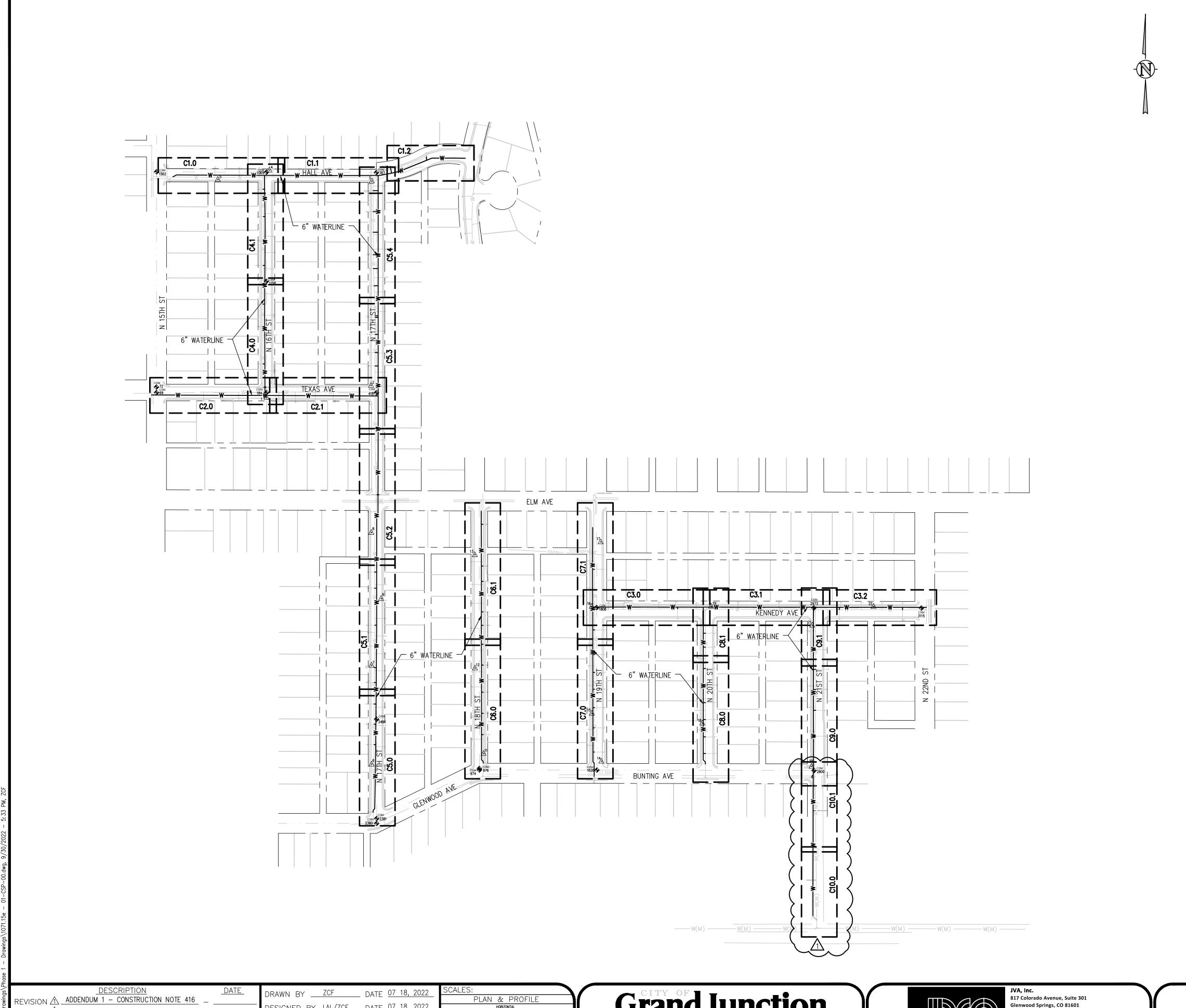
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PLAN & PROFILE





2022 WATERLINE REPLACEMENT PROJECT - PHASE 1 EROSION CONTROL NOTES



CONTROL POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	CP/16TH	41086.21	96354.86	4634.00
2	CP/17TH	41122.02	96669.27	4635.94
3	CP/17TH	41736.43	96671.37	4639.00
4	CP/16TH	41769.52	96363.59	4638.46
5	CP/ALLEY	41741.67	96208.48	4638.35
6	CP/CHURCH	39983.25	96670.86	4626.72
7	CP/1353	40280.74	96670.61	4629.78
8	CP/S ELM	40679.82	96669.92	4631.65
9	CP/1400	40481.04	96699.47	4630.34
11	CP/18TH&BUNTING	40015.26	97007.59	4625.86
12	CP/1343 18TH	40272.37	96981.69	4626.96
13	CP/1421 18TH	40612.94	96981.33	4628.54
14	CP/19TH&BUNTING	39992.11	97361.61	4623.41
15	CP/1323 19TH	40136.04	97333.17	4624.55
16	CP/19TH&KENNEDY	40457.54	97332.80	4626.76
17	CP/19TH&ELM	40651.49	97359.69	4628.43
18	CP/1313 20TH	40106.92	97665.17	4623.25
19	CP/20TH&KENNEDY	40458.05	97691.67	4625.30
20	CP/21ST&BUNTING	39976.42	97993.81	4621.06
21	CP/21ST&KENNEDY	40401.02	97995.68	4623.62
22	CP/2150 KENNEDY	40457.65	98180.15	4623.07
69	CSM	41100.83	96023.92	4634.23
72	CSM	41117.32	96023.83	4634.36
184	CSM	41100.45	96354.70	4633.88
418	CSM	41099.97	96684.94	4635.99
767	CSM	41762.35	96685.10	4640.14
974	CSM	39965.78	96994.72	4626.08
976	CSM	39970.26	96994.54	4626.07
1069	CSM	41763.41	96354.42	4638.87
1158	CSM	41435.61	96354.58	4636.62
1562	CSM	41764.48	96024.02	4639.11
1626	CSM	39965.65	97347.98	4623.66
1808	CSM	40454.24	97347.33	4627.11
2380	CSM	39805.17	96685.85	4626.00
2381	CSM	39819.85	96685.82	4626.12
2496	CSM	40118.66	96685.71	4628.53
2800	CSM	39964.32	98000.77	4621.35
2973	CSM	40453.33	98000.37	4624.17
3115	CSM	40452.80	98323.46	4622.33

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 07 18, 2022

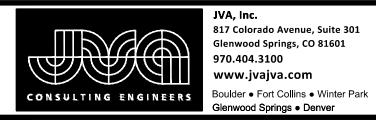
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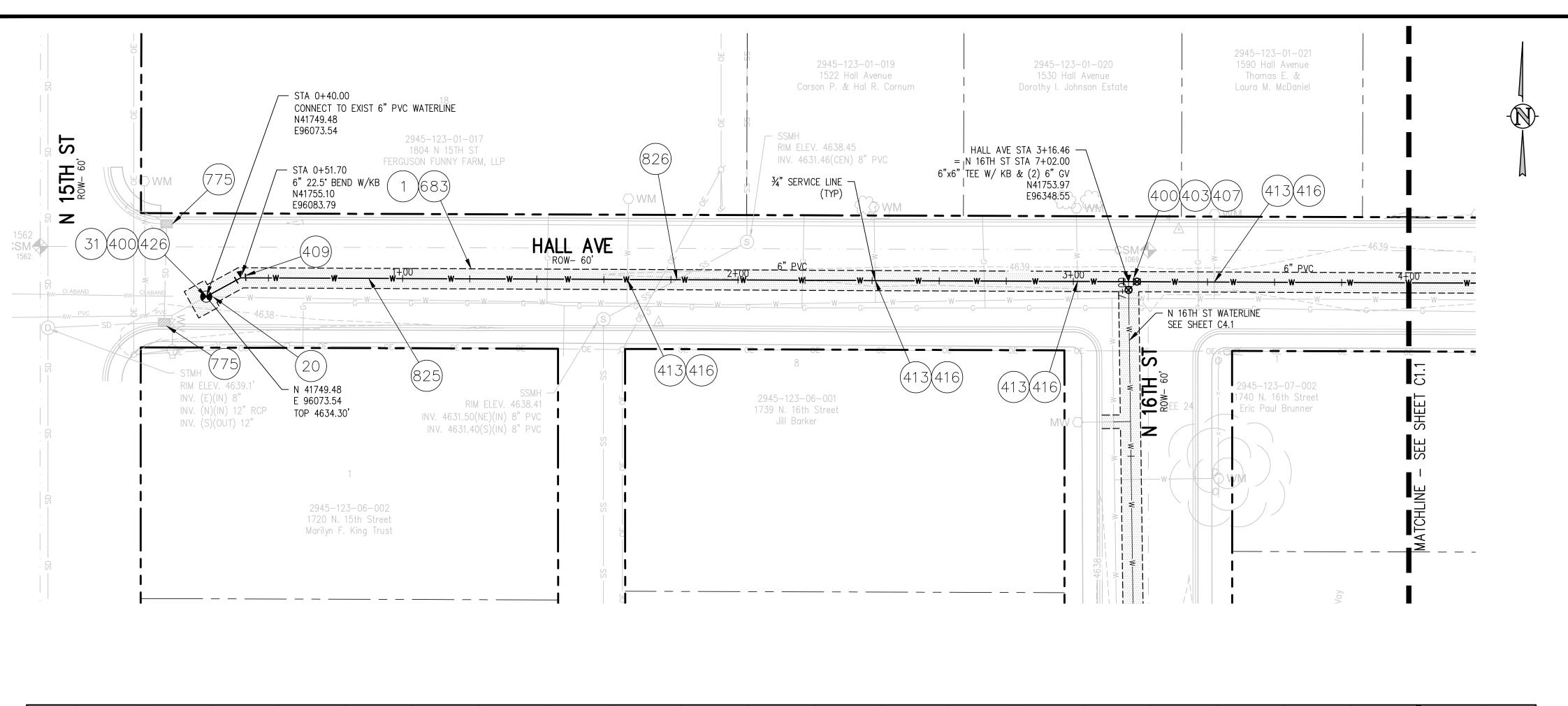
PLAN & PROFILE

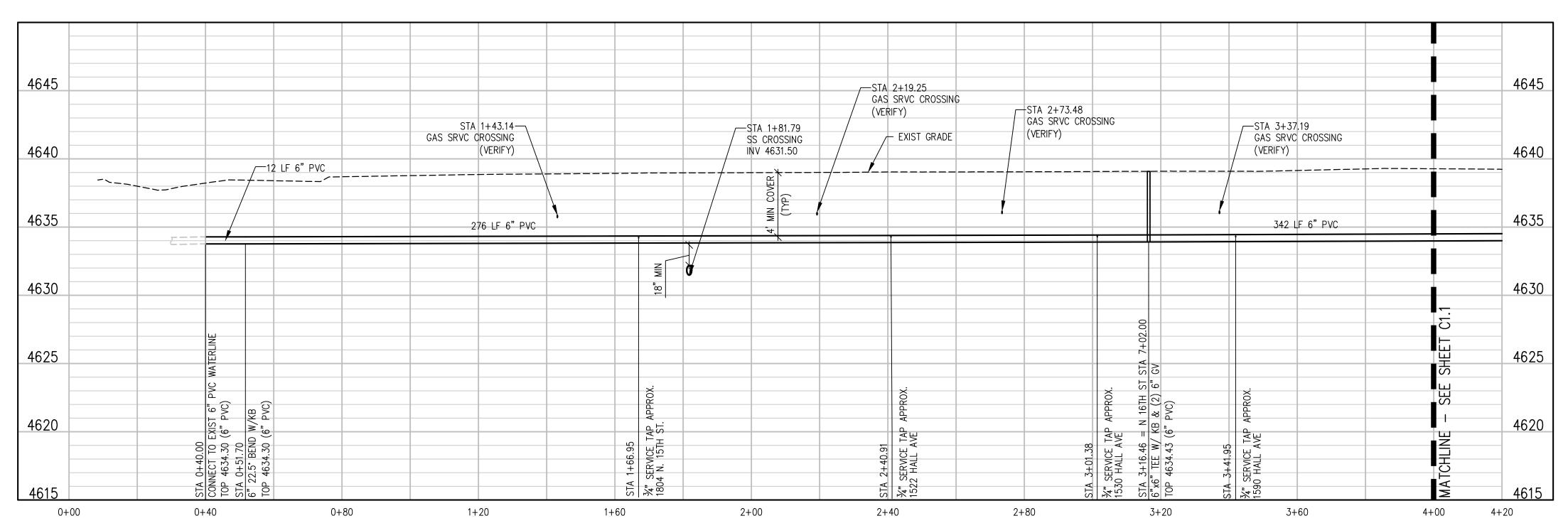
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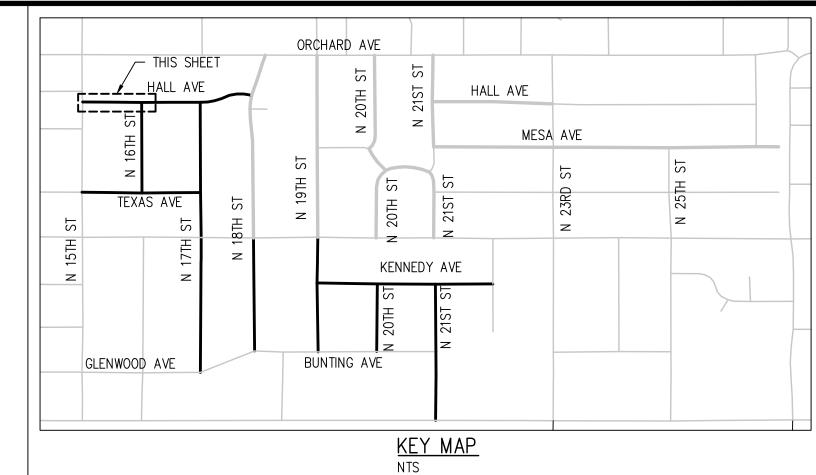
75 150 300

Grand Junction









- 1) 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 20 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- (31) REMOVE EXISTING ELBOW. SALVAGE AND DELIVER TO CITY SHOPS.
- (400) 102.7/108.2 WATER MAIN PIPE (C-900 DR-18 PVC) (SIZE AS SHOWN). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- (403) 102.8b/108.3 GATE VALVE. (SIZE AS SHOWN)
- (407) 102.8/108.3 TEE (SIZE AS SHOWN)
- (409) 102.8/108.3 ELBOW (SIZE AND ANGLE AS SHOWN)
- 413 102.7C/108.4 WATER SERVICE LINE (TYPE K COPPER) (SIZE AS SHOWN ON PLAN) THE CONTRACT UNIT PRICE FOR WATER SERVICE PIPE SHALL INCLUDE THE COST OF CONNECTION TO WATERLINE INCLUDING ALL MATERIALS TO MAKE THE CONNECTION AND CLOSING ORIGINAL CORPORATION STOP.
- (416) 102.8j/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN)  $\Lambda$
- 426 CONNECT TO EXISTING WATER PIPE/VALVE/FITTING. THE CONTRACT UNIT PRICE FOR WATER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- (683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON TOP OF 6" ABC) (GRADING SX, BINDER GRADE PG 64-22, GYR 75) (TWO 2" LIFTS)
- (775) 208 STORM DRAIN INLET PROTECTION (EROSION CONTROL LOG) (AS SHOWN AND PER DETAIL)
- (825) CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS
  ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY
  BEHIND ROW LINE OR EASEMENT LIMITS.
- (826) PROTECT EXISTING UTILITY LINE IN PLACE.

### NOTES:

- 1. CONNECT TO EXISTING SERVICE LINES OR EXTEND SERVICE
- LINES TO NEW 6" WATERLINE
  2. ALL CURB STOP AND SERVICE LINE LOCATIONS ARE
- APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION
- 3. IF CURB STOP WAS NOT LOCATED FIELD LOCATE CURB STOP
  AND REPLACE EXIST SRVC CONNECTION WITH NEW
  CONNECTION TO NEW 6" WATERLINE

 DRAWN BY
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 LAL/ZCF
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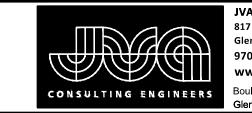
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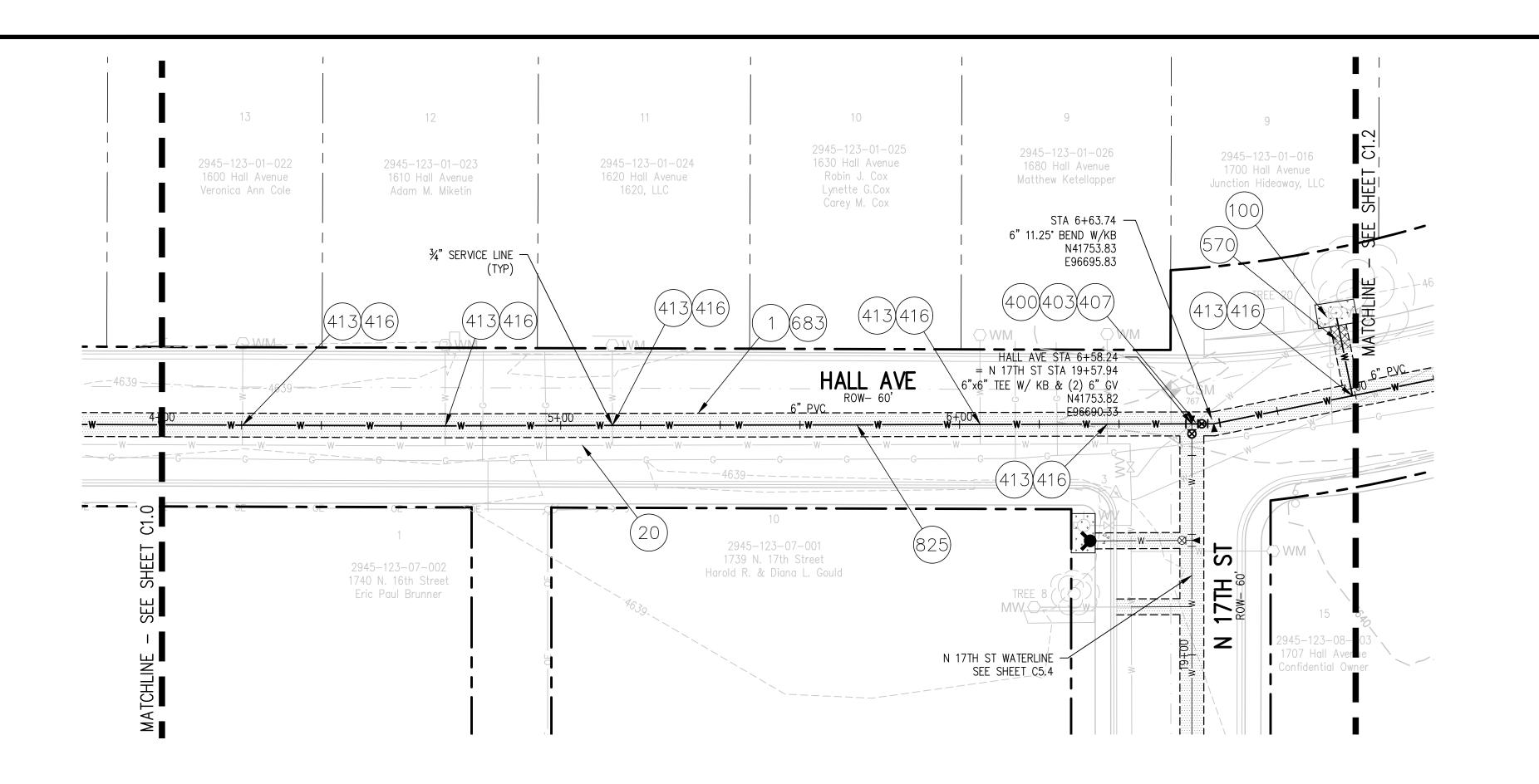
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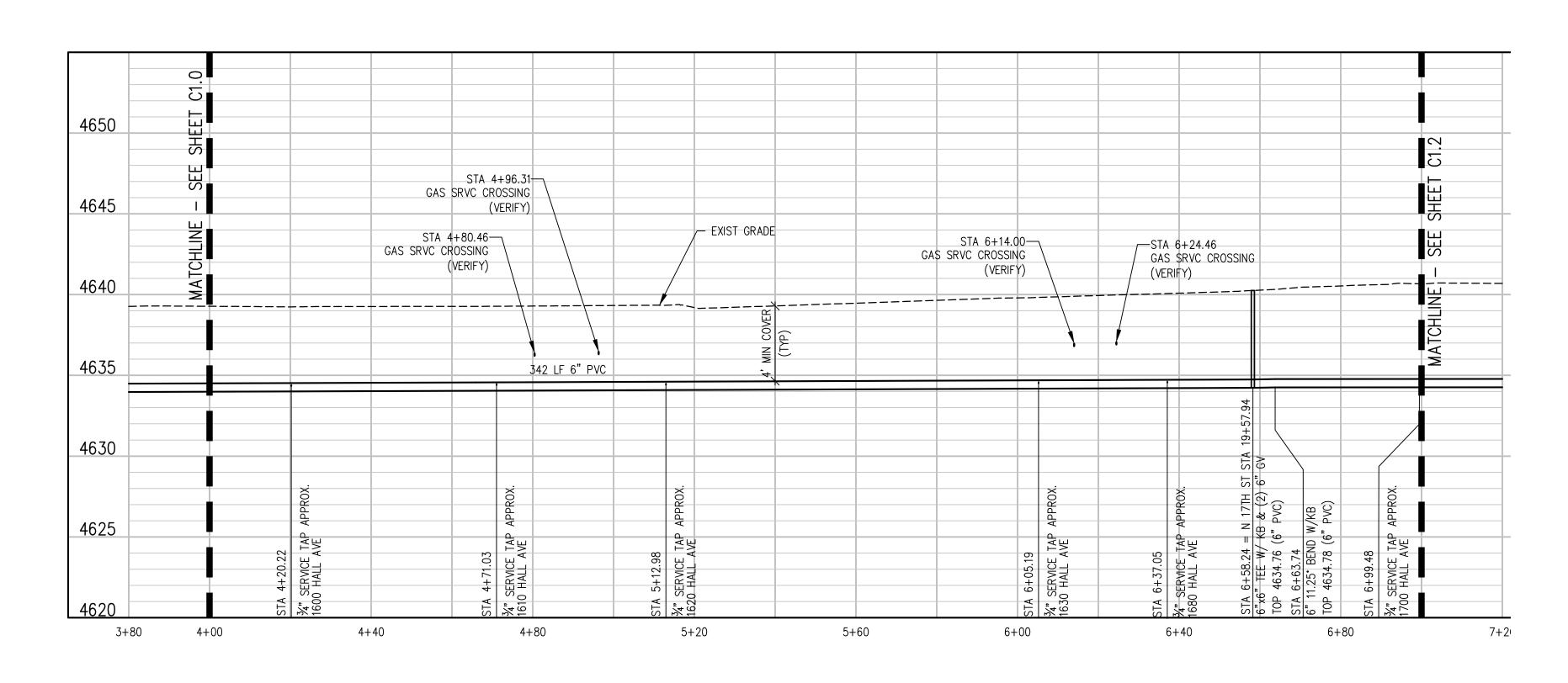


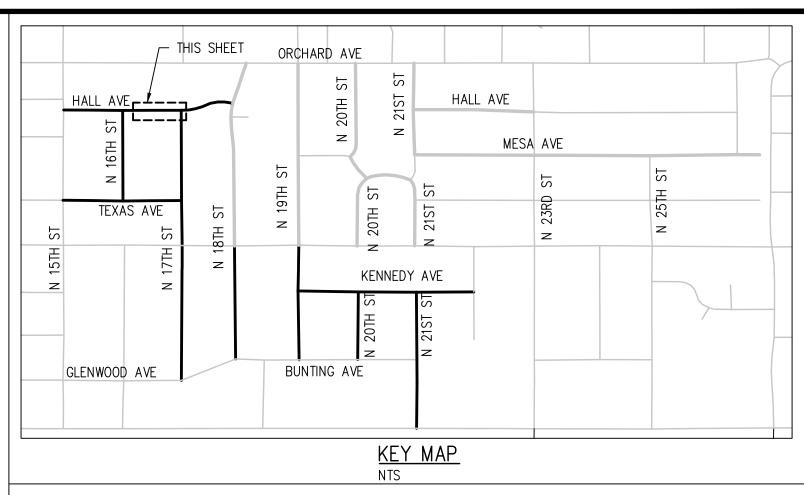
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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
HALL AVE WATER PLAN & PROFILE

C1.0







- 1 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 210 RESET LANDSCAPE GROUND COVER. CONTRACTOR SHALL REMOVE GROUND COVER AND ANY UNDERLYING WEED BARRIER AS NEEDED AND STOCKPILE MATERIALS. CONTRACTOR SHALL RESET THESE MATERIALS AND PROVIDE ADDITIONAL MATERIALS AS NEEDED TO RESTORE LANDSCAPING.
- (400) 102.7/108.2 WATER MAIN PIPE (C-900 DR-18 PVC) (SIZE AS SHOWN). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
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- (416) 102.8j/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN)  $\angle 1$
- (570) 608.06 MONOLITHIC CURB, GUTTER, AND SIDEWALK (6' WIDE)
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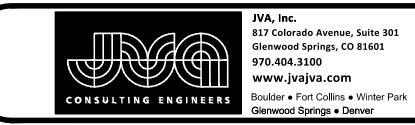
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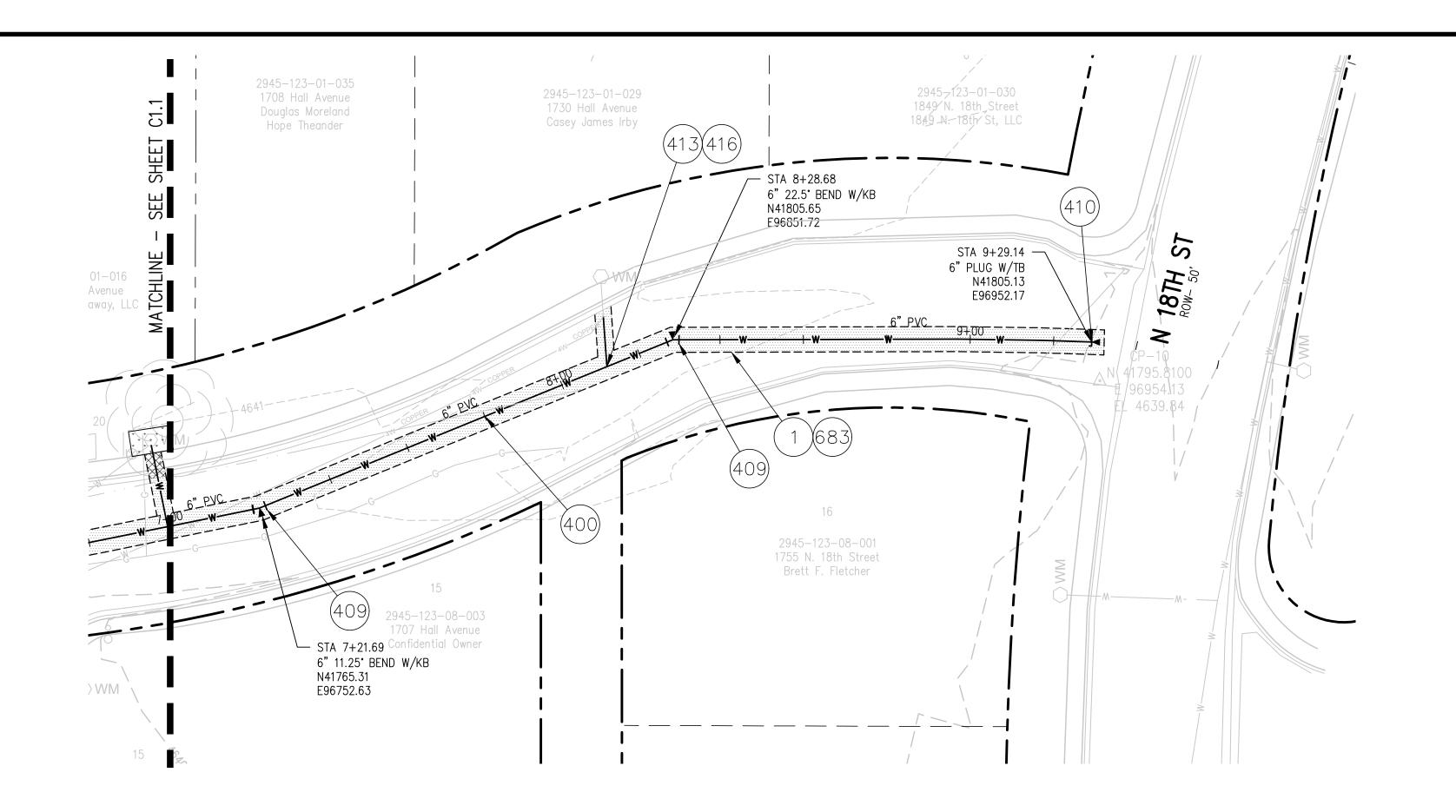
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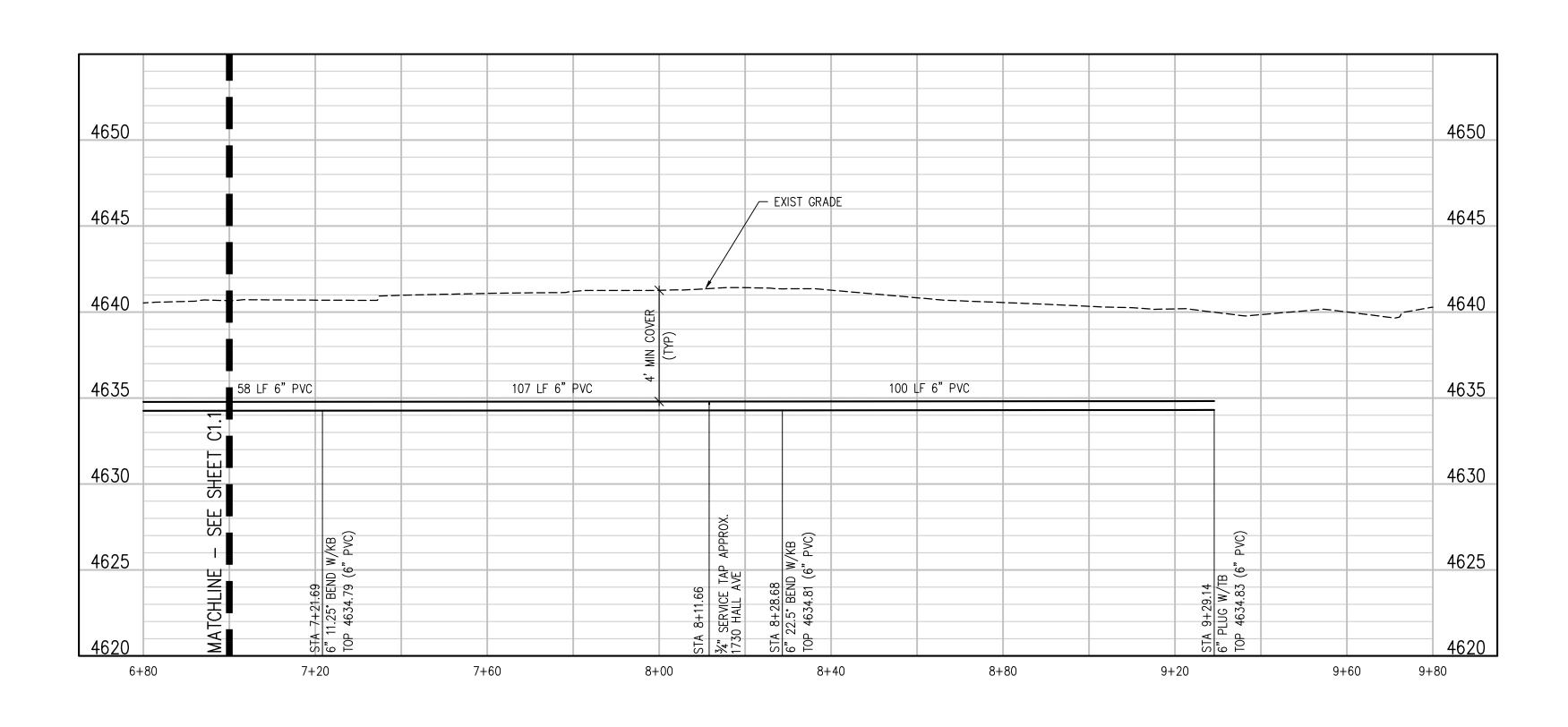
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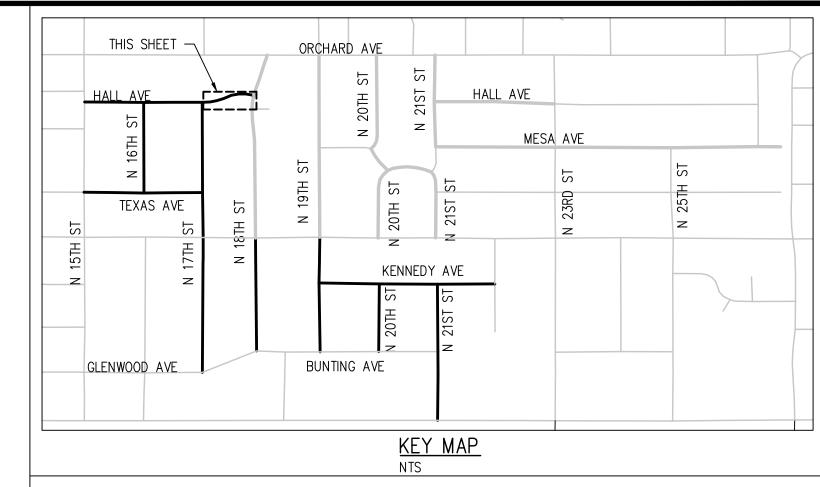
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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
HALL AVE WATER PLAN & PROFILE







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- (410) 102.8/108.3 END CAP / PLUG (SIZE AS SHOWN)
- (413) 102.7C/108.4 WATER SERVICE LINE (TYPE K COPPER) (SIZE AS SHOWN ON PLAN) THE CONTRACT UNIT PRICE FOR WATER SERVICE PIPE SHALL INCLUDE THE COST OF CONNECTION TO WATERLINE INCLUDING ALL MATERIALS TO MAKE THE CONNECTION AND CLOSING ORIGINAL CORPORATION STOP.
- 16) 102.8j/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN)  $\bigwedge$
- 683 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON TOP OF 6" ABC) (GRADING SX, BINDER GRADE PG 64-22, GYR 75) (TWO 2" LIFTS)

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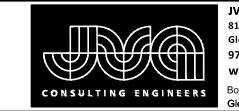
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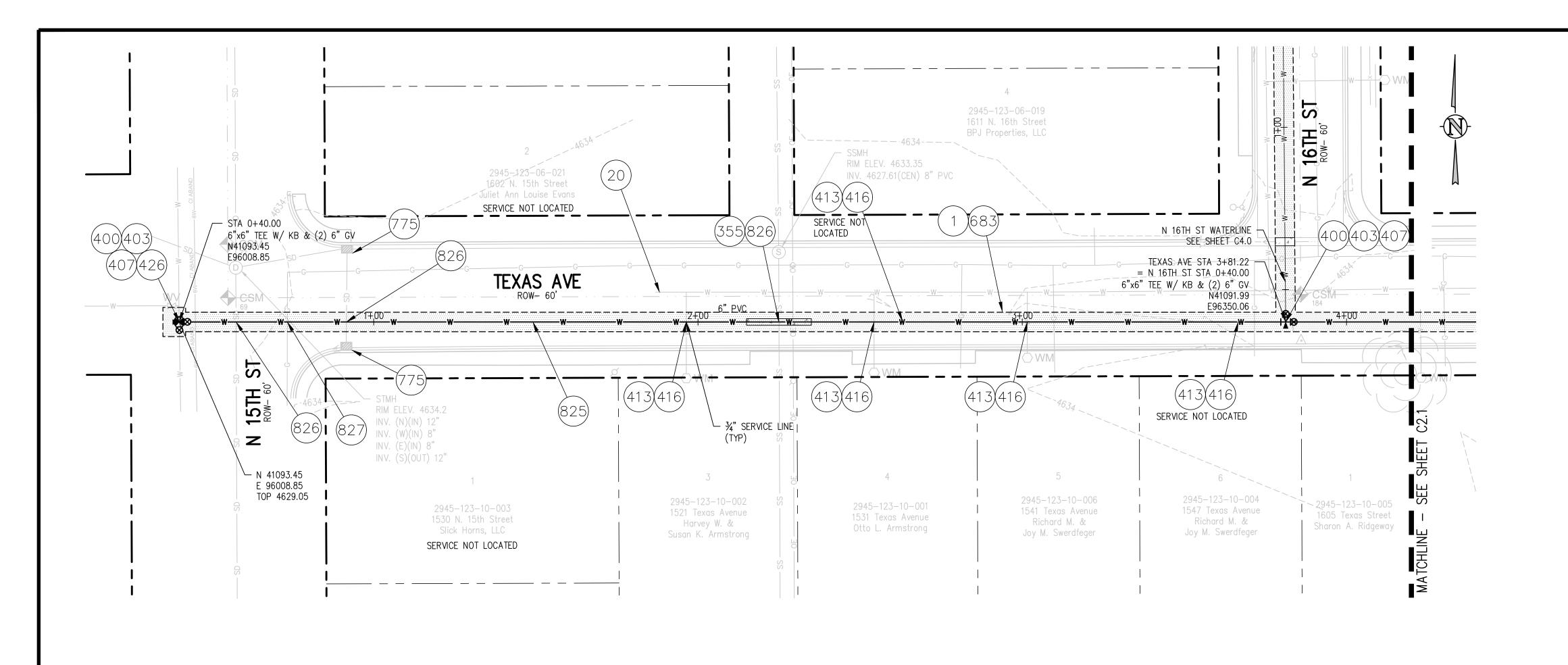
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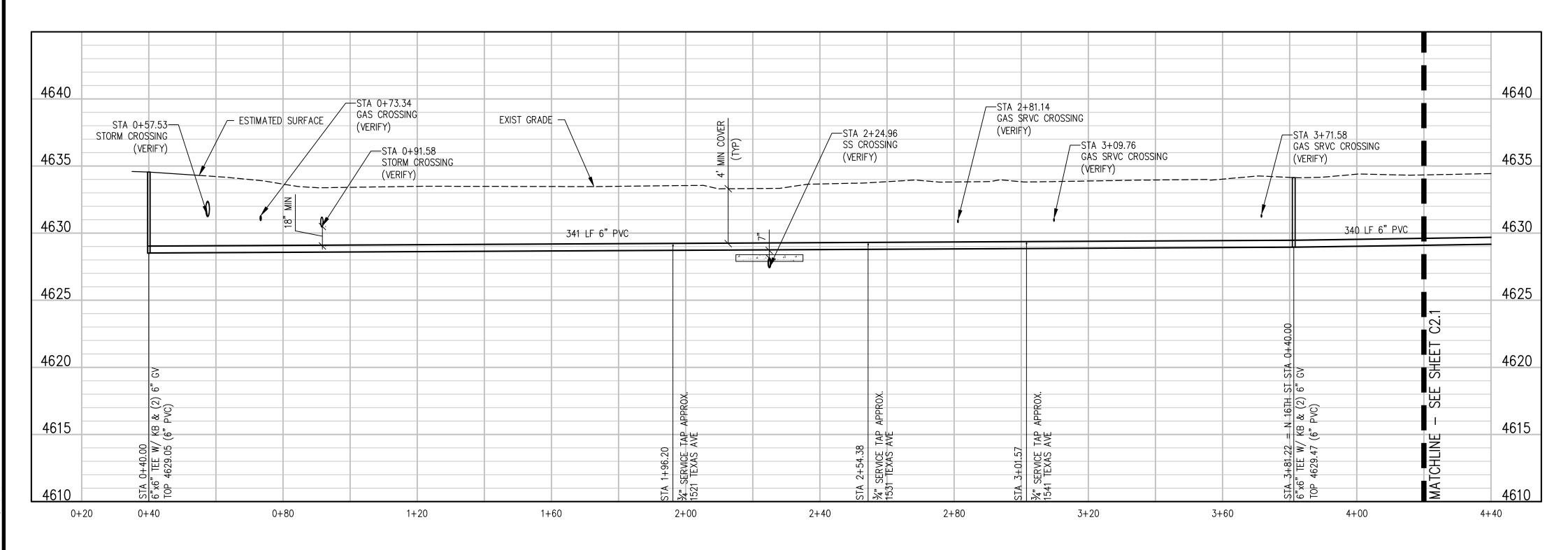
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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
HALL AVE WATER PLAN & PROFILE





# ORCHARD AVE HALL AVE MESA AVE ─ THIS SHEE KENNEDY AVE GLENWOOD AVE BUNTING AVE KEY MAP

### **CONSTRUCTION NOTES**

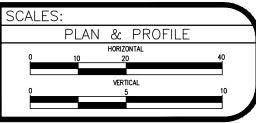
- ( 1 ) 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- (20) 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- (355) 104.40 CAP TOP HALF OF SEWER IN CONCRETE PER STD. DETAIL GU-04. (WATER LINE LESS THAN 18" ABOVE SEWER LINE)
- 102.7/108.2 WATER MAIN PIPE (C-900 DR-18 PVC) (SIZE AS SHOWN). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL
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- (826) PROTECT EXISTING UTILITY LINE IN PLACE.
- (827) PROTECT EXISTING GAS.

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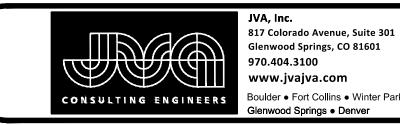
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DESCRIPTION REVISION A ADDENDUM 1 - CONSTRUCTION NOTE 416 \_ 9/29/2022 REVISION 🛆 REVISION A REVISION A

DRAWN BY <u>ZCF</u> DATE <u>09 22, 2022</u> DESIGNED BY <u>LAL/ZCF</u> DATE <u>09 22, 2022</u> CHECKED BY JJM DATE 09 22, 2022 APPROVED BY \_\_\_\_\_ DATE \_\_

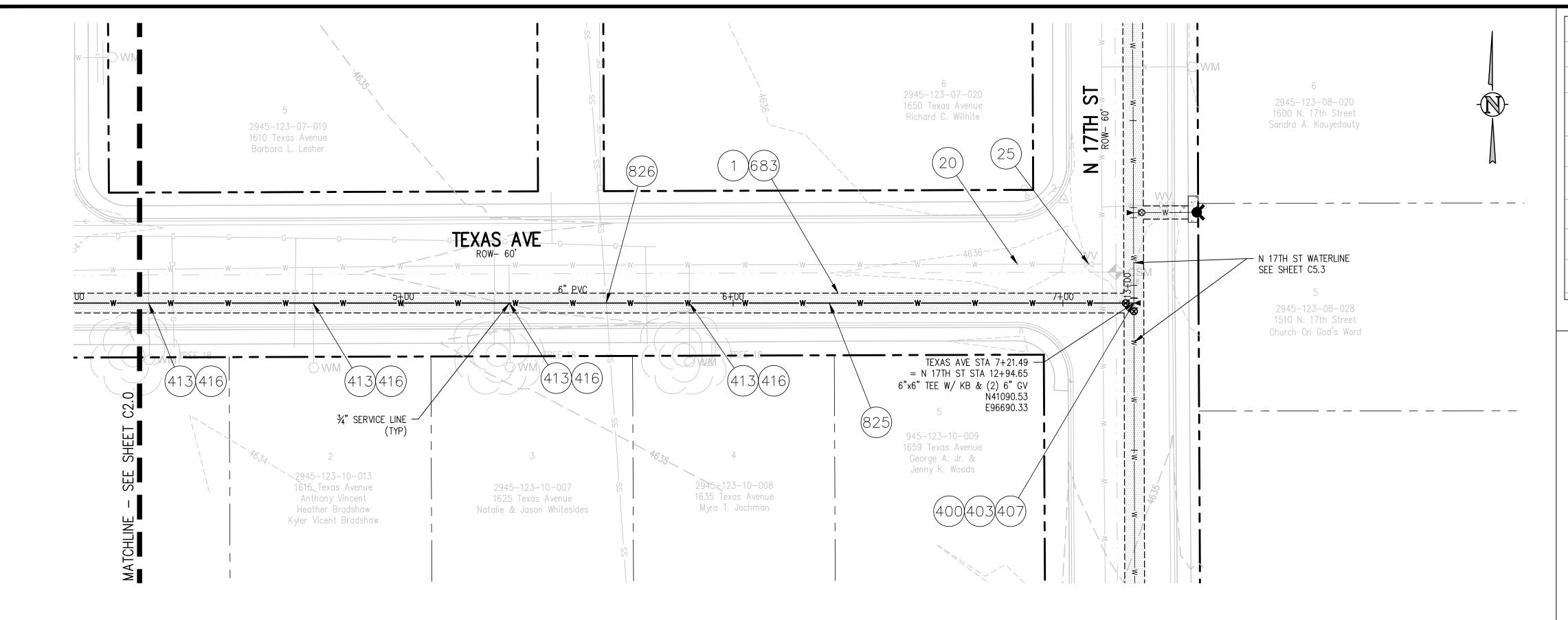


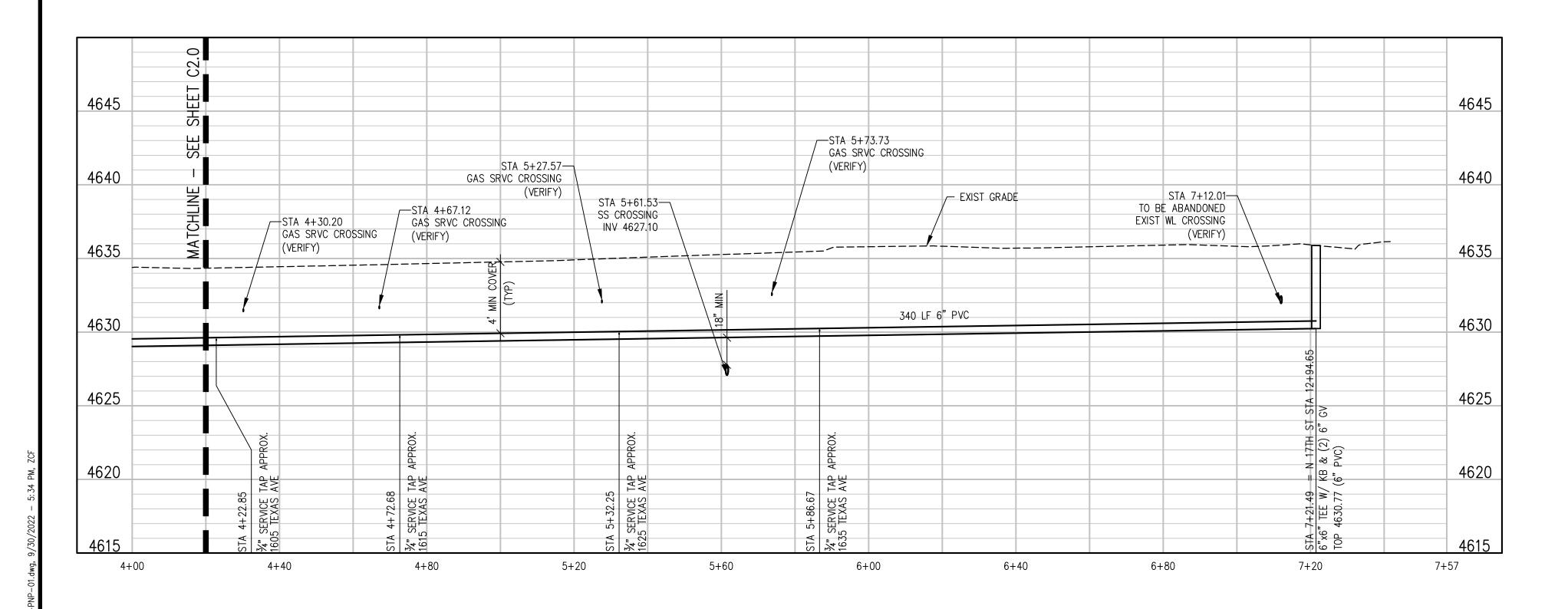
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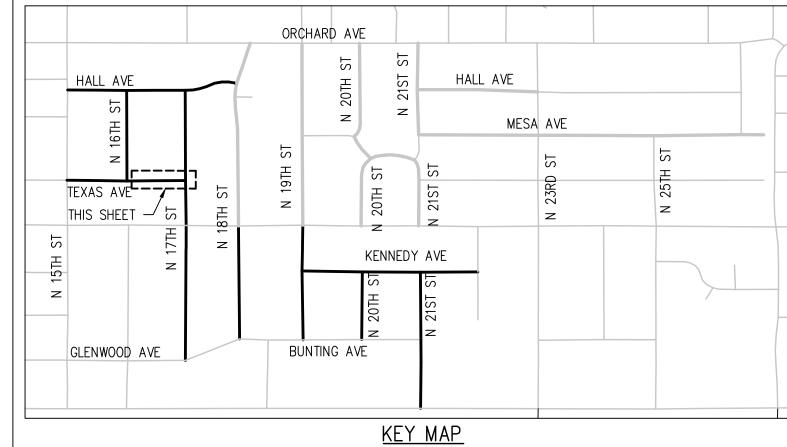


2022 WATERLINE REPLACEMENT PROJECT - PHASE 1 TEXAS AVE WATER PLAN & PROFILE Boulder ● Fort Collins ● Winter Park

C2.0







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- 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 25 202 ABANDON EXISTING WATER VALVE. CLOSE VALVE, REMOVE TOP HALF OF EXISTING VALVE BOX, FILL CAVITY TO FINISHED SUBGRADE WITH FLOW FILL MATERIAL.
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### NOTES:

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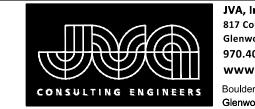
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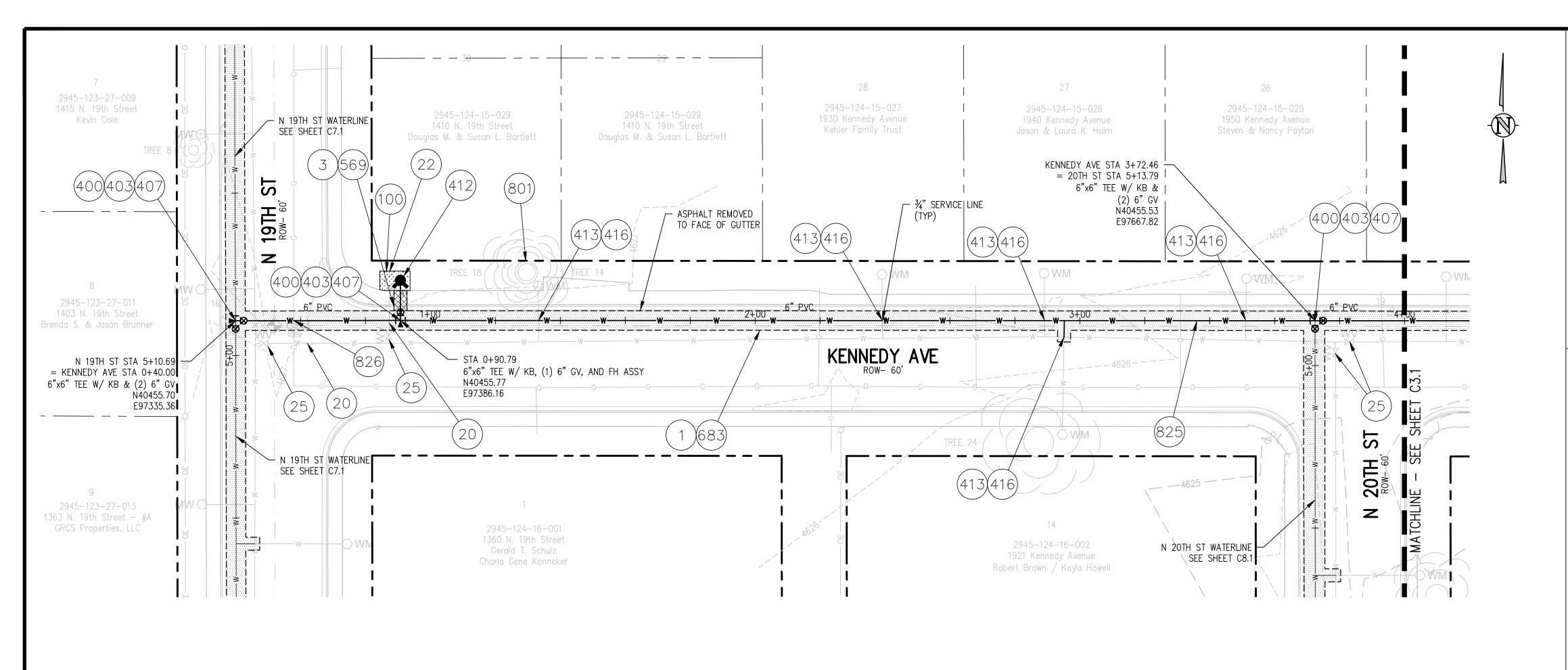
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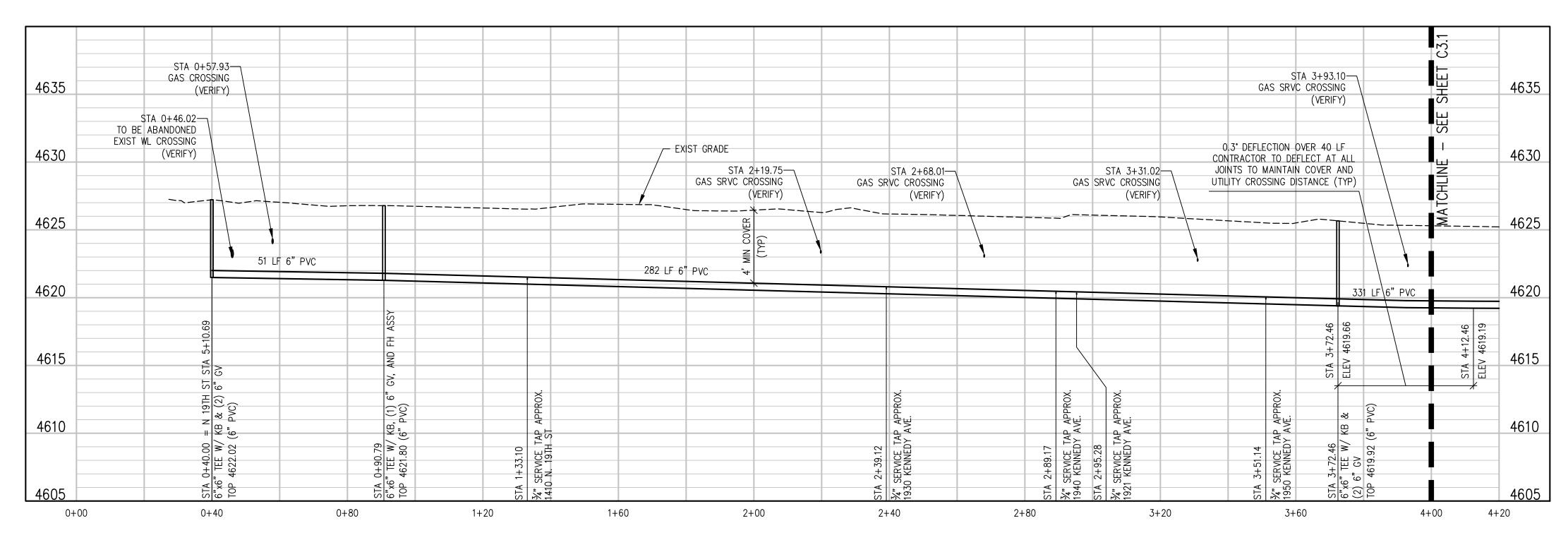
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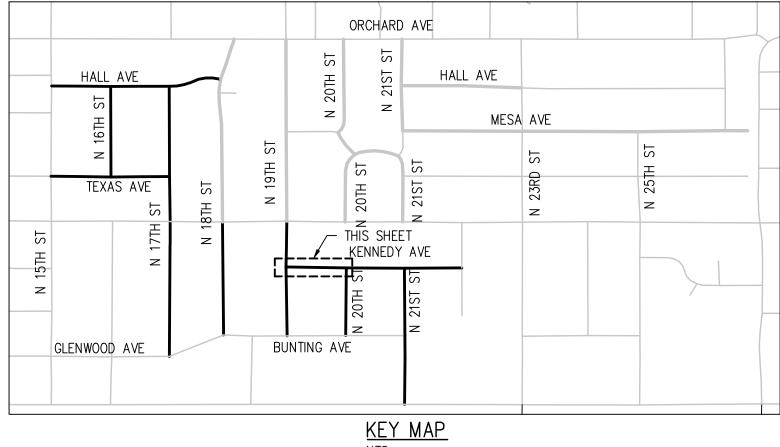


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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
TEXAS AVE WATER PLAN & PROFILE







- 1) 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 3 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 20 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 22 202 REMOVE EXISTING FIRE HYDRANT AND RETURN TO CITY SHOPS.
- 25 202 ABANDON EXISTING WATER VALVE. CLOSE VALVE, REMOVE TOP HALF OF EXISTING VALVE BOX, FILL CAVITY TO FINISHED SUBGRADE WITH FLOW FILL MATERIAL.
- 210 RESET LANDSCAPE GROUND COVER. CONTRACTOR SHALL REMOVE GROUND COVER AND ANY UNDERLYING WEED BARRIER AS NEEDED AND STOCKPILE MATERIALS. CONTRACTOR SHALL RESET THESE MATERIALS AND PROVIDE ADDITIONAL MATERIALS AS NEEDED TO RESTORE LANDSCAPING.
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- (416) 102.8j/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN) (569) 608.06 MONOLITHIC CURB, GUTTER AND SIDEWALK (5' WIDE)
- 683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON
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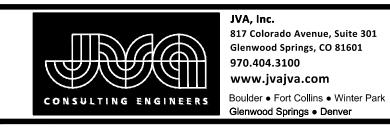
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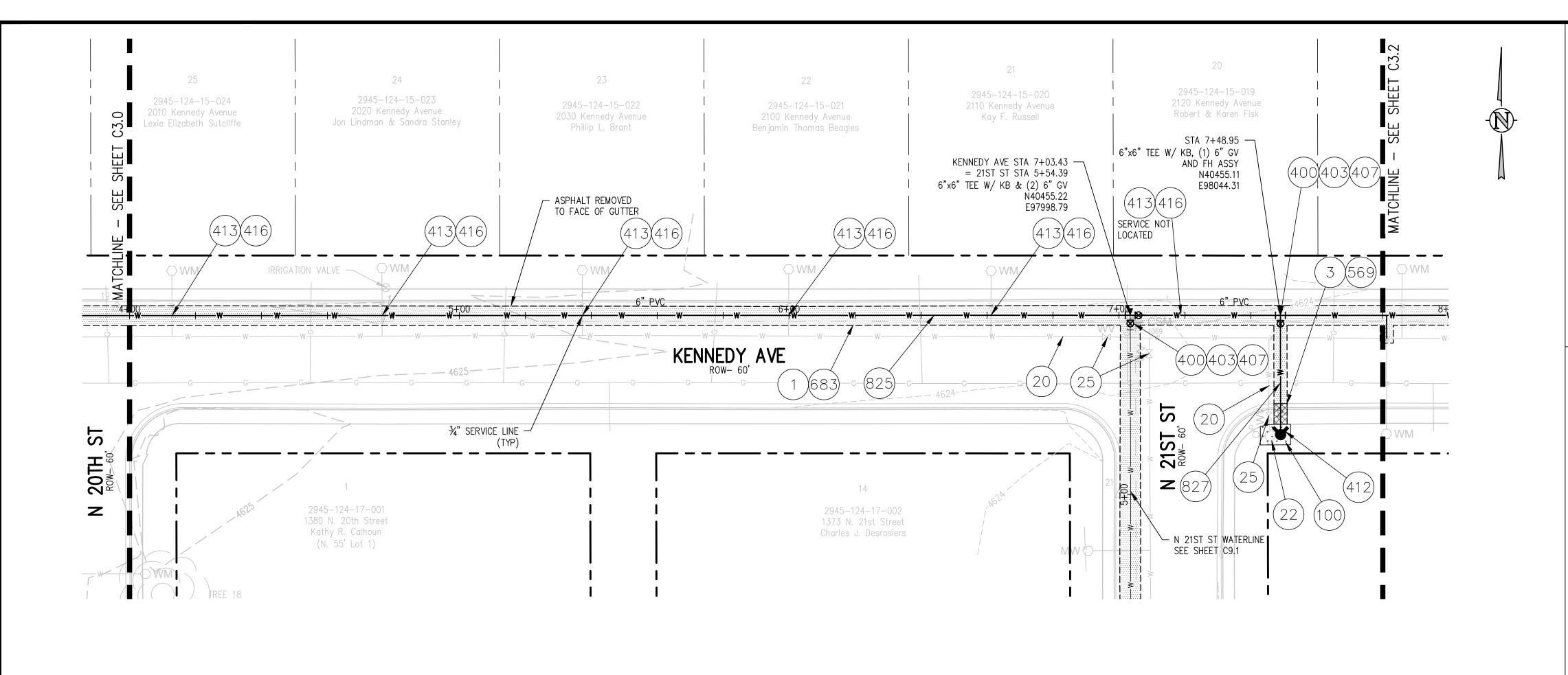
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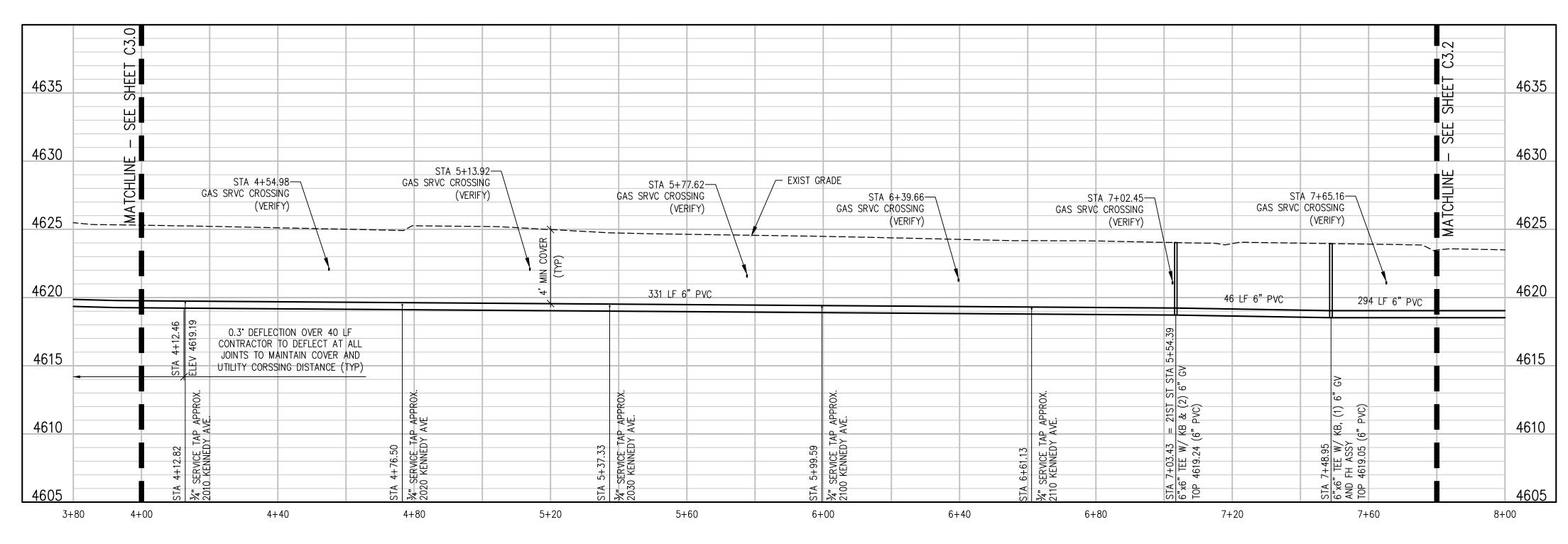
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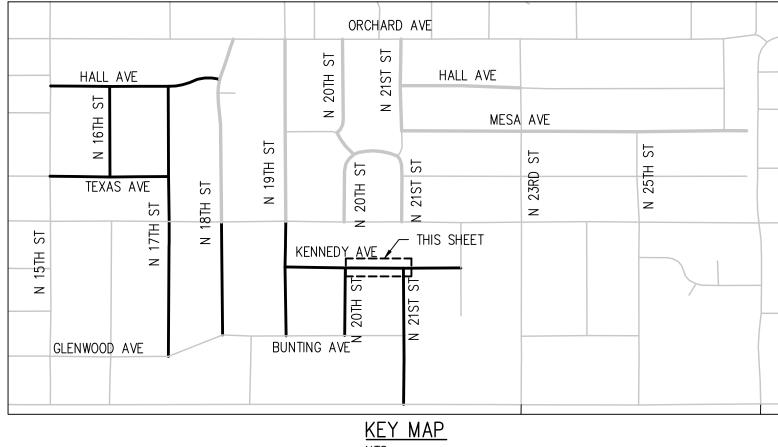


2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
KENNEDY AVE WATER PLAN & PROFILE

C3.0







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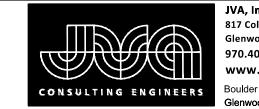
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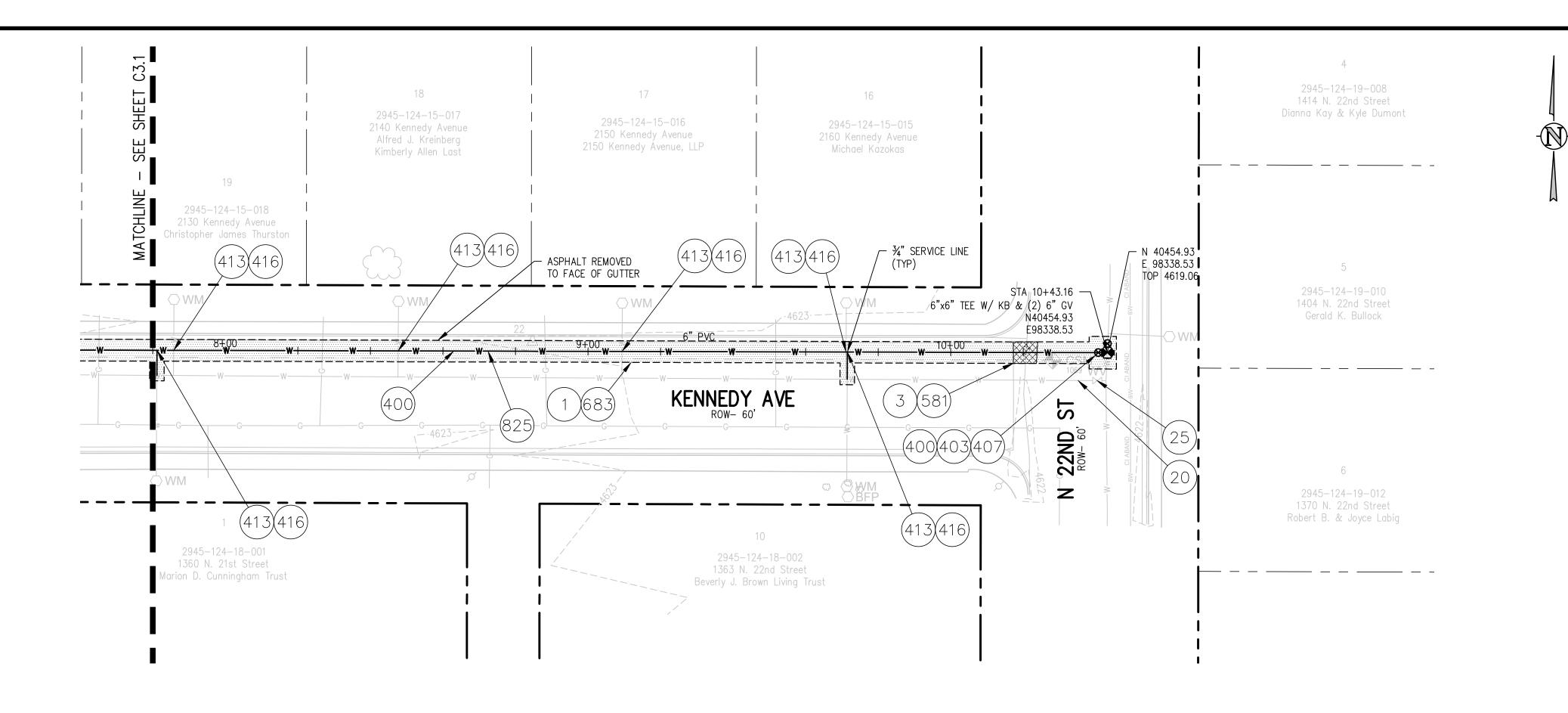
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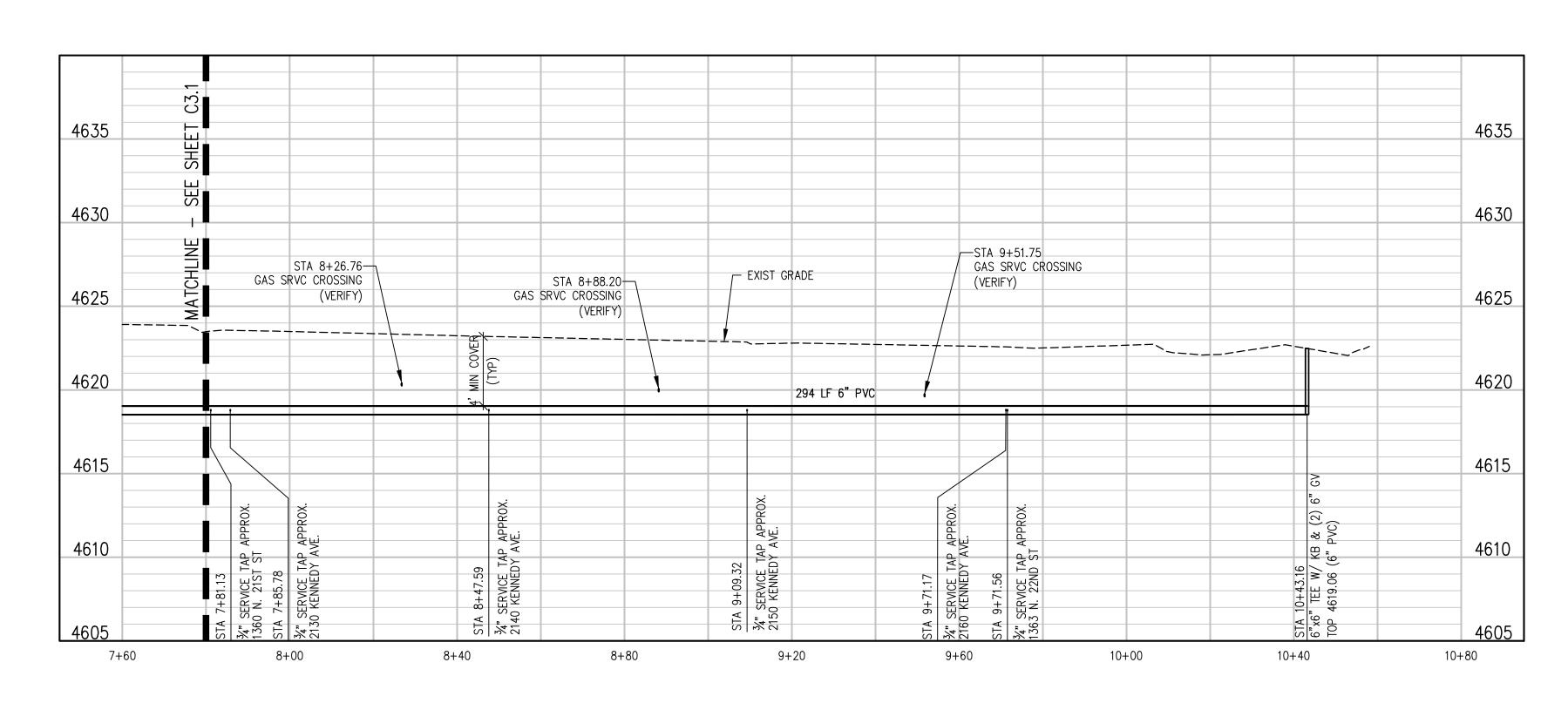
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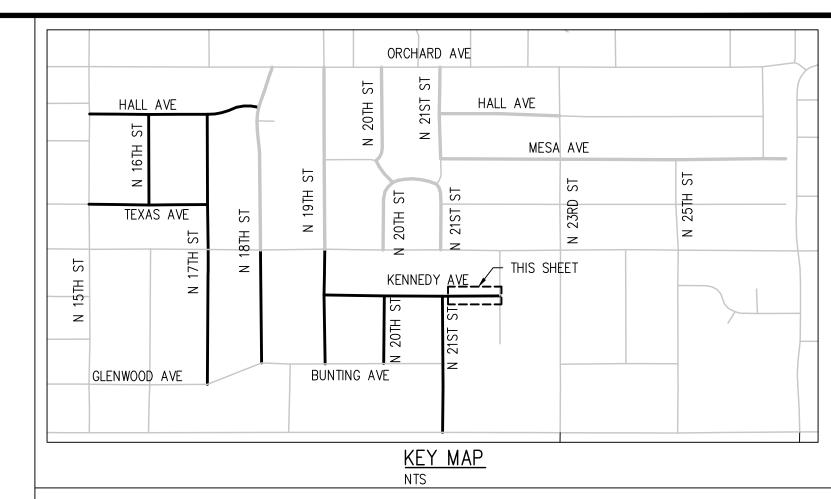


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PROJECT - PHASE 1
KENNEDY AVE WATER PLAN & PROFILE







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- 3 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
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 DRAWN BY
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 09 22, 2022

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 LAL/ZCF
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 JJM
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 DATE
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PLAN & PROFILE

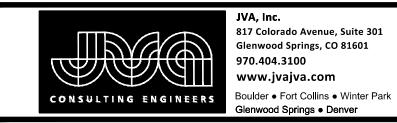
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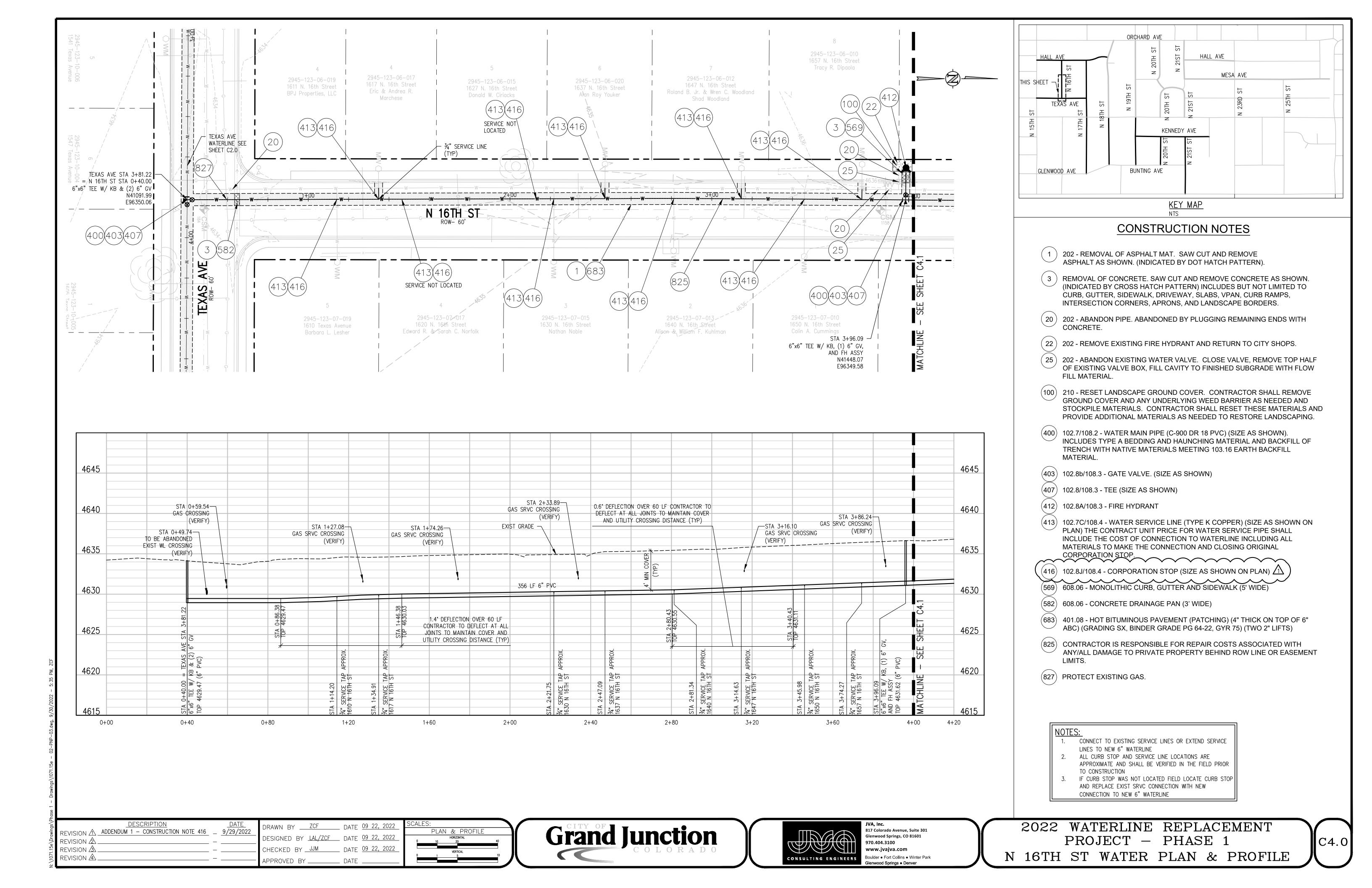
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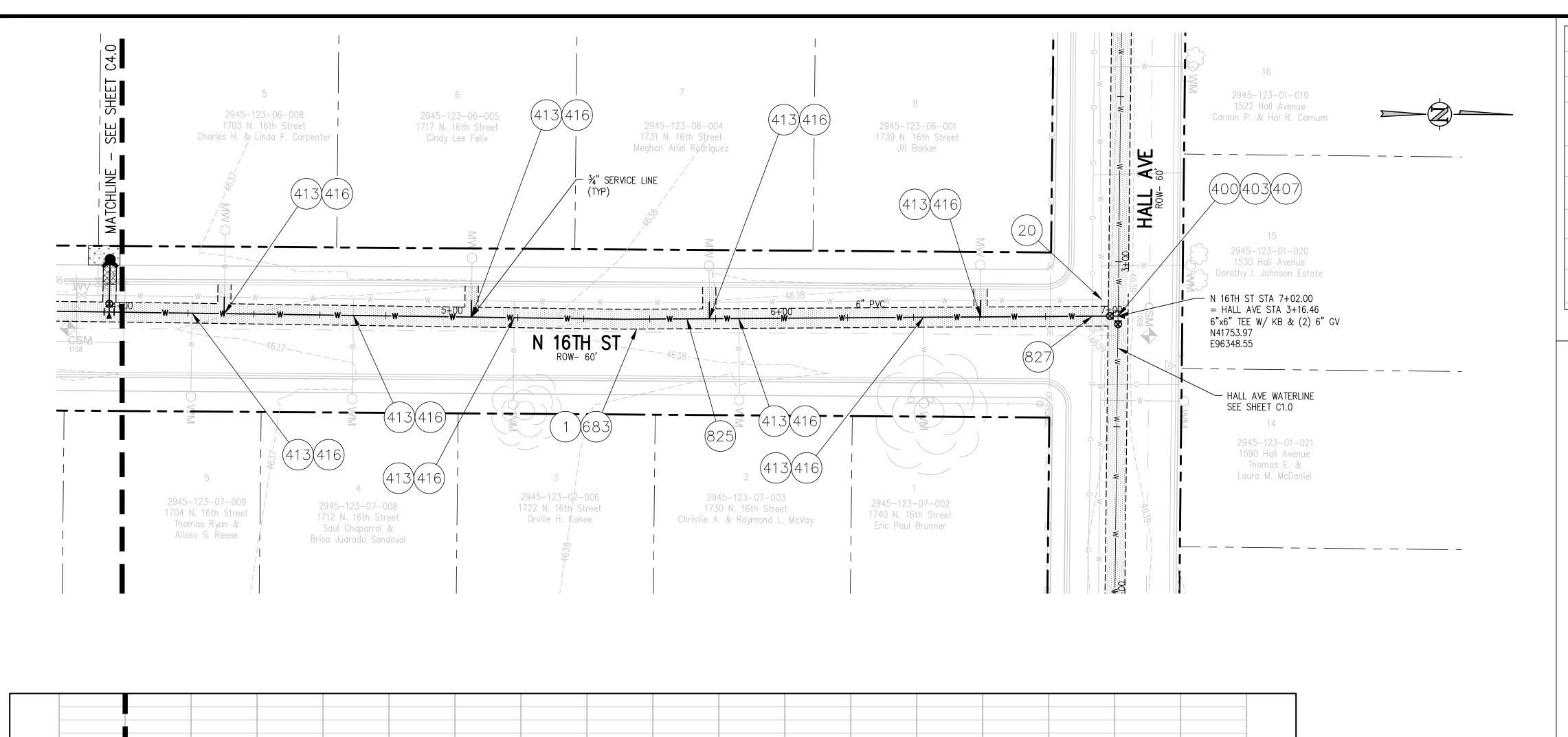
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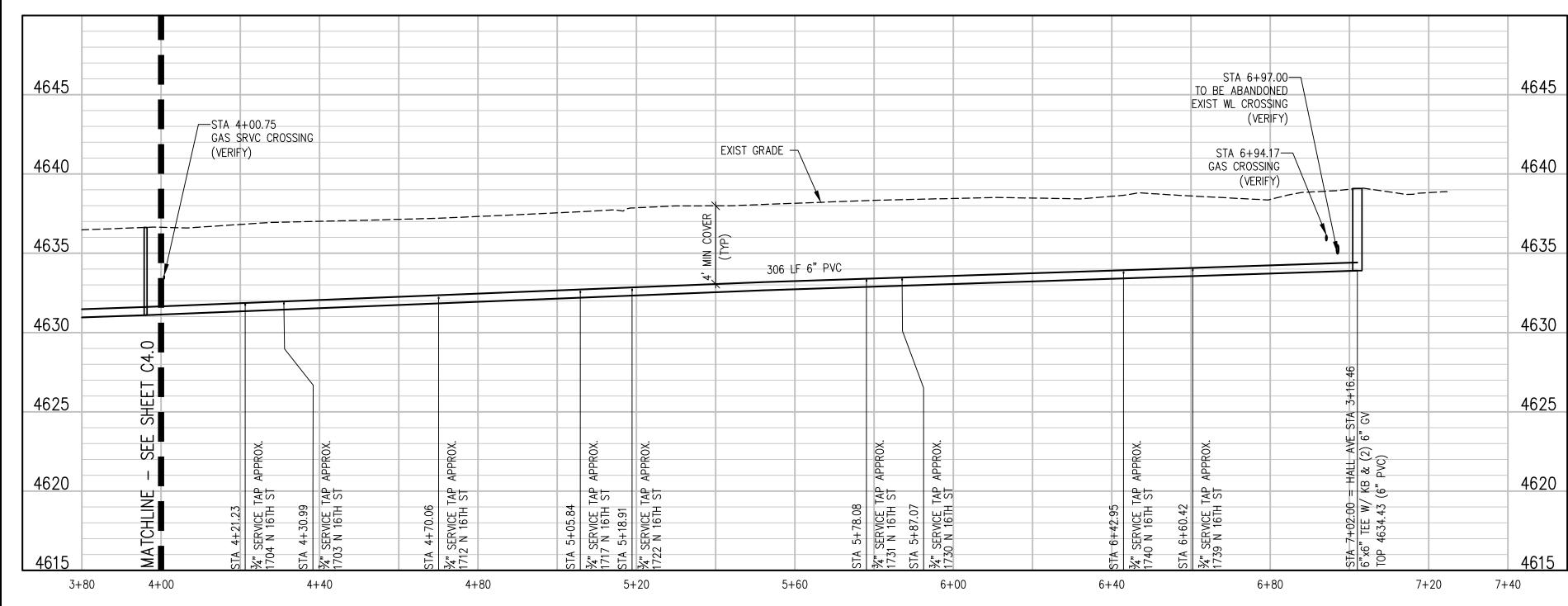
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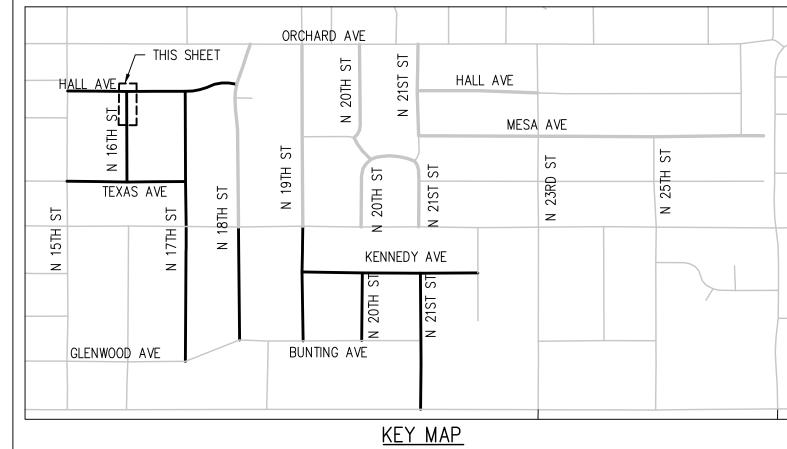


2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
KENNEDY AVE WATER PLAN & PROFILE









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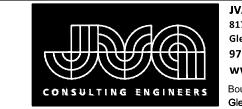
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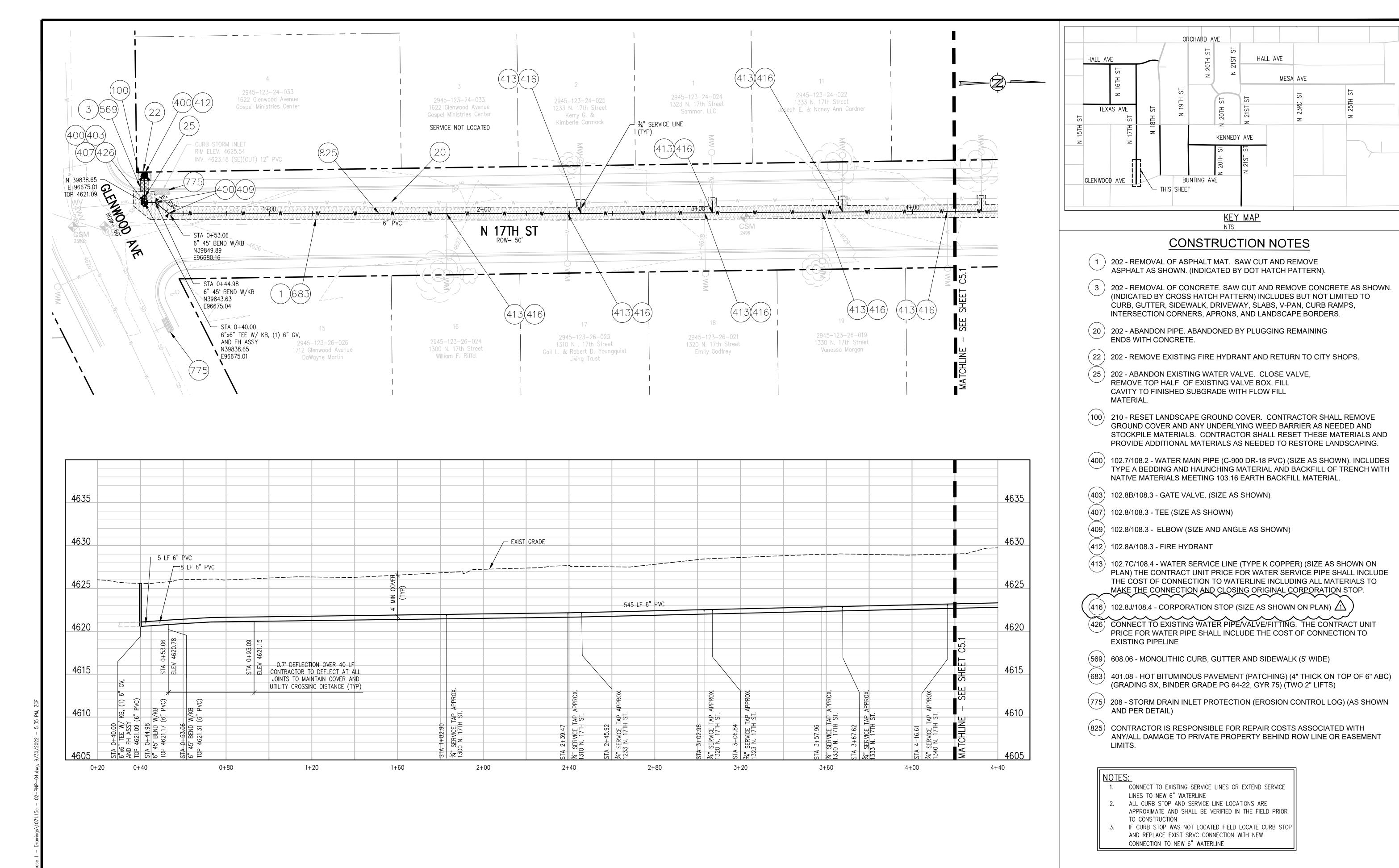
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**DESCRIPTION** 

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REVISION A ADDENDUM 1 - CONSTRUCTION NOTE 416 \_ 9/29/2022

DRAWN BY <u>ZCF</u> DATE <u>09 22, 2022</u>

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PLAN & PROFILE

2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
N 17TH ST WATER PLAN & PROFILE

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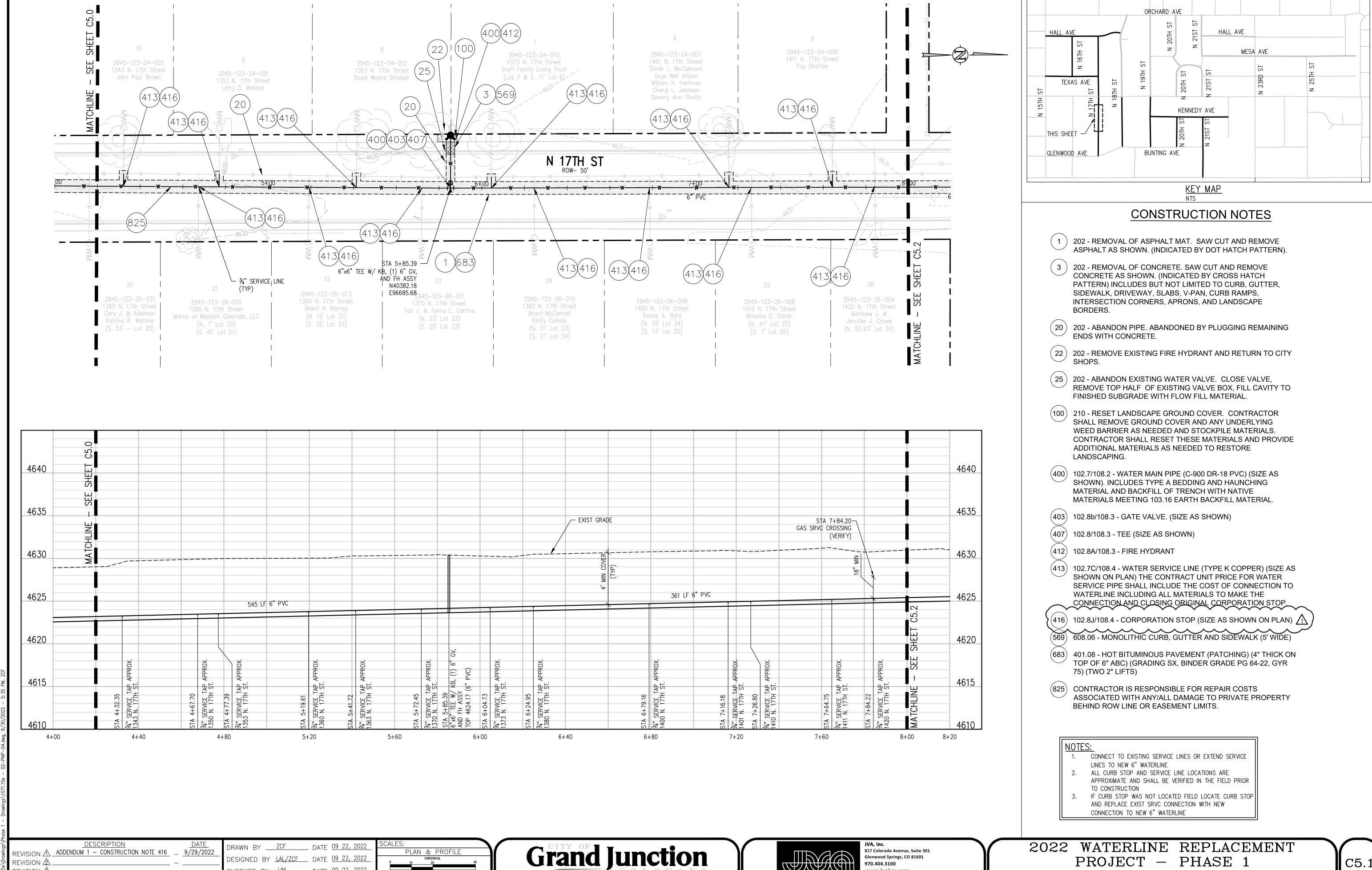
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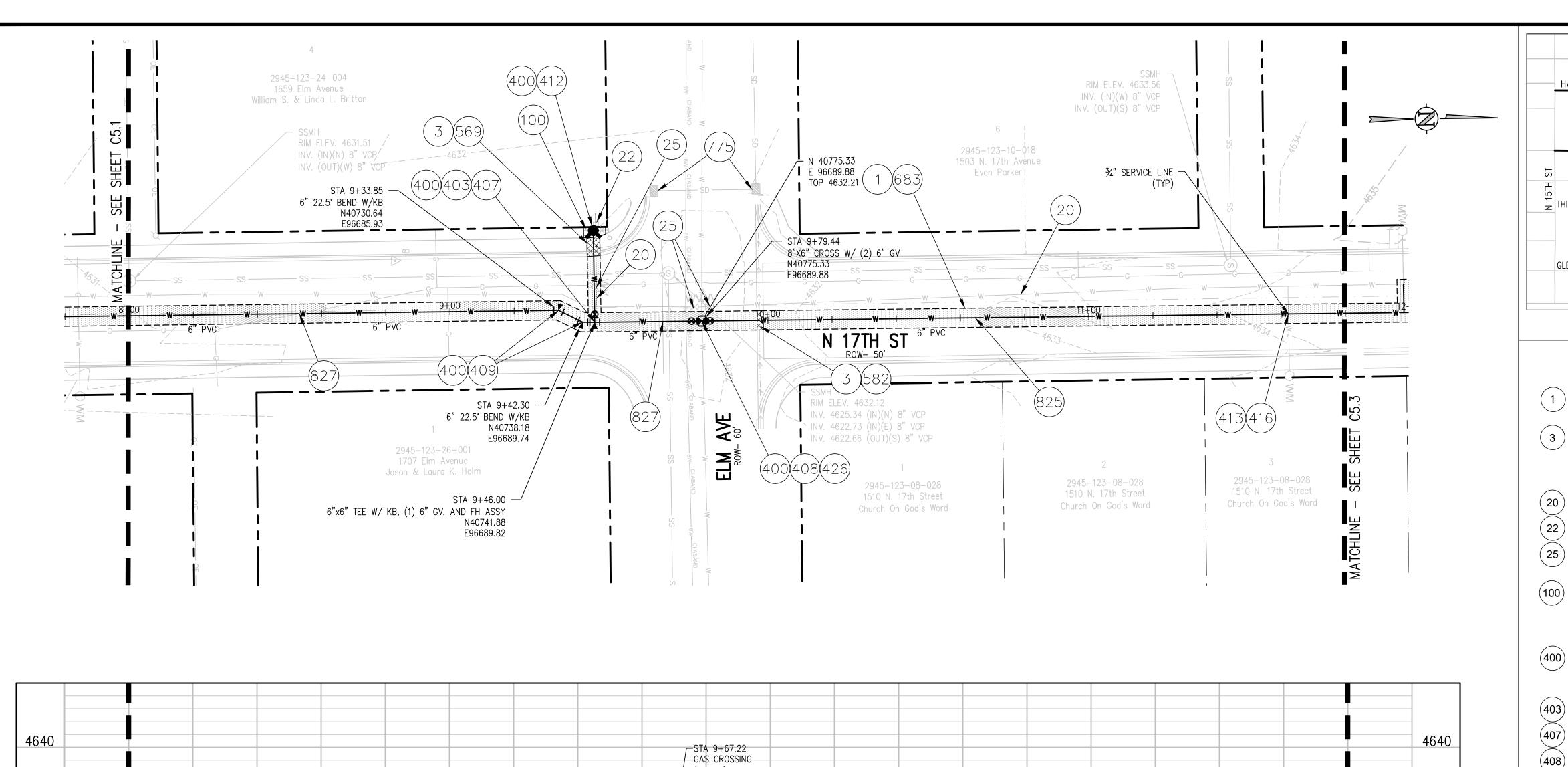
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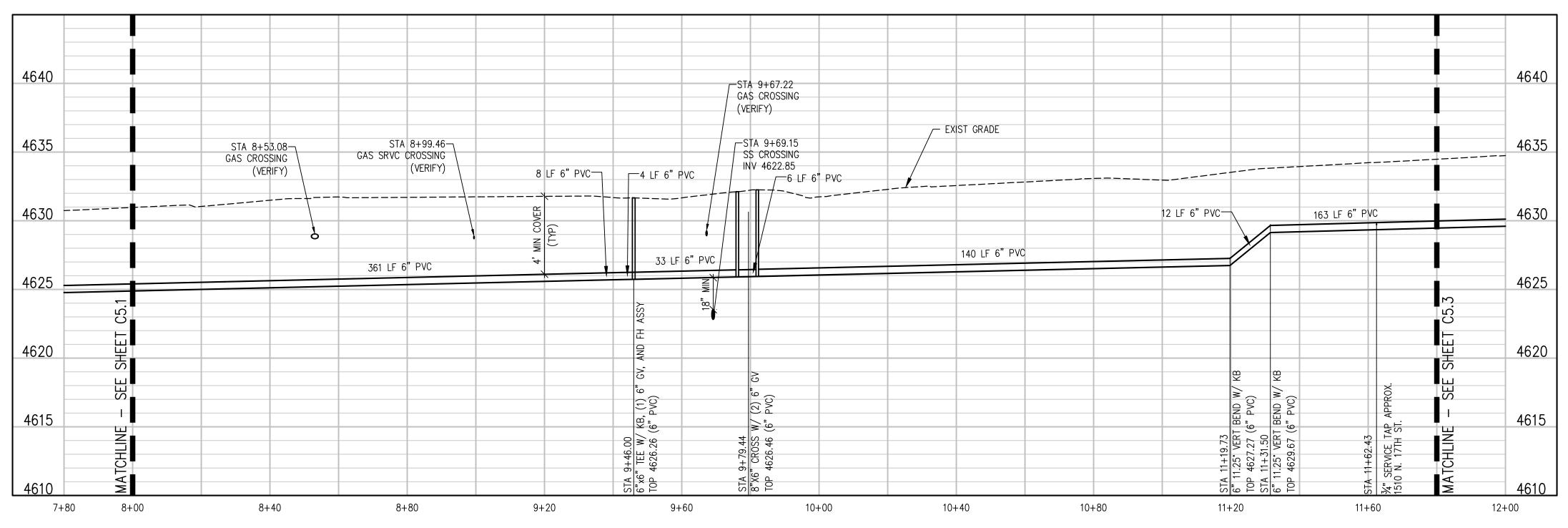
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PROJECT - PHASE 1

N 17TH ST WATER PLAN & PROFILE





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REVISION A

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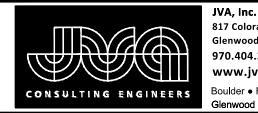
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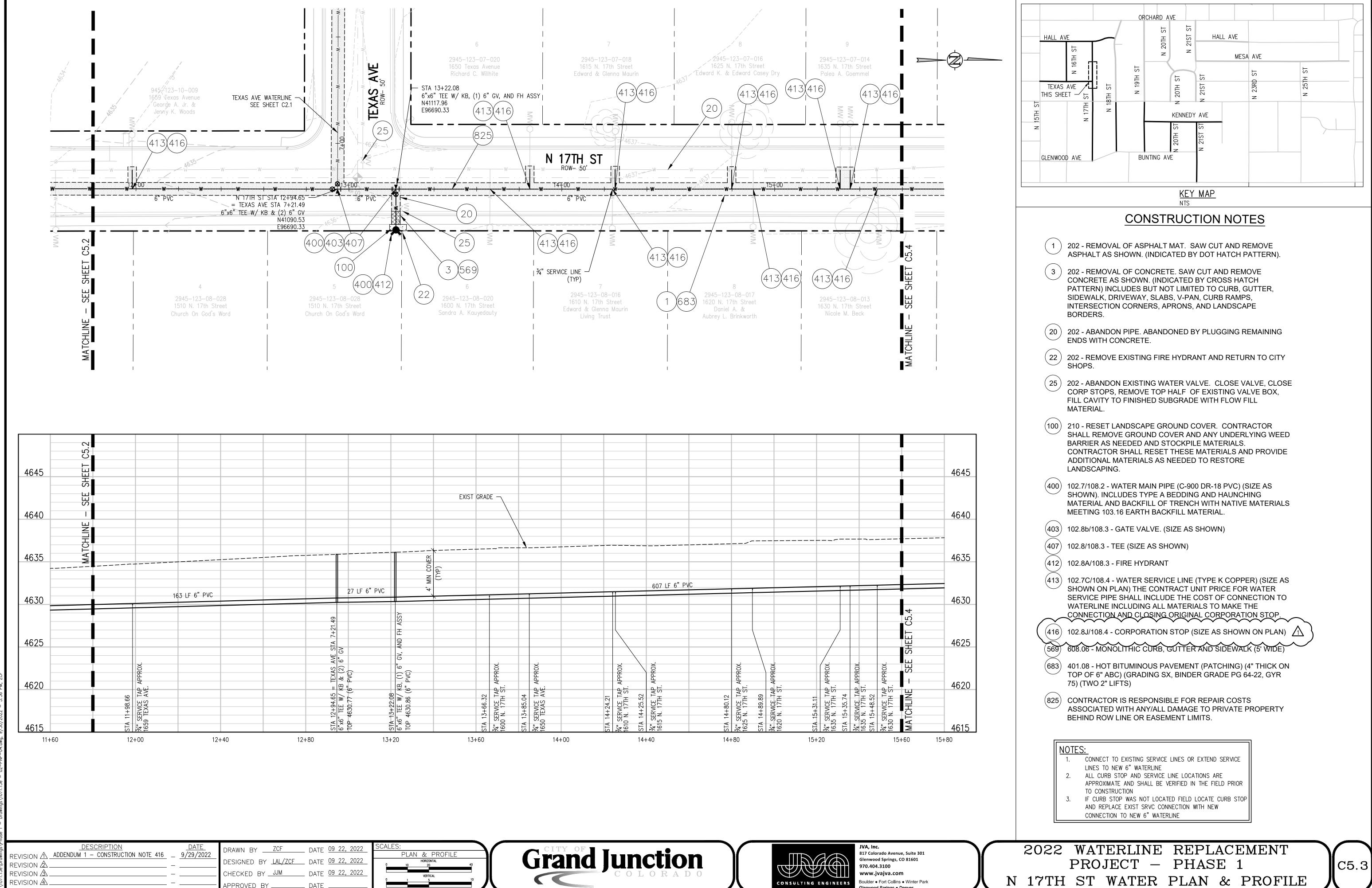
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PROJECT - PHASE 1
N 17TH ST WATER PLAN & PROFILE

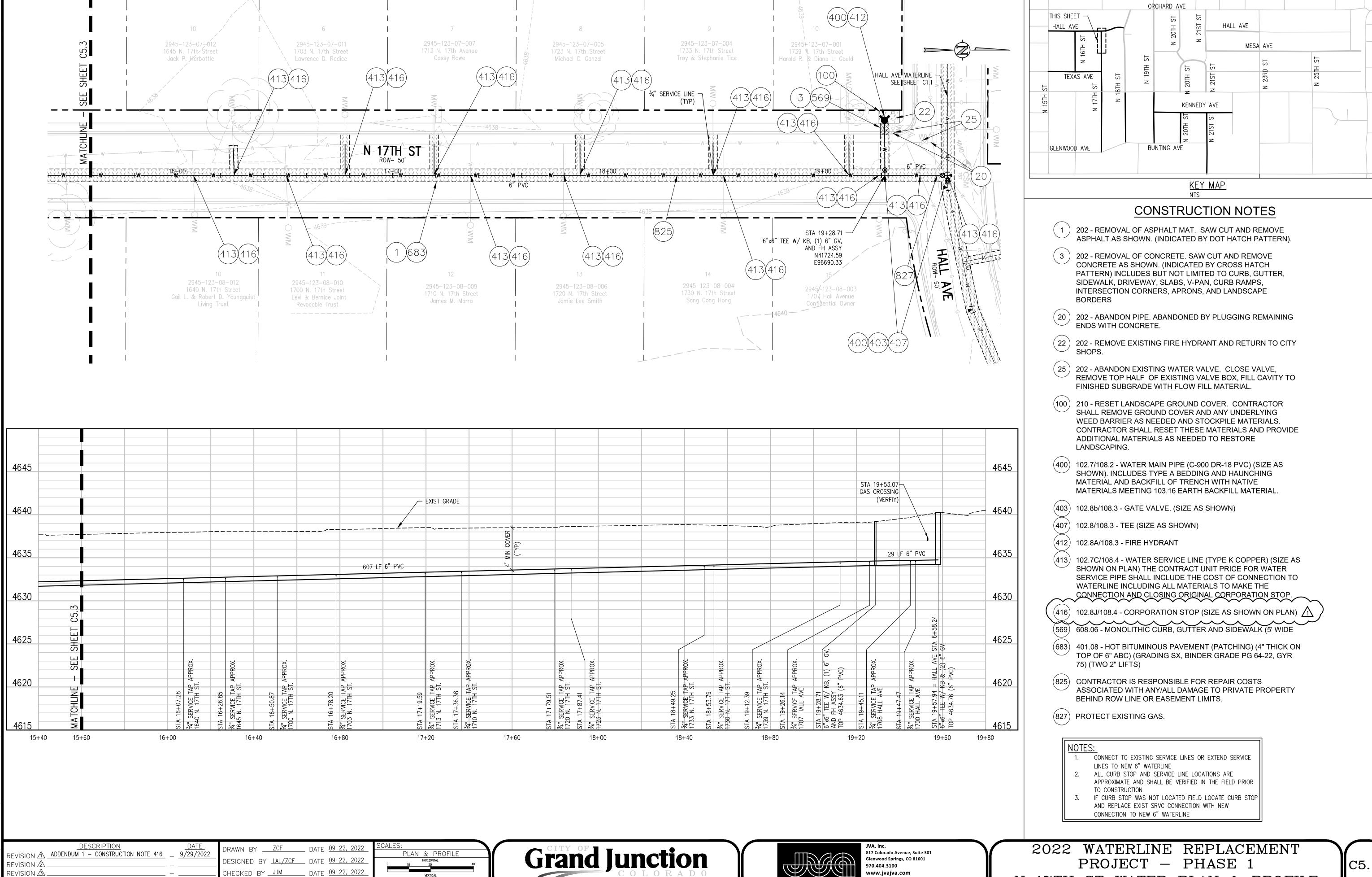


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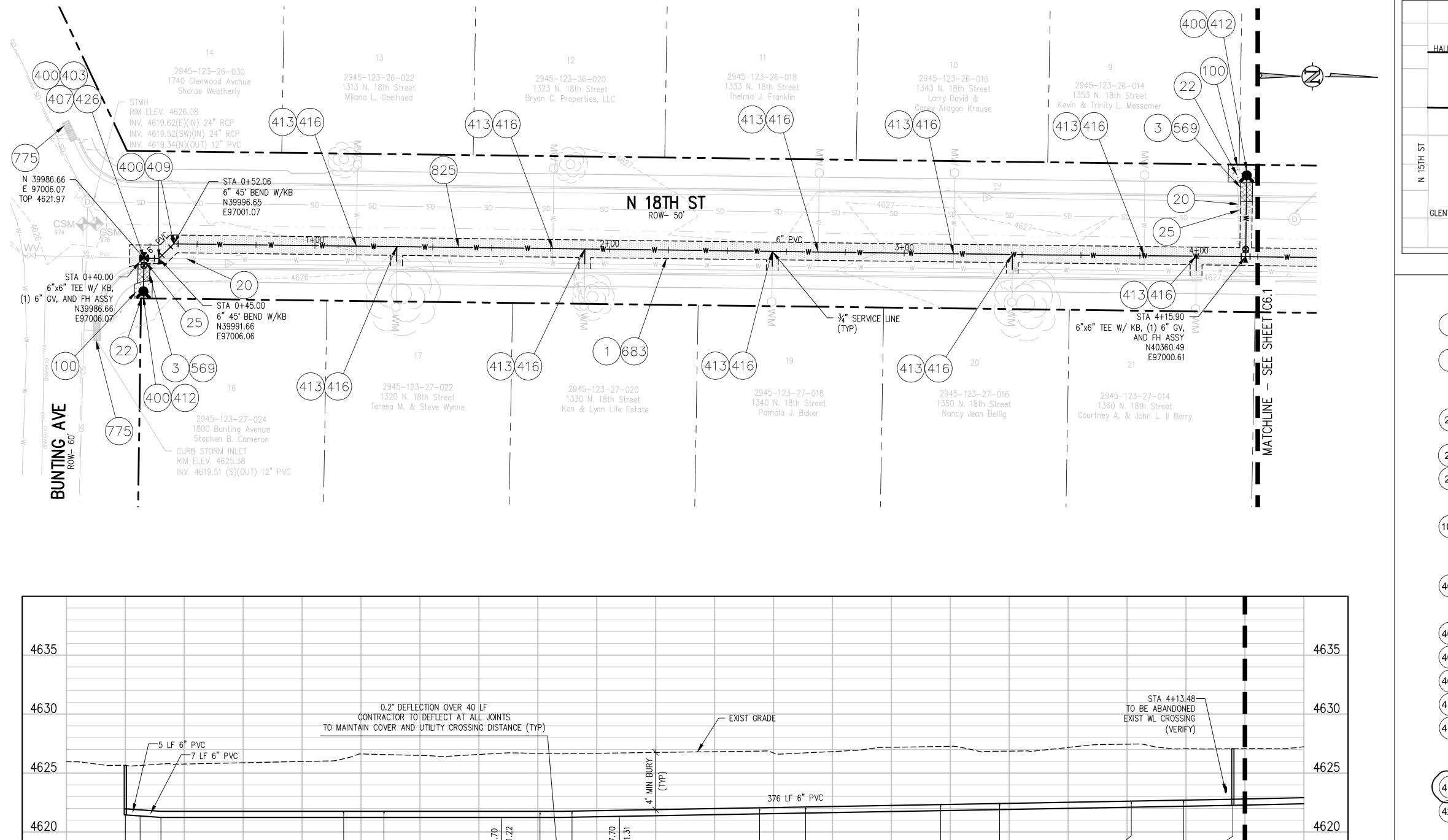
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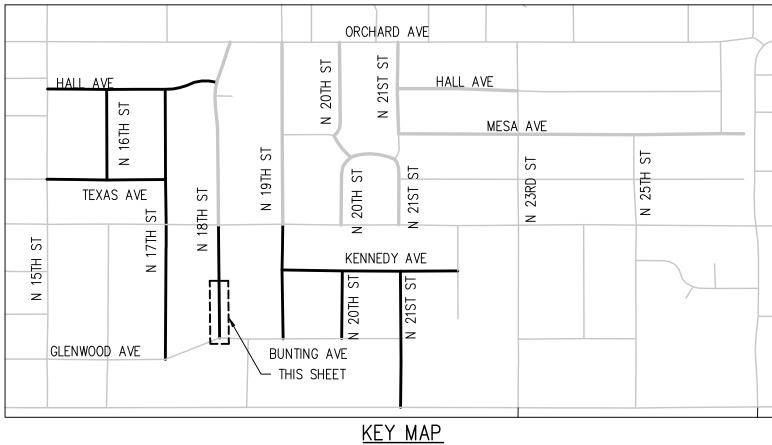
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N 17TH ST WATER PLAN & PROFILE





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### NOTES:

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1 0+45.00 45° BEND V 2 4621.88 ( 4 0+52.06 45° BEND V

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DRAWN BY ZCF DATE 09 22, 2022

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STA 1+27.78
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SERVICE 18TH

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1+60

Grand Junction

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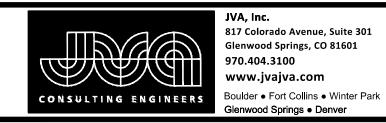
STA 2+55.27

34" SERVICE T
1340 N 18TH

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34" SERVICE T
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2+40



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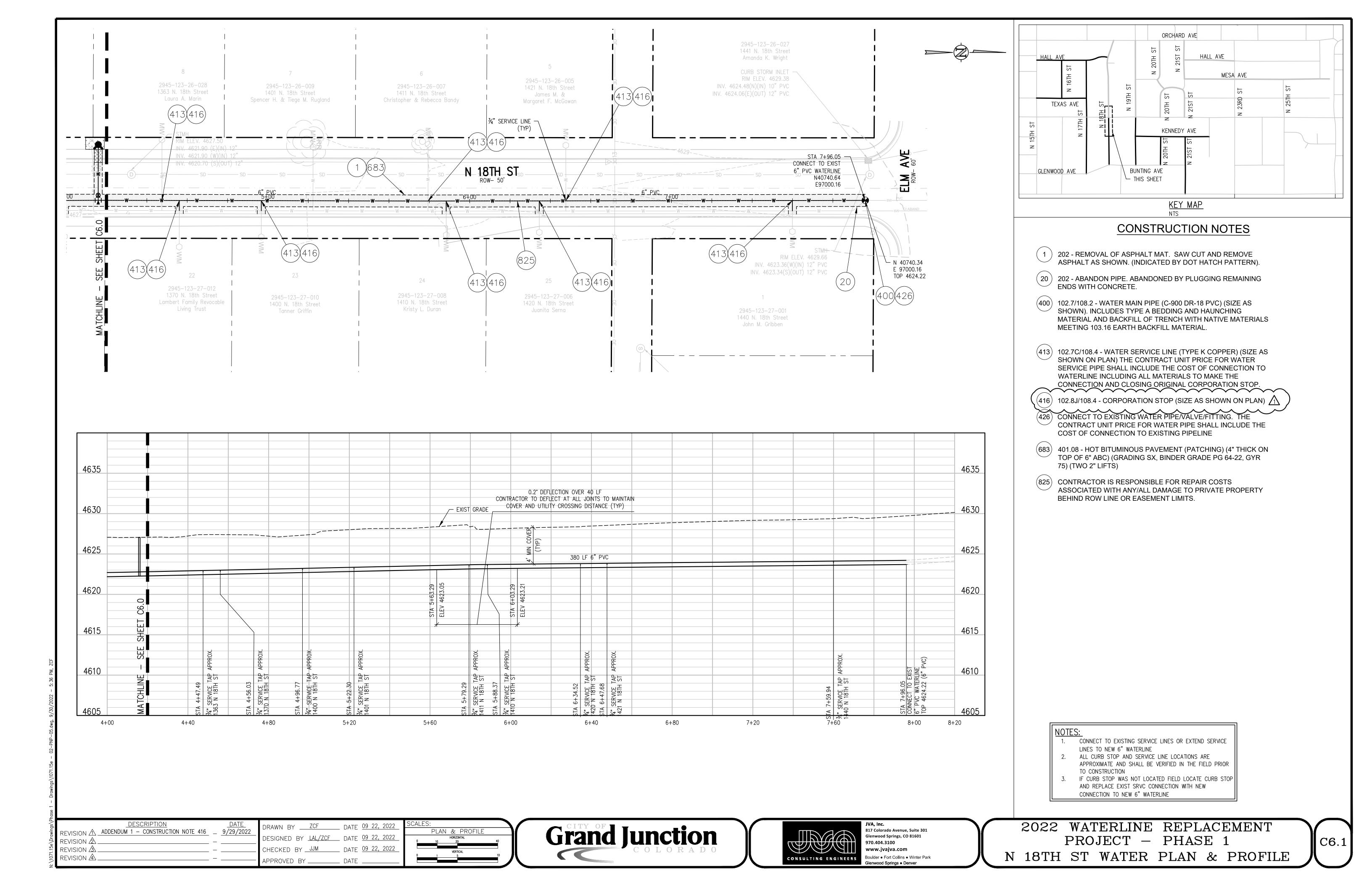
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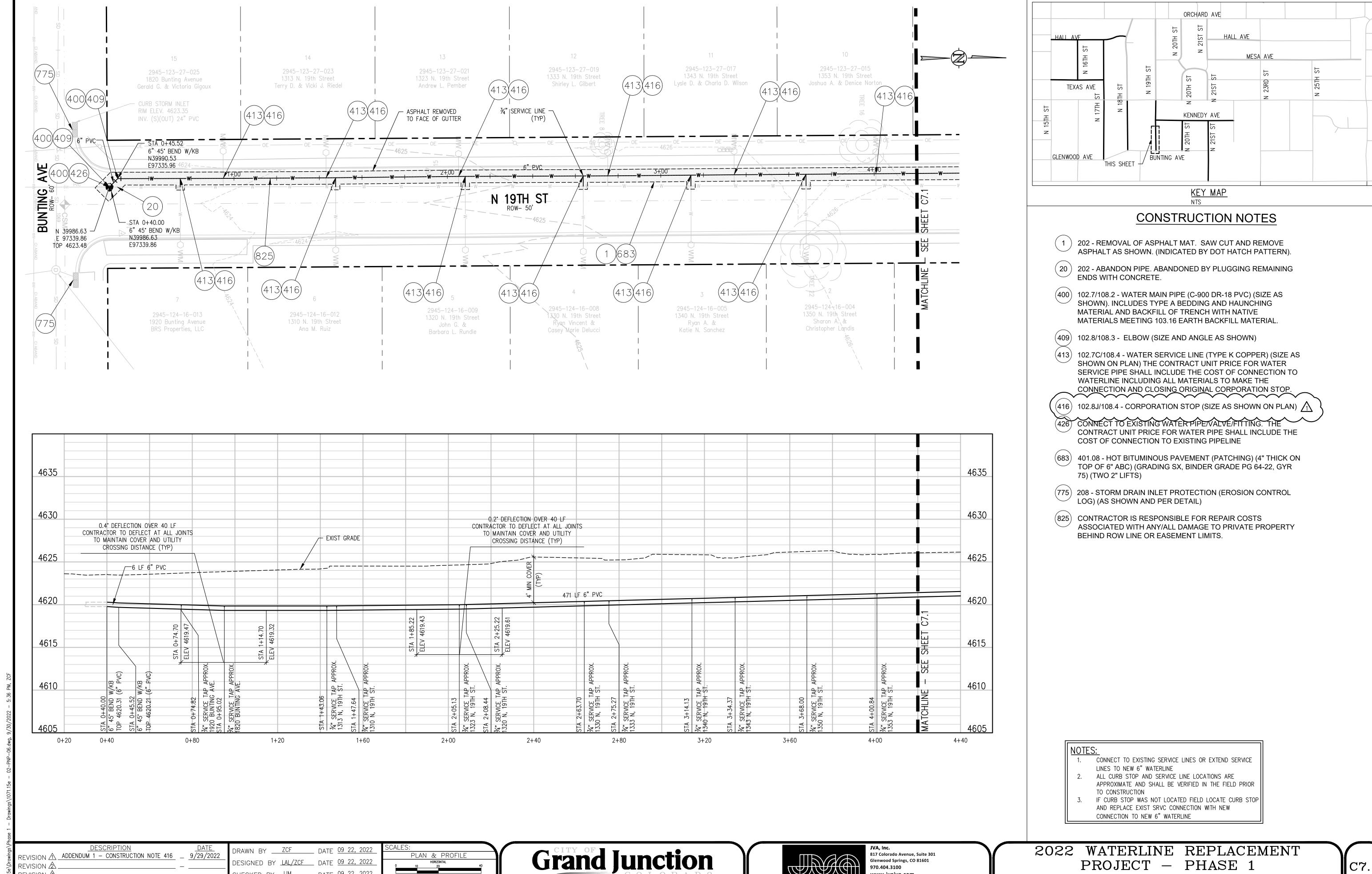
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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
N 18TH ST WATER PLAN & PROFILE

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PROJECT - PHASE 1 N 19TH ST WATER PLAN & PROFILE

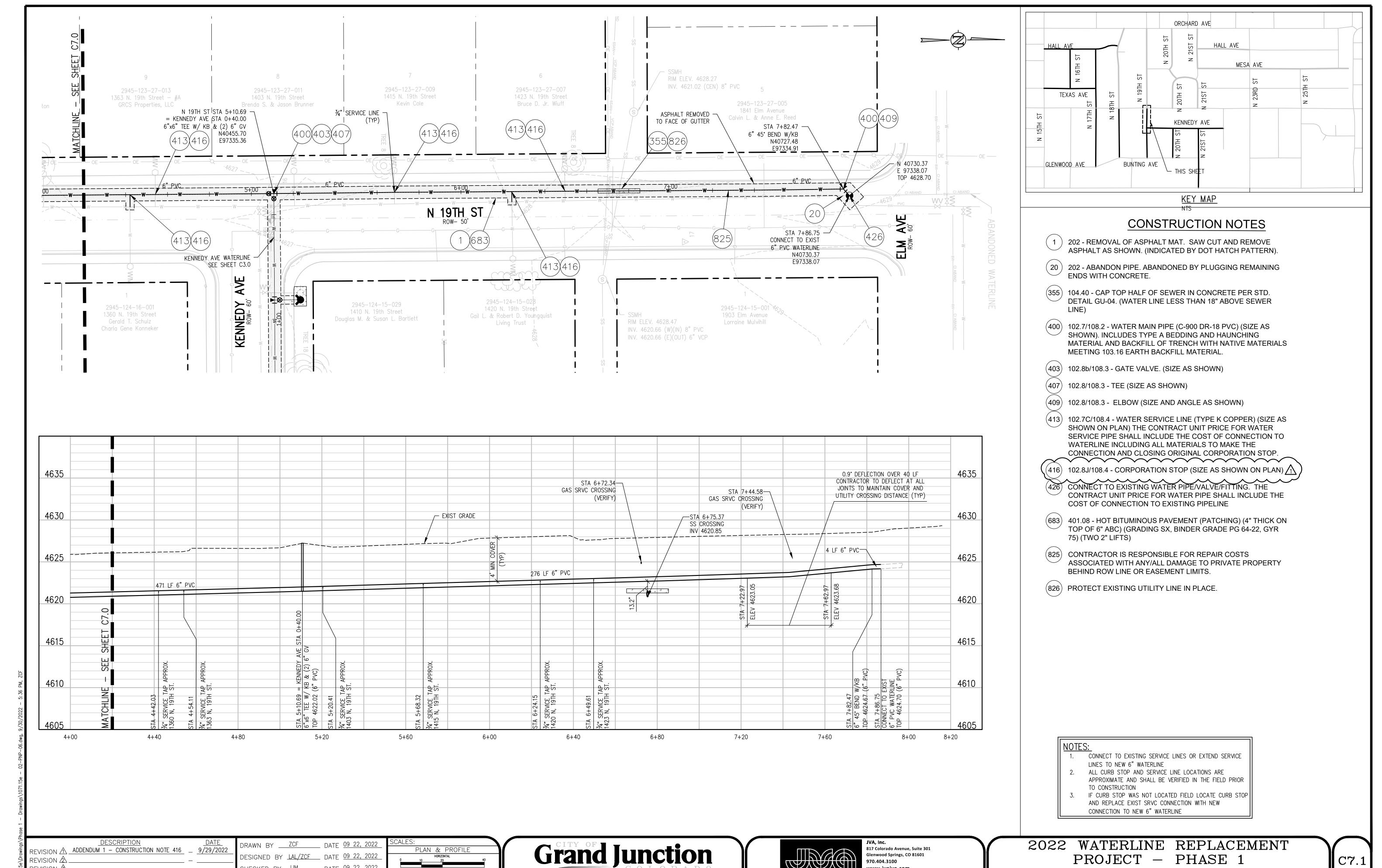
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PROJECT - PHASE 1

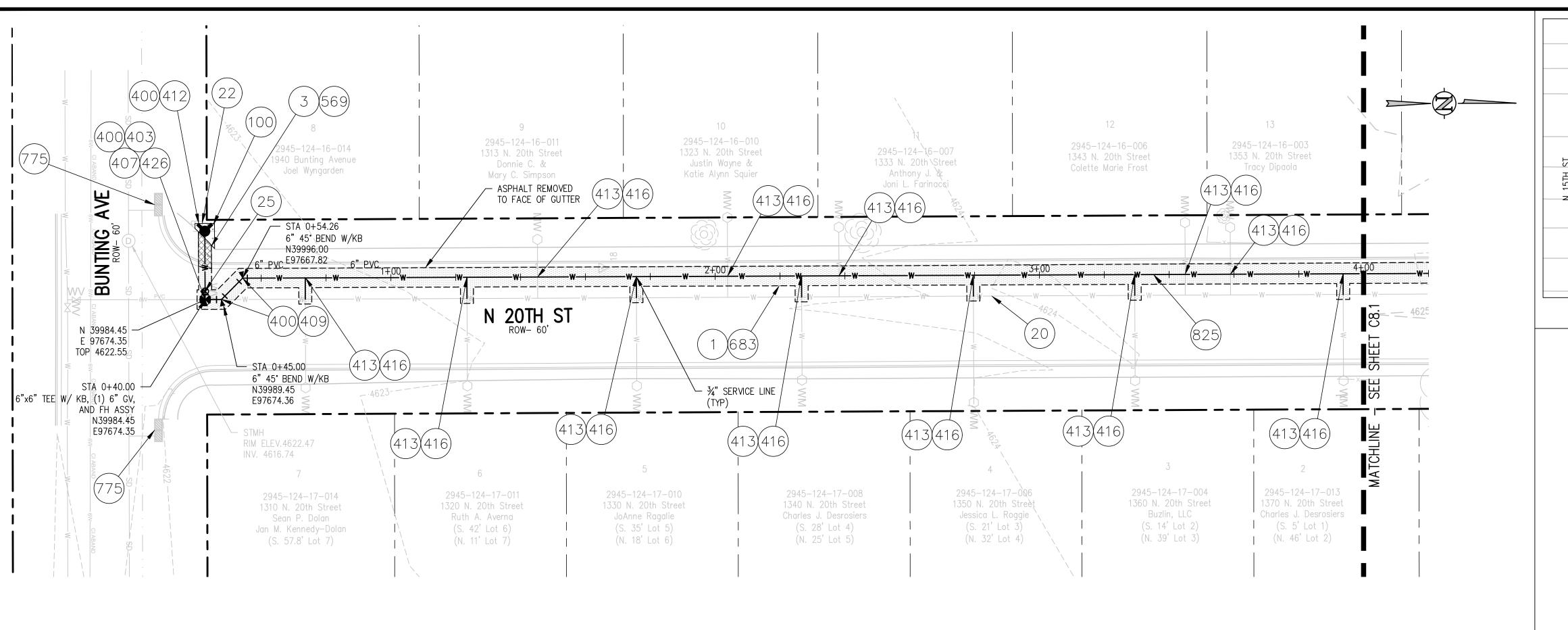
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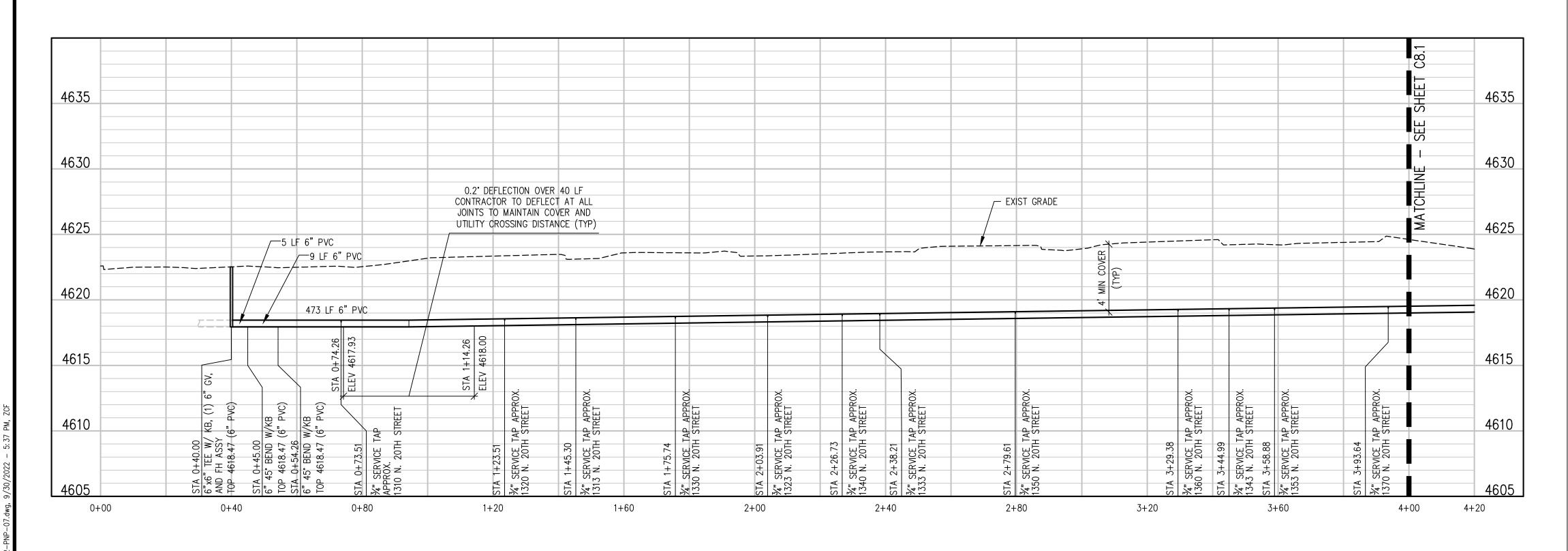
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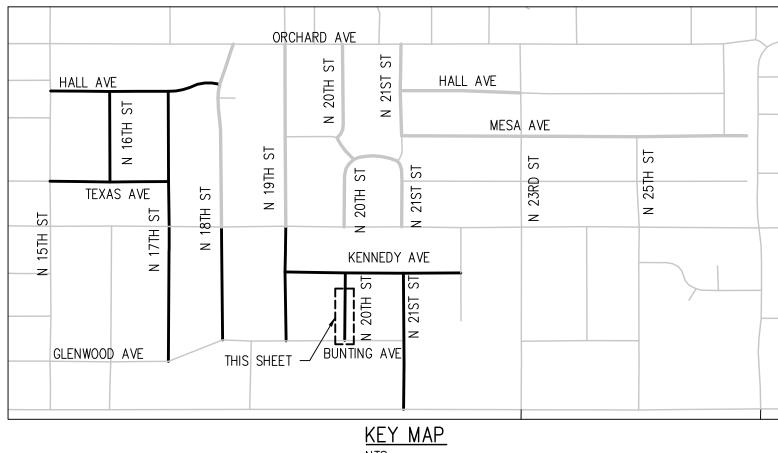
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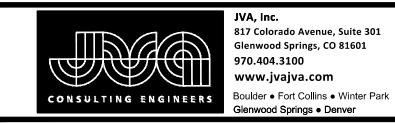
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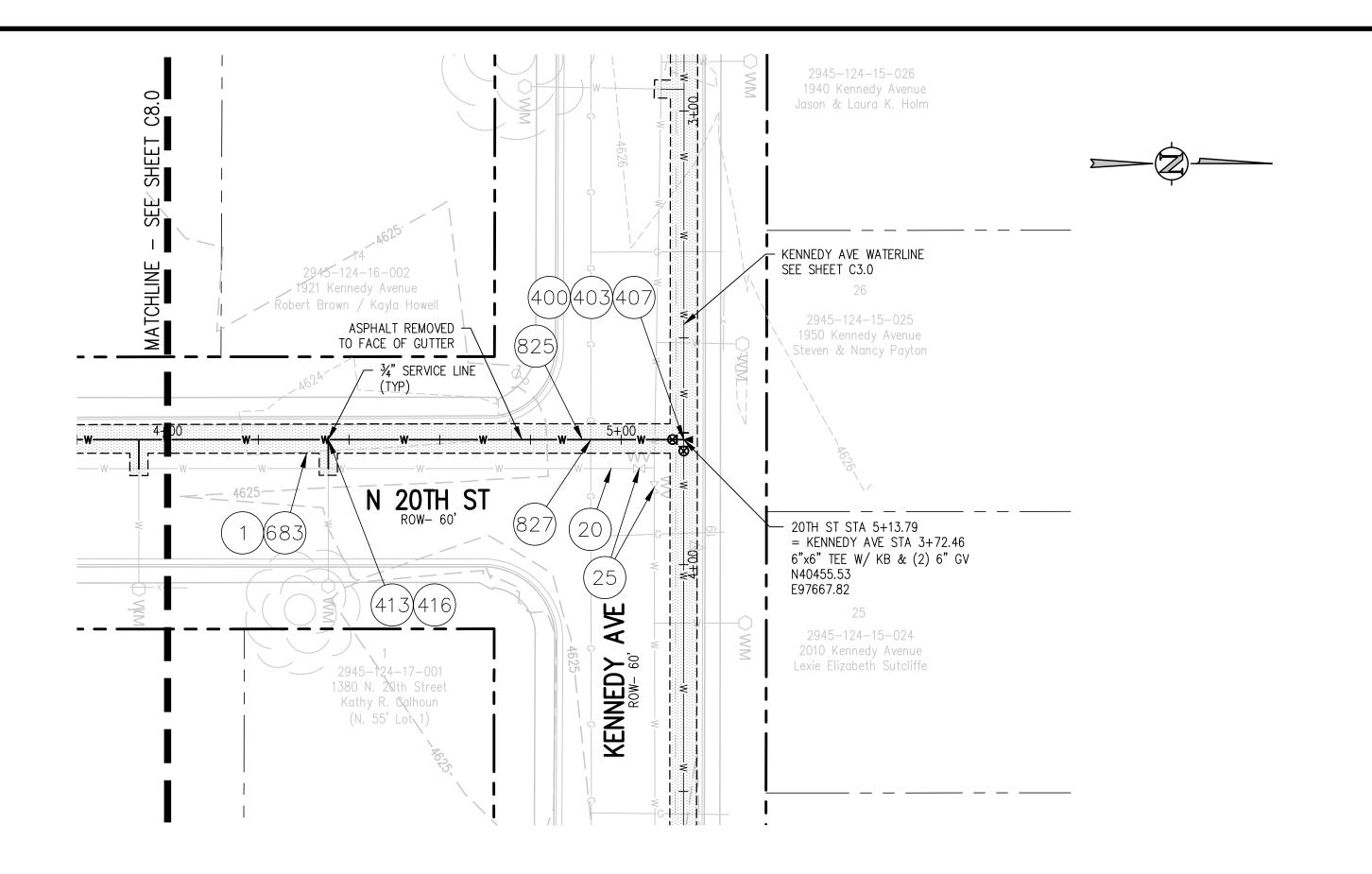
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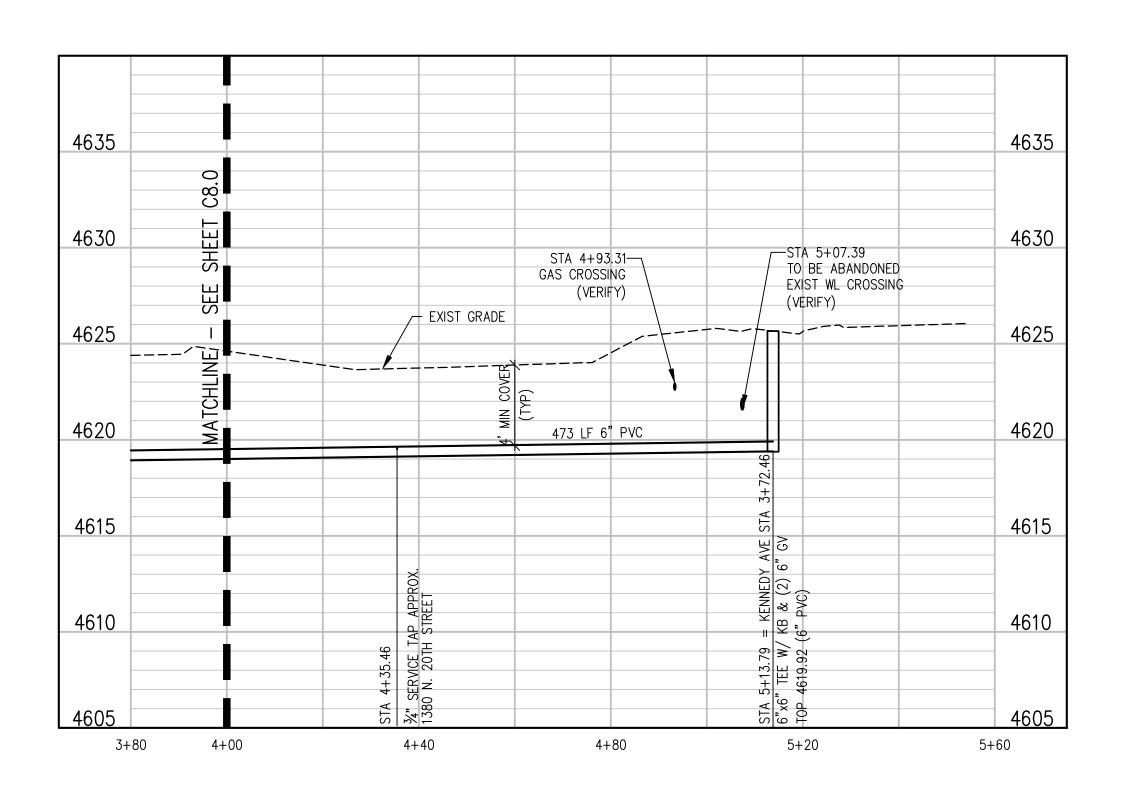
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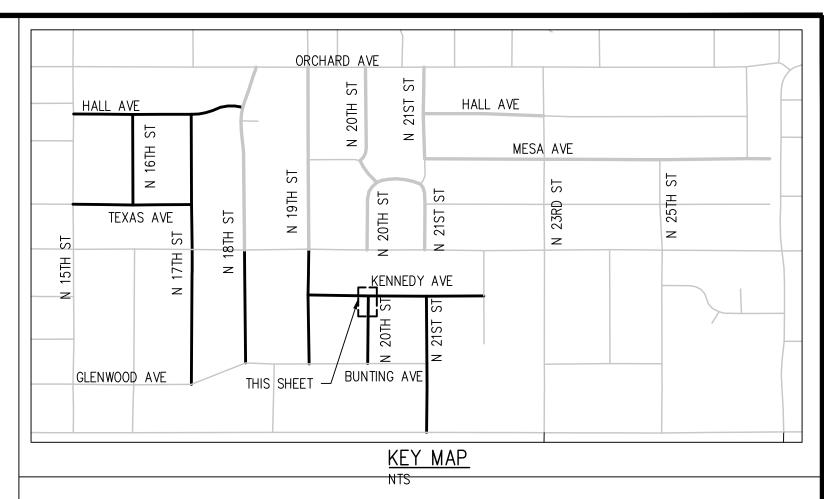


2022 WATERLINE REPLACEMENT
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- 683 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON TOP OF 6" ABC) (GRADING SX, BINDER GRADE PG 64-22, GYR 75) (TWO 2" LIFTS)
- CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS
  ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY
  BEHIND ROW LINE OR EASEMENT LIMITS.
- (827) PROTECT EXISTING GAS.

NOTES

- 1. CONNECT TO EXISTING SERVICE LINES OR EXTEND SERVICE LINES TO NEW 6" WATERLINE
- 2. ALL CURB STOP AND SERVICE LINE LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION
- 3. IF CURB STOP WAS NOT LOCATED FIELD LOCATE CURB STOP
  AND REPLACE EXIST SRVC CONNECTION WITH NEW
  CONNECTION TO NEW 6" WATERLINE

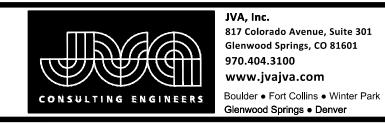
 DRAWN BY
 ZCF
 DATE
 09 22, 2022

 DESIGNED BY
 LAL/ZCF
 DATE
 09 22, 2022

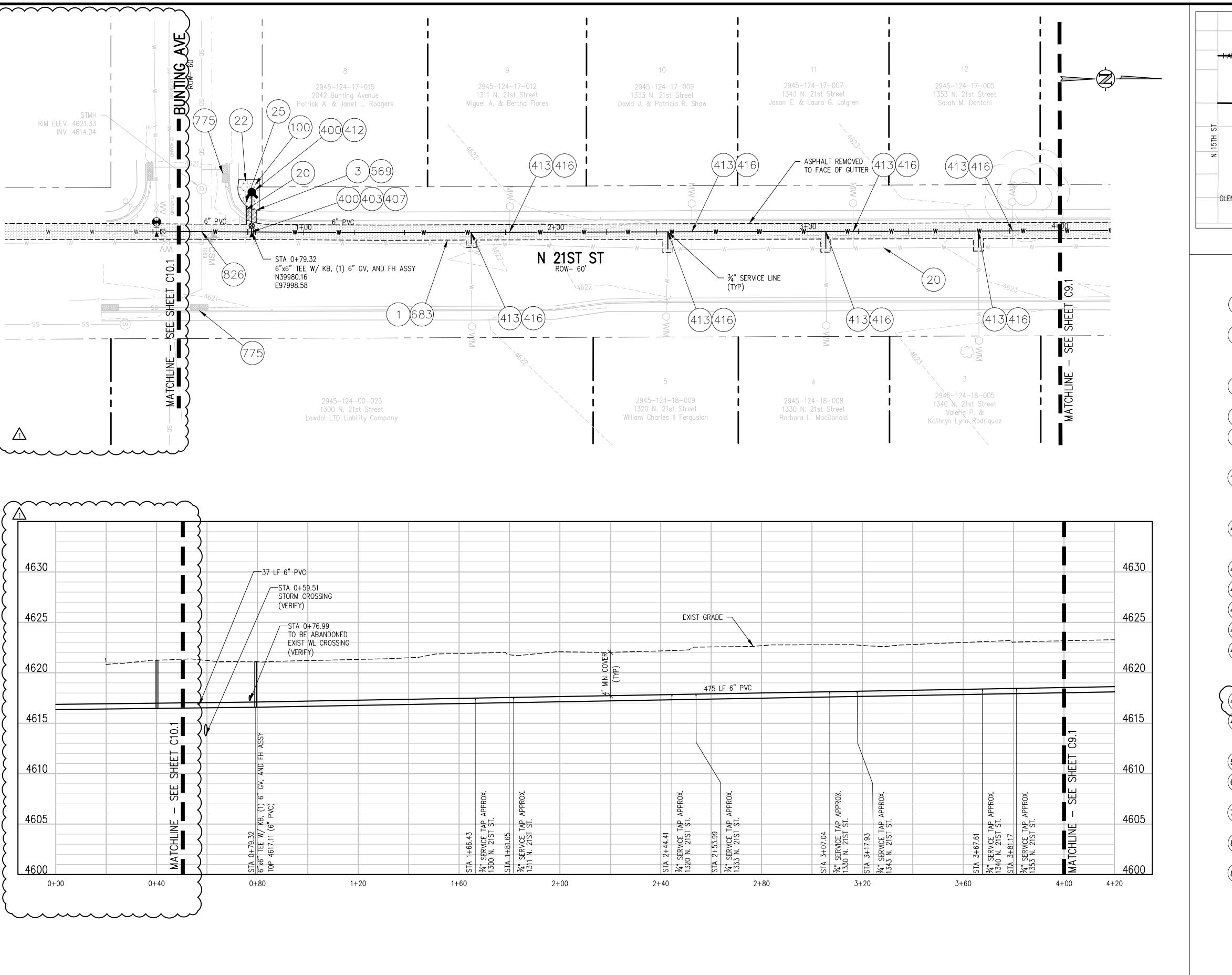
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 DATE
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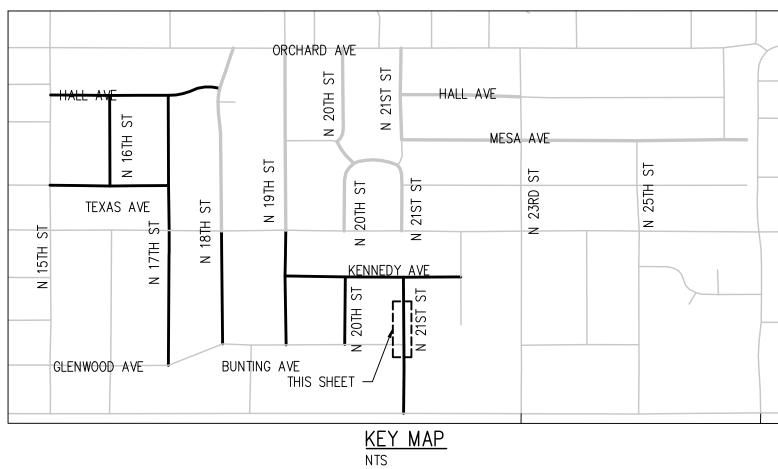
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Grand Junction



2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
N 20TH ST WATER PLAN & PROFILE





- 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- 20 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- (22) 202 REMOVE EXISTING FIRE HYDRANT AND RETURN TO CITY SHOPS.
- 25) 202 ABANDON EXISTING WATER VALVE. CLOSE VALVE, REMOVE TOP HALF OF EXISTING VALVE BOX, FILL CAVITY TO FINISHED SUBGRADE WITH FLOW FILL MATERIAL.
- (100) 210 RESET LANDSCAPE GROUND COVER. CONTRACTOR SHALL REMOVE GROUND COVER AND ANY UNDERLYING WEED BARRIER AS NEEDED AND STOCKPILE MATERIALS. CONTRACTOR SHALL RESET THESE MATERIALS AND PROVIDE ADDITIONAL MATERIALS AS NEEDED TO RESTORE LANDSCAPING.
- (400) 102.7/108.2 WATER MAIN PIPE (C-900 DR-18 PVC) (SIZE AS SHOWN). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- (403) 102.8b/108.3 GATE VALVE. (SIZE AS SHOWN)
- (407) 102.8/108.3 TEE (SIZE AS SHOWN)
- (409) 102.8/108.3 ELBOW (SIZE AND ANGLE AS SHOWN)
- (412) 102.8A/108.3 FIRE HYDRANT
- (413) 102.7C/108.4 WATER SERVICE LINE (TYPE K COPPER) (SIZE AS SHOWN ON PLAN)
  THE CONTRACT UNIT PRICE FOR WATER SERVICE PIPE SHALL INCLUDE THE
  COST OF CONNECTION TO WATERLINE INCLUDING ALL MATERIALS TO MAKE THE
  CONNECTION AND CLOSING ORIGINAL CORPORATION STOP.
- (416) 102.8J/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN)
- 426 CONNECT TO EXISTING WATER PIPE/VALVE/FITTING. THE CONTRACT UNIT PRICE FOR WATER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- (569) 608.06 MONOLITHIC CURB, GUTTER AND SIDEWALK (5' WIDE)
- (683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON TOP OF 6" ABC) (GRADING SX, BINDER GRADE PG 64-22, GYR 75) (TWO 2" LIFTS)
- (775) 208 STORM DRAIN INLET PROTECTION (EROSION CONTROL LOG) (AS SHOWN AND PER DETAIL)
- (825) CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- (826) PROTECT EXISTING UTILITY LINE IN PLACE.

### NOTES:

- 1. CONNECT TO EXISTING SERVICE LINES OR EXTEND SERVICE LINES TO NEW 6" WATERLINE
- 2. ALL CURB STOP AND SERVICE LINE LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION
- 3. IF CURB STOP WAS NOT LOCATED FIELD LOCATE CURB STOP AND REPLACE EXIST SRVC CONNECTION WITH NEW CONNECTION TO NEW 6" WATERLINE

 DESCRIPTION
 DATE

 REVISION ⚠ ADD 1 - N 21ST ST WL
 - 9/22/2022

 REVISION ☒ ADDENDUM 1 - CONSTRUCTION NOTE 416
 - 9/29/2022

 REVISION ☒
 - 

 REVISION ☒
 -

 DRAWN BY
 ZCF
 DATE
 09 22, 2022

 DESIGNED BY
 LAL/ZCF
 DATE
 09 22, 2022

 CHECKED BY
 JJM
 DATE
 09 22, 2022

 APPROVED BY
 DATE
 DATE

PLAN & PROFILE

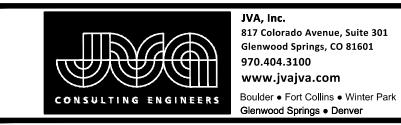
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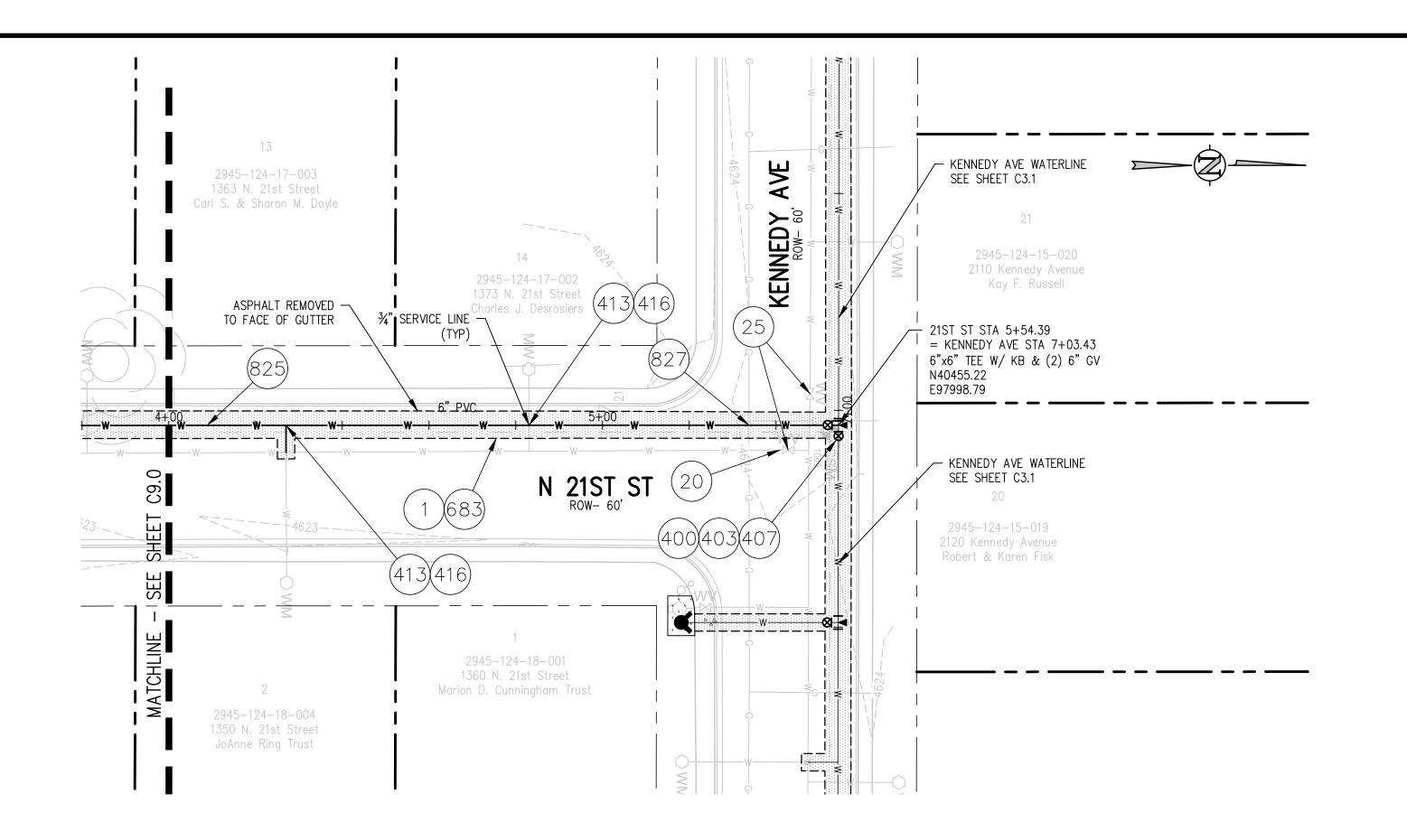
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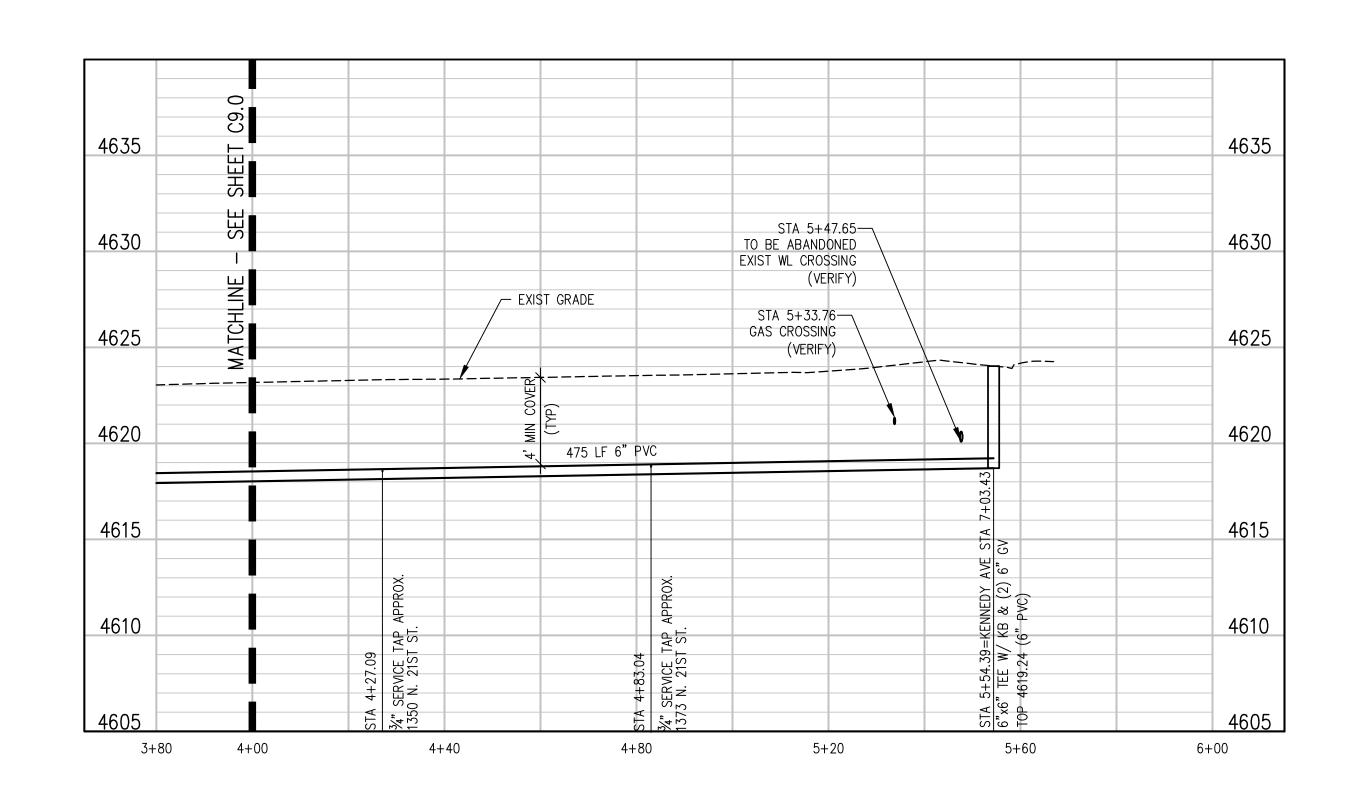
Grand Junction

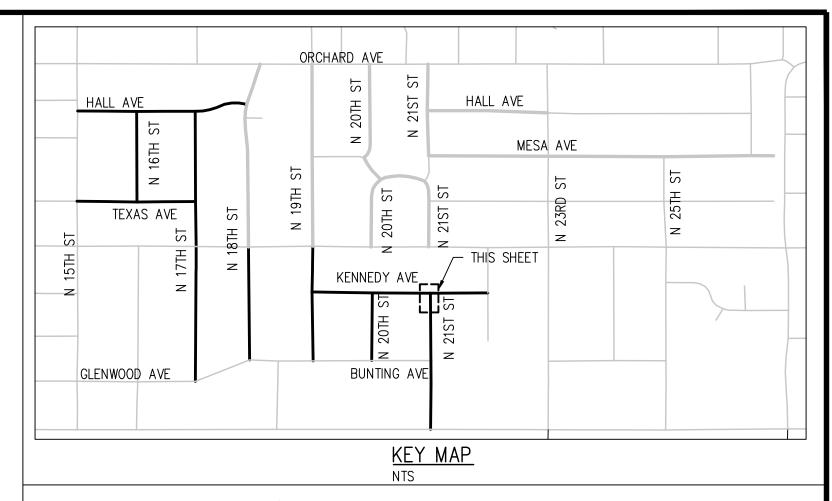


JVA, Inc.
817 Colorado Avenue, Suite 301
Glenwood Springs, CO 81601
970.404.3100
PROJECT — PHASE 1
www.jvajva.com
Boulder • Fort Collins • Winter Park
Glenwood Springs • Denver

C9.0







- 1 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 20 202 ABANDON PIPE. ABANDONED BY PLUGGING REMAINING ENDS WITH CONCRETE.
- 25 202 ABANDON EXISTING WATER VALVE. CLOSE VALVE, REMOVE TOP HALF OF EXISTING VALVE BOX, FILL CAVITY TO FINISHED SUBGRADE WITH FLOW FILL MATERIAL.
- 400 102.7/108.2 WATER MAIN PIPE (C-900 DR-18 PVC) (SIZE AS SHOWN). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- (403) 102.8b/108.3 GATE VALVE. (SIZE AS SHOWN)
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- (825) CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS.
- (827) PROTECT EXISTING GAS.

### NOTES:

- 1. CONNECT TO EXISTING SERVICE LINES OR EXTEND SERVICE
- LINES TO NEW 6" WATERLINE (TYP)

  2. ALL CURB STOP AND SERVICE LINE LOCATIONS ARE
  APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR

TO CONSTRUCTION

3. IF CURB STOP WAS NOT LOCATED FIELD LOCATE CURB STOP
AND REPLACE EXIST SRVC CONNECTION WITH NEW
CONNECTION TO NEW 6" WATERLINE

DESCRIPTION
REVISION A ADDENDUM 1 - CONSTRUCTION NOTE 416 - 9/29/2022
REVISION A - - -

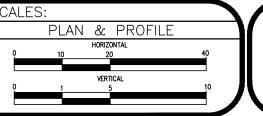
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 DATE
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 JJM
 DATE
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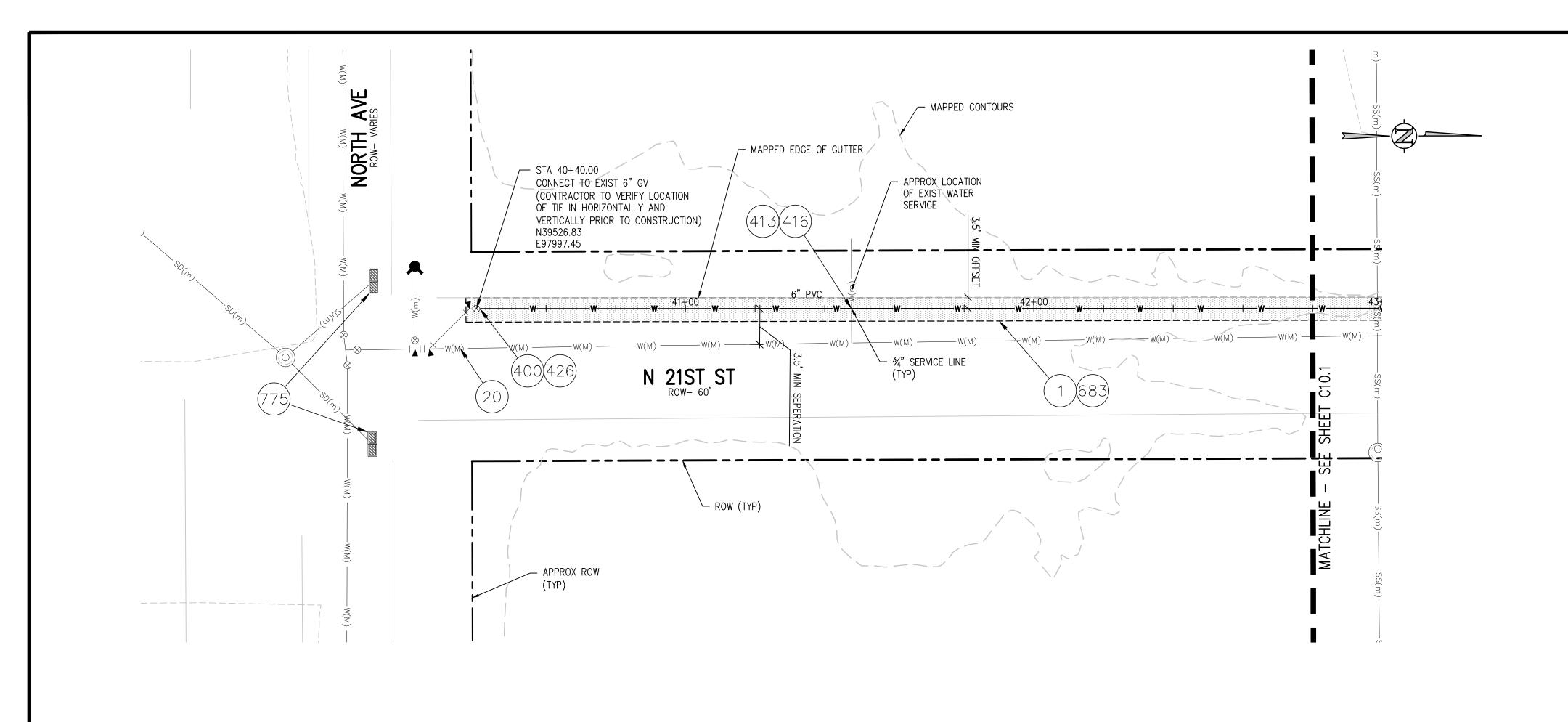
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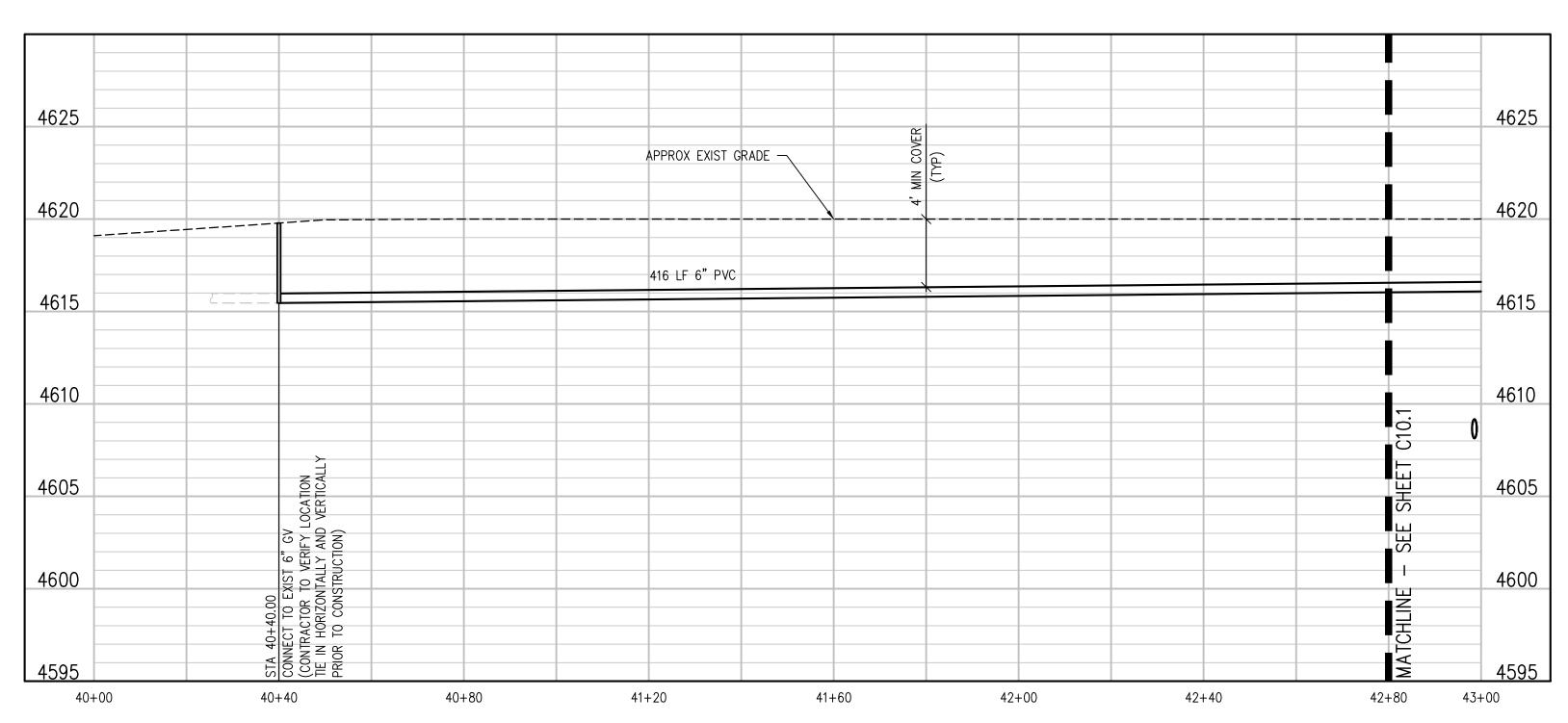


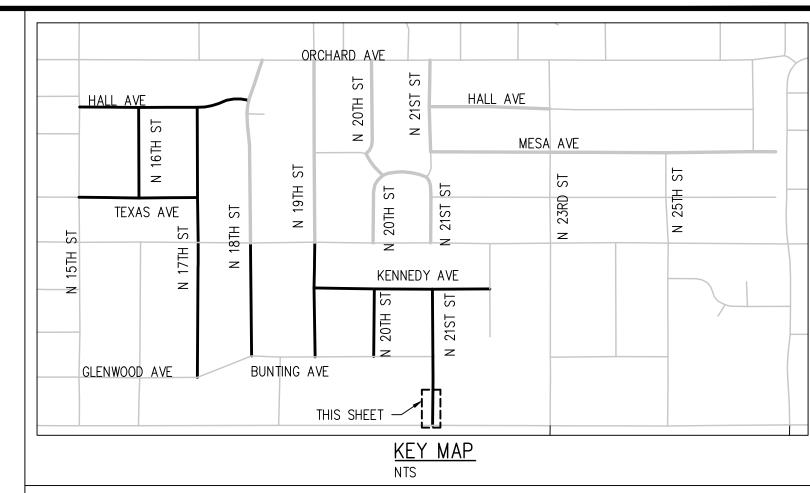
Grand Junction



2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
N 21ST ST WATER PLAN & PROFILE







- 1) 202 REMOVAL OF ASPHALT MAT. SAW CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN).
- 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
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- 102.7C/108.4 WATER SERVICE LINE (TYPE K COPPER) (SIZE AS SHOWN ON PLAN) THE CONTRACT UNIT PRICE FOR WATER SERVICE PIPE SHALL INCLUDE THE COST OF CONNECTION TO WATERLINE INCLUDING ALL MATERIALS TO MAKE THE CONNECTION AND CLOSING ORIGINAL CORPORATION STOP.
- (416) 102.8J/108.4 CORPORATION STOP (SIZE AS SHOWN ON PLAN)
- (426) CONNECT TO EXISTING WATER PIPE/VALVE/FITTING. THE CONTRACT UNIT PRICE FOR WATER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE
- (683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK ON TOP OF 6" ABC) (GRADING SX, BINDER GRADE PG 64-22, GYR 75) (TWO 2" LIFTS)
- 208 STORM DRAIN INLET PROTECTION (EROSION CONTROL LOG) (AS SHOWN AND PER DETAIL)
- (825) CONTRACTOR IS RESPONSIBLE FOR REPAIR COSTS ASSOCIATED WITH ANY/ALL DAMAGE TO PRIVATE PROPERTY BEHIND ROW LINE OR EASEMENT LIMITS

### NOTES:

- 1. CONNECT TO EXISTING SERVICE LINES OR EXTEND SERVICE LINES TO NEW 6" WATERLINE
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 DESCRIPTION
 DATE

 REVISION ⚠ ADD 1 - N21ST ST WL (ENTIRE SHEET)
 - 09/22/2022

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PLAN & PROFILE

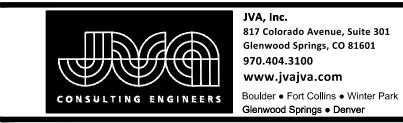
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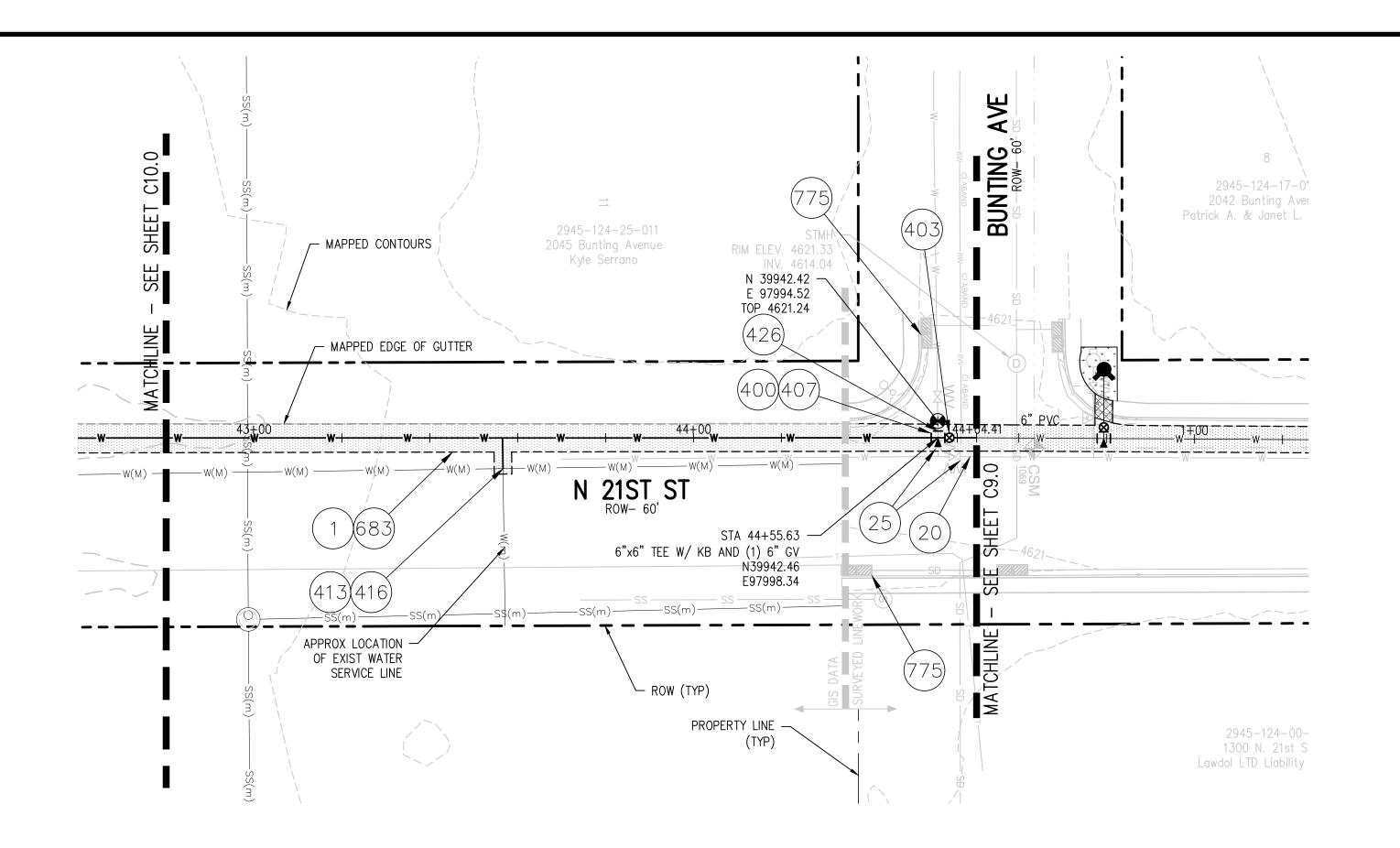
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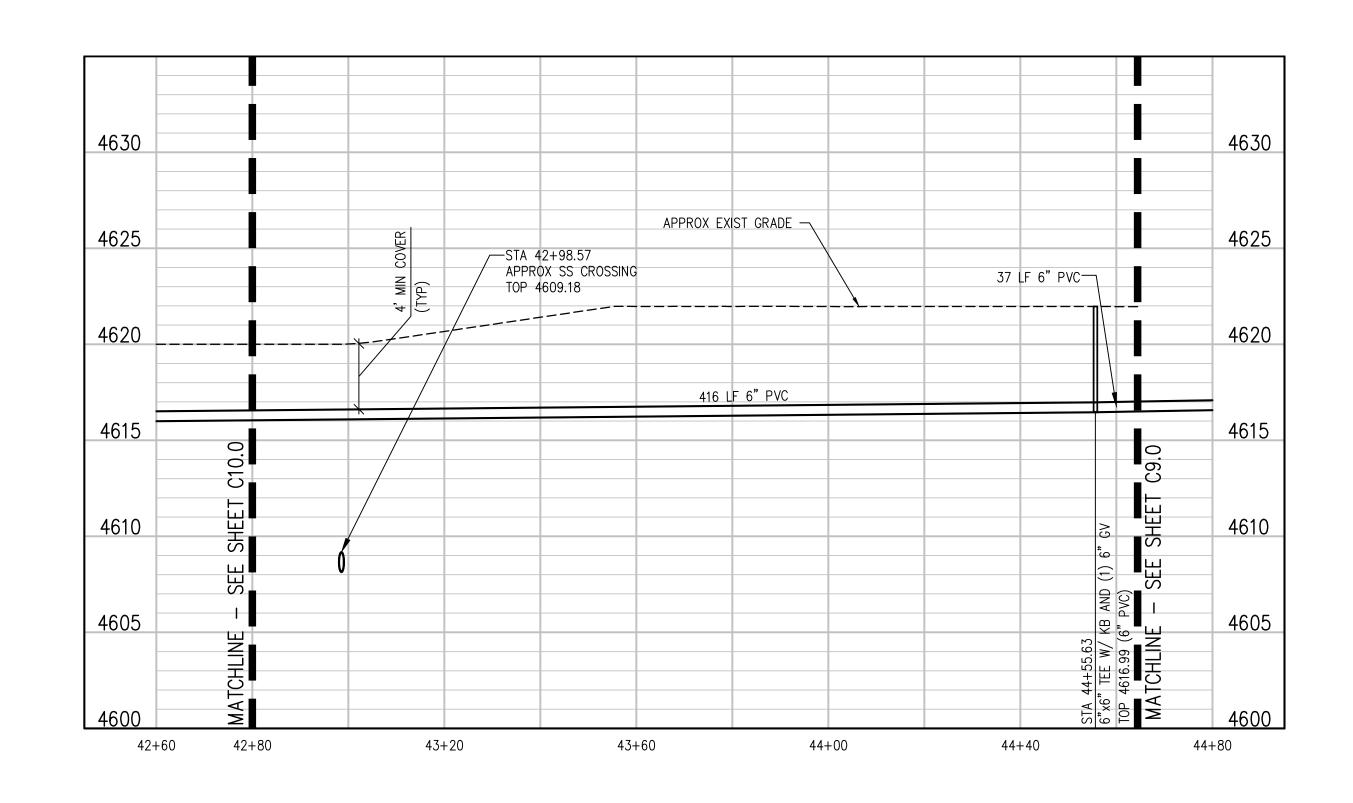
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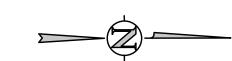


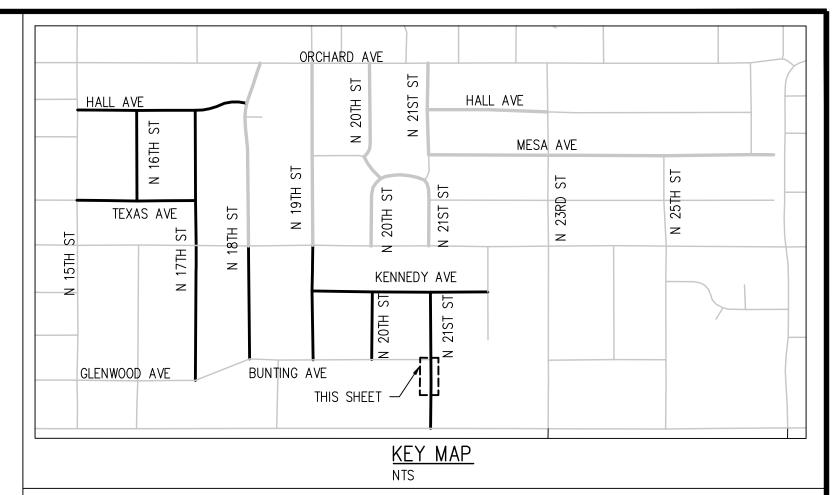
2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
N 21ST ST WATER PLAN & PROFILE

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  LINES TO NEW 6" WATERLINE

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DRAWN BY ZCF DATE 09 22, 2022

DESIGNED BY LAL/ZCF DATE 09 22, 2022

CHECKED BY JJM DATE 09 22, 2022

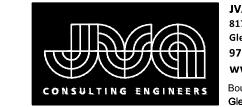
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2022 WATERLINE REPLACEMENT
PROJECT - PHASE 1
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C10.1