



October 10, 2023

Patrick Lennberg  
Division of Reclamation, Mining & Safety  
1313 Sherman Street, Room 215  
Denver, CO 80203

RE: Permit No. M-2016-054 – Irwin/Thomas Mine  
Drain Plan Clarification

Holcim – WCR, Inc. submitted the site specific engineered design and specifications for the slurry wall underdrain to DRMS on October 3, 2023 to satisfy conditions specified in Technical Revision 1 (TR-01). Following the October 3<sup>rd</sup> submittal, the DRMS requested clarification to the drainage plan. Holcim commits to working with the City of Longmont on an additional easement through open space land that will allow the underdrain to gravity flow into the St. Vrain River. Concurrently, Holcim will commit to installing a temporary pumping system that will discharge the drain into the current Outfall 001 location until an easement with the city is acquired. The pumping system will be designed to prevent any mounding effects on neighboring wells during high/low seasons.

If you have any questions, please feel free to contact me at 702-379-4623.

Sincerely,

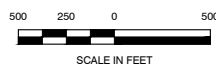
A handwritten signature in black ink, appearing to read 'Wyatt R. Webster', written over a horizontal line.

Wyatt R. Webster  
Environmental & Land Manager

**LOCATED IN**  
**PART OF SOUTHEAST 1/4 AND EAST 1/2 SECTION 11, T2N, R69W OF THE 6TH P.M.**  
**COUNTY of BOULDER, STATE of COLORADO**  
**JUNE, 2023**

1. THESE CONSTRUCTION PLANS ARE TO BE USED IN CONJUNCTION WITH THE TECHNICAL SPECIFICATIONS PREPARED BY J&T CONSULTING, INC., AND GEOTECHNICAL INVESTIGATION AND ENGINEERING DESIGN RECOMMENDATIONS PREPARED BY CMT TECHNICAL SERVICES.
2. COMPLY WITH ALL REQUIREMENTS OF OWNER OBTAINED PROJECT PERMITS: INCLUDING, BUT NOT LIMITED TO, PERMITS FROM THE U.S. ARMY CORPS OF ENGINEERS AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT. CONTRACTOR SHALL OBTAIN ALL OTHER PERMITS NECESSARY FOR CONSTRUCTION OF THE WORK.
3. PROTECT ALL EXISTING WETLANDS.
4. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION.
5. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, PLEASE CONTACT THE COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO 80246-1530. ATTENTION: PERMITS SECTION. PHONE 303-692-3500.
6. IF DEWATERING IS REQUIRED, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED FOR DISCHARGES TO A STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREET THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATER OF THE UNITED STATES.
7. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES TO COORDINATE SCHEDULES.
8. THE CONTRACTOR SHALL REGULARLY PATROL THE PUBLIC LANDS ADJACENT TO THE PROJECT. REMOVE CONSTRUCTION DEBRIS AND KEEP AREAS CLEAN AND SAFE.
9. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A SEQUENCE AND SCHEDULE FOR COMPLETION OF THE WORK IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE CONTRACT DOCUMENTS.
10. READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS RELATED WORK PRIOR TO CONSTRUCTION.
11. VERIFY SITE ELEVATIONS PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES AND FEES INCLUDING, BUT NOT LIMITED TO, ALL INSPECTION CHARGES OF AGENCIES HAVING APPROPRIATE JURISDICTION.
13. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS OF ENTIRE PROJECT, AS SPECIFIED, UPON FINAL COMPLETION OF PROJECT.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL AT THE SITE THROUGHOUT CONSTRUCTION.
2. BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE USED AS NECESSARY TO ADDRESS SEDIMENT AND DUST FROM SITE DISTURBANCE. ADDITIONAL MEASURES MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
3. BMP'S MAY INCLUDE, BUT ARE NOT LIMITED TO:
  - MINIMAL DISTURBANCE FOR MINIMAL TIME PERIODS
  - GRAVEL CONSTRUCTION ENTRIES
  - SILT FENCE, STRAW BALE OR SAND BAG BARRIERS, ROCK CHECK DAMS
  - STORM SEWER INLET PROTECTION
  - SEDIMENT CAPTURE PONDS
  - SITE WATERING FOR DUST SUPPRESSION
4. BMP'S SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL INSPECT BMP'S WEEKLY AND AFTER SIGNIFICANT (GREATER THAN 0.1" PRECIPITATION) STORM EVENTS. THE MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THEY REACH HALF THE BMP HEIGHT OR IMPACT THE FUNCTION OF THE BMP.
5. SOIL STOCKPILES SHALL BE PROTECTED FROM SEDIMENT TRANSPORT BY SURFACE ROUGHENING, WATERING AND PERIMETER SILT FENCING. SOILS THAT WILL BE STOCKPILED FOR MORE THAN 30 DAYS SHALL BE MULCHED AND SEEDED WITH A GRASS COVER WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION.
6. THE CONTRACTOR SHALL INSURE THAT ALL LOADS OF CUT AND FILL SOILS IMPORTED TO OR EXPORTED FROM THE SITE ARE PROPERLY LOADED AND COVERED TO PREVENT LOSS DURING TRANSPORT.
7. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS RESULTING FROM THIS PROJECT FROM FLOWLINES AND PAVEMENT OF PUBLIC STREETS IN A TIMELY MANNER.
8. SOILS EXPOSED DURING LAND DISTURBING ACTIVITY SHALL BE KEPT IN A ROUGHENED CONDITION BY RIPPING OR DISCING ALONG LAND CONTOURS UNTIL MULCH, VEGETATION OR OTHER PERMANENT EROSION CONTROL IS IN PLACE. NO SOILS SHALL REMAIN EXPOSED BY LAND DISTURBING ACTIVITY FOR MORE THAN THIRTY (30) DAYS BEFORE REQUIRED TEMPORARY OR PERMANENT EROSION CONTROL IS INSTALLED UNLESS OTHERWISE APPROVED.
9. ALL TEMPORARY SEDIMENT CONTROLS WILL BE REMOVED WITHIN 30 DAYS AFTER THE FINAL STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, WHICHEVER OCCURS FIRST.
10. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHENEVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.



SCALE 1" = 500'



**Northern Colorado Constructors, Inc.**  
Chris Zadel  
9075 County Road 10  
Fort Lupton, CO 80621  
303-857-1754

**J&T Consulting, Inc.**  
J.C. York  
305 Denver Ave., Ste. D  
Fort Lupton, CO 80621  
303-857-6222

**American West Land Surveying Co.**  
331 South 4th Avenue  
P.O. Box 129  
Brighton, CO 80601  
303-659-1532


**CMT Technical Services**  
7108 SOUTH ALTON WAY, BLDG. B  
CENTENNIAL, CO 80112  
303-220-0300



1	Cover Sheet
2	Horizontal Control Plan
3	Perimeter Drain Plan & Profile Sta 0+00 to 13+50
4	Perimeter Drain Plan & Profile Sta 13+50 to 26+50
5	Perimeter Drain Plan & Profile Sta 26+50 to 40+00
6	Perimeter Drain Plan & Profile Sta 40+00 to 42+00

	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING RIGHT-OF-WAY
	EXISTING GRAVEL ROADS
	EXISTING EASEMENT
	EXISTING RIGHT-OF-WAY
	SECTION LINES
	EXISTING FENCE
	EXISTING POWER POLE
	EXISTING OVERHEAD ELECTRIC
	EXISTING FIBER OPTIC
	EXISTING WATER
	EXISTING STORM SEWER
	EXISTING GAS
	EXISTING IRRIGATION CHANNEL
	SLURRY WALL
	MINING CELL BOUNDARY

I hereby certify that these plans for the construction of the Irwin-Thomas Drain were prepared by me or under my direct supervision for Northern Colorado Constructors, Inc.

  
James C. York, P.E.  
Colorado Registration No. 36846


[illegible]

Job #	22012
Date	8.22.23
Drawn By	TPY
Designed By	TPY
Checked By	JCY
File	JT-Inwin Drain Cover.dwg
Scale	As Shown
Sheet:	Of:

Sheet: **1** Of: **6**

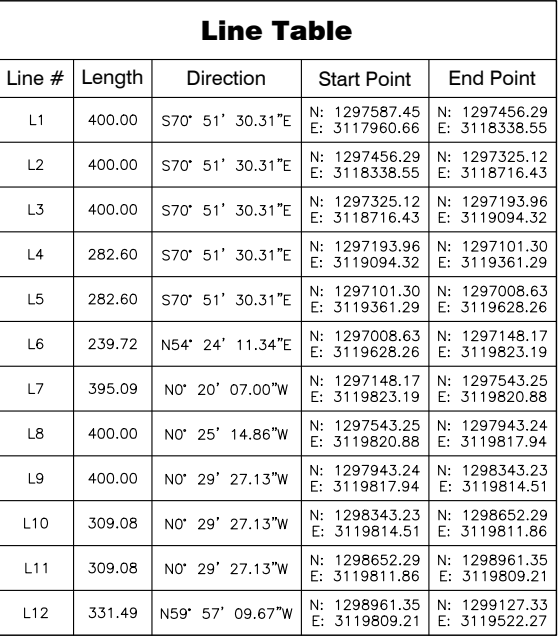
## Northern Colorado Constructors

## Irwin-Thomas Drain



**J&T Consulting, Inc.**

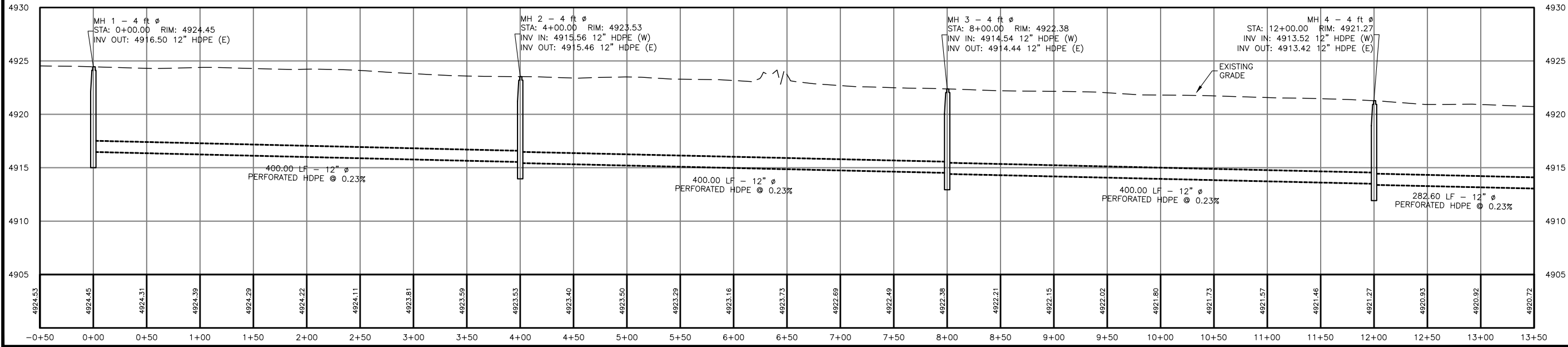
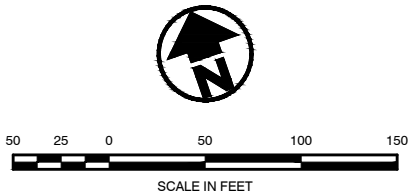
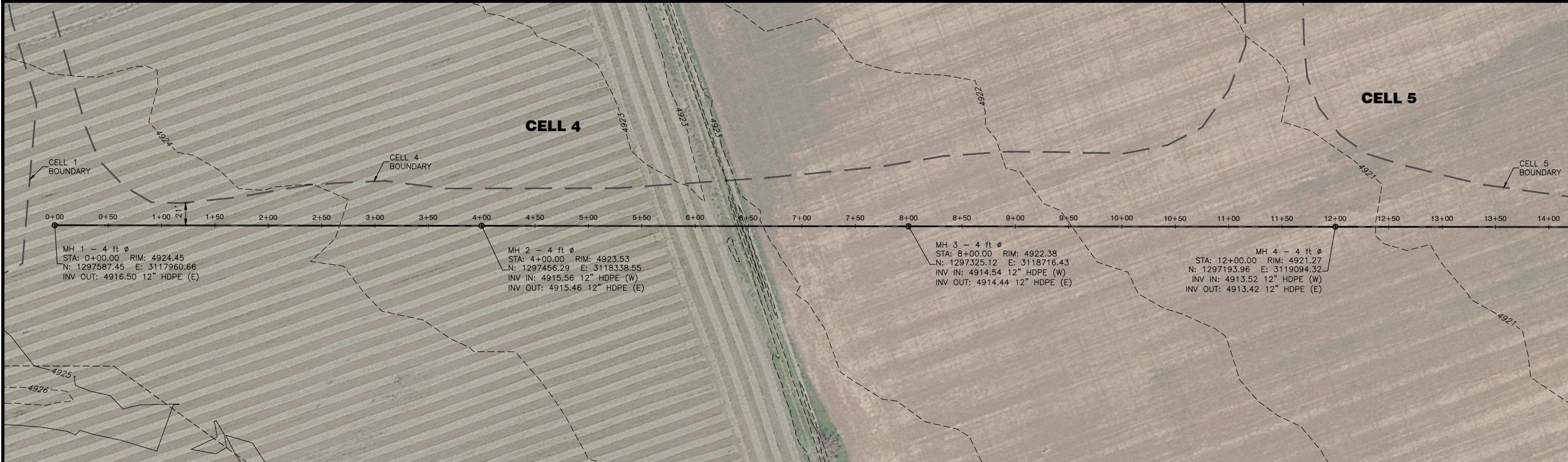
305 Denver Avenue - Suite D  
Fort Lupton, CO 80621  
Ph: 303-857-6222  
[www.j-tconsulting.com](http://www.j-tconsulting.com)



Sheet: **2** Of: **6**

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ISSUED FOR CONSTRUCTION

REVISIONS		Description	
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2	10.3.23	TPY	JCY



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Designed By	TPY
Checked By	JCY
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Scale	As Shown

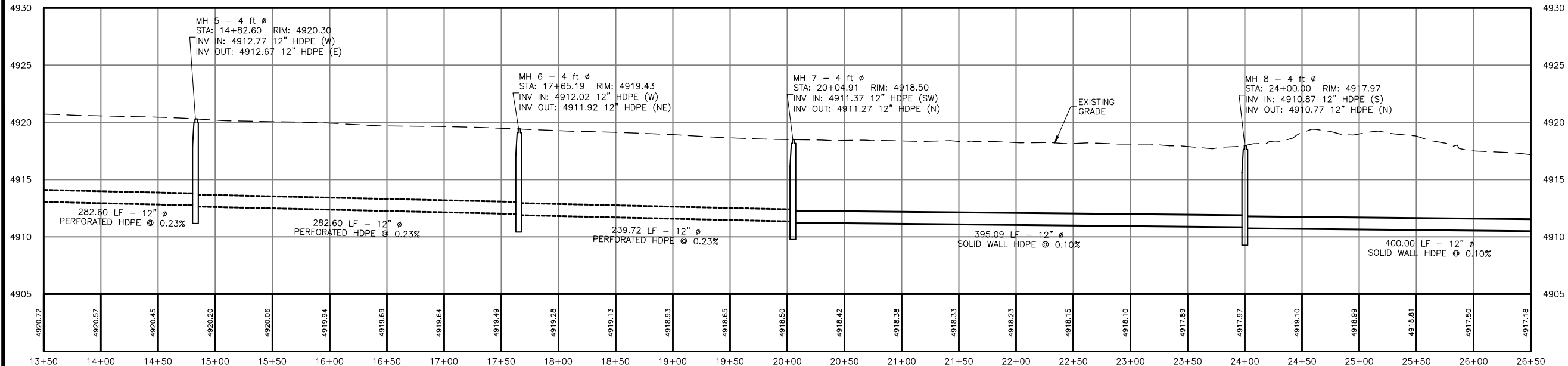
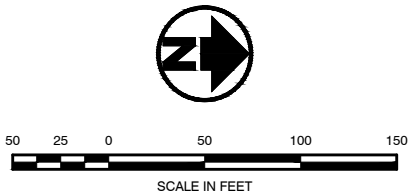
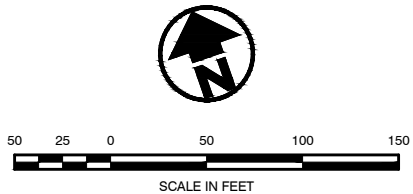
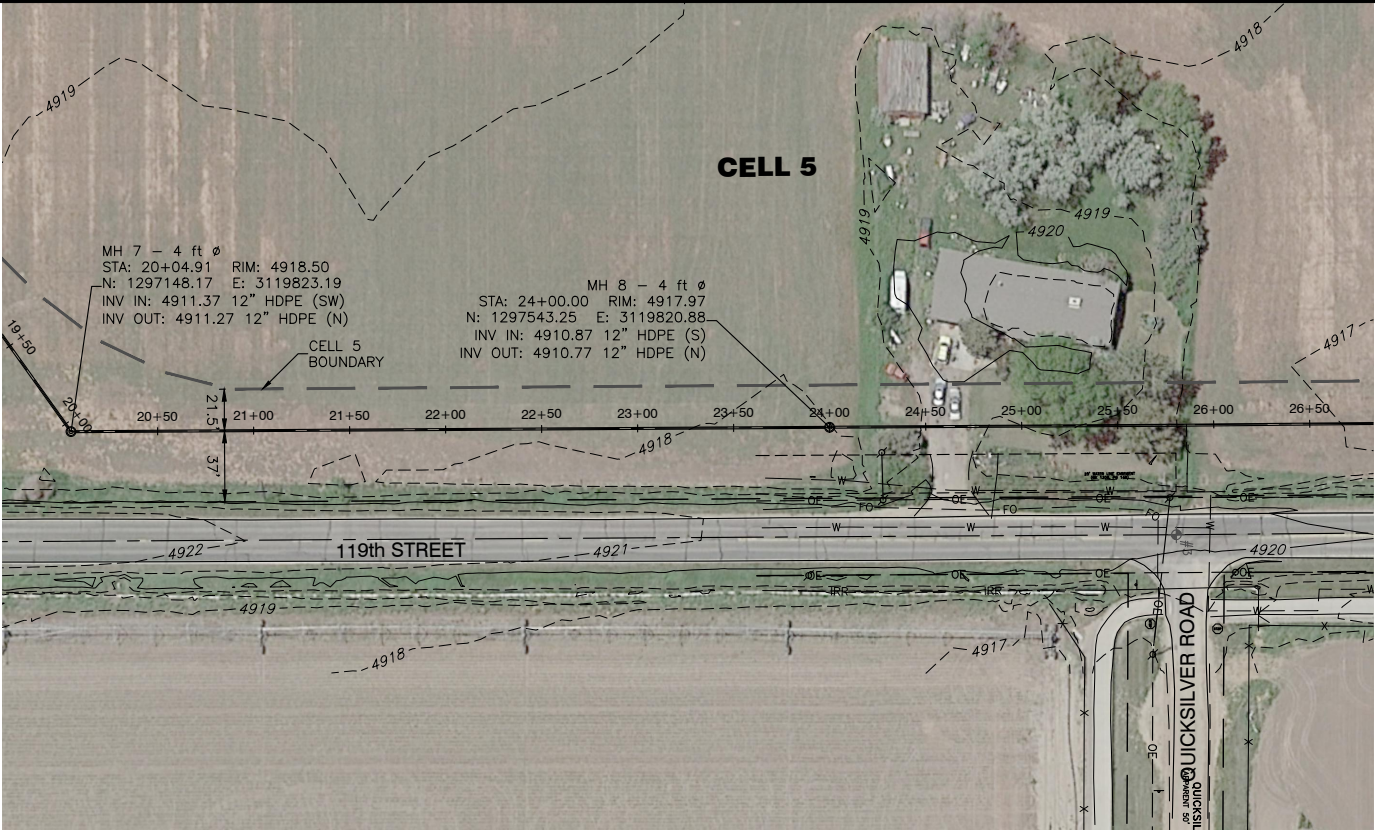
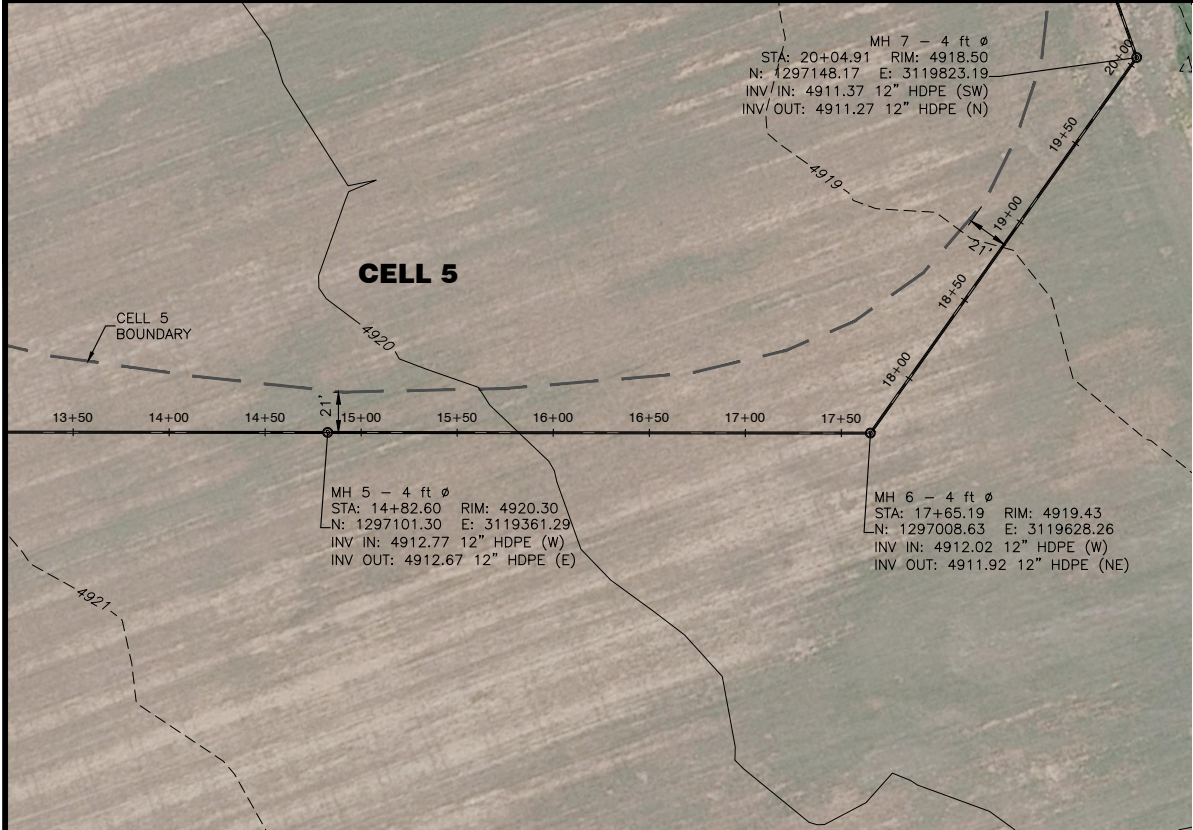
Sheet: 3 of 6

Irwin-Thomas Drain

Northern Colorado Constructors

Perimeter Drain Plan & Profile  
Sta 0+00 To 13+50

J&T Consulting, Inc.  
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2	10.3.23	TPY	JCY



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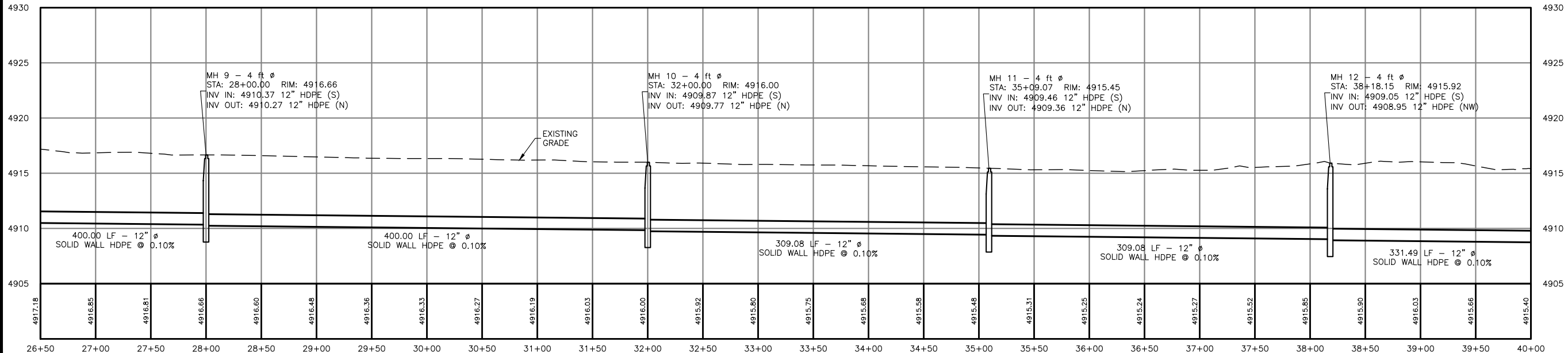
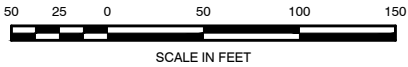
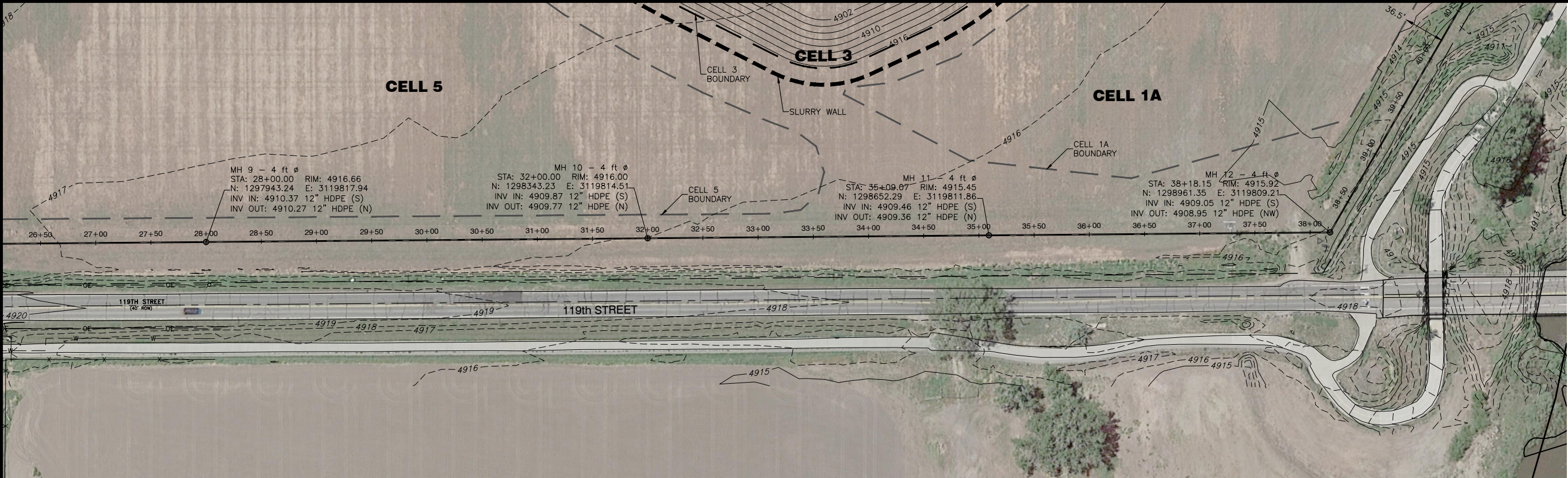
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Northern Colorado Constructors

Irwin-Thomas Drain  
Perimeter Drain Plan & Profile  
Sta 13+50 To 26+50

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2	10.3.23	TPY	JCY



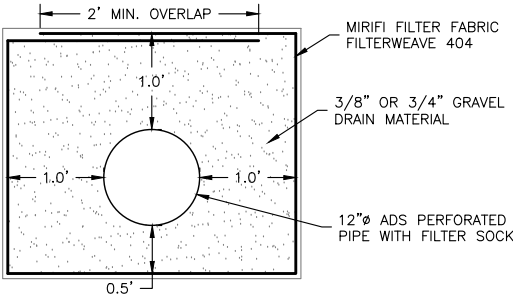
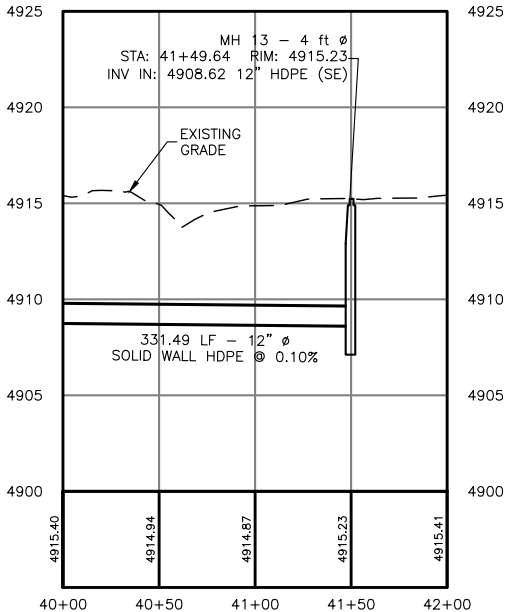
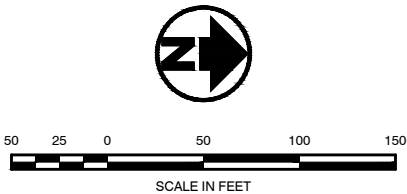
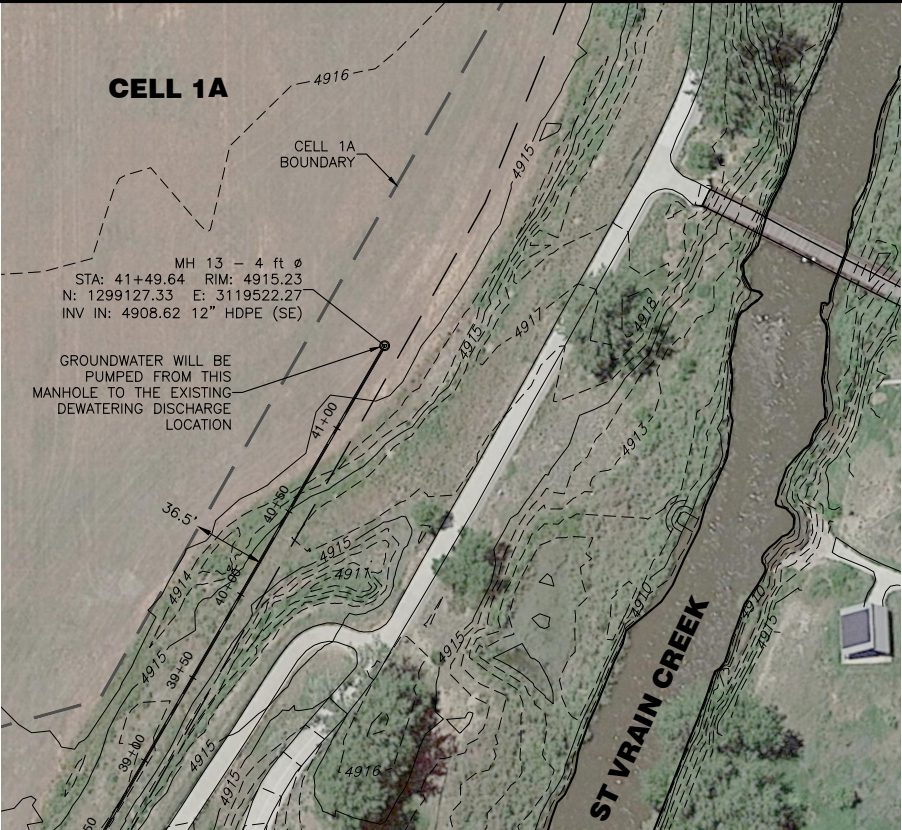
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Sheet: 5 of 6

Northern Colorado Constructors

Irwin-Thomas Drain  
Perimeter Drain Plan & Profile  
Sta 26+50 To 40+00

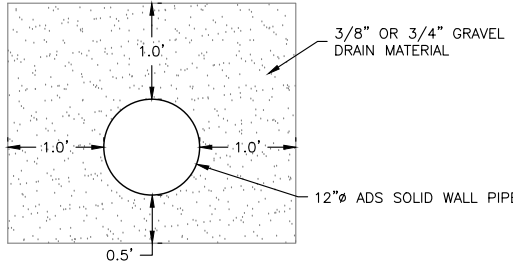
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Ph: 303-857-6222 Fax: 303-857-6224  
www.jtconsulting.com



**PERIMETER DRAIN**  
**STA: 0+00 TO 20+05**

SCALE 1" = 1'

PERFORATED PIPE PORTION OF DRAIN



**PERIMETER DRAIN**  
**STA: 20+05 TO 43+39**

SCALE 1" = 1'

SOLID PIPE PORTION OF DRAIN

ISSUED FOR CONSTRUCTION

**Northern Colorado Constructors**

**Irwin-Thomas Drain**

Perimeter Drain Plan & Profile  
Sta 40+00 To 42+00

**J&T Consulting, Inc.**

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