City Council Special Meeting Agenda

Date: 7/14/2020
Time: **5:00 p.m.**
Location: City Hall Council Chambers

- Mayor Matt Hall
- Justin Baily
- Diane Ballard
- Jerry Fritz
- Landon Greer
- Glenn Nielson
- Heidi Rasmussen
- City Administrator, Barry Cook
- Administrative Services Officer, Cindy Baker
- City Attorney, Scott Kolpitcke

- 5:00 – 5:20 –
  - Water Tank Construction Update
  - Action Item - Consider Approving Change Order No 1 for the Beacon Hill Water Tank Project
  - Action Item – Consider Approving Change Order No. 2 for the Beacon Hill Water Tank Project.
    - Staff Reference: Phillip Bowman, Public Works Director

- 5:20 – 5:30 –Discuss Recreation Center Refund Ending Date
  - Staff Reference: Barry Cook, City Administrator

- 5:30 – 5:40 - Discuss/Review Wage Publication and New Requirements per State Statute
  - Staff Reference: Cindy Baker, Administrative Services Officer

- 5:40 – 6:00 - Discuss Mobile Vendor Ordinance
  - Staff Reference: Barry Cook, City Administrator and Scott Kolpitcke, City Attorney

- Updates – City Administrator – Publications
  - Concerts in the Park

MEETING DATE: JULY 14, 2020
DEPARTMENT: PUBLIC WORKS - WATER
PREPARED BY: PHILLIP M. BOWMAN, P.E.
PRESENTED BY: PHILLIP M. BOWMAN, P.E.

AGENDA ITEM SUMMARY REPORT

Approve Change Order #1 for the Beacon Hill Water Tank and Water Main Extension Project

ACTION TO BE TAKEN

Approve Change Order #1 for the Beacon Hill Water Tank and Water Main Extension Project, and authorize the Mayor to sign and execute all associated documents.

SUMMARY OF INFORMATION

The Beacon Hill Water Tank and Water Main Extension Project (the "Project) was awarded to Harris Trucking and Construction Company (HTC) on April 21, 2020, and a Notice to Proceed was issued to HTC on May 26, 2020, to start construction on the Project. While performing excavation on Beacon Hill for preparation of the water tank foundation construction, subsurface conditions were discovered that differed substantially from those identified by the geotechnical investigations completed during the preliminary design phase of the Project. T-O Engineers, the project engineer for both design and construction management, were notified immediately by HTC of these differing site conditions, and T-O performed significant investigation and evaluation of the subsurface conditions encountered. In addition, T-O worked with the geotechnical engineer to develop alternatives to address the differing subsurface conditions. Based upon the differing site conditions and evaluation of the alternatives, it is recommended by T-O, the geotechnical engineer, and City Staff to move the tank approximately forty (40) feet to the east (into the hillside) and construct the tank foundation on the uniform rock subgrade that can be excavated at the new location.

Based on this recommendation, Change Order #1 is proposed to address additional costs and credits for items contained in the original bid documents with established unit prices. Change Order #1 will create a credit of $68,633.00 and decrease the overall contract amount to $3,042,747.65. In addition, this Change Order will increase the contract time by twenty-seven (27) days, and extend the date of Substantial completion from October 16, 2020, to November 12, 2020. This change of the Substantial Completion date will also change the Final Completion date of the project.

City Council approval of Change Order #1 will be subject to final approval of all associated documents by the City Attorney prior to execution by the Mayor.

FISCAL IMPACT

Change Order #1 creates a credit for the project, and lowers the overall cost of the project. The modified overall contract amount is fully budgeted for in the approved FY2020-21 Budget of the Water Enterprise Fund.

ATTACHMENTS

1. Change Order #1 and support documentation.

AGENDA & SUMMARY REPORT TO

None

AGENDA ITEM NO. _____

Change Order

No. 1

Date of Issuance: July 14, 2020 Effective Date: July 14, 2020

Project: BEACON HILL WATER TANK & WATER MAIN EXTENTION PROJECT	Owner: City of Cody, Wyoming	Owner's Contract No.: 2020-01
Contract: Beacon Hill Water Tank & Water Main Extension Project		Date of Contract: May 4, 2020
Contractor: Harris Trucking & Construction, Inc.		Engineer's Project No.: 171133

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

Due to a change in underground site conditions (bedrock dips off at a steeper angle than geotechnical and test pit Explorations), the tank will be moved back into the approximately 40 feet. Change Order #1 modifies unit price Bid items.

Attachments (list documents supporting change):

Attachment A: Change Order Description and cost breakdown.

Plan Sheets: WT 2, WT 5, WT 9, WT 11, WT 12, WT 13, WT 14, WT 18, WT 20, WT 21

CHANGE IN CONTRACT PRICE:

Original Contract Price:

$3,111,380.65

No Change from previously approved Change Orders No. N.A. to No. N.A.:

$0.00

Contract Price prior to this Change Order:

$3,111,380.65

Decrease of this Change Order:

-$68,633.00

Contract Price incorporating this Change Order:

$3,042,747.65

CHANGE IN CONTRACT TIMES:

Original Contract Times: ☐ Working days ☒ Calendar days

Substantial completion (days or date): 10/16/2020 BS #1

Ready for final payment (days or date): 11/6/2020 BS #1

No Change from previously approved Change Orders No. N.A. to No. N,A,:

Substantial completion (days): _____

Ready for final payment (days): _____

Contract Times prior to this Change Order:

Substantial completion (date): 10/16/2020 BS #1

Ready for final payment (date): 11/6/2020 BS #1

Increase of this Change Order:

Substantial completion (days): 27 calendar days

Ready for final payment (days): 28 calendar days

Contract Times with all approved Change Orders:

Substantial completion (date): 11/12/2020 BS #1

Ready for final payment (date): 12/4/2020 BS #1

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date:_____	Date: _____	Date: _____

Approved by Funding Agency (if applicable):

_____ Date: _____

Beacon Hill Water Tank & Water Main Extension Project

Attachment A to Change Order No. 1

General Change Order No. 1 Description:

This change order involves moving the water tank back (to the east) into the hill 40 feet. The original plans called for benching down to the bedrock and building roughly the west 1/3 of the tank up with structural fill. After excavating the tank site to rough grade, the Contractor began the excavation for the benching. The Contractor excavated an area 10 feet deeper than planned for bedrock. The Engineer was on-site to observe this excavation. Other observations were that the incline plane of the bedrock changed to a steeper angle than anticipated. Based on estimates of the incline plane of the bedrock, it is estimated that to encounter bedrock, a fill of 50 to 60 feet would be needed at the west edge of the tank. The plans estimated a fill of 16 feet. The project geotechnical engineer was called to the site and was on-site the next day. The contractor excavated down in another area and the same conditions were encountered. The field report from the geotechnical engineer is attached. After evaluation of alternatives, the best alternative going forward is to move the tank back into the hill 40 feet.

Change Order 1 modifies quantities for current contract items. There is a deduction of structural fill and import fill due to the increased rock excavation. There are additional quantities for pipe, trench excavation and backfill. The additional rock excavation is for rock excavation for the access road and for excavation at the tank that can be accomplished by means similar to bid conditions.

Beacon Hill Water Tank & Water Main Extension Project
Attachment A to Change Order No. 1

		Bid Qty	Units	Bid Unit Cost	Total Bid Cost		Change Order #1 Qty	Units	Change Order #1 Unit Cost	Change Order #1 Total Cost		Total Qty	Total Contract Cost Adjustment
1-11	UNCLASSIFIED WATER TANK SITE EXCAVATION	4900	CY	$ 4.30	$ 21,070.00		1500	CY	$ 4.30	$ 6,450.00		6400	$ 27,520.00
1-12	ROCK EXCAVATION - WATER TANK	1100	CY	$ 26.25	$ 28,875.00		1900	CY	$ 26.25	$ 49,875.00		3000	$ 78,750.00
1-13	UNCLASSIFIED BEACON HILL ROAD EXCAVATION	1400	CY	$ 7.00	$ 9,800.00		900	CY	$ 7.00	$ 6,300.00		2300	$ 16,100.00
1-16	IMPORTED FILL FOR WATER TANK	7700	CY	$ 14.00	$ 107,800.00		-5600	CY	$ 14.00	$ (78,400.00)		2100	$ 29,400.00
1-19	TRENCH EXCAVATION - DOUBLE PIPE TRENCH WITH SHALLOW UTILITIES	670	LF	$ 39.40	$ 26,398.00		40	LF	$ 39.40	$ 1,576.00		710	$ 27,974.00
1-24	TRENCH BACKFILL - DOUBLE PIPE TRENCH WITH SHALLOW UTILITIES	670	LF	$ 1.00	$ 670.00		40	LF	$ 1.00	$ 40.00		710	$ 710.00
1-31	STRUCTURAL WATER TANK FILL	1500	CY	$ 38.00	$ 57,000.00		-1500	CY	$ 38.00	$ (57,000.00)		0	$ -
1-41	10" PVC C900 CLASS 235 DR18 WATER PIPE	1582	LF	$ 14.25	$ 22,543.50		40	LF	$ 14.25	$ 570.00		1622	$ 23,113.50
1-44	10" MJ JOINT RESTRAINT ***HARNESS***	32	EA	$288.00	$ 9,216.00		2	EA	$ 288.00	$ 576.00		34	$ 9,792.00
1-47	12" PVC C900 CLASS 235 DR18 WATER PIPE	665	LF	$ 19.50	$ 12,967.50		40	LF	$ 19.50	$ 780.00		705	$ 13,747.50
1-49	12" MJ JOINT RESTRAINT ***HARNESS***	28	EA	$300.00	$ 8,400.00		2	EA	$ 300.00	$ 600.00		30	$ 9,000.00
				TOTAL:	$ 304,740.00				TOTAL:	$ (68,633.00)		TOTAL:	$ 236,107.00

RIMROCK ENGINEERING, INC.
5440 Holiday Avenue. Billings, Montana 59101: Phone: 406.294.8400 Fax: 406.294.8405

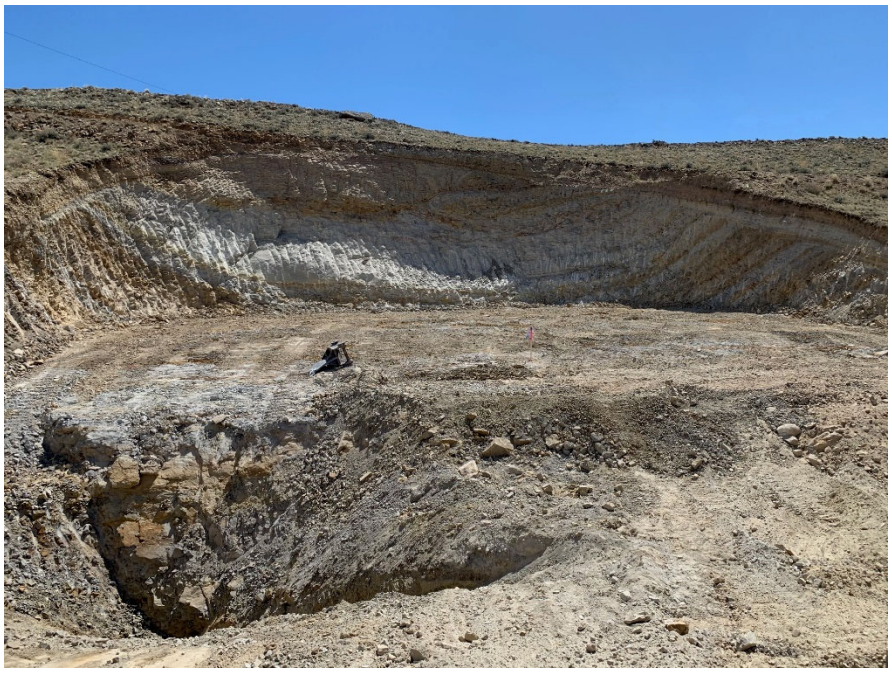
June 16, 2020

Mr. Jeremy Gilb, P.E.
TO Engineers
502 33rd Street
Cody, Wyoming 82414

Re: Excavation Observation
Cody Water Tank
Cody Water District
Cody, Wyoming

Dear Mr. Gilb:

As requested, on Thursday, June 11, 2020, I traveled to the site to perform an excavation observation for the referenced project. It was brought to our attention that competent bedrock was not encountered along the west edge of the proposed tank footprint. Upon arrival, excavations for the tank were at or near planned subgrade elevations. Competent bedrock was present throughout most of the tank footprint. However, along the west edge of the planned tank footprint, the bedrock appears to dip steeply. A test pit was excavated in an attempt to find competent rock and it was not encountered within the ±20 feet of excavation depth. The picture below shows the excavation looking east.



Based on these conditions, several options were discussed while on site. The options discussed were:

1) Continue to excavate down until competent bedrock is encountered and bring back to grade with structural fill while still benching into the bedrock per the geotechnical report.
2) Install some sort of pier foundation system to support the west tank wall.
3) Move the tank to the east further into the hillside to ensure the tank is fully supported on the competent rock.

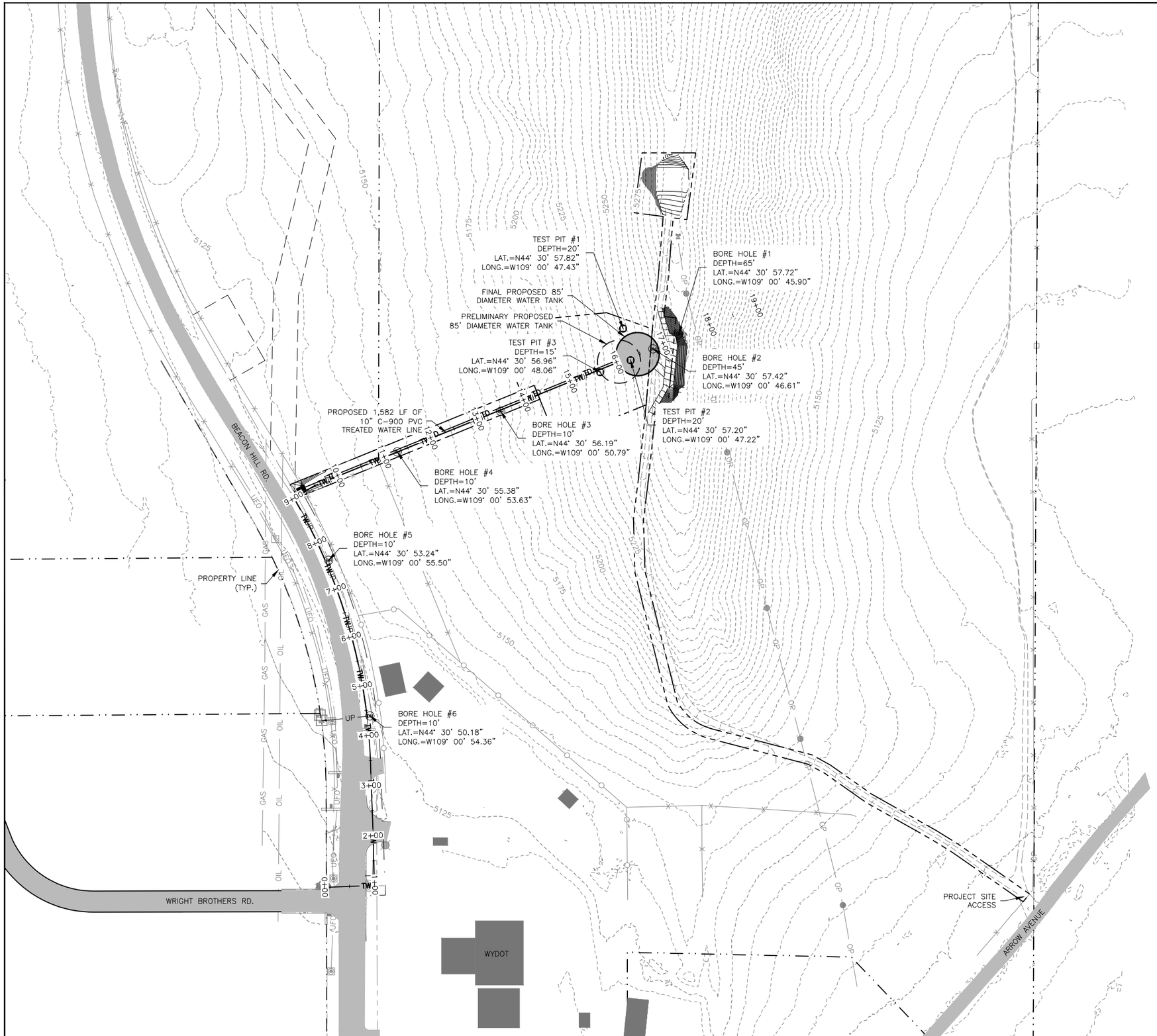
In our opinion and based on our conversations on site, option 3 seems to be best option. This will provide for subgrade uniformity and stability for the tank. Also, with this option, benching of the excavation can be omitted since competent rock will be encountered at a uniform depth.

We appreciate the opportunity to provide this service. If you have any questions regarding this matter or if we can be of further service, please contact us at your convenience.

Sincerely,
RIMROCK ENGINEERING, INC.

Matt Geering, P.E.
Principal/Vice President

Wade Reynolds
Principal/President



LEGEND

BORE HOLE (BH)

TEST PIT

SCALE

100 0 100 200

SCALE IN FEET

NOTE:

1. A COMPLETE COPY OF THE GEOTECHNICAL ENGINEERING REPORT IS LOCATED IN THE PROJECT MANUAL.

DRAWN BY: TJL APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

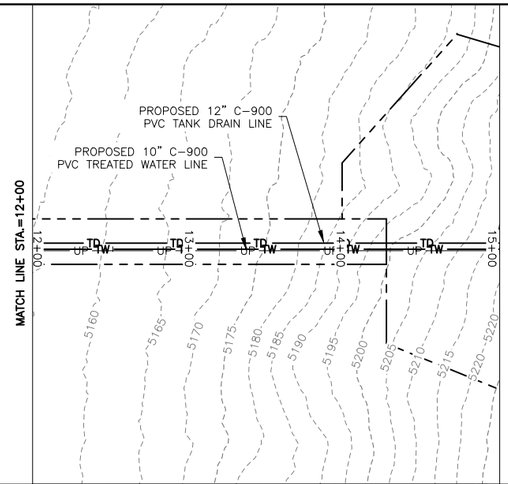
NO.	DESCRIPTION	DATE	BY:
	REVISIONS		

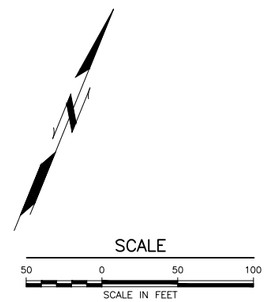
PARK COUNTY
CODY, WYOMING

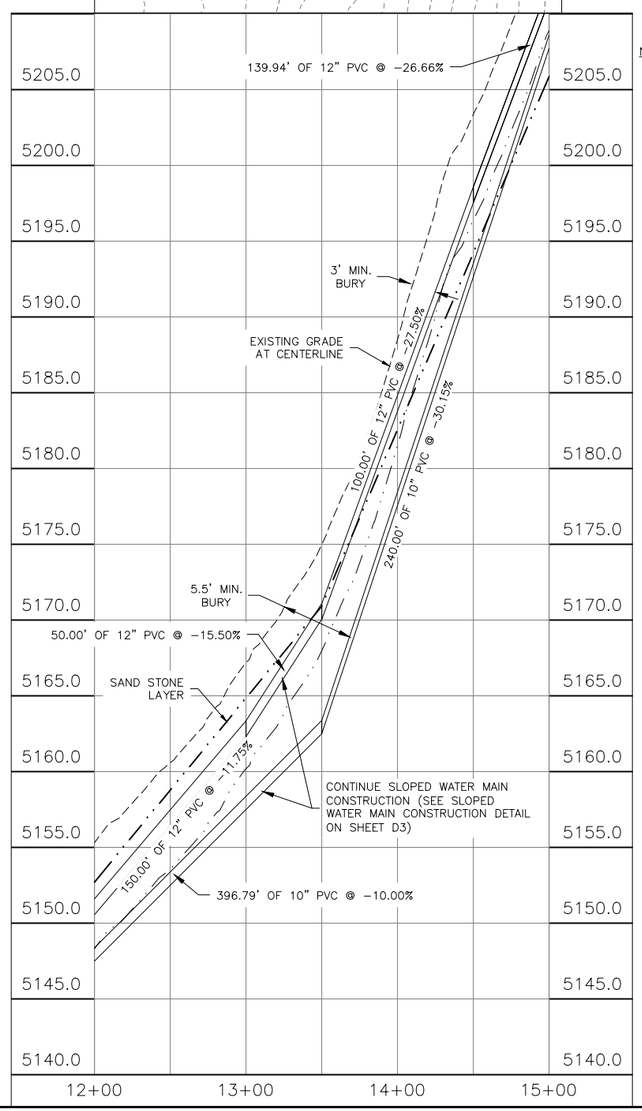
WATER TANK GEOTECHNICAL INFORMATION SHEET
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
2

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\2 WATER TANK GEOTECHNICAL INFORMATION SHEET.dwg, 7/9/2020 11:23:11 AM, Tireland





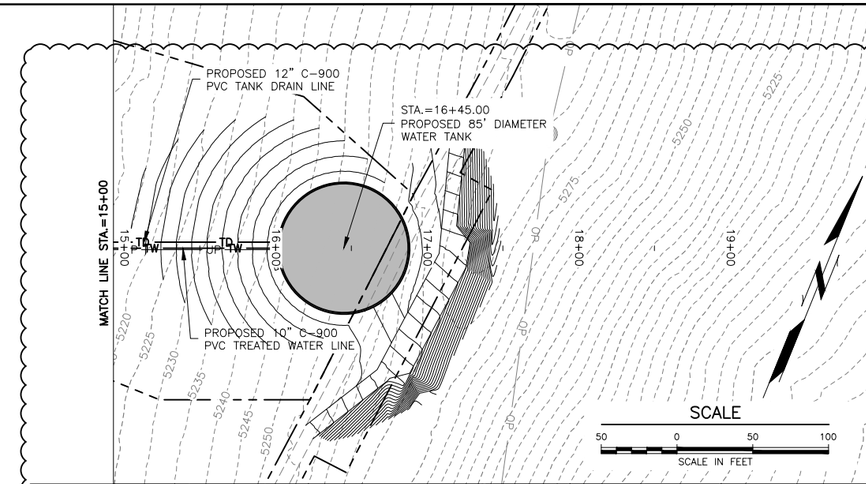


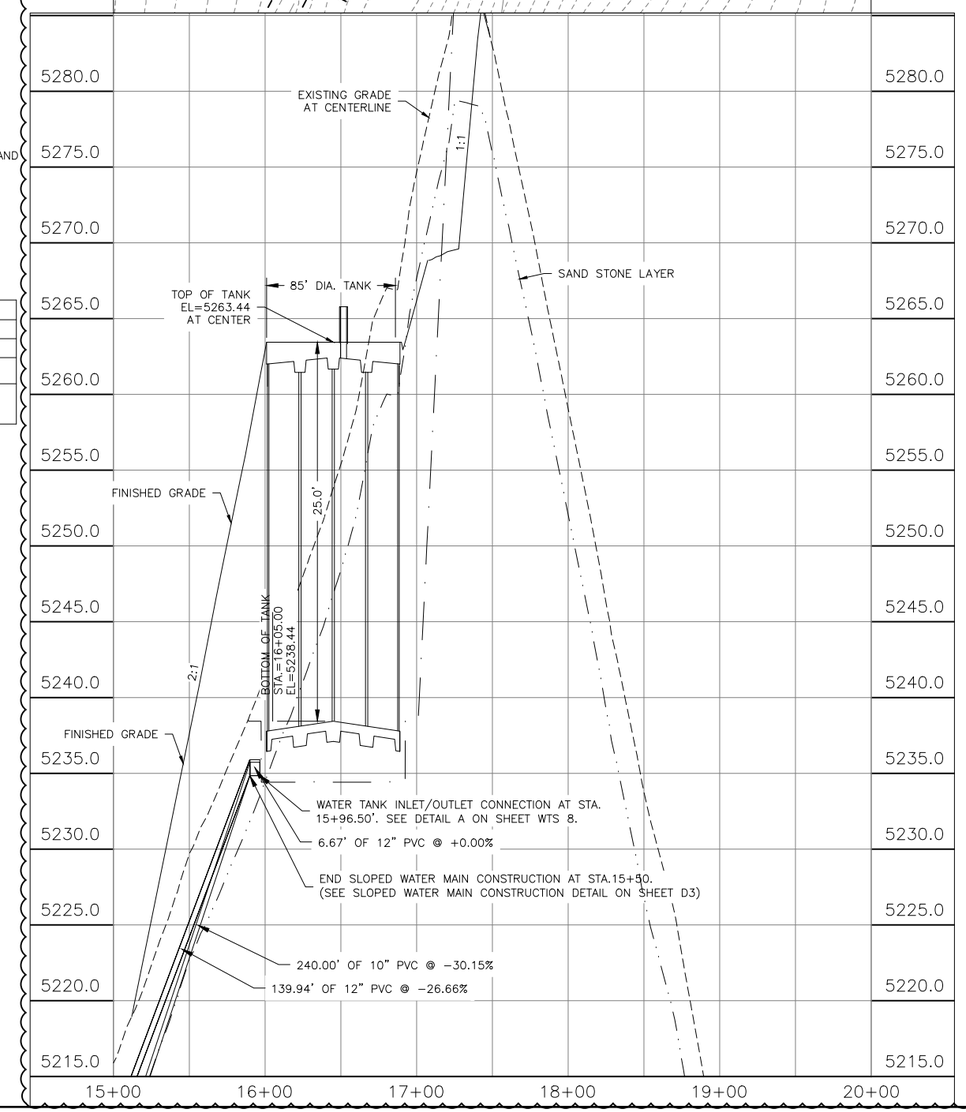
NOTE:

1. DEFLECT PIPE TO MANUFACTURES RECOMMENDATIONS.
2. MAINTAIN 5.5' MIN. PIPE COVER OVER PROPOSED TREATED WATER LINE.
3. MAINTAIN 3.0' MIN. PIPE COVER OVER TANK DRAIN LINE.
4. STA.9+50 TO STA.15+50 USE SLOPED WATER MAIN CONSTRUCTION FOR WATER MAIN AND TANK DRAIN LINE. (SEE SLOPED WATER MAIN CONSTRUCTION DETAIL ON SHEET D3)
5. FIELD ADJUSTMENTS MAY BE MADE TO ANCHOR BLOCKS, SLOPE ANCHORS, BENTONITE TRENCH PLUGS, AND WATERLINE REFERENCE MARKER WITH APPROVAL OF ENGINEER.
6. ALIGNMENT IS ALONG CENTERLINE OF TREATED WATER LINE. DRAIN LINE IS PARALLEL AND OFFSET 4' LEFT OF ALIGNMENT.

TYPICAL TRENCH DETAIL TABLE

FEATURE(S)	BEGIN STA.	END STA.	TRENCH DETAIL (SHEET D5)
10" TREATED WATER	0+00	4+38.58	SINGLE PIPE TRENCH DETAIL
10" TREATED WATER & POWER	4+38.58	9+01.69	SINGLE PIPE WITH SHALLOW UTITLITIES TRENCH DETAIL
10" TREATED WATER & 12" DRAIN LINE & POWER	9+01.69	15+96.50	DOUBLE PIPE WITH SHALLOW UTITLITIES TRENCH DETAIL





Δ C.O.#1

DRAWN BY: TJI APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY
1	CHANGE ORDER #1	6/18/2020	TJI

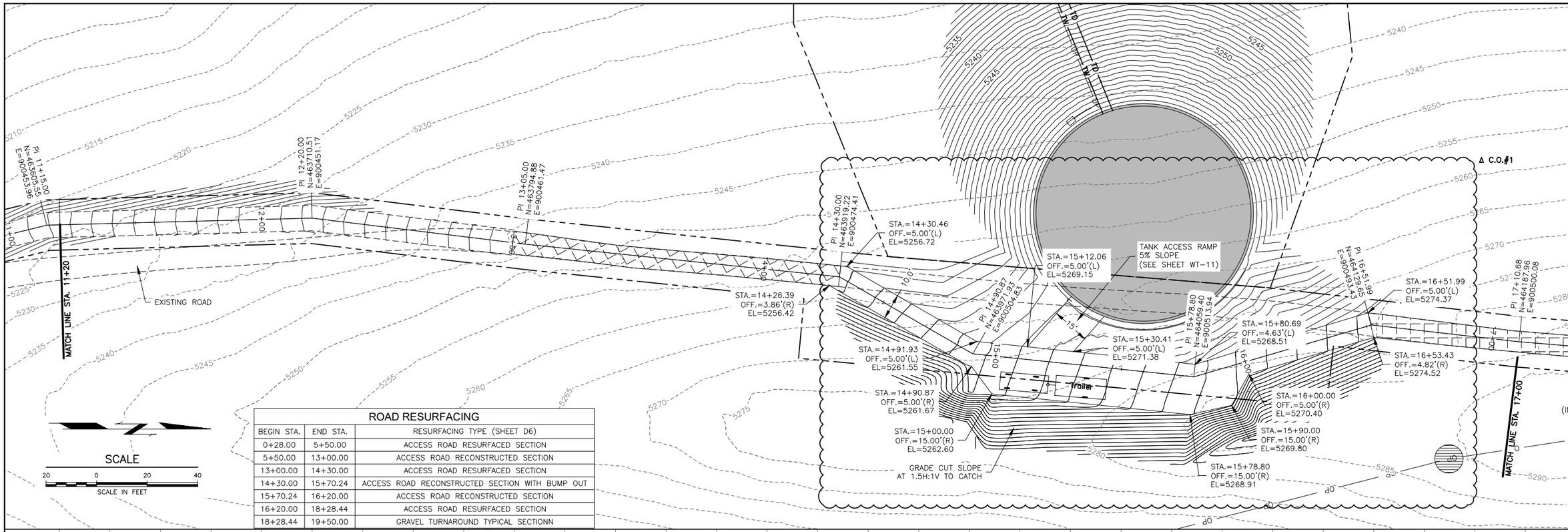
REVISIONS

PARK COUNTY
CODY, WYOMING

WATER TANK PLAN AND PROFILE SHEET 2
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

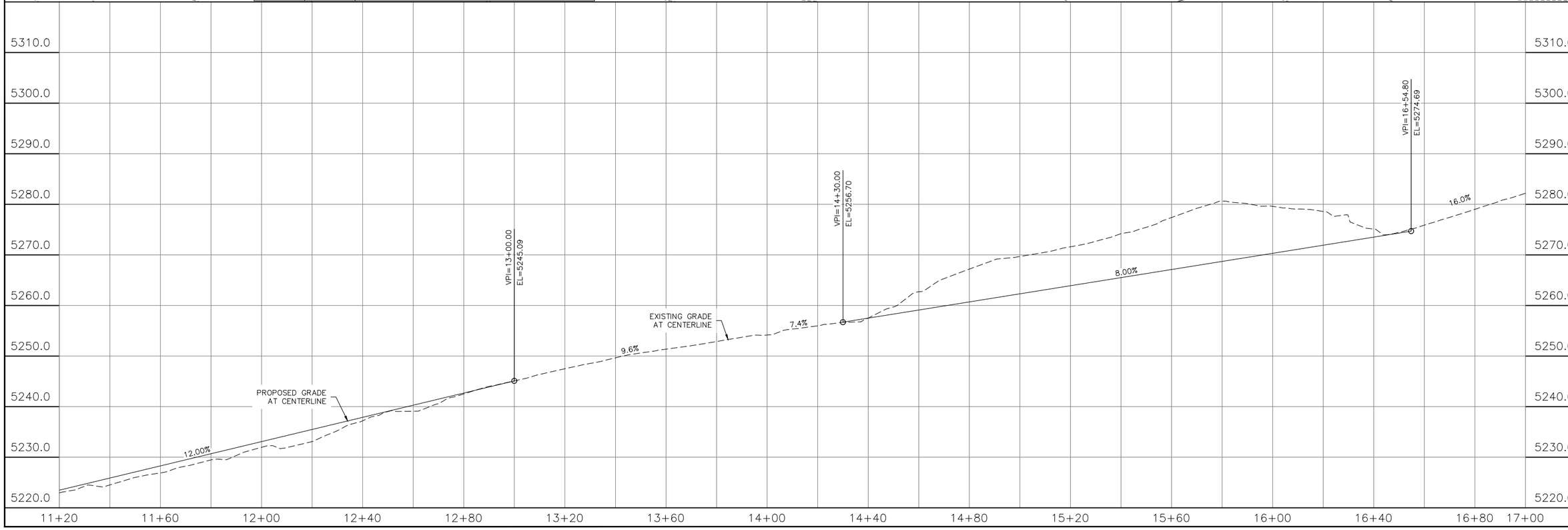
SHEET NUMBER
WT
5

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\5 WATER TANK PLAN AND PROFILE SHEET 2.dwg, 7/9/2020 11:23:41 AM, Tireland



ROAD RESURFACING

BEGIN STA.	END STA.	RESURFACING TYPE (SHEET D6)
0+28.00	5+50.00	ACCESS ROAD RESURFACED SECTION
5+50.00	13+00.00	ACCESS ROAD RECONSTRUCTED SECTION
13+00.00	14+30.00	ACCESS ROAD RESURFACED SECTION
14+30.00	15+70.24	ACCESS ROAD RECONSTRUCTED SECTION WITH BUMP OUT
15+70.24	16+20.00	ACCESS ROAD RECONSTRUCTED SECTION
16+20.00	18+28.44	ACCESS ROAD RESURFACED SECTION
18+28.44	19+50.00	GRAVEL TURNAROUND TYPICAL SECTIONN



DRAWN BY: KES APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY
1	CHANGE ORDER #1	6/18/2020	TJI

REVISIONS

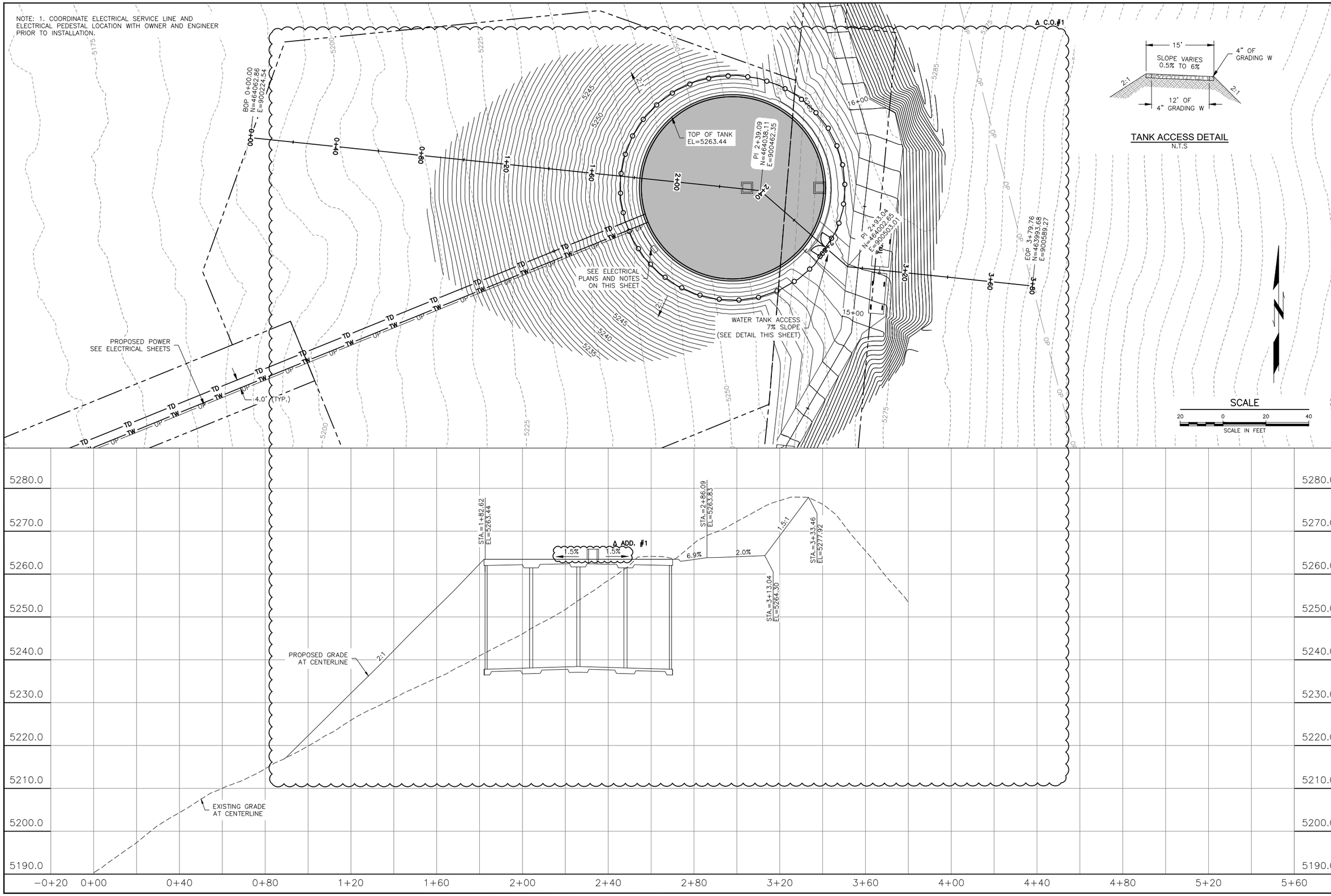
PARK COUNTY
CODY, WYOMING

BEACON ACCESS ROAD PLAN AND PROFILE SHEET 3
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
9

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\7 BEACON ACCESS ROAD PLAN AND PROFILE SHEET 1.dwg, 7/9/2020 11:24:08 AM, Tireland

NOTE: 1. COORDINATE ELECTRICAL SERVICE LINE AND ELECTRICAL PEDESTAL LOCATION WITH OWNER AND ENGINEER PRIOR TO INSTALLATION.



DRAWN BY: TJI APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY
2	CHANGE ORDER #1	6/18/2020	TJI
1	ADDENDUM #1	05/11/20	ABK

REVISIONS

PARK COUNTY
CODY, WYOMING

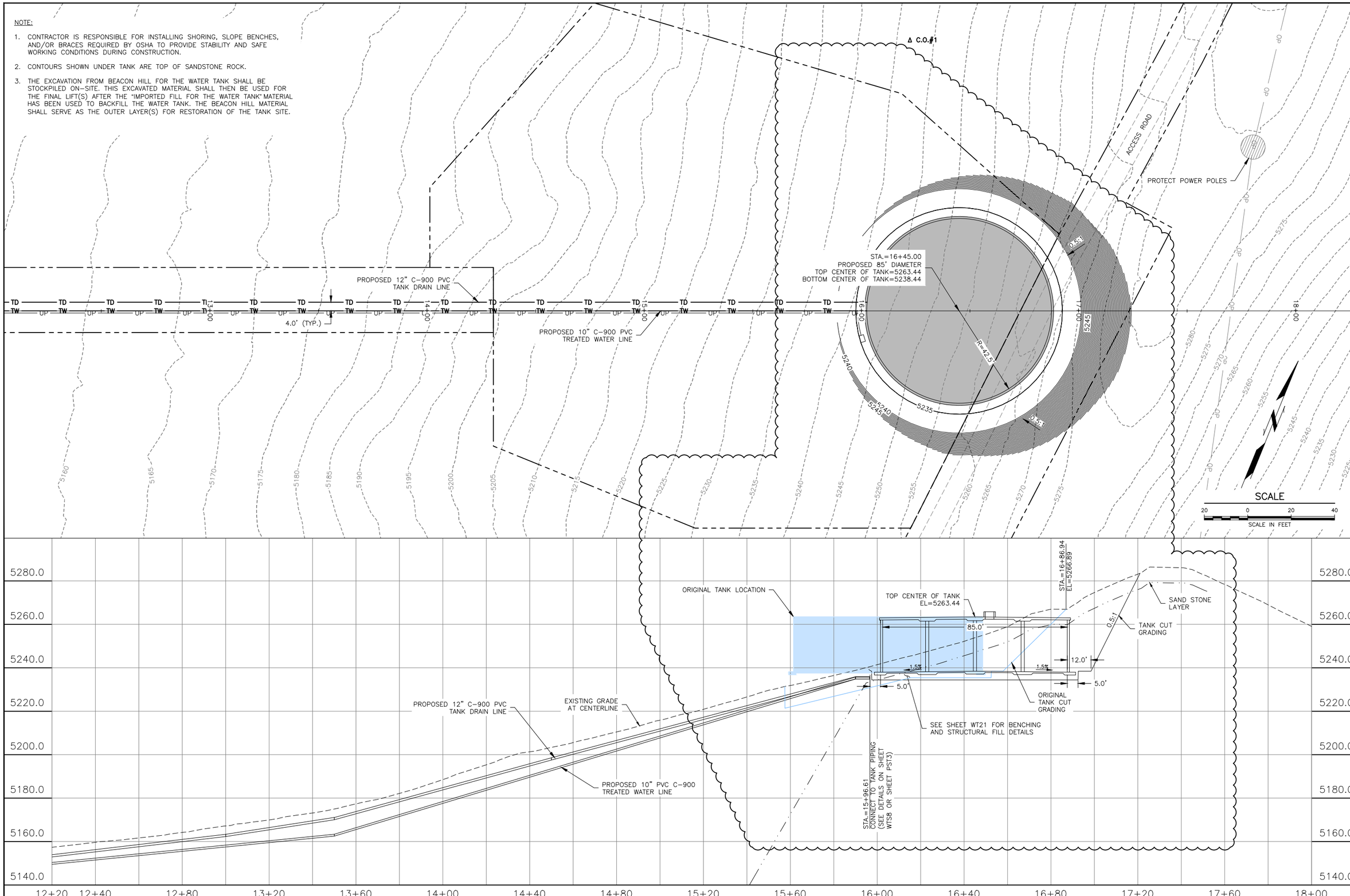
WATER TANK ACCESS
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
11

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\11 WATER TANK ACCESS.dwg, 7/8/2020 11:24:35 AM, Tlreland

NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SHORING, SLOPE BENCHES, AND/OR BRACES REQUIRED BY OSHA TO PROVIDE STABILITY AND SAFE WORKING CONDITIONS DURING CONSTRUCTION.
2. CONTOURS SHOWN UNDER TANK ARE TOP OF SANDSTONE ROCK.
3. THE EXCAVATION FROM BEACON HILL FOR THE WATER TANK SHALL BE STOCKPILED ON-SITE. THIS EXCAVATED MATERIAL SHALL THEN BE USED FOR THE FINAL LIFT(S) AFTER THE "IMPORTED FILL FOR THE WATER TANK" MATERIAL HAS BEEN USED TO BACKFILL THE WATER TANK. THE BEACON HILL MATERIAL SHALL SERVE AS THE OUTER LAYER(S) FOR RESTORATION OF THE TANK SITE.



DRAWN BY: TJL APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY:
	REVISIONS		

PARK COUNTY
CODY, WYOMING

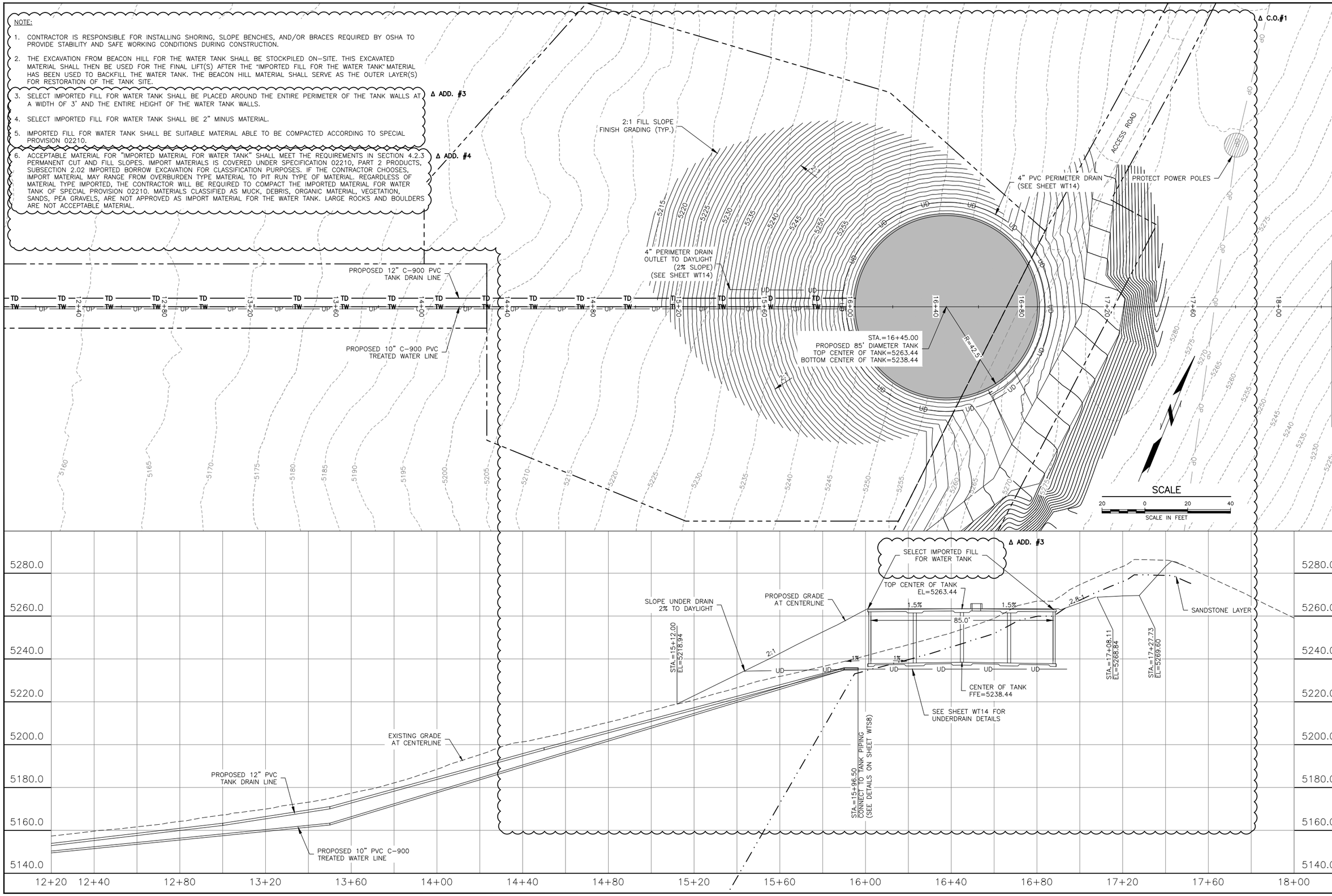
WATER TANK CUT GRADING
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
12

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\12 WATER TANK CUT GRADING.dwg, 7/9/2020 11:25:00 AM, Tlireland

NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SHORING, SLOPE BENCHES, AND/OR BRACES REQUIRED BY OSHA TO PROVIDE STABILITY AND SAFE WORKING CONDITIONS DURING CONSTRUCTION.
2. THE EXCAVATION FROM BEACON HILL FOR THE WATER TANK SHALL BE STOCKPILED ON-SITE. THIS EXCAVATED MATERIAL SHALL THEN BE USED FOR THE FINAL LIFT(S) AFTER THE "IMPORTED FILL FOR THE WATER TANK" MATERIAL HAS BEEN USED TO BACKFILL THE WATER TANK. THE BEACON HILL MATERIAL SHALL SERVE AS THE OUTER LAYER(S) FOR RESTORATION OF THE TANK SITE.
3. SELECT IMPORTED FILL FOR WATER TANK SHALL BE PLACED AROUND THE ENTIRE PERIMETER OF THE TANK WALLS AT A WIDTH OF 3' AND THE ENTIRE HEIGHT OF THE WATER TANK WALLS. Δ ADD. #3
4. SELECT IMPORTED FILL FOR WATER TANK SHALL BE 2" MINUS MATERIAL.
5. IMPORTED FILL FOR WATER TANK SHALL BE SUITABLE MATERIAL ABLE TO BE COMPACTED ACCORDING TO SPECIAL PROVISION 02210.
6. ACCEPTABLE MATERIAL FOR "IMPORTED MATERIAL FOR WATER TANK" SHALL MEET THE REQUIREMENTS IN SECTION 4.2.3 PERMANENT CUT AND FILL SLOPES. IMPORT MATERIALS IS COVERED UNDER SPECIFICATION 02210, PART 2 PRODUCTS, SUBSECTION 2.02 IMPORTED BORROW EXCAVATION FOR CLASSIFICATION PURPOSES. IF THE CONTRACTOR CHOOSES, IMPORT MATERIAL MAY RANGE FROM OVERBURDEN TYPE MATERIAL TO PIT RUN TYPE OF MATERIAL. REGARDLESS OF MATERIAL TYPE IMPORTED, THE CONTRACTOR WILL BE REQUIRED TO COMPACT THE IMPORTED MATERIAL FOR WATER TANK OF SPECIAL PROVISION 02210. MATERIALS CLASSIFIED AS MUCK, DEBRIS, ORGANIC MATERIAL, VEGETATION, SANDS, PEA GRAVELS, ARE NOT APPROVED AS IMPORT MATERIAL FOR THE WATER TANK. LARGE ROCKS AND BOULDERS ARE NOT ACCEPTABLE MATERIAL. Δ ADD. #4



NO.	DESCRIPTION	DATE	BY:
3	ADDENDUM #4	5/11/2020	ABK
2	ADDENDUM #3	3/27/2020	ABK
1	CHANGE ORDER #1	6/18/2020	TJI

REVISIONS

DRAWN BY: TJI APPR. BY: JLG
CHK'D BY: OJJ PROJ NO.: 171133

T-O ENGINEERS

PARK COUNTY
CODY, WYOMING

WATER TANK FINISH GRADING
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
13

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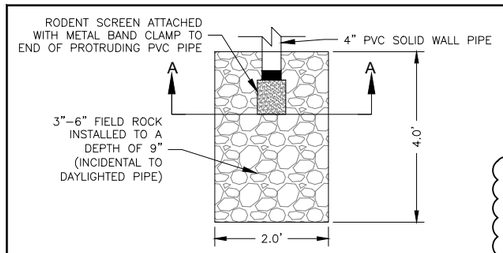
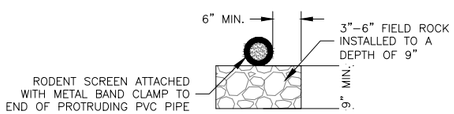
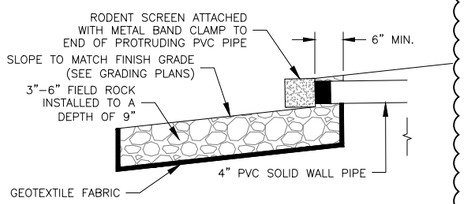


PLAN VIEW



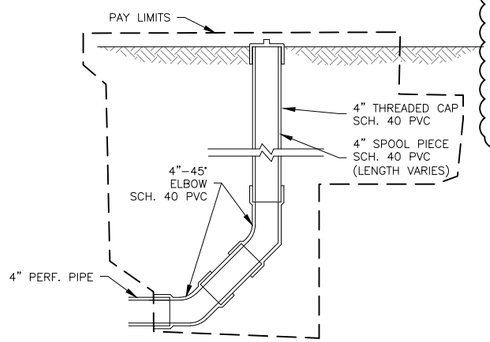
A-A SECTION VIEW



PROFILE VIEW

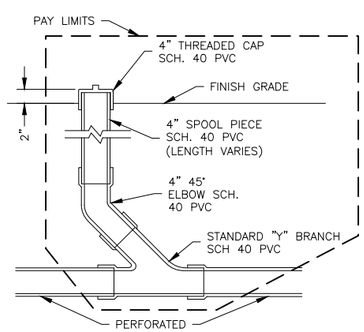
PERIMETER DRAIN ROCK FIELD DETAIL

N.T.S.



4 " PVC END CLEAN OUT DETAIL

N.T.S.



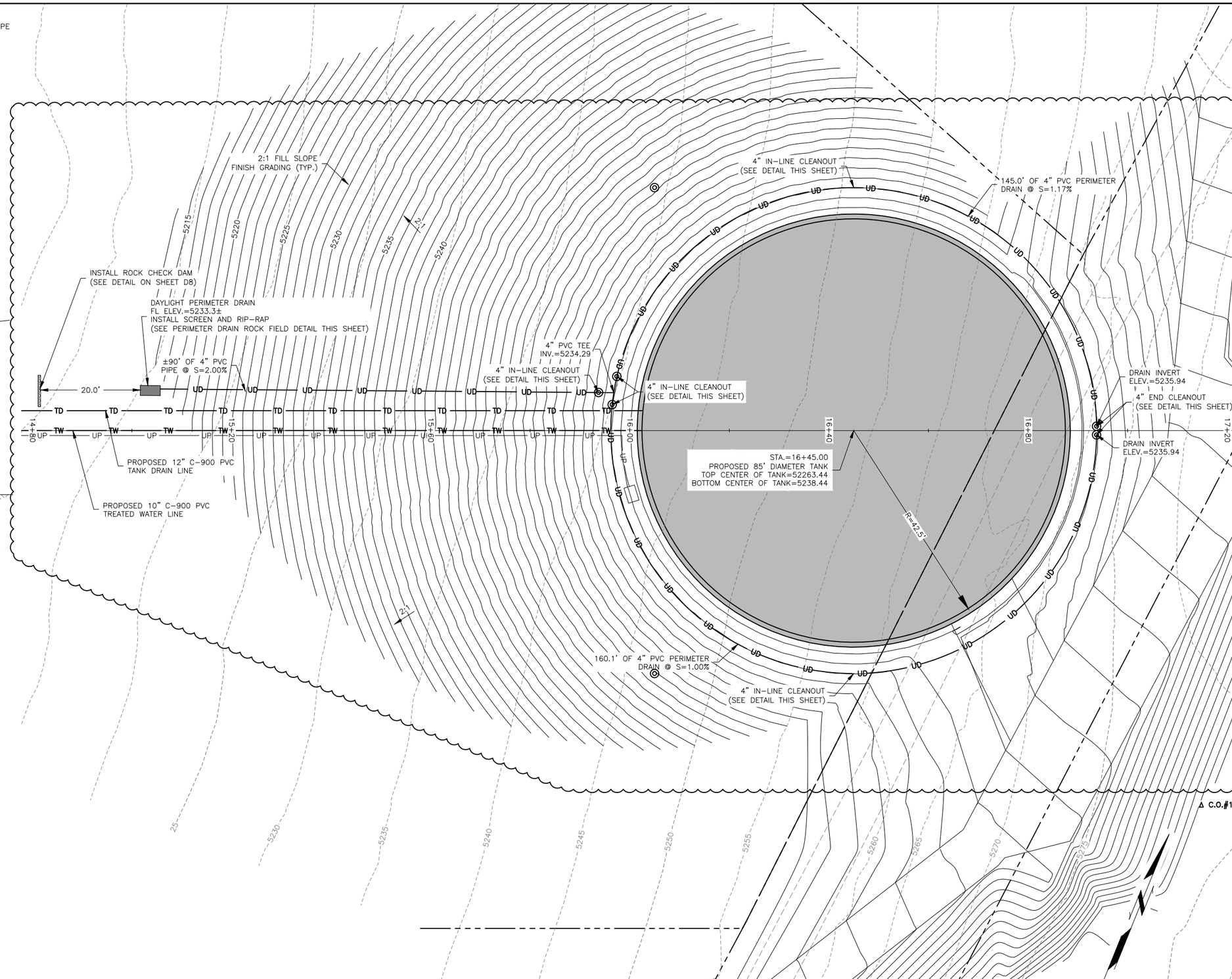
IN-LINE CLEANOUT DETAILS

CITY OF CODY

N.T.S.

NOTE:

1. PAYMENT FOR THE 4" PVC CLEAN OUTS INCLUDES ALL MATERIALS SHOWN WITHIN THESE PAY LIMITS. SEE SPECIFICATIONS FOR FURTHER DETAILS.



NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SHORING, SLOPE BENCHES, AND/OR BRACES REQUIRED BY OSHA TO PROVIDE STABILITY AND SAFE WORKING CONDITIONS DURING CONSTRUCTION.

SCALE

10 0 10 20

SCALE IN FEET

DRAWN BY: TJL APPR. BY: JLG

CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY:
	REVISIONS		

PARK COUNTY
CODY, WYOMING

WATER TANK UNDER DRAIN LAYOUT

BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER

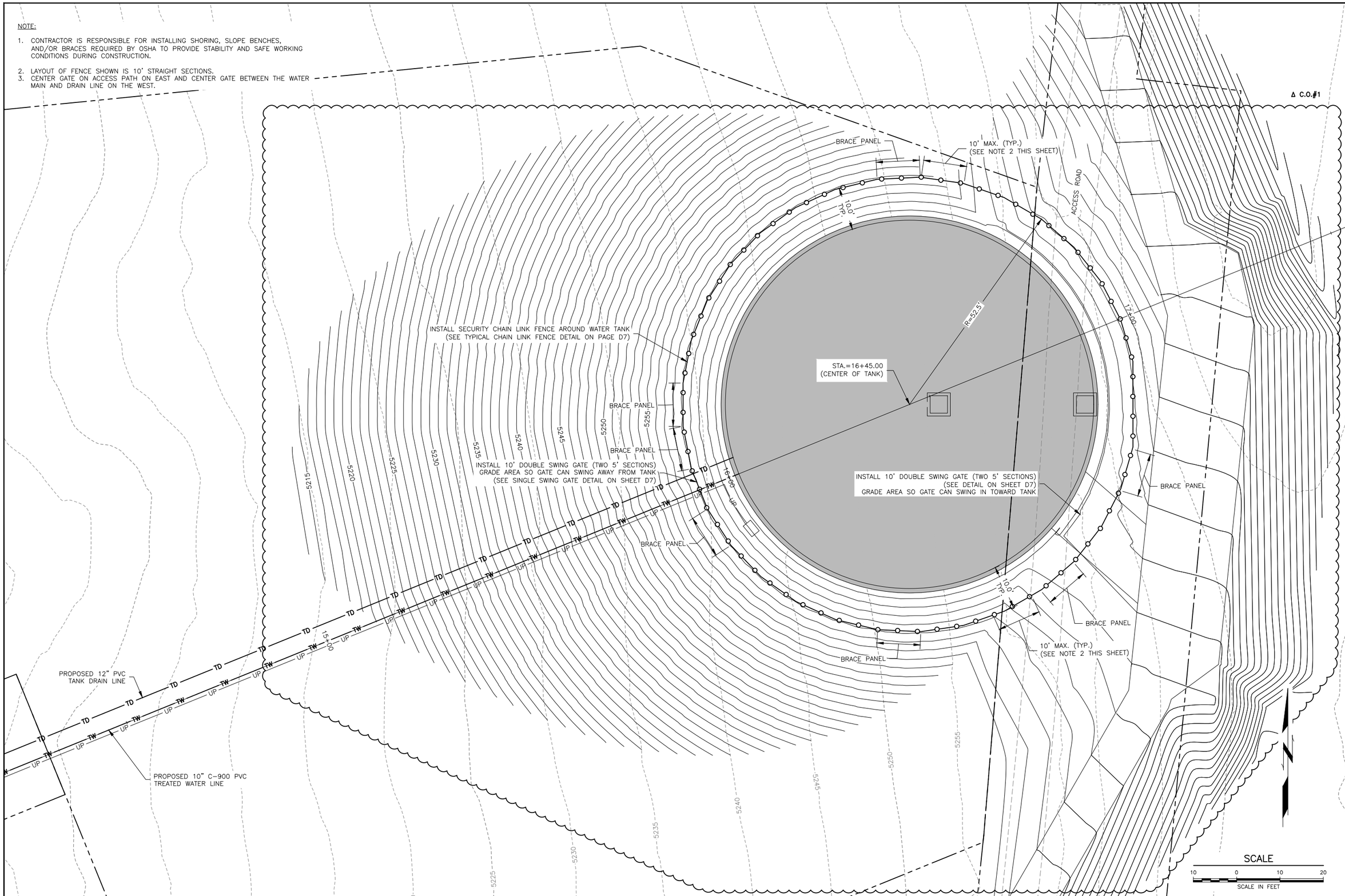
WT

14

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\13 WATER TANK UNDER DRAIN LAYOUT.dwg, 7/9/2020 11:25:41 AM, Tlreland

NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SHORING, SLOPE BENCHES, AND/OR BRACES REQUIRED BY OSHA TO PROVIDE STABILITY AND SAFE WORKING CONDITIONS DURING CONSTRUCTION.
2. LAYOUT OF FENCE SHOWN IS 10' STRAIGHT SECTIONS.
3. CENTER GATE ON ACCESS PATH ON EAST AND CENTER GATE BETWEEN THE WATER MAIN AND DRAIN LINE ON THE WEST.



DRAWN BY: TJI APPR. BY: JLG
CHK'D BY: OJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY:
1	CHANGE ORDER #1	6/18/2020	TJI

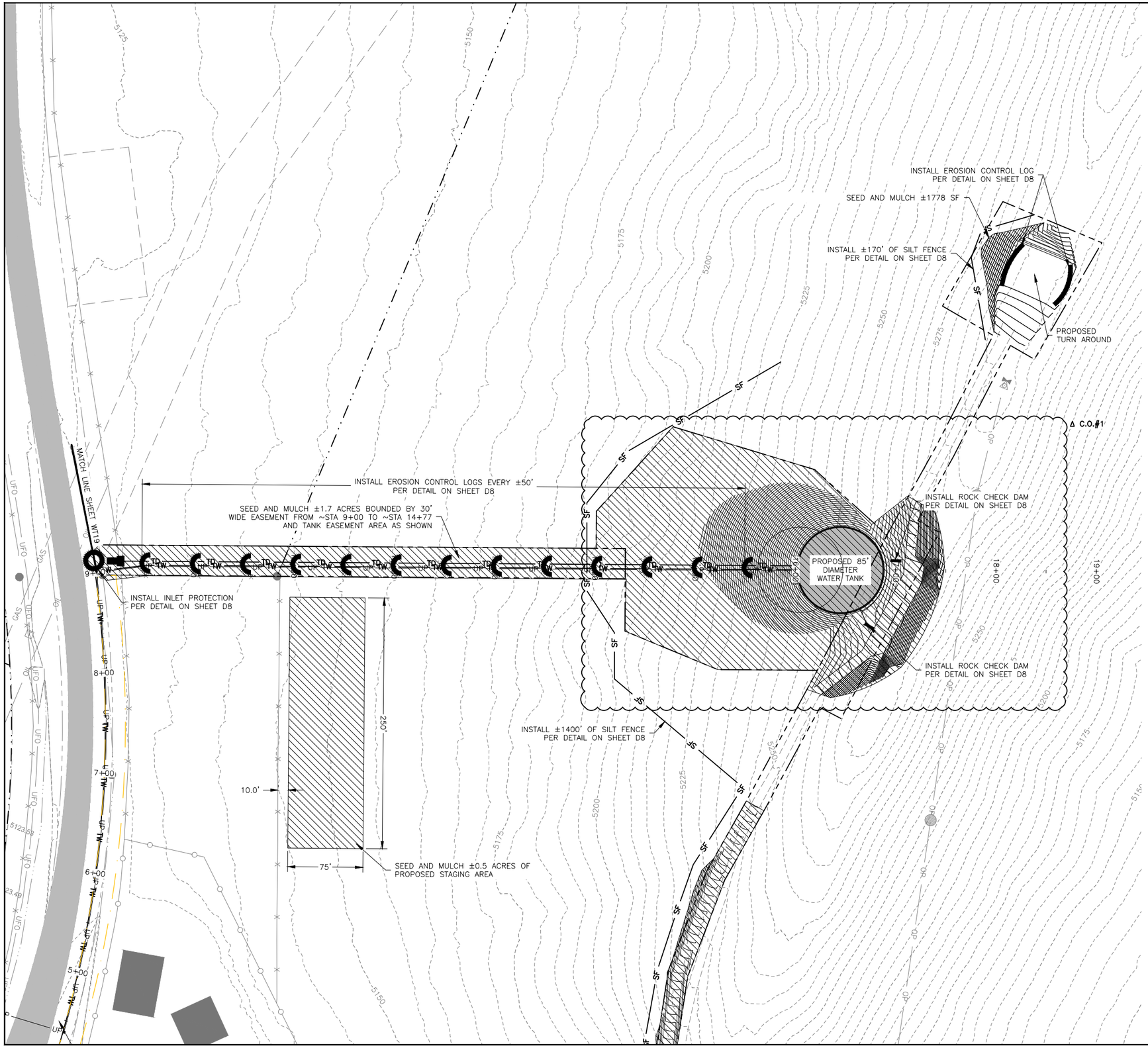
REVISIONS

PARK COUNTY
CODY, WYOMING

WATER TANK FENCE LAYOUT
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
18

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\18 WATER TANK FENCE LAYOUT.dwg, 7/9/2020 11:26:00 AM, Tireland



NOTES:

1. ANY DISTURBANCE OUTSIDE OF CONSTRUCTION BOUNDARIES IS TO BE SEEDED AND MULCHED AND RESTORED TO EXISTING CONDITIONS AND IS CONSIDERED INCIDENTAL TO CONSTRUCTION.
2. CONTRACTOR SHALL USE CITY/WYDOT APPROVED SEED MIX.

LEGEND

- SEED AND MULCH AREA
- INLET
- MANHOLE
- INLET PROTECTION
- SILT FENCE — SF —
- EROSION CONTROL LOG
- ROCK CHECK DAM

SCALE

100 0 100 200

SCALE IN FEET

DRAWN BY: TJL APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY:
1	CHANGE ORDER #1	6/18/2020	KES

REVISIONS

PARK COUNTY
CODY, WYOMING

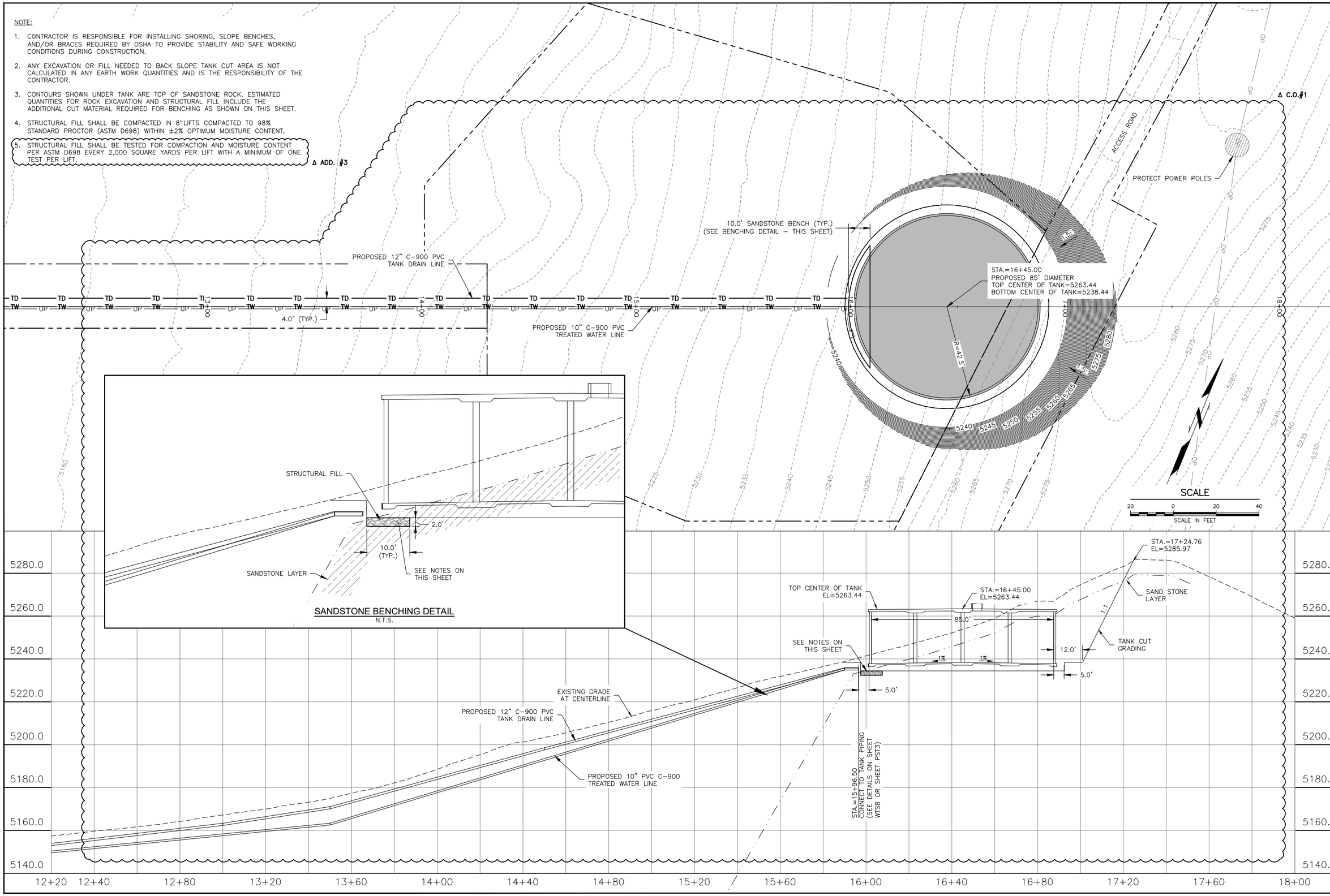
WATER TANK SURFACE RESTORATION AND EROSION PLAN - SHEET 2
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
20

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\20 WATER TANK SURFACE RESTORATION AND EROSION PLAN - SHEET 2.dwg, 7/9/2020 11:26:19 AM, Tireland

NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SHORING, SLOPE BENCHES, AND/OR BRACES REQUIRED BY OSHA TO PROVIDE STABILITY AND SAFE WORKING CONDITIONS DURING CONSTRUCTION.
2. ANY EXCAVATION OR FILL NEEDED TO BACK SLOPE TANK CUT AREA IS NOT CALCULATED IN ANY EARTH WORK QUANTITIES AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTOURS SHOWN UNDER TANK ARE TOP OF SANDSTONE ROCK. ESTIMATED QUANTITIES FOR ROCK EXCAVATION AND STRUCTURAL FILL INCLUDE THE ADDITIONAL CUT MATERIAL REQUIRED FOR BENCHING AS SHOWN ON THIS SHEET.
4. STRUCTURAL FILL SHALL BE COMPACTED IN 8" LIFTS COMPACTED TO 98% STANDARD PROCTOR (ASTM D698) WITHIN ±2% OPTIMUM MOISTURE CONTENT.
5. STRUCTURAL FILL SHALL BE TESTED FOR COMPACTION AND MOISTURE CONTENT PER ASTM D698 EVERY 2,000 SQUARE YARDS PER LIFT WITH A MINIMUM OF ONE TEST PER LIFT. Δ ADD. #3



DRAWN BY: TJI APPR. BY: JLG
CHK'D BY: QJJ PROJ NO.: 171133

T-O ENGINEERS

NO.	DESCRIPTION	DATE	BY
2	CHANGE ORDER #1	6/18/2020	TJI
1	ADDENDUM #3	05/11/20	ABK

REVISIONS

PARK COUNTY
CODY, WYOMING

SANDSTONE BENCHING LAYOUT
BEACON HILL WATER TANK & WATER MAIN EXTENSION PROJECT

SHEET NUMBER
WT
21

W:\Municipal Projects\171133 - City of Cody Beacon Hill Water Tank\CAD\Drawings\21 SANDSTONE BENCHING LAYOUT.dwg, 7/9/2020 11:26:41 AM, Tireland

MEETING DATE: JULY 14, 2020
DEPARTMENT: PUBLIC WORKS - WATER
PREPARED BY: PHILLIP M. BOWMAN, P.E.
PRESENTED BY: PHILLIP M. BOWMAN, P.E.

AGENDA ITEM SUMMARY REPORT

Approve Change Order #2 for the Beacon Hill Water Tank and Water Main Extension Project

ACTION TO BE TAKEN

Approve Change Order #2 for the Beacon Hill Water Tank and Water Main Extension Project, and authorize the Mayor to sign and execute all associated documents.

SUMMARY OF INFORMATION

The Beacon Hill Water Tank and Water Main Extension Project (the "Project) was awarded to Harris Trucking and Construction Company (HTC) on April 21, 2020, and a Notice to Proceed was issued to HTC on May 26, 2020, to start construction on the Project. While performing excavation on Beacon Hill for preparation of the water tank foundation construction, subsurface conditions were discovered that differed substantially from those identified by the geotechnical investigations completed during the preliminary design phase of the Project. T-O Engineers, the project engineer for both design and construction management, were notified immediately by HTC of these differing site conditions, and T-O performed significant investigation and evaluation of the subsurface conditions encountered. In addition, T-O worked with the geotechnical engineer to develop alternatives to address the differing subsurface conditions. Based upon the differing site conditions and evaluation of the alternatives, it is recommended by T-O, the geotechnical engineer, and City Staff to move the tank approximately forty (40) feet to the east (into the hillside) and construct the tank foundation on the uniform rock subgrade that can be excavated at the new location.

Based on this recommendation, Change Order #2 is proposed to complete the additional rock excavation required by moving the tank. This rock excavation is at a greater depth and is in a harder rock material than the rock excavation identified in the original project plans with an established unit price, and is therefore eligible for a change of unit price through a change order. In discussing the nature of the additional rock excavation with HTC, it was negotiated and agreed to by HTC staff and City Staff that the work would be paid for on an "actual hours worked" basis with contractually set hourly equipment rates. Change Order #2 defines the hourly equipment rates (including overhead and profit) for each piece of equipment required for this task, and also defines the not to exceed amount of the change order at $380,581.75. Change Order #2 will increase the total contract amount to $3,423,329.40.

City Council approval of Change Order #2 will be subject to final approval of all associated documents by the City Attorney prior to execution by the Mayor.

FISCAL IMPACT

Change Order #2 increases the overall cost of the project to $3,423,329.40. This overall cost is $311,948.75 higher than the original contract amount, and the additional amount is not included in the approved FY2020-21 Budget of the Water Enterprise Fund. Approval of Change Order #2 will require a Budget Amendment and utilization of unrestricted reserves in the Water Enterprise Fund.

AGENDA ITEM NO. _____

In addition, City Staff is working with Wyoming Water Development Commission (WWDC) staff to determine if some or all of the additional project cost is eligible for grant funding. There is approximately $60,000 of funding remaining in the original project grant that could be applied to the cost of Change Order #2 with WWDC approval. Furthermore, additional grant funding may be available from WWDC through their construction contingency funds with approval of the WWDC Board of Commissioners.

At this time, the use of the remaining grant funds and the availability of additional construction contingency funds has not been approved by WWDC. As the "worst case scenario" all funding of Change Order #2 would be provided by the City's Water Enterprise Fund and would require the use of unrestricted reserves to fund the change order.

ATTACHMENTS

1. Change Order #2 and support documentation.

AGENDA & SUMMARY REPORT TO

None

AGENDA ITEM NO. _____

Change Order

No. 2

Date of Issuance: July 14, 2020 Effective Date: July 14, 2020

Project: BEACON HILL WATER TANK & WATER MAIN EXTENTION PROJECT	Owner: City of Cody, Wyoming	Owner's Contract No.: 2020-01
Contract: Beacon Hill Water Tank & Water Main Extension Project		Date of Contract: May 4, 2020
Contractor: Harris Trucking & Construction, Inc.		Engineer's Project No.: 171133

The Contract Documents are modified as follows upon execution of this Change Order:

Description:
See Attachment A.

Attachments (list documents supporting change):
Attachment A: Change Order Description and cost breakdown.

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: $3,111,380.65	Original Contract Times: ☐ Working days ☒ Calendar days Substantial completion (days or date): 10/16/2020 BS #1 Ready for final payment (days or date): 11/6/2020 BS #1
Decrease from previously approved Change Orders No. 1 to No. 1: -$68,633.00	No Change from previously approved Change Orders No. 1 to No. 1: Substantial completion (days): 11/12/2020 BS #1 Ready for final payment (days): 12/4/2020 BS #1
Contract Price prior to this Change Order: $3,042,747.65	Contract Times prior to this Change Order: Substantial completion (date): 10/16/2020 BS #1 Ready for final payment (date): 11/6/2020 BS #1
Increase of this Change Order: $380,581.75	No Change of this Change Order: Substantial completion (days):_____ Ready for final payment (days):_____
Contract Price incorporating this Change Order: $3,423,329.40	Contract Times with all approved Change Orders: Substantial completion (date): 11/12/2020 BS #1 Ready for final payment (date): 12/4/2020 BS #1

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date:_____	Date: _____	Date: _____

Approved by Funding Agency (if applicable):

_____ Date: _____

Beacon Hill Water Tank & Water Main Extension Project

Attachment A to Change Order No. 2

General Change Order No. 2 Description:

This change order involves moving the water tank back (to the east) into the hill 40 feet. The original plans called for benching down to the bedrock and building roughly the west 1/3 of the tank up with structural fill. After excavating the tank site to rough grade, the Contractor began the excavation for the benching. The Contractor excavated an area 10 feet deeper than planned for bedrock. The Engineer was on-site to observe this excavation. Other observations were that the incline plane of the bedrock changed to a steeper angle than anticipated. Based on estimates of the incline plane of the bedrock, it is estimated that to encounter bedrock, a fill of 50 to 60 feet would be needed at the west edge of the tank. The plans estimated a fill of 16 feet. The project geotechnical engineer was called to the site and was on-site the next day. The contractor excavated down in another area and the same conditions were encountered. The field report from the geotechnical engineer is attached. After evaluation of alternatives, the best alternative going forward is to move the tank back into the hill 40 feet.

Change Order 2 adds equipment hours to the contract. This equipment is needed for the additional rock excavation back into the hill and into more competent bedrock. Equipment hours will be tracked and paid for actual hours of operation to accomplish the rock excavation. It is anticipated that this rock excavation will take approximately 25 days at a production rate around 150 CY per day. This rate is similar to the rock excavation already completed. A not to exceed amount is estimated based on equipment rates times estimated hours.

Beacon Hill Water Tank & Water Main Extension Project
Attachment A to Change Order No. 2

Equipment	Hours	Rate (Includes 15% O&P)	Estimate
490 Excavator	265	$ 310.50	$ 82,282.50
336 Excavator	175	$ 235.75	$ 41,256.25
D8 Cat	175	$ 287.50	$ 50,312.50
D9 Cat	192	$ 529.00	$101,568.00
Volvo Rock Truck (2)	200	$ 224.25	$ 44,850.00
Hammer Breaker	175	$ 287.50	$ 50,312.50
Transport & Permits	1		$ 10,000.00
		Not To Exceed Total:	**$380,581.75**

Notes:

1. Equipment Rate includes 15% mark up as allowed per the General Conditions Arcticle 11.01.

2. Transport & Permits is a sub-contractor needed to haul the large equipment to the site and is considered a sub-contractor. Per the General Conditions a 5% markup is allowed. Payement will be made by actual receipts and then the 5% markup will be added.

3. Payment for equipment hours will be for by the actual hours of operation.

Change Order Proposal Breakdown (If $1,000 Or More)

From Harris Trucking & Construction, Inc.

Item No.	Item Description	Qty	Unit	Labor Class/ Craft	Labor Hours Per Unit	Labor Hours Total	Labor Rate	Labor Total	Material Unit Price	Material Total	Lower Tier Sub Total	HRLY $ w/ 15% PO	Equip/ Other Total	Item Total (Bare Cost)
1	490 Excavator	265.00	HR									$310.50	82,282.50	$82,282.50
2	336 Excavator	175.00	HR									$235.75	41,256.25	$41,256.25
3	D8 Cat Dozer	175.00	HR									$287.50	50,312.50	$50,312.50
4	D9 Cat Dozer	192.00	HR									$529.00	101,568.00	$101,568.00
5	Volvo Rock Truck	200.00	HR									$224.25	44,850.00	$44,850.00
6	Hammer/Breaker	175.00	HR									$287.50	50,312.50	$50,312.50
	Transport and Permits	1.00											10,000.00	$10,000.00
7	Bond													
	TOTALS:												$380,581.75	$380,581.75