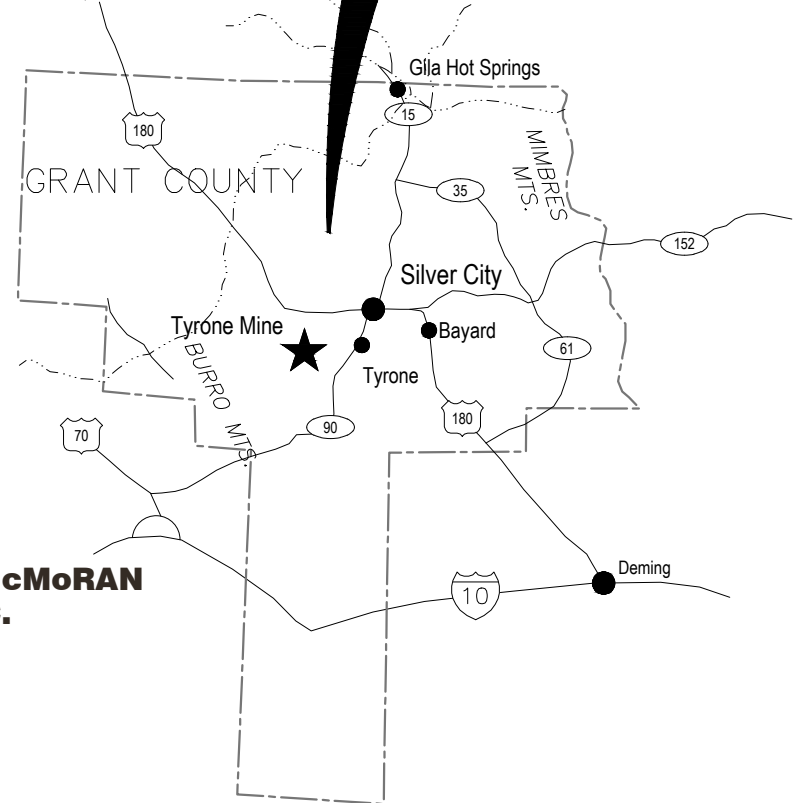
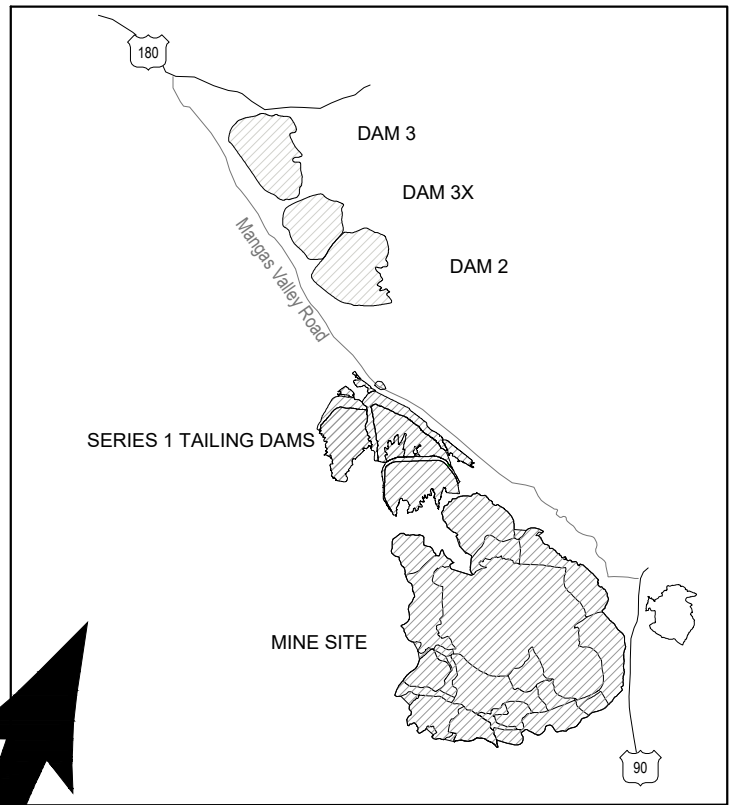


APPENDIX A
TYRONE MINE SITE CLOSURE CLOSEOUT PLAN

MAY 2019
Rev. 2- Revised Bond Calculation

LIST OF DRAWINGS

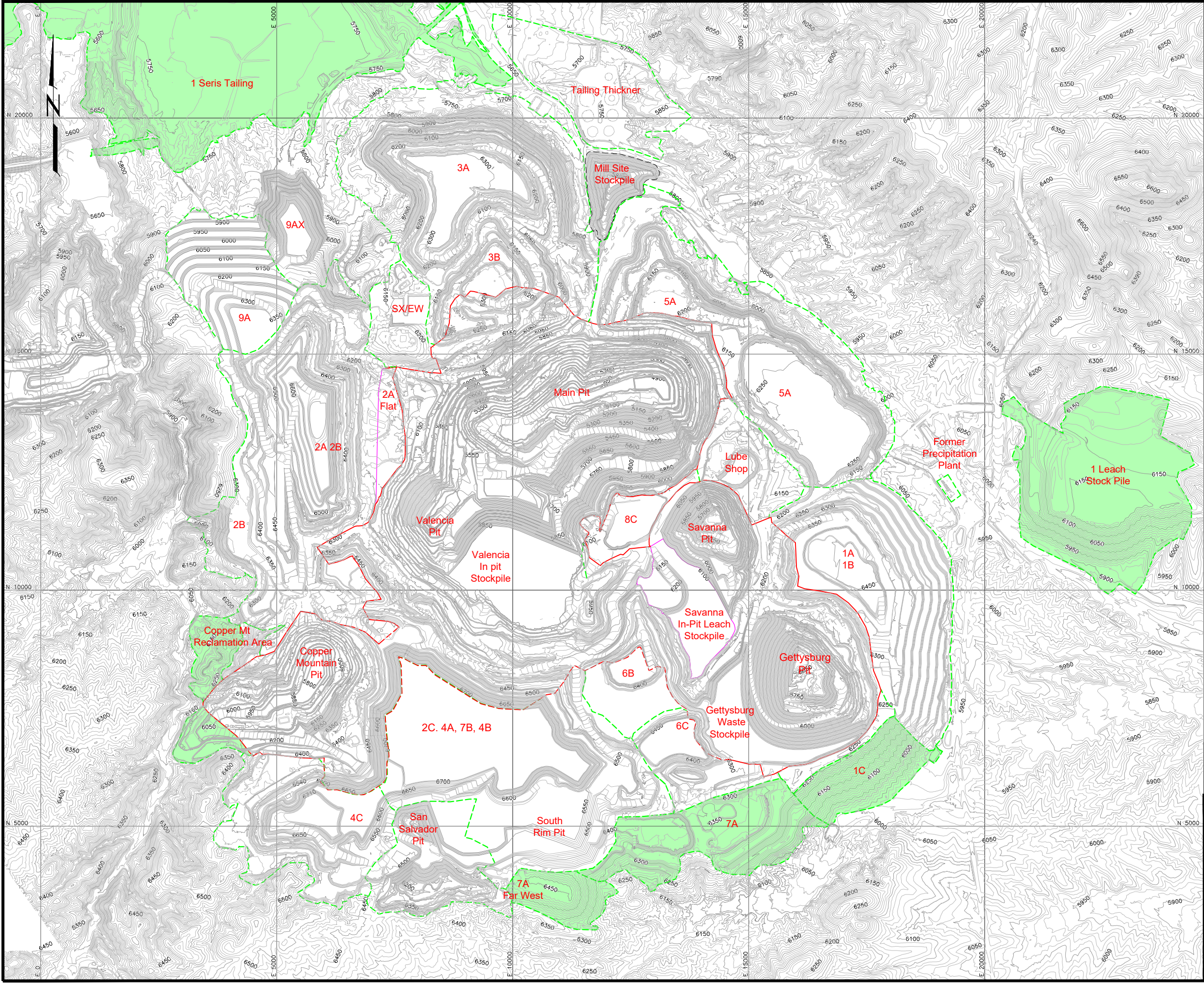
DRAWING NO.	DRAWING TITLE
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2.	MINE SITE - OVERALL
3.	OVERALL GRADING SITE PLAN
4.	Nos. 1A AND1B LEACH STOCKPILES AND 1C WASTE - 2014 CONFIGURATION
5.	Nos. 1A AND 1B LEACH STOCKPILES AND 1C WASTE - GRADING AND DRAINAGE PLAN
6.	Nos. 1A AND 1B LEACH STOCKPILES AND 1C WASTE - CUT/FILL ISOPACH MAP
7.	Nos. 1A AND 1B LEACH STOCKPILES AND 1C WASTE - CROSS SECTIONS
8.	Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - 2014 CONFIGURATION
9.	Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - GRADING AND DRAINAGE PLAN
10.	Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - CUT/FILL ISOPACH MAP
11.	Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - CROSS SECTIONS
12.	Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES, SOUTH RIM PIT AND SAN SALVADOR PITS - 2014 CONFIGURATION
13.	Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES, SOUTH RIM AND SAN SALVADOR PITS - GRADING AND DRAINAGE PLAN
14.	Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES, SOUTH RIM AND SAN SALVADOR PITS - CUT/FILL ISOPACH MAP
15.	Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES, SOUTH RIM AND SAN SALVADOR PITS - CROSS SECTIONS
16.	No. 3A LEACH AND 3B WASTE STOCKPILES - 2014 CONFIGURATION
17.	No. 3A LEACH AND 3B WASTE STOCKPILES - GRADING AND DRAINAGE PLAN
18.	No. 3A LEACH AND 3B WASTE STOCKPILES - CUT/FILL ISOPACH MAP
19.	No. 3A LEACH AND 3B WASTE STOCKPILES - CROSS SECTIONS - 1
20.	No. 3A LEACH AND 3B WASTE STOCKPILES - CROSS SECTIONS - 2
21.	No. 5A OVER BURDEN STOCKPILE - 2014 CONFIGURATION
22.	No. 5A OVER BURDEN STOCKPILE - GRADING AND DRAINAGE PLAN
23.	No. 5A OVER BURDEN STOCKPILE - CUT/FILL ISOPACH MAP
24.	No. 5A OVER BURDEN STOCKPILE - CROSS SECTIONS
25.	Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH STOCKPILES - 2014 CONFIGURATION
26.	Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH STOCKPILES - GRADING AND DRAINAGE
27.	Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH STOCKPILES - CUT/FILL ISOPACH MAP
28.	Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH STOCKPILES - CROSS SECTIONS
29.	No. 9A OVER BURDEN STOCKPILE - 2014 CONFIGURATION
30.	No. 9A OVER BURDEN STOCKPILE - GRADING AND DRAINAGE
31.	No. 9A OVER BURDEN STOCKPILE - CUT/FILL ISOPACH MAP
32.	No. 9A OVER BURDEN STOCKPILE - CROSS SECTIONS
33.	DRAINAGE DETAILS
34.	HAUL ROUTE MAP



PREPARED FOR:
FM **FREEPORT-McMoRAN**
TYRONE, INC.

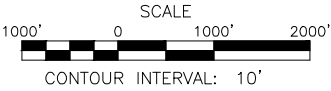
PREPARED BY:
Stantec
DENVER, CO

C:\Tommy\Tyrone\Tyrone Mine Site Closure Closeout Plan 6 2013\Cover Sheet-01-REV1 042019



LEGEND

- EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- STOCKPILE LIMITS



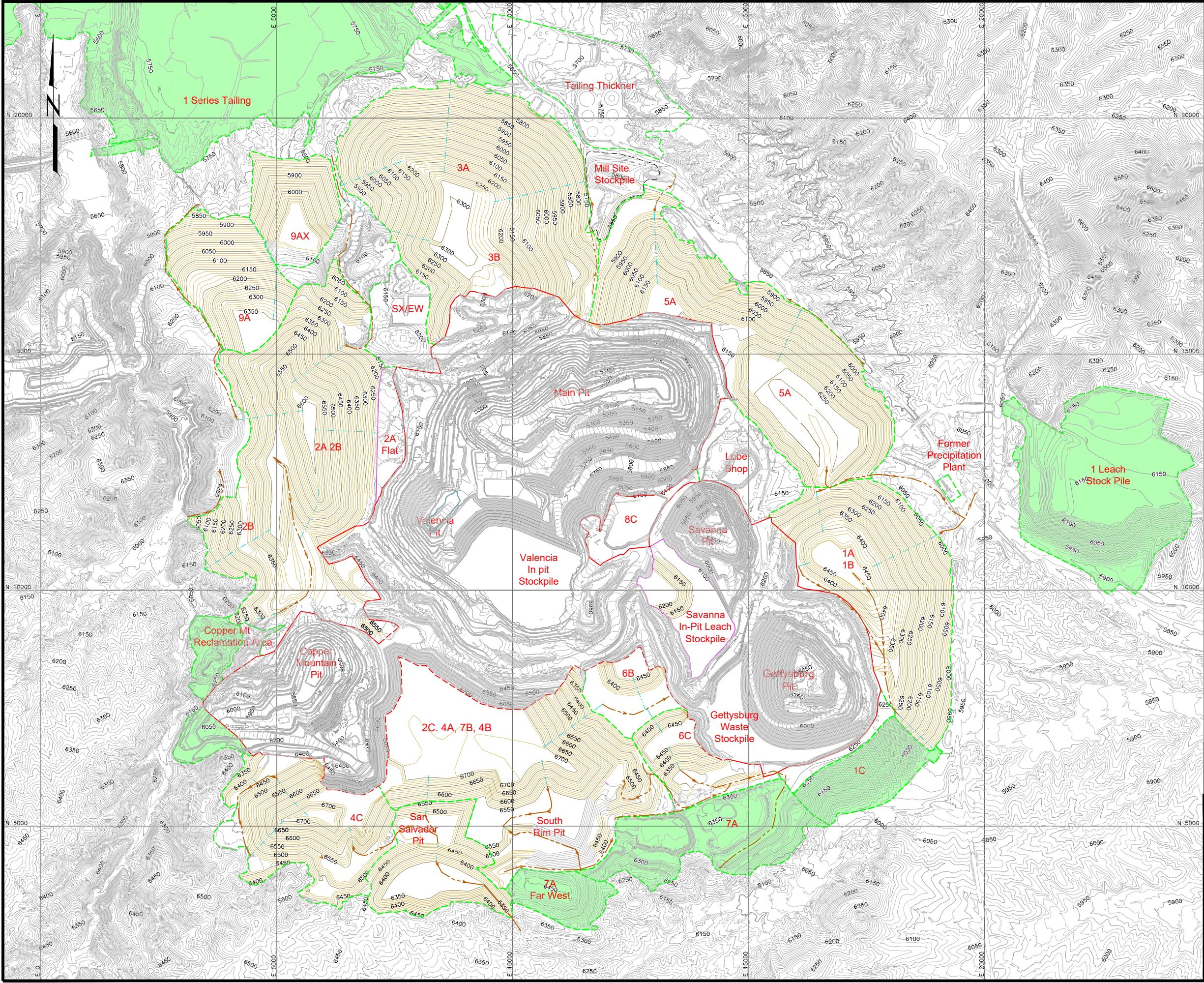
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1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Pever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: MINE SITE - OVERALL

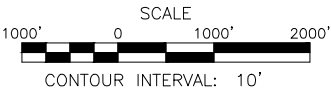


Sheet 2 Of 34 Sheets
SCALE: 1"=1000'
DRAWING No. 2



LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREAS
- BENCH CHANNEL
- DOWNDRAIN
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)

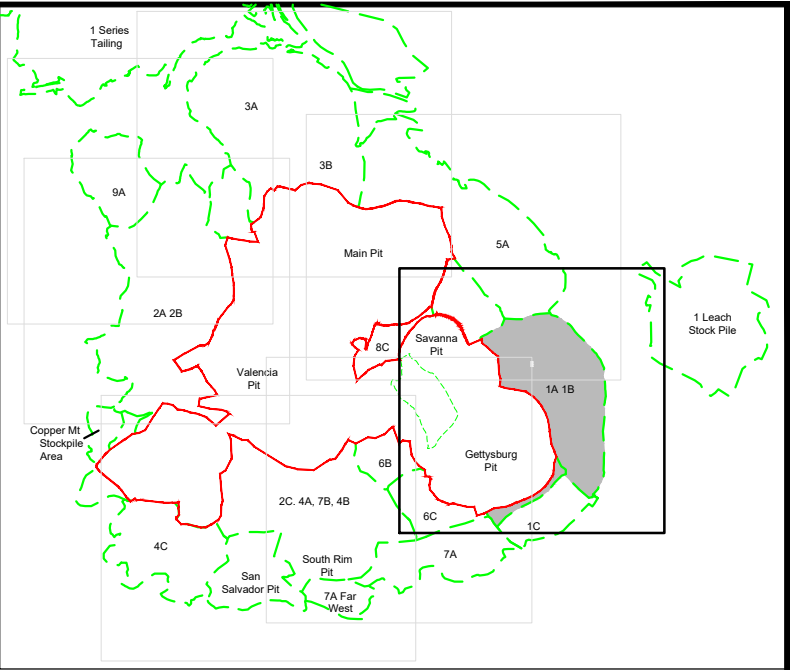
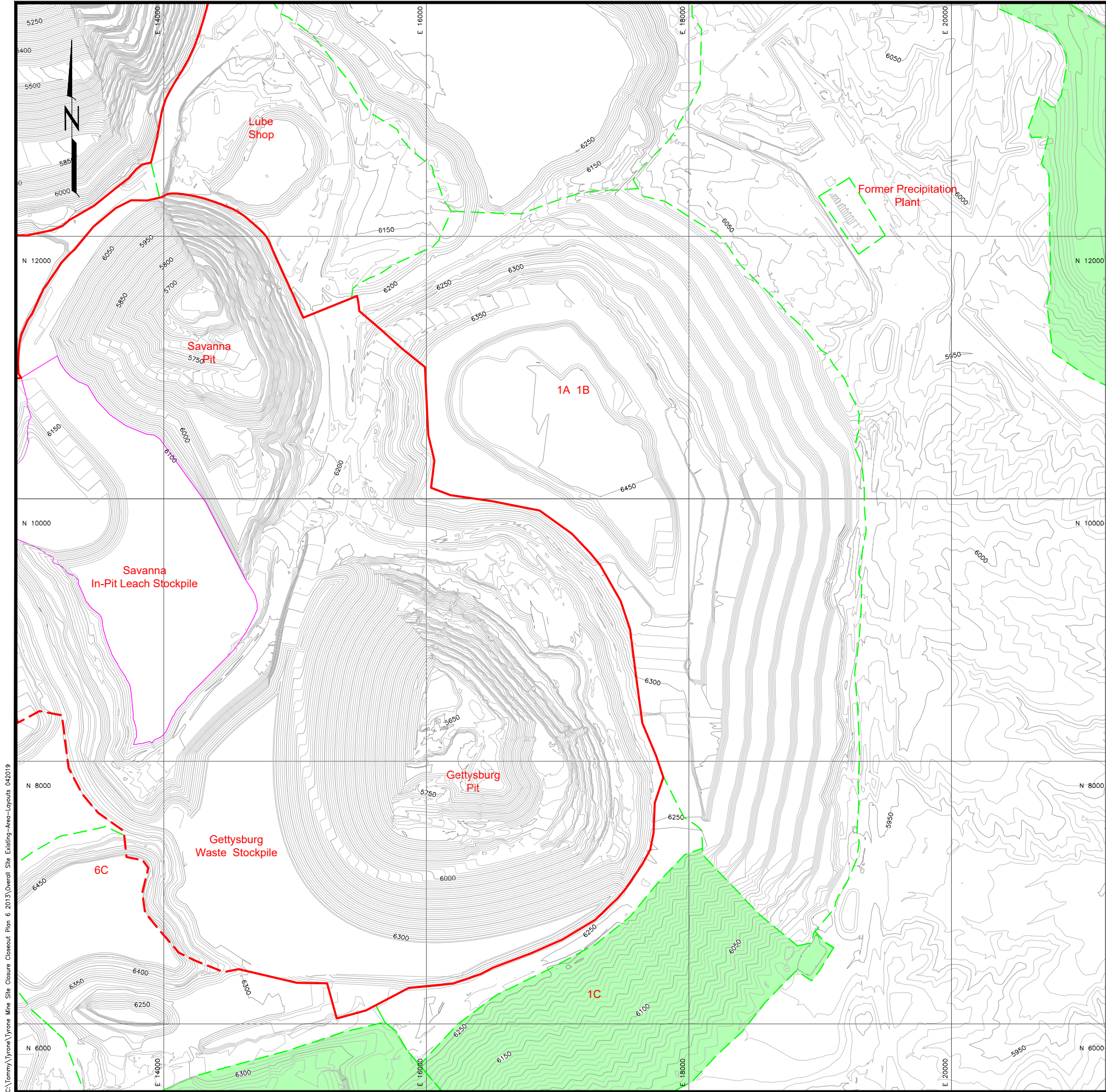


2	REVISED BOND CALCULATIONS	5/19	T.Leidich	T.Leidich		
1	ISSUED FOR BOND CALCULATION	8/14	T.Leidich	T.Leidich		
0	DRAFT	09/12	T.Leidich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: OVERALL GRADING SITE PLAN

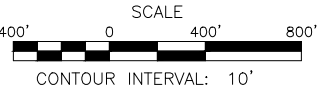




KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



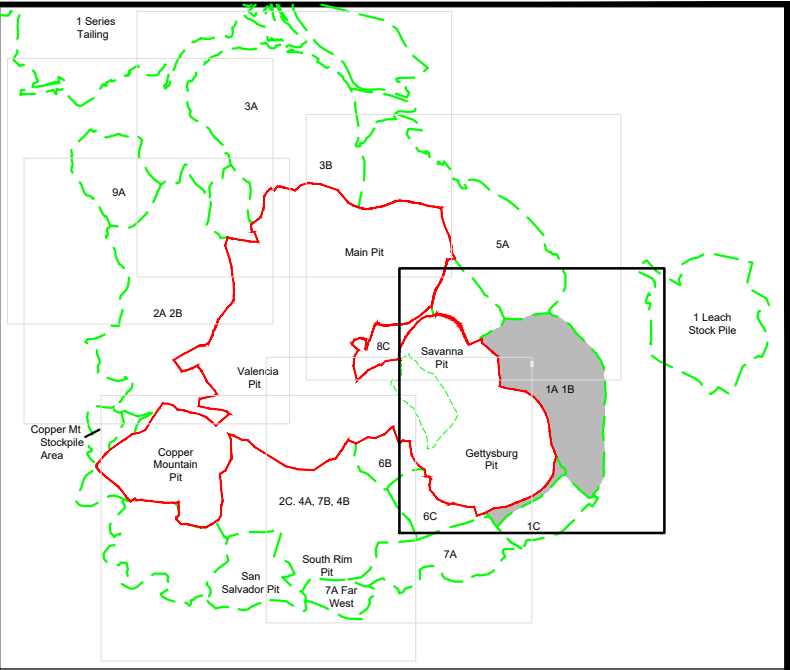
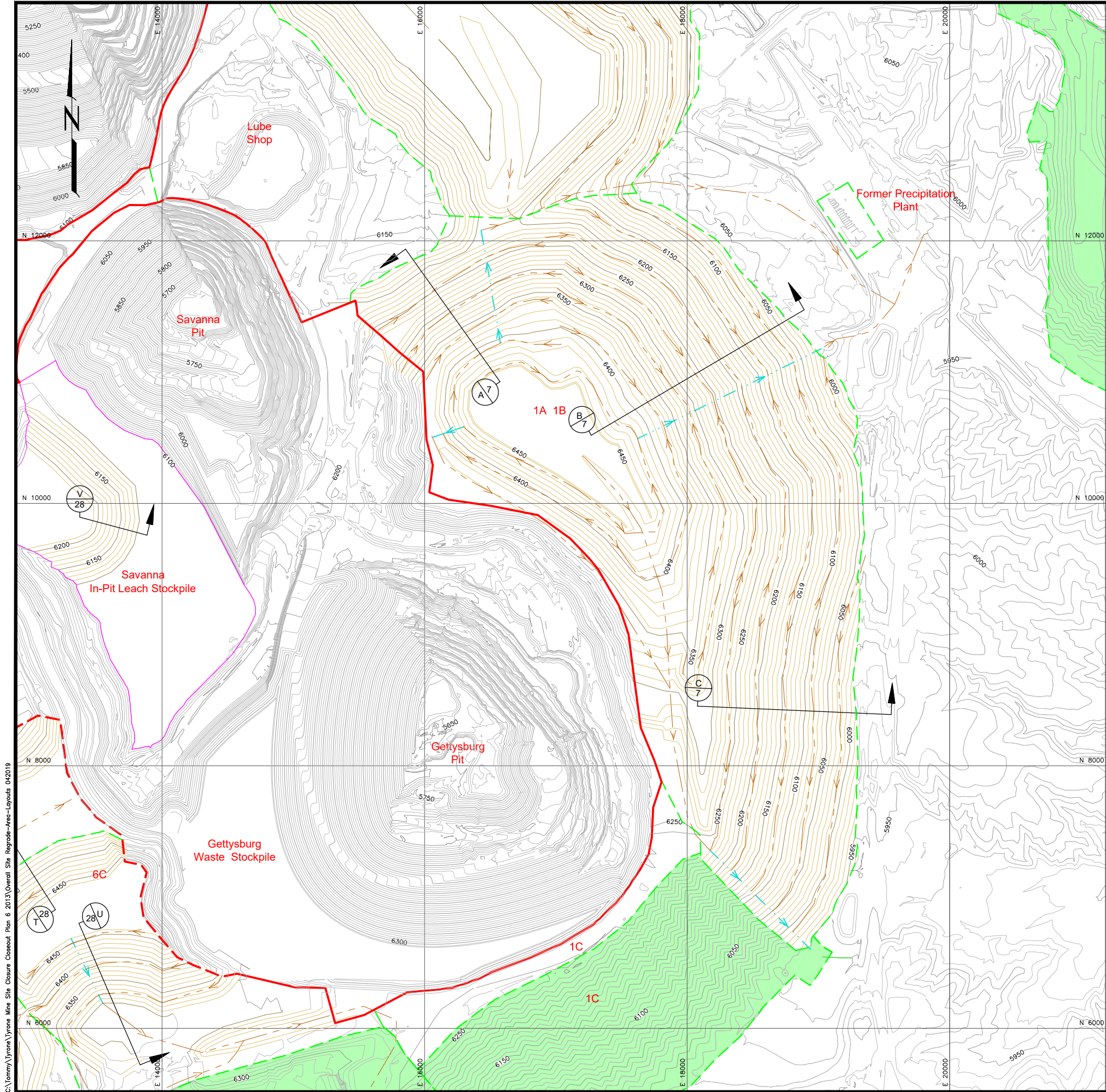
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1	ISSUED FOR BOND CALCULATION	08/14	T. Liedich	T. Leidich		
0	DRAFT	09/12	T. Liedich	J. Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: TYRONE MINE AREA RECLAMATION
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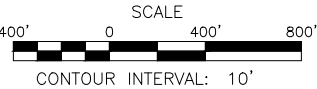
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KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- DETAIL/SECTION NUMBER
- DRAWING No. WHERE DETAIL/SECTION IS SHOWN



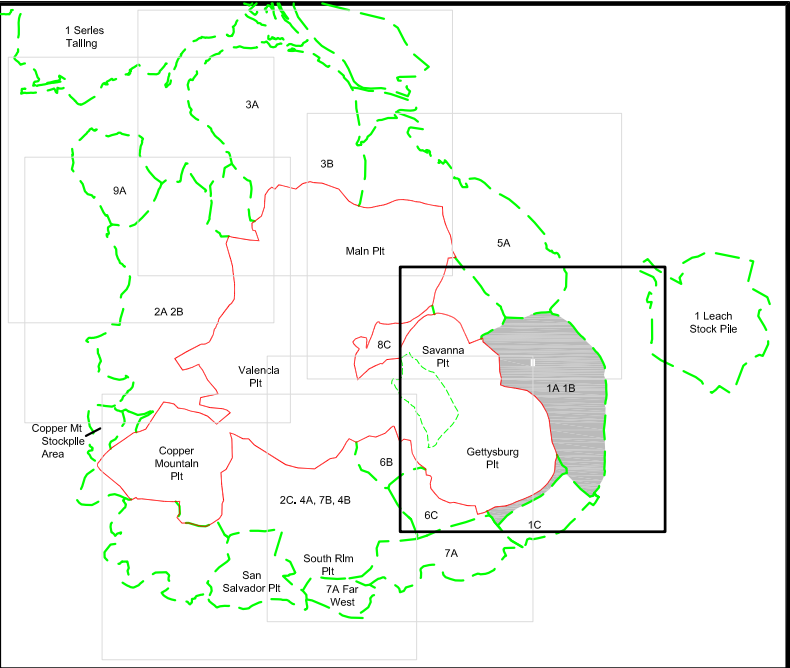
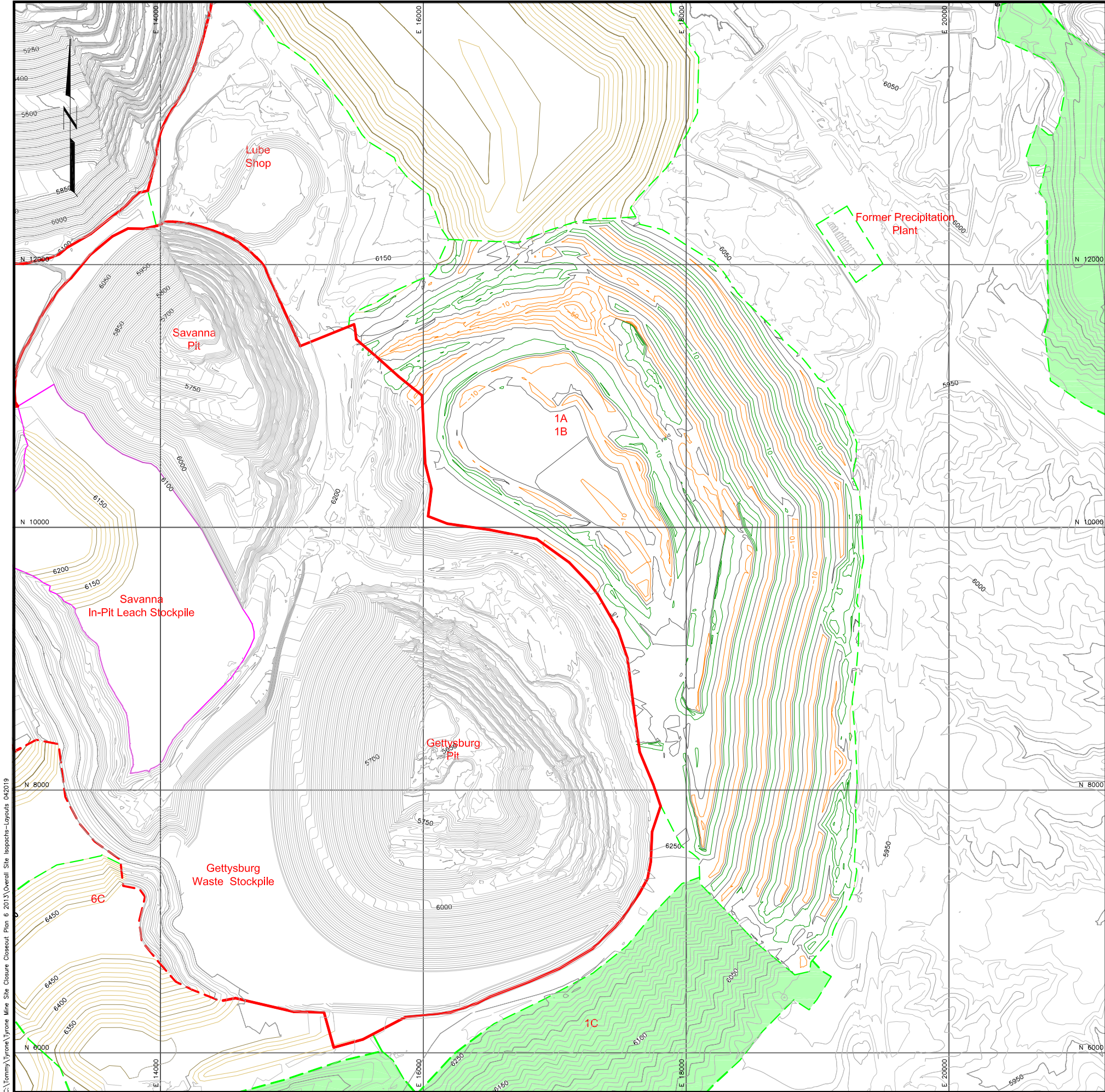
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1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: Nos. 1A, 1B LEACH STOCKPILES AND 1C WASTE - GRADING AND DRAINAGE PLAN



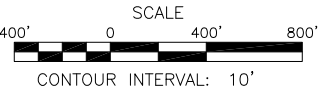
Sheet 5 Of 34 Sheets
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DRAWING No. 5



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

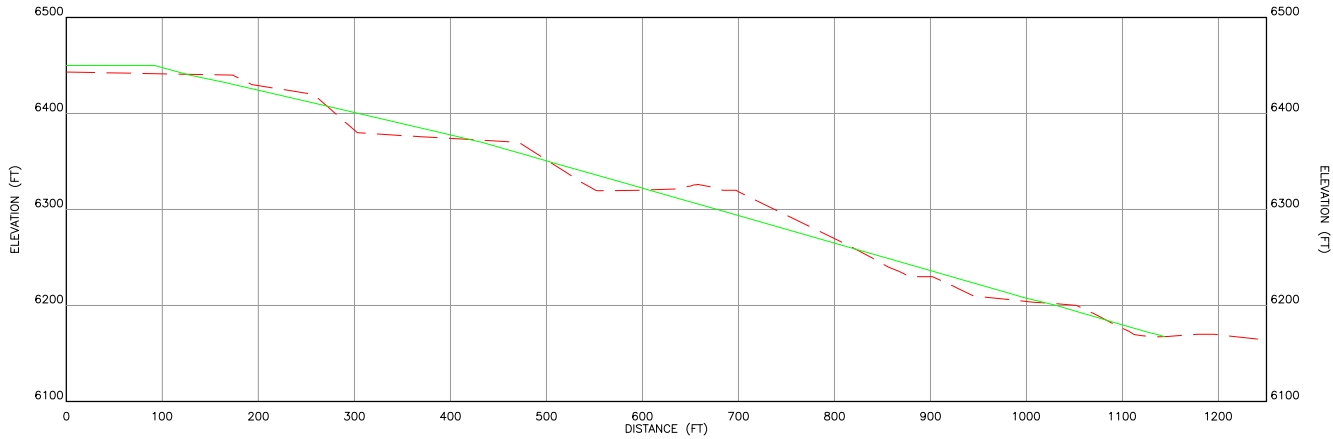
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1C WASTE - CUT/FILL ISOPACH MAP**



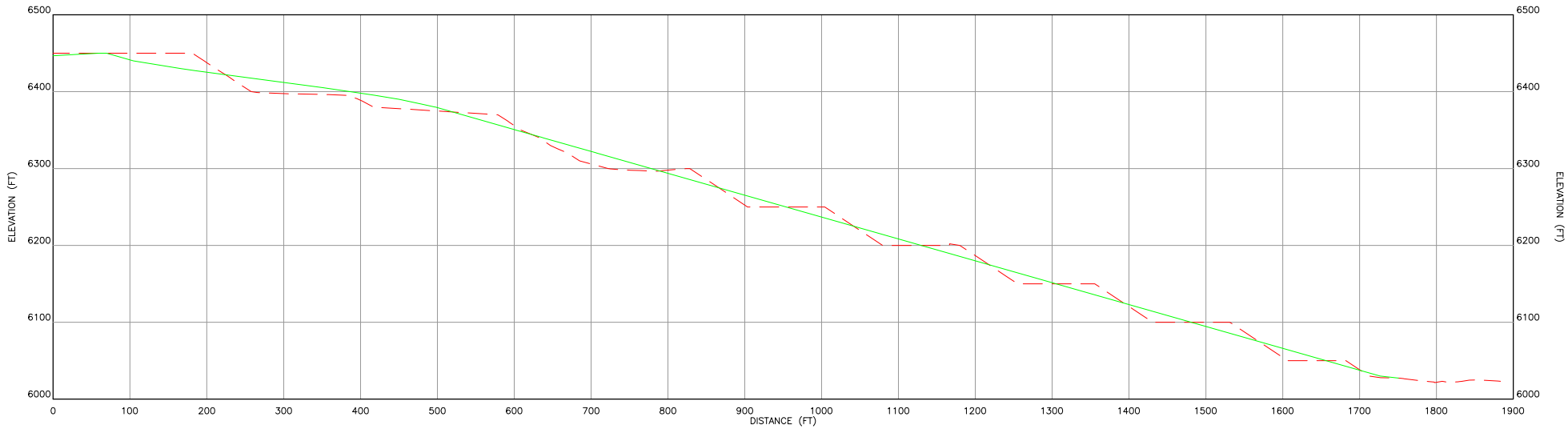
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Sheet 6 Of 34 Sheets
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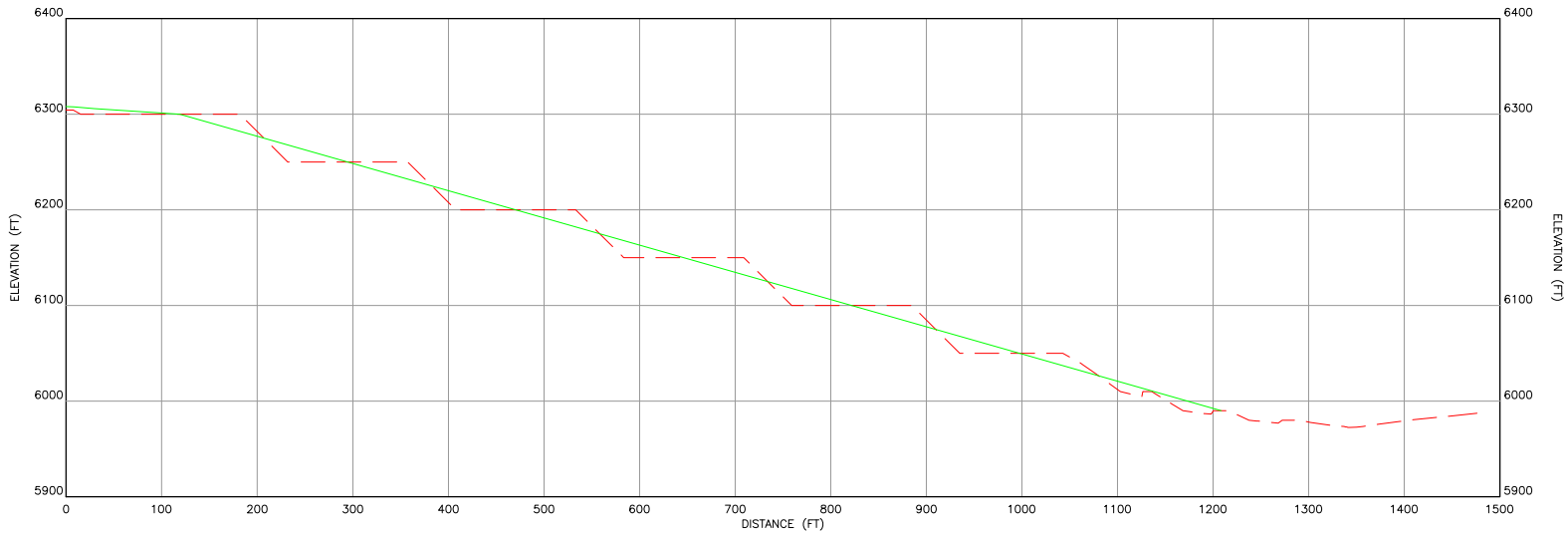
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A
5 AREA 1A-1B - CROSS SECTION A



B
5 AREA 1A-1B - CROSS SECTION B



C
5 AREA 1A-1B - CROSS SECTION C

LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
-  DETAIL/SECTION NUMBER
-  DRAWING No. WHERE DETAIL/SECTION IS SHOWN



1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

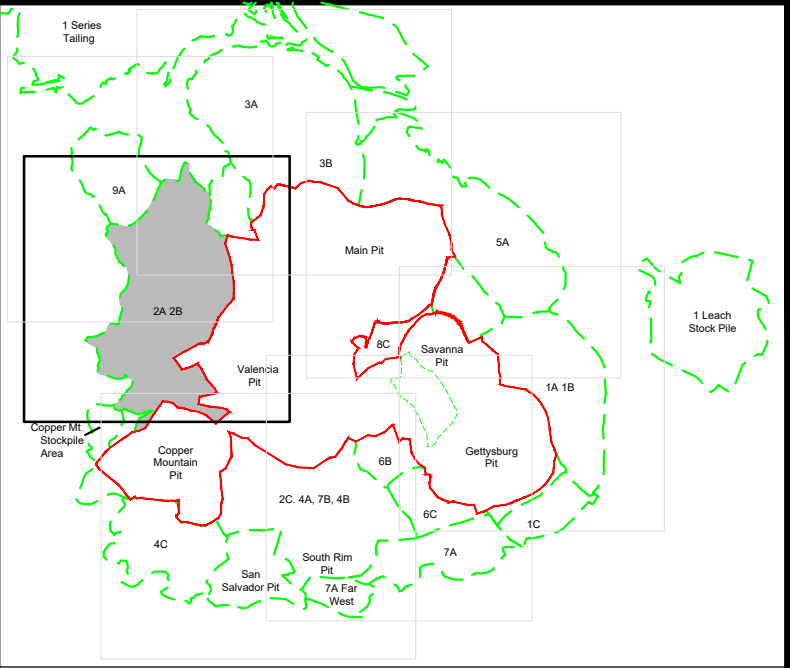
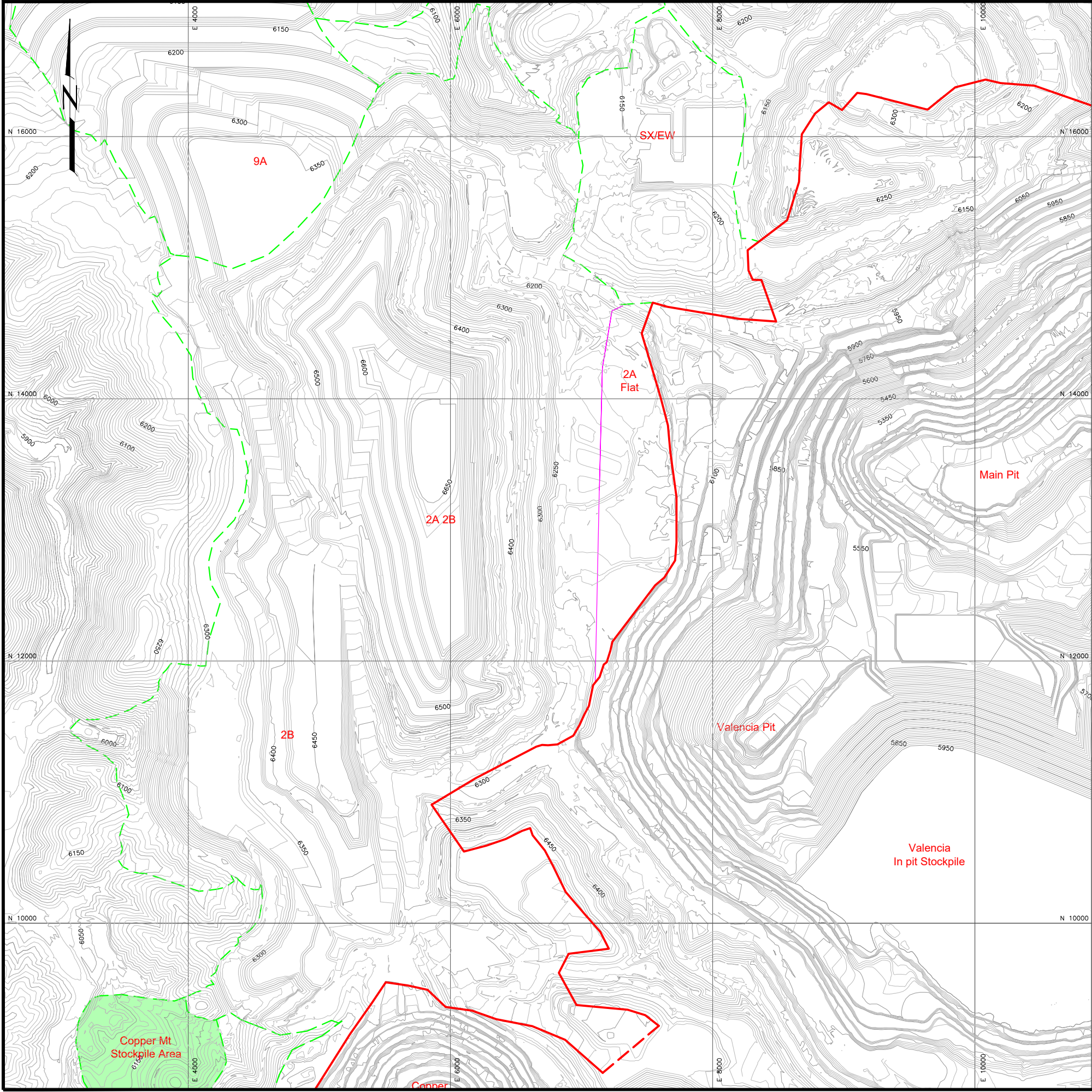
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1C WASTE - CROSS SECTIONS**



Stantec

Sheet 7 Of 34 Sheets
SCALE: 1"=100'
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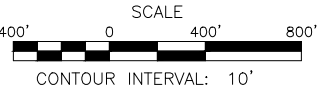
Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33



KEY MAP

LEGEND

- EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



2	REVISED BOND CALCULATION	5/19	T. Leidich	T. Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



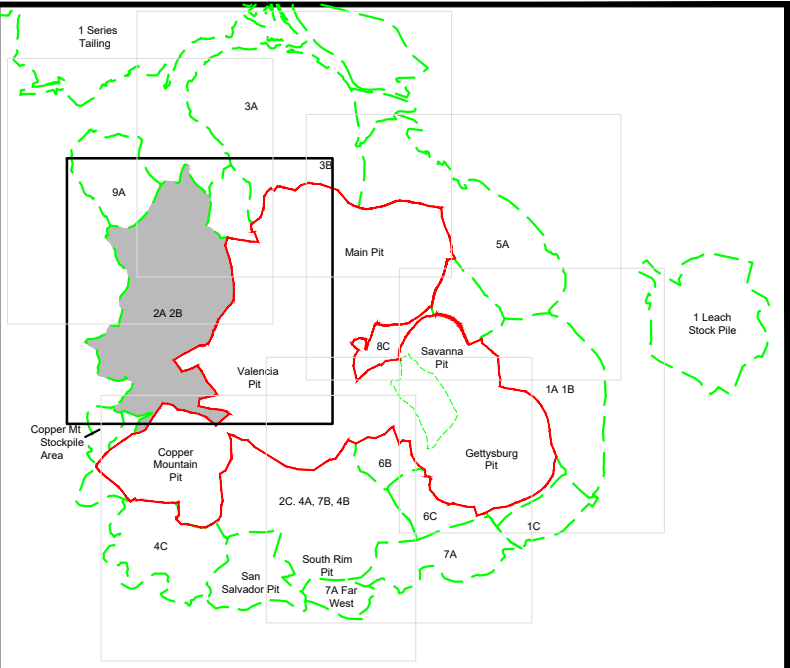
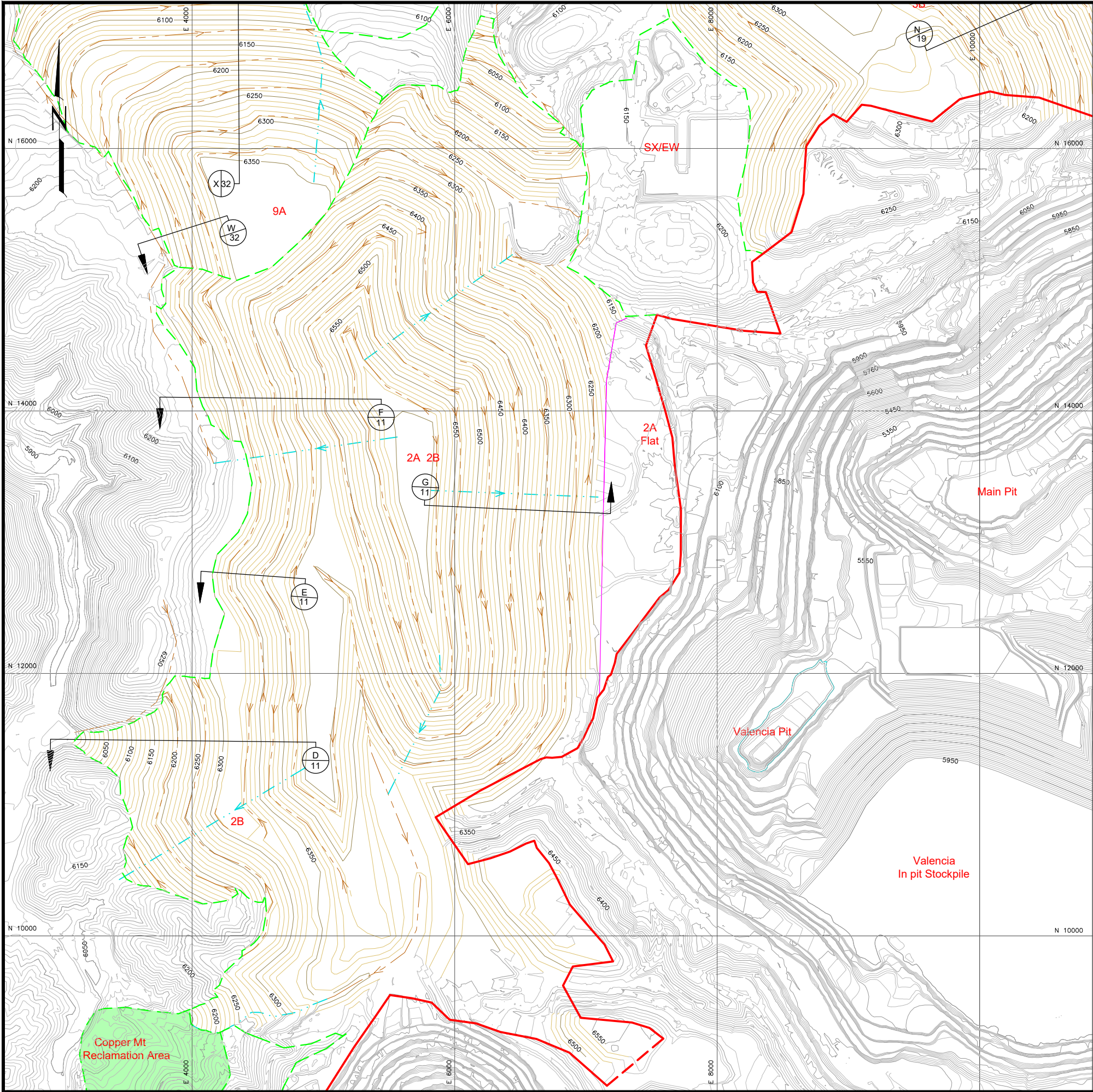
PROJECT: TYRONE MINE AREA RECLAMATION

DRAWING TITLE: Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES-2014 CONFIGURATION



Sheet 8 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 8

C:\Tommy\Tyrona\Tyrona Mine Site Closure\Clearcut Plan & 2013\Overall Site Regrade-Area-LAYOUTS 042019



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)

DETAIL/SECTION NUMBER
DRAWING No. WHERE
DETAIL/SECTION IS SHOWN

SCALE
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CONTOUR INTERVAL: 10'

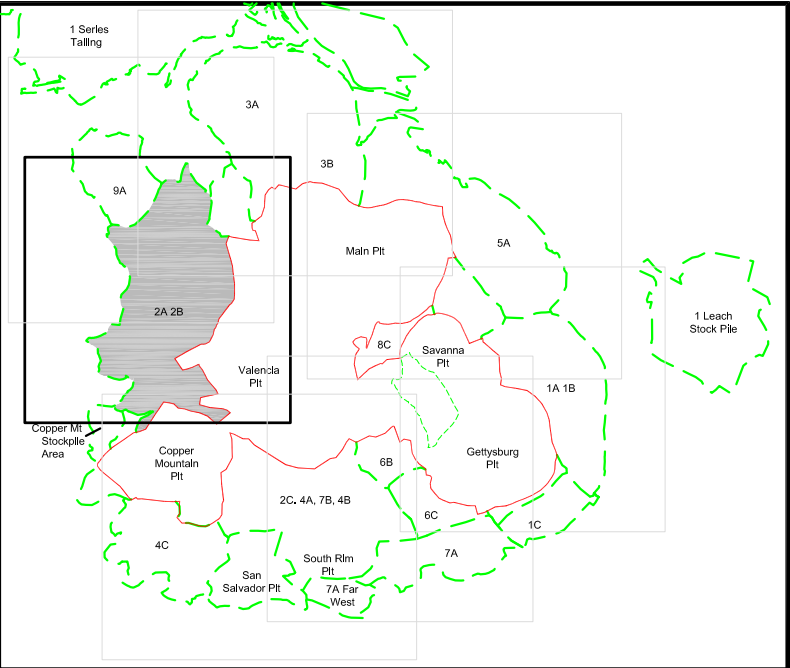
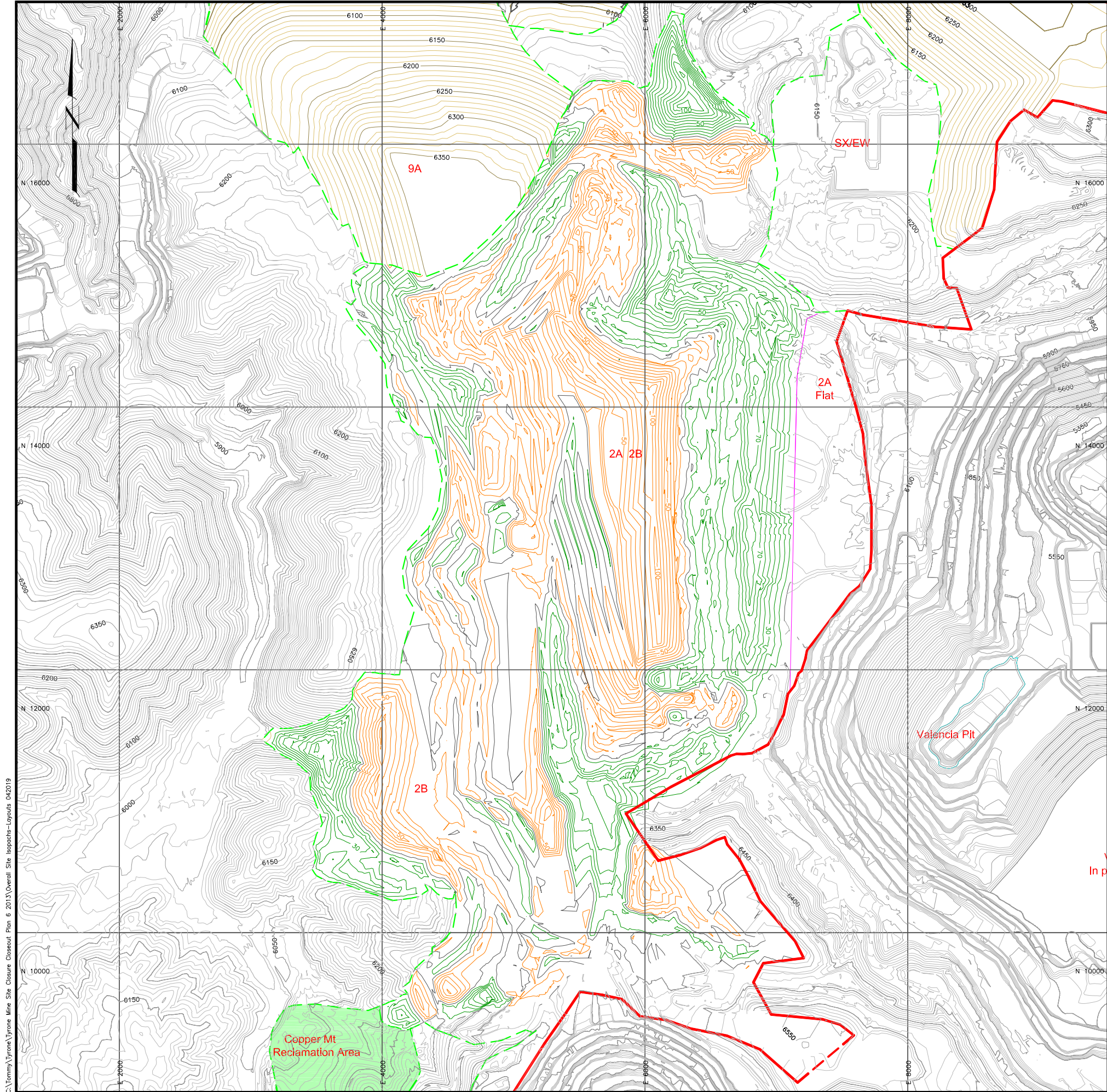
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1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

FREEPORT-McMoRAN TYRONE, INC.

PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - GRADING AND DRAINAGE PLAN

Stantec

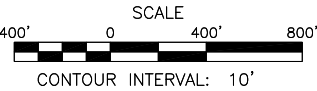
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SCALE: 1"=400'
DRAWING No. 9



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



TYRONE, INC.

PROJECT: TYRONE MINE AREA RECLAMATION

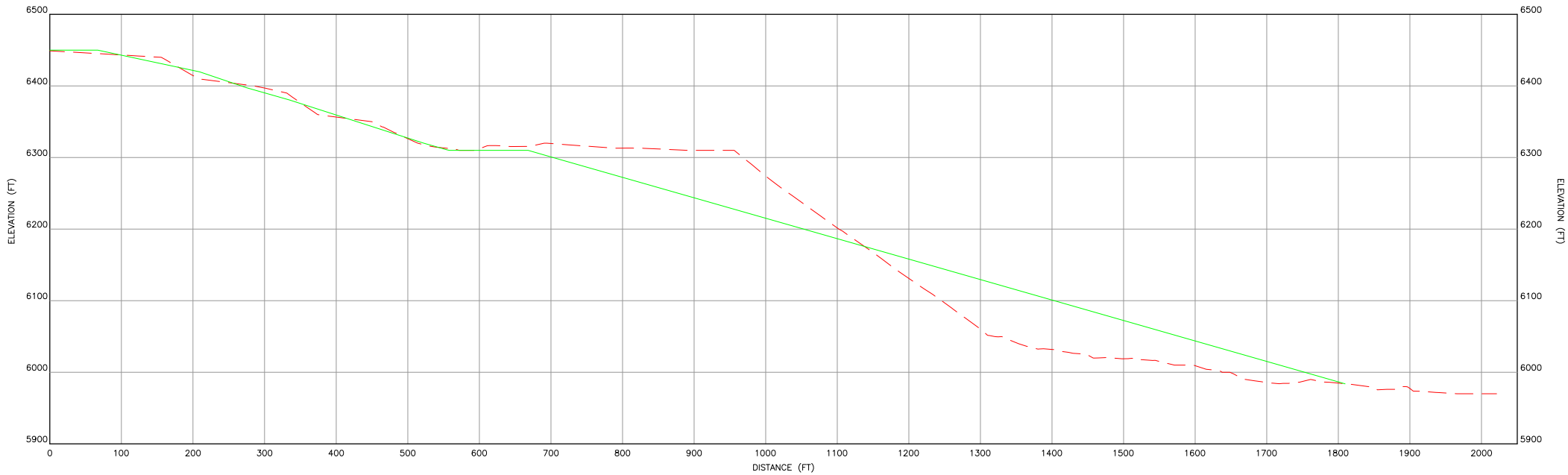
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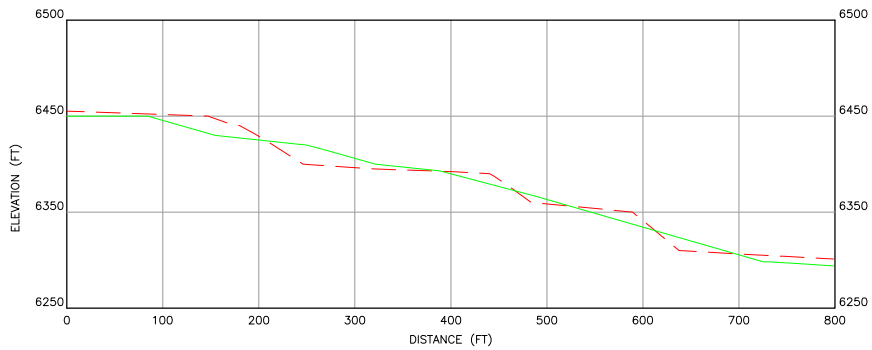
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Sheet 10 Of 34 Sheets
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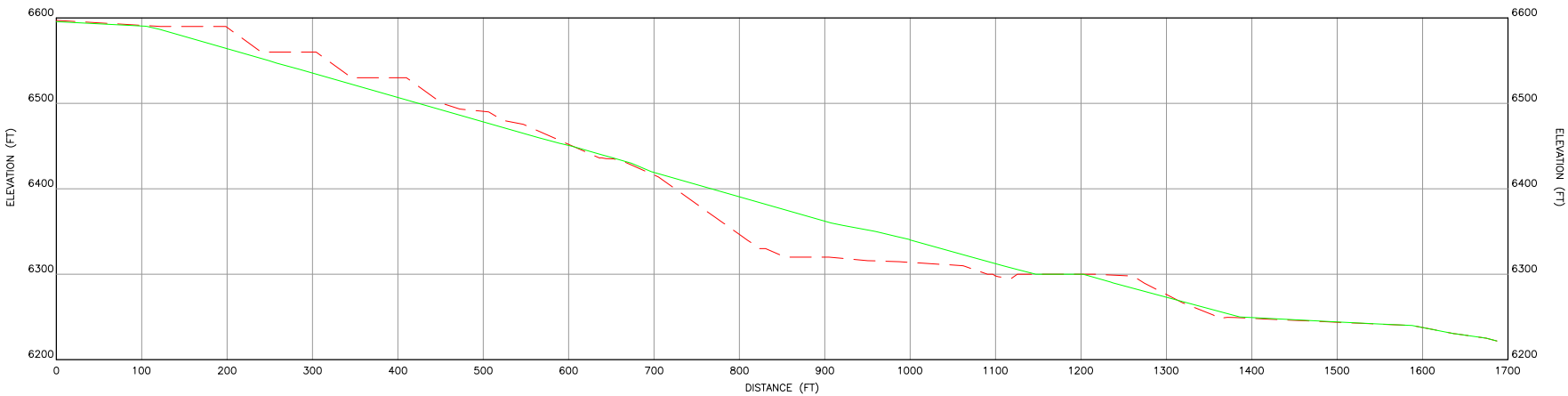
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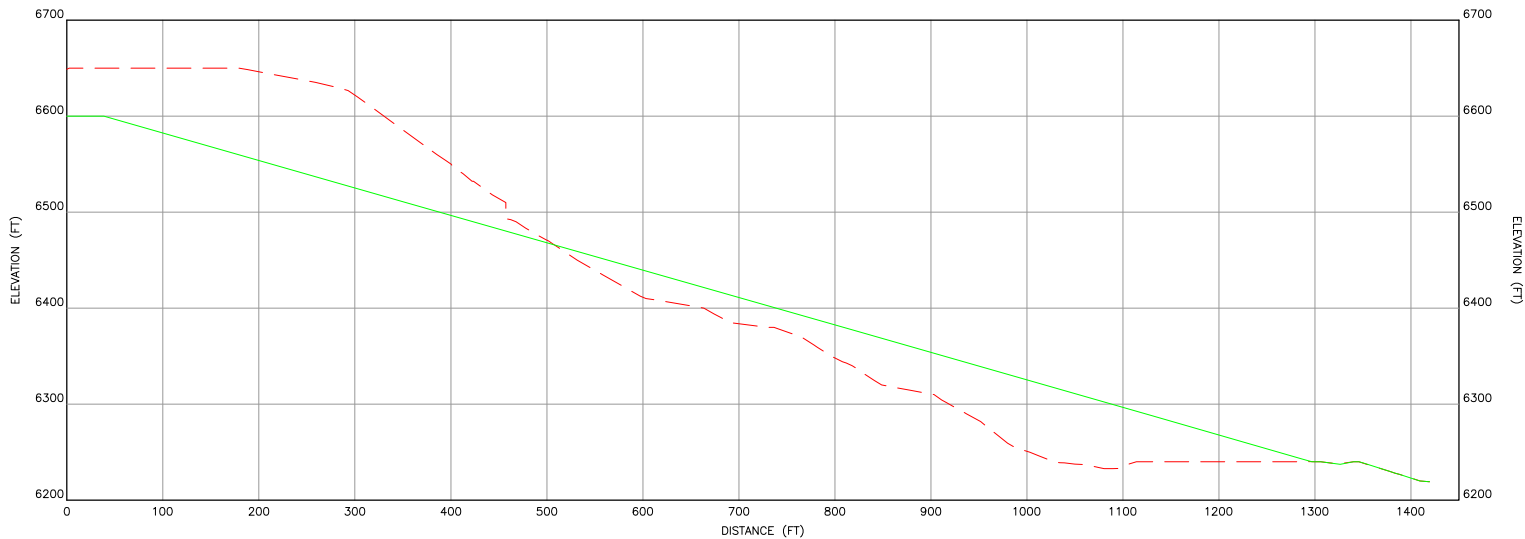
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E
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F
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G
9 AREA 2A-2B - CROSS SECTION G

LEGEND

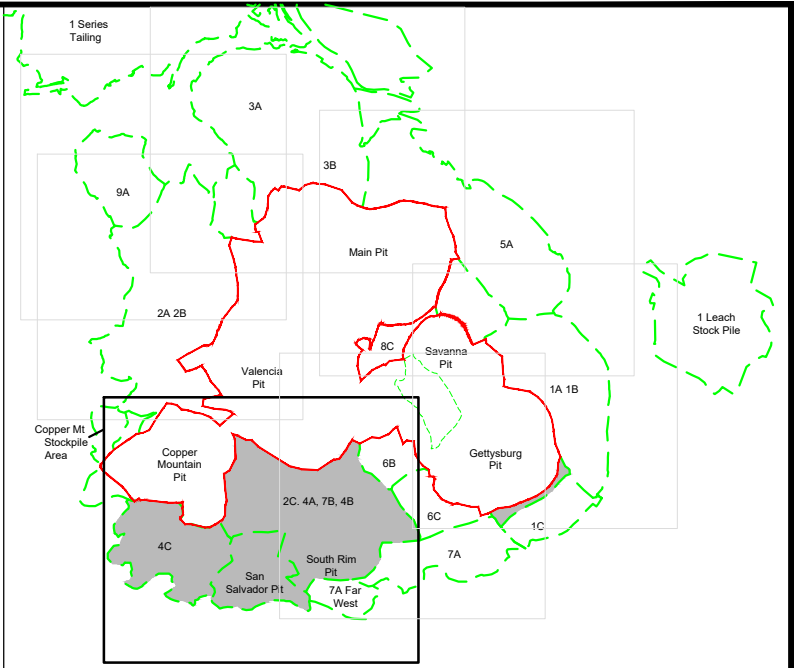
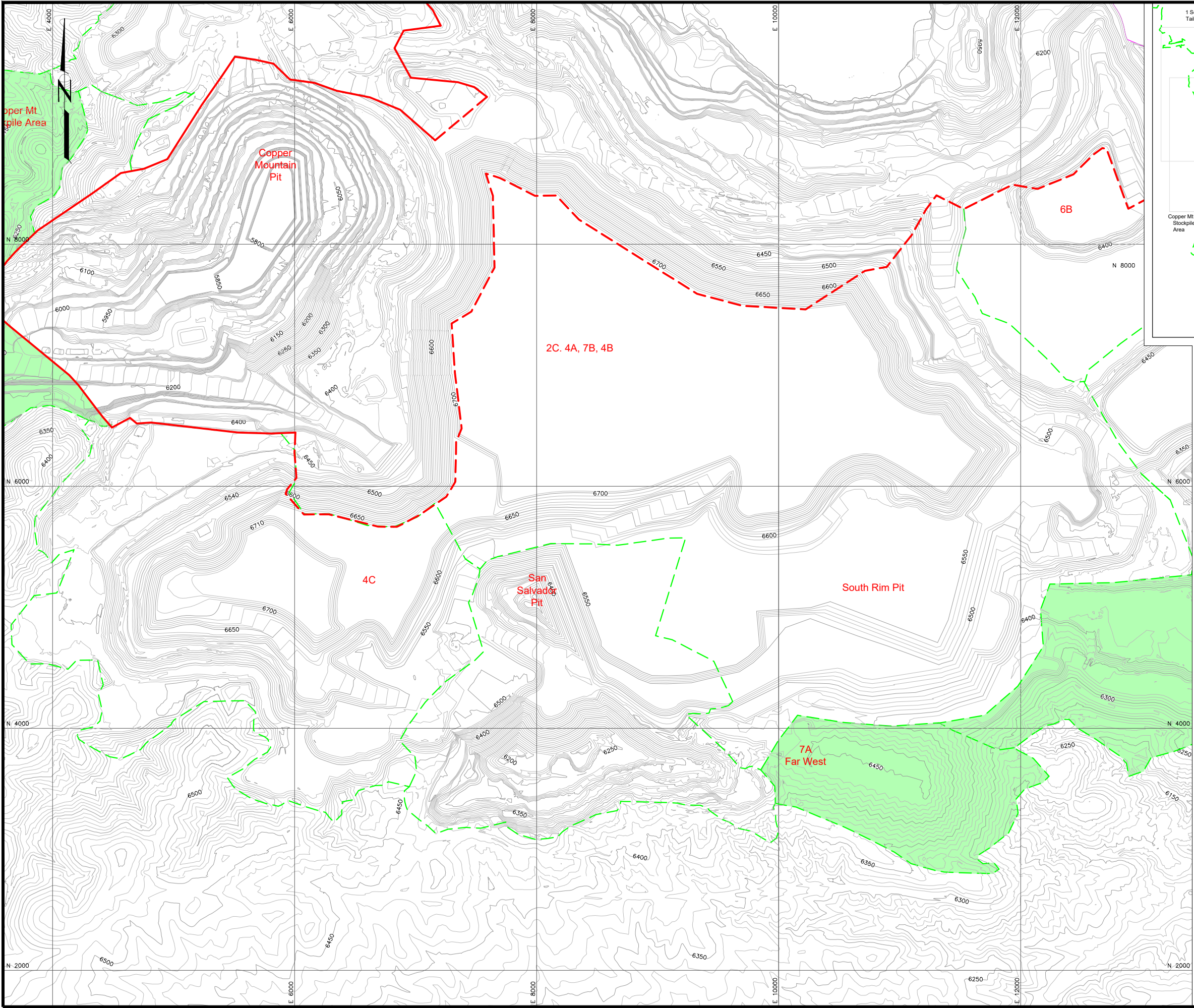
- EXISTING GROUND SURFACE
- REGRADE SURFACE
-  DETAIL/SECTION NUMBER
-  DRAWING No. WHERE DETAIL/SECTION IS SHOWN



1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	
 FREEPORT-McMoRAN TYRONE, INC. PROJECT: TYRONE MINE AREA RECLAMATION DRAWING TITLE: Nos. 2A, 2B LEACH AND 2B WASTE STOCKPILES - CROSS SECTIONS  Stantec Sheet <u>11</u> Of <u>34</u> Sheets SCALE: <u>1"=100'</u> DRAWING No. <u>11</u>						

Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33

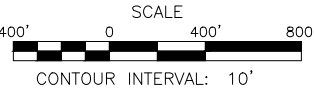
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KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



2	REVISED BOND CALCULATION	5/19	T. Leidich	T. Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Pever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

FREEPORT-McMoRAN
TYRONE, INC.

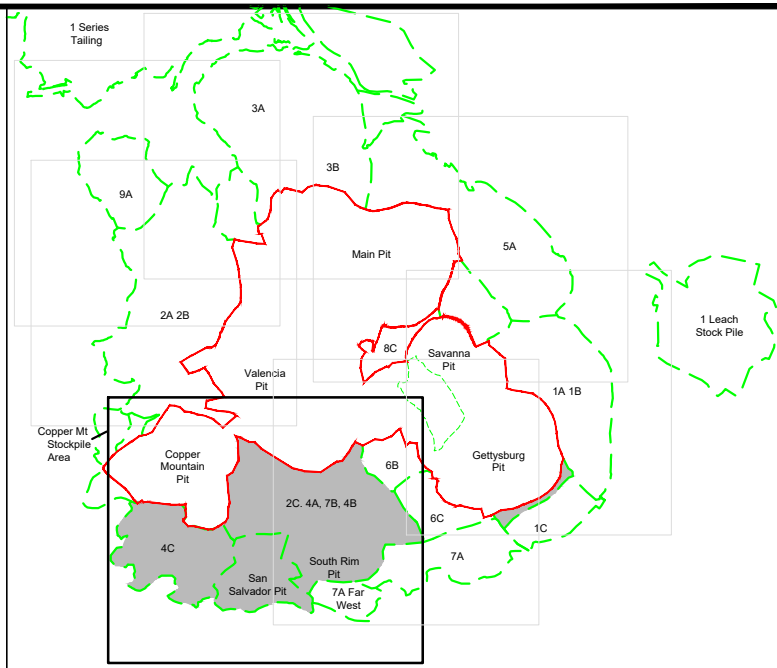
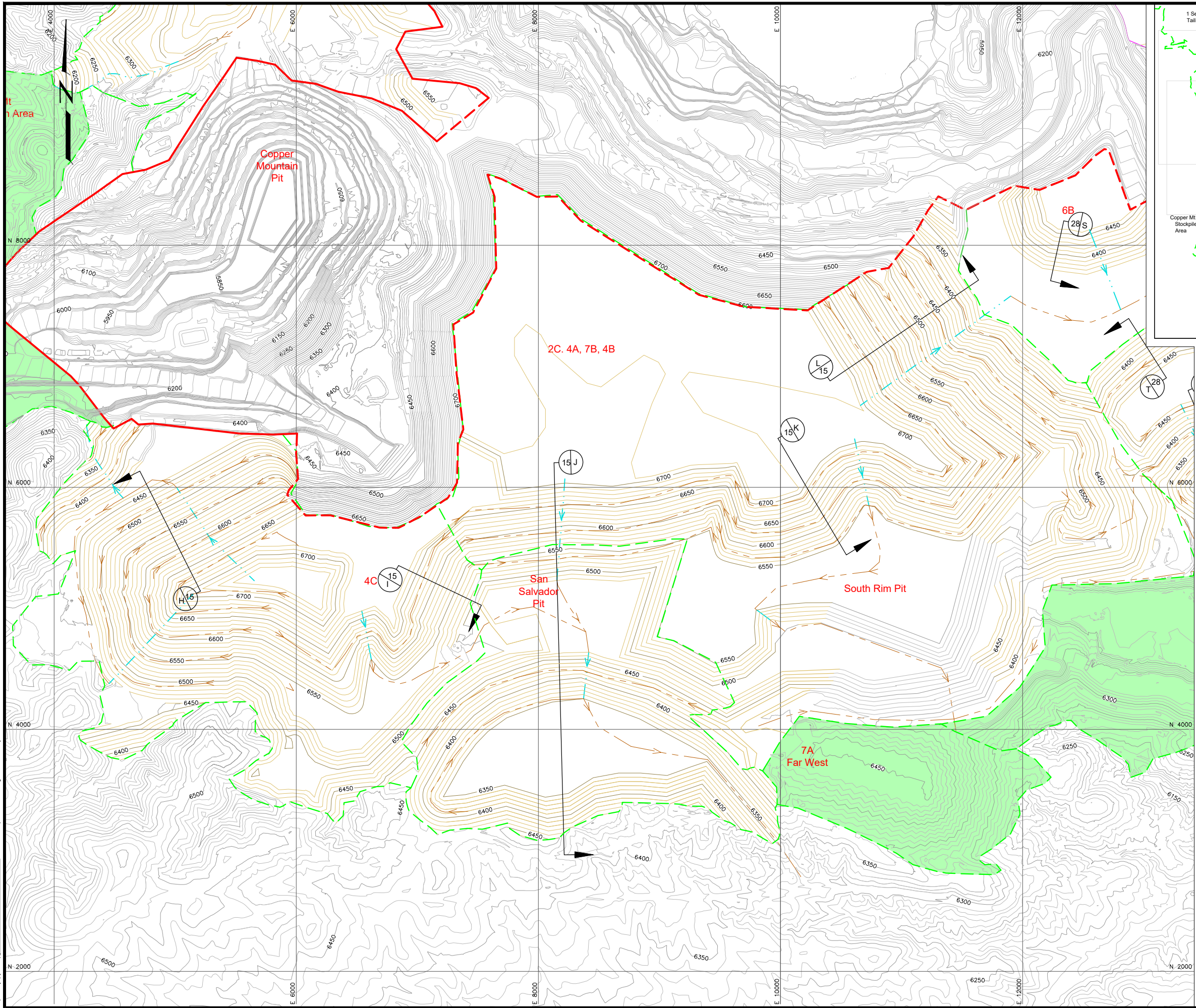
PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE:
**Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES,
SOUTH RIM AND SAN SALVADOR PITS
2014 CONFIGURATION**



Sheet 12 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 12

C:\Tommy\Tyrona Mine Site Closure Closeout Plan & 2013 Overall Site Regrade-Area Layouts 042019



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)

DETAIL/SECTION NUMBER
DRAWING No. WHERE
DETAIL/SECTION IS SHOWN

SCALE
400' 0 400' 800'
CONTOUR INTERVAL: 10'

2	REVISED BOND CALCULATION	5/19	T.Leidich	T.Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Leidich	T.Leidich		
0	DRAFT	08/14	T.Leidich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

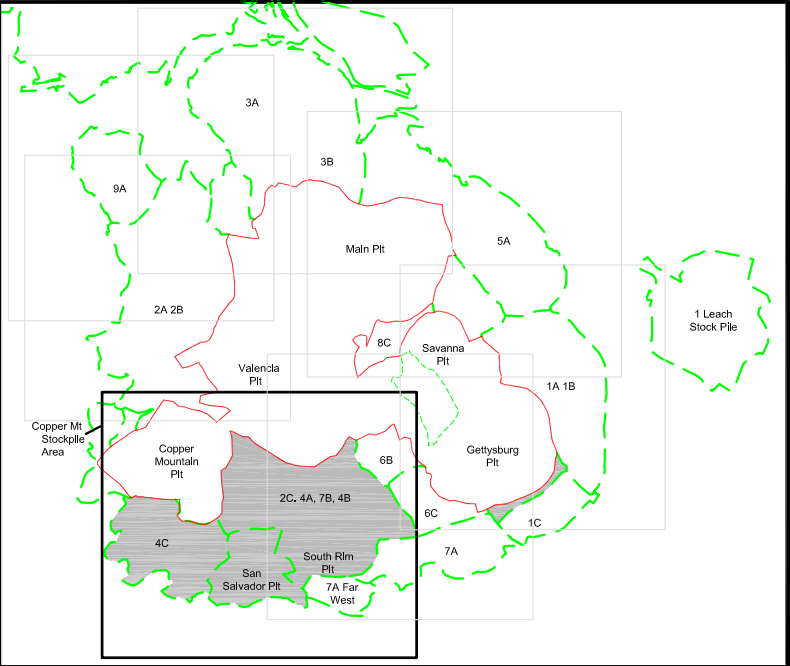
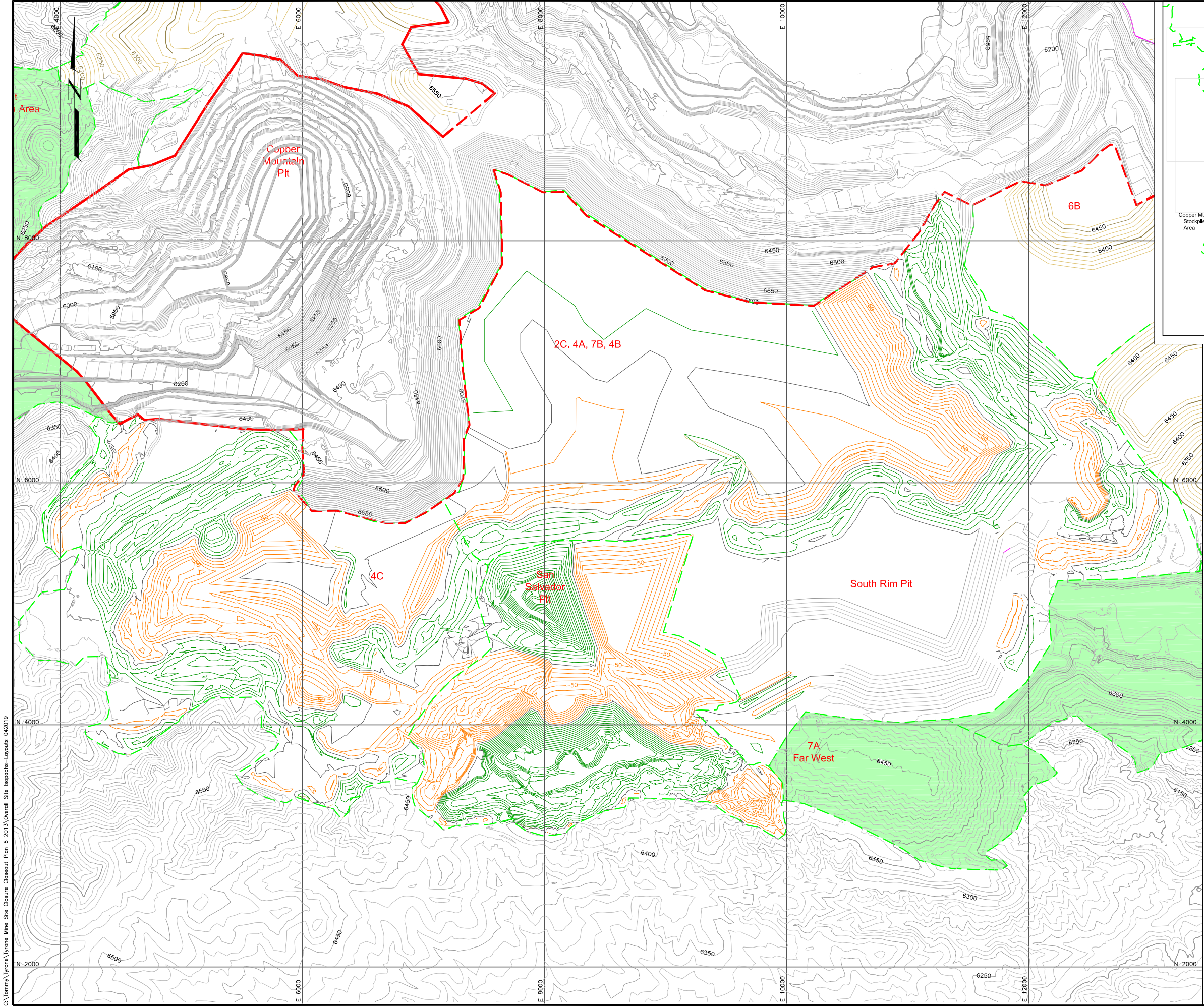
FREEPORT-McMoRAN
TYRONE, INC.

PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE:
**Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES,
SOUTH RIM AND SAN SALVADOR PITS
GRADING & DRAINAGE PLAN**

Stantec

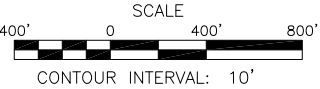
Sheet **13** Of **34** Sheets
SCALE: **1"=400'**
DRAWING No. **13**



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Leidich	T.Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Leidich	T.Leidich		
0	DRAFT	09/12	T.Leidich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

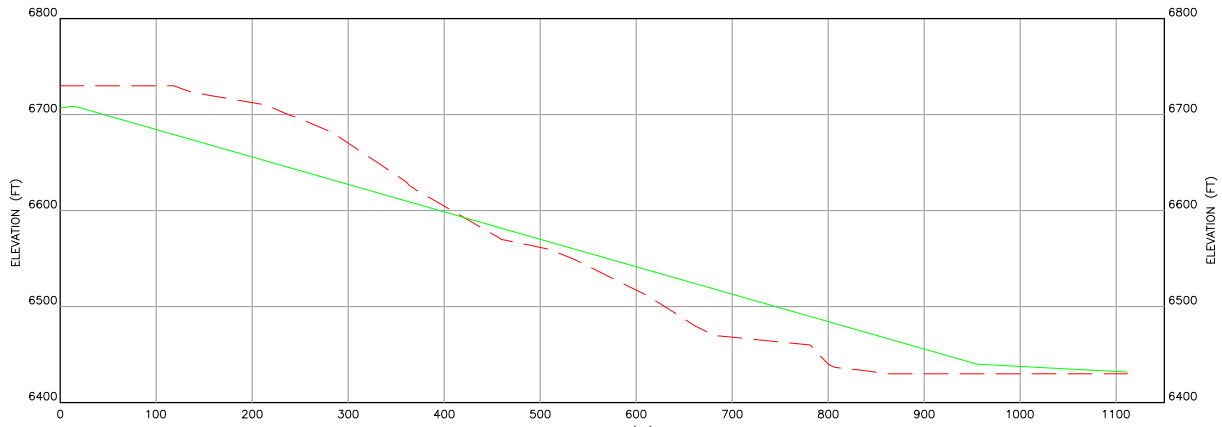
DRAWING TITLE:
**Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES,
SOUTH RIM AND SAN SALVADOR PITS
CUT/FILL ISOPACH MAP**



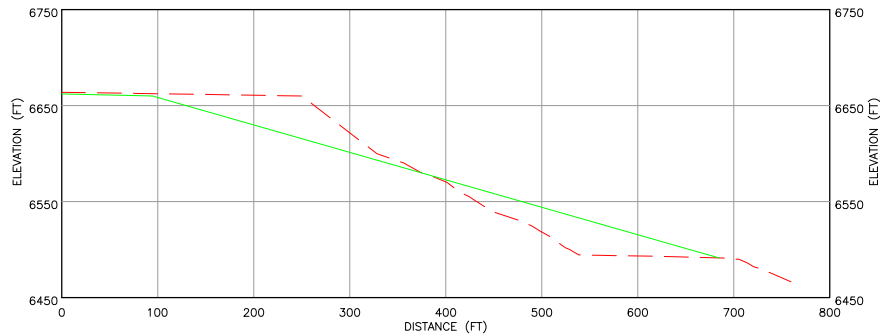
Stantec

Sheet 14 Of 34 Sheets
SCALE: 1"=400' DRAWING No. 14

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H
13
AREA 4C - CROSS SECTION H

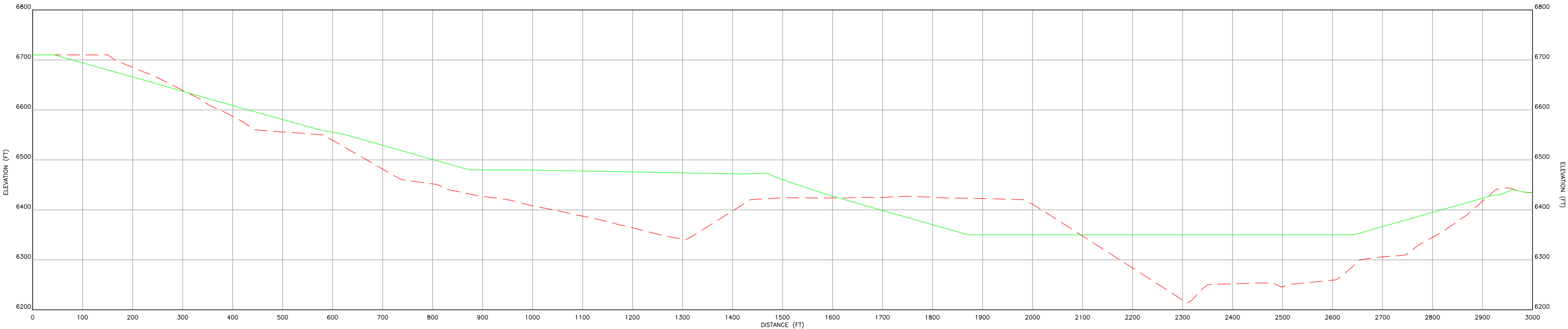


I
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AREA 4C - CROSS SECTION I

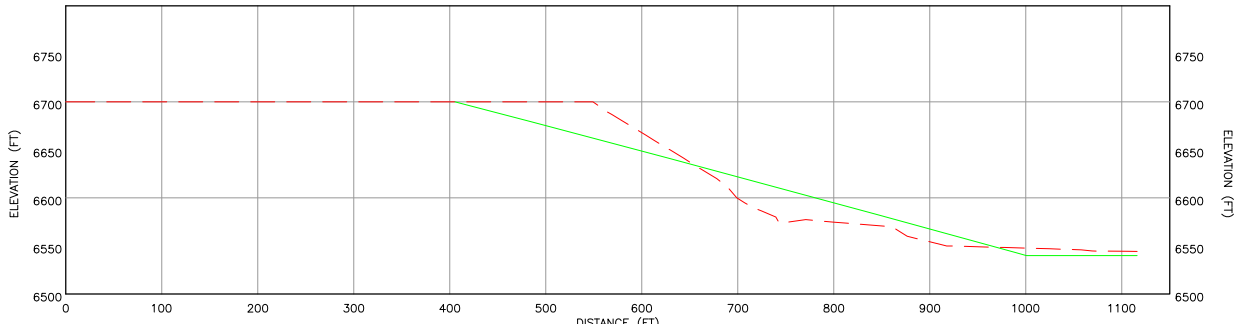
LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
- DETAIL/SECTION NUMBER
- DRAWING No. WHERE DETAIL/SECTION IS SHOWN

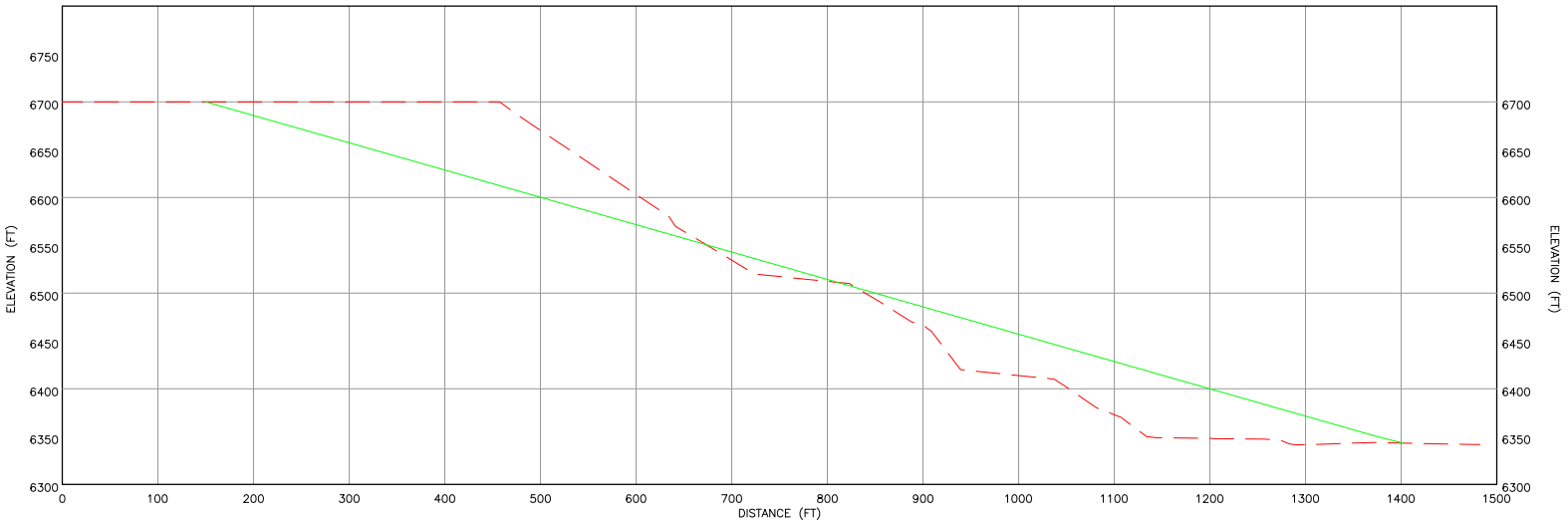
A
8



J
13
AREA 7B - CROSS SECTION J



K
13
AREA 7B - CROSS SECTION K



L
13
AREA 7B - CROSS SECTION L

Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33



1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

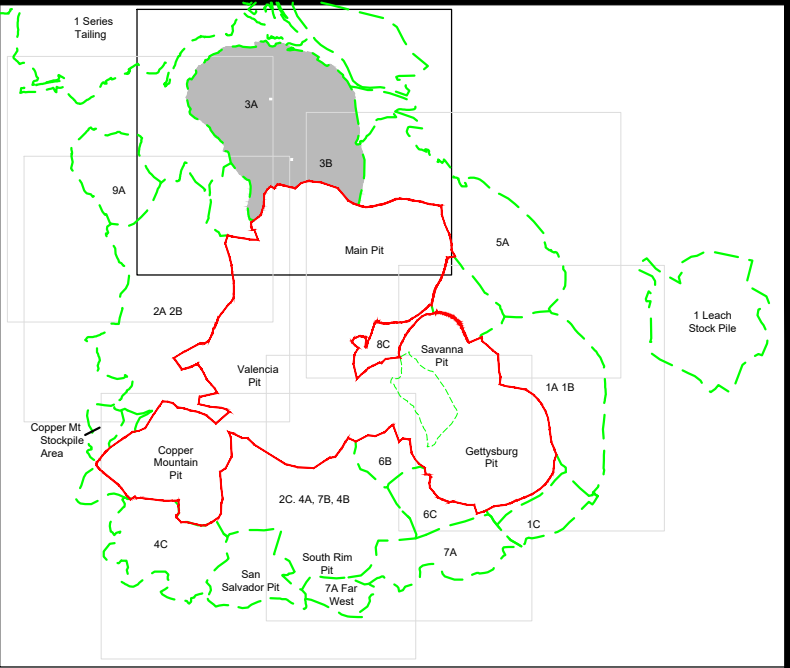
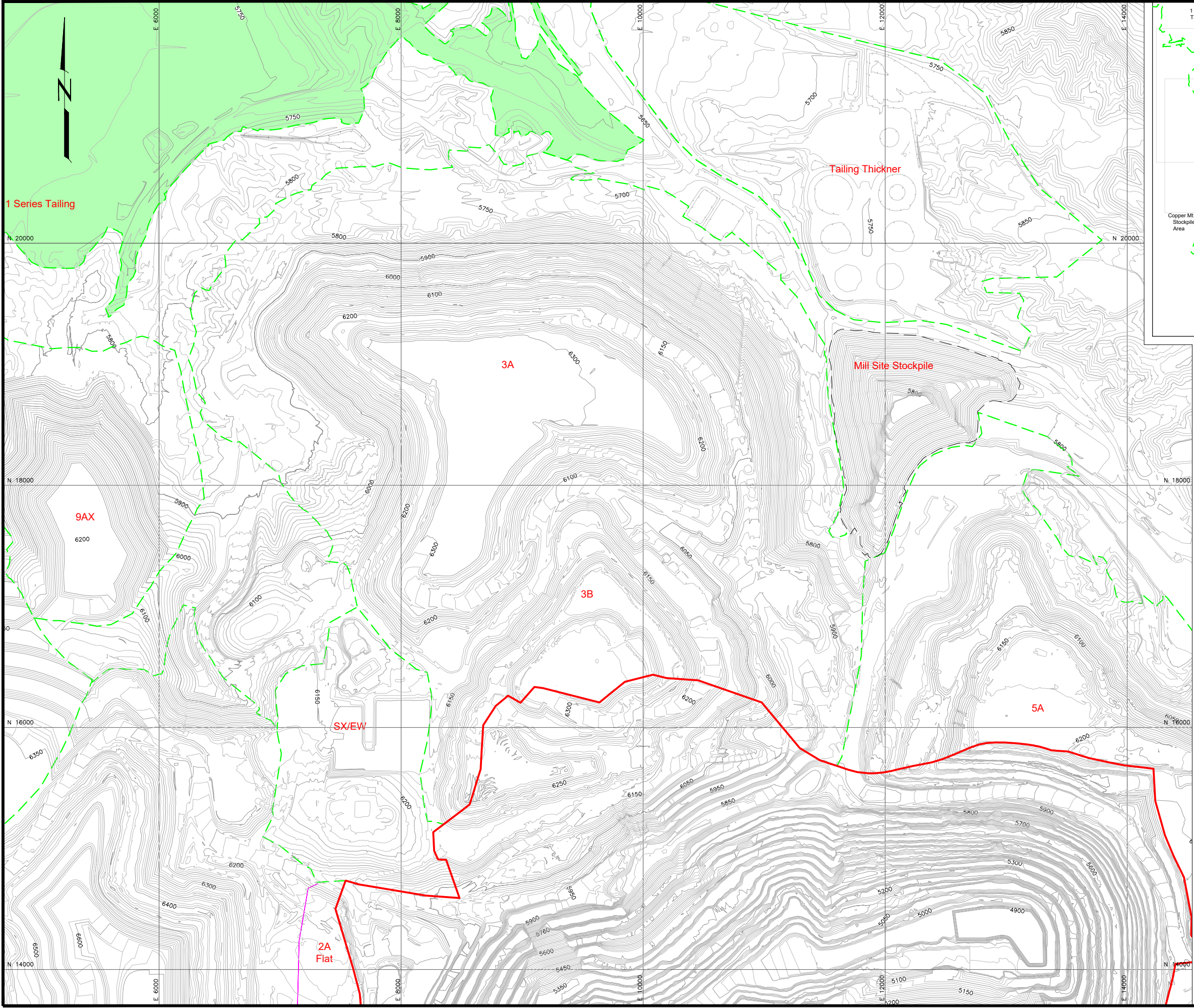
PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **Nos. 2C, 4A, 4B, 4C, 7B LEACH STOCKPILES, SOUTH RIM AND SAN SALVADOR PITS CROSS SECTIONS**

Sheet **15** Of **34** Sheets

SCALE: **1"=100'**

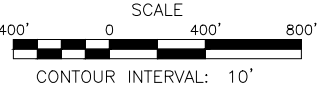
DRAWING No. **15**



KEY MAP

LEGEND

- EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



2	REVISED BOND CALCULATION	5/19	T.Liedich	T. Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T. Leidich		
0	DRAFT FOR DISCUSSION	05/07	T.Liedich	L.Berkness		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

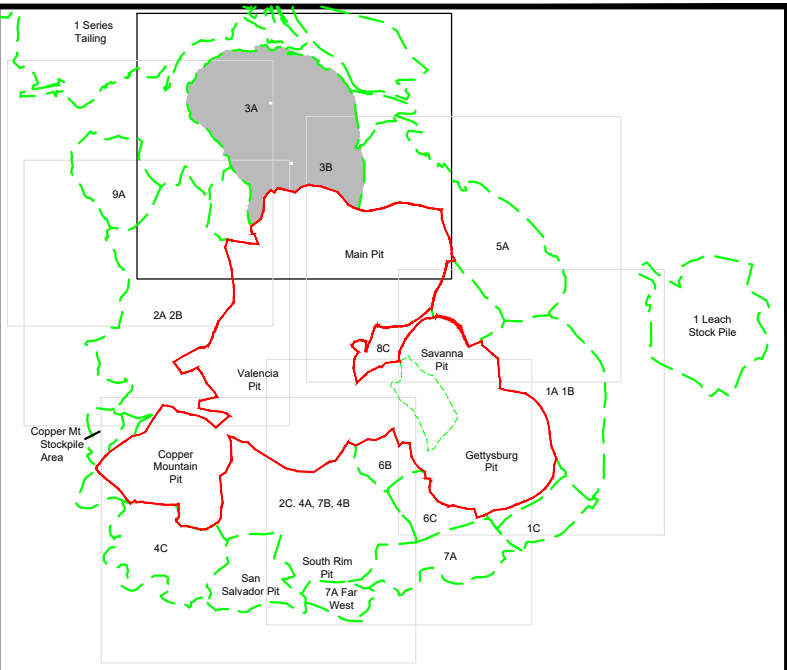
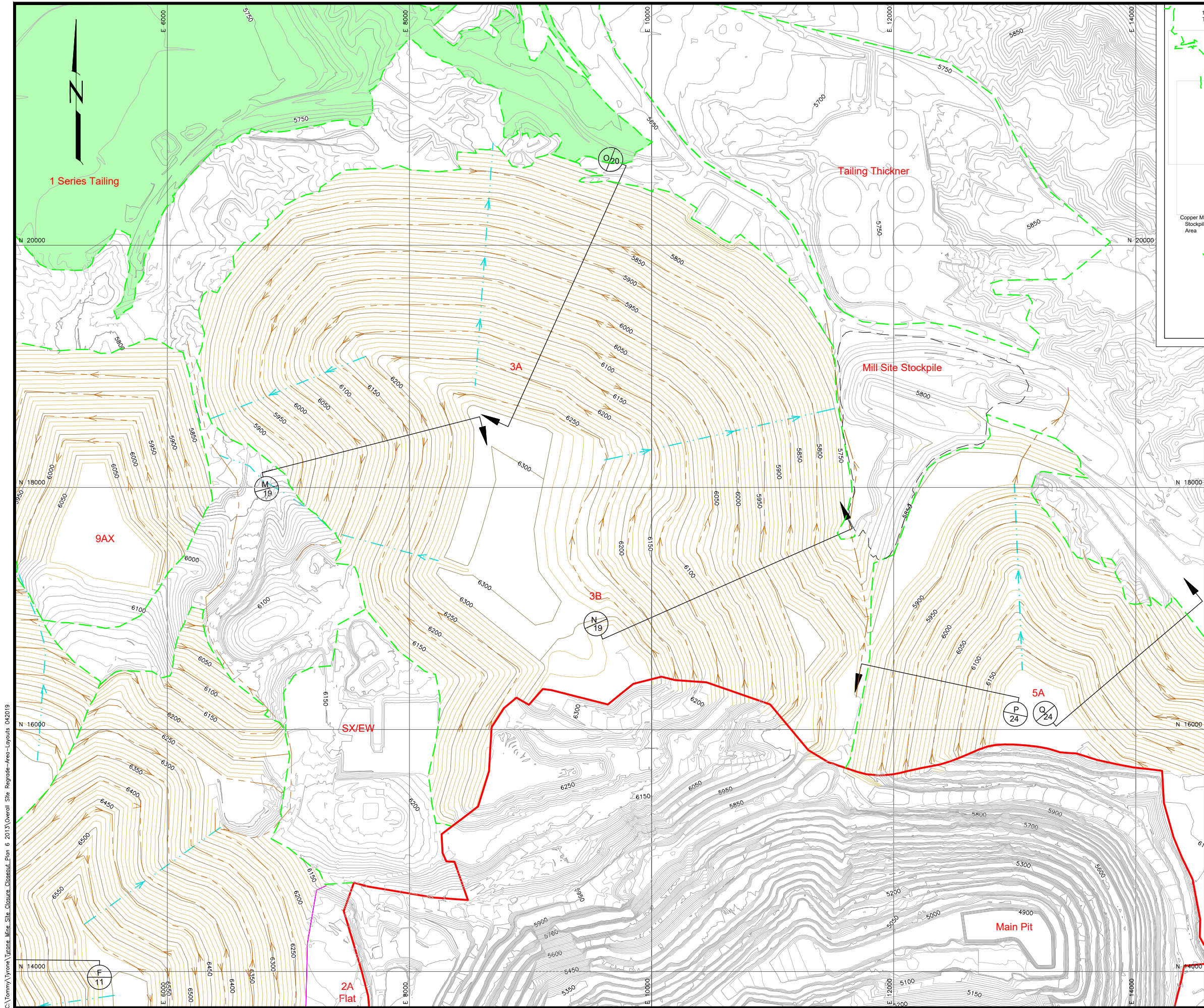


PROJECT: TYRONE MINE AREA RECLAMATION

DRAWING TITLE: No. 3A LEACH AND 3B WASTE STOCKPILES 2014 CONFIGURATION



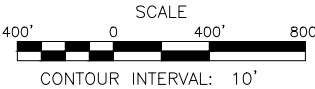
Sheet 16 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 16



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- DETAIL/SECTION NUMBER
- DRAWING No. WHERE DETAIL/SECTION IS SHOWN



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT FOR DISCUSSION	05/07	T.Liedich	L.Berkness		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

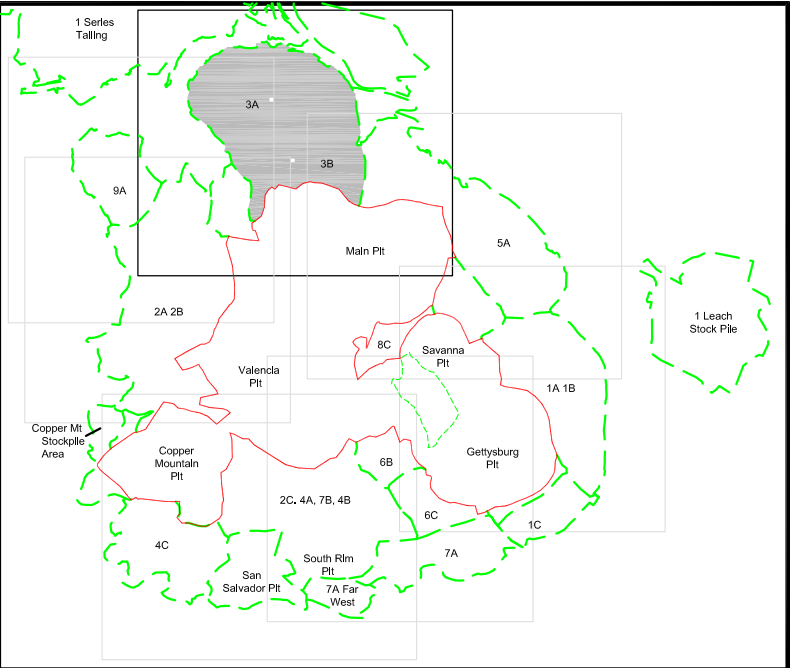
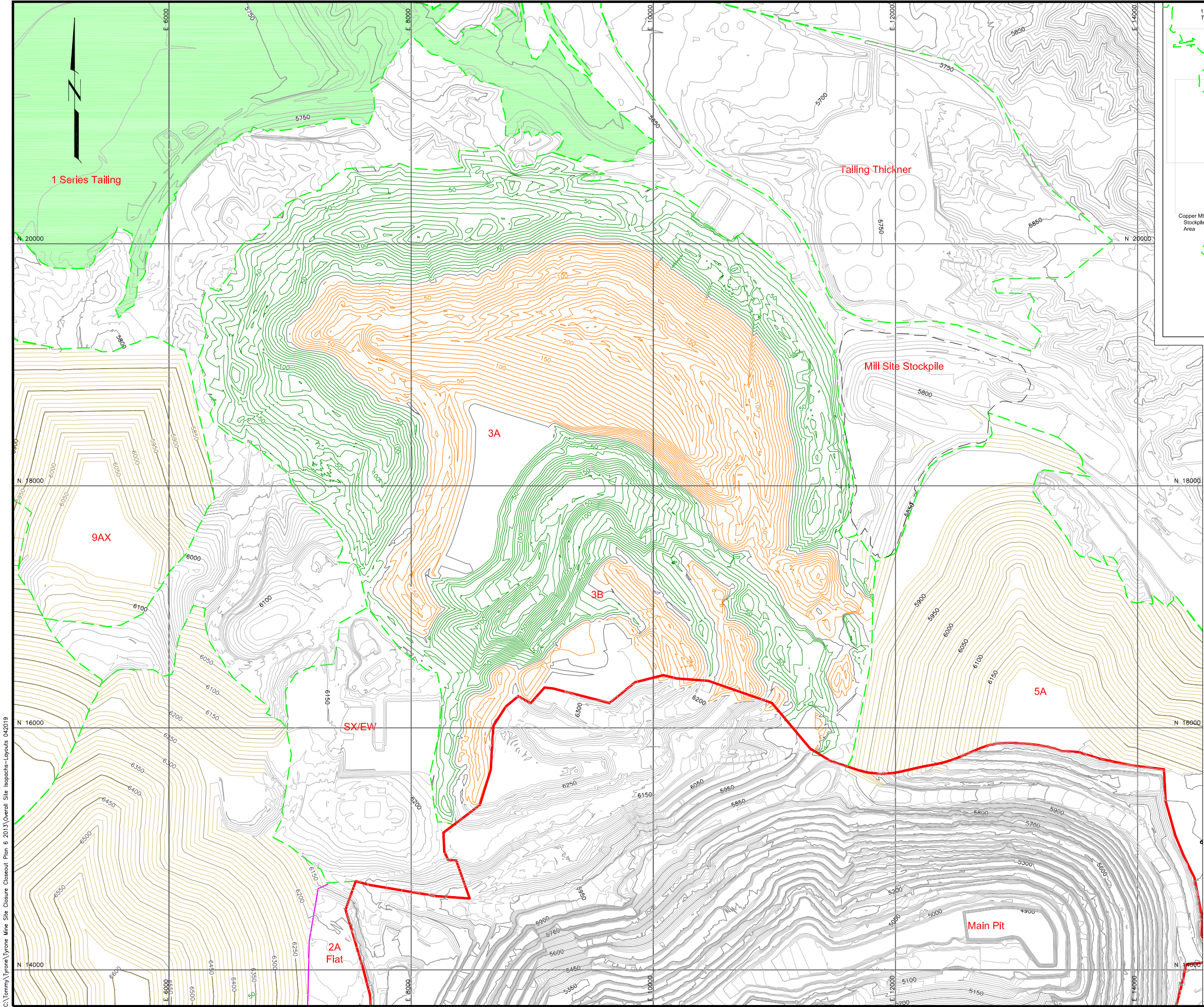
FREEPORT-McMoRAN
TYRONE, INC.

PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **No. 3A LEACH AND 3B WASTE STOCKPILES
GRADING & DRAINAGE PLAN**



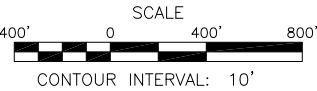
Sheet **17** Of **34** Sheets
SCALE: **1"=400'**
DRAWING No. **17**



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	L.Moore		
0	DRAFT FOR DISCUSSION	05/07	T.Liedich	L.Berkness		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



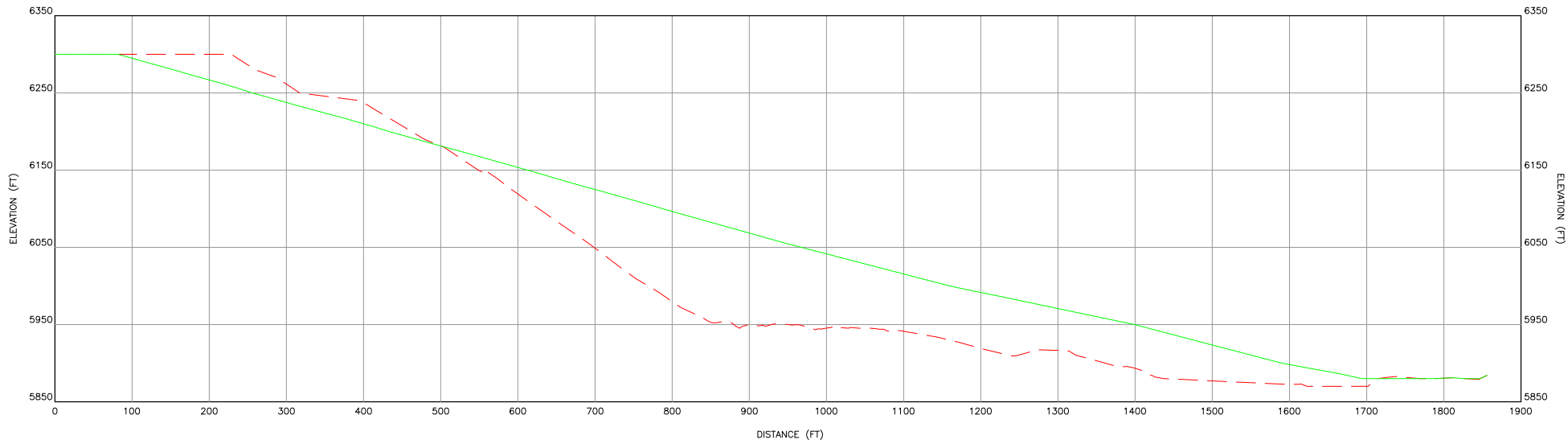
PROJECT: TYRONE MINE AREA RECLAMATION

DRAWING TITLE: No. 3A LEACH AND 3B WASTE STOCKPILES CUT/FILL ISOPACH MAP

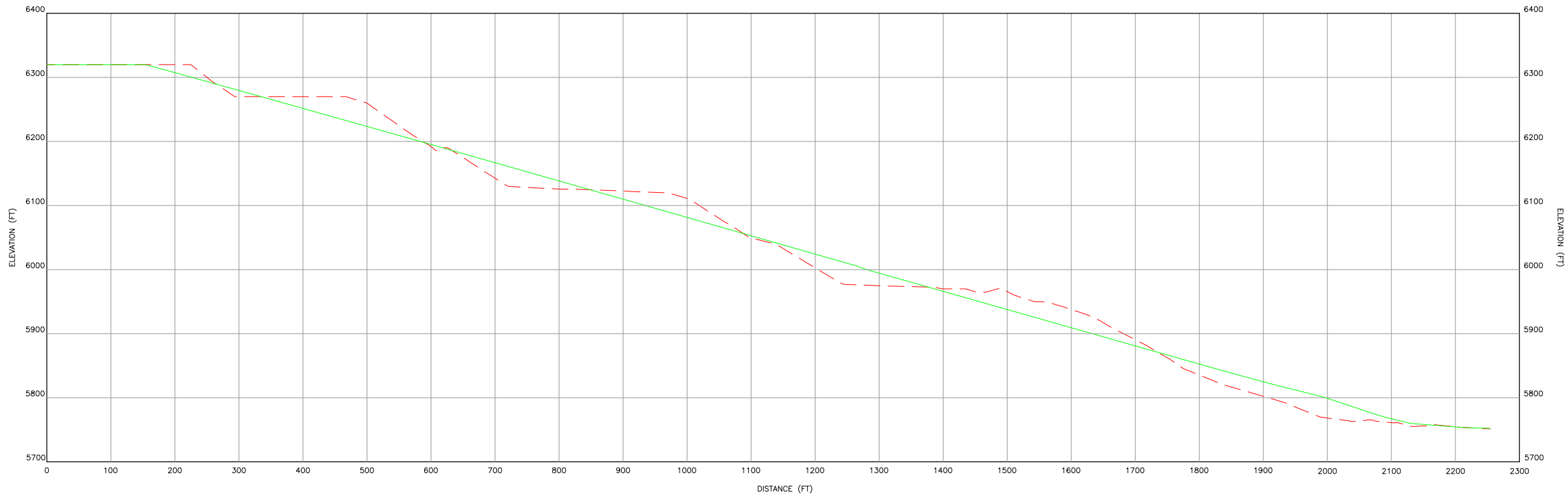


Sheet 18 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 18

C:\Tommy\Tyron\Tyron Mine Site Closures\Chesout Plan & 2013\Overall Site Cross-Sections-LayoutREV1 042019



M
17 **AREA 3A-3B CROSS SECTION M**



N
17 **AREA 3A-3B CROSS SECTION N**

LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
-  DETAIL/SECTION NUMBER
-  DRAWING No. WHERE DETAIL/SECTION IS SHOWN



1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: **TYRONE MINE AREA RECLAMATION**

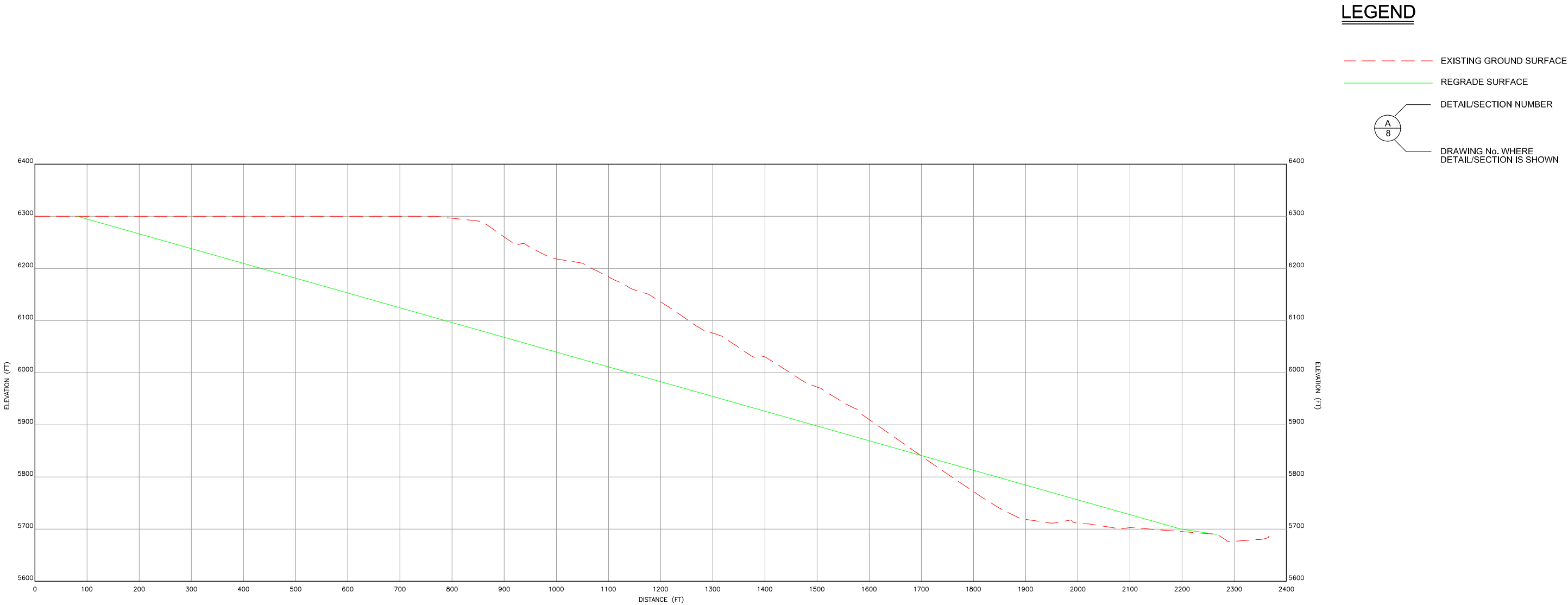
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CROSS SECTIONS - 1**

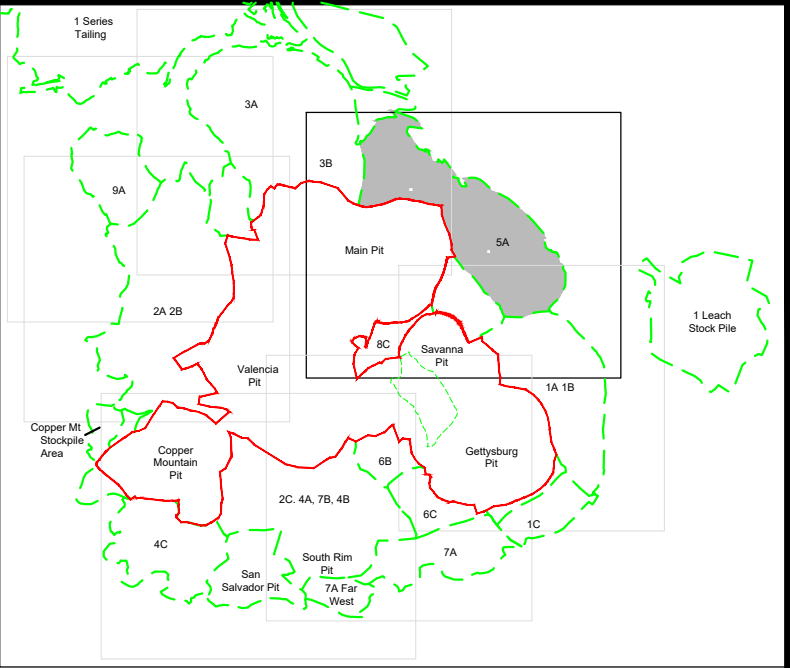
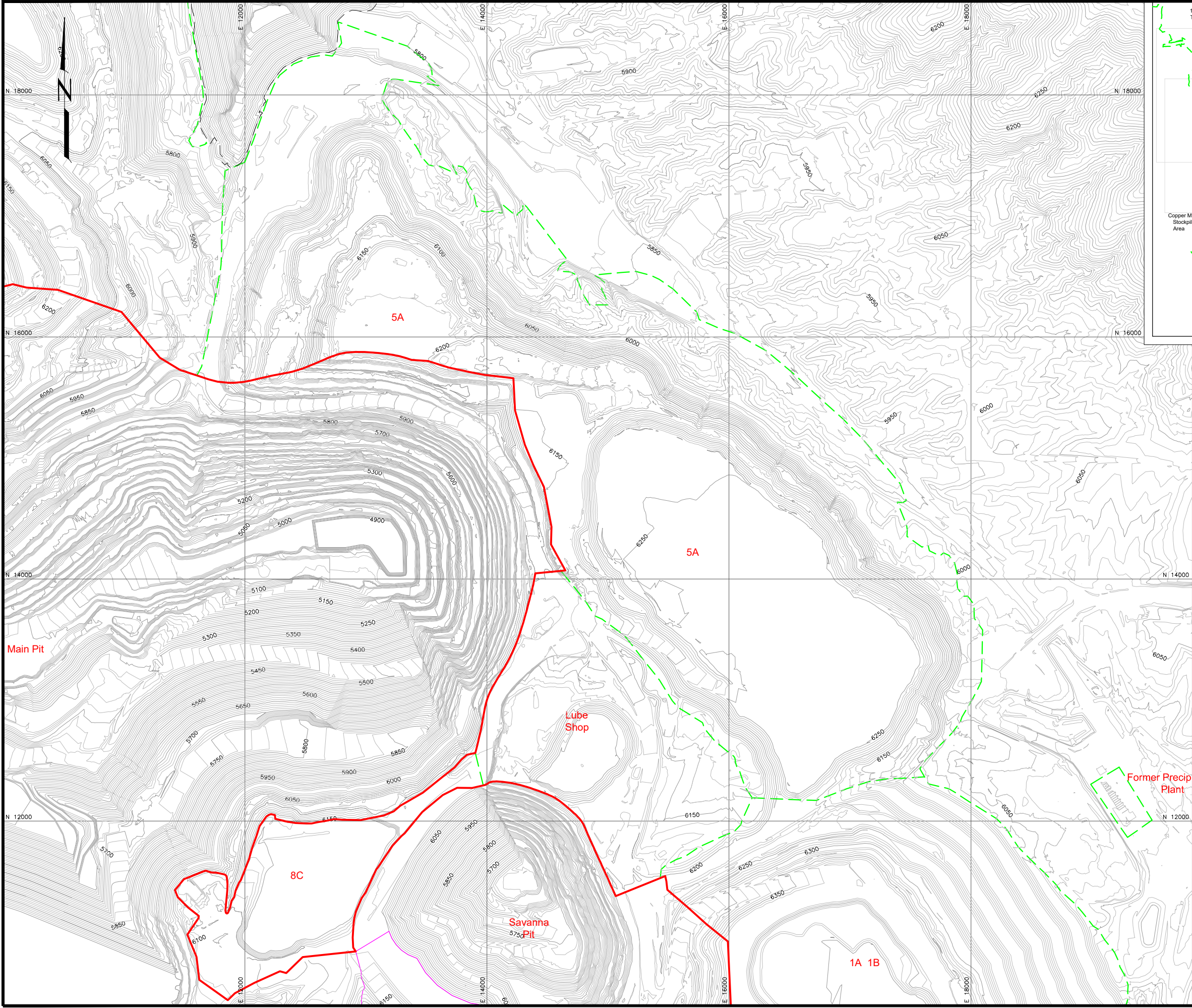


Sheet 19 Of 34 Sheets
SCALE: 1"=100'
DRAWING No. 19

Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33

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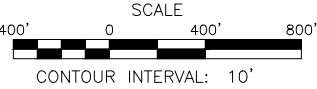




KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



2	REVISED BOND CALCULATION	5/19	T.Leidich	T.Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Pever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

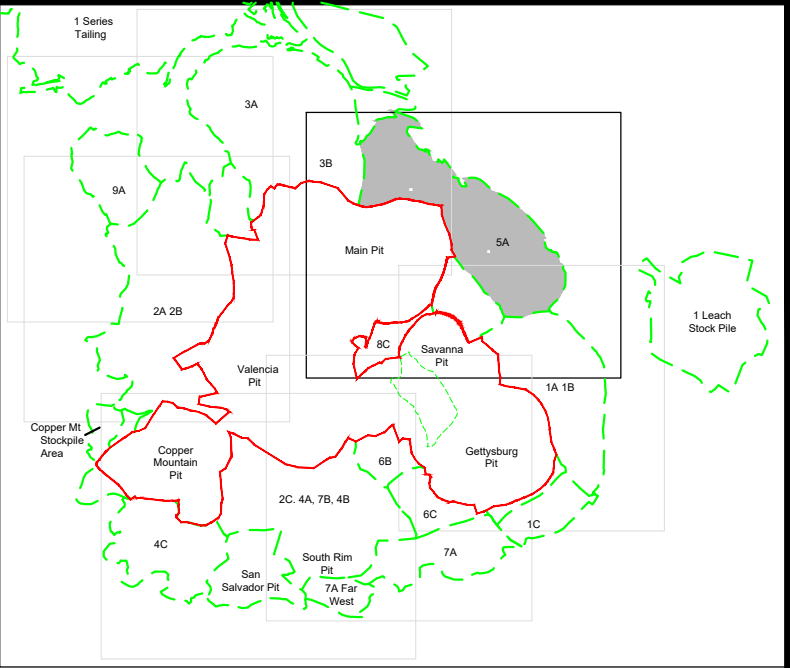
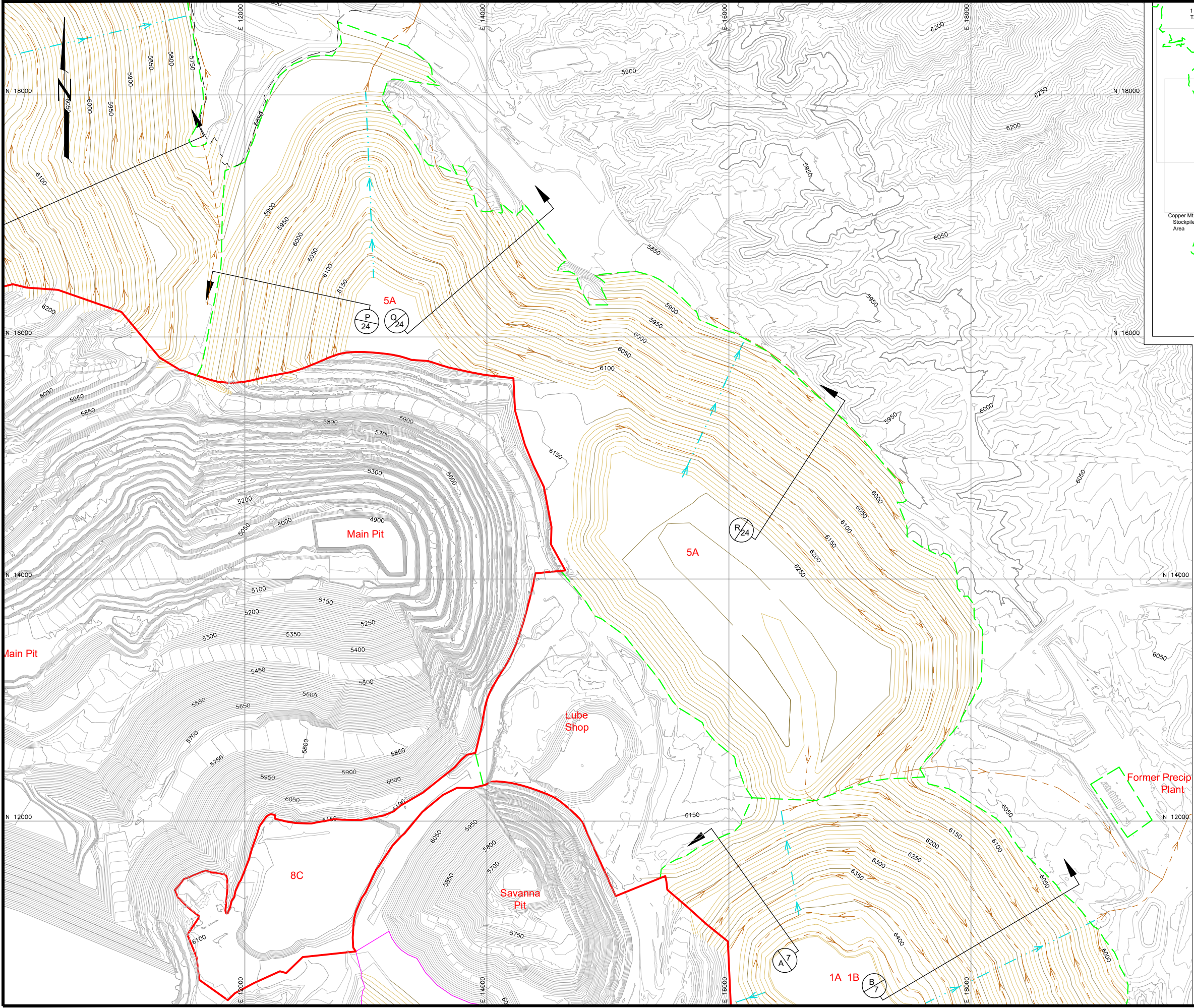
FREEPORT-McMoRAN
TYRONE, INC.

PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **No. 5A OVER BURDEN STOCKPILE
2014 CONFIGURATION**



Sheet 21 of 34 Sheets
SCALE: 1"=400'
DRAWING No. 21

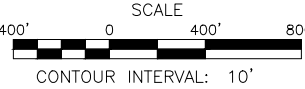


KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)

DETAIL/SECTION NUMBER
DRAWING No. WHERE
DETAIL/SECTION IS SHOWN



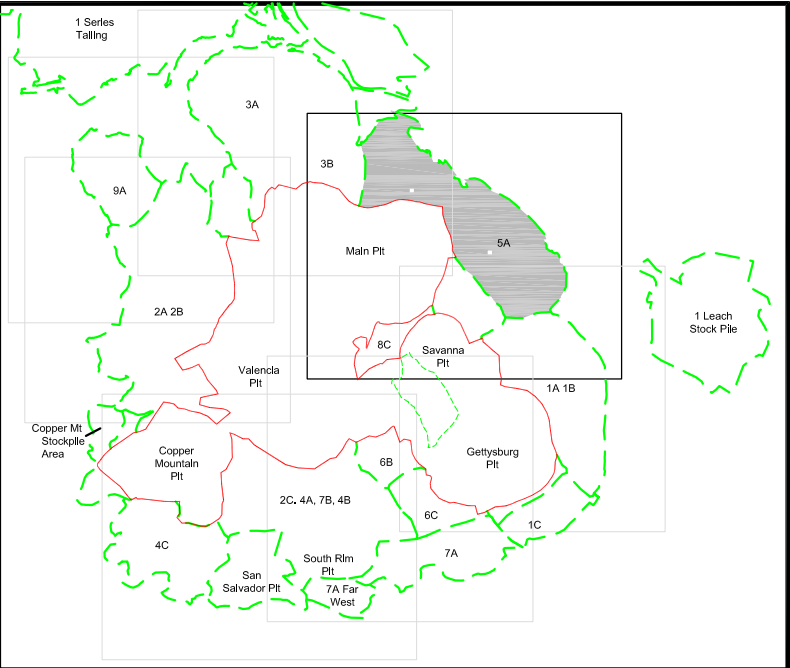
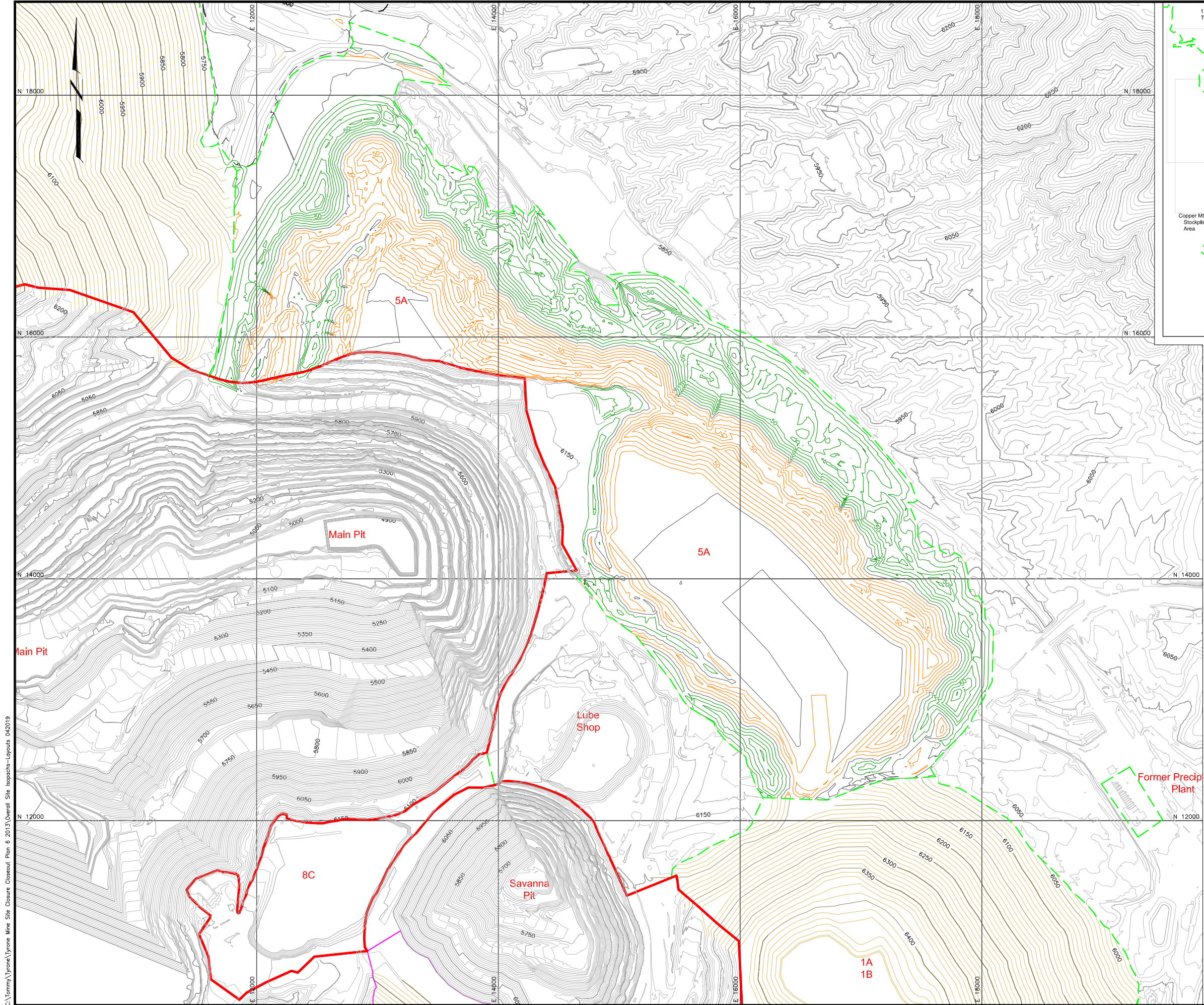
2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Pever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

FREEPORT-McMoRAN
TYRONE, INC.

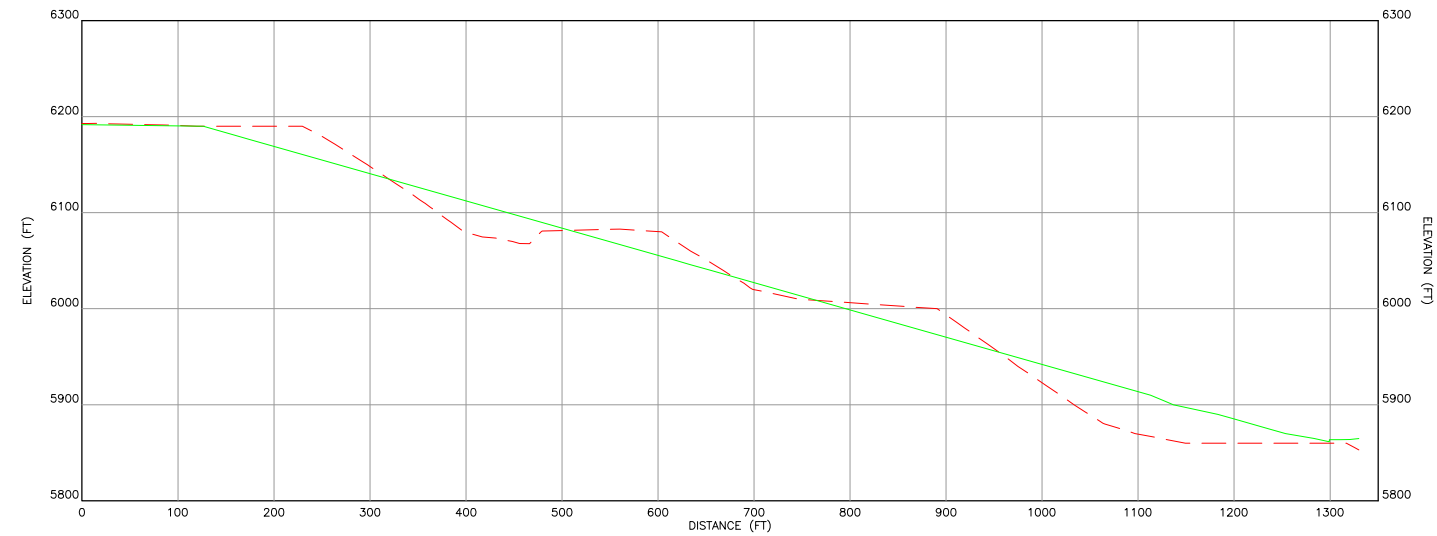
PROJECT: **TYRONE MINE AREA RECLAMATION**
DRAWING TITLE: **No. 5A OVER BURDEN STOCKPILE
GRADING & DRAINAGE PLAN**

Stantec

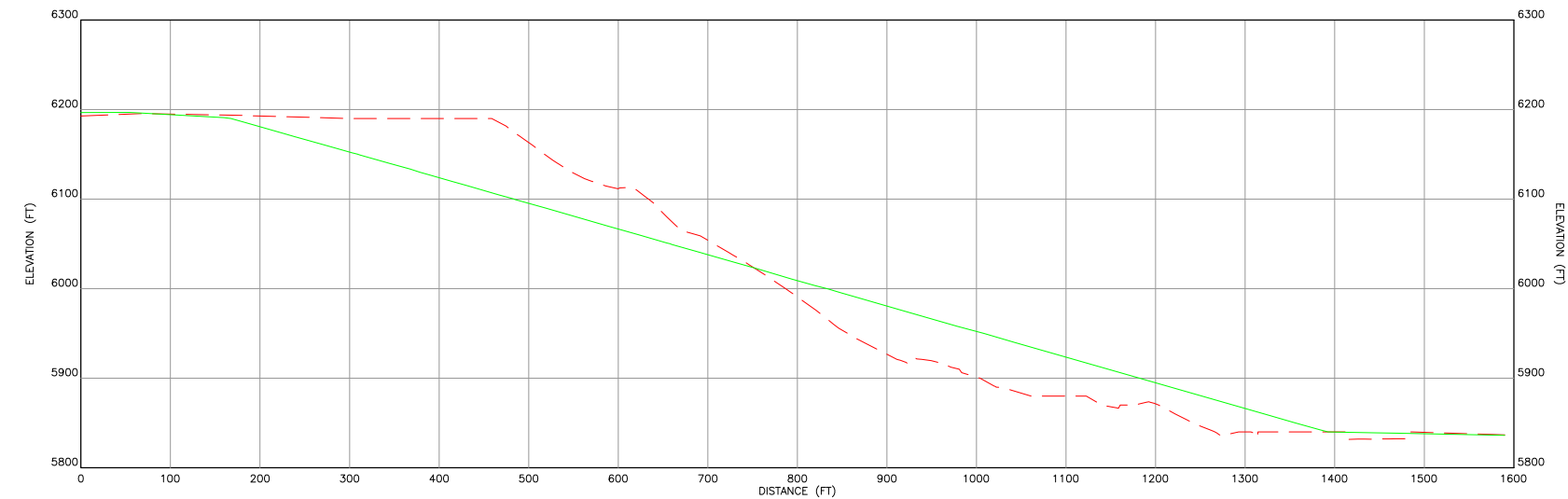
Sheet 22 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 22



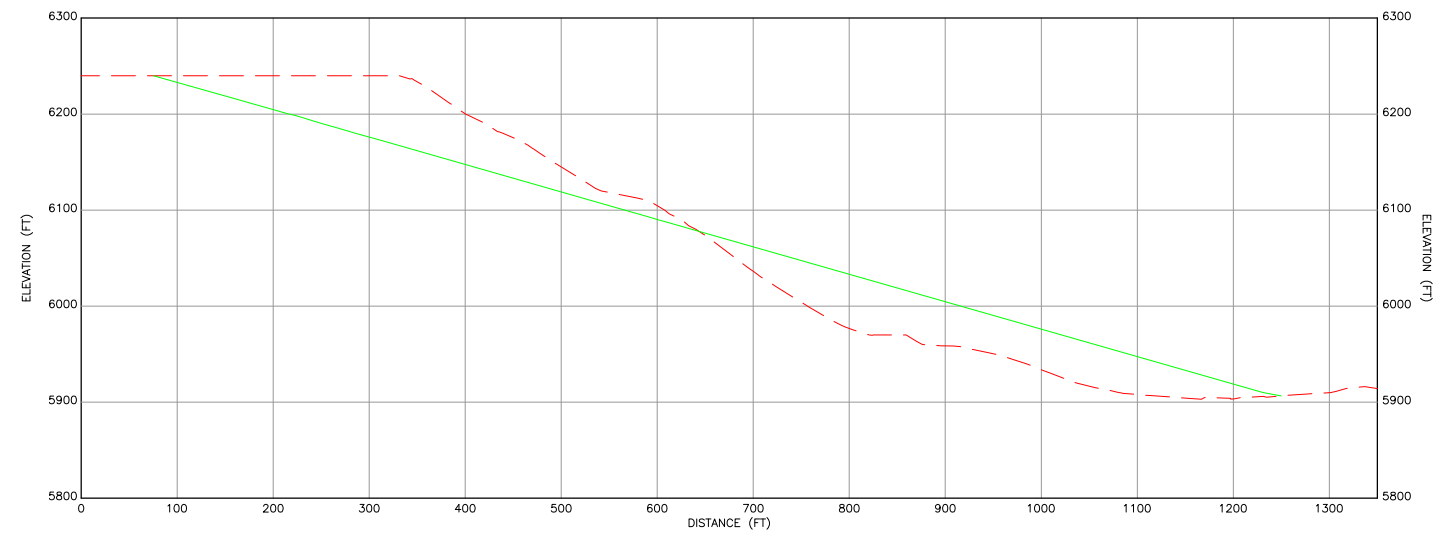
C:\Tommy\Tyrona\Tyrona Mine Site Closures\Chesout Plan & 2013\Overall Site Cross-Sections-LayoulsREV1 042019



P
22
AREA 5A - CROSS SECTION P



Q
22
AREA 5A - CROSS SECTION Q



R
22
AREA 5A - CROSS SECTION R

LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
-  DETAIL/SECTION NUMBER
-  DRAWING No. WHERE DETAIL/SECTION IS SHOWN



REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich	
0	DRAFT	09/12	T.Liedich	J.Bever	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

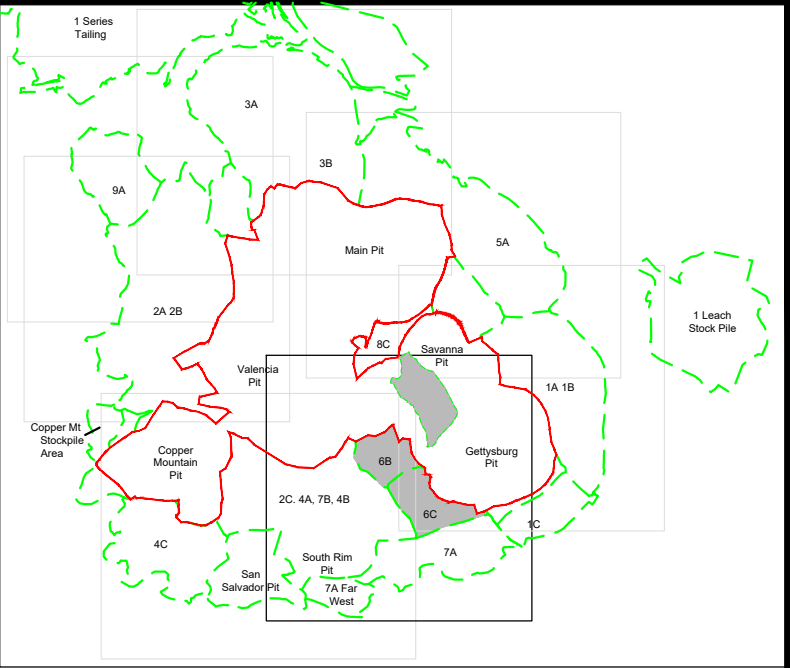
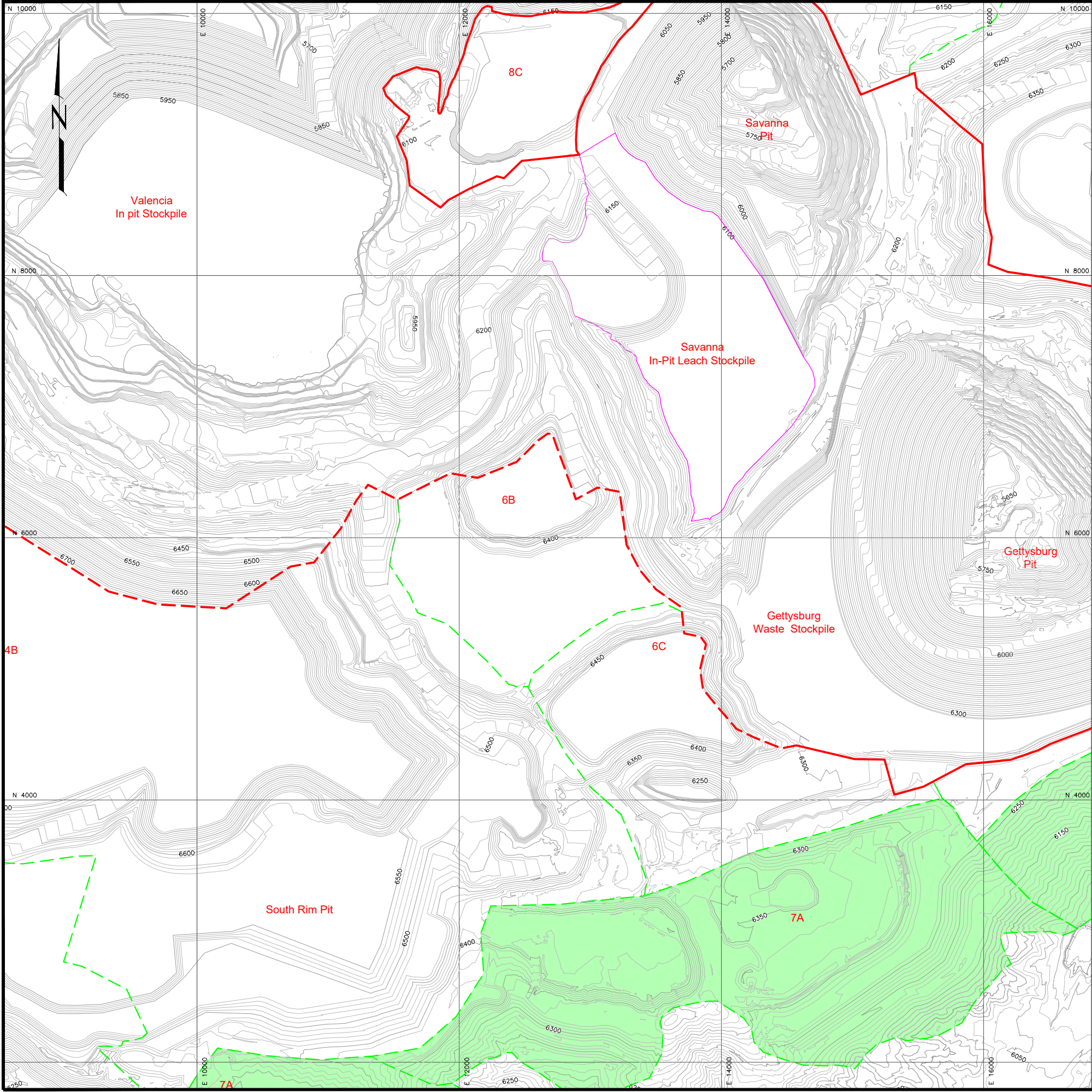
DRAWING TITLE: **No. 5A OVER BURDEN STOCKPILE
CROSS SECTIONS**



Stantec

Sheet 24 Of 34 Sheets
SCALE: 1"=100'
DRAWING No. 24

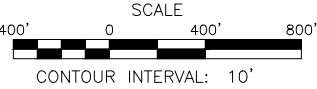
Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33



KEY MAP

LEGEND

- EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



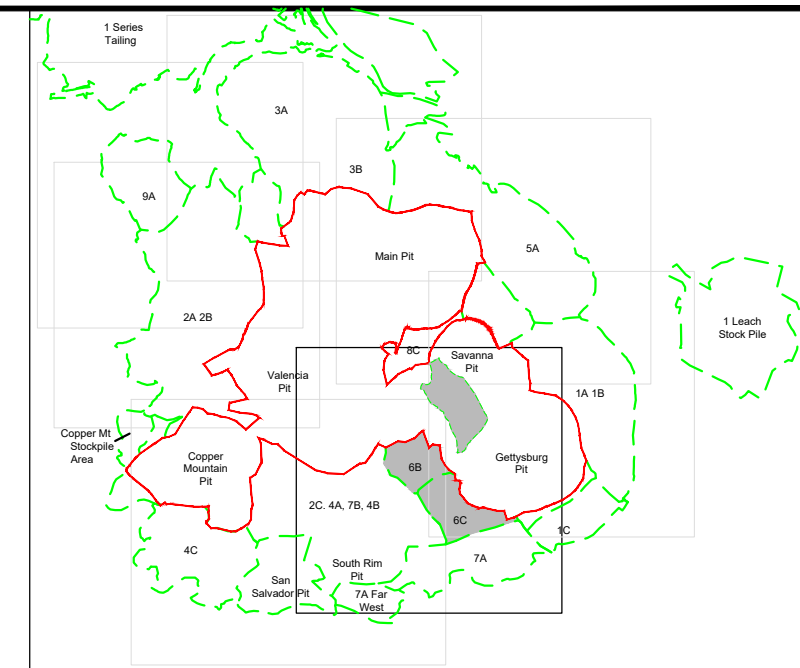
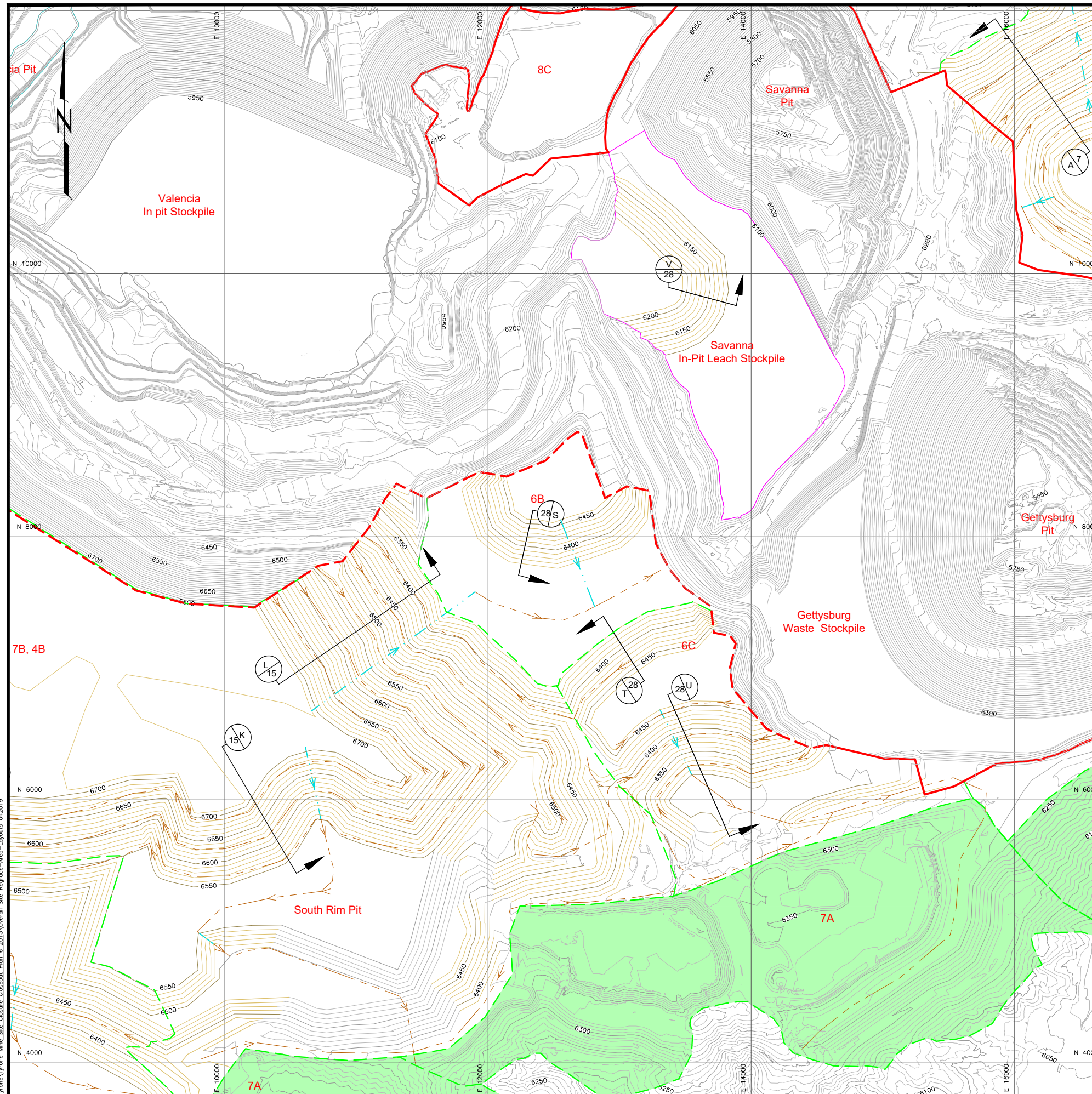
2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: Nos. 6B, 6C AND SAVANNA IN-PIT LEACH STOCKPILE - 2014 CONFIGURATION



Sheet 25 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 25



KEY MAP

LEGEND

-
- Legend:
- 6250 EXISTING CONTOURS
 - 6250 REGRADED CONTOURS
 - 2013 CONDITIONAL WAIVER AREA
 - REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
 - RECLAMATION AREA
 - STOCKPILE LIMITS
 - DOWNDRAIN
 - BENCH CHANNEL
 - INTERIOR FLAT AREA
 - RECLAIMED AREAS (2019)

- DETAIL/SECTION NUMBER

DRAWING No. WHERE
DETAIL/SECTION IS SHOWN

SCALE



CONTOUR INTERVAL: 10'

2	REVISED BOND CALCULATION	5/1	T.Leidich	T.Leidich	
1	ISSUED FOR BOND CALCULATION	08/14	T.Leidich	T. Leidich	
0	DRAFT	09/12	T.Leidich	J.Bever	
REV. NO.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: *TYRONE MINE AREA RECLAMATION*

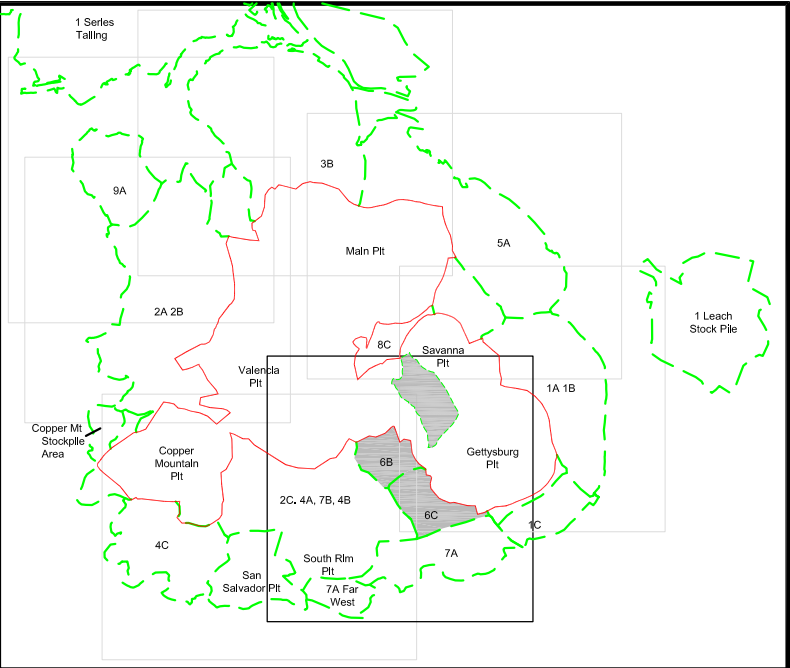
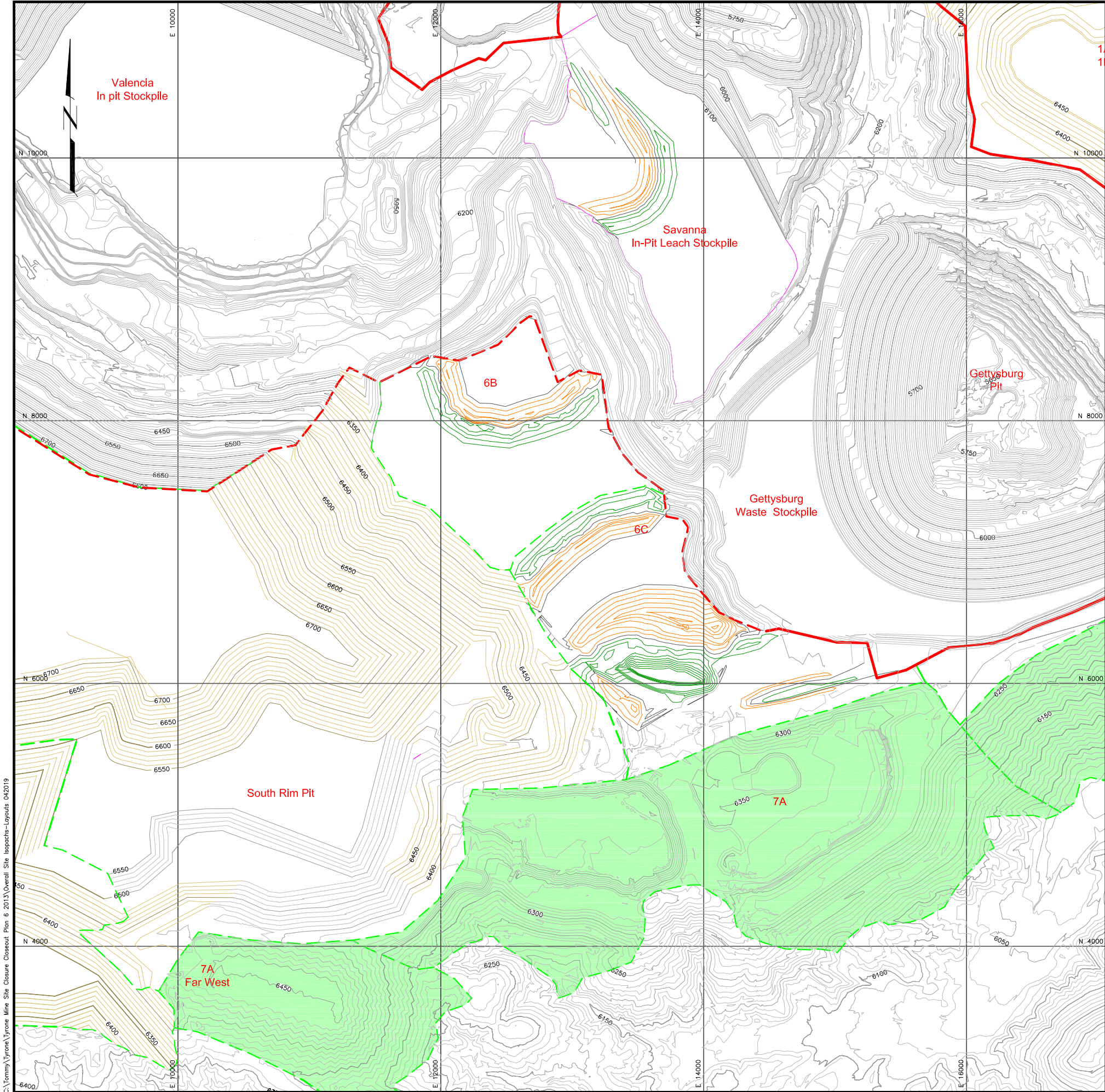
DRAWING TITLE:
*Nos. 6B, 6C, AND SAVANNA IN- PIT LEACH
STOCKPILES - GRADING & DRAINAGE PLAN*

**Stantec**

Sheet 26 Of 34 Sheets

SCALE:	DRAWING No.
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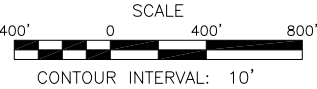
$1''=400'$	26
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KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Leidich	T.Leidich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

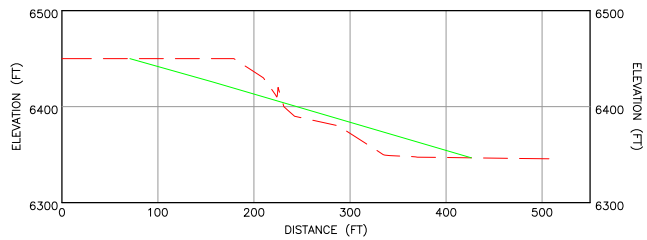


PROJECT: TYRONE MINE AREA RECLAMATION
DRAWING TITLE: Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH STOCKPILE - CUT/FILL ISOPACH MAP

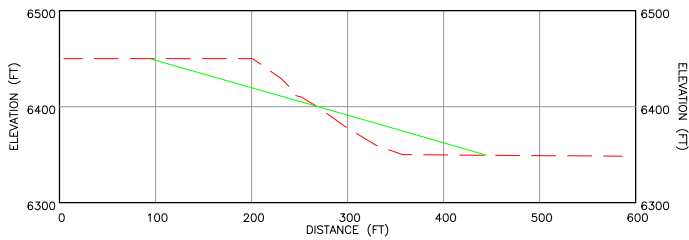


Sheet 27 Of 34 Sheets
SCALE: 1"=400'
DRAWING No. 27

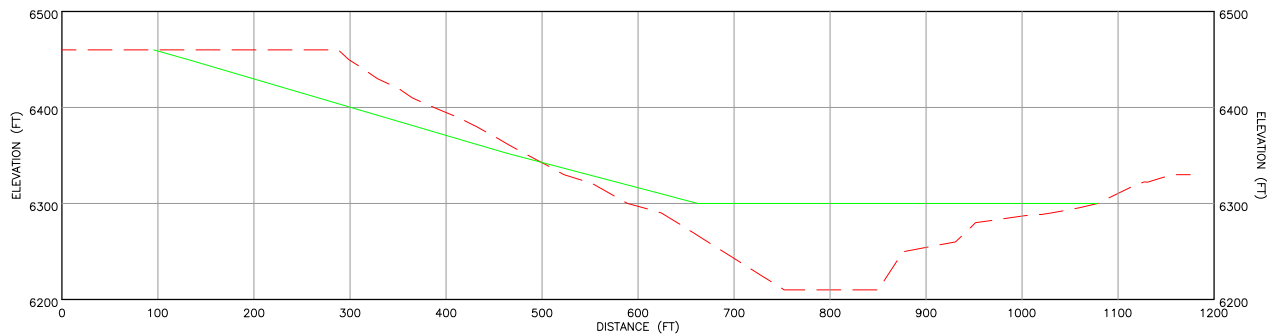
C:\Tommy\Tyrone\Tyrone Mine Site Closures\Chesout Plan & 2013\Overall Site Cross-Sections-LAYOUTREV1 042019



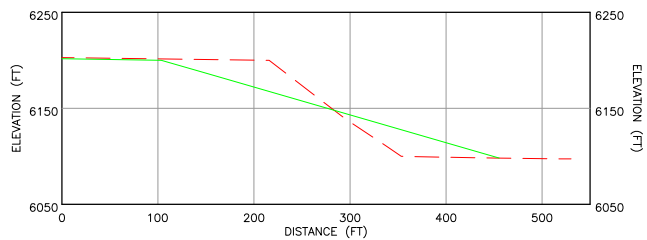
S
26
AREA 6B - CROSS SECTION S



T
26
AREA 6C - CROSS SECTION T



U
26
AREA 6C - CROSS SECTION U



V
26
AREA 8C - CROSS SECTION V

LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
-  DETAIL/SECTION NUMBER
-  DRAWING No. WHERE
DETAIL/SECTION IS SHOWN



REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich	
0	DRAFT	09/12	T.Liedich	J.Bever	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE:
**Nos. 6B, 6C, AND SAVANNA IN-PIT LEACH
STOCKPILES - CROSS SECTIONS**

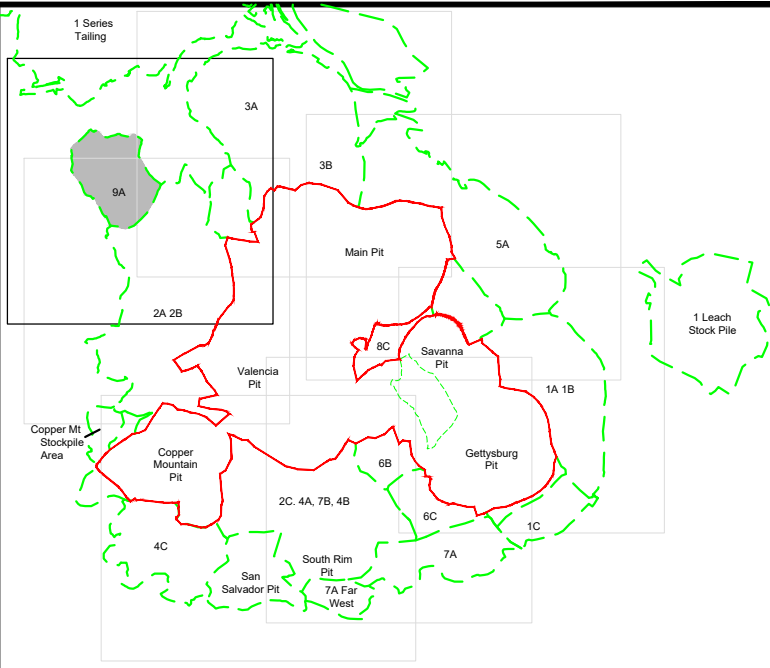
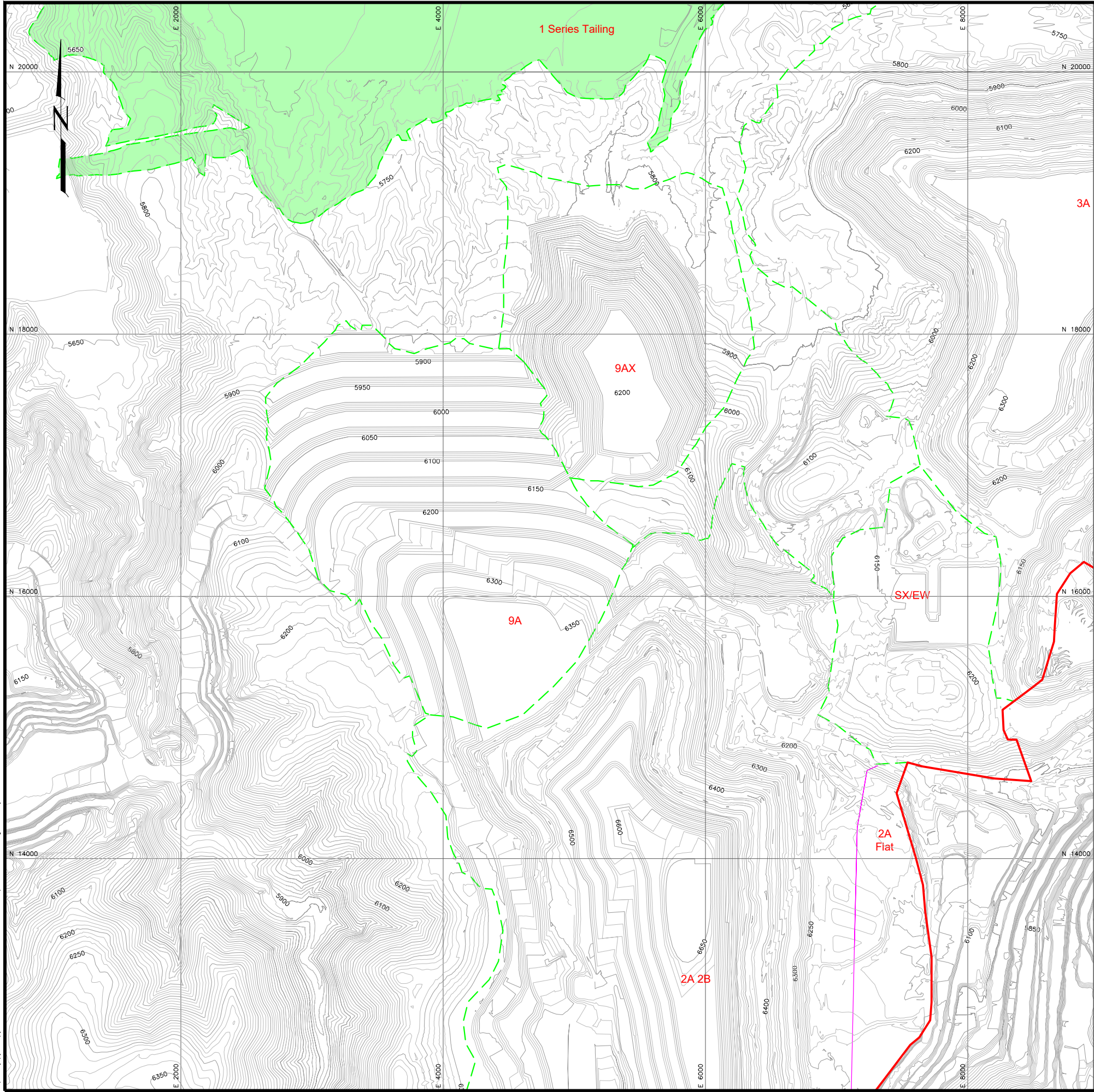


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Sheet 28 Of 34 Sheets
SCALE: 1"=100'
DRAWING No. 28

Note: The regrade surface shows the overall slope and does not show the terrace benches that **will** be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33

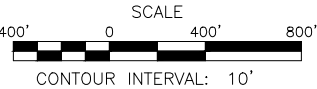
C:\Tommy\Tyrone\Tyrone Mine Site Closure Cleanout Plan & 2013 Overall Site Existing-Area-Layouts 042019



KEY MAP

LEGEND

- EXISTING CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)
- LIMITS OF STOCKPILE



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Beaver		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

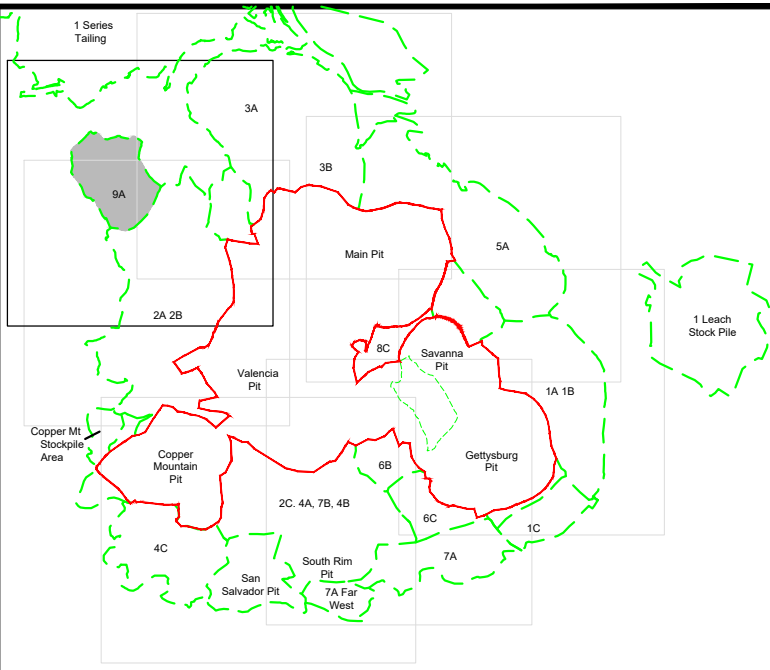
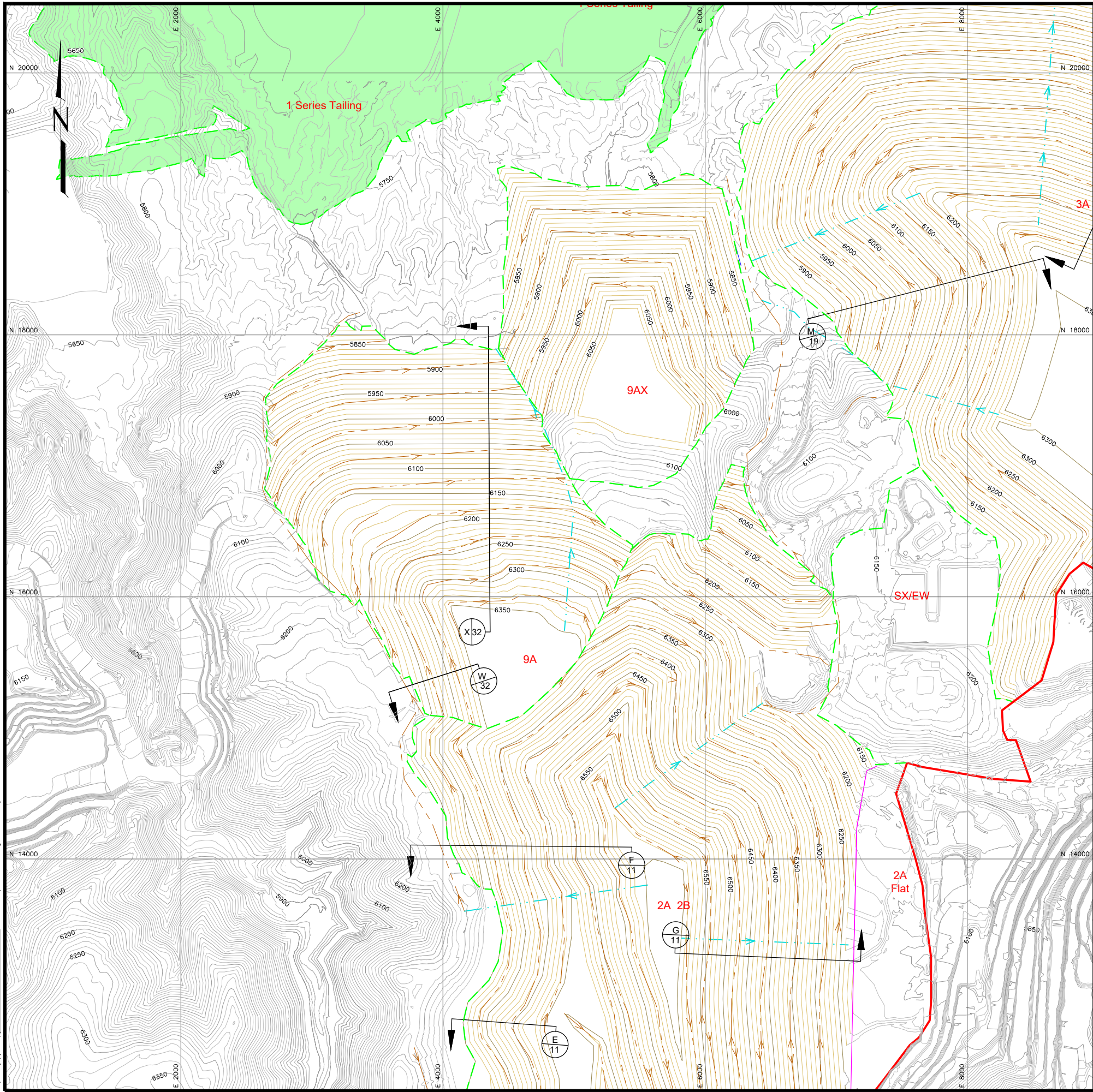
FREEPORT-McMoRAN
TYRONE, INC.

PROJECT: **TYRONE MINE AREA RECLAMATION**
DRAWING TITLE: **No. 9A OVER BURDEN STOCKPILE
2014 CONFIGURATION**



Sheet 29 of 34 Sheets
SCALE: 1"=400'
DRAWING No. 29

C:\Tommy\Tyrone\Tyrone Mine Site Closure\Classcut Plan & 2013 Overall Site Regrade-Area Layouts 042019



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- STOCKPILE LIMITS
- DOWNDRAIN
- BENCH CHANNEL
- INTERIOR FLAT AREA
- RECLAIMED AREAS (2019)

DETAIL/SECTION NUMBER

A 8

DRAWING No. WHERE
DETAIL/SECTION IS SHOWN

SCALE

400' 0 400' 800'

CONTOUR INTERVAL: 10'

2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	L.Moore		
0	DRAFT	09/12	T.Liedich	J.Pever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

FREEPORT-McMoRAN
TYRONE, INC.

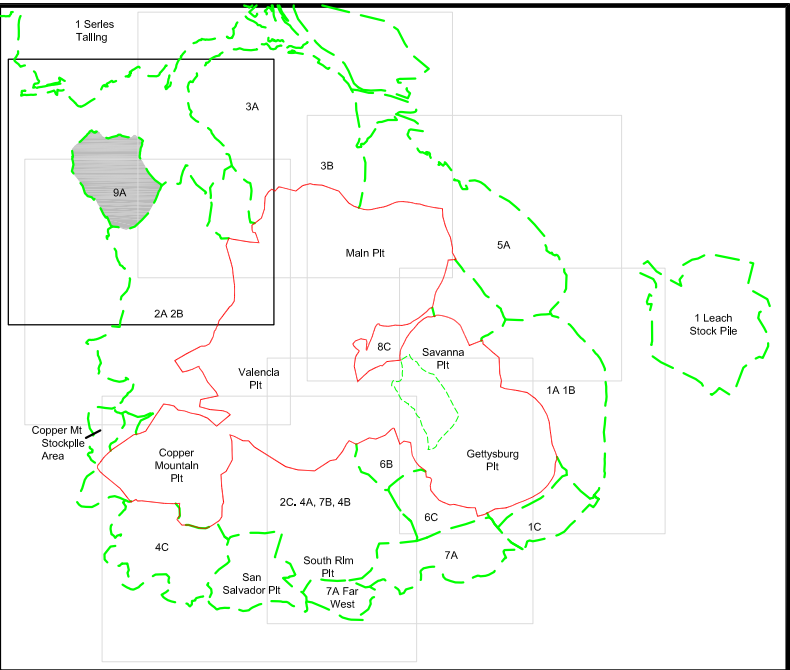
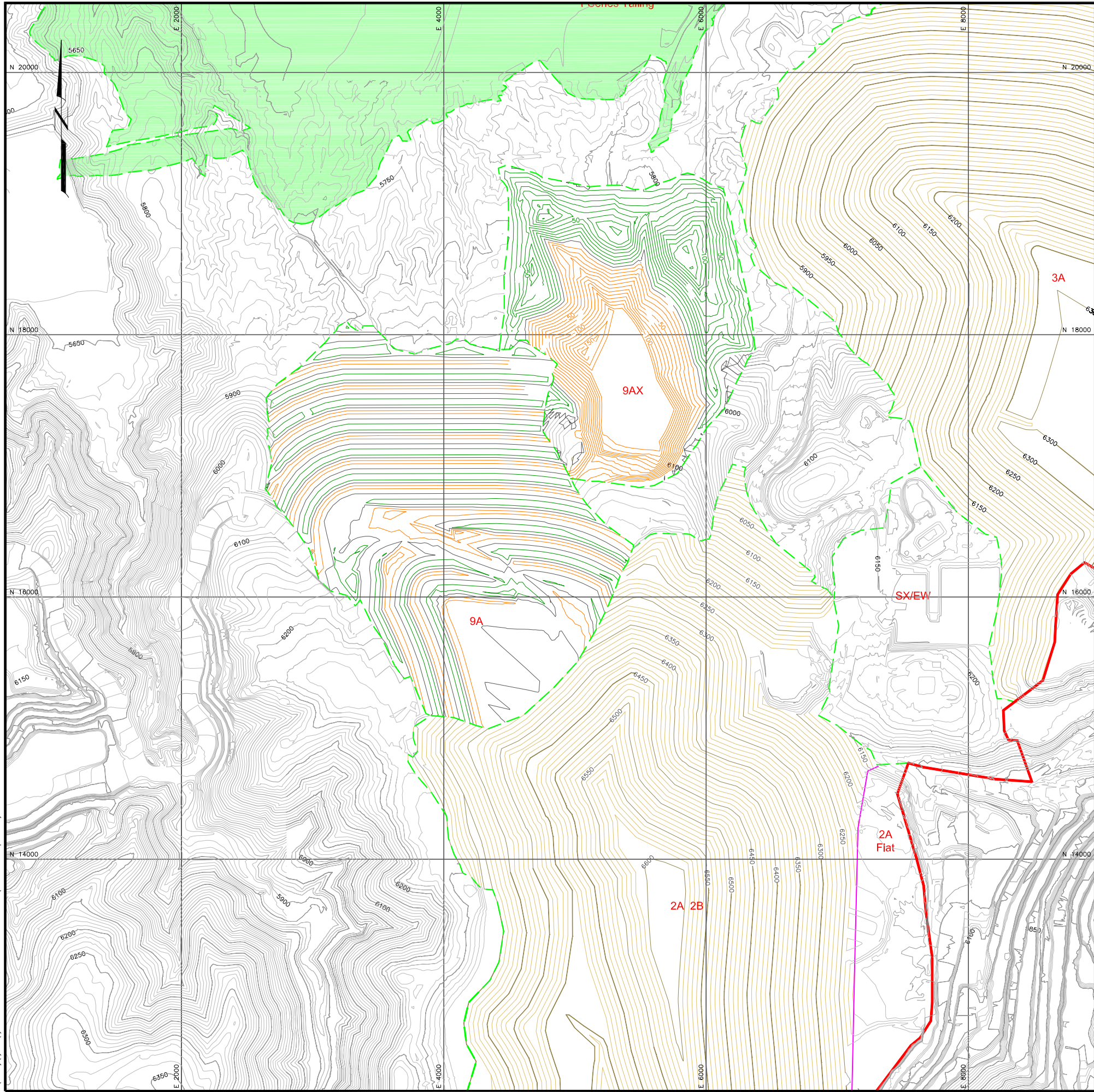
PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **No. 9A OVER BURDEN STOCKPILE
GRADING & DRAINAGE PLAN**

Stantec

Sheet 30 of 34 Sheets
SCALE: 1"=400'
DRAWING No. 30

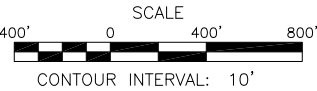
C:\Tommy\Tyron\Tyron Mine Site Closures Closures Plan & 2013\Overall Site Isopach-Layers 042019



KEY MAP

LEGEND

- 6250 EXISTING CONTOURS
- 6250 REGRADED CONTOURS
- 2013 CONDITIONAL WAIVER AREA
- REVISED CONDITIONAL WAIVER AREA (based on 2014 mine configuration)
- RECLAMATION AREA
- CUT ISOPACH
- FILL ISOPACH
- ZERO ELEVATION ISOPACH
- INTERIOR FLAT AREA
- STOCKPILE LIMITS
- RECLAIMED AREAS (2019)



2	REVISED BOND CALCULATION	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



**FREEPORT-McMoRAN
TYRONE, INC.**

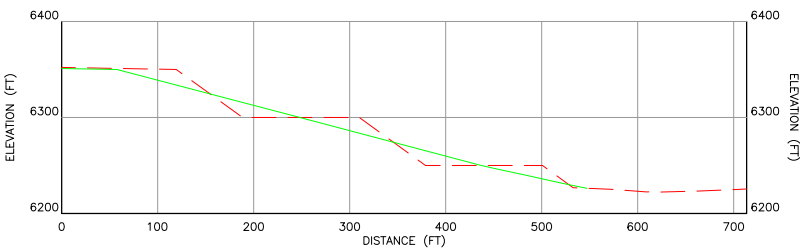
PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **No. 9A OVER BURDEN STOCKPILE
CUT/FILL ISOPACH MAP**



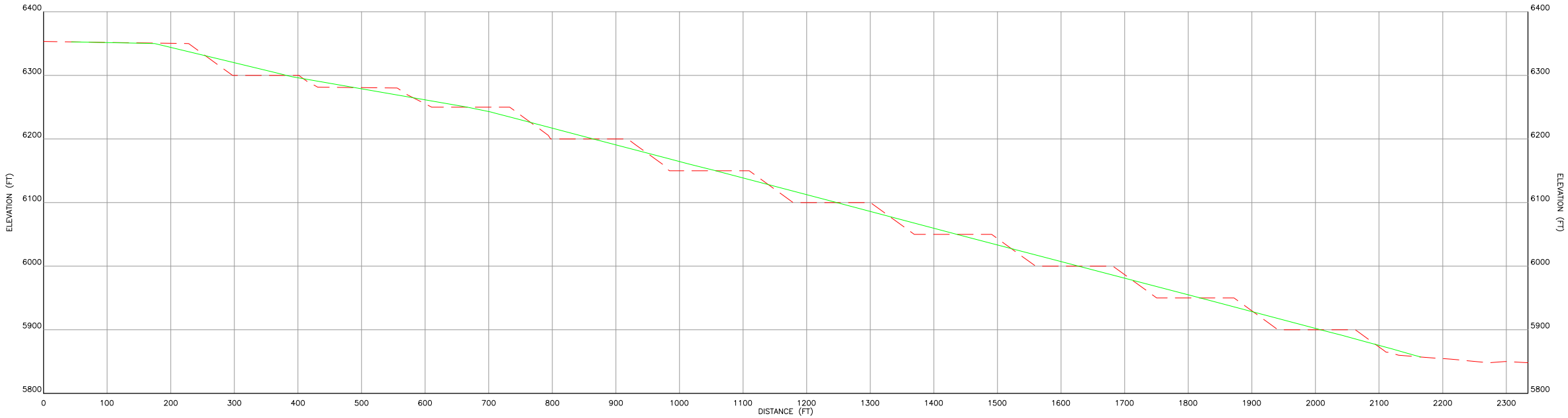
Stantec

Sheet 31 Of 34 Sheets
SCALE: 1"=400' DRAWING No. 31



W
30

AREA 9A - CROSS SECTION W

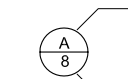


X
30

AREA 9A - CROSS SECTION X

LEGEND

- EXISTING GROUND SURFACE
- REGRADE SURFACE
- DETAIL/SECTION NUMBER
- DRAWING No. WHERE DETAIL/SECTION IS SHOWN



DRAWING No. WHERE
DETAIL/SECTION IS SHOWN



1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T. Leidich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	



**FREEPORT-McMoRAN
TYRONE, INC.**

PROJECT: **TYRONE MINE AREA RECLAMATION**

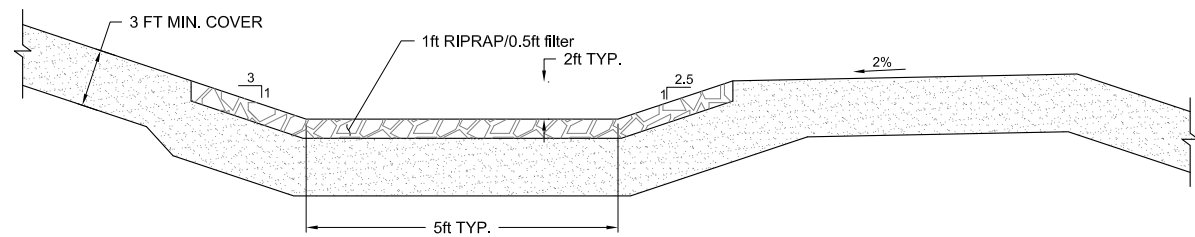
DRAWING TITLE: **No. 9A OVER BURDEN STOCKPILE
- CROSS SECTIONS**



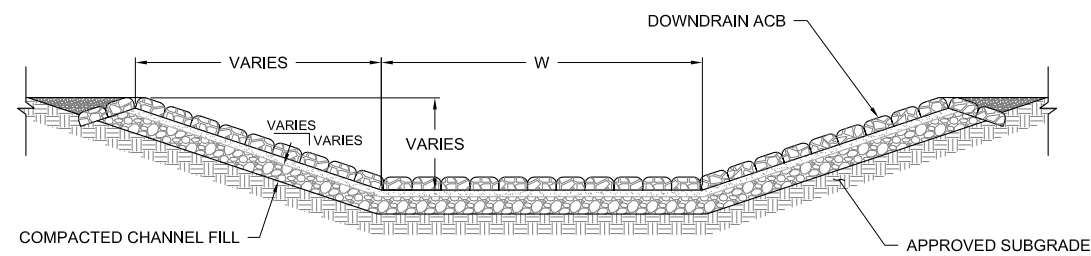
Stantec

Sheet 32 Of 34 Sheets
SCALE: 1"=100'
DRAWING No. 32

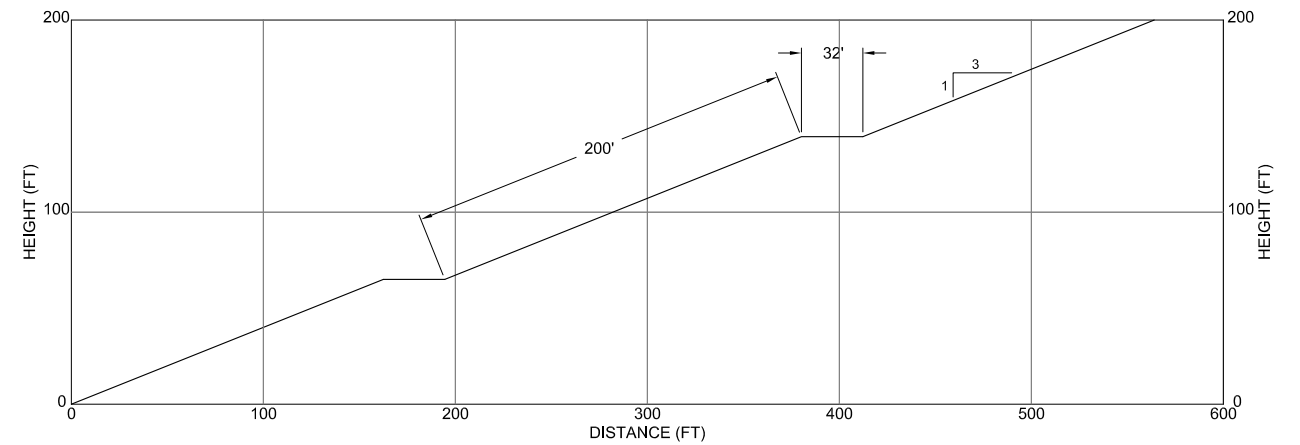
Note: The regrade surface shows the overall slope and does not show the terrace benches that will be constructed on inter-bench outslope angles of 3H:1V at slope lengths no greater than 200'. For the typical final slope configuration refer to Drawing No. 33



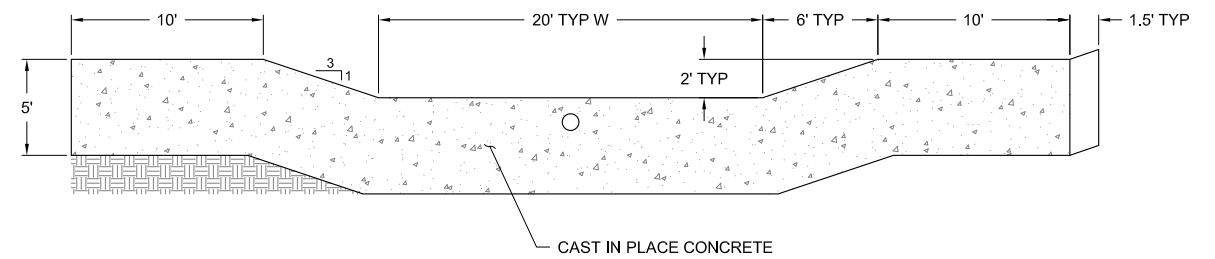
TYPICAL BENCH CHANNEL CROSS SECTION
NOT TO SCALE



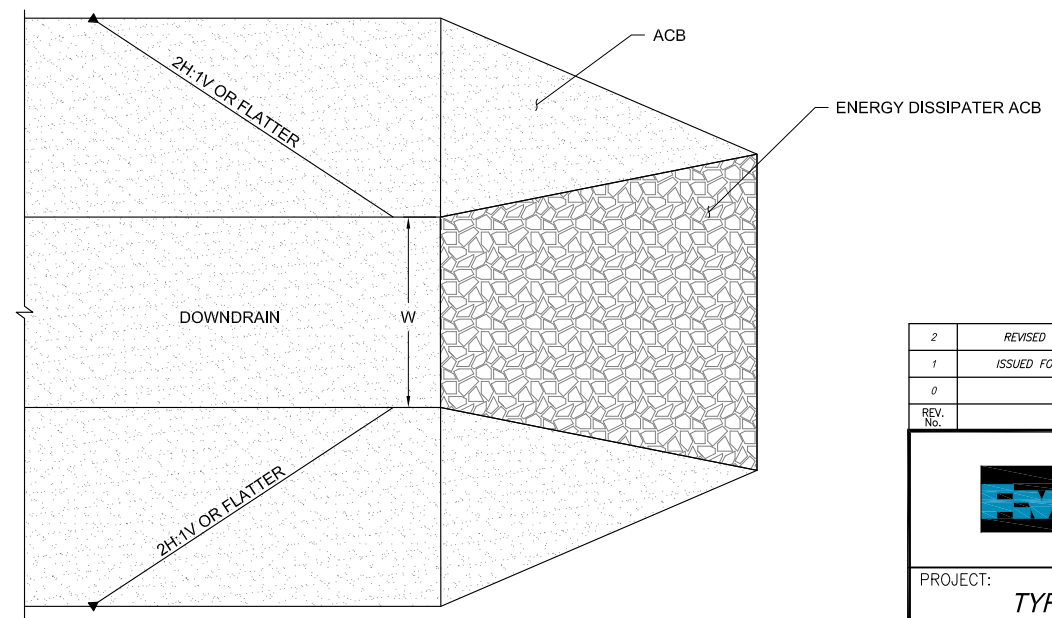
TYPICAL DOWNDRAIN CHANNEL CROSS SECTION
NOT TO SCALE



TYPICAL SLOPE CONFIGURATION



TYPICAL CUTOFF WALL SECTION



TYPICAL TOE ENERGY DISSIPATOR PLAN DETAIL
NOT TO SCALE

2	REVISED BOND CALCULATIONS	5/19	T.Liedich	T.Liedich		
1	ISSUED FOR BOND CALCULATION	06/13	T.Liedich	T.Liedich		
0	DRAFT	09/12	T.Liedich	J.Bever		
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	

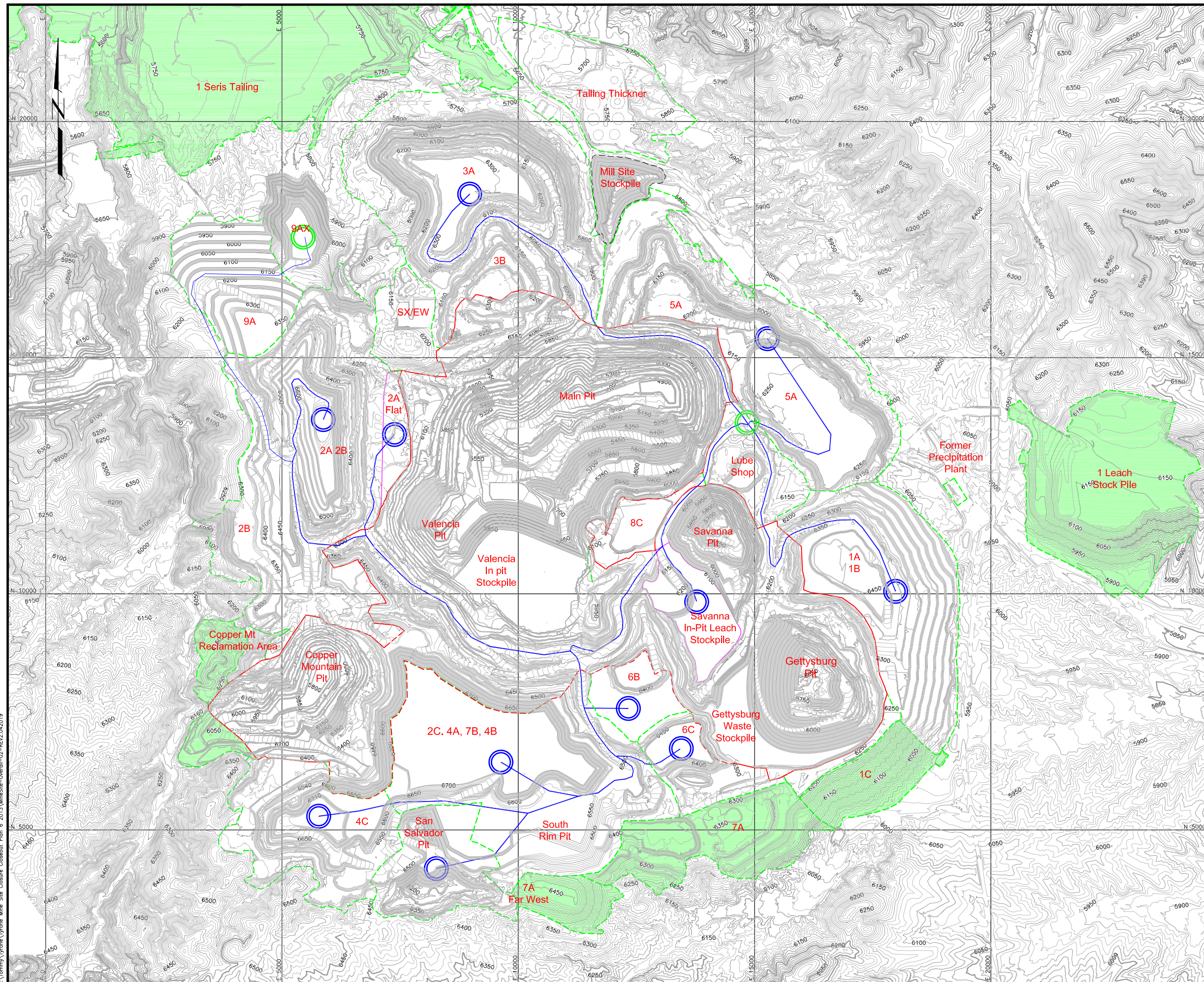
FREEPORT-McMoRAN TYRONE, INC.

PROJECT: **TYRONE MINE AREA RECLAMATION**

DRAWING TITLE: **DRAINAGE DETAILS**

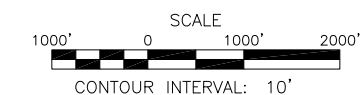
Stantec

Sheet **33** Of **34** Sheets
SCALE: **AS SHOWN**
DRAWING No. **33**



LEGEND

- | | |
|---|---|
|  | EXISTING CONTOURS |
|  | 2013 CONDITIONAL WAIVER AREA |
|  | REVISED CONDITIONAL WAIVER AREA
(based on 2014 mine configuration) |
|  | RECLAMATION AREA |
|  | INTERIOR FLAT AREA |
|  | MINE HAUL ROAD |
|  | CENTROID OF RECLAMATION AREA |
|  | CENTER OF BORROW AREA |
|  | RECLAIMED AREAS (2019) |



2	REVISED BOND CALCULATIONS	5/19	T.Liedich	T.Liedich	
1	ISSUED FOR BOND CALCULATION	08/14	T.Liedich	L.Moore	
0	DRAFT	09/12	T.Liedich	J.Bever	
REV. NO.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT: *TYRONE MINE AREA RECLAMATION*

DRAWING TITLE: *HAUL ROUTE MAP*

