TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION

MONUMENT, CO

SEPTEMBER 2022

CODE STATEMENT

APPLICABLE CODES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: PIKES PEAK REGIONAL BUILDING CODE (2017) INTERNATIONAL BUILDING CODE (2015)
INTERNATIONAL ENERGY CONSERVATION CODE (2015) INTERNATIONAL MECHANICAL CODE (2015) INTERNATIONAL FUEL GAS CODE (2015) INTERNATIONAL PLUMBING CODE (2018)

NATIONAL ELECTRICAL CODE (2020) ICC/ANSI A117.1 ACCESSIBILITY STANDARD (2009)

CODE ABSTRACT:

SCOPE
THE PURPOSE OF THIS PROJECT IS TO
CONSTRUCT A PUMP STATION FOR THE TRIVIEW
METROPOLITAN DISTRICT. THE BUILDING WILL
HOUSE A PUMPING SYSTEM, PIPING, ELECTRICAL
AND CONTROLS EQUIPMENT. ASSOCIATED
APPURTENANCES INCLUDE UNDERGROUND SERVICE

II. CODE ABSTRACT (CONT.)

GENERAL PROPERTY INFORMATION
-LOCATION: EL PASO COUNTY
-LEGAL DESCRIPTION: SEC 03-12-66

-EPC PARCEL SCHED #: 6203000002 -ZONING: -LAND USE: RR-5
POLITICAL SUBDIVISION CITY OF COLORADO SPRINGS -OWNER

BUILDING CONSTRUCTION
-TOTAL BUILDING AREA:
-BUILDING HEIGHT:

-# OF LEVELS:

BUILDING CODE ANALYSIS

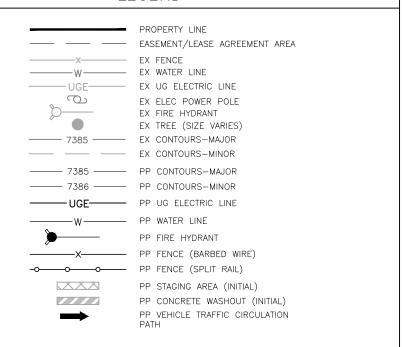
-CONSTRUCTION TYPE:

-O.C. CLASSIFICATION: TYPF II-B

-ALLOWABLE HEIGHT:

EGRESS REQUIREMENTS:
-OC. LOAD CALCULATION
TOTAL BUILDING: 1,496 SF x 1/100 = 14.96 SF-TOTAL EXITS PROVIDED: 1

LEGEND



SURVEY DATA

OPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE OLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:

HORIZONTAL DATUM: HORIZONTAL COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL BASED UPON THE FOLLOWING: COORDINATES ARE SCALED FROM CONTROL POINT 5052 BEING A 2—INCH ALUMINUM CAP STAMPED AZTEC CP 52 SET AT THE TOP OF A DIRT BANK ALONG THE EAST SIDE OF GLEN EAGLE DR. APPROXIMATELY 380+- FEET NORTHERLY OF ST. LAWRENCE WAY. VALUES ARE BASED UPON A STATIC SURVEY SESSION WITH THE FOLLOWING RESULTS:

LATITUDE: 39-04-05916N; LONGITUDE: 104-49-24.82486 W STATE PLANE NORTHING: 1,450,401.759; STATE PLANE EASTING: 3,192,049.712 SCALE FACTOR: 1.0004063250

TRUNCATE NORTHING: 1,000,000.00; TRUNCATE EASTING: 3,000,000.00
PROJECT NORTHING: 450,401.759; PROJECT EASTING: 192,049.712

VERTICAL DATUM: NAVD 88 WITH GEOID G18US; BENCHMARK: CP 5052 EL: 7213.70 BENCHMARK: NGS CS110/DM9842 EL: 6843.25; BENCHMARK: NGS S294/KK0272 EL:

70% DESIGN



VICINITY MAP







THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATION AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY TRIVEW METROPOLITAIN DISTRICT DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY OTHER FEDERAL OR STATE ACCESSIBILITY LAWS OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

SHEET INDEX

SHEET NUMBER	DESCRIPTION	SHEET NUMBER	DESCRIPTION
	COVER SHEET		
GENERAL		ARCHITECTURA	AL
G1	GENERAL NOTES	A1	ARCHITECTURAL FLOOR PLAN
G2	FEMA FLOODPLAIN MAP	A2	ARCHITECTURAL ROOF PLAN
G3	VICINITY MAP	A3	EAST & WEST BUILDING ELEVATIONS
G4	PFD	A4	NORTH & SOUTH BUILDING ELEVATIONS
		A5	ARCHITECTURAL SECTIONS
<u>CIVIL</u>		A6	ARCHITECTURAL DETAILS
C1	OVERALL SITE PLAN	A7	LIFE SAFETY PLAN
C2	SITE DEVELOPMENT PLAN		
C3	SITE DEVELOPMENT PLAN	<u>PROCESS</u>	
C4	UTILITY PLAN	P1	PROCESS FLOOR PLAN
C5	WATERLINE INLET ALIGNMENT	P2	PROCESS PIPE SECTIONS
	PLAN & PROFILE	P3	PROCESS PIPE SECTIONS
C6	WATERLINE OUTLET ALIGNMENT	P4	PROCESS DETAILS
07	PLAN & PROFILE	P5	PROCESS DETAILS
C7 C8	LANDSCAPE PLAN LANDSCAPE DETAILS		
C9	LANDSCAPE DETAILS	MECHANICAL	LEGENDS AND ADDDENIATIONS
C10	LANDSCAPE DETAILS	M-001	LEGENDS AND ABBREVIATIONS
C10	CIVIL DETAILS	M-002 M-003	SCHEDULES SPECIFICATIONS
C12	CIVIL DETAILS	M-003 M-101	HVAC PLAN
C12	CIVIL DETAILS	M-601	HVAC PLAN HVAC DETAILS & DIAGRAMS
C14	CIVIL DETAILS	M-601	HVAC DETAILS & DIAGRAMS
	OIVIE DET/WES	ELECTRICAL	
STRUCTURAL		E1	SYMBOLS LEGEND & SCHEDULES
S1	STRUCTURAL NOTES	E2	ELECTRICAL POWER PLAN
S2	STRUCTURAL SECTIONS	E3	ELECTRICAL LIGHTING PLAN
S3	STRUCTURAL FLOOR PLAN	E4	ONE-LINE DIAGRAM & PANEL
S4	STRUCTURAL ANCHOR PLAN		SCHEDULES
S5	STRUCTURAL DETAILS	E5	ELECTRICAL CONCRETE EMBEDDED
S6	STRUCTURAL DETAILS		CONDUIT PLAN
S7	STRUCTURAL DETAILS		

PARTICIPANTS

TRIVIEW METROPOLITAN DISTRICT 16055 OLD FOREST POINT STF 302 MONUMENT, CO 80132 CONTACT: JIM MCGRADY PHONE: (719) 488-6868

CONSULTING/DESIGN ENGINEER JDS-HYDRO CONSULTANTS, A DIVISION OF RESPEC 5540 TECH CENTER DR COLORADO SPRINGS, CO 80919 CONTACT: GWEN DALL, PE PHONE: (719) 402-0014

DRAINAGE ENGINEER RESPEC 121 S TEJON ST STE 1110 COLORADO SPRINGS, CO 80903 CONTACT: RICH GALLEGOS, PE PHONE: (719) 266-5212

SIGNATURE BLOCKS

DISTRICT APPROVALS

THE TRIVIEW METROPOLITAN DISTRICT RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE TRIVIEW METROPOLITAN DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.

TRIVIEW METROPOLITAN DISTRICT DESIGN APPROVAL

BY: JIM MCGRADY, DISTRICT MANAGER DATE:

PROJ NO. W0224.21029

IN CASE OF FRRORS OR OMISSIONS WITH THE WATER DESIGN AS SHOWN ON THIS DOCUMENT. THE STANDARDS AS DEFINED IN THE "RULES AND REGULATIONS FOR INSTALLATION OF WATER MAINS AND SERVICES" SHALL RULE. APPROVAL EXPIRES 180 DAYS FROM DESIGN APPROVAL.

ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE APPLICABLE GOVERNING AGENCIES

MARIO DIPASQUALE, P.E. #41667 JDS-HYDRO CONSULTANTS, A DIVISION OF RESPEC

W224.21029

PCD FILE NO. _____

TRIVIEW METRO DISTRICT GENERAL NOTES:

- 1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED THE SITE WORK STANDARDS AND SPECIFICATIONS, THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE TRIVIEW METROPOLITAN DISTRICT DESIGN CRITERIA & CONSTRUCTION SPECIFICATIONS, AND APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC R.O.W. OR EASEMENTS SHALL BE INSPECTED AND APPROVED BY TRIVIEW METROPOLITAN DISTRICT. THE DISTRICTS WILL ALSO INSPECT ALL WORK ON PRIVATE PROPERTY.
- THE TRIVIEW METROPOLITAN DISTRICT DESIGN CRITERIA & CONSTRUCTION SPECIFICATIONS MANUALS ARE CONSIDERED PART OF THIS CONSTRUCTION DRAWING SET. THIS DESIGN AND PLAN SET IS INCOMPLETE WITHOUT THESE SPECIFICATIONS MANUALS. THE CONTRACTOR SHALL OBTAIN A COPY OF THESE MANUALS AND BE FAMILIAR WITH THEM FOR ALL CONSTRUCTION ACTIVITIES.
- 3. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ACTUAL CONSTRUCTION. ALL EXISTING UTILITIES SHOWN ARE BASED ON INFORMATION OF RECORD. THE CONTRACTOR IS RESPONSIBLE FOR TAKING PRECAUTIONARY MEASURES TO PROTECT THE EXISTING UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS AND AGREES TO ACCEPT FULL RESPONSIBILITY FOR FAILURE TO LOCATE AND PRESERVE ANY EXISTING UTILITIES. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- 4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TRIVIEW METROPOLITAN DISTRICT AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH THE MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE TRIVIEW METROPOLITAN DISTRICT INSPECTORS AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY, OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.
- 6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ALL PERMITS NEEDED FOR THE JOB, ON—SITE AT ALL TIMES.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
- 8. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND THE TRIVIEW METROPOLITAN DISTRICT INSPECTORS IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
- 10. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH M.U.T.C.D. TO THE TOWN OF MONUMENT FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS—BUILT INFORMATION ON THE SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE, WHICH SHALL BE AVAILABLE TO THE TRIVIEW METROPOLITAN DISTRICT INSPECTORS AT ALL TIMES. A REPRODUCIBLE SET OF AS—BUILT DRAWINGS MUST BE FURNISHED TO TRIVIEW METROPOLITAN DISTRICT AT THE COMPLETION OF THE PROJECT, PRIOR TO FINAL APPROVAL BY THE TRIVIEW METROPOLITAN DISTRICT
- 14. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE ENGINEER-OF-RECORD FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- 15. ALL STRUCTURAL EROSION CONTROL MEASUREMENTS SHALL BE INSTALLED, AT THE LIMITS OF CONSTRUCTION, PRIOR TO ANY OTHER GROUND DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BE THE CONTRACTOR, UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING

- 16. THE CONTRACTOR SHALL SEQUENCE THE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES.
- 17. NO SITE—RELATED IMPROVEMENTS MAY COMMENCE UNTIL A PRE—CONSTRUCTION MEETING IS HELD WITH THE THE TRIVIEW METROPOLITAN DISTRICT AND ALL APPLICABLE PERMITS ARE OBTAINED.
- 18. THE CONTRACTOR MUST IDENTIFY TO THE TRIVIEW METROPOLITAN DISTRICT, PRIOR TO THE START OF ANY WORK, A QUALIFIED PLAN PERSON RESPONSIBLE FOR REVIEWING AND MONITORING ALL OPERATIONS IN ORDER TO PREVENT OR MINIMIZE THE IMPACT OF VIBRATION, NOISE, DUST, DRAINAGE, AND EROSION DAMAGE, AND OTHER FORMS OF POLLUTION ON NEARBY PROPERTY AND THE PUBLIC AS A WHOLE. THE DEVELOPER MUST WRITE TO THE OWNERS/OCCUPANTS OF PROPERTIES WITHIN AT LEAST 100 YARDS OF THE LIMITS OF THE WORKSITE, INFORMING THEM OF THE NATURE AND TIMING OF THE PROJECT AND PROVIDING CONTACT DETAILS FOR COMPLAINTS.

GENERAL CONSTRUCTION NOTES:

- 1. THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING IMPROVEMENTS TO BE MET BY THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION. ANY SIGNIFICANT DISCREPANCIES FOUND BETWEEN THIS PLAN SET AND ACTUAL FIELD CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD FOR APPROPRIATE ACTION.
- 2. THE CONTRACTOR IS ADVISED THAT ALL EXISTING CONDITIONS OUTSIDE THE AREA OF WORK SHALL BE PROTECTED, IF DAMAGE OCCURS DURING CONSTRUCTION, IT WILL BE REPLACED IN THE ORIGINAL, EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND ROUTING DURING CONSTRUCTION, IF REQUIRED. TWO—WAY TRAFFIC SHALL BE MAINTAINED THROUGH THE WORK AREA AT ALL TIMES.
- 4. ALL DISTURBED AREAS THAT ARE TO REMAIN UNCOVERED FOR A PERIOD GREATER THAN 2 MONTHS SHALL BE RESEEDED AND WATERED UNTIL STABLE VEGETATION IS ESTABLISHED.
- AT LEAST ONE SIGNED AND STAMPED SET OF THESE CONSTRUCTION DRAWINGS SHALL BE KEPT ON-SITE AT ALL TIMES.
- 6. ALL PLANS ON THE JOB SITE SHALL BE SIGNED BY THE TRIVIEW METROPOLITAN DISTRICT, AND THE DISTRICTS' ENGINEERS. ANY REVISION OF THE PLANS SHALL BE SO NOTED, WITH THE OLD DRAWINGS MARKED NOT VALID.
- 7. ALL STATIONING IS CENTER LINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE CENTER LINE UNLESS OTHERWISE NOTED.
- ALL BURIED DUCTILE IRON PIPE, INCLUDING FITTINGS, VALVES AND FIRE HYDRANTS, SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
- ALL DUCTILE IRON PIPE LESS THAN 12 INCHES AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRE WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING.
- 10. ALL MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH TRACER WIRE WITH TEST STATIONS EVERY 500 FT (UNLESS VALVE BOXES CAN BE USED AT INTERSECTIONS AND SERVICE STUBS).
- 11. ALL PIPE MATERIAL, BACKFILL AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, COLORADO DEPARTMENT OF TRANSPORTATION, EL PASO COUNTY DEPARTMENT OF TRANSPORTATION, COLORADO SPRINGS UTILITIES AND THE GEOTECHNICAL ENGINEER.
- 12. COMPACTION TESTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE DISTRICT OR HIGHER STANDARD AS IMPOSED BY ANOTHER AGENCY HAVING RIGHT-OF-WAY JURISDICTION. THIS SHALL INCLUDE ALL VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES AND MANHOLES. ALL REPORTS SHALL BE SUBMITTED TO THE TRIVIEW METROPOLITAN DISTRICT FOR REVIEW AND APPROVAL.
- 13. ALL BENDS SHALL BE STAKED PRIOR TO THE START OF CONSTRUCTION.
- 14. ALL UNUSED SALVAGED WATER UTILITY MATERIAL SHALL BE RETURNED TO THE TRIVIEW METROPOLITAN DISTRICT AS REQUESTED.
- 15. AT THE CONTRACTOR'S EXPENSE ALL UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED SUCH THAT THEY FUNCTION CONTINUOUSLY DURING CONSTRUCTION OPERATIONS. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR OR THE METROPOLITAN DISTRICTS AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR/DEVELOPER.
- 16. THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.
- 17. ALL CONTRACTORS WORKING ON OR NEAR A WATER OR SEWER FACILITY (TO INCLUDE SERVICE LINES) SHALL HAVE LIABILITY INSURANCE NAMING THE TRIVIEW METROPOLITAN DISTRICT AS ADDITIONAL INSURERS AND SHALL PROVIDE A CURRENT COPY OF WORKERS COMPENSATION INSURANCE ON FILE WITH THE DISTRICTS. NO WORK CAN PROCEED WITHOUT CURRENT CERTIFICATES ON FILE AT THE DISTRICT OFFICE.

- 18. THE CONTRACTOR SHALL NOTIFY THE TRIVIEW METROPOLITAN DISTRICT (488–6868), AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A WEEKLY CONSTRUCTION MEETING SHALL BE REQUIRED WITH THE CONTRACTOR, DISTRICT ENGINEERS AND ALL OTHER PARTIES AS DEEMED NECESSARY BY THE DISTRICTS.
- 19. COMMENCEMENT OF CONSTRUCTION OF WATER/SEWER SYSTEMS WITHIN DISTRICTS:
- 19.1. PRIOR TO THE START OF CONSTRUCTION, A PRE—CONSTRUCTION MEETING IS REQUIRED A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. A REPRESENTATIVE OF THE OWNER OR DEVELOPER, A REPRESENTATIVE OF THE CONTRACTOR, AND THE DESIGN ENGINEER ARE REQUIRED TO ATTEND. CONTACT THE TRIVIEW METROPOLITAN DISTRICT (488—6868) TO SCHEDULE THE PRE—CONSTRUCTION MEETING. NO PRE—CONSTRUCTION MEETING CAN BE SCHEDULED UNTIL THREE (3) SIGNED/APPROVED PLAN SETS ARE RECEIVED BY THE METROPOLITAN DISTRICTS.
- 19.2. THE CONTRACTOR IS REQUIRED TO NOTIFY THE TRIVIEW METROPOLITAN DISTRICT (488-6868) A MINIMUM OF 48 HOURS AND A MAXIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.

20. PRESSURE TESTING OF FACILITIES:

- 20.1. THE CONTRACTOR SHALL NOTIFY THE TRIVIEW METROPOLITAN DISTRICT (488-6868) A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING.
- 20.2. ALL SECTIONS OF WATER LINE ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
- 20.2.1. TEST 100% OF ALL LINES.
- 20.2.2. MUST PASS PRESSURE TEST TO 200 PSI FOR TWO HOURS (UNLESS OTHERWISE APPROVED ON THE PLANS)

21. DISINFECTION OF FACILITIES:

- 21.1. THE CONTRACTOR SHALL DISINFECT ALL DOMESTIC WATERLINES ACCORDING TO AWWA STANDARDS B-300 AND C-601, INCLUDING PRELIMINARY FLUSHING, CHLORINATION, AND FINAL FLUSHING.
- 21.2. THE CONTRACTOR SHALL COLLECT SAMPLES FROM END OF PIPELINE AFTER FINAL FLUSHING AND PRIOR TO PLACING WATERLINES IN SERVICE AND TEST FOR COLIFORM ORGANISMS. THE NUMBER AND FREQUENCY OF SAMPLES SHALL CONFORM WITH THE REQUIREMENTS OF THE PUBLIC HEALTH AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL PAY FOR THE SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM SAMPLING AND TESTING AS REQUIRED.
- 21.3. REPEAT DISINFECTION UNTIL SATISFACTORY SAMPLES HAVE BEEN OBTAINED IF INITIAL OR SUBSEQUENT DISINFECTION FAILS TO PRODUCE SATISFACTORY SAMPLES.
- 22. COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS:
- 22.1. NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL AFTER THE COMPLETION OF ALL PRESSURE TESTING, FLUSHING, DISINFECTION, BAC—T TESTING, AND COMPACTION TESTING, AND UNTIL AS—BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
- 22.2. NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO THE USE OF THE FACILITY.
- 22.3. NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICTS, AND RECORDED.
- 23. ALL WATER LINES SHALL HAVE "AS BUILT" PLANS PREPARED AND APPROVED PRIOR TO PRELIMINARY ACCEPTANCE BY THE DISTRICT.

24. SUBSURFACE UTILITY ENGINEERING

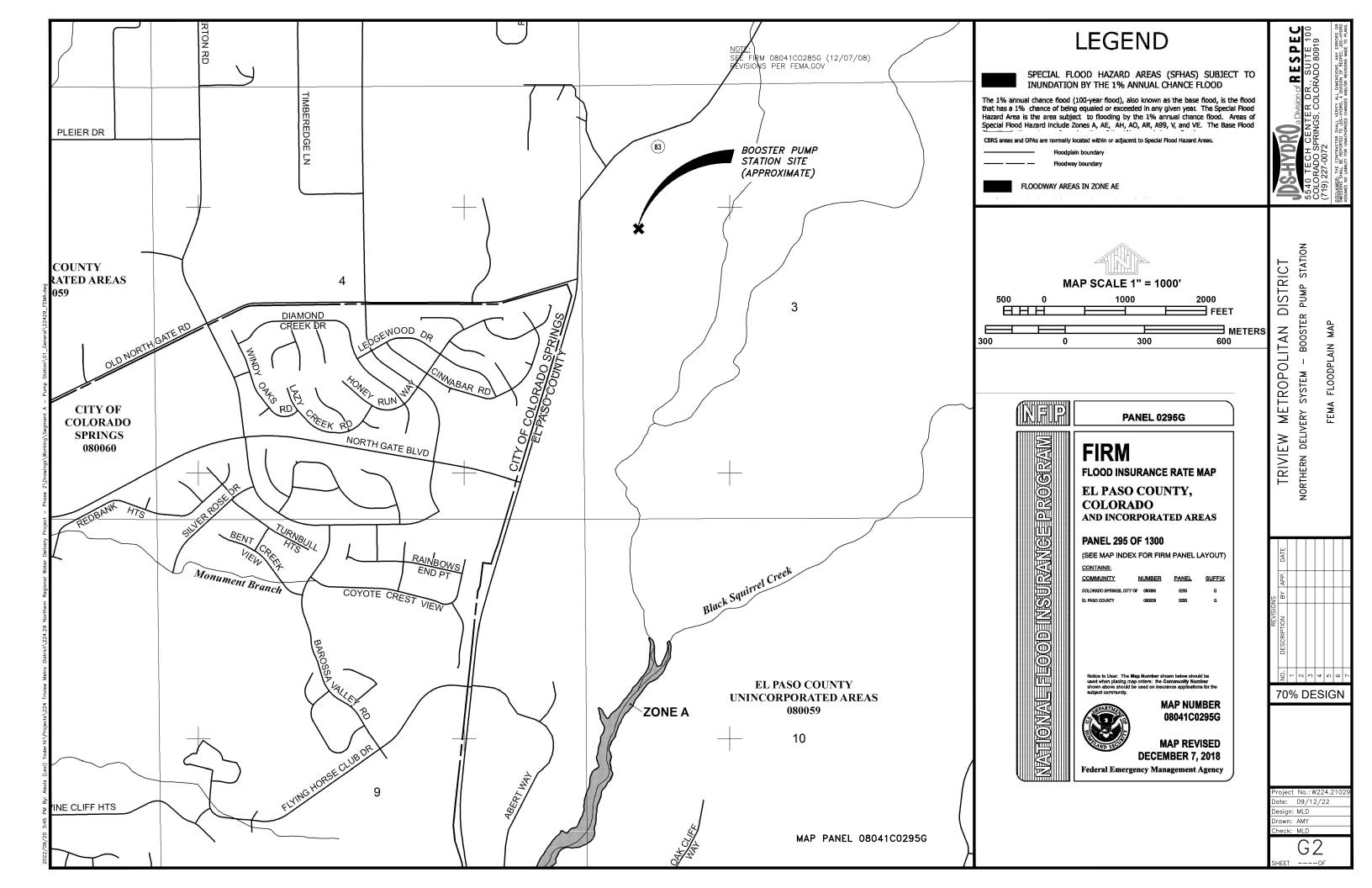
- 24.1. UTILITIES ARE DEPICTED ON THESE PLANS IN ACCORDANCE WITH THEIR ACHIEVED "QUALITY LEVELS" AS DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEER'S DOCUMENT ASCE 38, "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
- 24.2. RELIANCE UPON THESE DATA FOR RISK MANAGEMENT PURPOSES DURING BIDDING DOES NOT RELIEVE THE EXCAVATOR OR UTILITY OWNER FROM FOLLOWING ALL APPLICABLE UTILITY DAMAGE PREVENTION STATUTES, POLICIES, AND/OR PROCEDURES DURING EXCAVATION. IT IS IMPORTANT THAT THE CONTRACTOR INVESTIGATES AND UNDERSTANDS THE SCOPE OF WORK BETWEEN THE PROJECT OWNER AND THEIR ENGINEER REGARDING THE SCOPE AND LIMITS OF THE UTILITY INVESTIGATIONS LEADING TO THESE UTILITY DEPICTIONS.

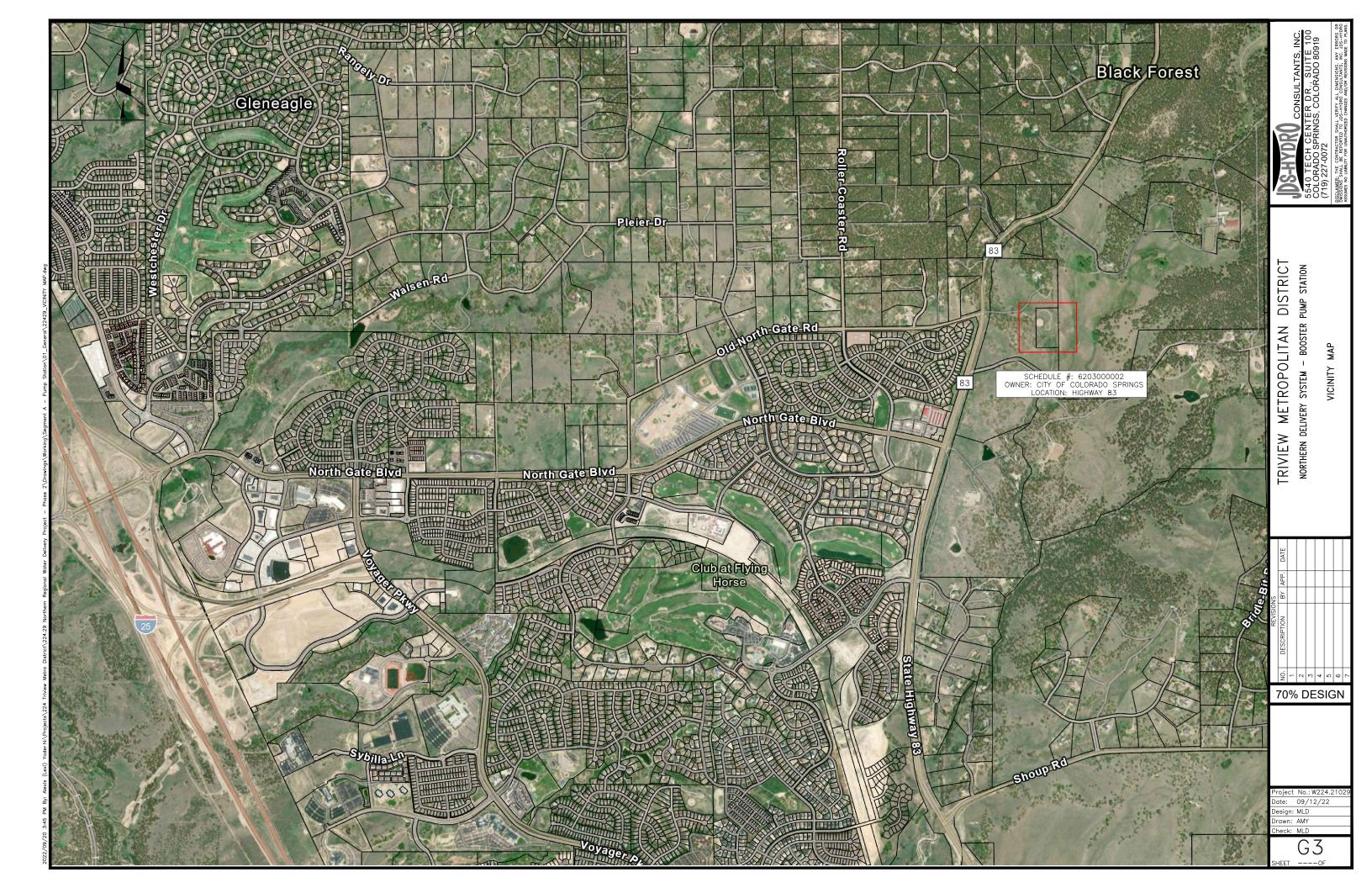
Renge Colorado 8091

5540 COLC (719)

Design: MLD
Drawn: AMY
Check: MLD

G1





P101, 102, 103
8-STAGE VERTICAL TURBINE
PEERLESS 15MA/LC
350 HP
TDH: 590 FT
FLOWRATE: 1500 GPM
460V, 390A
1770 RPM A101
CHLORINE RESIDUAL
ANALYZER
AMPEROMETRIC
NO REAGENTS REQUIRED
CLT10SC P201, 202 PERISTALTIC PUMP M324-SNDR 0.67 GPH T101, 102 CHLORINE STORAGE TANK HIGH-DENSITY CROSS-LINKED V101 ELECTRICAL CONTROL VALVE WORKING PRESSURE: 175 PSI <u>F101</u> ELECTROMAGNETIC PRV102 SURGE VALVE FLOW METER 8" BADGER M-2000 6" CLA-VAL 52-03 POLYETHYLENE (XLPE) LEAD FREE DOUBLE WALLED 250 GALLON 16" CLA-VAL 131-66 ALTERNATE
PUMPS —
EACH START NaOCI PRV101 T101 16" 16" 16"x8" 8" F101 P101 P102 P103 16"x8" V101 1 12" 12" 12" TO NDS TANK TANK HGL 7476FT-7483FT 255-306 PSI PRV103 SET @ 7 PSI PRV102 SET @ XX PSI CSU HIGHWAY 83 RESERVOIR SS SAMPLING TAP 8-13 PSI HGL 7120FT-7140FT THOSE BIBB SAMPLE M-A101 TO ATMOSPHERE ATMOSPHERE SS SAMPLING TAP **♦** HOSE BIBB LEGEND TO ATMOSPHERE CONTROL VALVE **|**✓ BUTTERFLY VALVE CHECK VALVE I∭I GATE VALVE

BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM

DIAGRAM

FLOW

PROCESS

Division of **RESPEC** ER DR., SUITE 100 COLORADO 80919

9-28-60

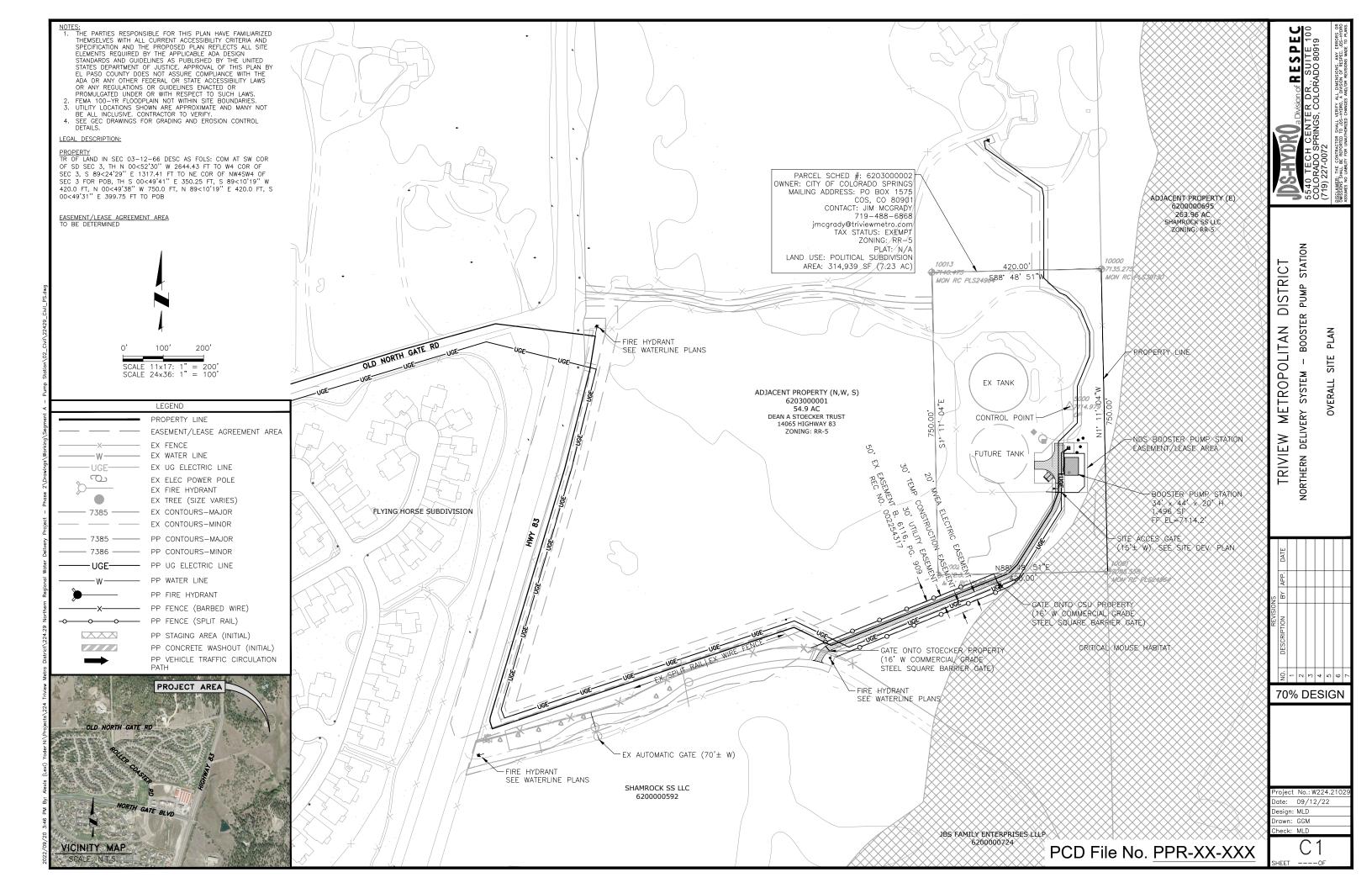
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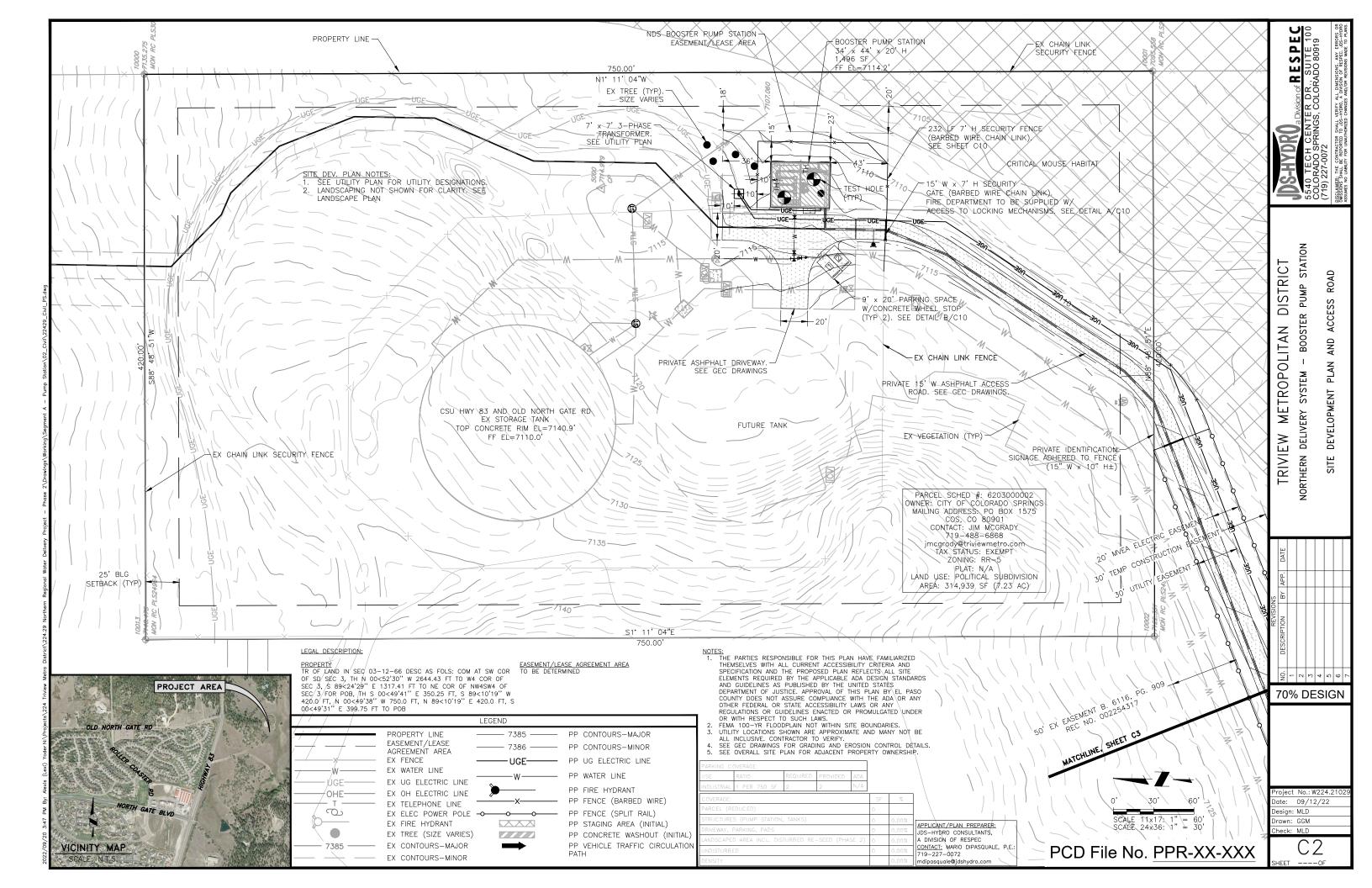
Project No.: W224.21

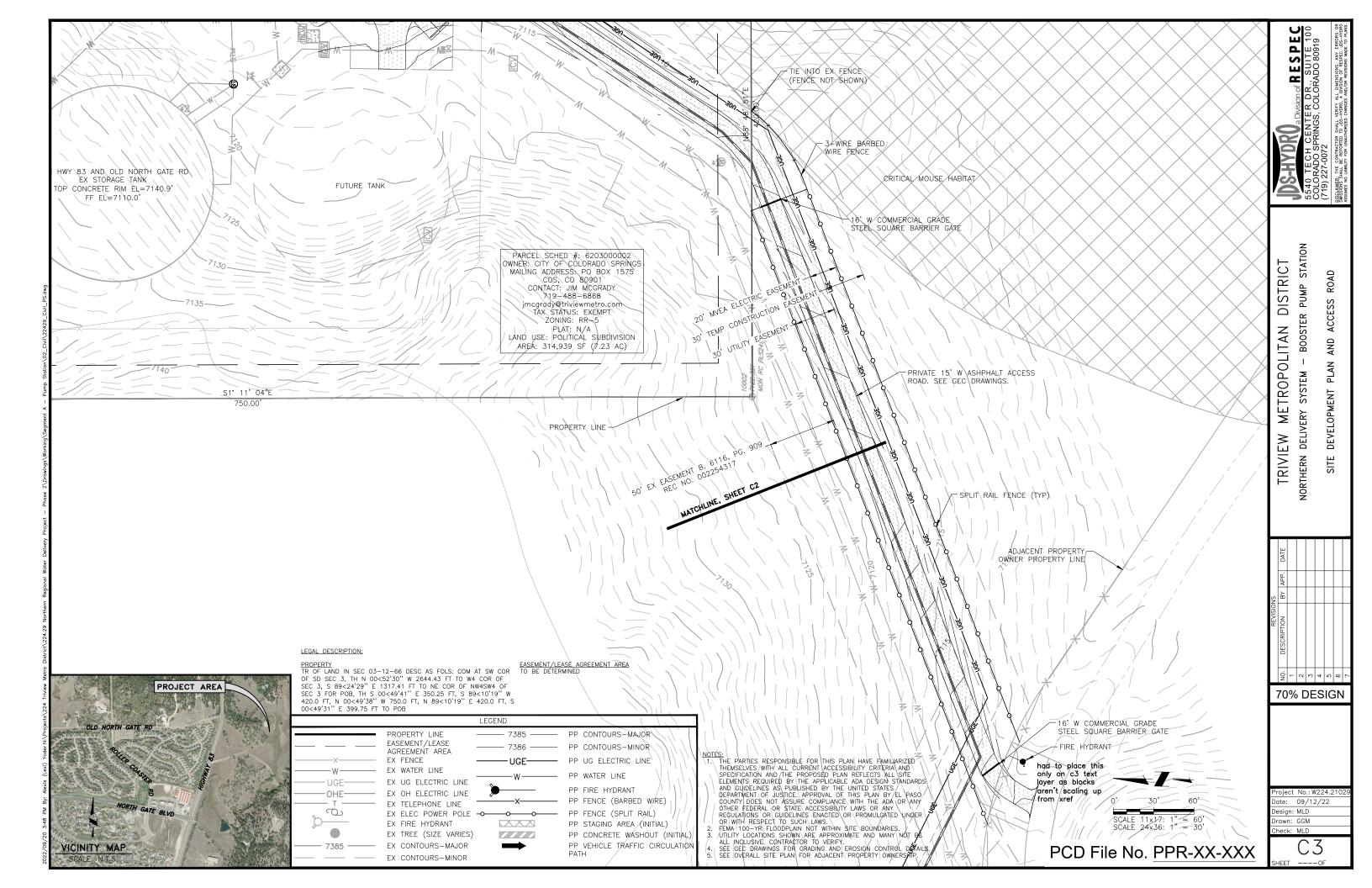
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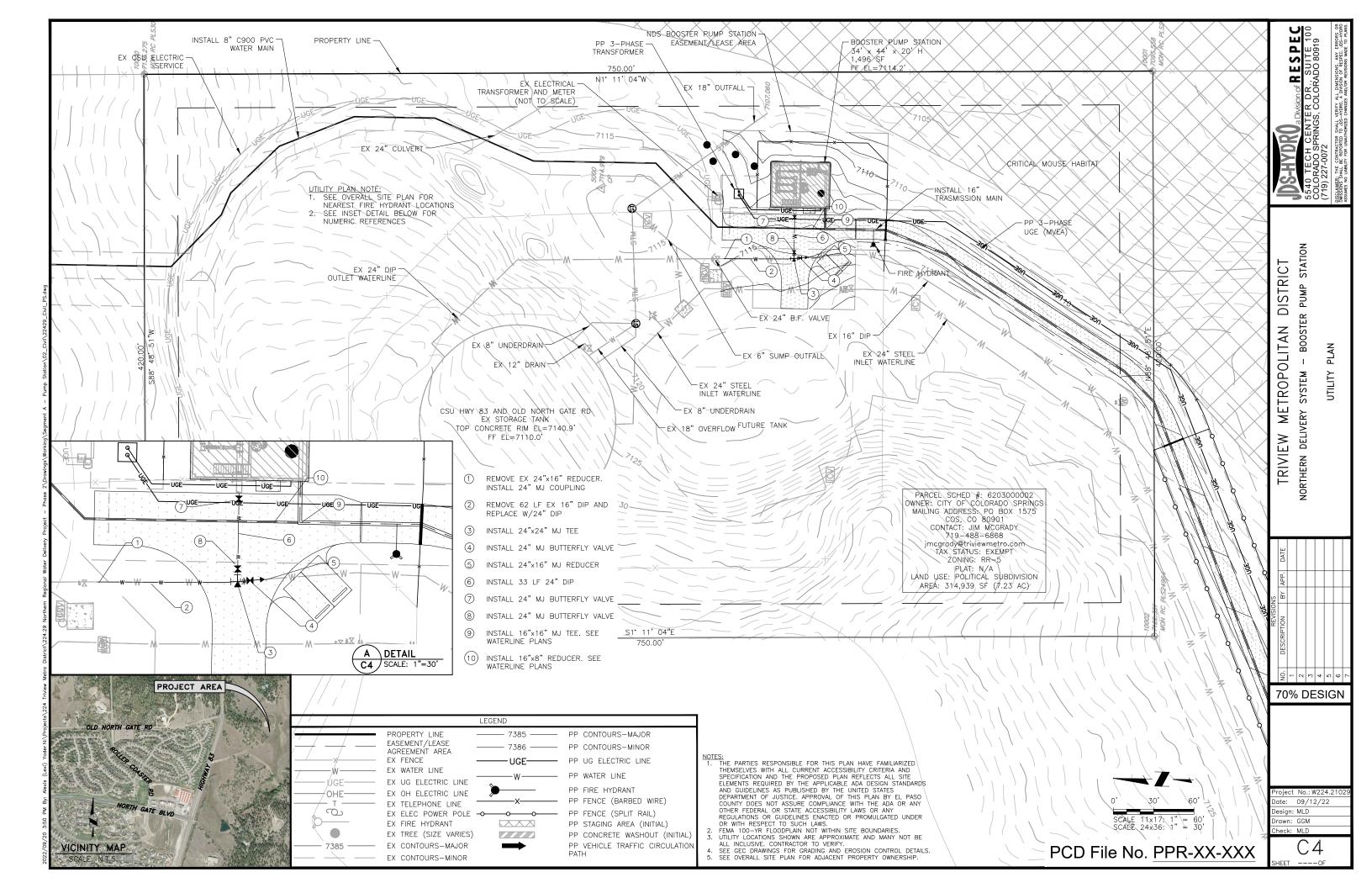
eck: MID G4

NOTE: ALL PARTS IN CONTACT WITH POTABLE WATER TO BE STAINLESS STEEL, PVC ON NSF-61 APPROVED AND LEAD FREE









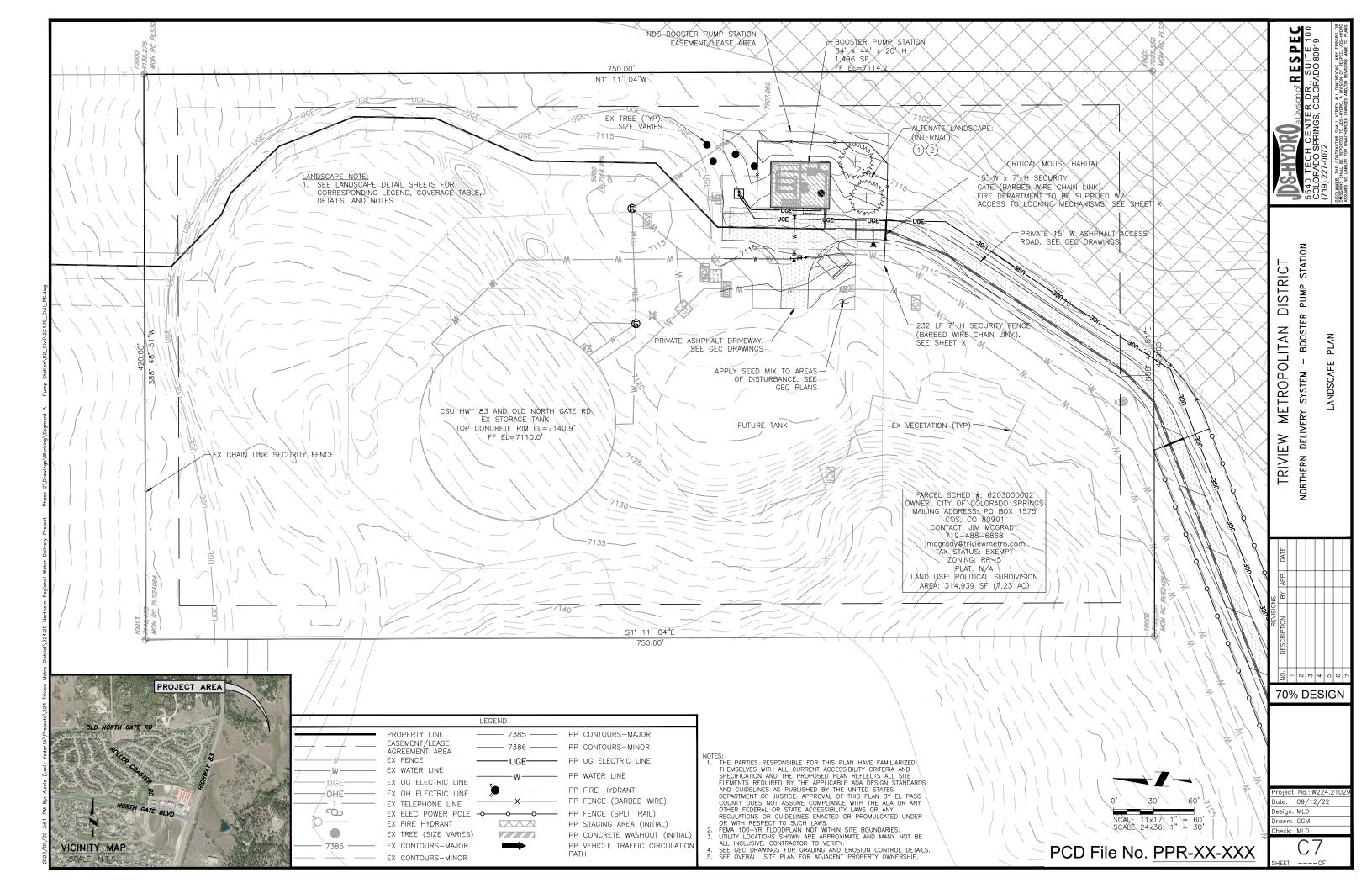




WATERLINE OUTLET ALIGNMENT PLAN & PROFILE

Date: 09/12/22

С6



	LANDSCAPE SCHEDULE - XERIC/LOW WATER VEGETATION								
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	MATURE SIZE	PLANTING	COMMENTS			
A).4	EVERGREEN TREE			(HEIGHT x WIDTH)	SIZE (MIN)				
ANNOTE THE STATE OF THE STATE O	PINUS PONDEROSA	PONDEROSA PINE	2	60'/100' × 25'	6' MIN. HEIGHT	MUST ARRIVE BALLED AND BURLAPPED. PRUNE TO SHAPE TREE AT EARLY GROWTH			

LANDSCAPE KEY/DESCRIPTIONS

1) TYP PLANTING REF: SHEET C9

2 LIVE GROUND COVER/SEED MIX REF: GEC SHEETS. SEED BLEND INSTALLED PER SUPPLIER'S SPECS. SUBMIT CUT SHEET FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. APPLY TO EXTENT OF SITE DISTURBED AREA

LANDSCAPING NOTES:

- 1. PLANT QUANTITY AND SUBSTITUTION: IN CASE OF DISCREPANCY IN PLANT QUANTITIES SHOWN ON THE PLANT TABLE AND THOSE SHOWN ON THE PLANTING PLAN, THE QUANTITIES SHOWN ON THE PLANTING PLAN SHALL GOVERN. THE MINIMUM ACCEPTABLE SIZES OF PLANTS MEASURED BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION SHALL CONFORM TO THE PLANTING SIZES AS SPECIFIED IN THE SCHEDULE. ANY SUBSTITUTION OF PLANT SIZE OR SPECIES MUST BE SUBMITTED TO THE ENGINEER IN WRITING FOR APPROVAL PRIOR TO INSTALLATION.
- 2. ACCEPTABLE PLANT MATERIAL: ALL PLANTS SHALL MEET OR EXCEED STANDARDS SET BY THE "COLORADO NURSERY ASSOCIATION," AND THE "AMERICAN STANDARD OF NURSERY STOCK." ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES, HEALTHY, FREE OF DISEASE, INSECT PESTS, MECHANICAL INJURIES, AND HAVE ADEQUATE ROOT SYSTEMS. ALL PLANTINGS SHALL BE INSTALLED PER PLANTING DETAILS. ALL PLANT MATERIAL SHALL BE INSPECTED BY THE ENGINEER OR OWNER PRIOR TO INSTALLATION. STAKING/CONTRACTOR INSPECTION NOTE: ALL PLANTING LOCATIONS TO BE STAKED AND INSPECTED BY CONTRACTOR PRIOR TO INSTALLATION. ALL PLANTS TO BE INSPECTED AT NURSERY LOCATION PRIOR TO TRANSPORTING TO THE SITE.
- 3. <u>SITE DISTURBANCE:</u> ALL AREAS OF SITE DISTURBANCE DUE TO CONSTRUCTION SHALL BE RENOVATED OR PLANTED PER THIS PLAN UNLESS OTHERWISE NOTED. SITE—SPECIFIC LANDSCAPING SHALL AT A MINIMUM, INCLUDE REVEGETATION OF DISTURBED AREAS WITH MATERIALS INDIGENOUS TO THE SITE OR OTHERWISE ADAPTABLE (SEE LEFT KEY DESCRIPTIONS AND EROSION CONTROL NOTES SHEET FOR SEED MIX).
- 4. <u>SOIL AMENDMENTS:</u> CONTRACTOR SHALL AMENDED PLANTING AREAS AS FOLLOWS:

 -ADD MINIMUM OF 3 CUBIC YARDS OF WELL-COMPOSTED AGED MANURE OR
 PREMIUM COMPOST PER 1000 S.F.
- -ALL AMENDED AREAS SHALL BE TILLED TO A DEPTH OF 6" PRIOR TO PLANTING.
- -3 CUBIC YARDS PER 1000 S.F. OF WELL-COMPOSTED AGED MANURE OR PREMIUM COMPOST.
- -ALL AMENDED AREAS SHALL BE TILLED TO A DEPTH OF 6" PRIOR TO PLANTING.
- 5. <u>SEEDED TURF:</u> ALL SEEDED OR HYDROMULCHED AREAS SHALL DEMONSTRATE 95% GERMINATION PRIOR TO FINAL ACCEPTANCE.
- 6. IRRIGATION: OWNER TO WATER FOR ONE TO TWO GROWING SEASONS UNTIL ESTABLISHED AND ON AN AS-NEEDED BASIS THEREAFTER. DISTURBED AREA SEED/GRASS MIXTURE MUST BE IRRIGATED BY OWNER UNTIL ESTABLISHED AND IN TIMES OF DROUGHT. THE ON-GOING MAINTENANCE OF THE NATIVE GRASS IS THE RESPONSIBILITY OF OWNER. AUTOMATED IRRIGATION SYSTEM SHALL DRIP IRRIGATE ALL TREE, SHRUB, AND GROUND COVER PLANTING AREAS AND SPRAY ANY TURF.
- 7. INORGANIC AND ORGANIC MULCH/FABRIC: ALL PLANTINGS (INCLUDING THOSE IN ROCK MULCH AREAS) TO RECEIVE 3-INCH DEPTH OF SHREDDED CEDAR WOOD MULCH UNLESS OTHERWISE SPECIFIED. MULCH RINGS TO BE SIZED PER PLANTING DETAILS (15-INCH DIA. FOR (5) GALLON SHRUBS/GRASSES. WOOD MULCH TO BE "GORILLA HAIR CEDAR MULCH" AVAILABLE FROM C&C SAND CO. (719)471-7222 OR PIONEER SAND CO. (719)599-8100. SUBMIT PRODUCT INFOR. TO DESIGN ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. HIGH QUALITY COMMERCIAL—GRADE (SPUN—BONDED POLYPROPYLENE OR EQUAL) LANDSCAPING FABRIC SHALL BE APPLIED UNDER ALL ROCK BASES.
- 8. <u>STEEL EDGE:</u> ALL EDGER SHALL BE ACME 4" <u>PERFORATED</u> STEEL EDGER "SELF COLORING" 14 GAUGE OR APPROVED EQUAL.
- 9. <u>APPROVAL:</u> ANY FIELD CHANGES OR DEVIATIONS TO THESE PLANS WITHOUT PRIOR APPROVAL OF AN AMENDED DEVELOPMENT PLAN MAY RESULT IN A DELAY OF FINAL APPROVAL AND THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- 10. FINAL TREE AND SHRUB LOCATIONS: ALL TREE LOCATIONS SHALL BE STAKED FOR APPROVAL BY OWNER REPRESENTATIVE/ENGINEER PRIOR TO PLANTING. SHRUBS SHALL BE PLACED IN THEIR LOCATIONS PER THIS PLAN AND APPROVED BY OWNER REPRESENTATIVE/ENGINEER. THE FINAL LOCATION OF TREES TO BE PLANTED MAY REQUIRE ADJUSTMENT BASED ON APPROVAL OF THE FINAL UTILITIES PLANS AND ASSOCIATED FINAL PLAT AND EASEMENTS.
- ** BY APPROVING THIS PLAN, THE DIRECTOR IS ACKNOWLEDGING AN ALTERNATE LANDSCAPE DESIGN AS IT RELATES AND CONFORMS TO HOMELAND SECURITY STANDARDS AND PROMOTES WATER CONSERVATION WHILE MEETING THE PURPOSES DESCRIBED IN THE LAND DEVELOPMENT CODE.
- ** CONTRACTOR TO REFER TO ANY TOWN OF MONUMENT LANDSCAPE SPECIFICATIONS FOR SPECIFIC SOIL AMENDMENT AND PREPARATION FOR SOD, SEED AND PLANTING AREAS.

5540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 (719) 227-0072

DETAILS

Design: MLD
Drawn: GGM
Check: MLD

DIAMETER: 2.5" CAL. = 4'-4"

3" DEPTH APPROVED

BACKFILL MIXTURE: 50%

TOPSOIL, 25% COMPOST,

25% NATIVE TOPSOIL

BARK MULCH

ROOTBALL SIZES: 2.5" CAL. = 2'-4"

TREE PIT DIAMETER: 2.5" CAL. = 8'-4"



(1) PVC MAIN LINE

② CONNECTION TO COPPER STUB-OUT

CONSTRUCT TREE RING WITH RAINBIRD

3 BUILDING WALL

(4) GALVANIZED UNION

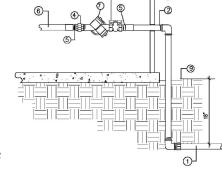
⑤ GALVANIZED NIPPLE -3' LENGTH

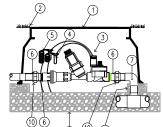
6 MAIN LINE FROM WATER METER

REDUCED PRESSURE BACKFLOW PREVENTER OR APPROVED EQUAL

(8) SHUT-OFF VALVE

(9) FINISHED GRADE





1 JUMBO VALVE BOX

(2) FINISHED GRADE

C6 / FILTER ASSEMBLY

AUTOMATIC DRIP VALVE & FITTINGS

9 3/4" MINUS WASHED GRAVEL

LANDSCAPING NOTES:

1. PLANT QUANTITY AND SUBSTITUTION: IN CASE OF DISCREPANCY IN PLANT QUANTITIES SHOWN ON THE PLANT TABLE AND THOSE SHOWN ON THE PLANTING PLAN SHALL GOVERN. THE MINIMUM ACCEPTABLE SIZES OF PLANTS MEASURED BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION SHALL CONFORM TO THE PLANTING SIZES AS SPECIFIED IN THE SCHEDULE. ANY SUBSTITUTION OF PLANT SIZE OR SPECIES MUST BE SUBMITTED TO THE ENGINEER IN WRITING FOR APPROVAL PRIOR TO INSTALLATION.

SPECIES MUST BE SUBMITTED TO THE RESIDENCE IN WRITING FOR APPROVAL PRIOR TO INSTALLATION.

ACCEPTABLE PLANT MATERIAL: ALL PLANTS SHALL MEET OR EXCEED STANDARDS SET BY THE "COLORADO NURSERY ASSOCIATION," AND THE "AMERICAN STANDARD OF NURSERY STOCK." ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES, HEALTHY, FREE OF DISEASE, INSECT PESTS, MECHANICAL INJURIES, AND HAVE ADEQUATE ROOT SYSTEMS. ALL PLANTINGS SHALL BE INSTALLED PER PLANTING DETAILS. ALL PLANT MATERIAL SHALL BE INSPECTED BY THE ENGINEER OR OWNER PRIOR TO INSTALLATION.STAKING/CONTRACTOR INSPECTION NOTE: ALL PLANTING LOCATIONS TO BE STAKED AND INSPECTED BY CONTRACTOR PRIOR TO INSTALLATION. ALL PLANTS TO BE INSPECTED AT NURSERY LOCATION PRIOR TO TRANSPORTING TO THE SITE

SITE DISTURBANCE: ALL AREAS OF SITE DISTURBANCE DUE TO CONSTRUCTION SHALL BE RENOVATED OR PLANTED PER THIS PLAN UNLESS OTHERWISE NOTED.

NUIED.

NUIED.

NUIED.

ONTRACTOR SHALL AMENDED PLANTING AREAS AS FOLLOWS:

-ADD MINIMUM OF 3 CUBIC YARDS OF WELL-COMPOSTED AGED MANURE OR PREMIUM COMPOST PER 1000 S.F.

-ALL AMENDED AREAS SHALL BE TILLED TO A DEPTH OF 6" PRIOR TO PLANTING.

-3 CUBIC YARDS PER 1000 S.F. OF WELL-COMPOSTED AGED MANURE OR PREMIUM COMPOST.

-ALL AMENDED AREAS SHALL BE TILLED TO A DEPTH OF 6" PRIOR TO PLANTING.

SEEDED TURF: ALL SEEDED OR HYDROMULCHED AREAS SHALL DEMONSTRATE 95% GERMINATION PRIOR TO FINAL ACCEPTANCE.

IRRIGATION: OWNER TO HAND WATER FOR ONE TO TWO GROWING SEASONS UNTIL ESTABLISHED AND ON AN AS-NEEDED BASIS THEREAFTER. DISTURBED AREA SEED/GRASS MIXTURE MUST BE IRRIGATED BY OWNER UNTIL ESTABLISHED AND IN TIMES OF DROUGHT. THE ON-GOING MAINTENANCE OF THE NATIVE GRASS IS THE RESPONSIBILITY OF OWNER.

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7. INORGANIC MULCH AND FABRIC; ALL PLANTINGS TO RECEIVE 3—INCH DEPTH OF INORGANIC MULCH. MULCH RINGS TO BE 15—INCH DIA. FOR (5) GALLON SHRUBS/GRASSES (SEE DRAWING DETAILS). HIGH QUALITY COMMERCIAL—GRADE (SPUN—BONDED POLYPROPYLENE OR EQUAL) LANDSCAPING FABRIC SHALL BE APPLIED UNDER ALL ROCK BASES.

8. STEEL EDGE: ALL EDGER SHALL BE ACME 4" PERFORATED STEEL EDGER "SELF COLORING" 14 GAUGE OR APPROVED EQUAL.

9. APPROVAL: ANY FIELD CHANGES OR DEVIATIONS TO THESE PLANS WITHOUT PRIOR APPROVAL OF AN AMENDED DEVELOPMENT PLAN MAY RESULT IN A DELAY OF FINAL APPROVAL AND THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

10. FINAL TREE AND SHRUB LOCATIONS: ALL TREE LOCATIONS SHALL BE STAKED FOR APPROVAL BY OWNER REPRESENTATIVE/ENGINEER PRIOR TO PLANTING.

SHRUBS SHALL BE PLACED IN THEIR LOCATIONS PER THIS PLAN AND APPROVAL BY OWNER REPRESENTATIVE/ENGINEER. THE FINAL LOCATION OF TREES TO BE PLANTED MAY REQUIRE ADJUSTMENT BASED ON APPROVAL OF THE FINAL UTILITIES PLANS AND ASSOCIATED FINAL PLAT AND EASEMENTS.

11. COMPLIANCE WITH PLANS: THE COMPLETED LANDSCAPING SHALL COMPLY WITH THE APPROVED LANDSCAPE PLAN AND SHALL INCLUDE THE QUANTITIES, LOCATIONS, SPECIES AND SIZES OF PLANTS AND OTHER LANDSCAPE MATERIALS AS REPRESENTED ON THE APPROVED LANDSCAPE PLAN SEEDED LANDSCAPE AREAS SHALL HAVE NO BARE AREAS LARGER THAN 6 SQUARE INCHES AFTER GERMINATION.

12. MAINTENANCE:
A. THE OWNER IS RESPONSIBLE FOR ALL REGULAR AND NORMAL MAINTENANCE OF REQUIRED LANDSCAPING INCLUDING WEEDING, IRRIGATION,

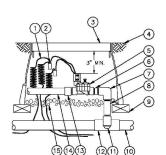
FERTILIZING, PRUNING AND MOWING.

REPLACEMENT OF DEAD, DISEASED OR SUBSTANTIALLY DAMAGED PLANT MATERIALS SHALL OCCUR WITHIN 6 MONTHS FROM WHEN THE PLANT

MATERIAL DIED, OR WHEN THE INSPECTION DETERMINED THE PLANT MATERIAL WAS DEAD OR DAMAGED. REPLACEMENT SHALL BE OF THE SAME OR

SIMILAR TYPE AS ORIGINALLY APPROVED. AN ALITEMATIVE TYPE OF SPECIES SHALL REQUIRE APPROVAL BY THE PCD DIRECTOR.

MAINTENANCE INSPECTIONS MAY BE PERFORMED PERIODICALLY. FAILURE TO MAINTAIN THE LANDSCAPING IN COMPLIANCE WITH THE APPROVAL IS



① 30" LINEAR LENGTH OF WIRE, COILED

(2) WATERPROOF CONNECTION

3 VALVE BOX WITH COVER

AUTOMATIC VALVE ASSEMBLY C6 SCALE: N.T.S.



4 FINISHED GRADE/TOP OF (1) PVC SCH 40 TEE OR EL 12) PVS CH 40 MALE

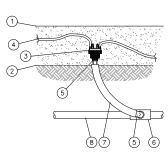
(13) PVC LATERAL PIPE

3" MINIMUM DEPTH OF

3/4" WASHED GRAVEL

- 5 REMOTE CONTROL VALVE: RAIN BIRD 100-DV
- 6 PVC SCH 80 NIPPLE (CLOSE)
- 7 PVC SCH 40 ELL
- (8) PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 9 BRICK (1 OF 4)
- (10) PVC MAIN LINE PIPE SCHE 80 NIPPLE (2' LENGTH, HIDDEN) AND SCH 40 ELL

 - (1) TOP OF MULCH
 - (5) 1/2" SPIRAL BARB TO MALE FITTING (2) FINISHED GRADE 6 PVC SCH 40 TEE OR ELL
 - MULTI-OUTLET XER-BUG RAIN BIRD (7) SWING PIPE, LENGTH AS XBT-10-6 CLIP OUTLETS AS NEEDED
 - REQUIRED 8 CLASS 200 PVC LATERAL
 - 4 DISTRIBUTION TUBING TO PLANT



DRIP EMITTER C6 SCALE: N.T.S.

1 HYBRID CONTROLLER: RAIN BIRD ESPLXI PLUS SERIES INDOOR WALL MOUNT 1.5" PVC SCH 40 CONDUIT AND FITTINGS (3) WIRES TO REMOTE CONTROL VALVES 2 4 117 VAC, 60 HZ EXTERNAL PLUG-IN TRANSFORMER

CONTROLLER SHALL BE MOUNTED SECURELY TO WALL USING APPROPRIATE FASTENERS FOR WALL TYPE. ALL EXPOSED CONDUIT SHALL BE E.M.T. OR EQUAL AND APPROVED BY LOCAL CODES. ALL CONDUIT CONNECTIONS SHALL BE MADE USING WATERTIGHT CONNECTORS

H WALL MOUNT AUTOMATIC CONTROLLER C6 SCALE: N.T.S.

PCD File No. PPR-XX-XXX

70% DESIGN

ITE 1 80919

S

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STATION

BOOSTER

SYSTEM

DELIVERY

LANDSCAPE

DISTRIC

OLITAN

METROP

TRIVIEW

ate: 09/12/22 esign: MLD

awn: GGM eck: MID

C9

CUT AND REMOVE BURLAP AND 3 STAKES PER TREE PLACED 120° AROUND WIRE FROM TOP 1/3 OF ROOTBALL: DO NOT CUT TREE ON TREES OVER 6 FEET. PER TREE ON TREES UNDER 6 FEET. CENTRAL LEADER OF TREE (STAKES: METAL OR WOOD, 3' DIAMETER) PRUNE DAMAGED OR DEAD 12 GAUGE DOUBLE STRAND GALV. WIRE WITH BRANCHES IMMEDIATELY PRIOR TO PLANTING. REMOVE ANY NYLON STRAP DOUBLE LEADER -PROVIDE MULCH RING EQUAL IN DIAMETER TO TREE PIT DIAMETER TREE CANOPY BASE AROUND ALL DECIDUOUS TREES IN TREE WRAP SODDED AREAS PLANT ROOTBALL 2" HIGHER THAN SURROUNDING GRADE -PROPOSED GRADE 3" DEPTH APPROVED PLANTING RIM-BARK MULCH BACKFILL MIXTURE: 50% TOPSOIL, 25% COMPOST. UNDISTURBED SOIL 25% NATIVE TOPSOIL TREE PLACEMENT ON SLOPES <u>C6</u> SCALE: N.T.S.

HIGHER THAN

SURROUNDING GRADE

PLANTING RIM-

3' MIN. -

C6 SCALE: N.T.S.

TREE PLANTING DETAIL

UNDISTURBED SOIL

R.P. BACKFLOW PREVENTER C6 SCALE: N.T.S.

3 DRIP ZONE KIT MODEL PCZ-101-XX FILTER (TIP 45 DEGREES) REGULATOR 25 OR 40 PSI 4 WATERPROOF CONNECTORS (2) 5 18-24" COILED WIRE

SWING PIPE WITH

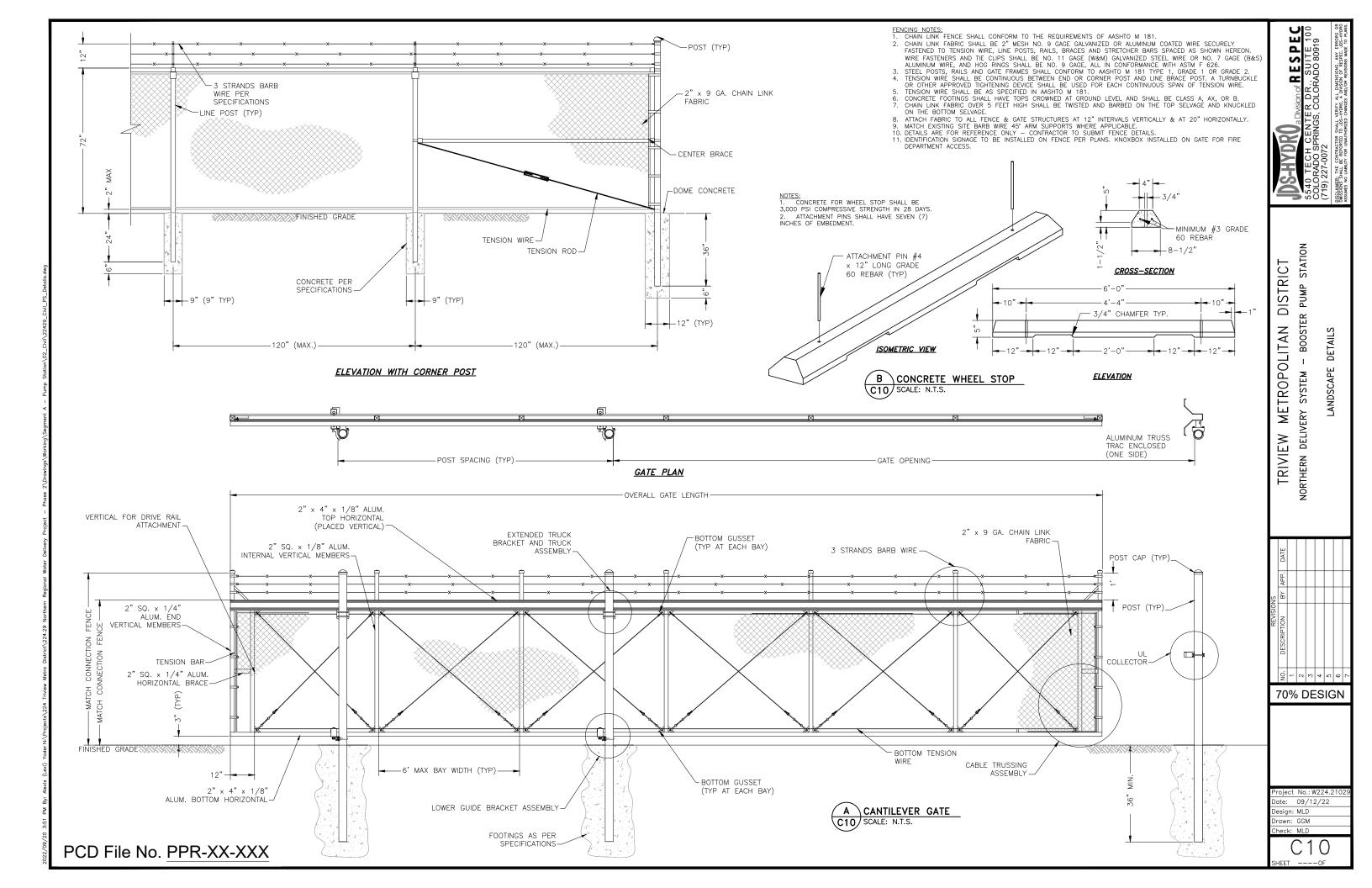
FITTINGS

APPROPRIATE BARB

6 SCH 80 T.O.E. NIPPLE 7 MAIN LINE PIPE &

(8) BRICK SUPPORTS (4)

(10) PVC SLIP UNIONS



- NEW BASE COURSE BACKFILL (REFER TO SUBSECTIONS 3-12.8, 3-13.8 & 3-16)

PIPE ZONE MATERIAL (REFER TO SUBSECTIONS 3-12.C, 3-13.A & 3-17)

TYPICAL TRENCH SECTION

NOTES:

1. PAVING SUPPACE SHALL COMPLY WITH PAVEMENT SECTION D.
2. TRENCH WALLS TO BE SUPPORTED AS REQUIRED BY OGHA-SUBPART P.
3. MINIMUM COVER TO BE BELOW OFFICAL STREET GRADE (SEE DETAIL 1).

PIPE	MIN	MAX
4	1'-4"	2'-4"
8*	1,-0,	2'-6"
9.	1'-8'	2'-B'
12*	5,=0,	3'-0"
16"	5,-4,	3'-4"
20"	50.	2,-8,
24"	€'-0°	0'-0"

2005 MODIFIED DRAWING FROM DENVER WATER

[SHEET 10]



TRIVIEW METROPOLITAN DISTRICT

174 N. Washington Street Suite C P.O. Box 849 Monument, CO 89132-0849 (719) 488-6868 Fax: (719) 488-6565

TYPICAL TRENCH SECTION PIPE PROTECTION

DETAIL 2

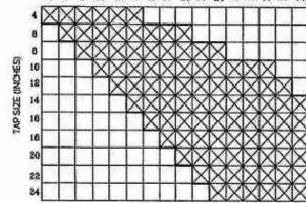
CONCRETE THRUST BLOCKS

WATER MAIN AND TAP SIZE COMBINATIONS WHICH REQUIRE A CONCRETE THRUST REACTION BLOCK BEHIND THE MAIN AT THE TAPPING SLEEVE OR SADDLE.

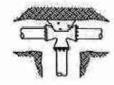
ALL WATER MAINS

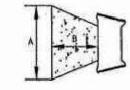
INDICATES CONCRETE THRUST BLOCK REQUIRED MAIN SIZE (INCHES)

4 6 8 10 12 14 16 18 20 22 24 26 28 30 36 42

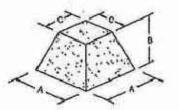


ANY THRUST REACTION BLOCK REQUIREMENTS FOR WATER MAIN AND TAP SIZE COMBINATIONS OTHER THAN THOSE SHOWN ABOVE WILL REQUIRE SPECIAL DESIGN APPROVAL BY TRIVIEW METROPOLITAN DISTRICT.





TEE OR TAP



NOTE: USE THE FOLLOWING VALUES FOR "C"

PIPE SIZE =	C=
12" & UNDER	1'-6
16" TO 24"	2.0
30" TO 36"	3'-6

2003 MODIFIED DRAWING FROM COLORADO

SPRINGS UTILITIES [DETAIL A 3-2]

OVER 36" A, B, & C WILL BE GIVEN IN EACH INSTANCE

(nyds)	٨	C-1-6	G-7-9	C-3-0
1/4	2'-5"	157	N/A.	N/A
1/2	3-7	2:5	7.0	MA
3/4	40	2'6'	10	10%
1	4.4	3.0	2-7	1:0
1.1M	4:17	5.1	2.0	7.2
1-1/2	5'-3"	3-3"	2-11"	7.4
1-3/4	W-7	2:5	3/4	1.5
2	\$7-10	3.7	3.7	2.6
2-1/4	6:3	3'-8"	3:4"	2.9
2-1/2	6.4"	3.11*	3.7	3.0
2-3/4	8.9	3'-11"	3-7	3.0
1	6:10	4.5	3.9	3.2
3-1/4	1.3	4.5	3.9	3,5.
3-172	7:4"	4'-3"	3-11	3'-4"
3-3/4	757	44	1.0	5.5
4	2511		4-0"	3:5
4-174	81.15		4.5	3-0
4-1/2	8.4		4:0"	3.4
4:3/4	8.6		4:1"	3.7
5	8/8"		41.2"	3'-8'
5-1/4	2/11.		41.2"	5'-8"
5-1/2	9.1		4.3*	3.9
5-3/4	9.3		4541	3/-10
6	9.4		4'5"	5-11
6-1/4	9.6		4'.6"	5-0"
6-1/2	9.5		4'.6"	4.0
6-3/4	B-11.		418*	4100
1	10.2		4/6"	650°
7-164	10/3*		457*	455
1.1/2	104"		418*	4.2
7-3/4	10:61		410*	41:31
8	10-6"		4410*	4.4"
8-1/4	10-8"		4'-10'	4.4"
0-1/2	10.91		4.11	4.5
8-3/4	107-11		4/11"	4.5
9	24.4.		4-11	4'+5"
9-1/4	11/2"		5.0"	4.6
9-1/7	115-15		5-0"	4/6
9-3/4	11/6"		5:-0"	456
10	11.6		6'-0"	4.6

ALL WATER MAINS WILL HAVE VOLUMES SHOWN ON PLAN AND PROFILE DRAWINGS,

SEE VOLUMES ABOVE FOR A, B, & C DIM.

FITTINGS	4"	0.	8"
168	1/4 yd.	1/2 yd	3/4 yd
80.8EMD	1/4 pd.	3/4 yd	1-164 yd
46'BEND	1/4 yd	172 yd	3/4 yd.
22-117 BEND	1/4 yd.	1/4 yet	1/4 yd
11-1M BEND	1/4 yd.	1/4 yd	1/4 yd



TRIVIEW METROPOLITAN DISTRICT 174 N. Washington Street Suite C P.O. Box 849 Manument, CO 89132-6849 (719) 488-6868 Fazz (719) 488-6565

THRUST BLOCKS DATA

DETAIL 13

DE., SUITE 10 LORADO 80919

DISTRIC BOOSTER TRIVIEW METROPOLITAN DELIVERY

DETAILS

	BY APP. DATE							
SEVICIONS	DESCRIPTION BY							
	ON	-	2	3	4	2	9	

70% DESIGN

ate: 09/12/22

esign: MLD rawn: AMY eck: MID

DETAILS

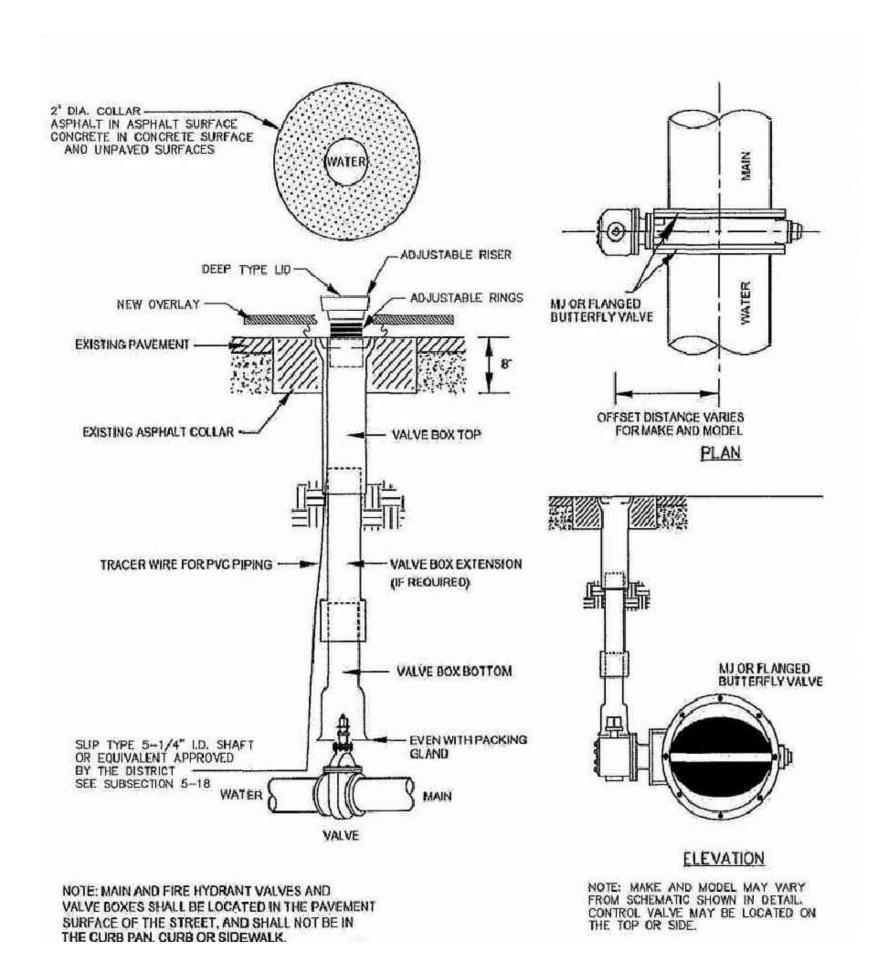
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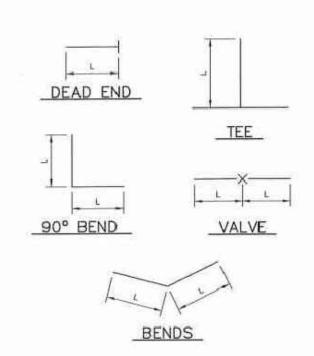
Project No.: W224.2102 Date: 09/12/22

Design: MLD
Drawn: AMY

heck: MLD

CTZ SHEET ----OF





LENGTH OF RESTRAINED PIPE

NOMINAL PIPE	FITTING							
ø ø	90° BEND, TEE, DEAD END	VALVE	45° BEND	22 1/2° BEND	11 1/4° BEND			
4"	30'	30*	9'	2	1*			
6"	46'	40"	13"	3'	1"			
8*	61,	51'	10"	5*	1,111			
12*	90'	90"	26'	Ť	2'			
16"	116"	116'	24,	6,	Z*			
20"	141"	141	411	31*	3'			

NOTES:

- 1. LENGTH OF RESTRAINED PIPE IS MEASURED DISTANCE EACH WAY FROM VALVES AND BENDS.
- 2. MINIMUM 4-FEET 6-INCH BURY DEPTH REQUIRED.
- 3. BASED ON 150 POUNDS PER SQUARE INCH WORKING PRESSURE.
- 4. CROSSES SHALL BE RESTRAINED IN ALL DIRECTIONS.
- WHEN REDUCERS ARE USED ON A VALVE INSTALLATION THE LENGTH OF RESTRAINT SHALL BE BASED ON THE SIZE OF THE PIPE NOT THE SIZE OF THE VALVE.



TRIVIEW METROPOLITAN DISTRICT

LENGTH OF RESTRAINED PIPE

Scale: NONE Date: May 2018

SHEET 21

5540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 (719) 227-0072

TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION

DETAILS

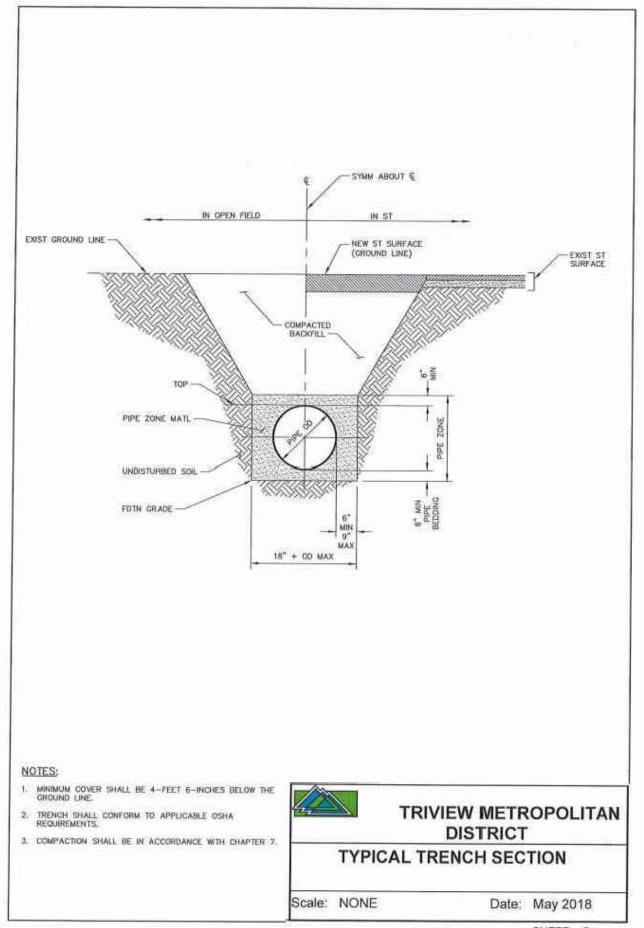


70% DESIGN

Project No.: W224.21029 Date: 09/12/22

Design: MLD Drawn: AMY

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S540 TECH CENTER DR., SUITE 100 COLORADO SPRINGS, COLORADO 80919 (719) 227-0072

TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STAT

DETAILS

CIVIL



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Project No.: W224.2102 Date: 09/12/22

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neck: MLD

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2. DESIGN OF FOOTINGS AND WALLS IS BASED ON THE FOLLOWING CRITERIA:

MAXIMUM ALLOWABLE SOIL BEARING PRESSURE FOR DENSE UNDISTURBED NATIVE TOTAL SOIL UNIT WEIGHT. 100.7 p.c.f

LATERAL EARTH PARAMETER SUMMARY	GRANULAR FILL ABOVE GW/BELOW GW	ON-SITE SOILS ABOVE GW/BELOW GW
AT REST	59/92 p.c.f.	63/94 p.c.f.
ACTIVE	38/82 p.c.f.	42/83 p.c.f.
PASSIVE	407/204 p.c.f.	375/188 p.c.f.
COFFEIGIENT OF SLIDING FRICTION	0.62	0.58

3. SOIL BENEATH FOOTINGS, WALLS AND SLABS ON GRADE SHALL BE FREE OF FROST, WATER AND FOREIGN DEBRIS, AND APPROVED STRUCTURAL FILL COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS WITH A MINIMUM DENSITY AS FOLLOWS (U.N.O.):

FOOTINGS, WALLS 92% OF STANDARD PROCTOR, ASTM D-1557. SLABS 95% OF STANDARD PROCTOR, ASTM D-1557.

- 4. ALL SOIL AND FOUNDATION MATERIAL SHALL BE THOROUGHLY MOISTENED BEFORE CONCRETE IS PLACED PER THE GEOTECHNICAL REPORT.
- 5. SUBGRADE PREP BELOW FOOTERS CONTRACTOR SHALL REMOVE AND REPLACE 1 FEET OF SUBGRADE BELOW <u>FOOTERS</u> PER SECTION 4.2.2. OF THE GEOTECHNICAL EVALUATION REPORT BY VIVID ENGINEERING GROUP. SUBGRADE SHALL BE PREPPED AND PLACED AS DESCRIBED IN TABLE TO THE CONTRACTOR OF THE PROPERTY OF T 3 OF THE GEOTECHNICAL REPORT.
- 6. SUBGRADE PREP BELOW SLAB-ON-GRADE: SUBGRADE BELOW SLAB-ON-GRADE SHALL BE PREPARED ACCORDING TO SECTION 4.4.1 OF THE GEOTECHNICAL REPORT.
- A REPRESENTATIVE OF VIVID ENGINEERING GROUP SHALL INSPECT THE OPEN EXCAVATION TO DETERMINE THAT THE SOIL TYPE AND CONDITIONS ARE CONSISTENT WITH DESIGN CRITERIA, IF THE SOIL PROPERTIES ARE FOUND TO BE DIFFERENT FROM THIS CRITERIA, THEN THE ENGINEER SHALL BE PROMPTLY NOTIFIED SO THAT THE FOUNDATION DESIGN MAY BE REVIEWED.
- 8. DESIGN LIVE LOADS ARE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2019 EDITION, AND PIKES PEAK REGIONAL BUILDING CODE, 2017 EDITION, WITH THE FOLLOWING

GROUND SNOW LOAD Pg
(EXPOSURE Ce=1, LOAD IMPORTANCE FACTOR, Ls=1, THERMAL Ct=1)
WIND, qs FOR 130 MPH (MIN. VULT) WIND SPEED 40
(EXPOSURE 'C', LOAD IMPORTANCE FACTOR Lw=1.15, THERMAL Ct=1))
BC SOIL PROFILE
SEISMICZONE C
SEISMIC IMPORTANCE FACOTR Le = 1.25
SEISMIC DESIGN BASE SHEAR V = 3.0 KIPS
SEISMIC SPECTRAL RESP. COEFF
SEE PLAN SHEETS FOR ADDITIONAL LOADING INFORMATION

- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION OF MECHANICAL OPENINGS, FLOOR DRAINS, INSERTS, DEPRESSIONS, BURIED CABLES AND UTILITIES, ETC. WITH ARCHITECTURAL, CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS.
- 10. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER

- MISCELLANEOUS:
 1. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF ALL MATERIALS TO BE USED FOR CONSTRUCTION INCLUDING BUT NOT LIMITED TO MEMBER DESIGN, BOLT DESIGN, WELDING MATERIAL, SHEETING, INSULATION, SHEETING PURLIN DESIGN, DOORS, AND FLASHING.
- 2. CONTRACTOR TO VERIFY WITH OWNER AND ENGINEER THE MATERIALS TO BE USED FOR CONSTRUCTION PRIOR TO BID.
- 3. CONTRACTOR TO COORDINATE WITH ENGINEER REGARDING BID SCHEDULE QUESTIONS.
- 4. INSTALL ALL MATERIALS AND EQUIPMENT ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
- 5. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, SHORING, DEWATERING, GUYS OR TIE-DOWNS MAY BE NECESSARY.
- 6. ALL TEMPORARY SHORING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR

CONCRETE:

- ALL CONCRETE DESIGN, MATERIALS AND CONSTRUCTION SHALL CONFORM TO ACI STANDARD 318-95, THE INTERNATIONAL BUILDING CODE, 2015 EDITION, THE PIKES PEAK BUILDING CODE 2017, THE CRSI MANUAL OF STANDARD PRACTICE AND THE PROJECT SPECIFICATIONS.
- 2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: FOOTING, WALLS.......4000 p.s.i. CEMENT TYPE II SLABS ON GRADE. STRUCTURAL SLABS..
- 3. GROUT UNDER BASE PLATES AND BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT WITH A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 7500 p.s.i.
- ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60, AND FREE FROM LOOSE RUST AND SCALE. ALL REINFORCING STEEL TO BE WELDED SHALL BE ASTM A706, GRADE 60. WELDED WIRE FABRIC SHALL BE SMOOTH STEEL WIRE FABRIC CONFORMING TO ASTM
- REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE ACI DETAILING MANUAL, LATEST EDITION. FORMWORK SHALL BE DESIGNED, ERECTED AND REMOVED IN ACCORDANCE WITH THE
- REINFORCEMENT SHALL BE PLACED SO THAT THE FOLLOWING MINIMUM CONCRETE PROTECTION IS

SEE TABLE 1 FOR TYPICAL REINFORCING BAR CLEARANCE

CONCRETE: CONT'D:

- REINFORCEMENT SHALL BE SECURELY TIED AND SHALL BE SUPPORTED WITH METAL CHAIRS OR HUNG FROM FORMS. NON-METALLIC BOLSTERS ARE TO BE USED TO CLEARANCE REBAR WHEN IN CONTACT WITH EARTHEN SURFACES.
- 8. CONTINUOUS HORIZONTAL BARS AND CORNER BARS IN FOOTINGS, STEM WALLS AND SLABS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS AT SPLICES. SPLICE LOCATIONS SHALL BE STAGGERED
- 9. VERTICAL DOWEL BARS IN WALLS AND COLUMNS SHALL BE LAPPED A MINIMUM OF 46 BAR DIAMETERS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 10. TWO (2) ADDITIONAL #5 BARS (ONE EACH FACE) WITH A 2'-0" PROJECTION SHALL BE PLACED DIAGONALLY ACROSS THE CORNERS OF ALL OPENINGS AND VERTICAL STEPS IN WALLS.
- 11. STEM WALLS BELOW GRADE SHALL HAVE BACKFILL PLACED EQUALLY ON BOTH SIDES UNTIL THE REQUIRED LEVELS ARE REACHED. STEM WALLS MUST REACH A MINIMUM OF 80% OF DESIGN STRENGTH PRIOR TO ANY BACKFILLING ACTIVITIES ARE PERFORMED.
- 12. ALL EXPOSED INTERIOR CONCRETE CORNERS (INCLUDING FOUNDATION WALLS AND PILASTERS ARE TO
- 13. DAMP PROOF ALL EXPOSED EXTERIOR SURFACES, BELOW GRADE. SEE SPECIFICATIONS FOR DAMP PROOFING METHODS.
- 14. CONTROL JOINTS SHALL BE EVERY 10-15 FEET EACH WAY IN CONCRETE SLAB FLOORS.
- 15. ALL EXPOSED CONCRETE FLOOR SURFACES SHALL BE COATED WITH CLEAR WATERPROOFING PER
- 16. SLOPE BACKFILL AWAY FROM THE STRUCTURE A MINIMUM OF 10% FOR THE FIRST 10 FEET (2% AT PAVED AREAS) UNLESS A MORE STRINGENT REQUIREMENT IS SPECIFIED BY THE GEOTECHNICAL
- 17. UNLESS A SPECIFIC TOP OF WALL CONNECTION IS SHOWN, FOUNDATION WALL STABILITY IS DEPENDENT ON FLOOR FRAMING FOR LATERAL SUPPORT. WALLS HAVING BACKFILL ON BOTH THE INTERIOR AND EXTERIOR FACES SHOULD HAVE BACKFILL ON EITHER SIDE BROUGHT UP APPROXIMATELY TOGETHER. OTHERWISE, WHERE POSSIBLE, NO EXTERIOR BACKFILL SHOULD BE PLACED UNTIL THE FLOOR SLAB IS IN PLACE OR THE FOUNDATION WALL IS OTHERWISE PROPERLY BRACED. TOP OF WALLS MUST ALSO BE BRACED IF BACKFILL IS PLACED WITHIN 14 DAYS OF CONCRETE POUR.
- 18. BACKFILL AGAINST FOUNDATION WALLS SHALL NOT BE PLACED UNTIL SLAB CONSTRUCTION HAS BEEN COMPLETED TO BRACE THE WALL. AT THE CONTRACTOR'S OPTION, WALLS MAY BE TEMPORARILY BRACED AND BACKFILL INSTALLED. ANY SUCH BRACING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL THE SLAB IS COMPLETED AND CONTINUOUSLY CONNECTED TO THE WALLS.
- 19. BACK FILL AGAINST WALLS SHALL NOT BE PLACED UNTIL THE COMPRESSIVE STRENGTH OF THE SPECIFIED CONCRETE HAS BEEN REACHED.
- 20. PROVIDE CONTROL/CONSTRUCTION JOINTS AS SHOWN ON THE STRUCTURAL DRAWINGS. ALL BEAMS AND SLABS SHALL BE CAST MONOLITHICALLY, EXCEPT FOR REQUIRED CONTROL/CONSTRUCTION JOINTS SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL SUBMIT ALTERNATE AND ADDITIONAL CONSTRUCTION JOINT LOCATIONS AND DETAILS TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO CONSTRUCTION, AT LEAST 48 HOURS SHALL ELAPSE BETWEEN CASTING OF ADJOINING UNITS. REINFORCEMENT SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS UNLESS DETAILED OTHERWISE ON THE DRAWINGS. CONTRACTOR SHALL SUBMIT ALL CONSTRUCTION JOINT
- 21. WHERE CONSTRUCTION JOINTS ARE REQUIRED BUT ARE NOT INDICATED ON THE DRAWINGS, THEY SHALL BE LOCATED AT THE MID-SPAN OF BEAMS, SLABS AND WALLS AND SHALL BE SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. UNLESS NOTED OTHERWISE OR SHOWN ON THE DRAWINGS, PROVIDE A CONTINUOUS SHEAR KEY IN SLABS AND WALLS, AND A MINIMUM OF TWO (2) CONTINUOUS HORIZONTAL KEYS IN BEAMS. THE MINIMUM KEY SIZE SHALL BE 1 1/2" DEEP x 1/3 THE DEPTH OR

TABLE NO. 1 TYPICAL REINFORCING BAR CLEARANCE TABLE

LOCATION	MIN.	CLEARANCE
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EA	\RTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER (#5 AND SMALL	ER)	2"
CONCRETE EXPOSED TO EARTH OR WEATHER (#6 AND LARGE	R)	2-1/2"
BEAMS (LONGITUDINAL REINFORCING PARALLEL TO JOIST OR :	SLAB)	3"
BEAMS (LONGITUDINAL REINFORCING PERPENDICULAR		
TO JOIST OR SLAB)		2-1/2"
BEAM STIRRUPS		2"
COLUMNS AND PIERS (VERTICAL REINFORCING)		2 1/2"
COLUMN AND PIER TIES		2"
WALLS (INTERIOR FACE)		2"
WALLS (EXTERIOR FACE, #5 AND SMALLER)		2"
WALLS (EXTERIOR FACE, #6 AND LARGER)		2"
SURFACES EXPOSED TO LIQUIDS		2"
FRAMED SLABS (INTERIOR, INCLUDING STAIRS)		2"
FRAMED SLABS (EXTERIOR, INCLUDING STAIRS)		2"
SLABS ON GRADE (BOTTOM REINFORCING)		2"
		THICKNESS
F	-ROM TOP	OF SLAB

STRUCTURAL STEEL:

- ALL STRUCTURAL STEEL DESIGN, MATERIALS, FABRICATION AND ERECTION SHALL CONFORM TO THE AISC SPECIFICATION, 9th EDITION, THE INTERNATIONAL BUILDING CODE, 2019 EDITION AND THE PROJECT SPECIFICATIONS WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1, LATEST EDITION.
- 2. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A572, GRADE 50. ALL STEEL PLATE, ANGLES AND BARS SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE NOTED. TUBE STEEL COLUMNS SHALL CONFORM TO ASTM A500, GRADE B. ANCHOR BOLTS SHALL CONFORM TO ASTM A307. HEADED ANCHOR STUDS SHALL CONFORM TO ASTM A108. PROVIDE A SHOP COAT OF RUST INHIBITING PAINT ON ALL STRUCTURAL STEEL.

3. STRUCTURAL STEEL: ASTM A992 (Fy=50 KSI)

- ROLLED STEEL SHAPES, WIDE FLANGE AND CHANNELS UNLESS NOTED ON THE

DRAWINGS. ASTM A36 (Fy=36 KSI)

ROLLED STEEL PLATES, ANGLES, BARS AND RODS

- SHOP CONNECTIONS SHALL BE WELDED WITH E70XX ELECTRODES AND GROUND SMOOTH WHERE EXPOSED FIELD CONNECTIONS SHALL BE MADE WITH BOLTS CONFORMING TO ASTM A325N UNLESS OTHERWISE NOTED. FIELD WELDS SHALL BE MADE WITH E70XX ELECTRODES. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS "STRUCTURAL WELDING CODE", LATEST EDITION AND PERFORMED BY CERTIFIED, LICENSED WELDERS. FOR WELDING SYMBOLS WITH NO LENGTH DIMENSION GIVEN, THE WELDING SHALL BE CONTINUOUS BETWEEN ABRUPT CHANGES IN DIRECTION. WELDS NOT OTHERWISE NOTED SHALL BE 1/4" IN SIZE.
- 5. ALL BEAMS BEARING ON CONCRETE MASONRY SHALL BEAR A MINIMUM OF 5" ON 3/4" NON-SHRINK GROUT WITH TWO (2) 5/8" DIAMETER x 1'-0" + 2 ANCHOR BOLTS, UNLESS NOTED OTHERWISE.ALL BEAM CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE STANDARD FRAMED BEAM CONNECTIONS AS SHOWN IN TABLE II AND III OF THE AISC "MANUAL OF STEEL CONSTRUCTION", LATEST EDITION, DESIGNED TO CARRY THE FULL CAPACITY OF THE UNIFORMLY LOADED MEMBER, UNLESS NOTED OTHERWISE.
- BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" AS APPROVED BY THE COUNCIL ON RIVETED AND BOLTED JOINTS. USE BEARING—TYPE BOLTS WITH THREADS ALLOWED IN THE SHEAR PLANE, ANCHOR BOLTS SHALL CONFORM TO ASTM F-1554 AS SPECIFIED ON THE DRAWINGS. ALL BOLTS SHALL BE TICHTENED TO A "SNUG-TIGHT" CONDITION, UNLESS NOTED OTHERWISE.

- 1. METAL BUILDING MANUFACTURER TO DESIGN BUILDING MAIN FRAME, CROSS-BRACING, DOOR OPENING JAMBS, DOOR OPENING HEADERS, ROOFING, AND SHEATHING ACCORDING TO THE LOADING CRITERIA PROVIDED IN THE NOTES ON THIS PAGE. MANUFACTURER TO SUBMIT SHOP DRAWINGS AND STRUCTURAL CALCULATIONS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION. SPECIFICATIONS SECTION 05 51 01 IN THE PROJECT MANUAL FOR FURTHER DESCRIPTIONS AND REQUIREMENTS.
- 2. FOUNDATION HAS BEEN DESIGNED ACCORDING TO THE TYPICAL 44'X34'X20 METAL BUILDING MAIN FRAME AND FRAMING STRUCTURAL REACTIONS. FOUNDATION DESIGN AND ANCHOR PLAN WILL BE MODIFIED DEPENDING UPON FINAL LOAD REACTIONS SUBMITTED BY BUILDING MANUFACTURER.

MISCELLANEOUS:

- 1. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF ALL MATERIALS TO BE USED FOR CONSTRUCTION INCLUDING BUT NOT LIMITED TO MEMBER DESIGN, BOLT DESIGN, WELDING MATERIAL, SHEETING, INSULATION, SHEETING PURLIN DESIGN, DOORS, AND FLASHING.
- 2. CONTRACTOR TO VERIFY WITH OWNER AND ENGINEER THE MATERIALS TO BE USED FOR CONSTRUCTION PRIOR TO BID.
- 3. CONTRACTOR TO COORDINATE WITH ENGINEER REGARDING BID SCHEDULE QUESTIONS.
- 4. INSTALL ALL MATERIALS AND EQUIPMENT ACCORDING TO MANUFACTURERS RECOMMENDATIONS.

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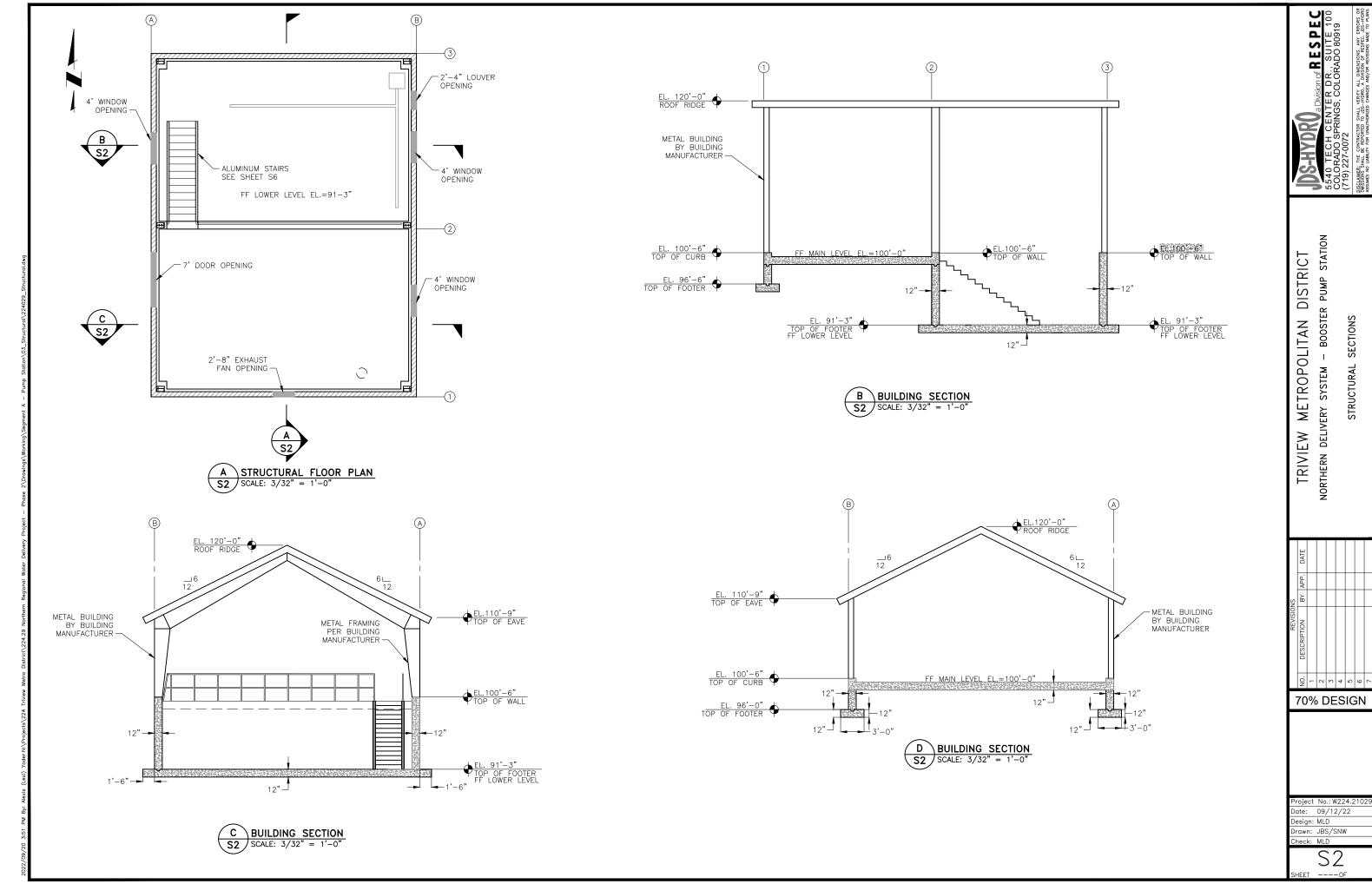
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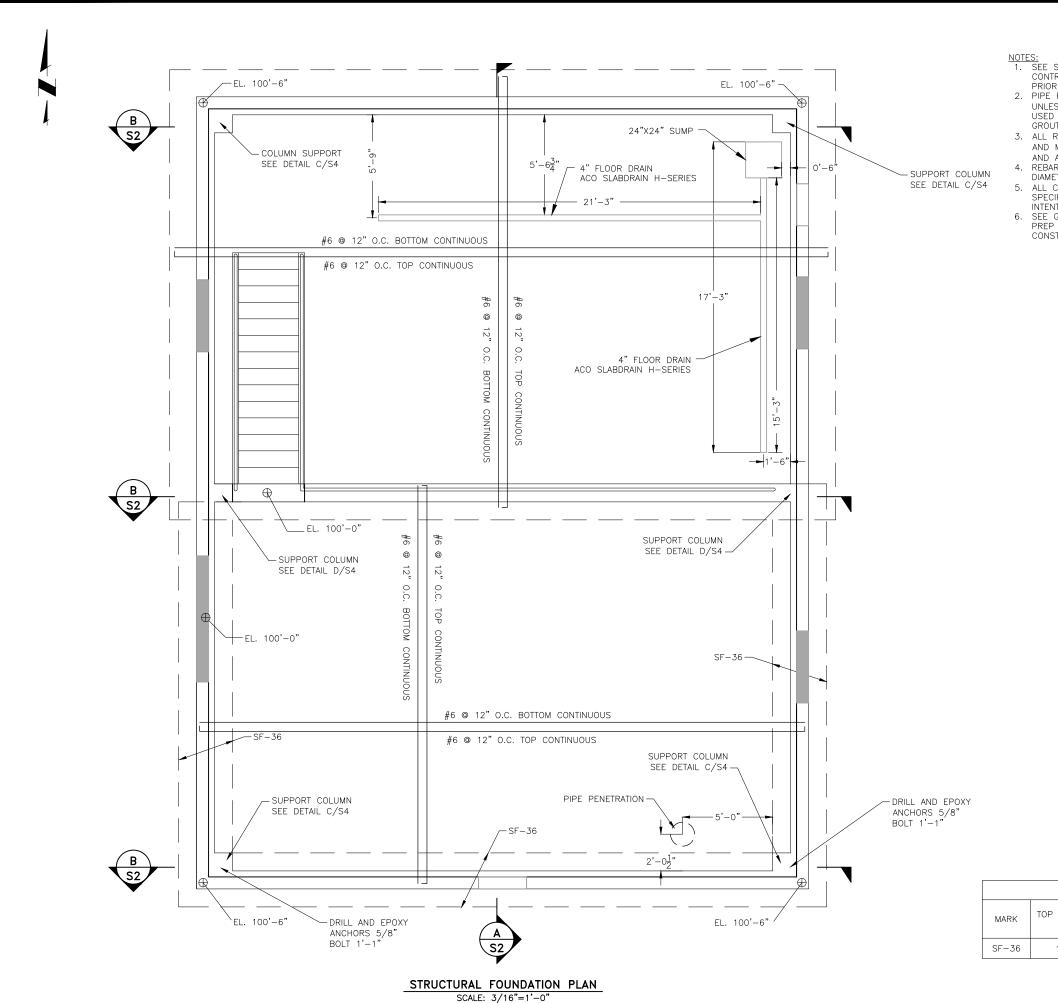
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- NOTES:

 1. SEE STRUCTURAL NOTES FOR PLACEMENT OF CONTROL JOINTS IN FLOOR TOPPING.
 CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF CRACK CONTROL JOINT LOCATIONS
 PRIOR TO IMPLEMENTATION.
- 2. PIPE PENETRATIONS: ALL PIPE PENETRATIONS IN TANK WALLS MAY BE CORED IN FIELD UNLESS OTHERWISE NOTED. FOR PIPE DIAMETERS > 2" O.D., LINK SEAL MUST BE USED TO PROVIDE A WATER TIGHT SEAL AROUND THE PIPE IN THE CORED HOLE, THEN GROUTED SMOOTH. VERIFY PENETRATION LOCATIONS WITH MECHANICAL SHEETS.
- 3. ALL REBAR SHALL HAVE A MINIMUM 1-1/2" CLEARANCE FOR #5 BARS AND SMALLER AND MINIMUM 2" CLEARANCE FOR #6 BARS AND LARGER ON ALL FORMED SURFACES AND A MINIMUM OF 3" OF CLEARANCE FROM ALL EARTHEN SURFACES.
- 4. REBAR SHALL HAVE A SPLICE LENGTH EQUAL TO OR GREATER THAN 36 TIMES THE DIAMETER OF THE BAR TO BE PLACED UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION JOINTS SHALL HAVE A 2"X4" SHEAR KEY UNLESS OTHERWISE SPECIFIED. A CONSTRUCTION JOINT IS AN INTERFACE BETWEEN CONCRETE PLACEMENTS INTENTIONALLY CREATED TO FACILITATE CONSTRUCTION.
- 6. SEE GENERAL NOTES AND GEOTECHNICAL EVALUATION FOR FOUNDATION AND SUBGRADE PREP REQUIREMENTS. IT IS ASSUMED THAT THE BOTTOM OF THE FOOTING WILL BE CONSTRUCTED ABOVE BEDROCK.

FOOTER SCHEDULE							
MARK TOP OF FOOTI	TOP OF FOOTING	SIZE		REINFORCING			
	EL.	WIDTH	DEPTH	TOP	воттом	TRANS.	
SF-36	100'-0"	3'-0"	12"	#6@12"	#6@12"	#6@12"	

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TRIVIEW METROPOLITAN DISTRICT ORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION

PLAN

FLOOR

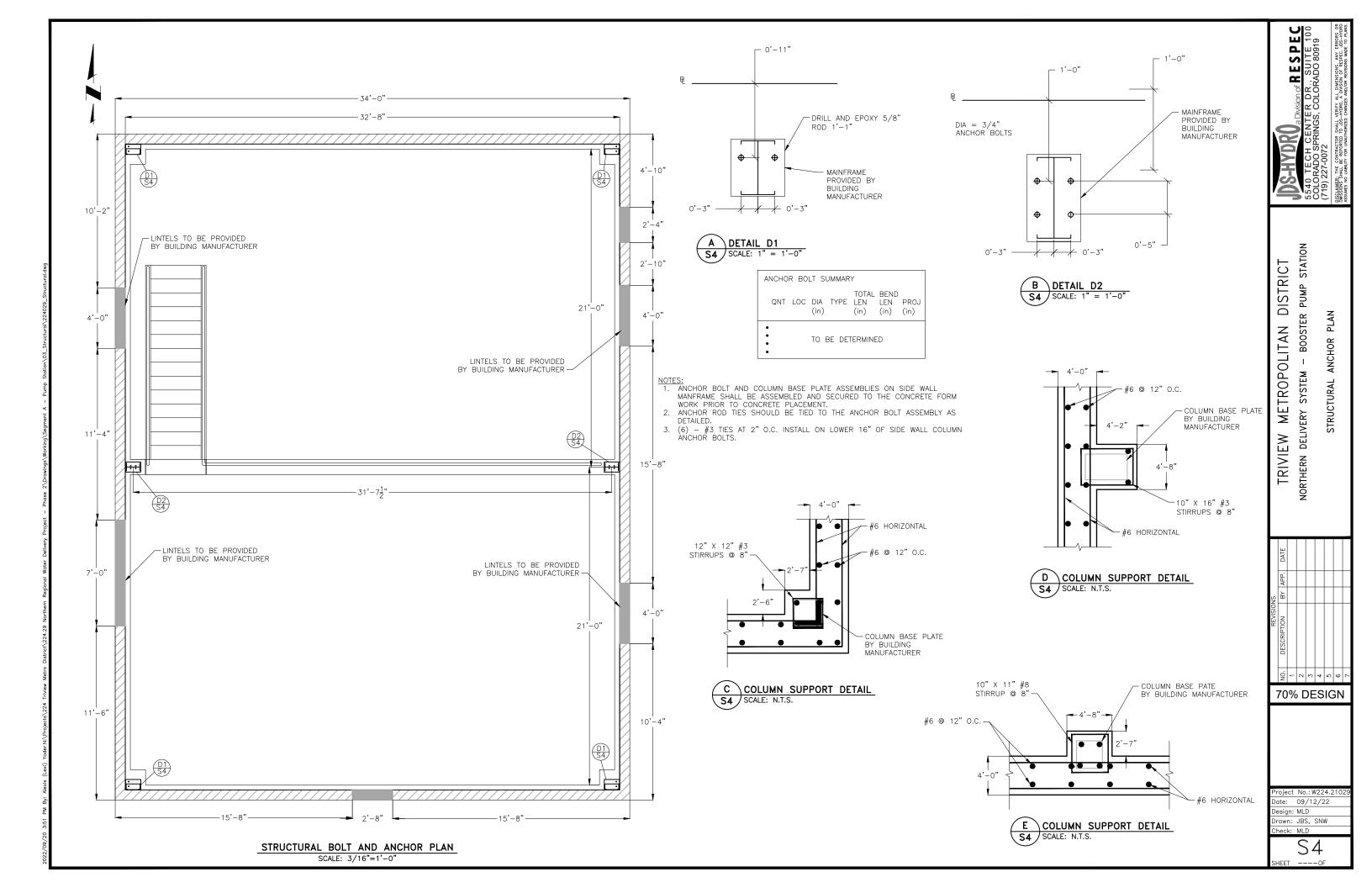
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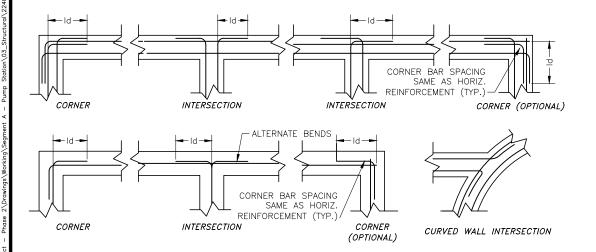
70% DESIGN

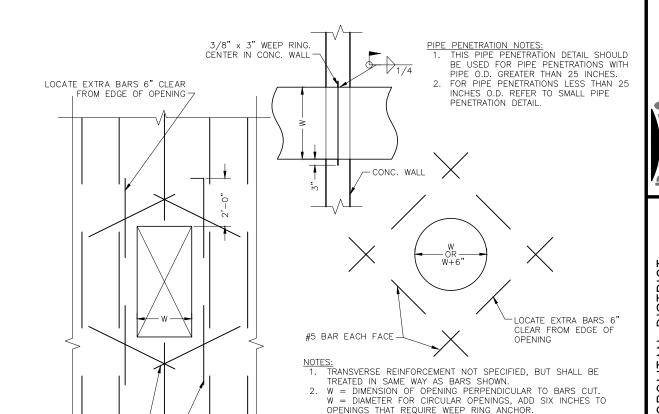
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- 1. HORIZONTAL BARS IN THIS COLUMN MUST HAVE A MINIMUM OF 12" OF CONCRETE THICKNESS BELOW THE BAR. HORIZONTAL BARS IN WALLS ARE ALSO SUBJECT TO THESE STANDARDS.
- VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE THICKNESS BELOW THE BAR CAN BE CONSIDERED AS "OTHER BARS".
- 3. STRAIGHT BARS SIZE 7 THROUGH 11 PLACED WITH NO LESS THAN 5 BAR DIAMETER CLEAR SPACING MAY HAVE A DEVELOPMENT LENGTH AND LAP SPLICE LENGTH OF 0.8 TIMES THE LENGTH SHOWN.

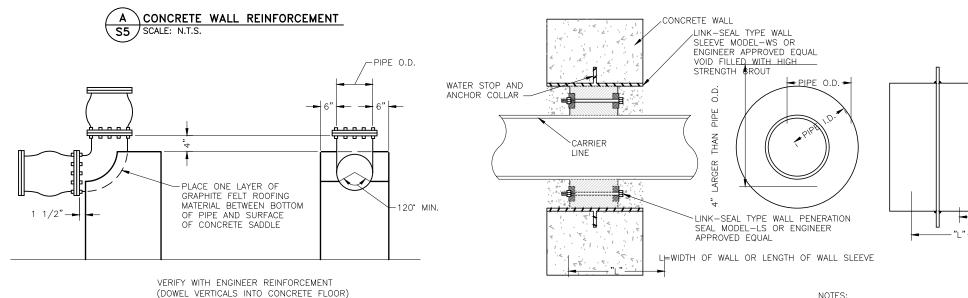




B REINFORCEMENT FOR OPENINGS IN S5 / WALLS AND PRECAST SLABS SCALE: N.T.S.

#4 EACH FACE, EACH

SIDE (MIN.)



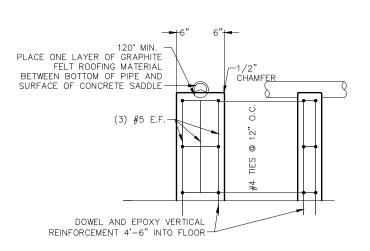
SMALL (O.D. < 25") PIPE PENETRATION S5 WALLS AND SLABS DETAIL SCALE: N.T.S.

THE CONTRACTOR WILL BE
RESPONSIBLE FOR DETERMINING
THE SIZE OF THE WALL SLEEVE AND THE PENETRATION SEAL REQUIRED.

 $\#4 \times 4'-0"$ EACH, AND

EACH CORNER-

 ALL PENETRATIONS IN THE WALL WILL REQUIRE WALL SLEEVES AND PENETRATION SEALS.



3. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS

FOR OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. SUPPLEMENTARY REINFORCEMENT MAY BE OMITTED ONLY

WHERE OPENING IS FRAMED BY BEAMS OR WALLS.

5. SUPPLEMENTARY REINFORCEMENT IS NOT REQUIRED WHEN SPECIFIED REINFORCEMENT IS NOT CUT BY PENETRATION.

CONCRETE PIPE SUPPORT DETAIL S5 SCALE: N.T.S.

ivision of **RESPE** ER DR., SUITE 10, COLORADO 80919

DISTRIC BOOSTER METROPOLITAN DELIVERY TRIVIEW

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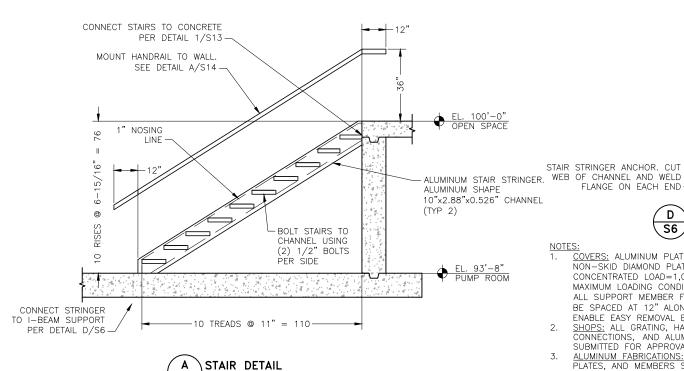
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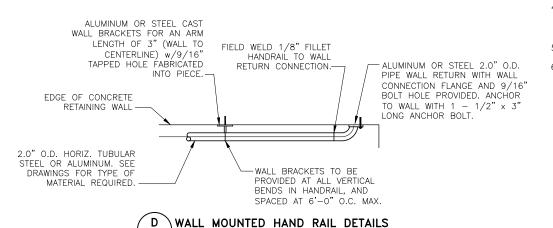
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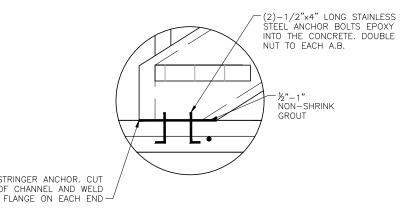
S5

C CONCRETE PIPE SUPPORT DETAIL © 90° ELBOW
S5 SCALE: N.T.S.



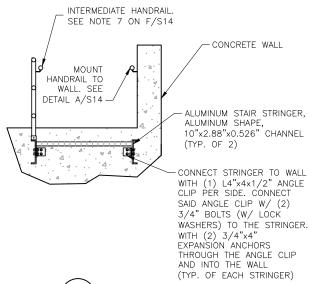


S6 SCALE: 1/4" = 1'-0"



D STRINGER CONNECTION TO FLOOR S6 SCALE: N.T.S.

- COVERS: ALUMINUM PLATE COVERS SHALL BE 1/4" THICK WITH NON-SKID DIAMOND PLATE PATTERN. MAX LIVE LOAD=100 PSF, MAX CONCENTRATED LOAD=1,000 LB WITH MAX 1/4" DEFLECTION UNDER MAXIMUM LOADING CONDITIONS. COVER PLATES SHALL BE ATTACHED TO ALL SUPPORT MEMBER FLANGES VIA 1/2" S.S. BOLTS. BOLTS SHALL BE SPACED AT 12" ALONG ALL SUPPORT MEMBERS AND INSTALLED TO ENABLE EASY REMOVAL BY OWNER IF NECESSARY.
- SHOPS: ALL GRATING, HANDRAILING, SUPPORT SHAPES. STAIRS, CONNECTIONS, AND ALUMINUM COVERS MUST HAVE SHOP DRAWINGS SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.
- ALUMINUM FABRICATIONS: ALUMINUM GRATING, FLOOR PLATES, COVER PLATES, AND MEMBERS SHALL BE FIELD MEASURED FOR PROPER CUTOUTS AND PROPER SIZES. FIELD WELDING OF ALUMINUM GRATING, PLATES, AND MEMBER SHALL BE IN ACCORDANCE WITH ASCE VOL.
- STAIRS: ALUMINUM STAIR TREAD WITH NON-SLIP SURFACE. McNICHOLS TYPE A-STANDARD 1-3/4"x3/16" DEEP x 12" WIDE (EXCEPT WHERE NOTED). STAIR LENGTHS AS INDICATED ON PLANS. CORRUGATED METAL
- SUPPORT MEMBER INTERSECTIONS: CUT ALL I-BEAM INTERSECTIONS AT 45° ANGLE AND BUTT WELD MEMBERS IN FIELD.
- HANDRAIL: ALL NUTS, BOLTS, ANCHORS, ETC; SHALL BE STAINLESS



STRINGER CONNECTION TO CONCRETE SCALE: N.T.S.

1'-0" MAX 4" KICK PLATE CLIP TO EACH POST-/

S6 SCALE: N.T.S.

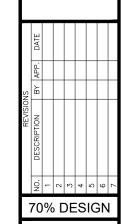
2.0" O.D. HORIZ. TUBULAR STEEL OR ALUMINUM. SEE DRAWINGS FOR TYPE OF MATERIAL REQUIRED. 2.0" O.D. VERT. TUBULAR STEEL OR ALUMINUM, EQUALLY SPACED (4'-0" O.C. MAX.). SUBMIT SHOP DRAWINGS OF TYPE AND MATERIALS USED FOR HAND-RAILS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

HANDRAIL DETAIL S6 SCALE: N.T.S.

HANDRAIL/GUARDRAIL NOTES:

- 1. ALL HANDRAILS SHALL BE FABRICATED WITH NEW 2.0" DIAMETER STANDARD WEIGHT ALUMINUM OR STEEL TUBING. (SEE DRAWINGS FOR TYPE OF MATERIAL REQUIREMENT). ALL RAILING POST MEASUREMENTS SHALL BE FIELD MEASURED AND FABRICATED TO
- 2. DESIGN LIVE LOADS EQUALS 50 LBS/LF APPLIED HORIZONTALLY AT RIGHT ANGLES TO TOP RAIL.
- WELD ALL PIPE JOINTS WITH 1/8" REINFORCED WELDS AND DRESS SMOOTH.
- CORNERS AND EDGES OF ALL BARS, PLATES AND PIPE ENDS
- SHALL BE SANDED SMOOTH AND FREE OF BURRS.

 5. ALL HANDRAIL MATERIAL REQUIRED FOR COMPLETE INSTALLATION SHALL BE APPROVED BY OWNER PRIOR TO APPLICATION. SUBMIT SHOP DRAWINGS TO ENGINEER PRIOR TO THE FABRICATION OF HANDRAILS
- WHEN THERE ARE STAIRS PRESENT, A SEPARATE INTERMEDIATE HANDRAIL MUST BE INSTALLED ON BOTH SIDES AT 36 INCHES ON CENTER TO PROTECT AGAINST FALLS. THIS HANDRAIL WILL PROTRUDE AWAY FROM THE GUARDRAIL TO ALLOW EASE OF GRASPING. SEE BUILDING CODES FOR ADDITIONAL INFORMATION.



SP 1TE 8091

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STATION

PUMP

BOOSTER

SYSTEM

DELIVERY

DETAILS

STRUCTURAL

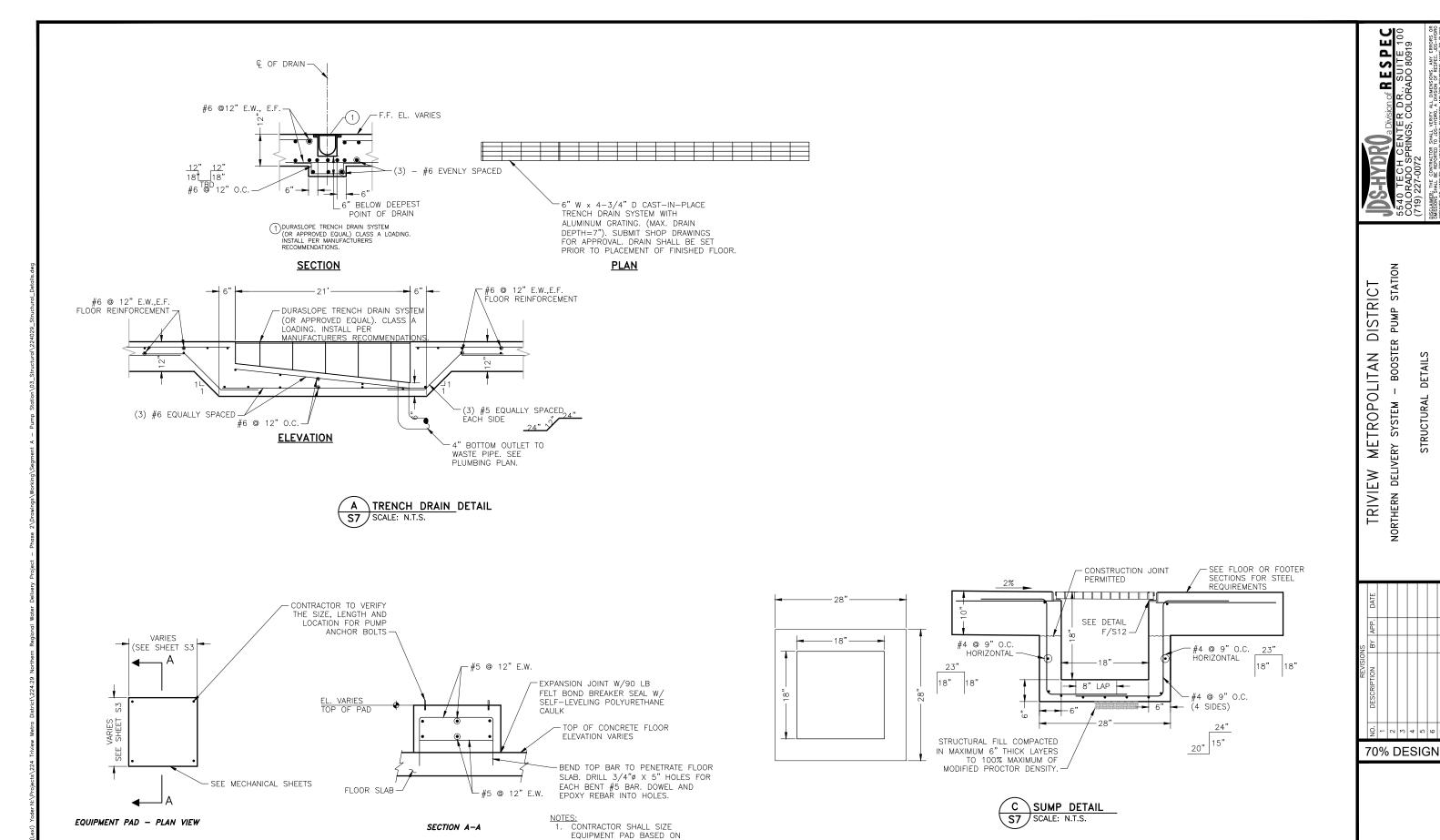
DISTRIC

METROPOLITAN

TRIVIEW

Project No.: W224.2 ate: 09/12/22 esign: MLD

awn: JBS/SNW eck: MID **S6**



EQUIPMENT AND MANUFACTURER'S RECOMMENDATIONS.

B EQUIPMENT PAD DETAIL

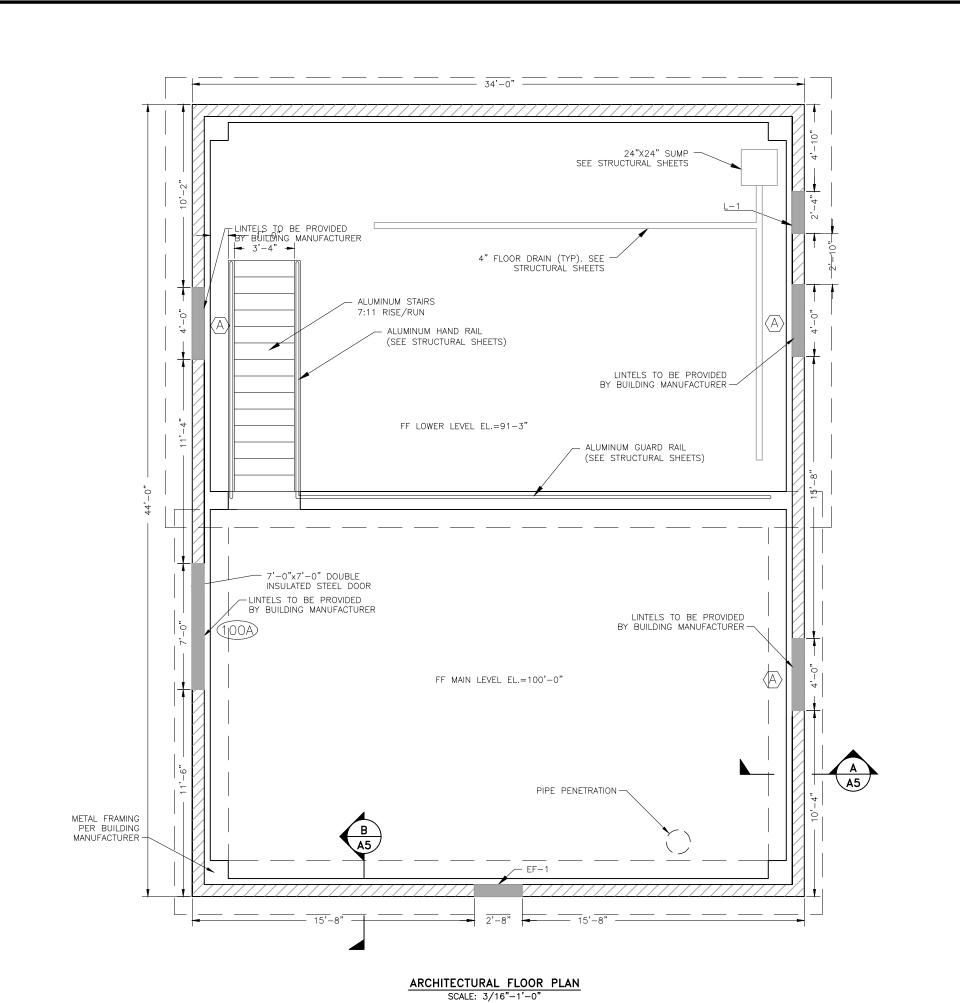
S7 SCALE: N.T.S.

Project No.: W224.21 Date: 09/12/22 Design: MLD rawn: SNW eck: MID

DETAILS

STRUCTURAL

S7



BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT

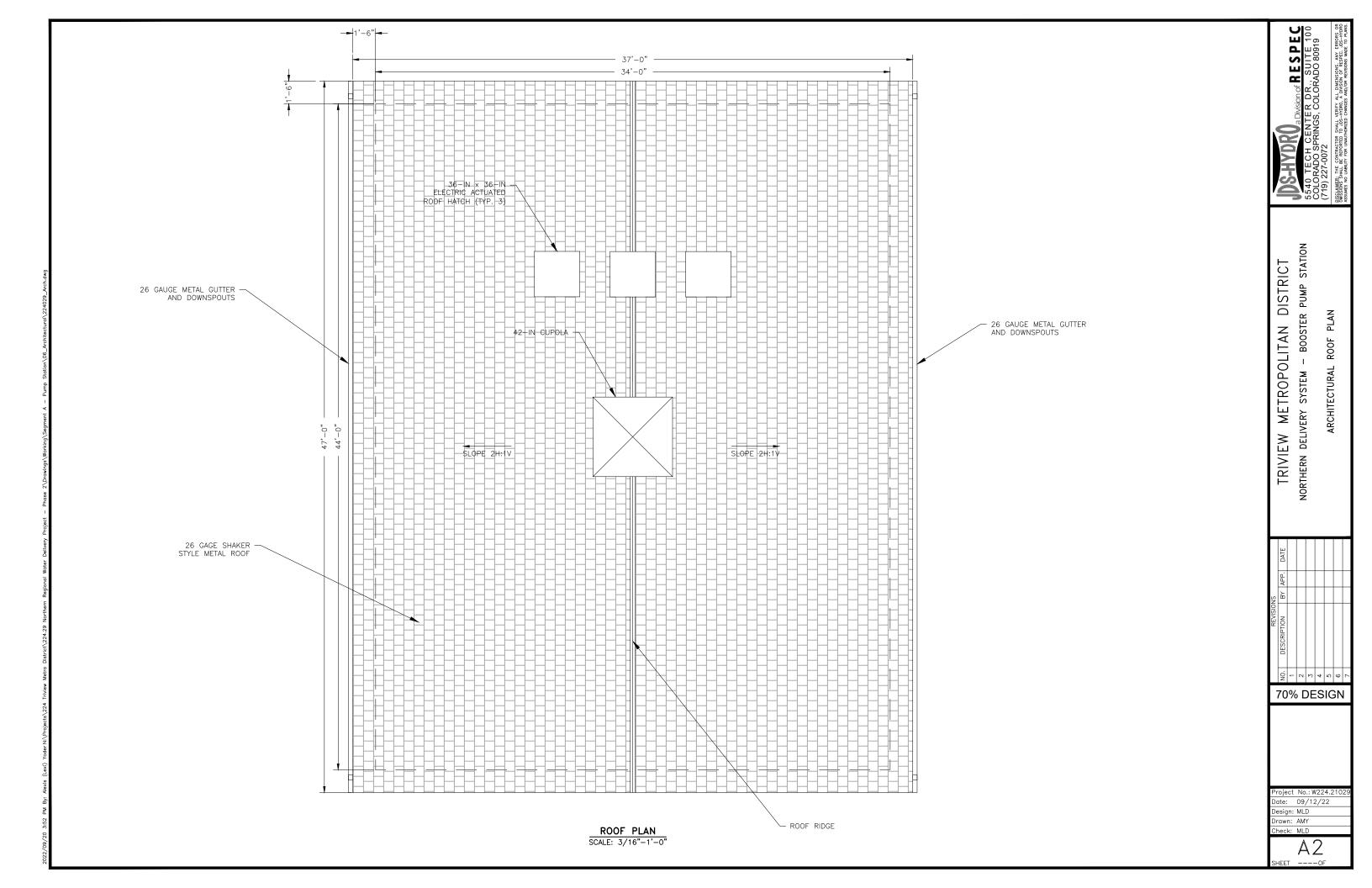
FLOOR ARCHITECTURAL

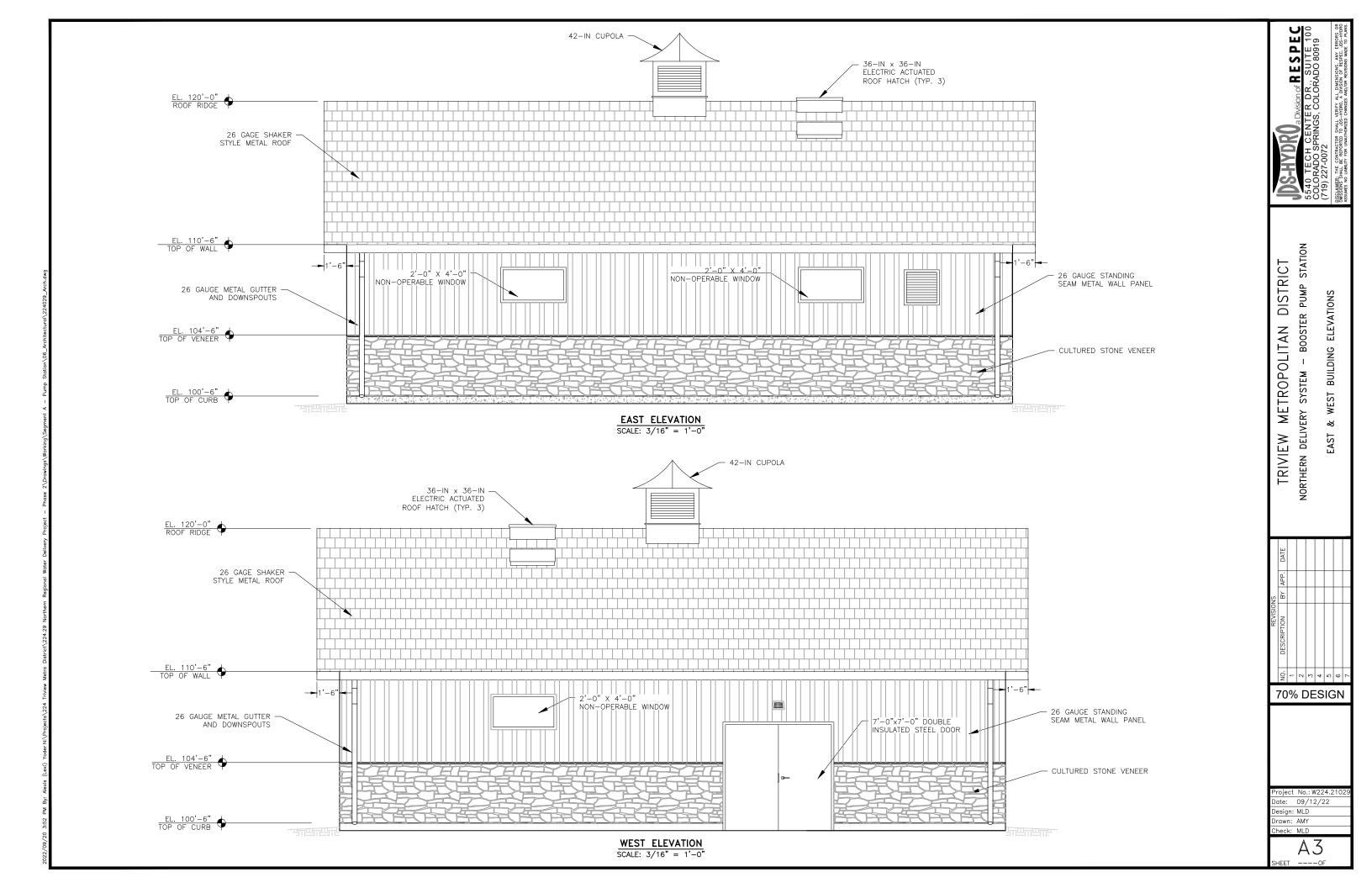
Division of **RESPEC**ER DR., SUITE 100
COLORADO 80919

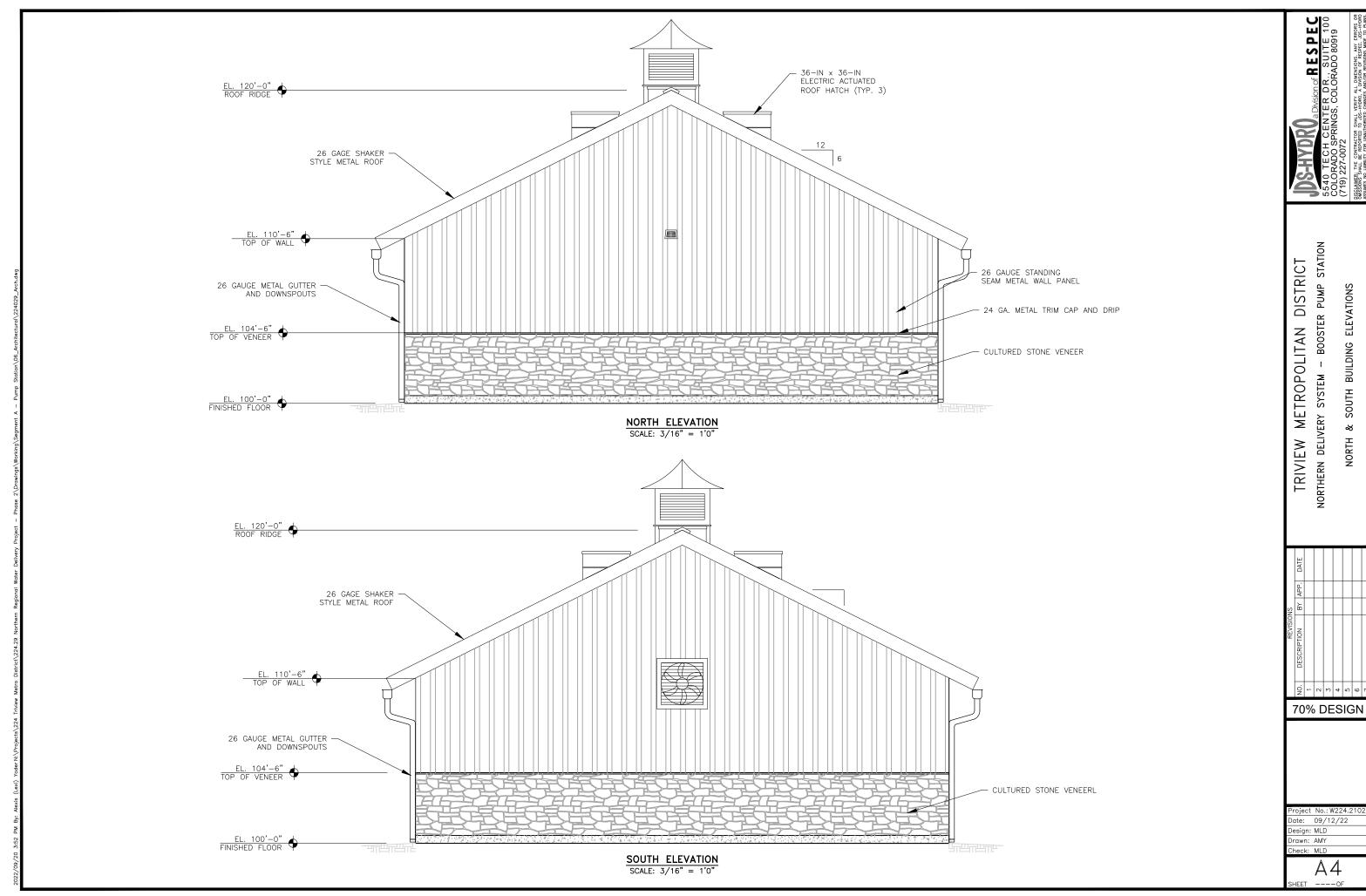
rawn: AMY neck: MLD A 1

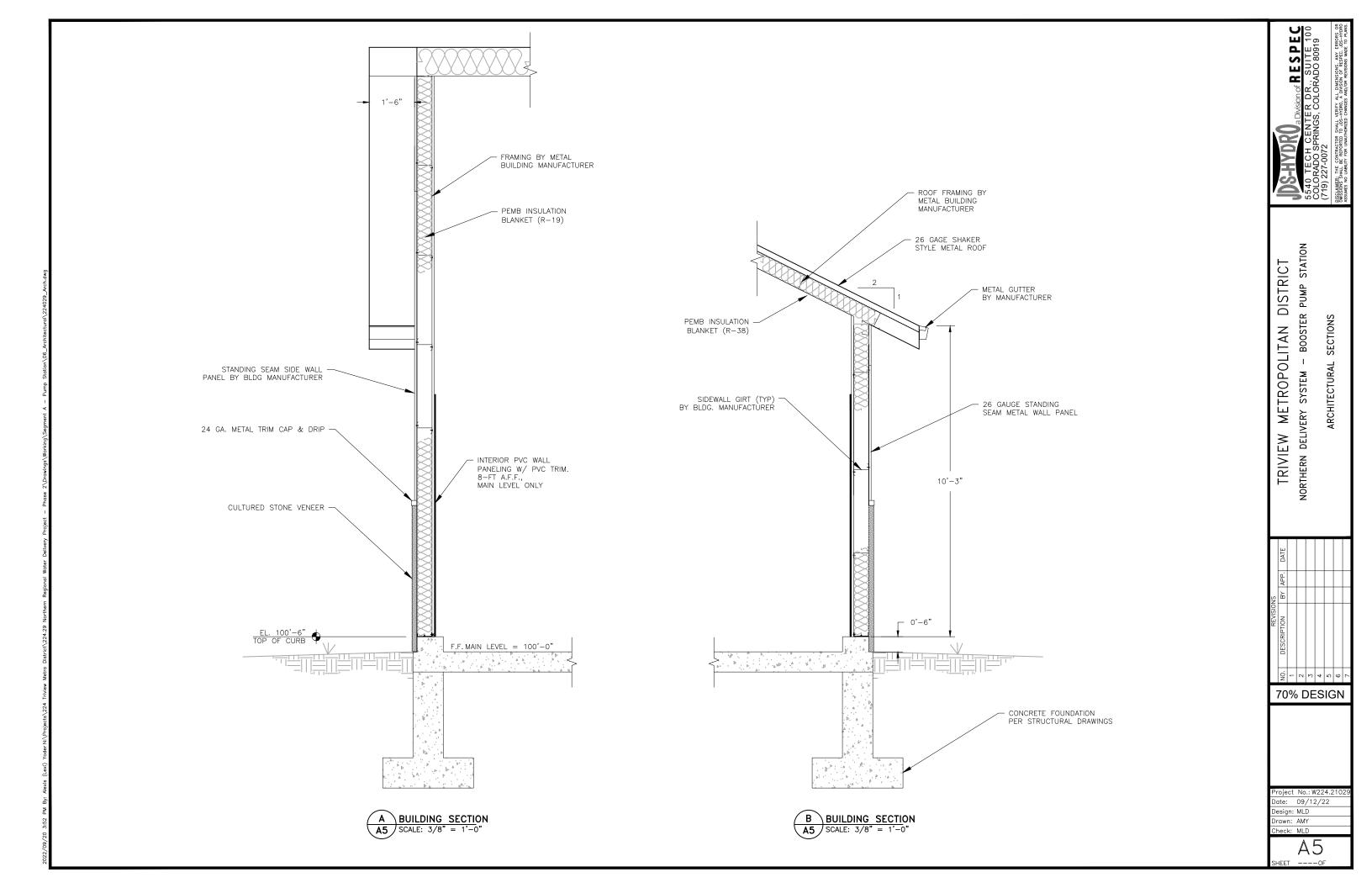
Date: 09/12/22 Design: MLD

70% DESIGN









DETAIL

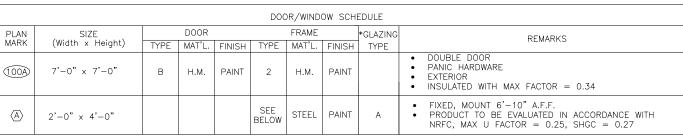
ARCHITECTURAL

ivision of **RESPE** ER DR., SUITE 10, COLORADO 80919

Project No.: W224.2 ate: 09/12/22 esign: MLD

rawn: AMY eck: MID

A6



*GLAZING LEGEND				
A INSULATED, LAMINATED, LOW-E				

FINISH LEGEND					
LABEL	FINISH				
P-1	PAINT - FIELD - EGGSHELL				

EXTERIOR STEEL WINDOW, SEE RIGHT

FOR GLAZING. FACTORY WELDED CORNERS — SHOP PRIME FOR FIELD

PAINT, GAUGE PER SPEC

OWNER TO SELECT ALL PAINT COLORS. SEE SPECIFICATIONS FOR FINISHES. VERIFY

COLORS WITH OWNER PRIOR TO FABRICATION.
ALL FINISH PATTERNS SHALL BE DETERMINED IN FIELD WITH OWNER AND ENGINEER PRIOR TO INSTALLATION.

OWNER TO SELECT DOOR HARDWARE FINISH COLOR.

OWNER TO SELECT PAINT COLOR FOR ALL PAINTED SURFACES INCLUDING DOORS, TRIM. AND EXTERIOR MATERIALS.

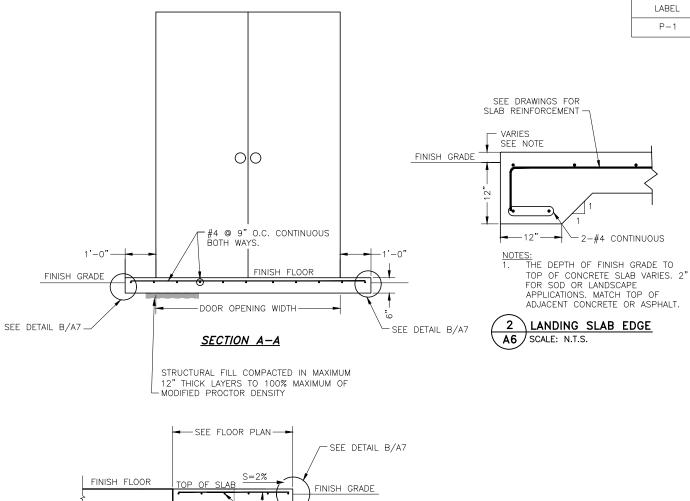
ALL EXPOSED CONCRETE FLOOR SURFACES SHALL BE COATED WITH CLEAR WATERPROOFING PER SPECIFICATIONS.

ALL INTERIOR DOOR AND FRAME PAINT TO MATCH EXTERIOR TRIM PAINT.

ALL INTERIOR ROOMS/AREAS TO RECEIVE FIELD PAINT P-1 ON SURFACES WHERE APPLICABLE. OWNER TO APPROVE COLOR SAMPLE PRIOR TO PAINTING.

DOOR TYPE A DOOR TYPE B DOOR FRAME 2 INTERIOR, 18 GAUGE, INSULATED EXTERIOR, 14 GAUGE, INSULATED HOLLOW METAL W/ FACTORY

HOLLOW METAL FLUSH FACE DOORHOWLOW METAL FLUSH FACE DOOWEWDED CORNERS —SHOP SHOP PRIME FOR FIELD PAINT SHOP PRIME FOR FIELD PAINT GAUGE



EDGE OF CONCRETE SLAB

6" CONCRETE SLAB WITH

SLOPE AT 2% AWAY FROM

-DOOR OPENING WIDTH

PLAN VIEW

THICKENED SLAB EDGES.

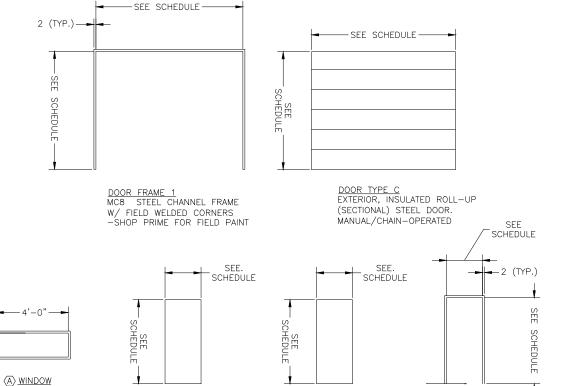
INSIDE EDGE OF

THICKENED EDGE

STRUCTURAL FILL COMPACTED IN MAXIMUM

12" THICK LAYERS TO 100% MAXIMUM OF

MODIFIED PROCTOR DENSITY



DOOR/WINDOW SCHEDULE/DETAILS A6 SCALE: N.T.S.

1 DOORWAY LANDINGS AS SHOWN ON ARCHITECTURAL SHEETS A6 SCALE: N.T.S.

#4 @ 9" O.C. CONTINUOUS

BOTH WAYS

SECTION B-B

ARCHITECTURAL LIFE SAFETY PLAN
SCALE: 1/8"=1'-0"

Date: 09/12/22

Design: MLD rawn: AMY neck: MLD

Α7

-OCCUPANCY LOADING 1496 SF/100 = 14.96
-ALLOWABLE AREA CALCULATION:
-Aa = At + (NS x If)
-Aa = 8,500 + (8,500 x 0)
-Aa = 8,500 sf -INCIDENTAL USE AREAS: NONE
-EGRESS WIDTH REQUIREMENT
-REQUIRED: O.C. LOAD x 0.3" = 4.5"
-PROVIDED: STAIRS = 48"; EGRESS = 32" & 36"

LIFE SAFETY PLAN CONFIRMATION:
-OCCUPANCY TYPE: UTILITY (U)
-NON-SEPARATED OCCUPANCY

CONSTRUCTION TYPE II-B

-MAXIMUM TRAVEL DISTANCE = 88' ±
-MAXIMUM COMMON PATH OF TRAVEL = 32' ±
-BUILDING IS NOT SPRINKLERED
-ITEMS NOT APPLICABLE:
-FIRE WALLS

-FIRE/SMOKE BARRIERS
-FIRE/SMOKE PARTITIONS

 $rac{ ext{NOTE:}}{ ext{FACILITY}}$ is unmanned and will be periodically accessed only by operations staff

METAL FRAMING PER BUILDING MANUFACTURER -

TRIVIEW METROPOLITAN DELIVERY

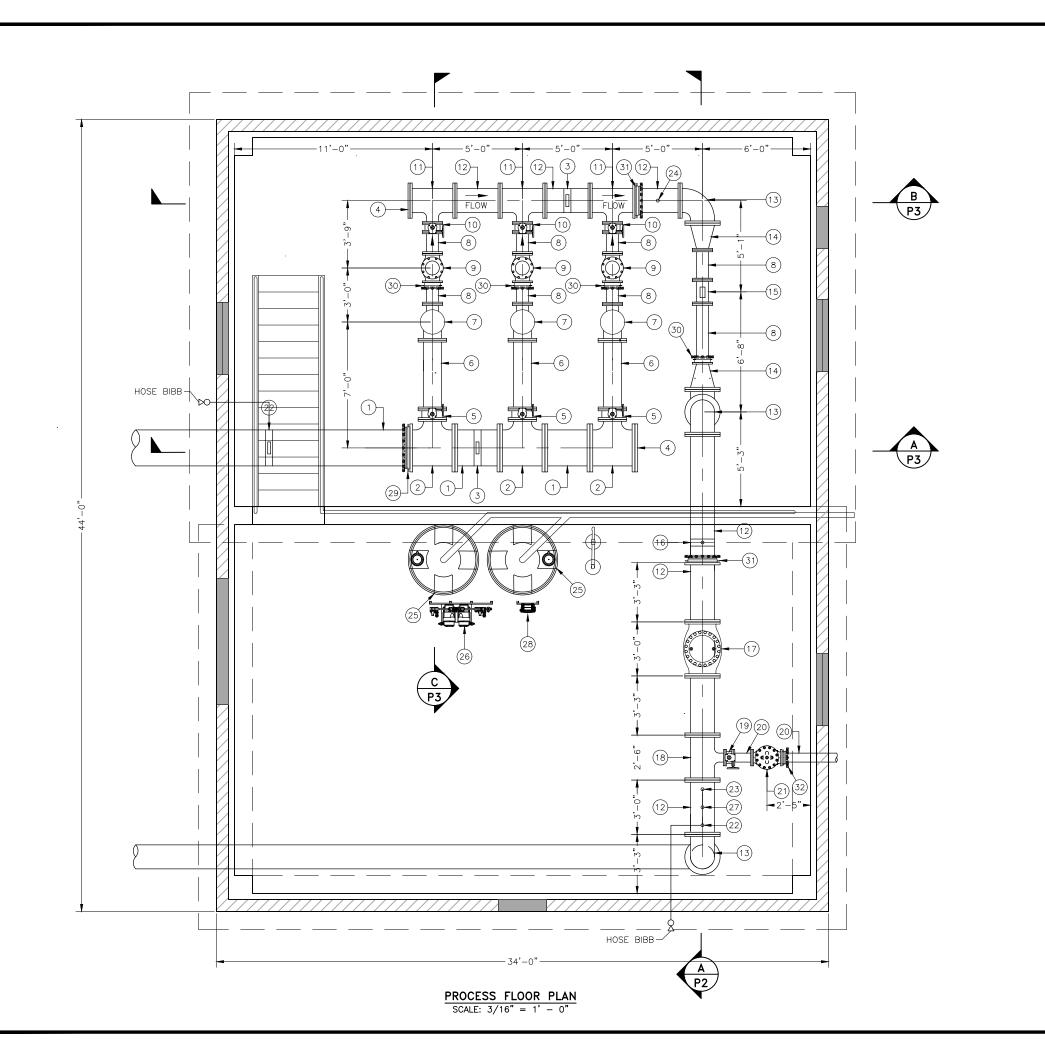
ivision of **RESPEC** ER DR., SUITE 100 COLORADO 80919

DISTRIC

BOOSTER I

SAFETY

70% DESIGN



		SCHEDULE
No.	SIZE	DESCRIPTION
1	24"	PIPE, PE, DIP
2	24"X12"	REDUCED TEE, FL, DIP
3	1"	PRESSURE INDICATOR/ TRANSMITTER ASSEMBLY. SEE DETAIL D/P4
4	24"	BLIND FLANGE
5	12"	BUTTERFLY VALVE W/ WHEEL LUG STYLE
6	12"	PIPE, FL, DIP
7	-	350 HP PUMP, SEE SPECS
8	8"	PIPE, FL, DIP
9	8"	CHECK VALVE, FL, DIP, CLA-VAL 81-02
10	8"	BUTTERFLY VALVE W/ WHEEL LUG STYLE
11	16"X8"	REDUCED TEE, FL, DIP
12	16"	PIPE, PE, DIP
13	16"	FLANGED 90 BEND
14	16X8"	CONCENTRIC REDUCER
15	8"	MAG METER, BADGER M2000
16	1"	AIR RELEASE VALVE, SEE DETAIL C/P4
17	16"	FLOW CONTROL VALVE, CLA-VAL 131-66
18	16"x6"	FLANGED TEE, EXPANDING, DIP
19	6"	BUTTERFLY VALVE W/ WHEEL LUG STYLE
20	6"	PIPE, PE, DIP
21	6"	SURGE VALVE, FL, CLA—VAL 52—03
22	3" 4	WATER QUALITY SAMPLE TAP
23	-	SURGE ANTICIPATOR TAP
24	-	CHLORINE INJECTION, SEE DETAIL A/P4
25	-	250 GALLON DOUBLE WALLED CHLORINE TANK
26	-	PERISTALTIC PUMPS
27	-	CHLORINE MONITORING, SEE DETAIL B/P4
28	-	CLT10SC ANALYZER
29	24"	MJ Fitting
30	8"	MJ Fitting
31	16"	MJ Fitting

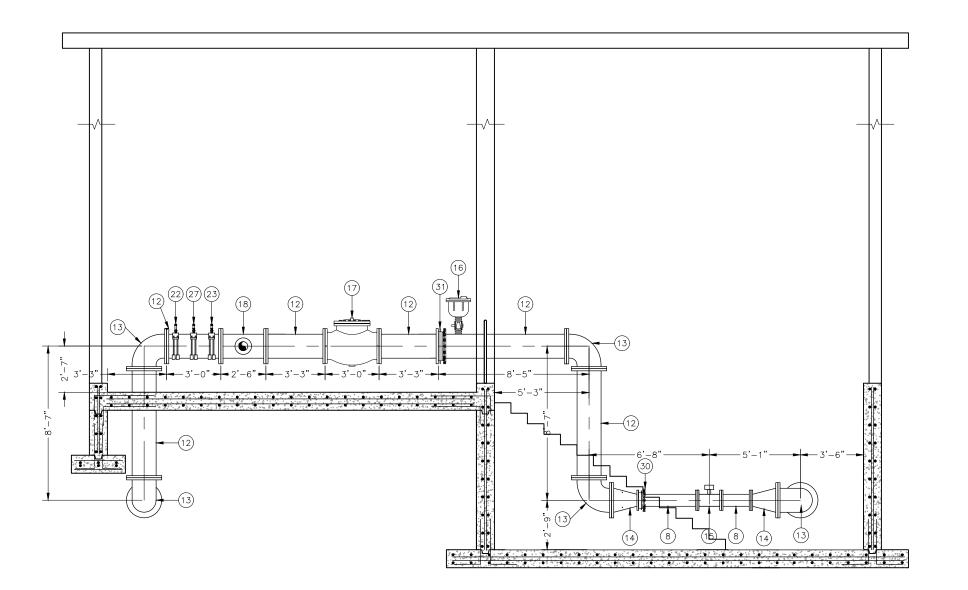
NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT

PROCESS FLOOR PLAN

70% DESIGN

Project No.: W224.21 Date: 09/12/22 Design: GJD Drawn: JBS/SNH

neck: MLD P1



A METER / BACKFLOW PIPE SECTION
P2 SCALE: 3/16" = 1'-0"

		SCHEDULE
No.	SIZE	DESCRIPTION
1	24"	PIPE, PE, DIP
2	24"X12"	REDUCED TEE, FL, DIP
3	1"	PRESSURE INDICATOR/ TRANSMITTER ASSEMBLY. SE DETAIL D/P4
4	24"	BLIND FLANGE
5	12"	BUTTERFLY VALVE W/ WHEE LUG STYLE
6	12"	PIPE, FL, DIP
7	-	PUMP
8	8"	PIPE, FL, DIP
9	8"	CHECK VALVE, FL, DIP, CLA-VAL 81-02
10	8"	BUTTERFLY VALVE W/ WHEE LUG STYLE
11	16"X8"	REDUCED TEE, FL, DIP
12	16"	PIPE, PE, DIP
13	16"	FLANGED 90 BEND
14	16X8"	CONCENTRIC REDUCER
15	8"	MAG METER, BADGER M200
16	1"	AIR RELEASE VALVE, SEE DETAIL C/P4
17	16"	FLOW CONTROL VALVE, CLA-VAL 131-66
18	16"x6"	FLANGED TEE, EXPANDING, DIP
19	6"	BUTTERFLY VALVE W/ WHEE LUG STYLE
20	6"	PIPE, PE, DIP
21	6"	SURGE VALVE, FL, CLA—VAL 52—03
22	3" 4	WATER QUALITY SAMPLE TAI
23	-	SURGE ANTICIPATOR TAP
24	-	CHLORINE INJECTION, SEE DETAIL A/P4
25	-	250 GALLON DOUBLE WALLE CHLORINE TANK
26	-	PERISTALTIC PUMPS
27	-	CHLORINE MONITORING, SEE DETAIL B/P4
28	-	CLT10SC ANALYZER
29	24"	MJ Fitting
30	8"	MJ Fitting
31	16"	MJ Fitting
32	6"	MJ Fitting

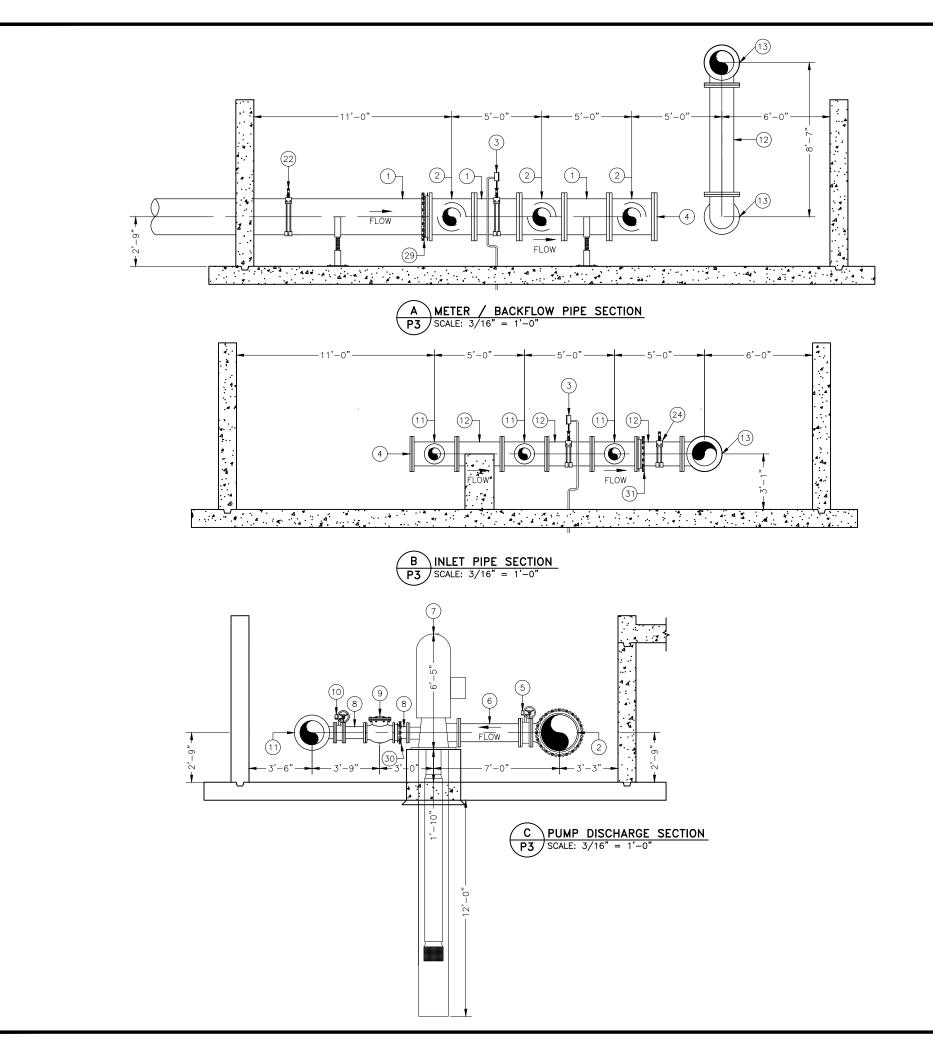
NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT PROCESS PIPE SECTIONS

	DATE							
	BY APP.							
SN	ВУ							
REVISIONS	DESCRIPTION							
	NO.	1	2	3	4	2	9	7
Γ-	70% DESIGN						ı	

70% DESIGN

Date: 09/12/22 Design: GJD rawn: JBS neck: MLD

P2



No. SIZE			SCHEDULE
2 24"X12" REDUCED TEE, FL, DIP 3 1" PRESSURE INDICATOR/ TRANSMITTER ASSEMBLY. SEE DETAIL D/P4 4 24" BLIND FLANGE 5 12" BUTTERFLY VALVE W/ WHEEL LUG STYLE 6 12" PIPE, FL, DIP 7 - PUMP 8 8" PIPE, FL, DIP 9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 2	No.	SIZE	DESCRIPTION
3 1" PRESSURE INDICATOR/TRANSMITTER ASSEMBLY. SEE DETAIL D/P4 4 24" BLIND FLANGE 5 12" BUTTERFLY VALVE W/ WHEEL LUG STYLE 6 12" PIPE, FL, DIP 7 - PUMP 8 8" PIPE, FL, DIP 9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"X6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	1	24"	PIPE, PE, DIP
1" TRANSMITTER ASSEMBLY, SEE DETAIL D/P4	2	24"X12"	REDUCED TEE, FL, DIP
5 12" BUTTERFLY VALVE W/ WHEEL LUG STYLE 6 12" PIPE, FL, DIP 7 - PUMP 8 8" PIPE, FL, DIP 9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"X6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 2	3	1"	TRANSMITTER ASSEMBLY. SEE
12	4	24"	BLIND FLANGE
7 — PUMP 8 8" PIPE, FL, DIP 9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"X6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 \$\frac{3}{2}" WATER QUALITY SAMPLE TAP 23 — SURGE ANTICIPATOR TAP 24 — CHLORINE INJECTION, SEE DETAIL A/P4 25 — 250 GALLON DOUBLE WALLED CHLORINE TANK 26 — PERISTALTIC PUMPS <	5	12"	BUTTERFLY VALVE W/ WHEEL LUG STYLE
8 8" PIPE, FL, DIP 9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 ₹" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	6	12"	PIPE, FL, DIP
9 8" CHECK VALVE, FL, DIP, CLA-VAL 81-02 10 8" BUTTERFLY VALVE W/ WHEEL LUG STYLE 11 16"X8" REDUCED TEE, FL, DIP 12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	7	-	PUMP
8	8	8"	PIPE, FL, DIP
10	9	8"	
12 16" PIPE, PE, DIP 13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	10	8"	
13 16" FLANGED 90 BEND 14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	11	16"X8"	REDUCED TEE, FL, DIP
14 16X8" CONCENTRIC REDUCER 15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 ‡" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	12	16"	PIPE, PE, DIP
15 8" MAG METER, BADGER M2000 16 1" AIR RELEASE VALVE, SEE DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	13	16"	FLANGED 90 BEND
1" AIR RELEASE VALVE, SEE DETAIL C/P4 17	14	16X8"	CONCENTRIC REDUCER
DETAIL C/P4 17 16" FLOW CONTROL VALVE, CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	15	8"	MAG METER, BADGER M2000
17 16 CLA-VAL 131-66 18 16"x6" FLANGED TEE, EXPANDING, DIP 19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	16	1"	
19 6" BUTTERFLY VALVE W/ WHEEL LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	17	16"	
LUG STYLE 20 6" PIPE, PE, DIP 21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	18	16"x6"	
21 6" SURGE VALVE, FL, CLA-VAL 52-03 22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	19	6"	
22 3" WATER QUALITY SAMPLE TAP 23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	20	6"	PIPE, PE, DIP
23 - SURGE ANTICIPATOR TAP 24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	21	6"	SURGE VALVE, FL, CLA-VAL 52-03
24 - CHLORINE INJECTION, SEE DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	22	3" 4	WATER QUALITY SAMPLE TAP
24 - DETAIL A/P4 25 - 250 GALLON DOUBLE WALLED CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	23	_	SURGE ANTICIPATOR TAP
CHLORINE TANK 26 - PERISTALTIC PUMPS 27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	24	-	
27 - CHLORINE MONITORING, SEE DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	25	_	
27 - DETAIL B/P4 28 - CLT10SC ANALYZER 29 24" MJ Fitting	26	_	PERISTALTIC PUMPS
29 24" MJ Fitting	27	_	
	28	-	CLT10SC ANALYZER
30 8" MJ Fitting	29	24"	MJ Fitting
	30	8"	MJ Fitting
31 16" MJ Fitting			W. 5111
32 6" MJ Fitting	31	16"	MJ Fitting

TRIVIEW METROPOLITAN DISTRICT
NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION

PROCESS PIPE SECTIONS

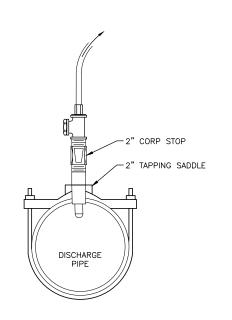
DR., SUITE 100 LORADO 80919

70% DESIGN

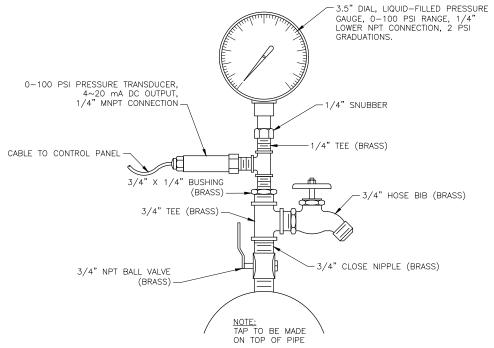
Project No.: W224.21029
Date: 09/12/22
Design: GJD
Drawn: JBS
Check: MI D

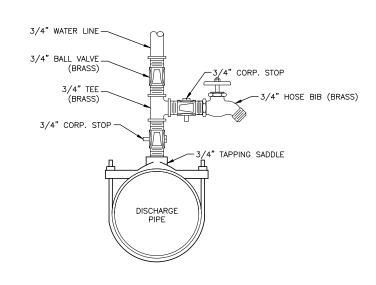
P3

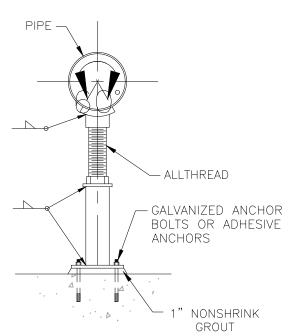
A CHLORINE INJECTION DETAIL P4 SCALE: N.T.S.



B CHLORINE ANALYZER DETAIL P4 SCALE: N.T.S.

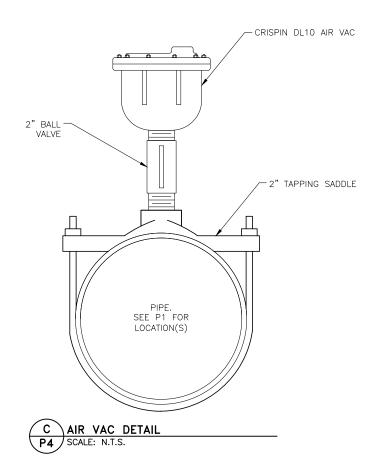






E 3/4" HOUSE WATER TAP DETAIL P4 SCALE: N.T.S.

F ADJUSTABLE PIPE SUPPORT DETAIL P4 SCALE: N.T.S.



70% DESIGN

Date: 09/12/22 Design: MLD

rawn: JBS heck: MLD

P4

D PRESSURE INDICATOR/TRANSMITTER ASSEMBLY P4 SCALE: N.T.S.

TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM

ivision of **RESPEC** ER DR., SUITE 100 COLORADO 80919

BOOSTER PUMP

DETAILS

PROCESS

A CHEMICAL DOSING SYSTEM P5 SCALE: N.T.S.

NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION

PROCESS DETAILS

Division of **RESPEC**ER DR., SUITE 100
COLORADO 80919

TRIVIEW METROPOLITAN DISTRICT

70% DESIGN

Date: 09/12/22

Design: MLD Drawn: JBS

heck: MLD P5

LOUVER TAG

SEE LOUVER SCHEDULE

SEQUENCE OF OPERATIONS ABBREVIATIONS

ACTUAL CUBIC FEET PER MINUTE AFF ABOVE FINISHED FLOOR BTU BRITISH THERMAL UNIT CFM CUBIC FEET PER MINUTE CLNG CEILING CONT CONTINUATION, CONTINUED CU COPPER DIAMETER DN DOWN EXHAUST AIR EA ELECTRIC BASEBOARD EXHAUST FAN ENT **ENTERING** EXTERNAL STATIC PRESSURE ESP EUH ELECTRIC UNIT HEATER GPM GALLONS PER MINUTE HORSE POWER ΗZ HERTZ **INCHES** LINEAL FEET LEAVING MAX MAXIMUM MBH THOUSAND BTU's PER HOUR MIN MINIMUM MISC MISCELLANEOUS OA OC OUTSIDE AIR ON CENTER OCC OCCUPANCY OUTSIDE AIR SUPPLY OSA PH POUNDS PER SQUARE INCH GAUGE PSIG POUNDS PER SQUARE INCH PSI RFL REFRIGERANT LIQUID REFRIGERANT SUCTION RFS SCH SCHEDULE SQUARE FEET SQFT SQUARE FEET SS STAINLESS STEEL TEMPERATURE TYP TYPICAL UNDERWRITER'S LABORATORY UL UNLESS OTHERWISE NOTED



DISTRICT

REGIONAL V NORTHERN DELIVERY P

EVIATION BBRI END

DEVEL

DESIGN DRAWN CHECKED 08/05/2022 PROJECT No. 22429

REVISIONS

Anchorage, A 2700 Gambell St. Ste. Anchorage, AK 99503

RESPEC Fax: 907.473.3295

AECC163270

ER.

DISTRICT

NORTHERN REGIONAL WATER DELIVERY PROJECT

DEVELOPMENT

SCHEDULES

 DESIGN
 JV

 DRAWN
 C

 CHECKED
 M

 DATE
 08/05/20

 PROJECT No.

 22429

M-002

REVISIONS

SPECIFICATIONS PART 1 - GENERAL PART 2 - PRODUCTS **PART 3 - EXECUTION** TRIVIEW METROPOLITAN DISTRICT REGIONAL WATER DESIGN
DRAWN
CSB
CHECKED
MJL
DATE
08/05/2022

PROJECT No.
22429
SHEET NUMBER

MINUMBER

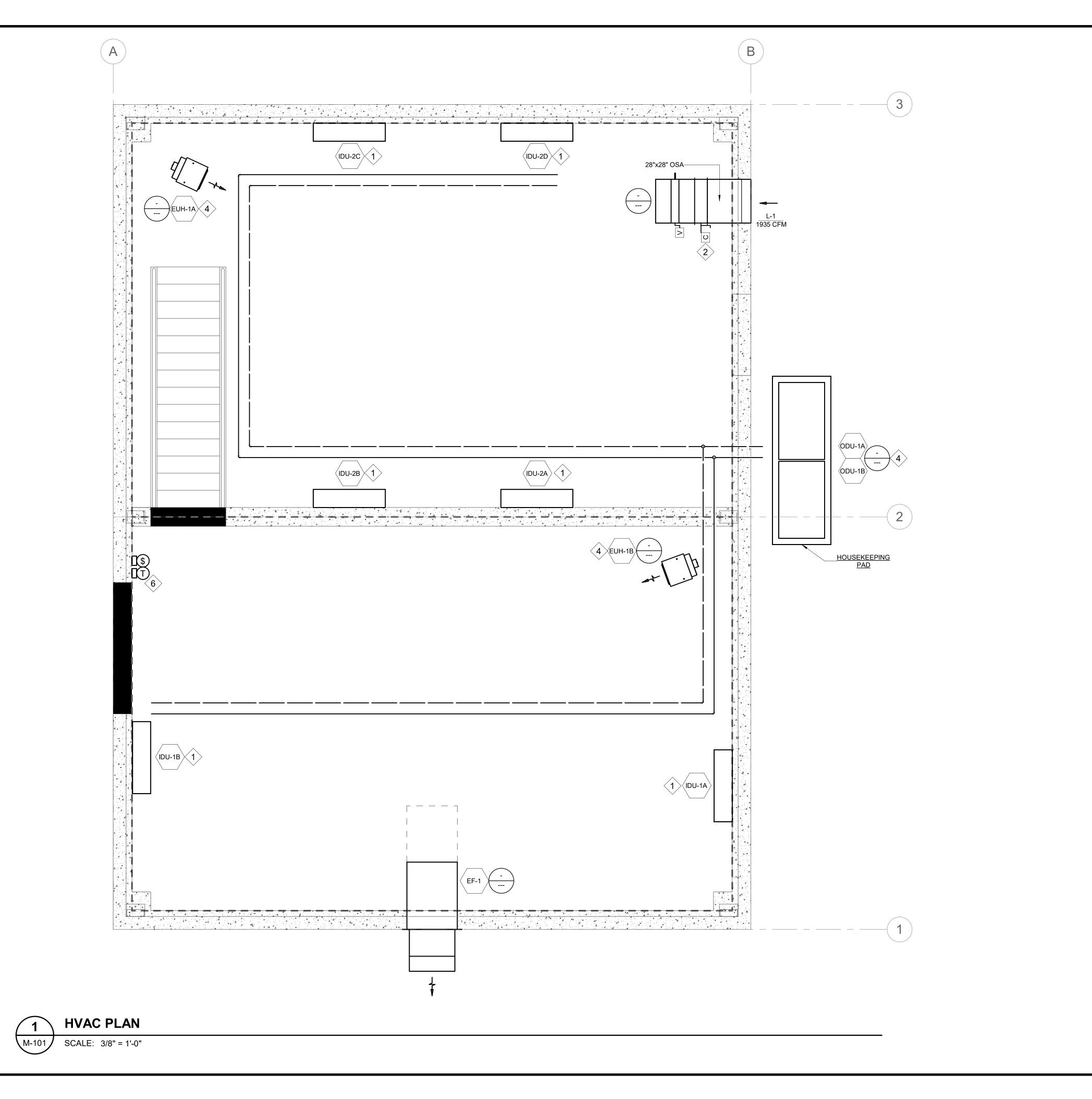
MINUMBER

MINUMBER

MINUMBER

MINUMBER No. Date

REVISIONS



SHEET NOTES

- 1. INSULATE DUCTWORK AND EQUIPMENT.
- PROVIDE MAINTENANCE AND OPERATION CLEARANCES PER MANUFACTURER RECOMMENDATIONS.
- 3. ROUTE REFRIGERANT AND CONDENSATE PIPING TO AVOID PASSING OVER ELECTRICAL EQUIPMENT.
- 4. PER 2015 IMC, THE MAXIMUM ALLOWABLE SPACE CHARGE FOR REFRIGERANT 410A IS 26 LBS OF REFRIGERANT PER 1,000 CUBIC FEET, THE CHARGE ALLOWED IS:

[(14,784 CF + 8,736 CF) / 1,000 CF] * 26 LBS = 611 LBS. THE MINI-SPLIT SYSTEM CHARGE OF 59.6 LBS IS BELOW THE MAX ALLOWABLE CHARGE OF 611 LBS FOR R-410A.

SHEET KEYNOTES

- ROUTE CONDENSATE DRAIN TO NEAREST APPROVED PLUMBING FIXTURE PER THE 2018 IPC, SECTIONS 314.2. SIZE CONDENSATE DRAIN PER MANUFACTURER REQUIREMENTS.
- INTERLOCK CONTROL DAMPER WITH EXHAUST FAN OPERATION.
- 3. MOUNT ODU ON METAL FRAMING MINIMUM 12-INCHES ABOVE HOUSE KEEPING PAD.
- 4. MOUNT ELECTRIC UNIT HEATER 10 FT AFF.
- 5. PROVIDE ROOM THERMOSTAT FOR CONTROL OF EUH-1A AND EUH-1B.

NOT FOR TO

Gambell St. Ste. 500 brage, AK 99503 e: 907.743.3295



CT OLITAN DISTRICT

NORTHERN REGIONAL DELIVERY PROJECT

DEVELOPMENT

HVAC PLAN

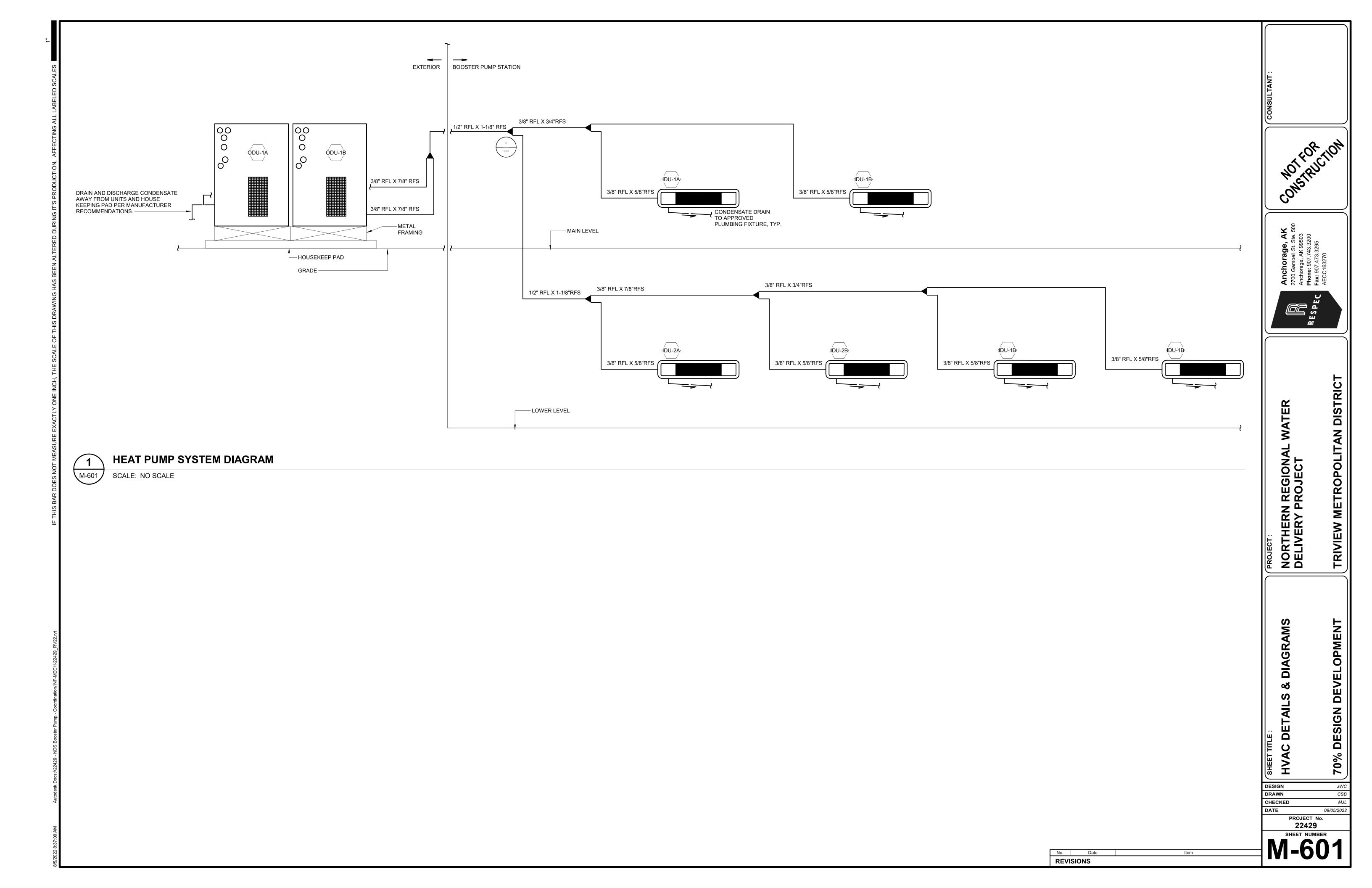
DESIGN
DRAWN
CHECKED
DATE

PROJECT No.
22429

SHEET NUMBER

M-10'

No. Date REVISIONS



	ABBREVIATIONS	DPDT	DOUBLE POLE DOUBLE THROW	LC	LIGHTING CONTACTOR	RLHT	RAIN LEADER HEAT TACE
(D)	DEMOLISH	DPF	DISTRIBUTION PANELBOARD, FUSED BRANCHES	LED	LIGHT EMITTING DIODE	RM	ROOM
(E)	EXISTING	DR	AUTOMATIC DOOR OPERATOR	LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT	RMC	RIGID METAL CONDUIT (HOT-DIPPED GALVANIZED)
(N)	NEW	DWG	DRAWING	LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT	RMS	ROOT MEAN SQUARED
(RN)	REPLACE EXISTING WITH NEW	E	EAST	LS	LIFE-SAFETY BRANCH (HEALTHCARE FACILITY)	ROW	RIGHT OF WAY
(S)	SALVAGE	EBJ	EQUIPMENT BONDING JUMPER	LSW	LIMIT SWITCH	RRHT	RAIN LEADER RELIEF HEAT TRACE
#	NUMBER	ECN	EXTRA CAPACITY NEUT (200%)	LTG	LIGHTING	S	SOUTH
+C	ABOVE COUNTER	EF	ELECTRONIC FLUSH/FAUCET	LV	LOW VOLTAGE	SCCR	SHORT CIRCUIT CURRENT RATING
+XX	DIMENSIONED HEIGHT XX INCHES AFF	EGB	EQUIPMENT GROUND BUS	MAN	MANUAL	SCP	SECURITY SYSTEM CONTROL PANEL
Α	AMPERES	EGC	EQUIPMENT GROUNDING CONDUCTOR	MAX	MAXIMUM	SD	FIRE/SMOKE DAMPER
AC	ALTERNATING CURRENT	EL	SWITCHED EMERGENCY LIGHT	мС	METAL-CLAD	SEC	SECONDARY
ADA	AMERICANS WITH DISABILITY ACT	EM	EMERGENCY	мсв	MAIN CIRCUIT BREAKER	SEP	SECURITY SYSTEM PANEL
AF	AMP FRAME	EMT	ELECTRICAL METALLIC TUBING	мсс	MOTOR CONTROL CENTER	SFB	SUB-FEED CB
AFF	ABOVE FINISHED FLOOR	ENT	ELECTRICAL NONMETALLIC TUBING	MCP	MOTOR CIRCUIT PROTECTOR	SFL	SUB-FEED DOUBLE LUGS
AFG	ABOVE FINISH GRADE	EOL	END OF LINE	MDH	MAGNETIC DOOR HOLDERS	SHT	SHEET (REFER TO DRAWING)
AIC	AMPS INTERRUPTING CAPACITY	EQ	EQUIPMENT BRANCH (HEALTHCARE FACILITY)	MECH	MECHANICAL	SLC	SIGNALING LINE CIRCUIT (FA INITIATING)
AL	ALUMINUM	ER	EMERGENCY RELAY (EM LIGHTING POWER TRANSFER)	MED	MEDIUM	SN	SOLID NEUTRAL
AMP	AMPERES	EST	ESTIMATED	MEZ	MEZZANINE	SPD	SURGE PROTECTION DEVICE
APPX	APPROXIMATE	FA	FIRE ALARM	МН	MANHOLE	SPDT	SINGLE POLE DOUBLE THROW
ARCH	ARCHITECTURAL	FAA	FIRE ALARM SYSTEM ANNUNCIATOR	MHD	METAL HALIDE	SPEC	SPECIFICATION
ASC	ABOVE SUSPENDED CEILING	FACU	FIRE ALARM CONTROL UNIT	MIN	MINIMUM	SPST	SINGLE POLE SINGLE THROW
АТ	AMP TRIP	FAIC	FIRE ALARM INTERFACE CABINET	MISC	MISCELLANEOUS	SR	SERIES RATED
ATS	AUTOMATIC TRANSFER SWITCH	FARA	FIRE ALARM REMOTE ANNUNCIATOR	MLO	MAIN LUGS ONLY	SS	STAINLESS STEEL, SOFT-START
AUX	AUXILIARY	FDN	FOUNDATION	MRCT	MULTI-RATIO CURRENT TRANSFORMER	SSBJ	SUPPLY-SIDE BONDING JUMPER
BCU	BARE COPPER WIRE	FG	FINISH GRADE	MTD	MOUNTED	STBY	STAND-BY
BFG	BELOW FINISHED GRADE	FLA	FULL LOAD AMPS	MTS	MANUAL TRANSFER SWITCH	STP	SHIELDED TWISTED PAIR
BLDG	BUILDING	FMC	FLEXIBLE METAL CONDUIT	MV	MEDIUM-VOLTAGE	SVD	SERVICE DISCONNECT
BPB	BRANCH-CIRCUIT PANELBOARD, CB BRANCHES	FO	FIBER OPTIC	N	NEUTRAL, NORTH	SW	SWITCH
BPF	BRANCH-CIRCUIT PANELBOARD, FUSED BRANCHES	FR	FULLY RATED	NAC	NOTIFICATION APPLIANCE CIRCUIT (FIRE ALARM)	SWBD	SWITCHBOARD
вѕмт	BASEMENT	FRC	FIBERGLASS RIGID CONDUIT	NC	NORMALLY CLOSED	SWD	SWITCHED
С	CONDUIT	FTL	FEED-THRU LUGS	NCA	NURSE CALL SYSTEM ANNUNCIATOR	SWGR	SWITCHGEAR
C/L	CENTERLINE	FU	FUSE	NCP	NURSE CALL SYSTEM CONTROL PANEL	SWN	SWITCHED NEUTRAL
CAM	CAMERA	GALV	GALVANIZED	NEC	NATIONAL ELECTRICAL CODE; NFPA 70	TBB	TELECOMMUNICATIONS BONDING BACKBONE CABLE
CAT	CATEGORY	GC	GENERAL CONTRACTOR	NECA	NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION	TEBB	TELECOMMUNICATIONS BACKBOARD
CATV	CABLE TELEVISION	GEC	GROUNDING ELECTRODE CONDUCTOR	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	TEL	TELEPHONE
СВ	CIRCUIT BREAKER	GFCI	GROUND-FAULT CIRCUIT INTERRUPTER (5mA)	NESC	NATIONAL ELECTRICAL SAFETY CODE	TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
CCTV	CLOSED CIRCUIT TELEVISION	GFPE	GROUND-FAULT PROTECTION OF EQUIPMENT (30mA)	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
CFOI	CONTRACTOR FURNISH OWNER INSTALL	GND	GROUND OR GROUNDED	NIC	NOT IN CONTRACT	TS	TERMINAL STRIP (DIN RAIL, ETC.)
CIRC	CIRCULATING	GRC	GALVANIZED RIGID STEEL CONDUIT (HOT-DIPPED)	NL	NIGHT LIGHT	TUP	TRIP UNIT POWER SUPPLY
CKT	CIRCUIT	нвн	HEADBOLT HEATER	NO	NORMALLY OPEN	TYP	TYPICAL
CL	CLASS	HDPE	HIGH-DENSITY POLYETHYLENE	NU	NURSE CALL	UG	UNDERGROUND
CLG	CEILING	НН	HANDHOLE	ос	ON CENTER	UL	UNDERWRITERS' LABORATORIES
CNDR	CONDUCTOR	HID	HIGH INTENSITY DISCHARGE (LAMP)	OD	OUTSIDE DIAMETER	UON	UNLESS OTHERWISE NOTED
СО	CARBON MONOXIDE	HPS	HIGH PRESSURE SODIUM	OFCI	OWNER FURNISHED CONTRACTOR INSTALL	UPS	UNINTERRUPTIBLE POWER SUPPLY
COAX	COAXIAL CABLE	НТ	HEAT TRACE	OFOI	OWNER FURNISHED OWNER INSTALL	USWD	UNSWITCHED CIRCUIT
COL	COLUMN	HV	HIGH VOLTAGE	Р	POLE	UTP	UNSHIELDED TWISTED PAIR
CR	CRITICAL BRANCH (HEALTHCARE FACILITY)	IBC	INTERNATIONAL BUILDING CODE	PA	PUBLIC ADDRESS	V	VOLTS
СТ	CURRENT TRANSFORMER	IBT	INTERSYSTEM BONDING TERMINATION	PAP	PUBLIC ADDRESS SYSTEM PANEL	VA	VOLT AMPERES
CTRL	CONTROL	ID	INSIDE DIAMETER	PC	PHOTOELECTRIC CONTROL/SWITCH	VAR	VOLT-AMPS REACTIVE
CU	COPPER	IDC	INITIATING DEVICE CIRCUIT	PCP	PUBLIC ADDRESS SYSTEM CONTROL PANEL	VEST	VESTIBULE
DC	DIRECT CURRENT	IES	ILLUMINATING ENGINEERING SOCIETY	PF	POWER FACTOR	VFD	VARIABLE FREQUENCY DRIVE
	DEGREES CELSIUS	IFC	INTERNATIONAL FIRE CODE	PH	PHASE		WATT, WEST or WIRE
DEGF	DEGREES FAHRENHEIT	IG	ISOLATED GROUND	PNL	PANEL(BOARD)	W/	WITH
DG	DIESEL GENERATOR	IGB	ISOLATED GROUND BUS	PR	PAIR	W/0	WITHOUT
	DIAMETER	IGC	ISOLATED GROUND CONDUCTOR	PRI	PRIMARY	WH	WATTHOUR
DIM	DIMENSION		INTERMEDIATE METALLIC CONDUIT	PS	PRESSURE SWITCH	WP	WEATHERPROOF
	DISCONNECT		INCANDESCENT	_	POTENTIAL TRANSFORMER	хс	AUXILIARY CONTACT
	DISTRIBUTION	JB	JUNCTION BOX		POLYVINYL CHLORIDE CONDUIT	_	TRANSFER
DIV	DIVERSITY	JCN	JACKETED CONCENTRIC NEUTRAL (CABLE)		RECEPTACLE	_	TRANSFORMER
DIV	DIVISION	ко	KNOCKOUT	+	ROOF DRAIN HEAT TRACE	XP	EXPLOSION PROOF
DP	DISTRIBUTION PANELBOARD	KVA	KILOVOLT AMPERES		REQUIRED	xPyT	x POLE y THROW (x and y indicate quantity)
DPB	DISTRIBUTION PANELBOARD, CB BRANCHES	L	LINE		REVISION, REVERSE		NOT ALL ABBREVIATIONS ARE USED
	ı		1		ı		

	LED LUMINAIRE, 1'X4', UON
ЮН	LED STRIP FIXTURE, INDUSTRIAL, 4', UON.
모	EXTERIOR BUILDING LIGHT, WALL MTD.
1⊗1	WALL MOUNTED EXIT FIXTURE, ARROW AS INDICATED, TYPE E
⊗	CEILING MOUNTED EXIT FIXTURE, TYPE E
₩	WALL MOUNTED, BATTERY OPERATED EMERGENCY FIXTURE, TYPE EM
	EMERGENCY EGRESS LIGHT
●- ∳- DSA	POLE MOUNTED FIXTURE OCCUPANCY SENSOR, TYPE A COVERAGE; OSB, OSC, OSD FOR B, C, D
059	OCCUPANCY SENSOR WALL SWITCH
S	SINGLE POLE SWITCH
S ₂	DOUBLE POLE SWITCH
S ₃	THREEWAY SWITCH
S ₄	4 - WAY SWITCH
Sa	SWITCH FOR FIXTURES MARKED "a"
S _D	DIMMER SWITCH
SG	GLOW IN OFF POSITION SWITCH
S _K S _P	KEYED SWITCH PILOT LIGHT SWITCH
S _M	MOTOR-STARTING SWITCH, WITHOUT OVERLOAD PROTECTION
SM _{XX}	MOTOR-STARTING SWITCH (for misc designation; HT, DDC, etc)
S _{Xx}	SWITCH (for misc designation; S3a, S3b, etc)
0	PUSHBUTTON SWITCH
•	EMERGENCY STOP SWITCH
\ominus	SINGLE RECEPTACLE
\rightarrow	DUPLEX RECEPTACLE
⊕-	DOUBLE DUPLEX RECEPTACLE
<u> </u>	GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) DUPLEX RECEPTACLE
-	GFCI DOUBLE DUPLEX RECEPTACLE (TWO EACH GFCI RECEPTACLES)
₽	DUPLEX RECEPTACLE W/ ISOLATED GROUND SWITCHED RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE; Nema Type As Shown
0	JUNCTION BOX
M	MOTOR
	MANUAL CONTROLLER, WITH OVERLOAD PROTECTION
	MAGNETIC MOTOR STARTER OR VFD AS NOTED
\square	COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT
라	DISCONNECT SWITCH NON-FUSED
F	DISCONNECT SWITCH FUSED
빵	ENCLOSED CIRCUIT BREAKER
	MAGNETIC CONTACTOR METER SOCKET
	PANELBOARD
	MISC PANEL
	BRANCH CIRCUIT HOME RUN TO PANELBOARD; NO. OF ARROWS
	INDICATES NUMBER OF CIRCUITS, PANEL AND CIRCUIT NUMBERS AS SHOWN
4.6	NUMBER OF CONDUCTORS IN RACEWAY; ABSENCE OF MARKS
7/11/	NUMBER OF CONDUCTORS IN RACEWAT; ABSENCE OF MARKS INDICATES TWO CONDUCTORS AND EQUIPMENT GROUNDING CONDUCTOR, EGC IN ALL RACEWAYS. EQUIPMENT GROUNDING CONDUCTOR INDICATED.\(^2\)
T)	THERMOSTAT
	TELECOMMUNICATIONS OUTLET [TELEPHONE OUTLET]
	TELECOMMUNICATIONS OUTLET FLOOR BOX [TELEPHONE OUTLET]
	TELECOMMUNICATIONS OUTLET
	TELECOM. OUTLET (see Telecommunication Faceplate Schedule)
	COMPUTER OUTLET (NUMBER OF JACKS INDICATED, TYPE RJ-45)
	2 TELEPHONE & 2 COMPUTER JACKS, TYPE RJ-45
÷	GROUNDING ELECTRODE CONNECTION
1 (1)	
	HARD-WIRED EQUIPMENT CONNECTION NOT ALL SYMBOLS ARE USED

		BRANC	H CIRCUI	T CONDU	CTOR SCH	IEDULE			
		VOL	TS / AW	G / M/	AXIMUM C	NE-WAY	CIRCUIT	LENGTH (FT.)
C.B. OR FUSE (AMPS)	MAX. LOAD (AMPS)		120 \	/OLTS			277 '	VOLTS	
<u> </u>	, ,	#12	#12 #10		#6	#12	#10	#8	#6
20	16	66	102	161	250	153	236	371	-
25	20	-	82	129	200	-	189	297	-
30	24	-	68	107	167	-	157	247	385
35	28	_	-	92	143	-	_	212	330
40	32	_	_	80	125	-	_	185	289
45	36	-	-	71	111	-	_	165	256
50	40	_	_	64	100	_	_	148	231
60	48	-	_	_	83	_	-	-	192

	LUMINAIRE SCHEDUL	E						
TYPE	DESCRIPTION	LAMP	MANUF.	MOUNT.	CAT. NO.	VA	LUM.	COLOR (K)
Α	ONE-PIECE FIBERGLASS HOUSING, HIGH IMPACT RESISTANT, UV STABILIZED, CLEAR POLYCARBONATE DIFFUSER W/ CLOSED CELL GASKET, MEDIUM DISTRIBUTION, 10 kV SURGE SUPPRESSOR, WET LOCATION END FITTINGS, SUITABLE FOR HOSE DOWN, FURNISHED W/ PHOTOCONTROL. DIMMABLE DRIVER IS FACTORY PROVIDED BUT NOT REQUIRED FOR THIS APPLICATION. 120 V.	LED	LITHONIA	SURFACE CEILING	FHE L24 9000LM PCL MD MVOLT GZ10 50K 80 CRI SPD WLFEND2	59	9623	5000
В	WALL PACK, FULL CUTOFF OPTICS, CAST ALUMINUM, WEATHER SEALED HOUSING, PROTECTIVE GLASS LENS W/ GASKET, INTEGRAL SURGE PROTECTION & PHOTO CONTROL, 120 V.	LED	COOPER	OUTDOOR SURFACE WALL	XTOR1B W PC1	12	1396	4000
EG	EMERGENCY EGRESS LIGHT, SINGLE LAMP HEAD, DIE-CAST LAMP HEAD HOUSING, W/ SELF-CONTAINED BATTERY, UL WET LOCATION LISTED, DARK BRONZE, 120 V.	LED	LITHONIA	OUTDOOR SURFACE WALL	ELMRW LP220L DDBTXD SGL ELM2LLTP	1.2	110	N/A
EM	EMERGENCY LIGHT W/ SELF-CONTAINED NI-CAD BATTERY & CHARGER, NEMA 4X, STAINLESS STEEL HARDWARE & FASTENERS, 15 W TWIN, ADJUSTABLE AIM, LAMP HEADS, MIN. 90 MIN. SERVICE ON SINGLE BATTERY CHARGE, ADVANCED DIAGNOSTICS, 120 V.	LED	EMERGI-LITE	SURFACE WALL	12HPN402L15D	30	NA	N/A
EX	ILLUMINATED EXIT SIGN W/ FULLY GASKETED, HIGH IMPACT RESITANT, POLYCARBONATE FACEPLATE AND ALUMINUM HOUSING. 6-INCH HIGH, RED CHARACTERS, WATER PROOF, SELF-CONTAINED BATTERY BACKUP. 120 V	LED	EMERGI-LITE	SURFACE WALL OR CEILING	GG SVXNHZ 1 R D	2	N/A	N/A

SYMBOLS

S540 TECH CENTER DR., SUITE 100 (719) 227-0072

NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT

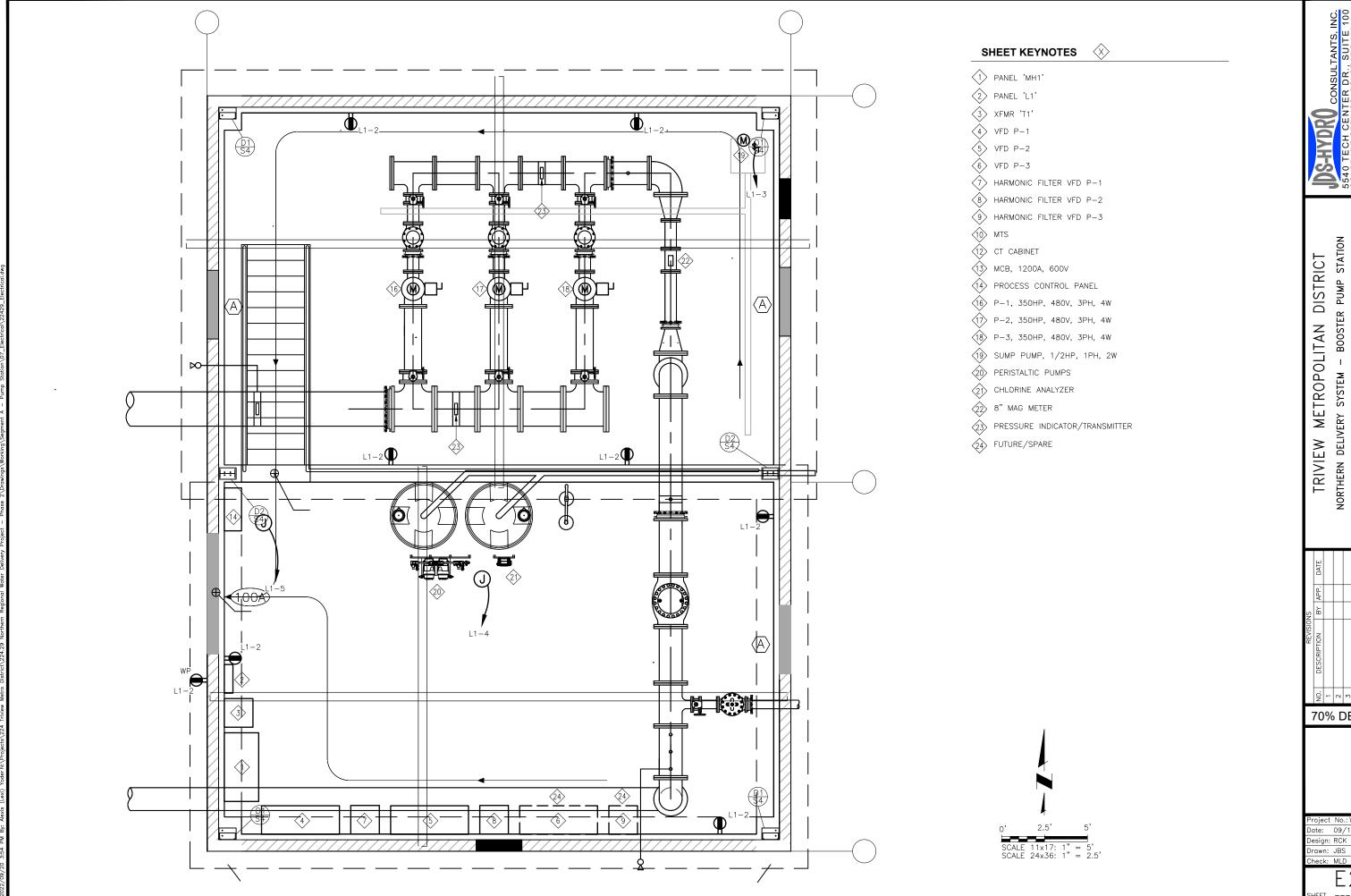
SYMBOLS LEGEND & SCHEDULES

	DATE							
	BY APP.							
S	ВУ							
REVISIONS	DESCRIPTION							
	ON	1	2	3	4	2	9	7

70% DESIGN

Project No.: W224.210 Date: 09/12/22 Design: RCK Drawn: JBS

Check: MLD E 1



PLAN

POWER

ELECTRICAL

70% DESIGN

ate: 09/12/22

esign: RCK

SHEET NOTES

1. CONNECT TYPES 'EG', 'EM' AND 'EX' LUMINAIRES TO NON-SWITCHED LIGHTING CIRCUIT.

	LIGHTING SYMBOLS
	SURFACE LUMINAIRE, 1'x4
-	WALL MOUNTED LUMINAIRE
▼	WALL MOUNTED EXIT SIGN, ARROW AS INDICATED, TYPE E1
4	WALL MOUNTED EMERGENCY LIGHTING UNIT, TYPE EM1

- BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT

NORTHERN DELIVERY SYSTEM

ELECTRICAL LIGHTING PLAN

70% DESIGN

Date: 09/12/22 Design: RCK awn: JBS

eck: MID E3

2.5 SCALE 11×17: 1" = 5' SCALE 24×36: 1" = 2.5'

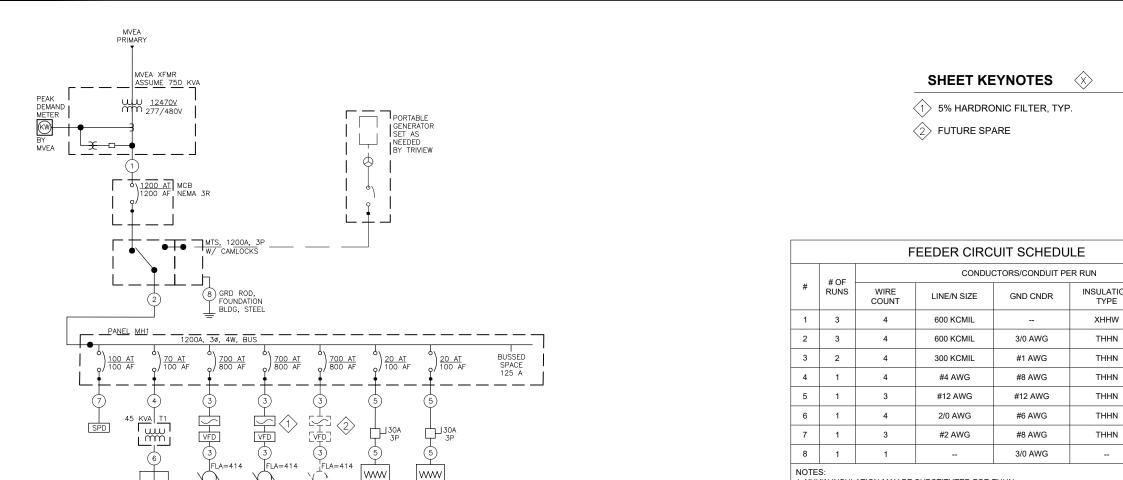
SCHEDULES

ઝ

ONE-LINE DIAGRAM

neck: MID





8 NOTES:

7

- 1. XHHW INSULATION MAY BE SUBSTITUTED FOR THHN.
- 2. ALL CONDUIT SHALL BE RMC, UON.
 3. AT CONTRACTOR'S DISCRETION, IMC MAY BE SUBSTITUTED FOR RMC WHERE NOT PROHIBITED

#8 AWG

3/0 AWG

#2 AWG

IN THESE DOCUMENTS, AND AS ALLOWED IN THE NEC.

3

TRIVIEW	NDS	PUMP	STATION	ONE-LINE	DIAGRAM
			N.T.S.		

(3)

|www|

12.5 KW

|www|

TFI A=414

P-2 350 HP

6

PANEL L1 175A MCB

	VOLTAGE: BUS AMPS: MAIN:	800	3PH, 4W				SF				ENCLOSURE: NEMA 1 MOUNTING: SUFFACE LOCATION: FILECTRIC ROOM		
СКТ	AMPS	FRAME	POLES	TRIP		FEAT	URES				CAR DESCRIPTION NOTE CONNECTED VA	7 0 4 0 3 0 7 3 7 7 0 7	
1	125	150	3	MTM				1	DANIEL DO	DD 11 11		7	
2	700				<u> </u>								
3	700						MIN AIC RATING: 25,000 MOUNTING: SURFACE LOCATION: ELECTRIC ROOM TURES LOAD DESCRIPTION PANELBOARD 'L1' PANELBOARD 'L1'						
4	700				<u> </u>							MOUNTING: SURFACE LOCATION: ELECTRIC ROOM	
5	20				<u> </u>								
6	20	100	3	MET	i i								
7	70	100	3	MET	1						15500 15500 15500	A PH C LOAI 1200 7 114680 4 114680 7 4167 3 4267 7 15500 7	
8	100	100	3	MET					SURGE SU	PPRESSO	R 'SPD'		
9													
OODE	SUMMARY A DEFINITION LIGHTING	IS			PH A	CONNEC PH B						JMPS	
2	RECEPTA	CLES =							10K+50%		WILL BE ALLOWED TO OPERATE AT ANY TIME.		
3	MOTORS :	:			118.8	118.8	118.8	356.5	100%	356.5			
4	LARGEST	MOTOR =			114.7	114.7	114.7	344.0	125%	430.1			
5		DO 800 3 MET 1 PUMP P-1, 350 HP 114680 11											
6	MISC. CON	SUOUNITI	-						125%				
7		ICIDENTAL	=		137.0	136.0	135.6	408.7					
8	SPARE =												
9	OTHER =								100%				
	KVA (PHAS	SE)			□ 3/0.5	369.6	369.2	1109.2		/86.6			
		,			4007.0	4000 5	4000 4	40040		0404			

					P/	NEL	В	DAF	RD	'L1	١.									
	VOLTAGE: 208Y/120V, 3PH, 4V	V			SPEC	IFICAT	101	1 TYF	E:	BPE	3						ENC	LOSUR	E: NEMA 1	
	BUS AMPS: 225					MIN AI	CR	ATIN	IG:	10,0	000						MO	UNTING	S: SURFACE	
	MAIN: MCB: 225 A						CIF	RCUI	TS:	42							LC	CATION	N: ELECTRIC ROOM	
LOAD	LOAD DESC	CRIPTION		NOTE	VA	AMP	Р	СКТ	PH	IASE	CH	(T F	۰,	AMP	VA	NOTE LOAD DESCRIPTION				
1	LIGHTING				1200	20	1	1	A		2	1		20	1440		RECEPTA	CLES		5
3	SUMP PUMP, 1/2 HP				1176	20	1	3		В	4	. 1		15	500		PERISTAL	TIC PM	PS & CHLORINE ANAL.	6
6	PLC CABINET				1000	15	1	5		- 0	6	1		20	200		8" MAG M	ETER		8
8	SPARE					20	1	7	Α		8	1		-			SPARE			
	SPACE W/ HARDWARE					-	1	9	П	В	10) 1		- 1			SPACE W	/HARD	WARE	
						-	1	11			12	2 1	П	-					н	
						-	1	13	A		14	4 1		-						
						-	1	15		В	16			-						
						-	1	17	П	- 0				- 1					н	
							_													
LOAD	SUMMARY AND	CC	NNECTED K	VA				N	EC	Т										
ODE	DEFINITIONS	PH A	PH B	PH C	TOTAL	% DI	V	TOTAL		_	ЮТЕ	ES:								
1	LIGHTING =	1.2			1.2	125%		1	1.5											
2	RECEPTACLES =					10K+5	0%			\top										
3	MOTORS =		1.2		1.2	100%		1	1.2	\top										
4	LARGEST MOTOR =					125%				$^{+}$										
5	MISC. NON-CONTINUOUS =	1.4			1.4	100%		1	1.4	$^{+}$										
6	MISC. CONTINUOUS =		0.5	1.0	1.5	125%		1	1.9	\top										
7	NON-COINCIDENTAL =			1		0%														
8	SPARE =			0.2	0.2	100%		1	0.2	\top										
9	OTHER =					100%				\top										
TOTAL	KVA (PHASE)	2.6	1.7	1.2	5.5			6	3.2	\top										
	AMPERES	22.0	14.0	10.0	15.3			1	7.2	\top										

DIAMETER

3-1/2"

4"

3"

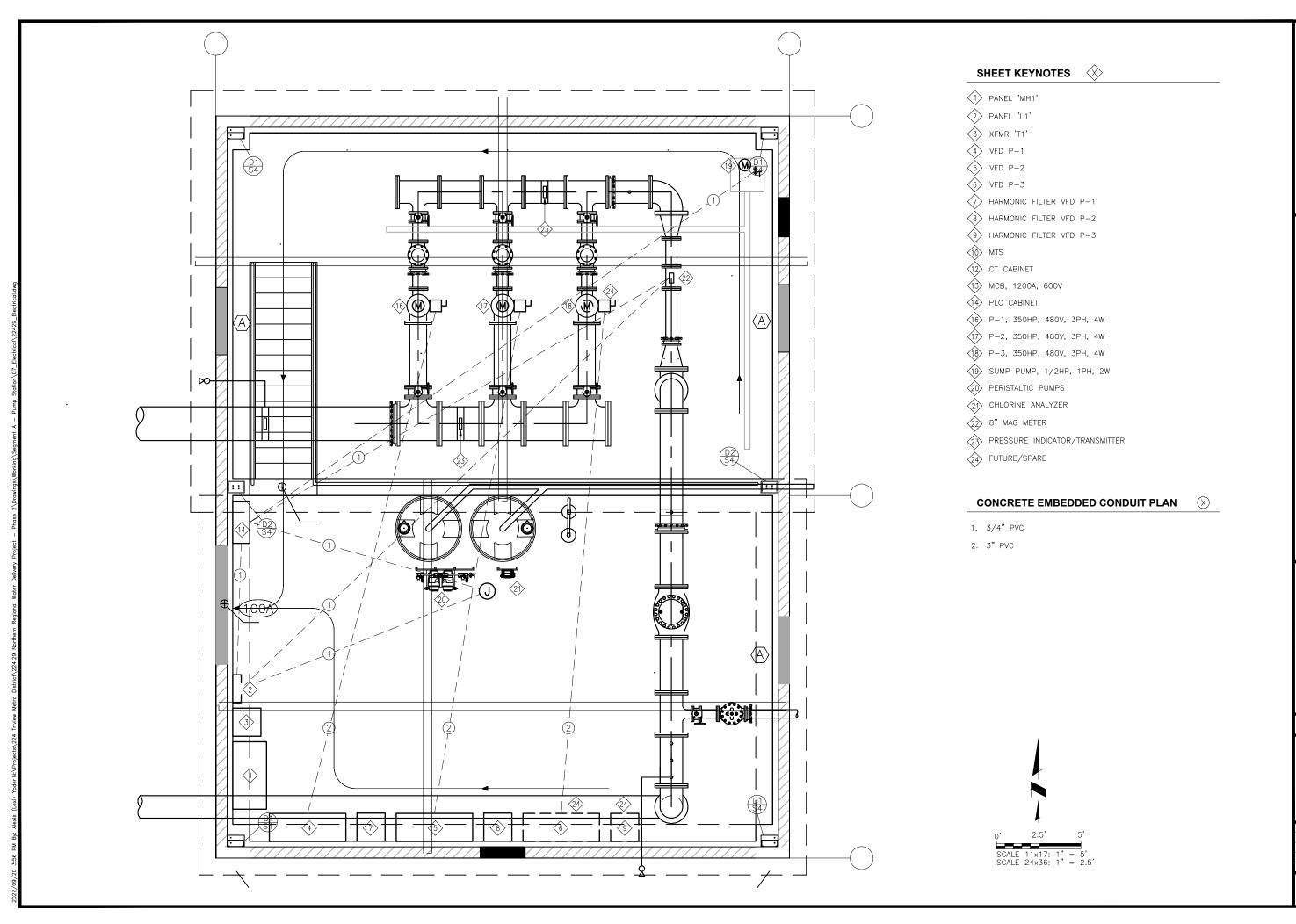
1-1/4"

1/2"

2"

1-1/4"

THHN



NORTHERN DELIVERY SYSTEM - BOOSTER PUMP STATION TRIVIEW METROPOLITAN DISTRICT ELECTRICAL CONCRETE EMBEDDED
CONDUIT PLAN

70% DESIGN

ate: 09/12/22

esign: RCK rawn: JBS

eck: MID E5