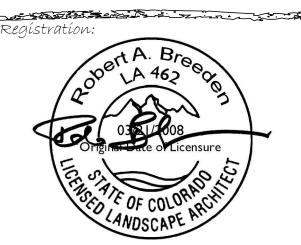
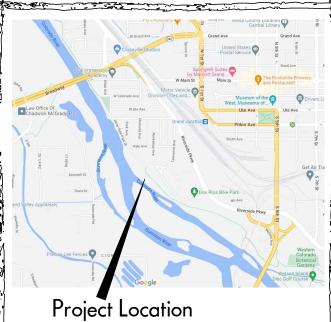


PARCEL NUMBER: 2945-221-23-002 OWNER: CITY OF GRAND JUNCTION ADDRESS: 901 DOS RIOS CT GRAND JUNCTION, CO 81501







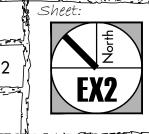
**EX1/EX2-Existing Conditions** 

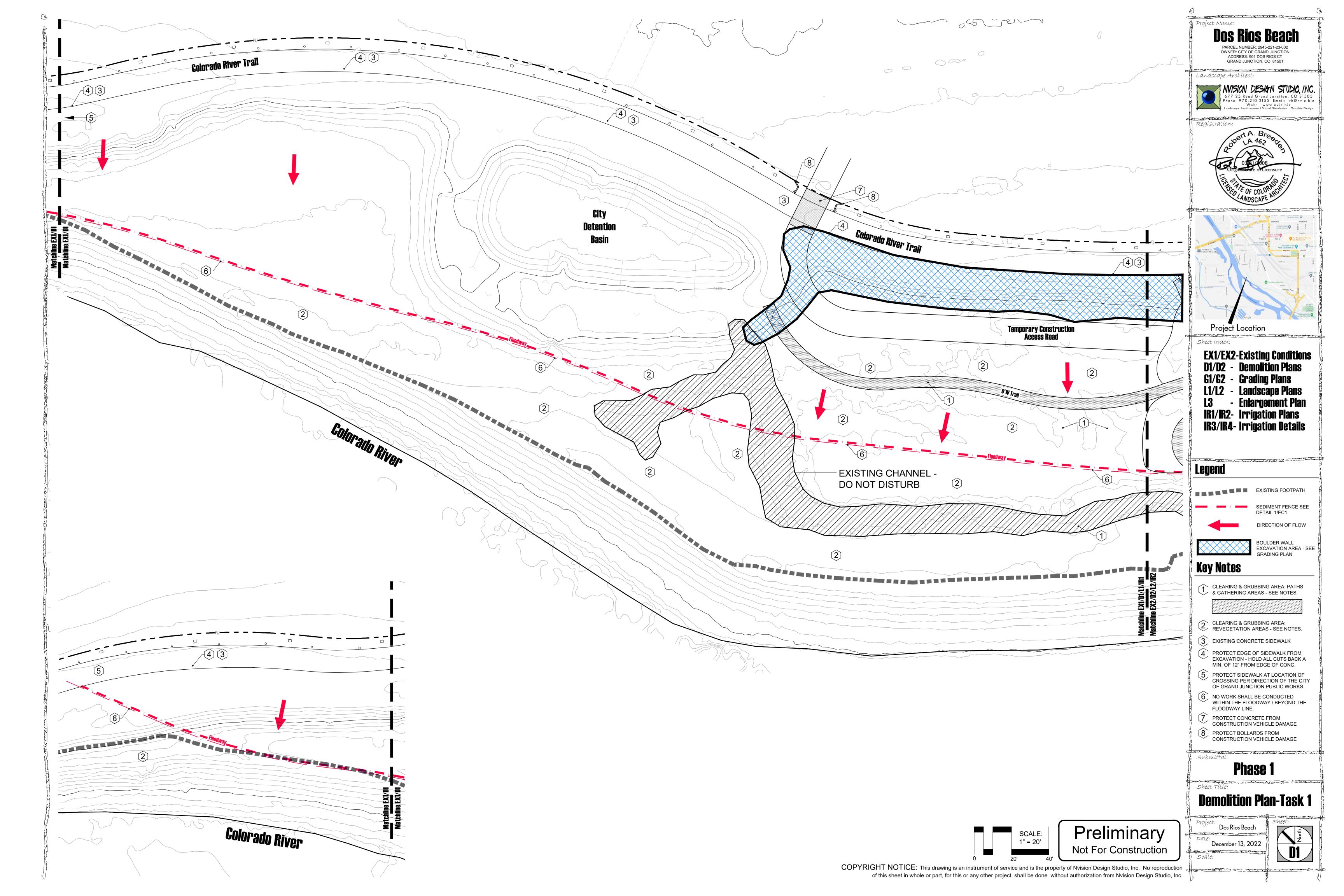
**IR1/IR2-** Irrigation Plans **IR3/IR4- Irrigation Details** 

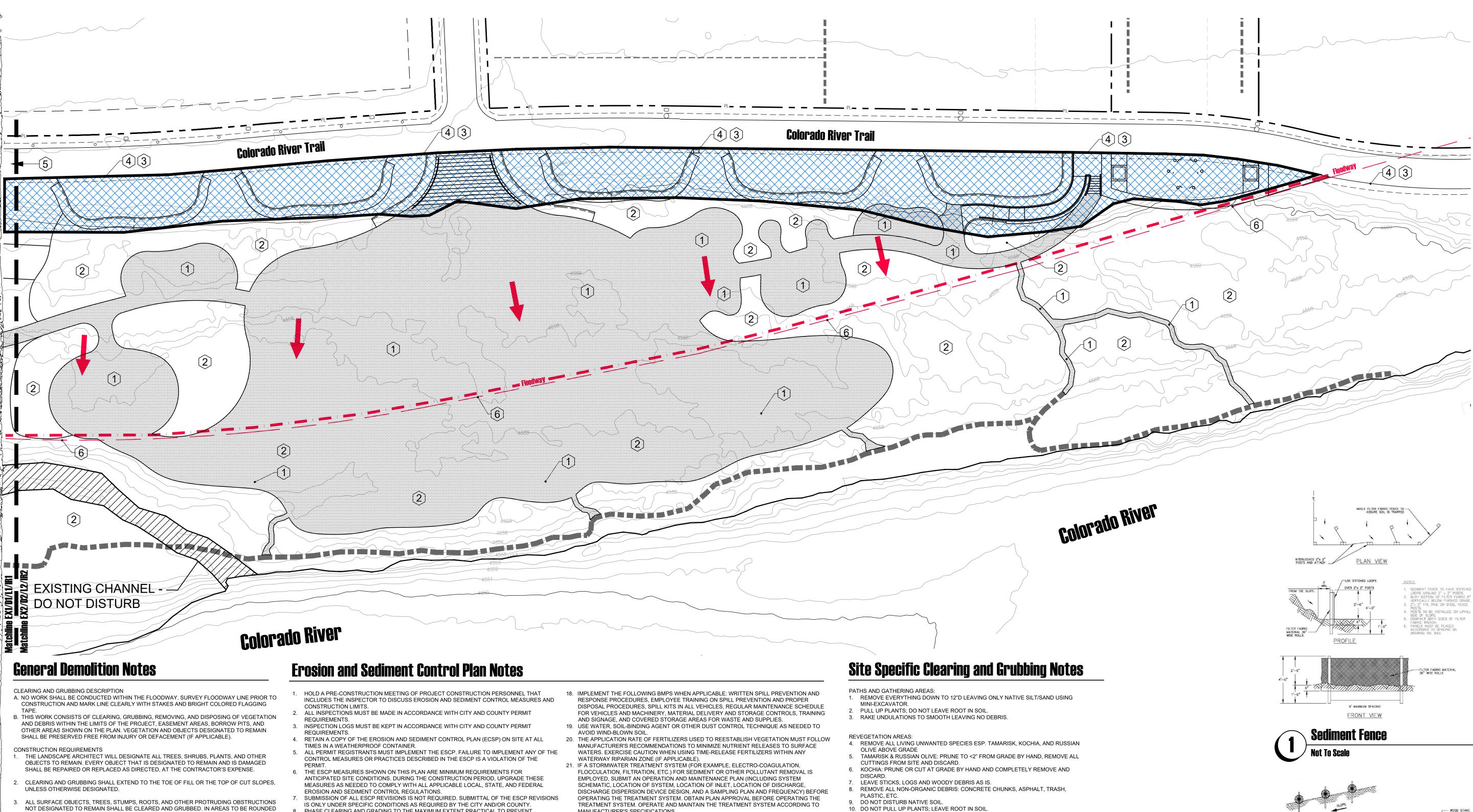
Phase 1

Submittal:

Sheet Title: **Existing Conditions** 







NOT DESIGNATED TO REMAIN SHALL BE CLEARED AND GRUBBED. IN AREAS TO BE ROUNDED AT THE TOPS OF BACKSLOPES, STUMPS SHALL BE REMOVED TO AT LEAST 2 FEET BELOW THE SURFACE OF THE FINAL SLOPE LINE.

4. EXCEPT IN AREAS TO BE EXCAVATED, ALL HOLES RESULTING FROM THE REMOVAL OF OBSTRUCTIONS SHALL BE BACKFILLED WITH NATIVE SOIL AND COMPACTED TO MATCH THE NATIVE CONDITION.

BURNING OF PERISHABLE MATERIAL WILL NOT BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE CITY OF GRAND JUNCTION FIRE DEPARTMENT, IF PERMITTED. PERISHABLE MATERIAL SHALL BE BURNED UNDER THE CONSTANT CARE OF THE CONTRACTOR, AT TIMES AND IN A MANNER THAT WILL NOT ENDANGER THE SURROUNDING VEGETATION, ADJACENT PROPERTY, OR OBJECTS DESIGNATED TO REMAIN. BURNING SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE LAWS AND ORDINANCES.

NO MATERIAL OR DEBRIS SHALL BE DISPOSED OF WITHIN THE PROJECT LIMITS WITHOUT THE WRITTEN PERMISSION OF THE CITY OF GRAND JUNCTION. MATERIAL OR DEBRIS THAT IS DISPOSED OF WITHIN THE PROJECT LIMITS SHALL BE BURIED TO A DEPTH OF AT LEAST 2 FEET AND THE SURFACE SHALL BE RESHAPED TO MATCH THE ADJACENT GROUND LINE. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS TO OBTAIN WRITTEN PERMISSION FROM PROPERTY OWNERS FOR DISPOSAL LOCATIONS OUTSIDE THE LIMITS AND VIEW OF THE PROJECT. COPIES OF THIS WRITTEN AGREEMENT SHALL BE FURNISHED TO THE LANDSCAPE ARCHITECT BEFORE THE DISPOSAL AREA IS USED.

ALL CLEARED MERCHANTABLE TIMBER SHALL BE REMOVED FROM THE PROJECT AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

BRANCHES ON TREES OR SHRUBS SHALL BE REMOVED AS DIRECTED. BRANCHES OF TREES EXTENDING OVER THE ROADBED SHALL BE TRIMMED TO GIVE A CLEAR HEIGHT OF 20 FEET ABOVE THE ROADBED SURFACE. ALL TRIMMING SHALL BE DONE IN ACCORDANCE WITH GOOD TREE PRUNING PRACTICES.

THE CONTRACTOR SHALL CLEAR AND GRUB THE AREAS WITHIN THE EXCAVATION OR EMBANKMENT GRADING LIMITS AND SHALL INCLUDE THE REMOVAL FROM THE GROUND OF BRUSH, ROOTS, SOD, GRASS, RESIDUE OF AGRICULTURAL CROPS, SAWDUST, AND OTHER VEGETABLE MATTER.

- 8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION.
- 9 IDENTIFY MARK AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES. AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS.
- 10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE DISTURBED AREAS. RE-VEGETATE DISTURBED AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX OR OTHER LANDSCAPE TREATMENT TO BE USED AND NOTIFY THE PLAN PREPARER PRIOR TO INSTALLATION. 11. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED. REPAIRED. AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS.
- 12. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. 13. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON
- ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. 14. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS
- 15. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED EXITS AND PARKING AREAS), GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMP'S MUST BE IN PLACE PRIOR TO I AND-DISTURBING ACTIVITIES
- 16. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS INTO AN APPROVED CONTAINED AREA PRIOR TO TRANSPORT. 17. USE BMP'S TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES: AND WASTE HANDLING ACTIVITIES. THESE POLITICANTS INCLUDE FUEL. HYDRAULIC FLUID. AND OTHER OILS FROM VEHICLES AND MACHINERY. AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION

## **Pre-Construction Notes**

- ALL BASE ESC MEASURES (INLET PROTECTION PERIMETER SEDIMENT CONTROL GRAVEL CONSTRUCTION ENTRANCES, ETC. ) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION
- SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS, CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW
- WATTLES, OR OTHER APPROVED MATERIALS. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- 4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT, ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION
- RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION

- MANUFACTURER'S SPECIFICATIONS.
- 22. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED, THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR.
- 23. AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMP'S MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. 24. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE
- GROUND DURING WET WEATHER 25. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. 26. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL.
- 27. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF

28. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST

- BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED IMMEDIATELY. 29. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS.
- 30. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. 31 PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE
- CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY

**Final Stabilization Notes** 

BE DETERMINED BY LOCAL INSPECTOR.

AND SIX INCHES.

1 APPLY PERMANENT SEEDING WHEN NO FURTHER DISTURBANCES ARE PLANNED

MANUFACTURERS RECOMMENDATIONS. CULTIVATE EXISTING BEFORE SEED APPLICATION, ROUGHEN THE SURFACE WITH FURROWS PARALLEL WITH SLOPE

CONTOURS AND LOOSEN THE SOIL TO A DEPTH BETWEEN THREE

RE-SEED ALL DISTURBED LAWN AREAS WITH NATIVE SEED MIX, APPLICATION RATE PER

BEFORE TERMINATION OF PERMIT COVERAGE, ALL SOIL DISTURBANCE ACTIVITIES MUST

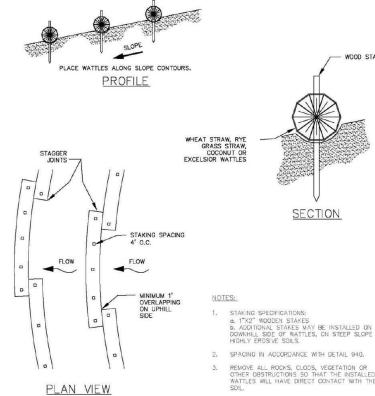
BE COMPLETE AND THE SITE MUST HAVE UNDERGONE FINAL STABILIZATION (NO BARE

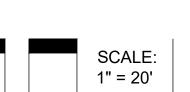
EROSION AND SEDIMENT CONTROLS MUST HAVE OCCURRED. FINALSTABILIATION WILL

SOIL, VEGETATION IS ESTABLISHED). REMOVE AND DISPOSE OF ALL TEMPORARY

# **Construction Notes**

- 1. CONSTRUCTION ENTRANCE INSTALLED AFTER DEMOLITION OF EXISTING ASPHALT (IF APPLICABLE). DISCHARGE FROM COVERED TEMPORARY STOCKPILE WILL BE CONTROLLED USING
- SEDIMENT BARRIERS AROUND PERIMETER. PIPE TRENCHING WILL BE COMPLETE IN PHASES WITH APPROXIMATELY 100 LINEAR FEET OF EXCAVATION AND BACKFILL PER DAY. TEMPORARY SEDIMENT BARRIERS TO BE IN PLACE, BEFORE TRENCHING, ALONG ROADWAY TO PROTECT DRAINAGE DITCHES DURING





Not For Construction

Dos Rios Beach de contraction de la contracti December 13, 2022 

OWNER: CITY OF GRAND JUNCTION ADDRESS: 901 DOS RIOS CT GRAND JUNCTION, CO 8150<sup>-</sup>

Project Location

**EX1/EX2-Existing Conditions** 

**IR1/IR2- Irrigation Plans** 

IR3/IR4- Irrigation Details

- Commence of the commence of

EXISTING FOOTPATH

CLEARING & GRUBBING AREA: PATHS

& GATHERING AREAS - SEE NOTES.

REVEGETATION AREAS - SEE NOTES.

4 PROTECT EDGE OF SIDEWALK FROM

MIN. OF 12" FROM EDGE OF CONC.

5 PROTECT SIDEWALK AT LOCATION OF

6 NO WORK SHALL BE CONDUCTED

FLOODWAY LINE.

7 PROTECT CONCRETE FROM

8 PROTECT BOLLARDS FROM

EXCAVATION - HOLD ALL CUTS BACK A

CROSSING PER DIRECTION OF THE CITY

OF GRAND JUNCTION PUBLIC WORKS.

WITHIN THE FLOODWAY / BEYOND THE

CONSTRUCTION VEHICLE DAMAGE

CONSTRUCTION VEHICLE DAMAGE

The state of the s

and the state of t

**Demolition Plan-Task 1** 

and the same of th

CLEARING & GRUBBING AREA:

(3) EXISTING CONCRETE SIDEWALK

**Key Notes** 

SEDIMENT FENCE SEE

DIRECTION OF FLOW

**EXCAVATION AREA - SEE** 

DETAIL 1/EC1

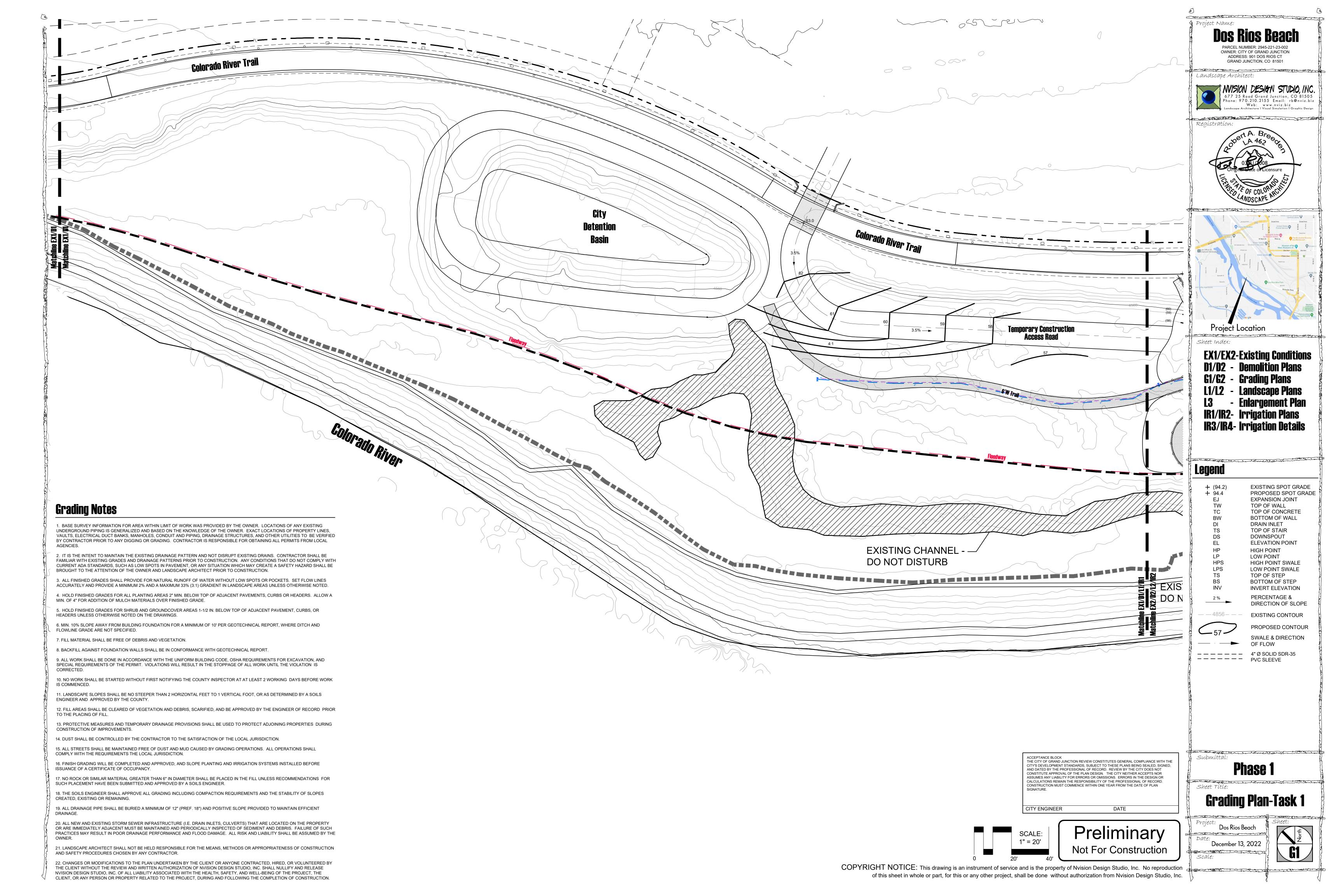
BOULDER WALL

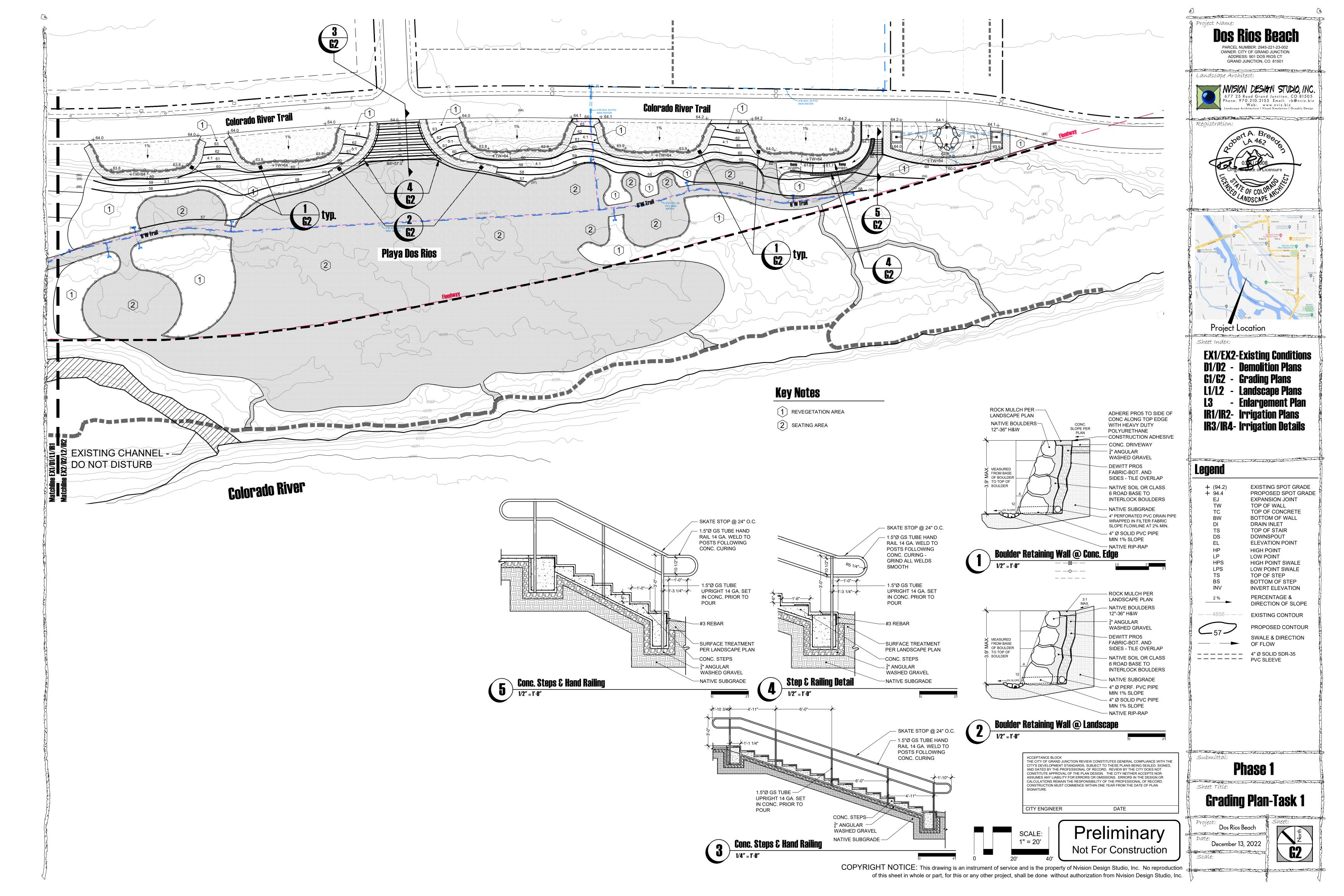
**GRADING PLAN** 

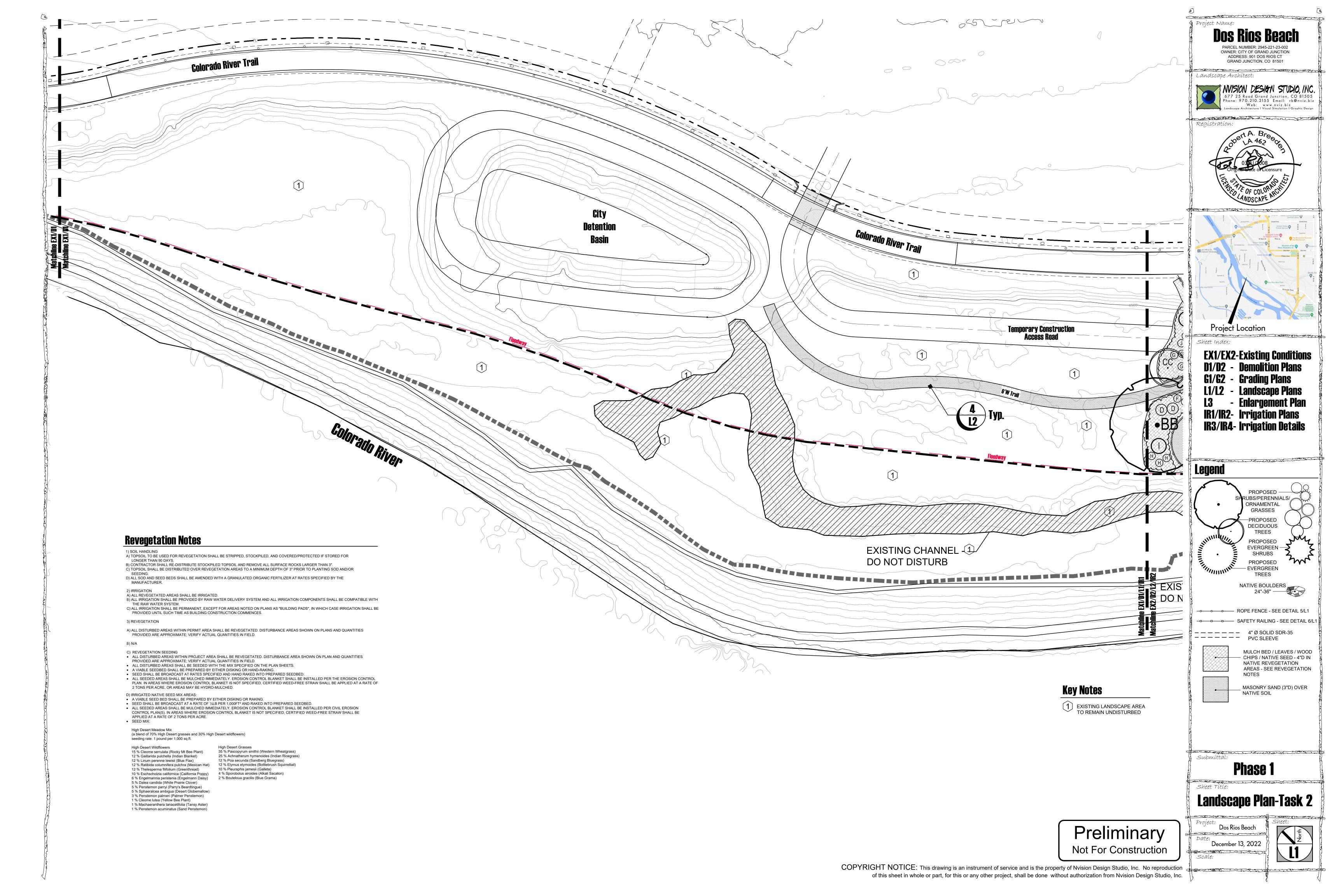
70.210.2155 Email: rb@nviz.bi

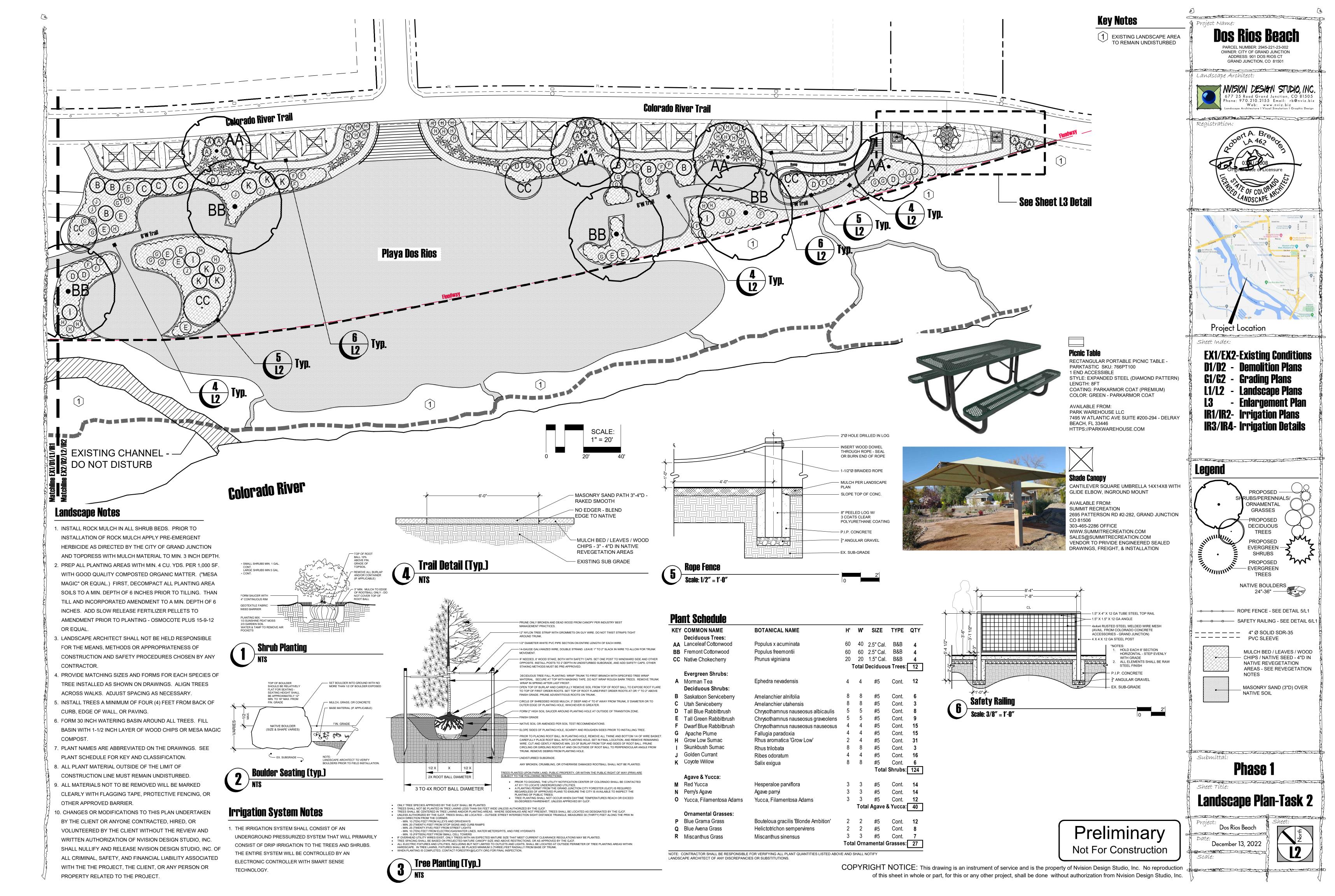


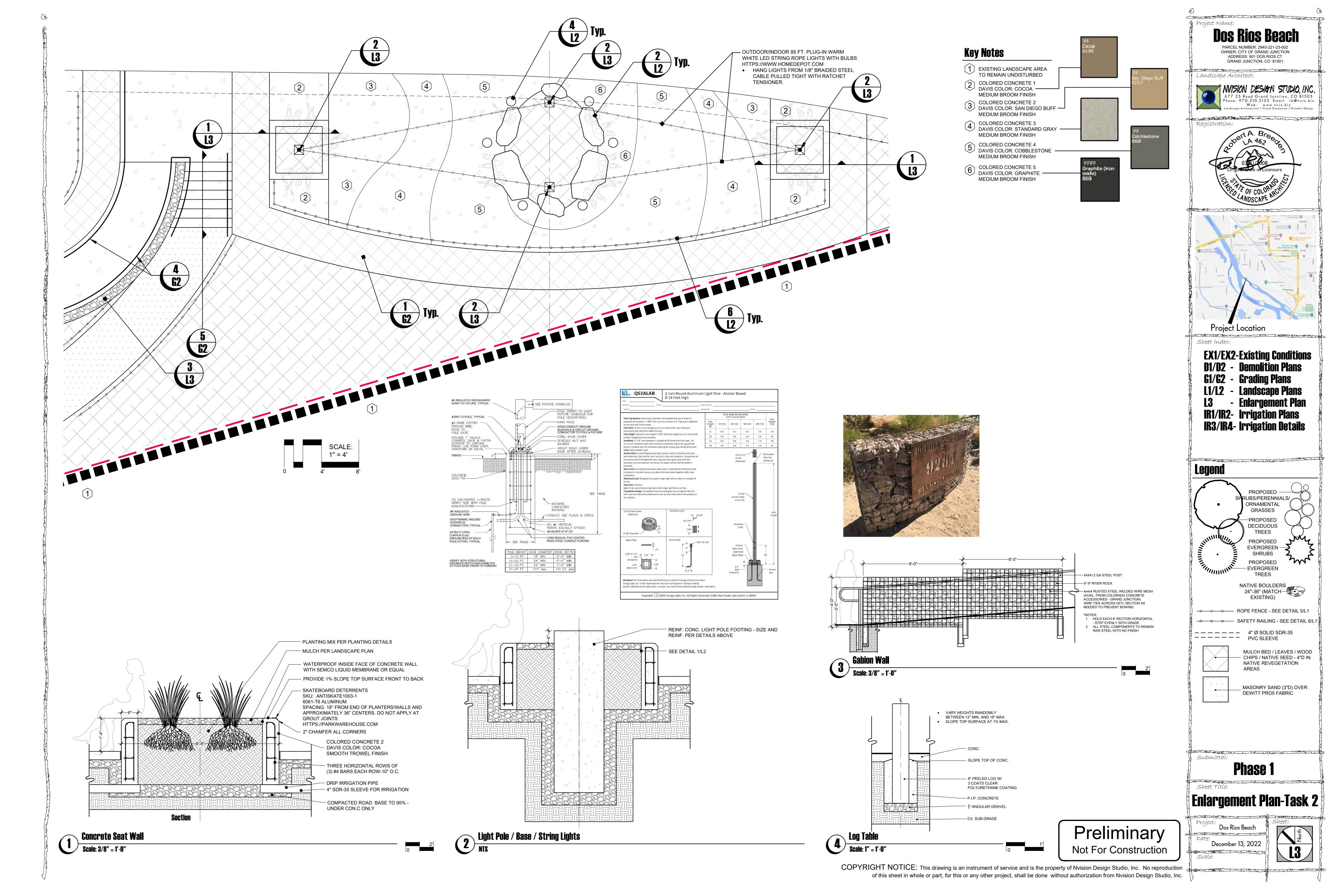
COPYRIGHT NOTICE: This drawing is an instrument of service and is the property of Nvision Design Studio, Inc. No reproduction of this sheet in whole or part, for this or any other project, shall be done without authorization from Nvision Design Studio, Inc.

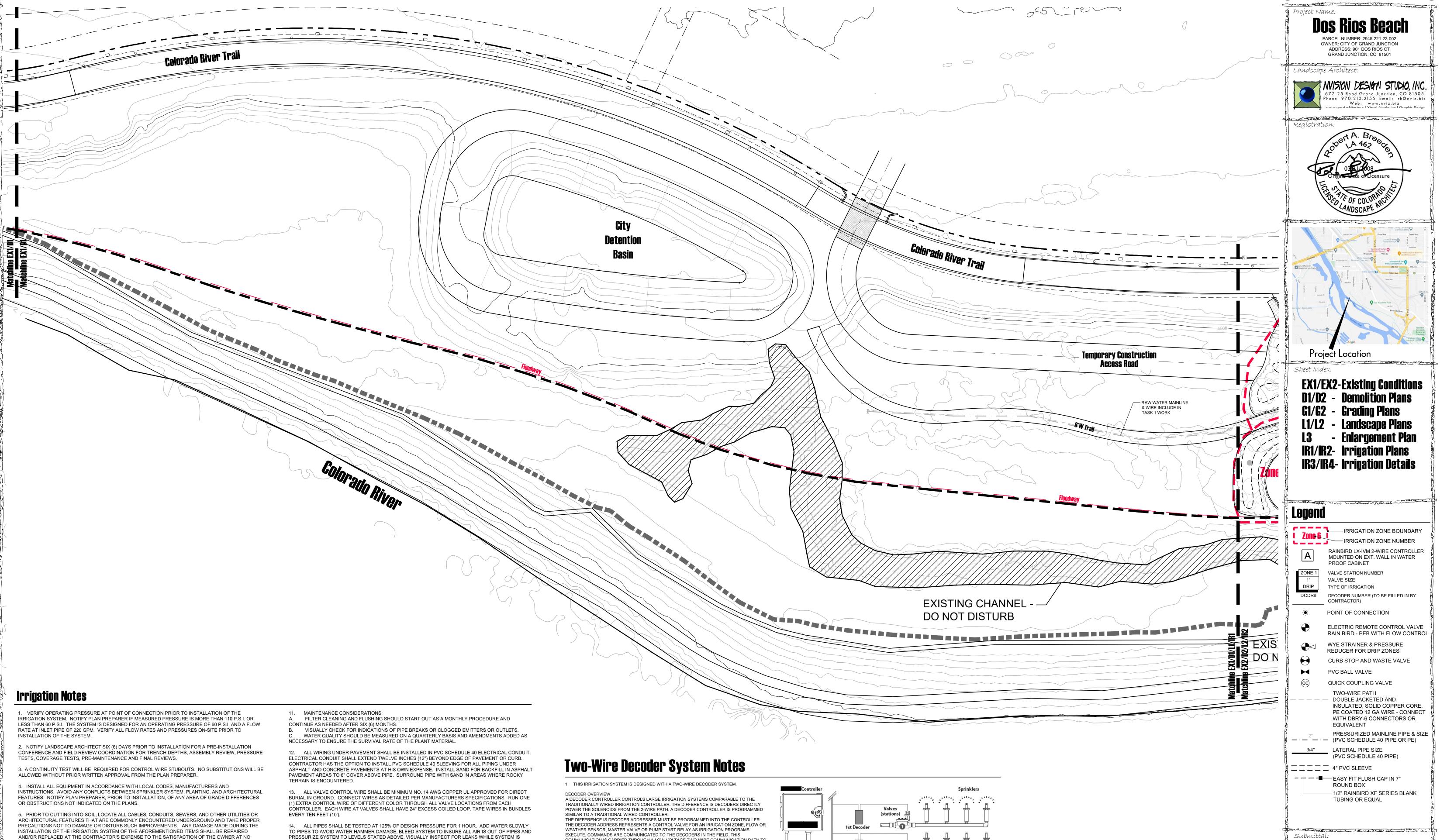












COMMUNICATION IS CARRIED THROUGH A LOW-VOLTAGE TWO-WIRE COMMUNICATION PATH TO THE NUMEROUS DECODERS LOCATED THROUGHOUT THE SITE. THE DECODERS RESPOND TO A THREE, FOUR OR FIVE-DIGIT ADDRESS. THE DECODERS WILL DIRECTLY ACTIVATE THE SOLENOIDS ON THE VALVES.

ADDITIONAL EXPENSE TO THE OWNER.

CARBIDE RESIN.

6. LOCATION OF CONTROLLER TO BE DETERMINED AT JOBSITE BY OWNER AND CONTRACTOR (IF

RECHARGEABLE BATTERY BACK-UP FOR CONTROLLERS. CONTROLLERS SHALL BE PROPERLY GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND CONFORM TO LOCAL

SHALL BE TAKEN TO PREVENT RUNOFF OF WATER AND SOIL EROSION DUE TO PROLONGED

8. INSTALL ALL ELECTRIC VALVES, PRESSURE REGULATORS, BALL OR GATE VALVES, PIPING,

BACKFLOW PREVENTION DEVICES (IF APPLICABLE), CONTROLLERS PER MANUFACTURERS

9. INSTALL FLOOD BUBBLERS ON UP HILL SIDE OF PLANT AND/OR WITHIN PLANT WELL.

APPLICATIONS APPLY PER MANUFACTURER'S RECOMMENDATIONS

ABOVE GRADE. INSTALL PER MANUFACTURERS SPECIFICATIONS. PROVIDE AND INSTALL

APPLICABLE). CONNECT TO EXISTING 120 VOLT ELECTRICAL SUPPLIES. USE THIN WALL METAL CONDUIT

REGULATIONS. INSTALL AS DETAILED. SEAL ALL CONDUIT HOLES WITH SILICONE OR EQUAL. PROGRAM

CONTROLLERS TO IRRIGATE SLOPES USING MULTIPLE REPEAT CYCLES OF SHORT DURATIONS. CARE

7. USE APPROPRIATE SOLVENT AND APPLICATOR, AND PRIMER IF REQUIRED, FOR PIPE SIZE AND TYPE

10. POLYETHYLENE PIPE (IF APPLICABLE) INSTALLED SHALL BE PRODUCED FROM ALL VIRGIN UNION

HOLDING PRESSURE CONSTANT.

15. ALL BACKFILL MATERIAL SHALL BE FREE OF ROCKS, CLODS, AND OTHER EXTRANEOUS

17. GUARANTEE THE IRRIGATION SYSTEM AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR

16. AT JOB COMPLETION, SUPPLY OWNER WITH TWO (2) KEYS FOR EACH CONTROLLER.

18. CHANGES OR MODIFICATIONS TO THE PLAN UNDERTAKEN BY THE CLIENT OR ANYONE

CONTRACTED, HIRED, OR VOLUNTEERED BY THE CLIENT WITHOUT THE REVIEW AND WRITTEN

AUTHORIZATION OF NVISION DESIGN STUDIO, INC. SHALL NULLIFY AND RELEASE NVISION DESIGN

STUDIO, INC. OF ALL LIABILITY ASSOCIATED WITH THE HEALTH, SAFETY, AND WELL-BEING OF THE

PROJECT, THE CLIENT, OR ANY PERSON OR PROPERTY RELATED TO THE PROJECT, DURING AND

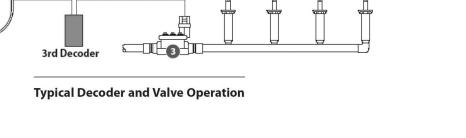
MATERIALS. COMPACT BACKFILL TO ORIGINAL DENSITY OF SOIL.

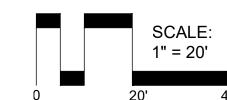
A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.

FOLLOWING THE COMPLETION OF CONSTRUCTION.

THE DESIGN OF A DECODER CONTROLLER SYSTEM REQUIRES CAREFUL CONSIDERATION TO THE LAYOUT OF THE DECODERS ON THE 2-WIRE PATH. SINCE A DECODER SYSTEM POWERS THE ELECTRIC SOLENOIDS THROUGH THE 2-WIRE PATH. THE 2-WIRE PATH MUST BE ABLE TO PROVIDE ENOUGH VOLTAGE TO POWER THE SOLENOIDS. THERE ARE DESIGN SPECIFICATIONS LIMITING THE LENGTH OF THE TWO-WIRE CRITICAL PATH, THE NUMBER OF DECODER ADDRESSES ON A GIVEN TWO-WIRE PATH, AND THE NUMBER OF SIMULTANEOUS, WHICH MUST BE FOLLOWED CAREFULLY.

THERE ARE TWO TYPES OF CONFIGURATIONS THAT CAN BE USED FOR THE LAYOUT OF THE 2-WIRE PATHS. THE 2-WIRE PATH CAN BE INSTALLED AS A STAR CONFIGURATION, OR AS A LOOP CONFIGURATION THE DECODER CONTROLLER WILL SUPPLY UP TO FOUR SEPARATE TWO-WIRE PATHS, OF THE STAR CONFIGURATION AND UP TO TWO SEPARATE 2-WIRE PATHS, OF THE LOOP CONFIGURATION FOR DECODERS. DEPENDING UPON THE DESIGN OF THE SITE, IT IS TYPICALLY PREFERABLE TO SEPARATE THE 2-WIRE PATHS INTO MULTIPLE WIRE RUNS RATHER THAN INSTALL A SINGLE TWO-WIRE PATH THROUGHOUT THE SITE. THESE WIRE PATHS CAN BE CONFIGURED IN EITHER THE STAR OR LOOP LAYOUTS OR A COMBINATION OF THE TWO TYPES. FOR EASE OF TROUBLESHOOTING, THE STAR CONFIGURATION IS THE RECOMMENDED LAYOUT





Preliminary Not For Construction **Irrigation Plan-Task 2** 

OWNER: CITY OF GRAND JUNCTION ADDRESS: 901 DOS RIOS CT

GRAND JUNCTION, CO 81501

o77 25 Road Grand Junction, CO 81505 hone: 970.210.2155 Email: rb@nviz.biz Web: www.nviz.biz

Enlargement Plan

--- IRRIGATION ZONE BOUNDARY - IRRIGATION ZONE NUMBER RAINBIRD LX-IVM 2-WIRE CONTROLLER MOUNTED ON EXT. WALL IN WATER

DECODER NUMBER (TO BE FILLED IN BY

ELECTRIC REMOTE CONTROL VALVE RAIN BIRD - PEB WITH FLOW CONTROL

INSULATED, SOLID COPPER CORE,

PE COATED 12 GA WIRE - CONNECT WITH DBRY-6 CONNECTORS OR

PRESSURIZED MAINLINE PIPE & SIZE

— (PVC SCHEDULE 40 PIPE OR PE)

1/2" RAINBIRD XF SERIES BLANK

(PVC SCHEDULE 40 PIPE)

PROOF CABINET

**VALVE SIZE** 

CONTRACTOR)

VALVE STATION NUMBER

POINT OF CONNECTION

WYE STRAINER & PRESSURE REDUCER FOR DRIP ZONES CURB STOP AND WASTE VALVE

QUICK COUPLING VALVE

TWO-WIRE PATH DOUBLE JACKETED AND

TYPE OF IRRIGATION

PVC BALL VALVE

EQUIVALENT

**ROUND BOX** 

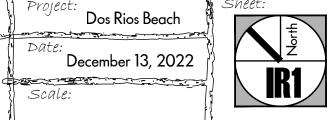
**TUBING OR EQUAL** 

and the second

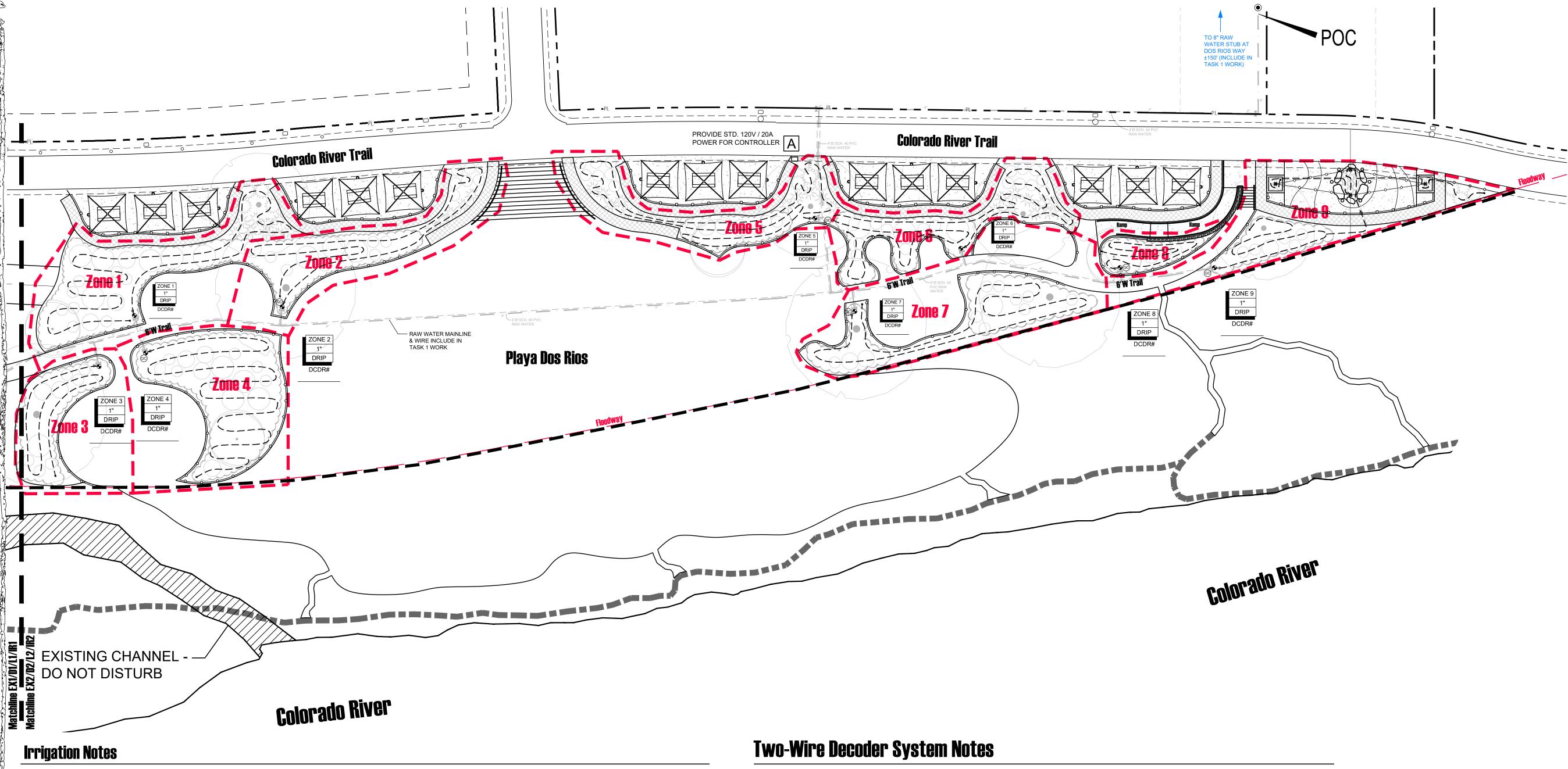
and the same of th

LATERAL PIPE SIZE

Dos Rios Beach A minimum and a



COPYRIGHT NOTICE: This drawing is an instrument of service and is the property of Nvision Design Studio, Inc. No reproduction of this sheet in whole or part, for this or any other project, shall be done without authorization from Nvision Design Studio, Inc.



1. VERIFY OPERATING PRESSURE AT POINT OF CONNECTION PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM. NOTIFY PLAN PREPARER IF MEASURED PRESSURE IS MORE THAN 110 P.S.I. OR LESS THAN 60 P.S.I. THE SYSTEM IS DESIGNED FOR AN OPERATING PRESSURE OF 60 P.S.I. AND A FLOW RATE AT INLET PIPE OF 220 GPM. VERIFY ALL FLOW RATES AND PRESSURES ON-SITE PRIOR TO INSTALLATION OF THE SYSTEM.

2. NOTIFY LANDSCAPE ARCHITECT SIX (6) DAYS PRIOR TO INSTALLATION FOR A PRE-INSTALLATION CONFERENCE AND FIELD REVIEW COORDINATION FOR TRENCH DEPTHS, ASSEMBLY REVIEW, PRESSURE TESTS. COVERAGE TESTS. PRE-MAINTENANCE AND FINAL REVIEWS.

3. A CONTINUITY TEST WILL BE REQUIRED FOR CONTROL WIRE STUBOUTS. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE PLAN PREPARER.

4. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH LOCAL CODES, MANUFACTURERS AND INSTRUCTIONS. AVOID ANY CONFLICTS BETWEEN SPRINKLER SYSTEM, PLANTING, AND ARCHITECTURAL FEATURES. NOTIFY PLAN PREPARER, PRIOR TO INSTALLATION, OF ANY AREA OF GRADE DIFFERENCES OR OBSTRUCTIONS NOT INDICATED ON THE PLANS.

5. PRIOR TO CUTTING INTO SOIL, LOCATE ALL CABLES, CONDUITS, SEWERS, AND OTHER UTILITIES OR ARCHITECTURAL FEATURES THAT ARE COMMONLY ENCOUNTERED UNDERGROUND AND TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. ANY DAMAGE MADE DURING THE INSTALLATION OF THE IRRIGATION SYSTEM OF THE AFOREMENTIONED ITEMS SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL EXPENSE TO THE OWNER.

6. LOCATION OF CONTROLLER TO BE DETERMINED AT JOBSITE BY OWNER AND CONTRACTOR (IF APPLICABLE). CONNECT TO EXISTING 120 VOLT ELECTRICAL SUPPLIES. USE THIN WALL METAL CONDUIT ABOVE GRADE. INSTALL PER MANUFACTURERS SPECIFICATIONS. PROVIDE AND INSTALL RECHARGEABLE BATTERY BACK-UP FOR CONTROLLERS. CONTROLLERS SHALL BE PROPERLY GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND CONFORM TO LOCAL REGULATIONS. INSTALL AS DETAILED. SEAL ALL CONDUIT HOLES WITH SILICONE OR EQUAL. PROGRAM CONTROLLERS TO IRRIGATE SLOPES USING MULTIPLE REPEAT CYCLES OF SHORT DURATIONS. CARE SHALL BE TAKEN TO PREVENT RUNOFF OF WATER AND SOIL EROSION DUE TO PROLONGED

7. USE APPROPRIATE SOLVENT AND APPLICATOR, AND PRIMER IF REQUIRED, FOR PIPE SIZE AND TYPE APPLICATIONS. APPLY PER MANUFACTURER'S RECOMMENDATIONS.

8. INSTALL ALL ELECTRIC VALVES, PRESSURE REGULATORS, BALL OR GATE VALVES, PIPING, BACKFLOW PREVENTION DEVICES (IF APPLICABLE), CONTROLLERS PER MANUFACTURERS

9. INSTALL FLOOD BUBBLERS ON UP HILL SIDE OF PLANT AND/OR WITHIN PLANT WELL. 10. POLYETHYLENE PIPE (IF APPLICABLE) INSTALLED SHALL BE PRODUCED FROM ALL VIRGIN UNION

CARBIDE RESIN.

MAINTENANCE CONSIDERATIONS:

A. FILTER CLEANING AND FLUSHING SHOULD START OUT AS A MONTHLY PROCEDURE AND CONTINUE AS NEEDED AFTER SIX (6) MONTHS.

VISUALLY CHECK FOR INDICATIONS OF PIPE BREAKS OR CLOGGED EMITTERS OR OUTLETS. WATER QUALITY SHOULD BE MEASURED ON A QUARTERLY BASIS AND AMENDMENTS ADDED AS NECESSARY TO ENSURE THE SURVIVAL RATE OF THE PLANT MATERIAL.

12. ALL WIRING UNDER PAVEMENT SHALL BE INSTALLED IN PVC SCHEDULE 40 ELECTRICAL CONDUIT. ELECTRICAL CONDUIT SHALL EXTEND TWELVE INCHES (12") BEYOND EDGE OF PAVEMENT OR CURB. CONTRACTOR HAS THE OPTION TO INSTALL PVC SCHEDULE 40 SLEEVING FOR ALL PIPING UNDER ASPHALT AND CONCRETE PAVEMENTS AT HIS OWN EXPENSE. INSTALL SAND FOR BACKFILL IN ASPHALT PAVEMENT AREAS TO 6" COVER ABOVE PIPE. SURROUND PIPE WITH SAND IN AREAS WHERE ROCKY TERRAIN IS ENCOUNTERED.

13. ALL VALVE CONTROL WIRE SHALL BE MINIMUM NO. 14 AWG COPPER UL APPROVED FOR DIRECT BURIAL IN GROUND. CONNECT WIRES AS DETAILED PER MANUFACTURERS SPECIFICATIONS. RUN ONE (1) EXTRA CONTROL WIRE OF DIFFERENT COLOR THROUGH ALL VALVE LOCATIONS FROM EACH CONTROLLER. EACH WIRE AT VALVES SHALL HAVE 24" EXCESS COILED LOOP. TAPE WIRES IN BUNDLES

14. ALL PIPES SHALL BE TESTED AT 125% OF DESIGN PRESSURE FOR 1 HOUR. ADD WATER SLOWLY TO PIPES TO AVOID WATER HAMMER DAMAGE, BLEED SYSTEM TO INSURE ALL AIR IS OUT OF PIPES AND PRESSURIZE SYSTEM TO LEVELS STATED ABOVE. VISUALLY INSPECT FOR LEAKS WHILE SYSTEM IS HOLDING PRESSURE CONSTANT.

15. ALL BACKFILL MATERIAL SHALL BE FREE OF ROCKS, CLODS, AND OTHER EXTRANEOUS MATERIALS. COMPACT BACKFILL TO ORIGINAL DENSITY OF SOIL.

16. AT JOB COMPLETION, SUPPLY OWNER WITH TWO (2) KEYS FOR EACH CONTROLLER. 17. GUARANTEE THE IRRIGATION SYSTEM AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.

18. CHANGES OR MODIFICATIONS TO THE PLAN UNDERTAKEN BY THE CLIENT OR ANYONE CONTRACTED, HIRED, OR VOLUNTEERED BY THE CLIENT WITHOUT THE REVIEW AND WRITTEN AUTHORIZATION OF NVISION DESIGN STUDIO, INC. SHALL NULLIFY AND RELEASE NVISION DESIGN STUDIO, INC. OF ALL LIABILITY ASSOCIATED WITH THE HEALTH, SAFETY, AND WELL-BEING OF THE PROJECT, THE CLIENT, OR ANY PERSON OR PROPERTY RELATED TO THE PROJECT, DURING AND FOLLOWING THE COMPLETION OF CONSTRUCTION.

1. THIS IRRIGATION SYSTEM IS DESIGNED WITH A TWO-WIRE DECODER SYSTEM.

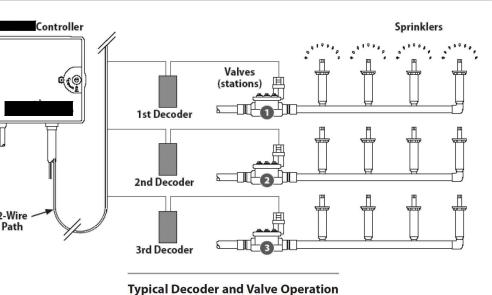
DECODER OVERVIEW

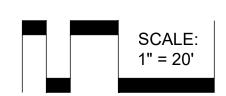
SOLENOIDS ON THE VALVES.

A DECODER CONTROLLER CONTROLS LARGE IRRIGATION SYSTEMS COMPARABLE TO THE TRADITIONALLY WIRED IRRIGATION CONTROLLER. THE DIFFERENCE IS DECODERS DIRECTLY POWER THE SOLENOIDS FROM THE 2-WIRE PATH. A DECODER CONTROLLER IS PROGRAMMED SIMILAR TO A TRADITIONAL WIRED CONTROLLER. THE DIFFERENCE IS DECODER ADDRESSES MUST BE PROGRAMMED INTO THE CONTROLLER. THE DECODER ADDRESS REPRESENTS A CONTROL VALVE FOR AN IRRIGATION ZONE, FLOW OR WEATHER SENSOR, MASTER VALVE OR PUMP START RELAY AS IRRIGATION PROGRAMS EXECUTE COMMANDS ARE COMMUNICATED TO THE DECODERS IN THE FIELD. THIS COMMUNICATION IS CARRIED THROUGH A LOW-VOLTAGE TWO-WIRE COMMUNICATION PATH TO THE NUMEROUS DECODERS LOCATED THROUGHOUT THE SITE. THE DECODERS RESPOND TO A THREE, FOUR OR FIVE-DIGIT ADDRESS. THE DECODERS WILL DIRECTLY ACTIVATE THE

THE DESIGN OF A DECODER CONTROLLER SYSTEM REQUIRES CAREFUL CONSIDERATION TO THE LAYOUT OF THE DECODERS ON THE 2-WIRE PATH. SINCE A DECODER SYSTEM POWERS THE ELECTRIC SOLENOIDS THROUGH THE 2-WIRE PATH, THE 2-WIRE PATH MUST BE ABLE TO PROVIDE ENOUGH VOLTAGE TO POWER THE SOLENOIDS. THERE ARE DESIGN SPECIFICATIONS I IMITING THE I FNGTH OF THE TWO-WIRE CRITICAL PATH. THE NUMBER OF DECODER ADDRESSES ON A GIVEN TWO-WIRE PATH, AND THE NUMBER OF SIMULTANEOUS, WHICH MUST BE FOLLOWED CAREFULLY.

THERE ARE TWO TYPES OF CONFIGURATIONS THAT CAN BE USED FOR THE LAYOUT OF THE 2-WIRE PATHS. THE 2-WIRE PATH CAN BE INSTALLED AS A STAR CONFIGURATION, OR AS A LOOP CONFIGURATION. THE DECODER CONTROLLER WILL SUPPLY UP TO FOUR SEPARATE TWO-WIRE PATHS, OF THE STAR CONFIGURATION AND UP TO TWO SEPARATE 2-WIRE PATHS, OF THE LOOP CONFIGURATION FOR DECODERS. DEPENDING UPON THE DESIGN OF THE SITE, IT IS TYPICALLY PREFERABLE TO SEPARATE THE 2-WIRE PATHS INTO MULTIPLE WIRE RUNS RATHER THAN INSTALL A SINGLE TWO-WIRE PATH THROUGHOUT THE SITE. THESE WIRE PATHS CAN BE CONFIGURED IN EITHER THE STAR OR LOOP LAYOUTS OR A COMBINATION OF THE TWO TYPES. FOR EASE OF TROUBLESHOOTING, THE STAR CONFIGURATION IS THE RECOMMENDED LAYOUT









- And the state of the state of

OWNER: CITY OF GRAND JUNCTION

NVISION DESIGN STUDIO, INC 25 Road Grand Junction, CO 81505 e: 970.210.2155 Email: rb@nviz.biz

ADDRESS: 901 DOS RIOS CT GRAND JUNCTION, CO 81501 and the same of th

Landscape Architect:

Project Location

and the same of th

**EX1/EX2-Existing Conditions** 

**IR1/IR2- Irrigation Plans** 

**IR3/IR4- Irrigation Details** 

all the second of the second o

PROOF CABINET

**VALVE SIZE** 

CONTRACTOR)

VALVE STATION NUMBER

POINT OF CONNECTION

PVC BALL VALVE

EQUIVALENT

— PVC SCHEDULE 40 PIPE OR PE)

LATERAL PIPE SIZE

- - T - EASY FIT FLUSH CAP IN 7"

ROUND BOX

**TUBING OR EQUAL** 

- A Commission of the Commissi

and the second of the second o

\_\_\_\_\_ 4" PVC SLEEVE

(PVC SCHEDULE 40 PIPE)

WYE STRAINER & PRESSURE

REDUCER FOR DRIP ZONES

QUICK COUPLING VALVE

DOUBLE JACKETED AND

INSULATED, SOLID COPPER CORE,

PE COATED 12 GA WIRE - CONNECT

PRESSURIZED MAINLINE PIPE & SIZE

WITH DBRY-6 CONNECTORS OR

- 1/2" RAINBIRD XF SERIES BLANK

TWO-WIRE PATH

CURB STOP AND WASTE VALVE

TYPE OF IRRIGATION

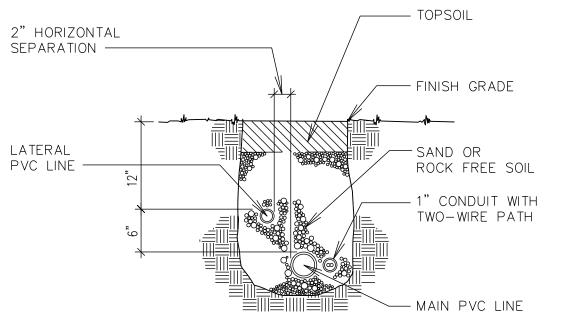
- IRRIGATION ZONE BOUNDARY - IRRIGATION ZONE NUMBER RAINBIRD LX-IVM 2-WIRE CONTROLLER MOUNTED ON EXT. WALL IN WATER

DECODER NUMBER (TO BE FILLED IN BY

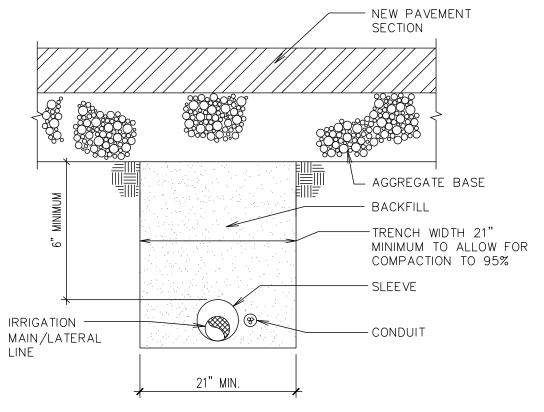
ELECTRIC REMOTE CONTROL VALVE

RAIN BIRD - PEB WITH FLOW CONTROL

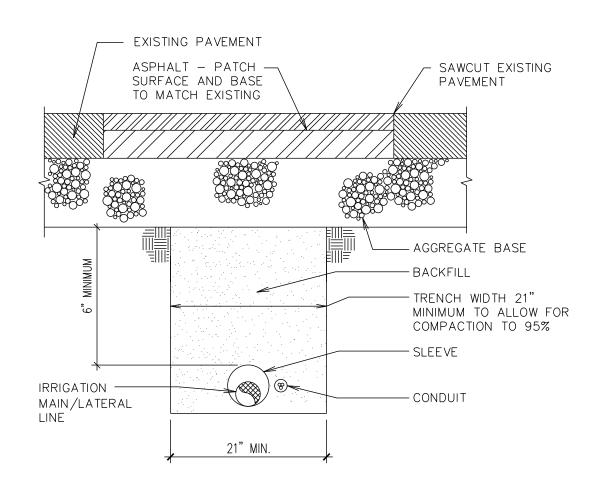
Landscape Plans



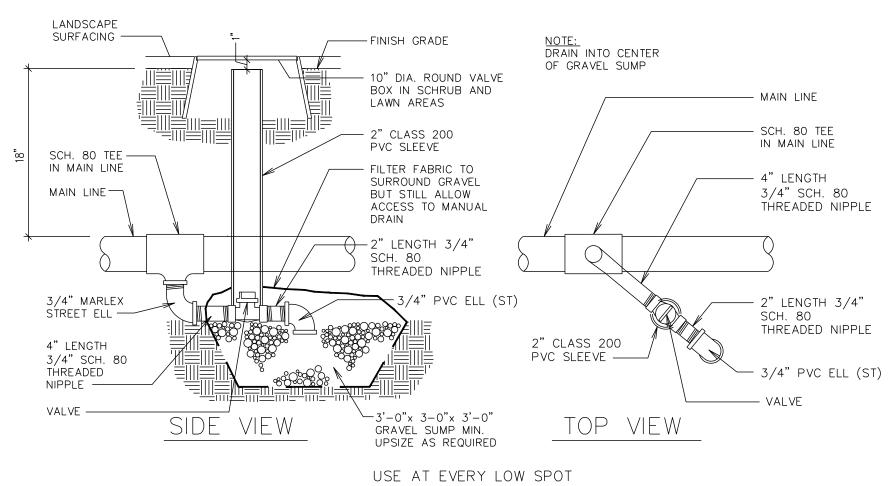
**Trench Section Two-Wire Section** 



Misc. Pipe Trench Detail New Pavement Areas

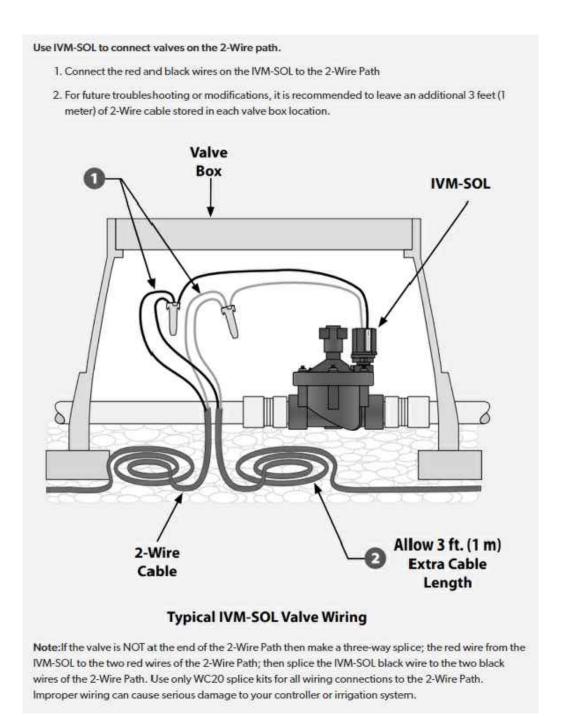


Misc. Pipe Trench Detail Exist. Pavement Areas



ON MAINLINE

**Main Line Manual Drain Valve** 



**Automatic Valve with Two-Wire System** 

VALVE BOX AND COVER ----

WHITE (COMMON) WIRE -

LANDSCAPE

GRADE-

SYSTEM WIRES IN

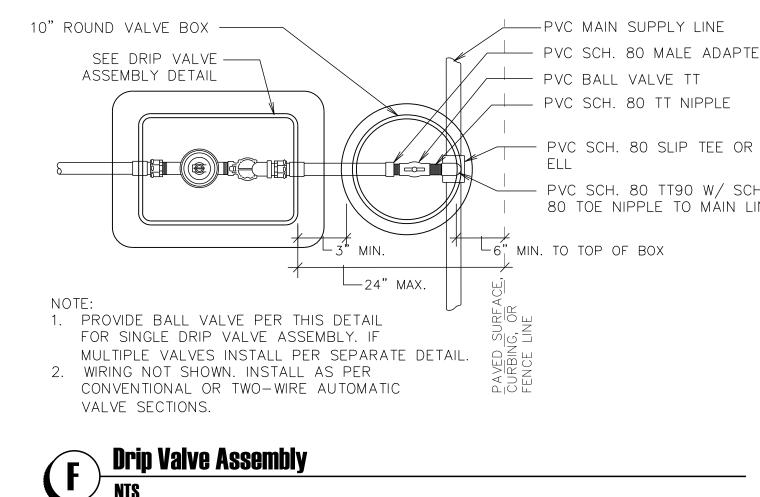
CONDUIT

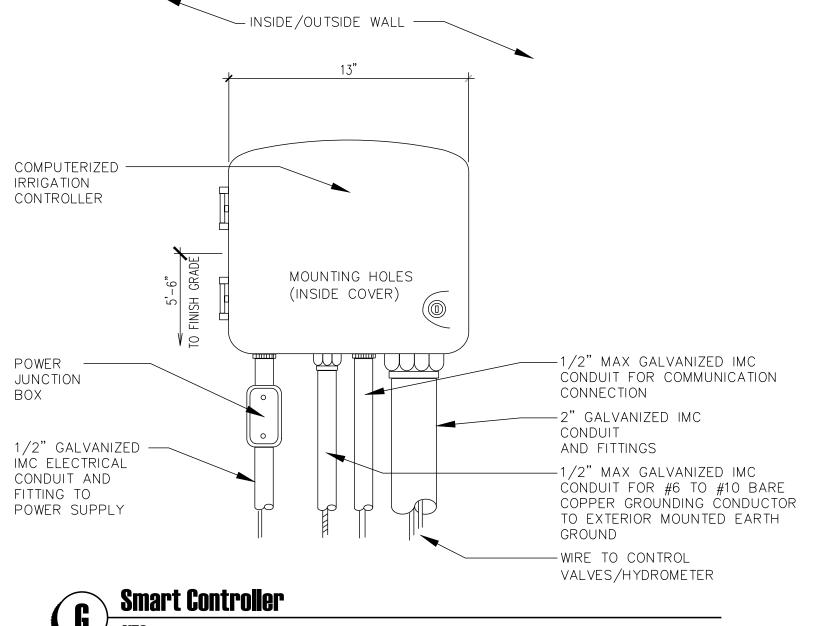
SOLENOID WIRES

COMPACTED GRAVEL -

**Soil Moisture Sensor** 

SURFACING -





PVC MAINLINE

PIPE

- BRICK

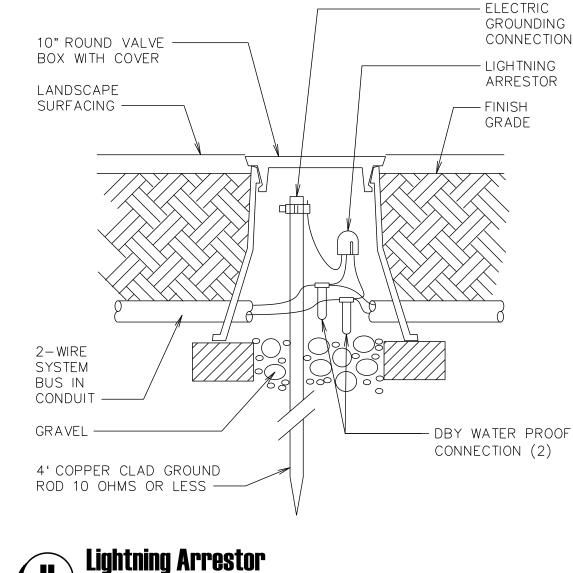
SUPPORT

- CONCRETE

3" GRAVEL

COMPACTED

PAVER



WATER PROOF CONNECTIONS JUMBO VALVE BOX TYPICAL ---WITH EXTENSIONS ON TOP CLEARANCE LANDSCAPE SURFACING ~ GRADE - FLOW SENSOR COILED CABLE FROM WIRE FROM CONTROLER CONTROLER HYDROMETER ACTION UNION (BOTH SIDES)

-SYSTEM WIRES IN CONDUIT

1. FOR ALL XFS-CV AND POLY CONNECTIONS INSTALL XFF AND/OR XFD FITTINGS.

- 2. INSTALL EACH LOOP PER RAIN BIRD INSTALLATION GUIDELINES3. INSTALL XFS-CV DRIPLINE ON SURFACE TO MAXIMUM OF 6 INCHES BELOW GRADE, STAPLE IN PLACE PER MANUFACTURERS RECOMMENDATIONS. BACKFILL AND SPREAD SURFACE TREATMENT AS DIRECTED BY OTHERS
- 4. INSTALL XFS-CV DRIPLINE IN ACCORDANCE WITH RAIN BIRD GUIDELINES

(1) FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFS-CV FLUSH POINT" (2) PVC OR DRIPLINE EXHAUST HEADER (3) SUB-SURFACE/ON-SURFACE DRIPLINE: RAIN BIRD XFS-CV SERIES DRIPLINE (TYPICAL) NON-POTABLE: XFS-CVP DRIPLINE (4) RAIN BIRD XFF-TEE FITTING (5) TREE TRUNK (6) TIE DOWN STAKES RAIN BIRD TDS-050 (7) ADJUSTABLE TREE BUBBLER – 4 PER TREE (8) RAIN BIRD XFD-CROSS FITTING (9) PVC OR DRIPLINE SUPPLY HEADER

- (10) RAIN BIRD TLF-TEE OR XFF-TEE FITTING (11) SCHEDULE 40 PVC DRIP LATERAL (12) ROOT BALL AT PLANTING
- 5. MOVE RING OUTWARD (MAKE LARGER) TO CANOPY
- LANDSCAPE AREAS. 6. PROTECT SOIL FROM EROSION ON DOWNHILL SIDES BY CREATING A SOIL SAUCER AT TIME OF PLANTING

DRIP LINE ON AN ANNUAL BASIS OR AS NEEDED IN

Preliminary Not For Construction

and the same of Dos Rios Beach A minima and a min December 13, 2022 

COPYRIGHT NOTICE: This drawing is an instrument of service and is the property of Nvision Design Studio, Inc. No reproduction of this sheet in whole or part, for this or any other project, shall be done without authorization from Nvision Design Studio, Inc.

Project Name: OWNER: CITY OF GRAND JUNCTION ADDRESS: 901 DOS RIOS CT GRAND JUNCTION, CO 81501 Marian de la companya del companya del companya de la companya de Landscape Architect: NVISION DESIGN STUDIO, INC 977 25 Road Grand Junction, CO 81505 hone: 970.210.2155 Email: rb@nviz.biz Web: www.nviz.biz Registration: The state of the s Project Location Company of the second Sheet Index: **EX1/EX2-Existing Conditions** D1/D2 - Demolition Plans Landscape Plans

- Anti- Endergrammer of market property of the second of t

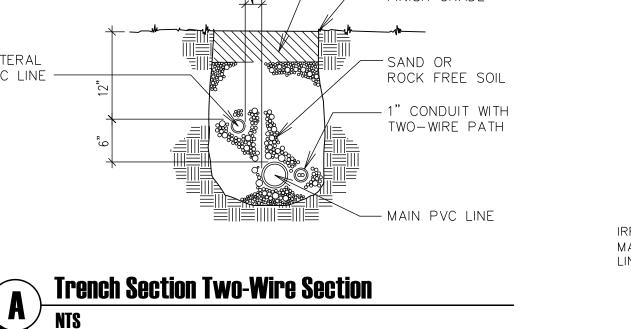
**IR1/IR2- Irrigation Plans** IR3/IR4- Irrigation Details

The state of the s

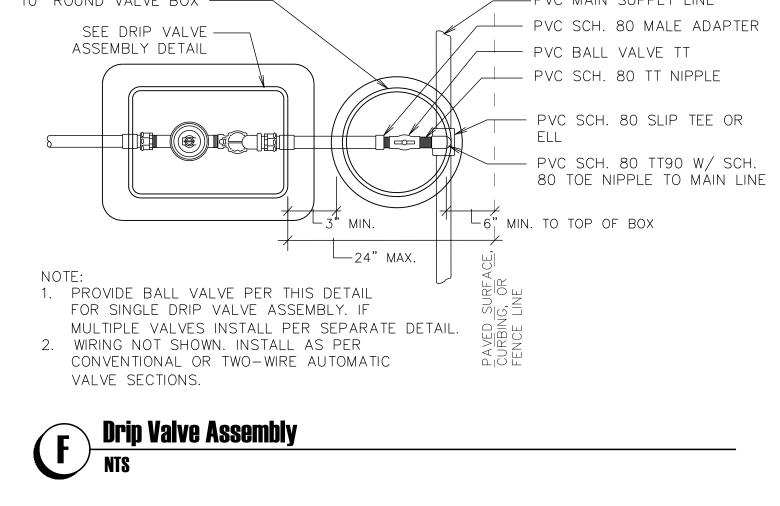
The state of the s

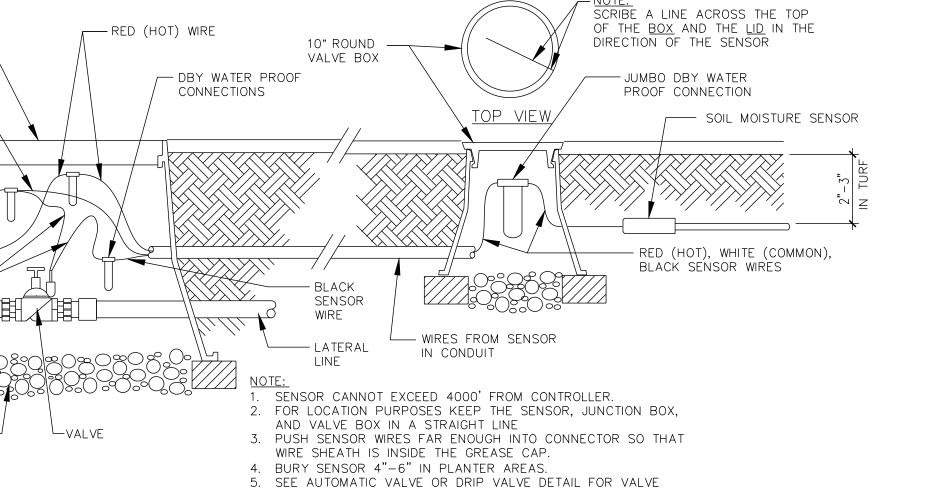
Sheet Title: **Irrigation Details-Task 2** 

and the second s

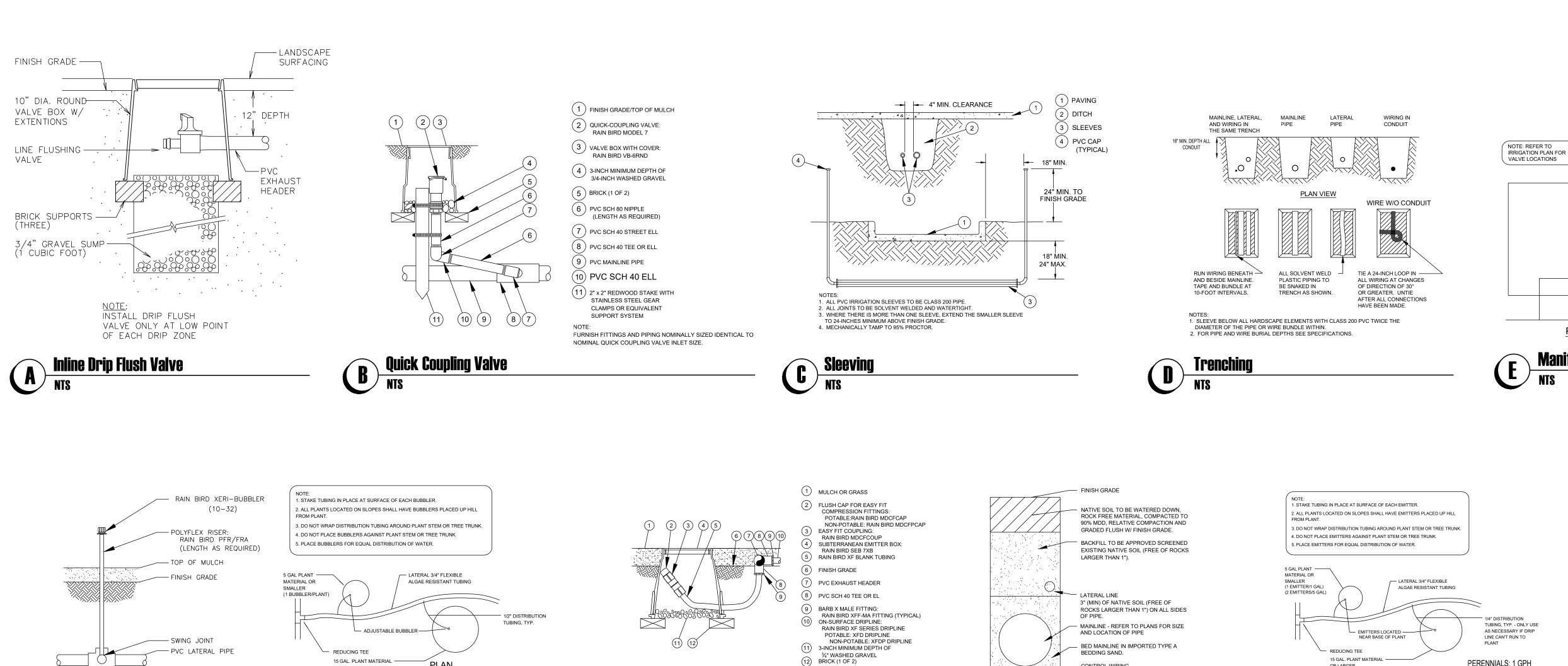








INSTALLATION.



ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

- P.V.C. UNION

PLAN VIEW

MAINLINE INTO VALVE

OR LARGER (2 BUBBLERS/PLANT)

F Bubbler on PVC Riser / Tree Layout NTS

Trench Sect. (w/Wire)

NTS

TYPE 'A'
BEDDING
SAND OR
SCREENED
NATIVE

- MAINLINE - REFER TO PLANS FOR SIZE

CONTROL WIRING (TAPE AND BUNDLE WIRING AT 10' O.C. INTERVALS).

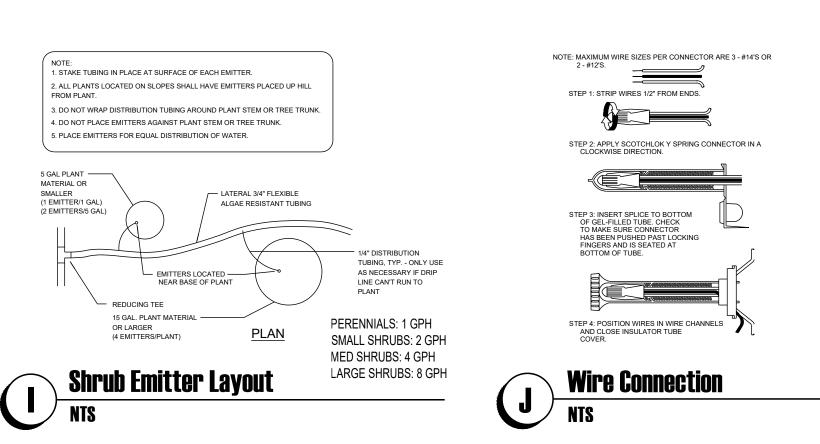
CONTINUOUS DETECTABLE WARNING TAPE TO BE PLACED 12" ABOVE MAINLINE AND

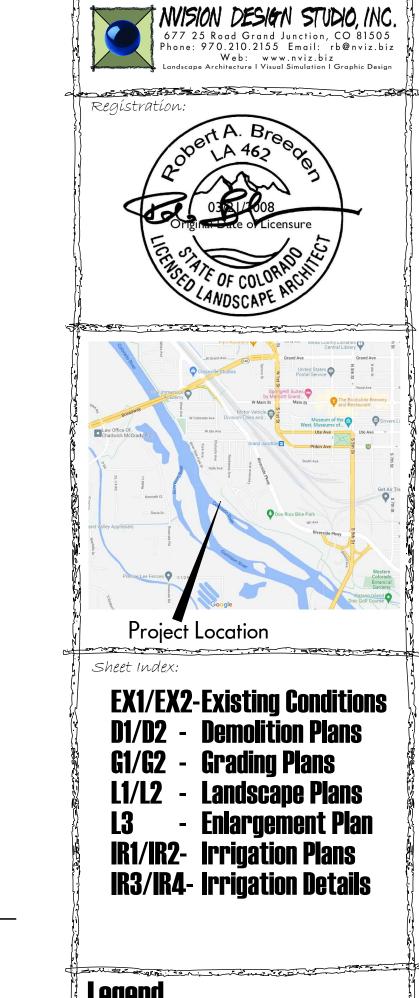
ALL PIPING TO BE SNAKED IN TRENCHES AS SHOWN. MAINLINE TO BE INSTALLED IN

LATERAL LINE TO BE INSTALLED ON ONE

BACKFILL TO BE APPROVED SCREENED EXISTING NATIVE SOIL (FREE OF ROCKS

CONTROL WIRES.





- Andrews of the state of the s

OWNER: CITY OF GRAND JUNCTION ADDRESS: 901 DOS RIOS CT

Harrison and the same of the s

Landscape Architect:

VALVE & WYE STRAINER

CARSON IND. INC VALVE BOX OR AN

APPROVED EQUAL

- SPRAY IRRIGATION

MAINLINE INTO VALVE

FLOW

PLAN VIEW

GRAND JUNCTION, CO 81501





**Irrigation Details-Task 2** 

Dos Rios Beach A minimum and a December 13, 2022 

