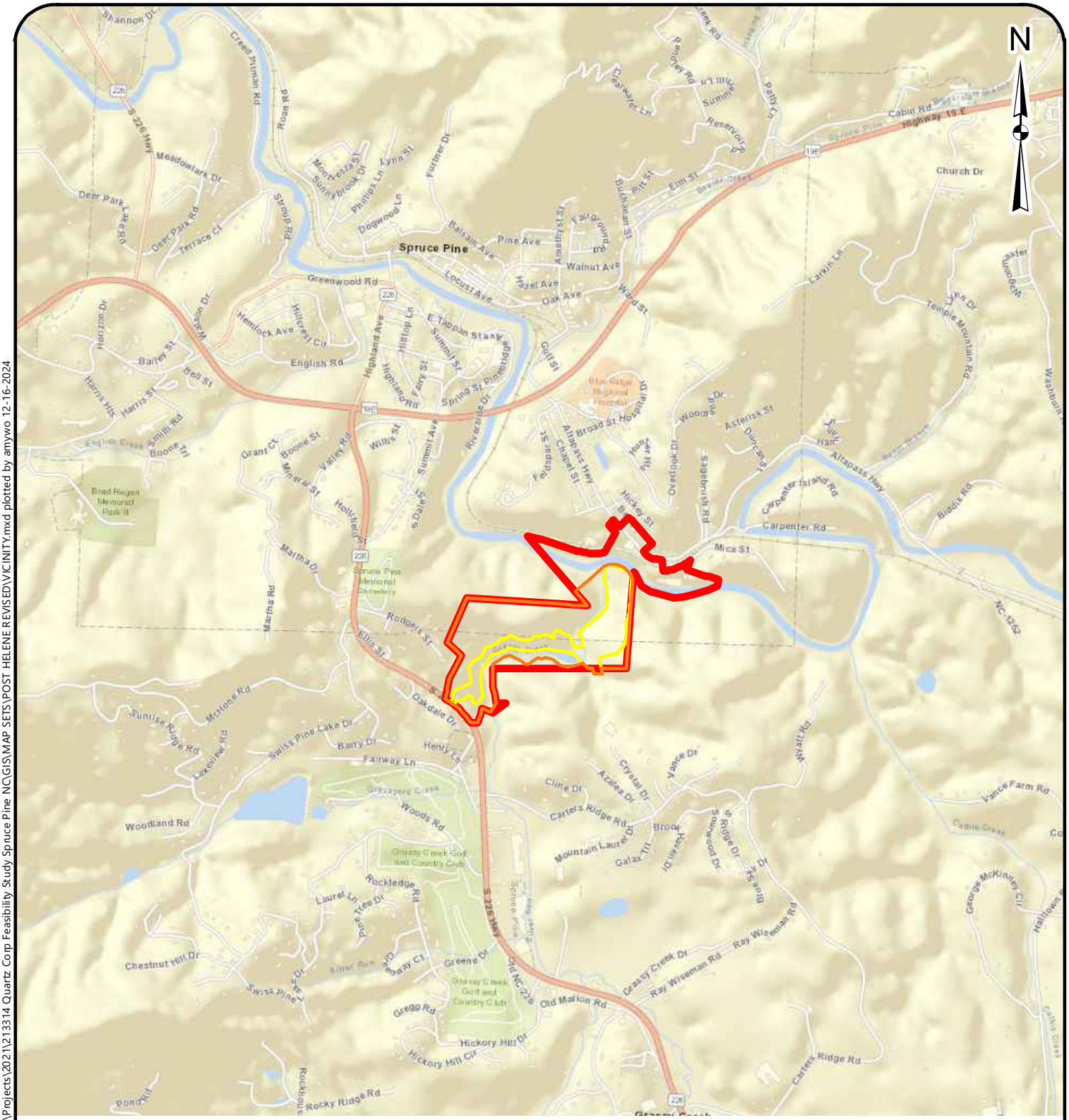


0 2,000 4,000 (FEET)

REFERENCE:
GIS BASE LAYERS WERE OBTAINED FROM ESRI. THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

LEGEND

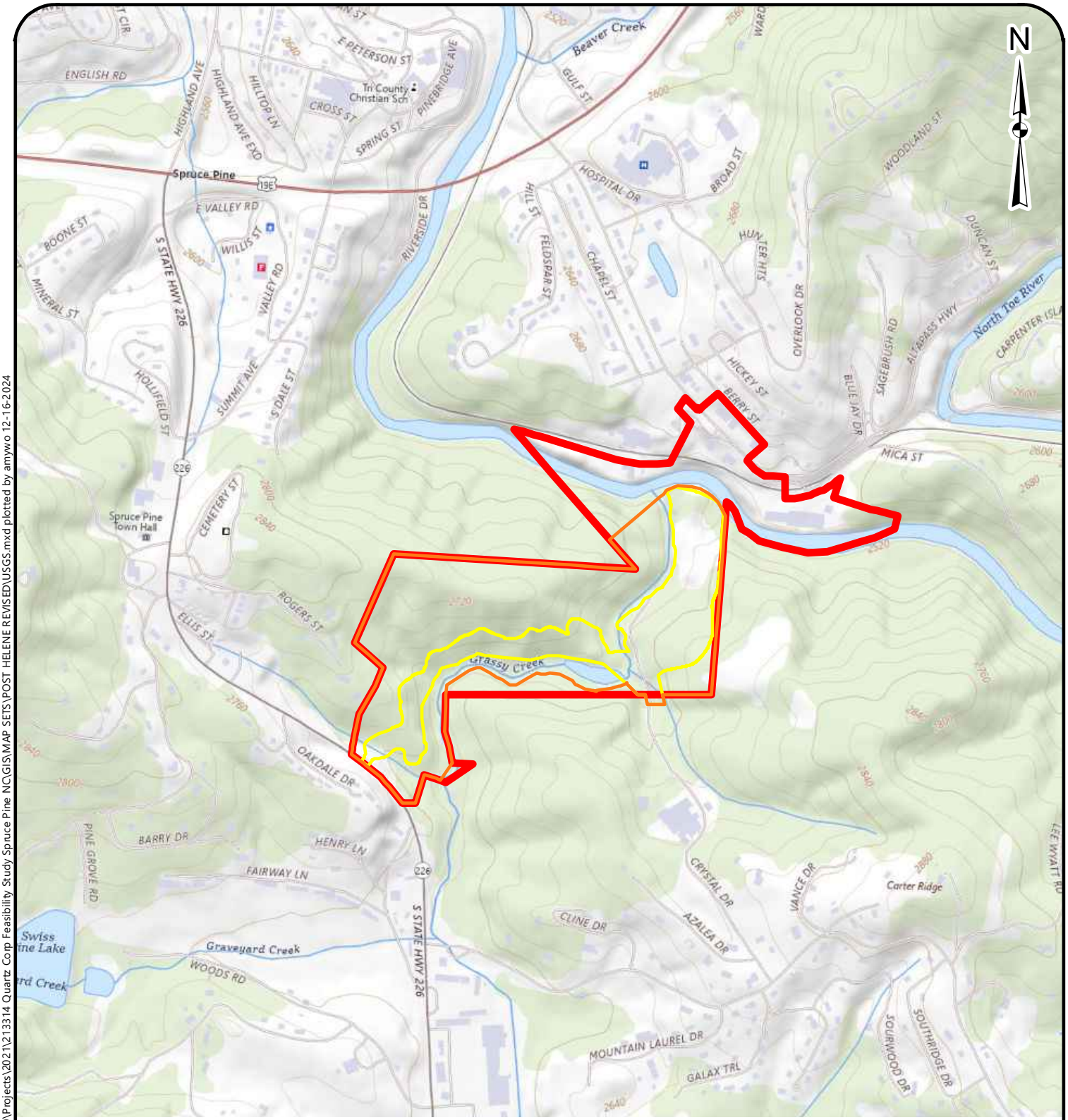
- LIMITS OF DISTURBANCE
- 2024 DELINEATION ASSESSMENT AREA
- PROPERTY BOUNDARY

Drawing Path: T:\Charlotte-1350\Projects\2021\213314 Quartz Corp Feasibility Study Spruce Pine NC\GIS\MAP SETS\POST HELENE REVISED\VICINITY.mxd plotted by amywo 12-16-2024

SITE VICINITY EXHIBIT

NEW FRESHWATER RESERVOIR, DAM, AND ACCESS ROAD
THE QUARTZ CORP USA
SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINAA

SCALE:	FIGURE NO.
1 " = 2,000 '	1
DATE: 12-16-24	
PROJECT NUMBER 213314	



0 1,000 2,000 (FEET)

REFERENCE:
GIS BASE LAYERS WERE OBTAINED FROM ESRI. THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

LEGEND

- LIMITS OF DISTURBANCE
- 2024 DELINEATION ASSESSMENT AREA
- PROPERTY BOUNDARY

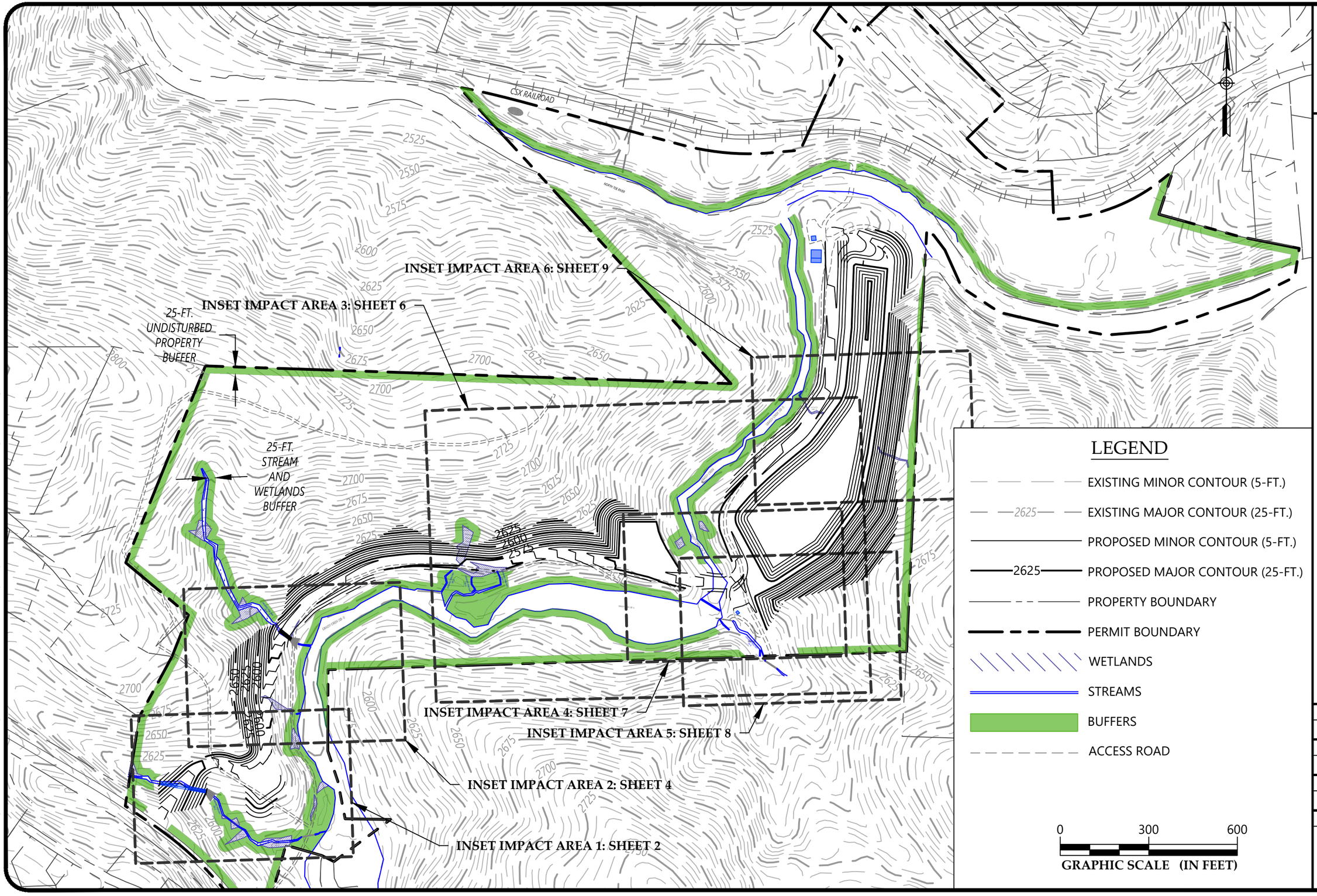
Drawing Path: T:\Charlotte-1350\Projects\2021\213314 Quartz Corp Feasibility Study Spruce Pine NC\GIS\MAP SETS\POST HELENE REVISED\USGS.mxd plotted by amywo 12-16-2024

USGS TOPOGRAPHIC EXHIBIT

NEW FRESHWATER RESERVOIR, DAM, AND ACCESS ROAD
THE QUARTZ CORP USA
SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA

SCALE:	FIGURE NO.
1 " = 1,000 '	2
DATE: 12-16-24	
PROJECT NUMBER 213314	

Appendix IV
Impact Exhibits



OVERALL IMPACT AREAS

STREAM AND WETLAND IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:	1"=300'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	1

Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\213314_IMPACTS.dwg ORG. PAPER SIZE (11X17)

UNNAMED TRIBUTARY SB-2
PERMANENT CULVERT IMPACT:
160 LF
1,275 SQ. FT.
0.029 ACRES

UNNAMED TRIBUTARY SB-2
TEMPORARY IMPACTS:
14 LF
117 SQ. FT.
0.003 ACRES

UNNAMED TRIBUTARY SB-2
PERMANENT RIPRAP IMPACTS:
39 LF
270 SQ. FT.
0.006 ACRES

PROPOSED 72-IN. DIA.
RCP CULVERT
154 LF

CONSTRUCTION
ENTRANCE

GRASSY CREEK (SB-1)

WETLAND (WA-1)

WETLAND (WA-2)

WETLAND (WA-3)

WETLAND (WA-4)

UNNAMED TRIBUTARY (SB-2)

HIGHWAY 226

LOD

24-FT

0+00

1+00

2+00

2+40

2590

2600

2610

2620

2630

2640

2650

2660

N

LEGEND

EXISTING FEATURES

- EXISTING MINOR CONTOUR (2-FT.)
- 2610 EXISTING MAJOR CONTOUR (10-FT.)
- PERMIT BOUNDARY
- WETLANDS
- STREAMS
- BUFFERS

PROPOSED FEATURES

- MINOR CONTOUR (2-FT.)
- 2610 MAJOR CONTOUR (10-FT.)
- REINFORCED SILT FENCE
- COMPOST FILTER SOCK
- COFFER DAM
- RIP-RAP APRON
- SLOPE MATTING
- EDGE OF ROAD
- IMPACT AREA

0 50 100
GRAPHIC SCALE (IN FEET)

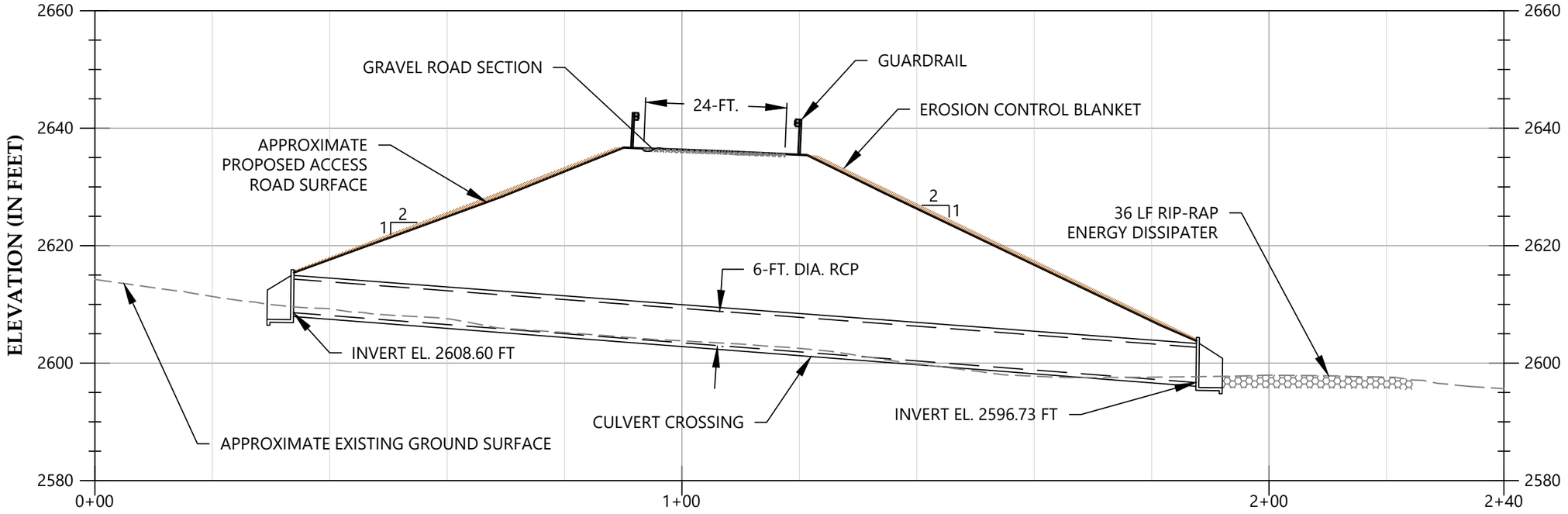
IMPACT AREA 1

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

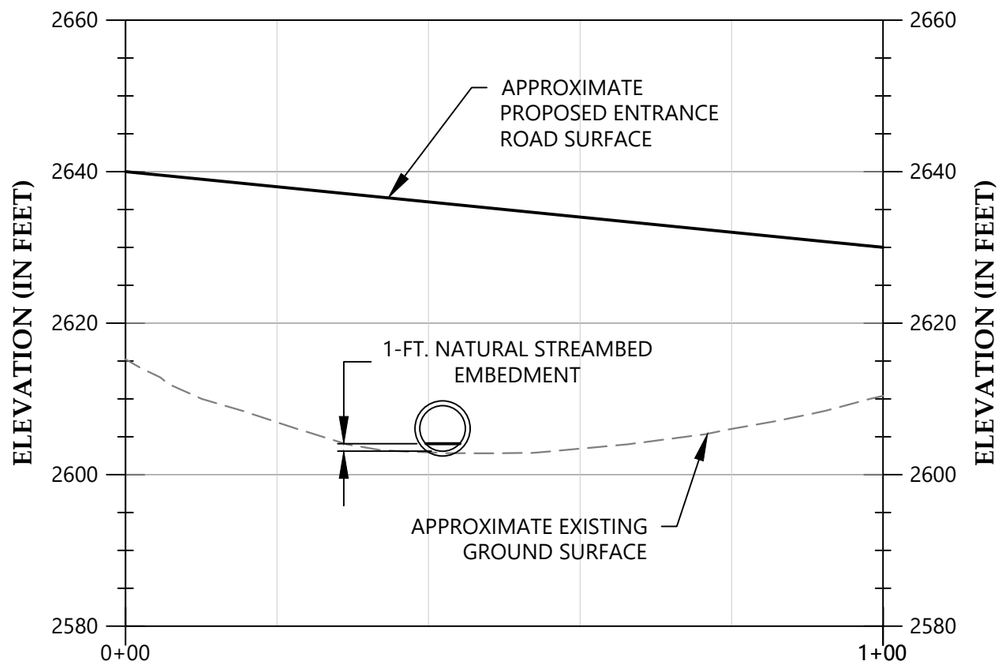
SCALE:	1"=50'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	2

Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\IMPACT 1.dwg ORG. PAPER SIZE (11X17)

CULVERT 1: CROSS SECTION A-A'



CULVERT 1: CROSS SECTION B-B'



0 20 40

GRAPHIC SCALE (IN FEET)

CULVERT 1 CROSS SECTIONS

STREAM AND WETLAND IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:	1" = 20'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	3

Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\213314_CULVERT PROFILE.dwg ORG. PAPER SIZE (11X17)

t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\C

UNNAMED TRIBUTARY SB-4
TEMPORARY IMPACTS:
15 LF
98 SQ. FT.
0.002 ACRES

UNNAMED TRIBUTARY SB-4
PERMANENT CULVERT IMPACTS:
73 LF
452 SQ. FT.
0.010 ACRES

PROPOSED (2) 36-IN. DIA.
RCP CULVERT
50 LF

WETLAND WA-8
PERMANENT IMPACTS:
95 SQ. FT.
0.002 ACRES

PORTION OF UNNAMED TRIBUTARY SB-4
NOT JURISDICTIONAL DUE TO EXISTING
CULVERT, NO IMPACTS

WETLAND WA-9
PERMANENT IMPACTS:
242 SQ. FT.
0.006 ACRES

24-FT

WETLAND (WA-7)
WETLAND (WA-8)
WETLAND (WA-9)
UNNAMED TRIBUTARY (SB-4)
UNNAMED TRIBUTARY (SB-3)
GRASSY CREEK (SB-1)

LOD
0+00
1+00
1+20

LEGEND

EXISTING FEATURES

- EXISTING MINOR CONTOUR (2-FT.)
- 2610 EXISTING MAJOR CONTOUR (10-FT.)
- PERMIT BOUNDARY
- WETLANDS
- STREAMS
- BUFFERS

PROPOSED FEATURES

- MINOR CONTOUR (2-FT.)
- 2610 MAJOR CONTOUR (10-FT.)
- REINFORCED SILT FENCE
- COMPOST FILTER SOCK
- COFFER DAM
- RIP-RAP APRON
- SLOPE MATTING
- EDGE OF ROAD
- IMPACT AREA

0 50 100
GRAPHIC SCALE (IN FEET)

N

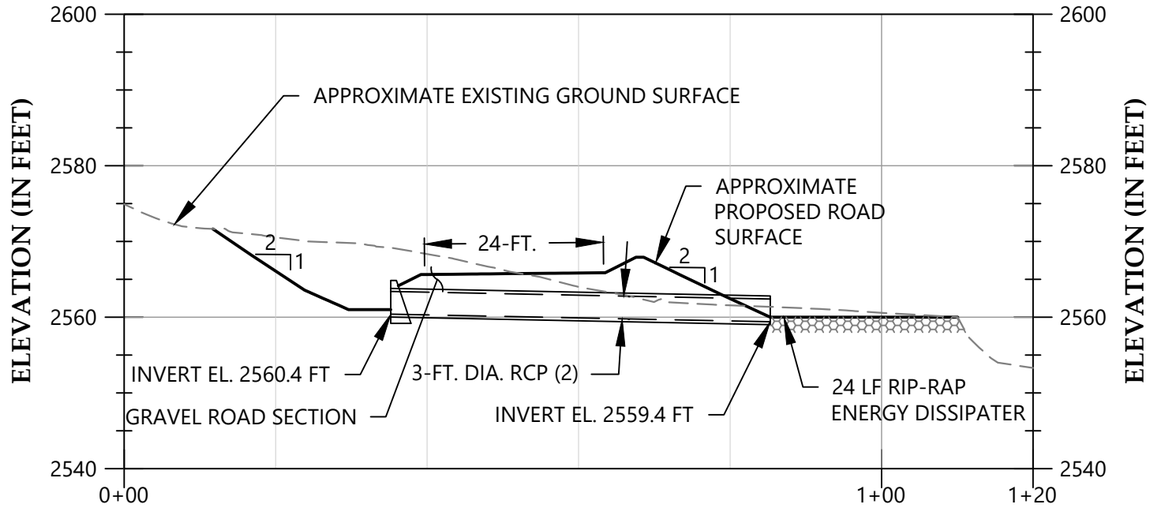
IMPACT AREA 2

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

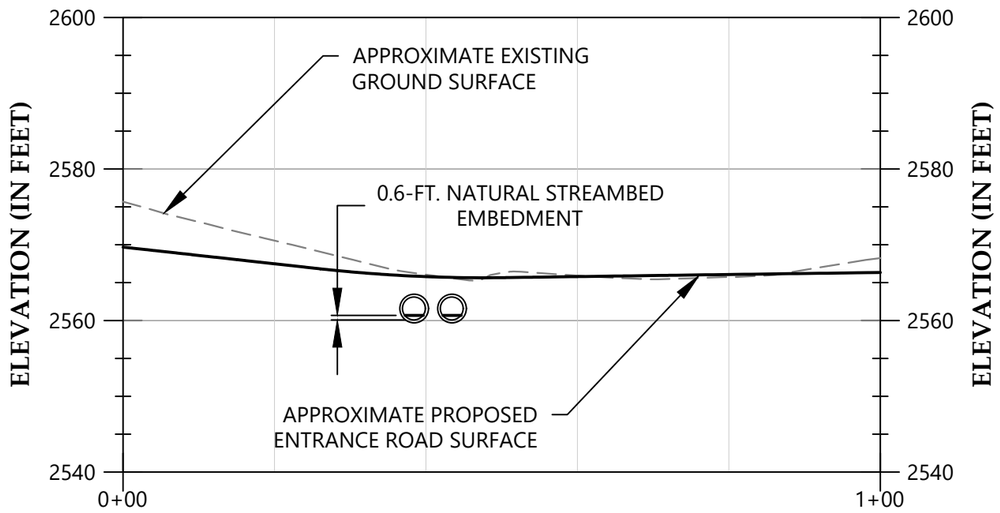
SCALE:	1"=50'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	4

Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\IMPACT 2.dwg ORG. PAPER SIZE (11X17)

CULVERT 2: CROSS SECTION C-C'



CULVERT 2: CROSS SECTION D-D'



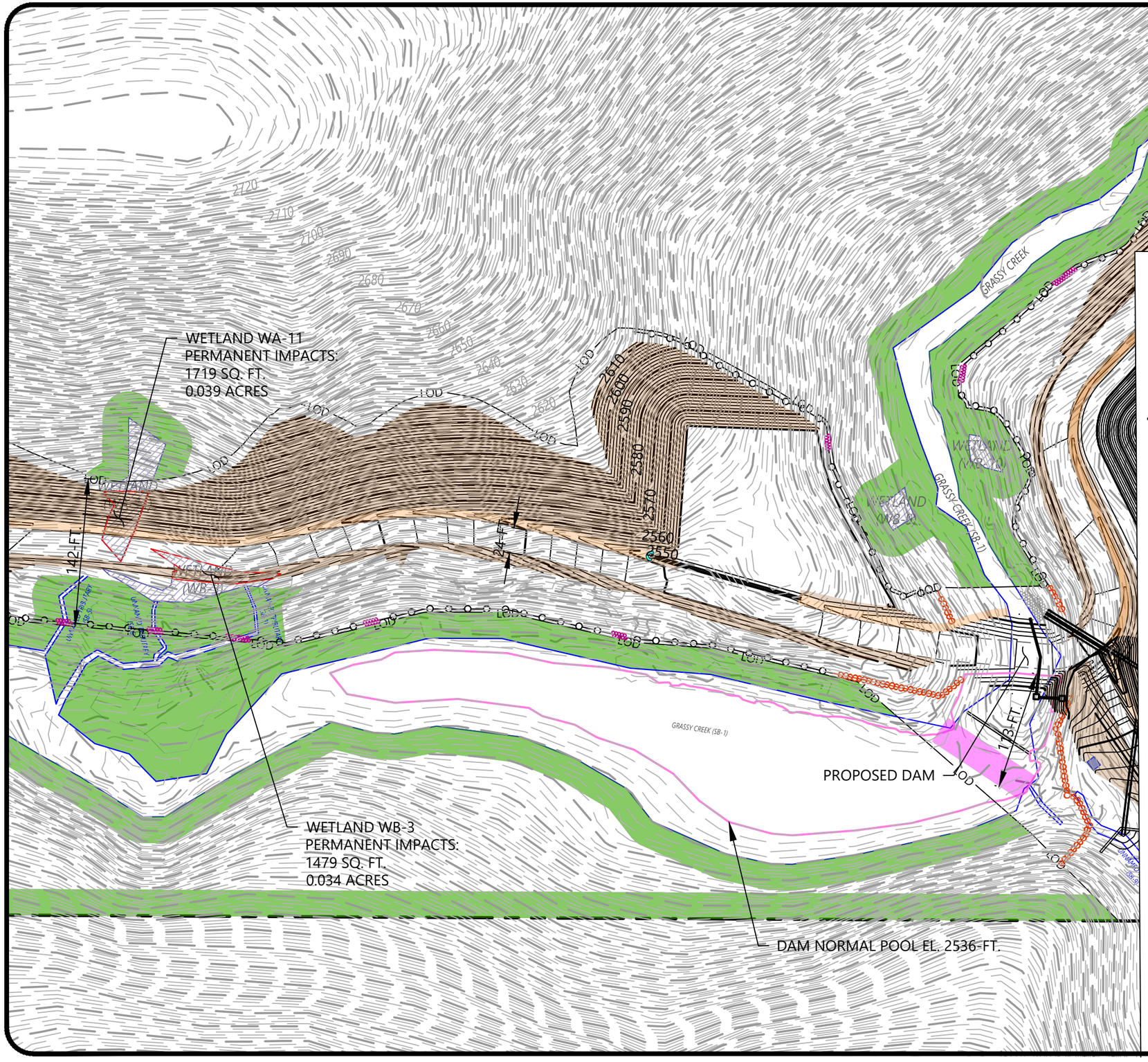
0 20 40

GRAPHIC SCALE (IN FEET)

CULVERT 2 CROSS SECTIONS

STREAM AND WETLAND IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:
1" = 20'
DATE:
12/05/2024
PROJECT NUMBER
213314
FIGURE NO.
5



LEGEND

EXISTING FEATURES

- EXISTING MINOR CONTOUR (2-FT.)
- 2610 EXISTING MAJOR CONTOUR (10-FT.)
- PERMIT BOUNDARY
- WETLANDS
- STREAMS
- BUFFERS

PROPOSED FEATURES

- MINOR CONTOUR (2-FT.)
- 2610 MAJOR CONTOUR (10-FT.)
- REINFORCED SILT FENCE
- COMPOST FILTER SOCK
- COFFER DAM
- RIP-RAP APRON
- SLOPE MATTING
- EDGE OF ROAD
- IMPACT AREA

0 100 200

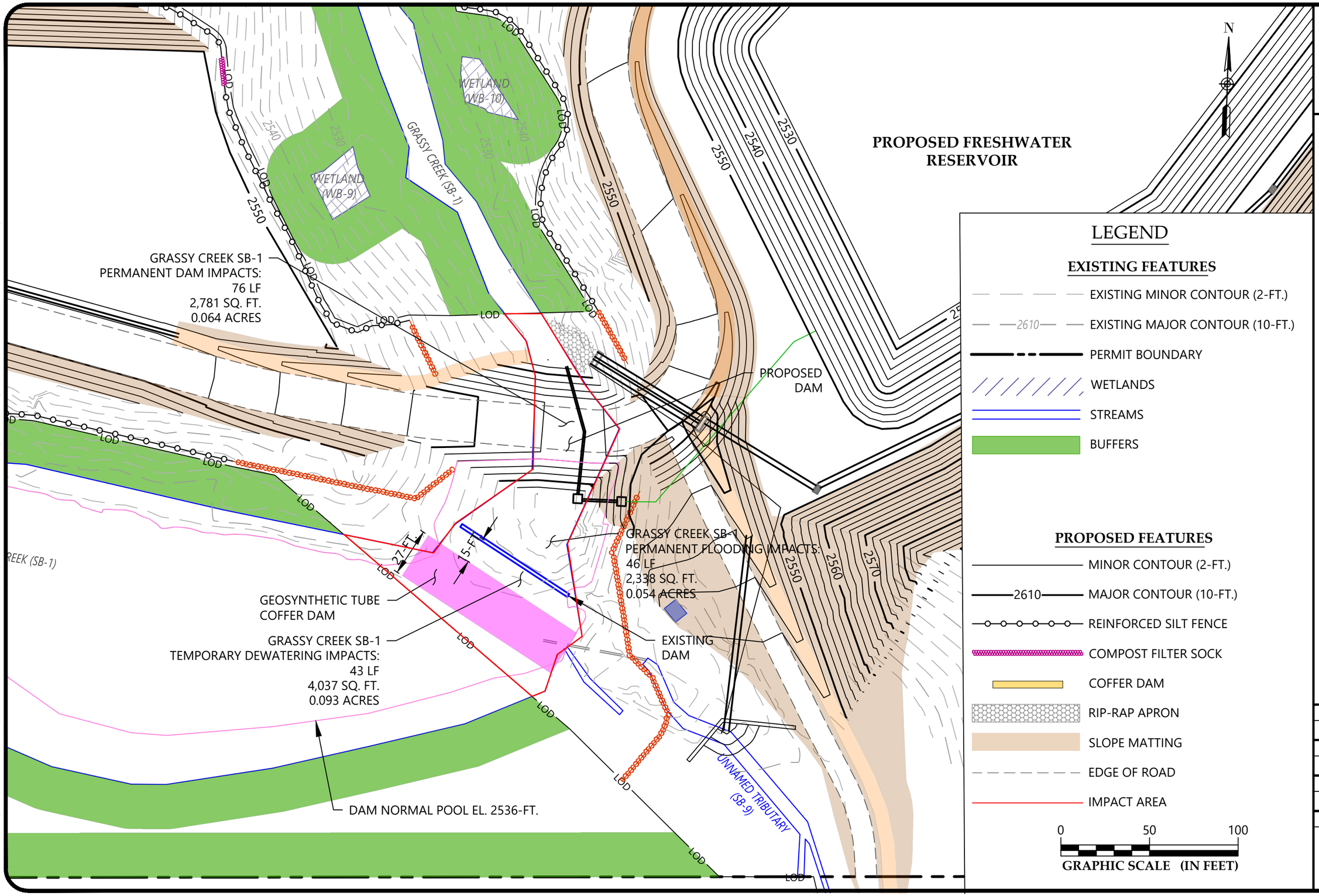
GRAPHIC SCALE (IN FEET)

IMPACT AREA 3

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:	1"=100'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	6

Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\IMPACT 3.dwg ORG. PAPER SIZE (11X17)

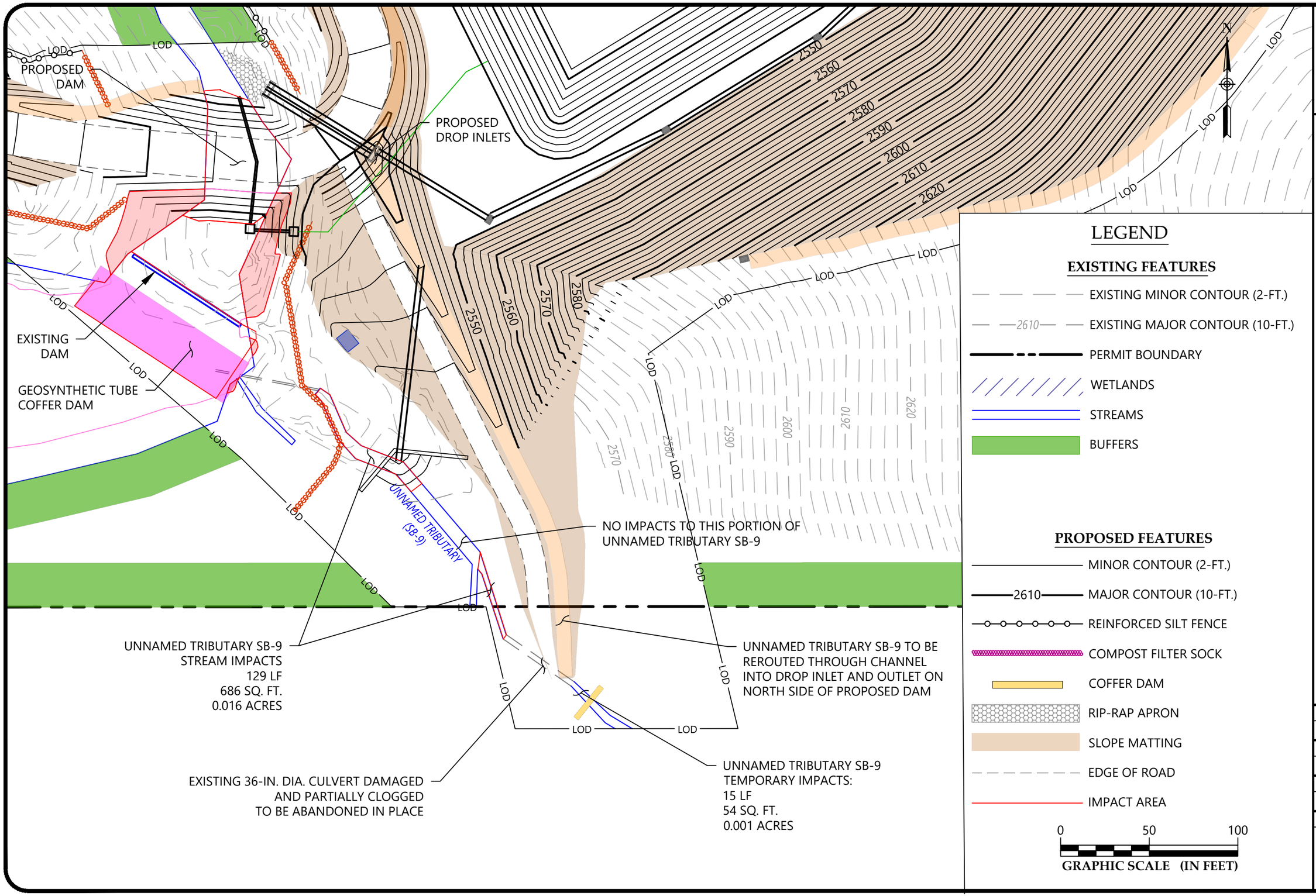


Drawing path: t:\charlotte-1350\Projects\2021\213314 quartz corp feasibility study spruce pine nc\CAD\phase 2 - design & permitting\DWG\~XREF\CALC_BASE\IMPACTS\IMPACT 4.dwg ORG. PAPER SIZE (11X17)

IMPACT AREA 4

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:	1"=50'
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	7



LEGEND

EXISTING FEATURES

- EXISTING MINOR CONTOUR (2-FT.)
- EXISTING MAJOR CONTOUR (10-FT.)
- PERMIT BOUNDARY
- WETLANDS
- STREAMS
- BUFFERS

PROPOSED FEATURES

- MINOR CONTOUR (2-FT.)
- MAJOR CONTOUR (10-FT.)
- REINFORCED SILT FENCE
- COMPOST FILTER SOCK
- COFFER DAM
- RIP-RAP APRON
- SLOPE MATTING
- EDGE OF ROAD
- IMPACT AREA

0 50 100

GRAPHIC SCALE (IN FEET)

IMPACT AREA 5

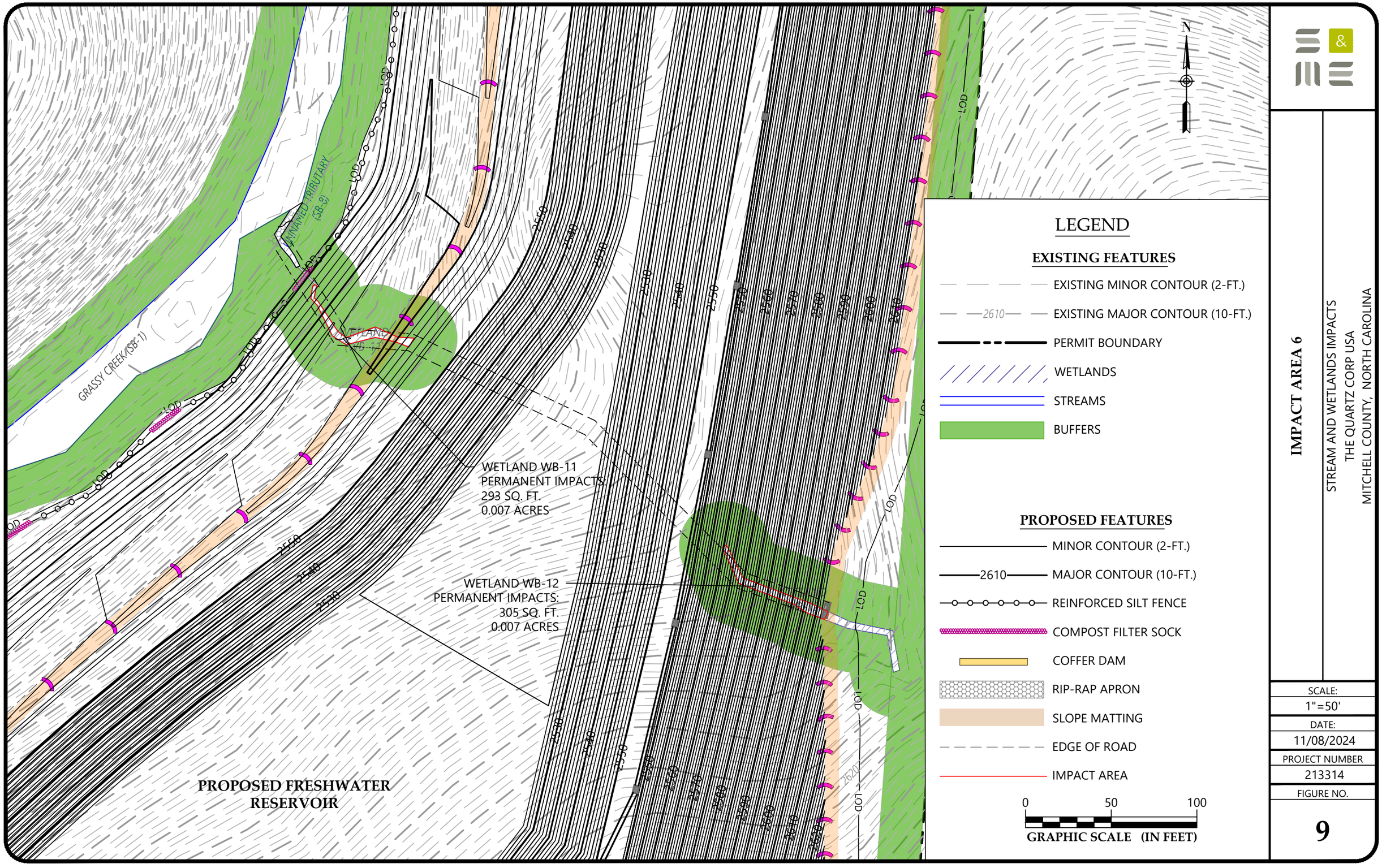
STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE: 1"=50'

DATE: 12/05/2024

PROJECT NUMBER 213314

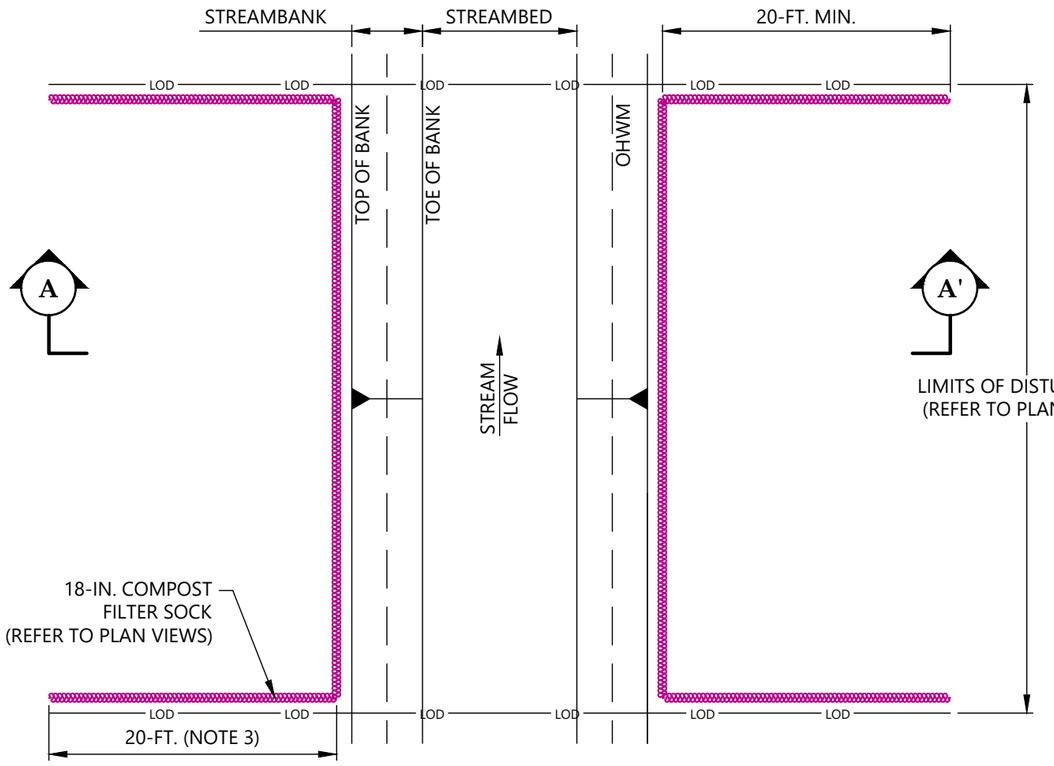
FIGURE NO. 8



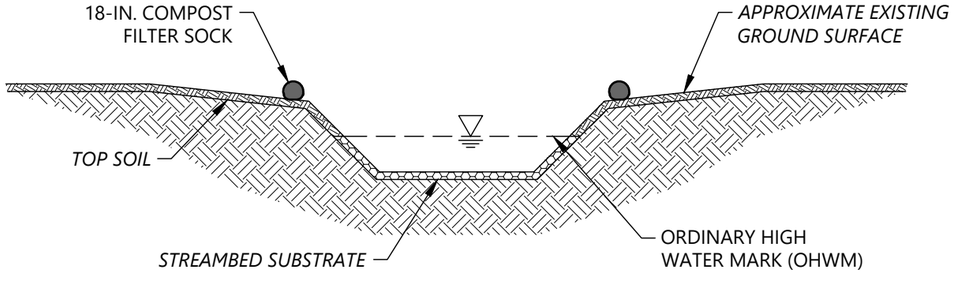
IMPACT AREA 6

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE:	1"=50'
DATE:	11/08/2024
PROJECT NUMBER	213314
FIGURE NO.	9



PLAN VIEW



CROSS-SECTION A-A'

GENERAL NOTES

1. REFER TO AUTHORIZED PERMITS FOR ADDITIONAL LOCAL, STATE, AND FEDERAL BMP REQUIREMENTS.
2. RESTRICT THE REMOVAL OF VEGETATION TO THE LIMITS OF DISTURBANCE. ONLY HAND CLEARING IS ALLOWED ON STREAMBANKS AND WITHIN 10-FT. OF TOP OF BANK, EXCEPT WITHIN THE CULVERT FOOTPRINT OR FOR SAFETY PURPOSE.
3. NO GRUBBING OR BELOW-GROUND VEGETATION REMOVAL SHALL OCCUR WITHIN 50-FT. OF TOP OF BANK. GRUBBING IS ALLOWED FOR CULVERT EXCAVATION AND/OR SAFETY CONSIDERATIONS ARE PERMISSIBLE.
4. INSTALL 18-IN. COMPOST FILTER SOCK A MINIMUM OF 20-FT. ON BOTH SIDES OF THE LIMITS OF DISTURBANCE AND ALONG THE STREAMBANK OR AS SHOWN ON PLAN VIEWS.
5. 18-IN. COMPOST FILTER SOCK SHALL REMAIN IN PLACE UNTIL CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE STREAM CROSSING WILL TAKE PLACE.

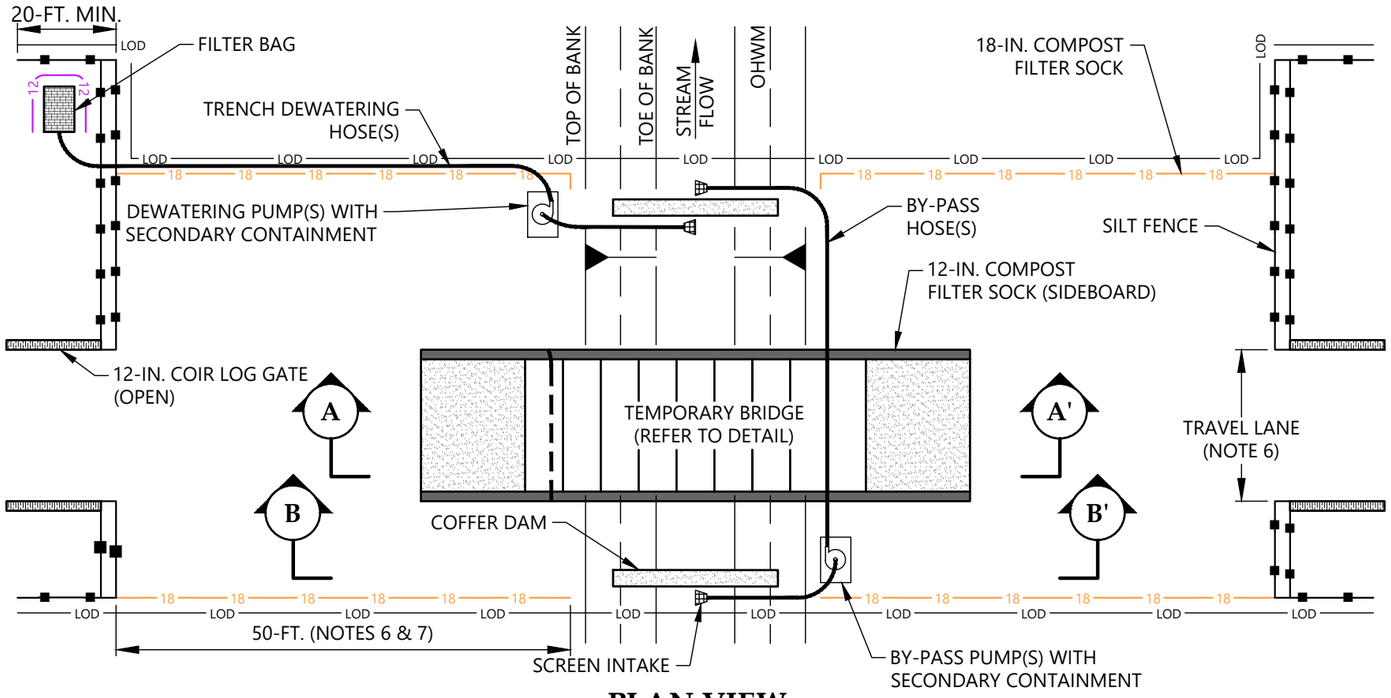
MAINTENANCE NOTES

1. INSPECT AT LEAST ONCE PER SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT GREATER THAN OR EQUAL TO 1.0-IN. IN 24 HOURS.
2. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. DISTURBED AREA WILL BE MAINTAINED IN A CONDITION THAT WILL PREVENT SEDIMENT FROM ENTERING THE WATER.

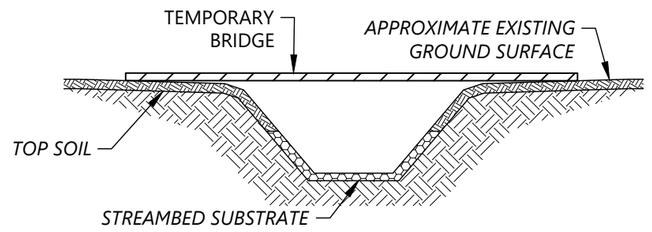
STREAM CROSSING - PRE-CONSTRUCTION

STREAMS AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

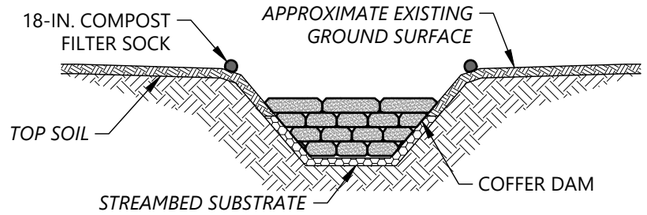
SCALE:	N.T.S
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	10



PLAN VIEW



CROSS-SECTION A-A'



CROSS-SECTION B-B'

GENERAL NOTES

1. REFER TO AUTHORIZED PERMITS FOR ADDITIONAL LOCAL, STATE, AND FEDERAL REQUIREMENTS. MECHANICAL EQUIPMENT SHALL NOT OPERATE WITHIN STREAMS OR TRAVERSE STREAMS.
2. CONSTRUCT TEMPORARY COFFER DAMS WITHIN LIMITS OF DISTURBANCE.
3. CONTRACTOR SHALL DEWATER AREA BETWEEN DAMS AND ENSURE TIGHT SEAL OF DAMS PRIOR TO TRENCHING. CONTRACTOR SHALL BE RESPONSIBLE FOR PASSING WATER WHICH IS TO BE FILTERED THROUGH A FILTER BAG PLACED IN CONJUNCTION WITH APPROPRIATE SWPPP MEASURES. DEWATERING PUMP(S) SHALL BE PLACED WITHIN SECONDARY CONTAINMENT.
4. SCREEN PUMP INTAKE(S) TO MINIMIZE ENTRAINMENT OF AQUATIC LIFE. PLACE PUMP(S) INTAKE IN SUMP HOLE/POOL UPSTREAM OF UPSTREAM COFFER DAM. PLACE BYPASS HOSE(S) OUTSIDE OF STREAMBANKS WITH DISCHARGE DOWNSTREAM OF DOWNSTREAM COFFER DAM BEFORE COMMENCING BYPASS. TAKE MEASURES TO PREVENT STREAMBED SCOUR AT PUMP DISCHARGE THROUGH THE USE OF AN ENERGY DIFFUSER. TAKE REASONABLE MEASURES TO PREVENT INTAKE FROM SUCTIONING THE STREAM SUBSTRATE.
5. THE BYPASS PUMP(S) SHALL BE OF SUFFICIENT SIZE TO CONVEY STREAM BASE FLOW. HAVE STANDBY PUMP(S) AND GENERATOR(S) CAPABLE OF HANDLING 100% OF ANTICIPATED STREAM BASE FLOW ON-SITE IN CASE OF PUMP(S) FAILURE OR A RAIN EVENT. CONTINUOUSLY MONITOR THE DAM AND PUMP(S) TO ENSURE PROPER OPERATION THROUGHOUT THE STREAM CROSSING. PUMP(S) SHALL BE PLACED WITHIN SECONDARY CONTAINMENT TO REDUCE POTENTIAL FOR FUEL SPILLS.
6. RESTRICT THE REMOVAL OF VEGETATION TO THE LIMITS OF DISTURBANCE. ONLY HAND CLEARING IS ALLOWED ON STREAMBANKS AND WITHIN 10-FT. OF TOP OF BANK, EXCEPT FOR SAFETY PURPOSE.
7. NO GRUBBING OR BELOW-GROUND VEGETATION REMOVAL SHALL OCCUR WITHIN 50-FT. OF TOP OF BANK. GRUBBING IS ALLOWED FOR TRAVEL LANE, TEMPORARY BRIDGE INSTALLATION, AND/OR SAFETY CONSIDERATIONS.
8. CONTRACTOR TO CONDUCT WORK "IN THE DRY" DURING LOW FLOW CONDITIONS. LOCAL WEATHER CONDITIONS SHALL BE MONITORED IN ORDER TO AVOID ANTICIPATED RAINFALL EVENTS DURING, OR IMMEDIATELY FOLLOWING, CONSTRUCTION OF THE ACCESS ROAD WITHIN THE STREAM.
9. TEMPORARILY REMOVE E&SC MEASURES TO FACILITATE ACCESS ROAD CONSTRUCTION.
10. CONTRACTOR TO CONDUCT WORK FROM THE STREAMBANKS ONLY, CROSSINGS ARE NOT PERMITTED. BEGIN IN STREAM WORK IN THE MORNING, CULVERT CONSTRUCTION AND STREAMBANK RESTORATION SHALL OCCUR WITHIN A 24-HOUR PERIOD TO THE FULLEST EXTENT PRACTICAL. IN NO INSTANCE SHOULD ACCESS ROAD CONSTRUCTION AND RESTORATION EXCEED 48 HOURS WITHOUT APPROVAL OF THE OWNER'S DESIGNATED REPRESENTATIVE.
11. CONTRACTOR SHALL ATTEMPT TO SEGREGATE STREAMBED SUBSTRATE FROM SUBGRADE.
12. NO WASTES, SPOILS, SOLIDS OR FILLS WILL BE PLACED WITHIN STREAMS, WETLANDS OR RIPARIAN AREAS BEYOND THE LIMITS OF DISTURBANCE. DO NOT PLACE TRENCH SPOILS ON BRIDGE DECK.
13. BACKFILL SUBGRADE AFTER ACCESS ROAD CONSTRUCTION WITHIN THE STREAM IS COMPLETE. THEN RESTORE STREAMBED SUBSTRATE AND STREAMBANKS TO ORIGINAL CONTOURS TO FULLEST EXTENT PRACTICAL.
14. REINSTALL E&SC MEASURES PREVIOUSLY REMOVED FOR ACCESS ROAD CONSTRUCTION WITHIN THE STREAM. ADDITIONAL SITE-SPECIFIC SWPPP MEASURES MAY BE NECESSARY IN ORDER TO PROTECT AFFECTED STREAMS AND PREVENT VIOLATIONS OF WATER QUALITY STANDARDS.
15. REINSTALL 12-IN. COIR LOGS ACROSS TRAVEL LANE ON BOTH SIDES OF BRIDGE AT THE END OF EACH WORKDAY.
16. OWNER'S DESIGNATED REPRESENTATIVE TO ASSIST IN DETERMINATION OF WHETHER BYPASS PUMP OR BYPASS PIPE STREAM CROSSING METHOD IS TO BE USED.

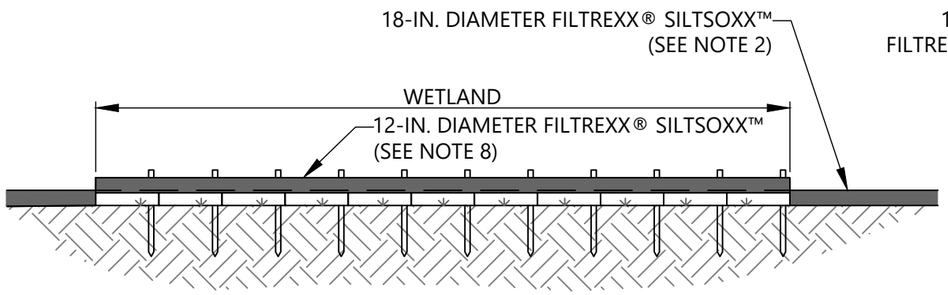
MAINTENANCE NOTES

1. AFTER CONSTRUCTION ACTIVITIES BEGIN ALL SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 1.0 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. INSPECTIONS MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
2. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. DISTURBED AREA WILL BE MAINTAINED IN A CONDITION THAT WILL PREVENT SEDIMENT FROM ENTERING THE WATER.

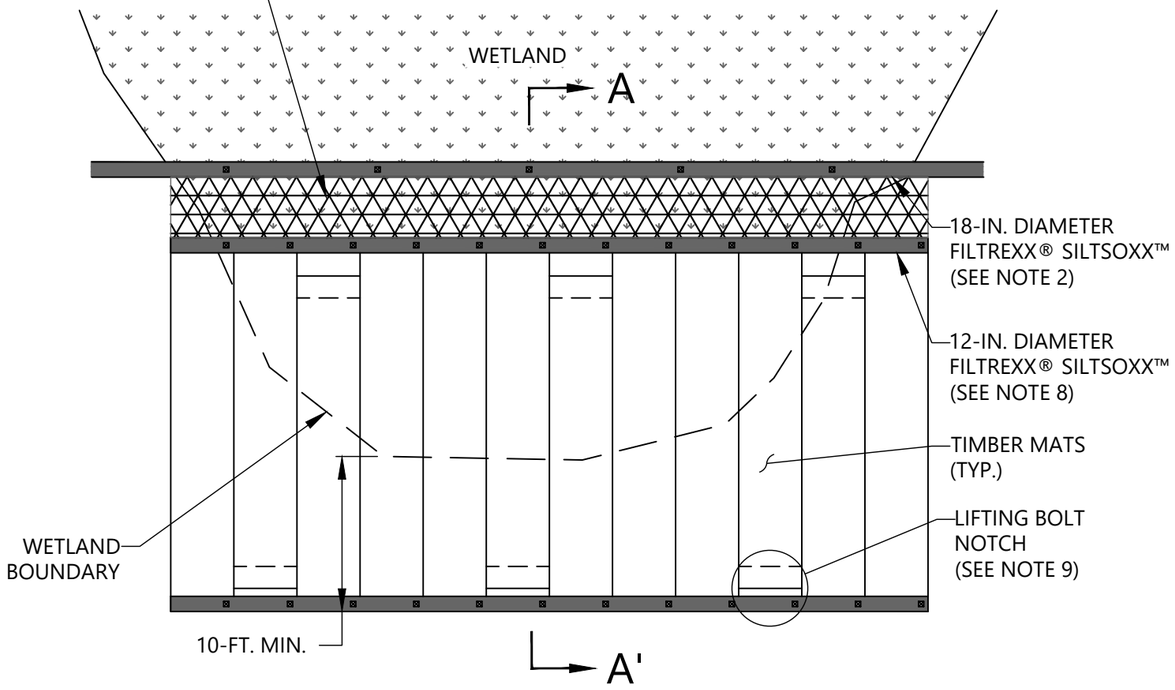
STREAM CROSSING - BY-PASS PUMP

STREAMS AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

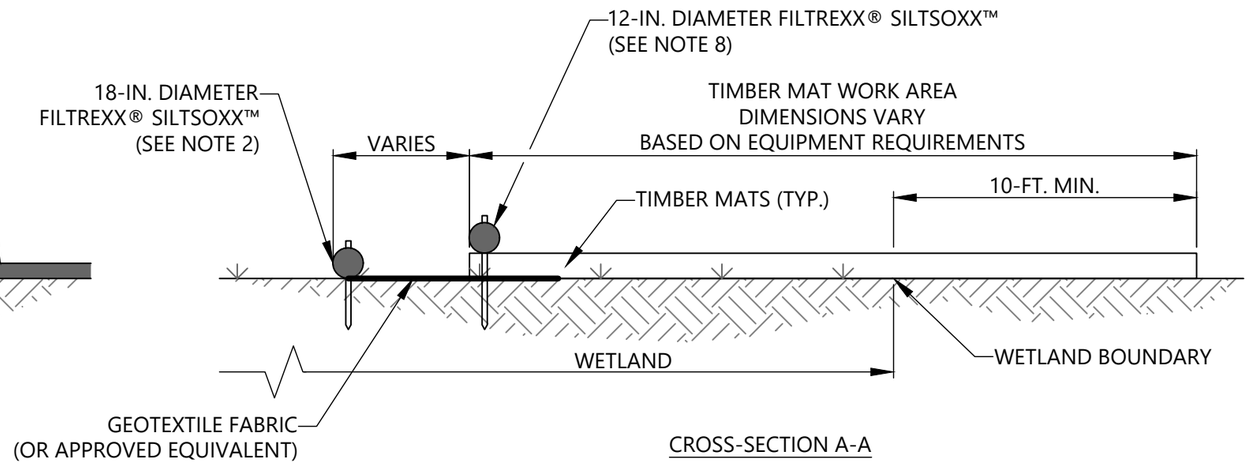
SCALE:	N.T.S
DATE:	12/05/2024
PROJECT NUMBER	213314
FIGURE NO.	11



TIMBER MAT SECTION VIEW



PLAN VIEW



CROSS-SECTION A-A

TIMBER MAT NOTES

1. TIMBER EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF WETLAND BOUNDARIES WHERE POSSIBLE, BUT SHOULD NOT EXTEND OUTSIDE OF THE LIMITS OF DISTURBANCE.
2. FILTREXX® SILTSOXX™ SHALL BE INSTALLED 4-FT. FROM THE EDGE OF THE TIMBER MATS AND ADJACENT TO THE UNDISTURBED WETLANDS.
3. INSTALL TIMBER MATS IN WORK AREA AS NEEDED. POSITION A SERIES OF TIMBER MATS AS NEEDED TO CREATE A SAFE, FLAT WORK AREA. MATS SHALL BE POSITIONED TO BUTT UP AGAINST EACH OTHER.
4. TIMBER MATS SECTIONS ARE TYPICALLY ATTACHED.
5. USE ADDITIONAL TIMBER MAT LAYERS TO RAISE WORK AREA ABOVE GRADE WHERE POOR SOIL CONDITIONS EXIST. ATTEMPT TO USE NO MORE THAN TWO (2) LAYERS IN WETLANDS.
6. EROSION CONTROL DEVICES SHALL BE INSTALLED ADJACENT TO TIMBER MATS AS SHOWN ON PLAN DRAWINGS.
7. DURING TIMBER MAT INSTALLATION CONTRACTOR SHALL PREVENT THE INTRODUCTION OF UPLAND SOILS OR OTHER MATERIALS INTO WETLANDS.
8. A 12-IN. DIAMETER FILTREXX® SILTSOXX™ SHALL BE INSTALLED ALONG THE PERIMETER OF THE TIMBER MAT WORK AREA. OAK OR OTHER DURABLE HARDWOOD STAKES 2-IN. X 2-IN. IN CROSS SECTION SHOULD BE DRIVEN VERTICALLY PLUMB, THROUGH THE CENTER OF THE COMPOST SOCK AT EACH OF THE TIMBER MAT LIFTING BOLT NOTCH LOCATIONS. STAKES SHOULD BE DRIVEN TO A MINIMUM DEPTH OF 12 INCHES, WITH A MINIMUM OF 3 INCHES PROTRUDING ABOVE THE FILTREXX® SILTSOXX™.
9. TIGHTLY PACKED SILT FENCE SHALL BE PLACED INTO EXPOSED LIFTING BOLT NOTCH LOCATIONS UNTIL FLUSH WITH TIMBER MAT. COVER REMAINDER OF EXPOSED LIFTING BOLT NOTCH LOCATIONS WITH GEOTEXTILE FABRIC OR APPROVED EQUIVALENT.
10. CLEARING IN WETLANDS MUST BE CONDUCTED WITH AS MINIMAL DISTURBANCE AS PRACTICAL. WHEN USING MECHANIZED EQUIPMENT; TIMBER MATS, COMPOSITE MATS, LOW-GROUND PRESSURE EQUIPMENT, OR OTHER MEASURES MUST BE UTILIZED TO PREVENT THE MIXING OF TOPSOIL AND SUBSOIL.
11. GRUBBING OR BELOW GROUND VEGETATION REMOVAL SHALL BE LIMITED TO THAT NECESSARY FOR INSTALLATION OF TIMBER MATS FOR WORK AREA AND SAFETY.

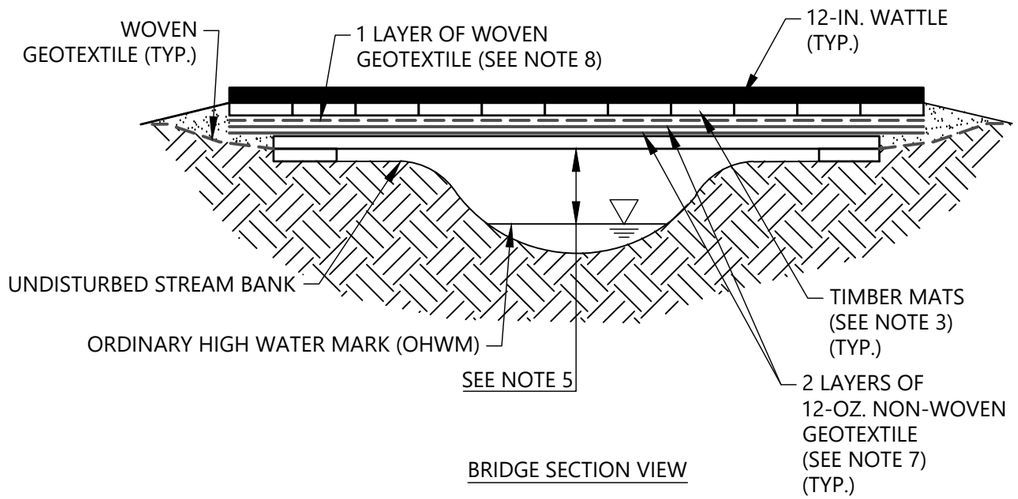
TIMBER MAT MAINTENANCE

1. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1-INCH OR MORE OF PRECIPITATION IN 24 HOURS.
2. TIMBER MATS AND ALL OTHER MATERIALS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.

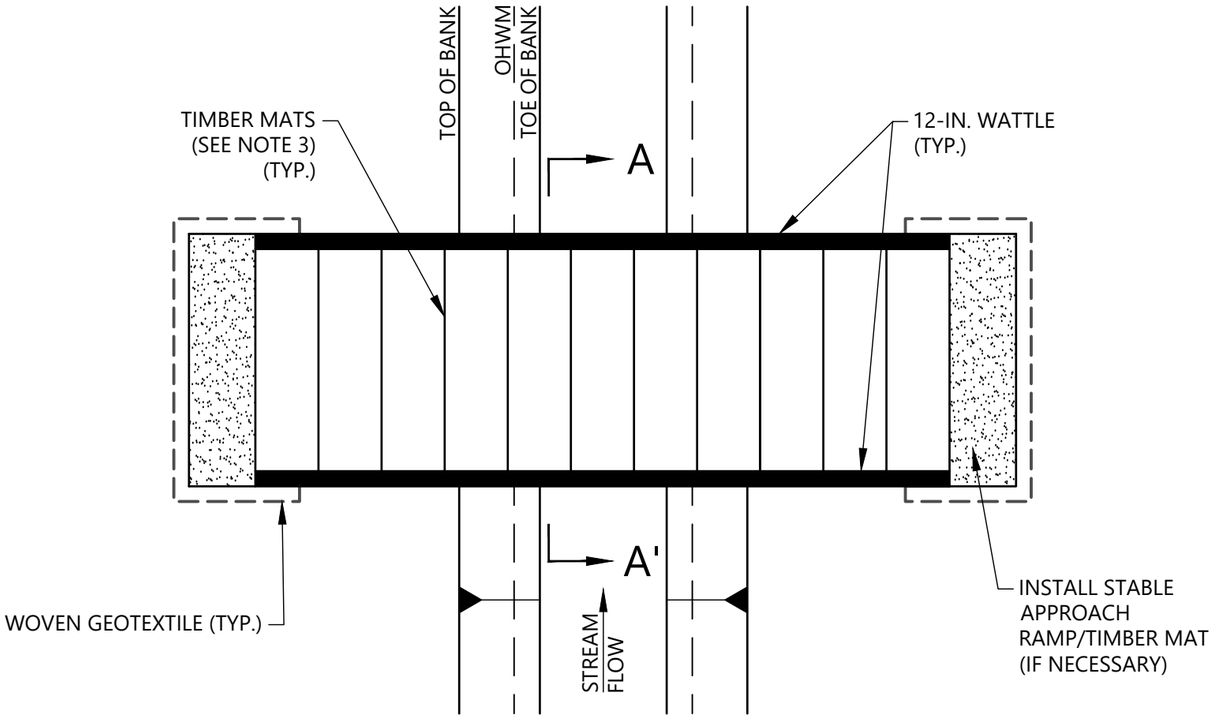
TIMBER MAT

STREAM AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

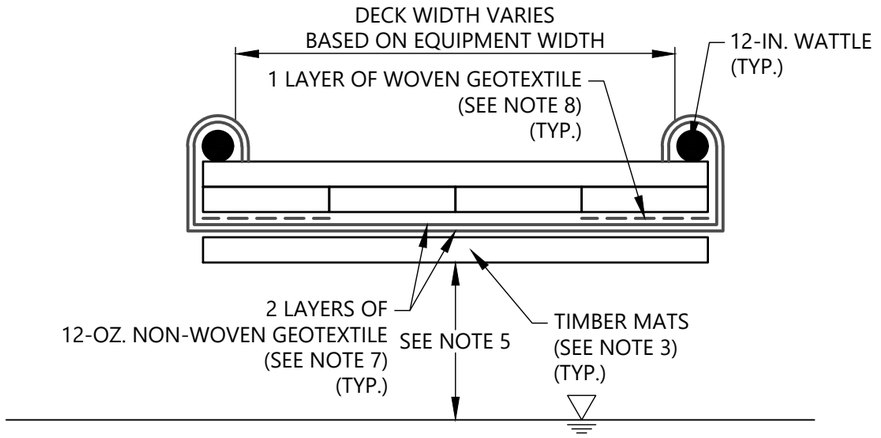
SCALE: N.T.S
DATE: 12/05/2024
PROJECT NUMBER: 213314
FIGURE NO.: 12



BRIDGE SECTION VIEW



PLAN VIEW



CROSS-SECTION A-A

TEMPORARY BRIDGE NOTES

1. A PRE-FABRICATED BRIDGE OR FLATBED RAILCAR MAY BE SUBSTITUTED FOR THE TEMPORARY CONSTRUCTION BRIDGE.
2. INSTALL THE BRIDGE IN A MANNER THAT WILL MINIMIZE SEDIMENT FROM ENTERING THE WATER.
3. BRIDGE MUST BE DESIGNED BY CONTRACTOR'S ENGINEER TO SUPPORT EXPECTED LOADS. RUNNERS ARE TO BE INSTALLED AT OUTER EDGE OF BRIDGE DECKING HOOK HOLES.
4. SECURELY ANCHOR BRIDGE AT ONE (1) END USING STEEL CABLE OR CHAIN.
5. ABUTMENTS SHOULD BE PLACED PARALLEL TO, AND ON, STABLE BANKS SUCH THAT THE STRUCTURE IS AT OR ABOVE BANKFULL DEPTH TO PREVENT ENTRAPMENT OF FLOATING MATERIALS AND DEBRIS.
6. PLACE SAND BAGS AND COVER HOOK HOLES AS NECESSARY TO PREVENT ACCUMULATION OF SEDIMENT ON NON-WOVEN GEOTEXTILE. PROVIDE SUPPORT FOR SAND BAGS IF NECESSARY.
7. INSTALL TWO (2) LAYERS OF 12-OZ. NON-WOVEN GEOTEXTILE.
8. USE ONE (1) SACRIFICIAL LAYER OF WOVEN GEOTEXTILE ON THE BRIDGE "RUNNERS" TO PROTECT THE NON-WOVEN GEOTEXTILE DURING THE TEMPORARY BRIDGE INSTALLATION.
9. NON-WOVEN AND WOVEN GEOTEXTILE WILL BE INSTALLED ON ALL TIMBER MATS ASSOCIATED WITH THE TEMPORARY BRIDGE INCLUDING APPROACH TIMBER MATS WITHIN THE 50-FT. E&SC BUFFER ZONE.
10. THE CONTRACTOR SHALL CLEAR SEDIMENT DEPOSITED ON BRIDGES PRIOR TO REMOVING.
11. REMOVE TEMPORARY EQUIPMENT BRIDGES IN AREAS WHERE TRAVEL LANE IS NO LONGER REQUIRED.
12. TEMPORARY EQUIPMENT BRIDGES ARE TO BE REMOVED IN REVERSE ORDER OF INSTALLATION.
13. TEMPORARY EQUIPMENT BRIDGES SHALL BE REMOVED SLOWLY AND CAREFULLY TO MINIMIZE SEDIMENT FALLING FROM THE BRIDGE DURING REMOVAL OPERATIONS.
14. APPLY SOIL AMENDMENTS, NATIVE RIPARIAN SEED, AND COIR MATTING TO FORMER TEMPORARY EQUIPMENT BRIDGE LOCATIONS WITHIN RIPARIAN SEEDING AREAS IN ACCORDANCE WITH THE NATIVE RIPARIAN AREA SEEDING SPECIFICATIONS.

TEMPORARY BRIDGE MAINTENANCE

1. INSPECT TEMPORARY BRIDGE AT LEAST ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT GREATER THAN OR EQUAL TO 1.0-IN. IN 24 HOURS. INSPECT MORE FREQUENTLY DURING PERIODS OF HEAVY USE.
2. TEMPORARY CONSTRUCTION BRIDGE WILL BE MAINTAINED IN A CONDITION THAT WILL PREVENT SEDIMENT FROM ENTERING THE WATER.
3. CLEAR EXCESSIVE SEDIMENT DEPOSITED ON BRIDGE AS NECESSARY.

TEMPORARY BRIDGE

STREAMS AND WETLANDS IMPACTS
THE QUARTZ CORP USA
MITCHELL COUNTY, NORTH CAROLINA

SCALE: N.T.S
DATE: 12/05/2024
PROJECT NUMBER: 213314
FIGURE NO.: 13