
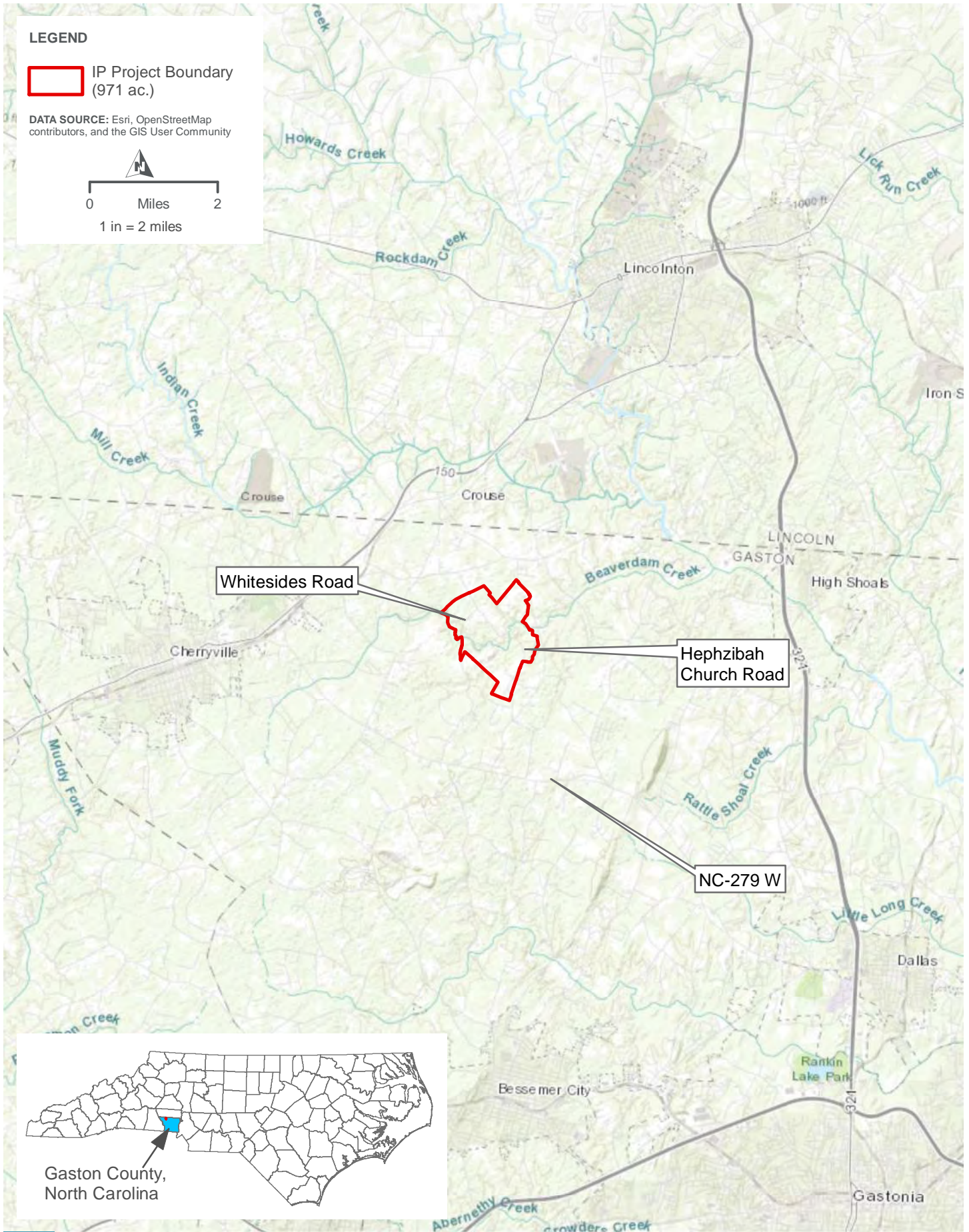
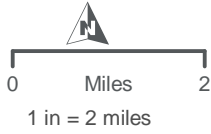


LEGEND

 IP Project Boundary
(971 ac.)

DATA SOURCE: Esri, OpenStreetMap contributors, and the GIS User Community



**PIEDMONT LITHIUM PROJECT
PROJECT LOCATION**

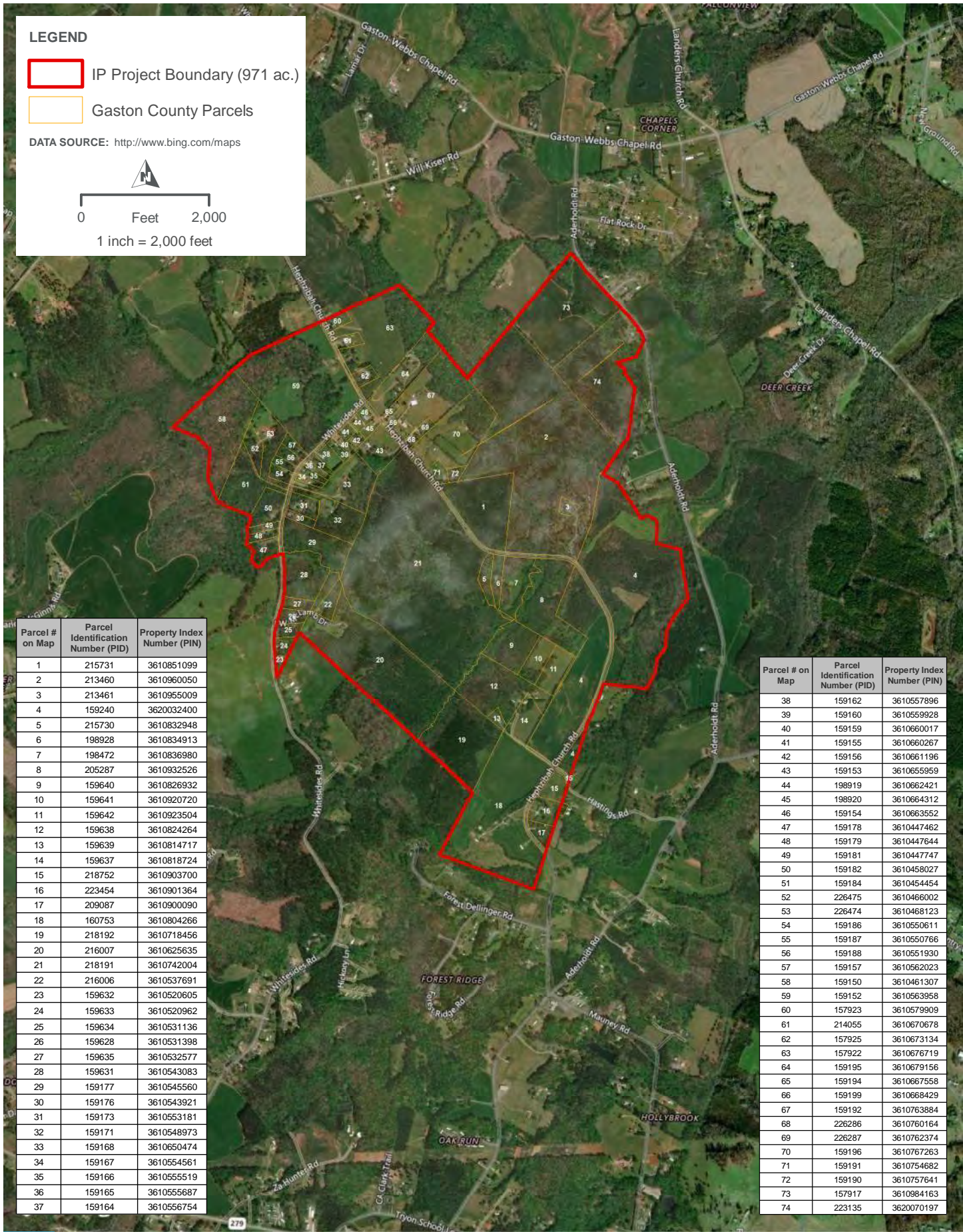
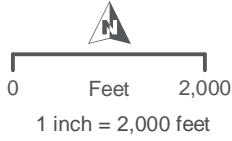
FIGURE 1

INDIVIDUAL PERMIT

LEGEND

- IP Project Boundary (971 ac.)
- Gaston County Parcels

DATA SOURCE: <http://www.bing.com/maps>



| Parcel # on Map | Parcel Identification Number (PID) | Property Index Number (PIN) |
|-----------------|------------------------------------|-----------------------------|
| 1 | 215731 | 3610851099 |
| 2 | 213460 | 3610960050 |
| 3 | 213461 | 3610955009 |
| 4 | 159240 | 3620032400 |
| 5 | 215730 | 3610832948 |
| 6 | 198928 | 3610834913 |
| 7 | 198472 | 3610836980 |
| 8 | 205287 | 3610932526 |
| 9 | 159640 | 3610826932 |
| 10 | 159641 | 3610920720 |
| 11 | 159642 | 3610923504 |
| 12 | 159638 | 3610824264 |
| 13 | 159639 | 3610814717 |
| 14 | 159637 | 3610818724 |
| 15 | 218752 | 3610903700 |
| 16 | 223454 | 3610901364 |
| 17 | 209087 | 3610900090 |
| 18 | 160753 | 3610804266 |
| 19 | 218192 | 3610718456 |
| 20 | 216007 | 3610625635 |
| 21 | 218191 | 3610742004 |
| 22 | 216006 | 3610537691 |
| 23 | 159632 | 3610520605 |
| 24 | 159633 | 3610520962 |
| 25 | 159634 | 3610531136 |
| 26 | 159628 | 3610531398 |
| 27 | 159635 | 3610532577 |
| 28 | 159631 | 3610543083 |
| 29 | 159177 | 3610545560 |
| 30 | 159176 | 3610543921 |
| 31 | 159173 | 3610553181 |
| 32 | 159171 | 3610548973 |
| 33 | 159168 | 3610650474 |
| 34 | 159167 | 3610554561 |
| 35 | 159166 | 3610555519 |
| 36 | 159165 | 3610555687 |
| 37 | 159164 | 3610556754 |

| Parcel # on Map | Parcel Identification Number (PID) | Property Index Number (PIN) |
|-----------------|------------------------------------|-----------------------------|
| 38 | 159162 | 3610557896 |
| 39 | 159160 | 3610559928 |
| 40 | 159159 | 3610660017 |
| 41 | 159155 | 3610660267 |
| 42 | 159156 | 3610661196 |
| 43 | 159153 | 3610655959 |
| 44 | 198919 | 3610662421 |
| 45 | 198920 | 3610664312 |
| 46 | 159154 | 3610663552 |
| 47 | 159178 | 3610447462 |
| 48 | 159179 | 3610447644 |
| 49 | 159181 | 3610447747 |
| 50 | 159182 | 3610458027 |
| 51 | 159184 | 3610454454 |
| 52 | 226475 | 3610466002 |
| 53 | 226474 | 3610468123 |
| 54 | 159186 | 3610550611 |
| 55 | 159187 | 3610550766 |
| 56 | 159188 | 3610551930 |
| 57 | 159157 | 3610562023 |
| 58 | 159150 | 3610461307 |
| 59 | 159152 | 3610563958 |
| 60 | 157923 | 3610579909 |
| 61 | 214055 | 3610670678 |
| 62 | 157925 | 3610673134 |
| 63 | 157922 | 3610676719 |
| 64 | 159195 | 3610679156 |
| 65 | 159194 | 3610667558 |
| 66 | 159199 | 3610668429 |
| 67 | 159192 | 3610763884 |
| 68 | 226286 | 3610760164 |
| 69 | 226287 | 3610762374 |
| 70 | 159196 | 3610767263 |
| 71 | 159191 | 3610754682 |
| 72 | 159190 | 3610757641 |
| 73 | 157917 | 3610984163 |
| 74 | 223135 | 3620070197 |



**PIEDMONT LITHIUM PROJECT
GASTON COUNTY PARCEL IDS**

FIGURE 2

INDIVIDUAL PERMIT

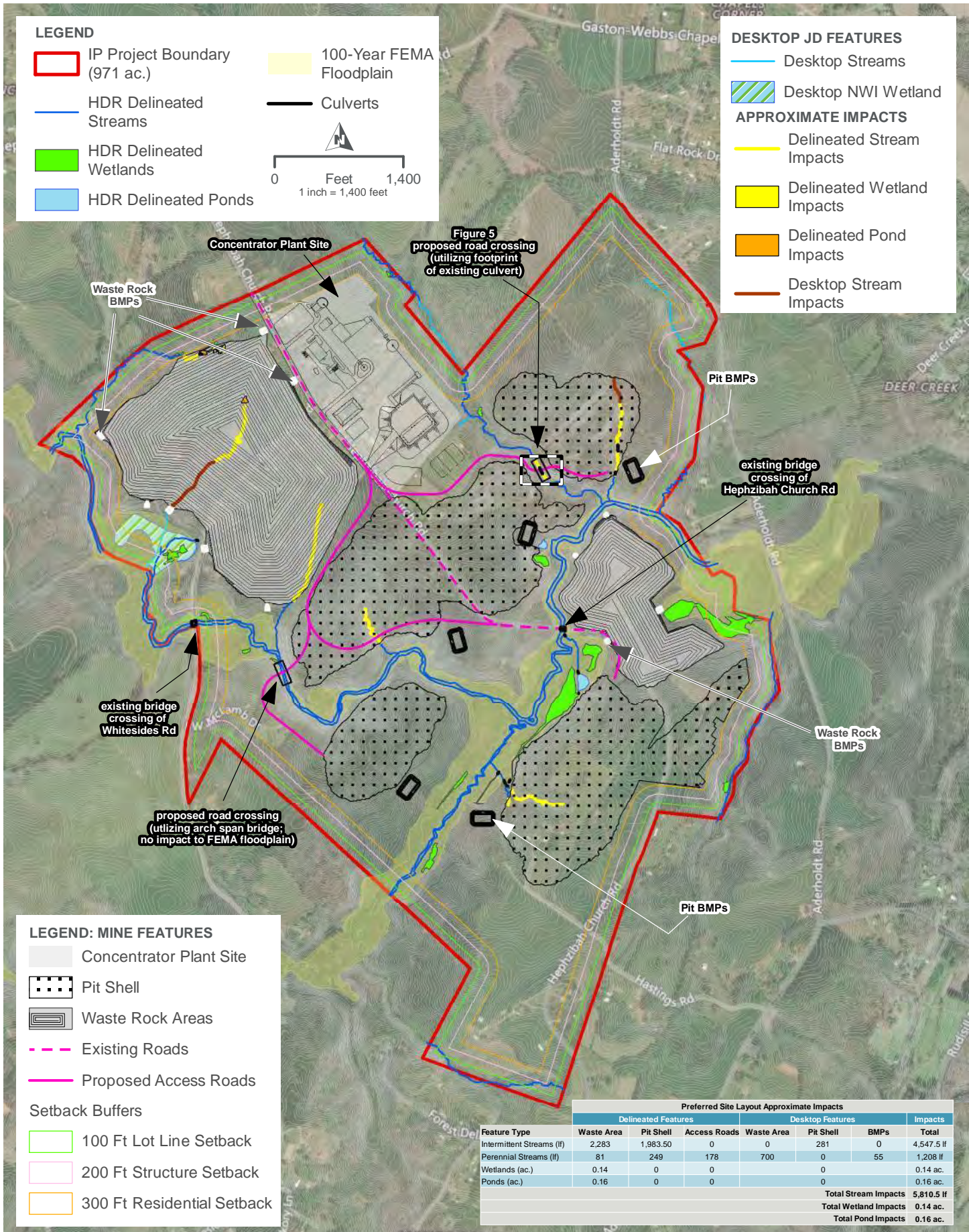
LEGEND

- IP Project Boundary (971 ac.)
- 100-Year FEMA Floodplain
- HDR Delineated Streams
- Culverts
- HDR Delineated Wetlands
- HDR Delineated Ponds



DESKTOP JD FEATURES

- Desktop Streams
- Desktop NWI Wetland
- APPROXIMATE IMPACTS**
- Delineated Stream Impacts
- Delineated Wetland Impacts
- Delineated Pond Impacts
- Desktop Stream Impacts



LEGEND: MINE FEATURES

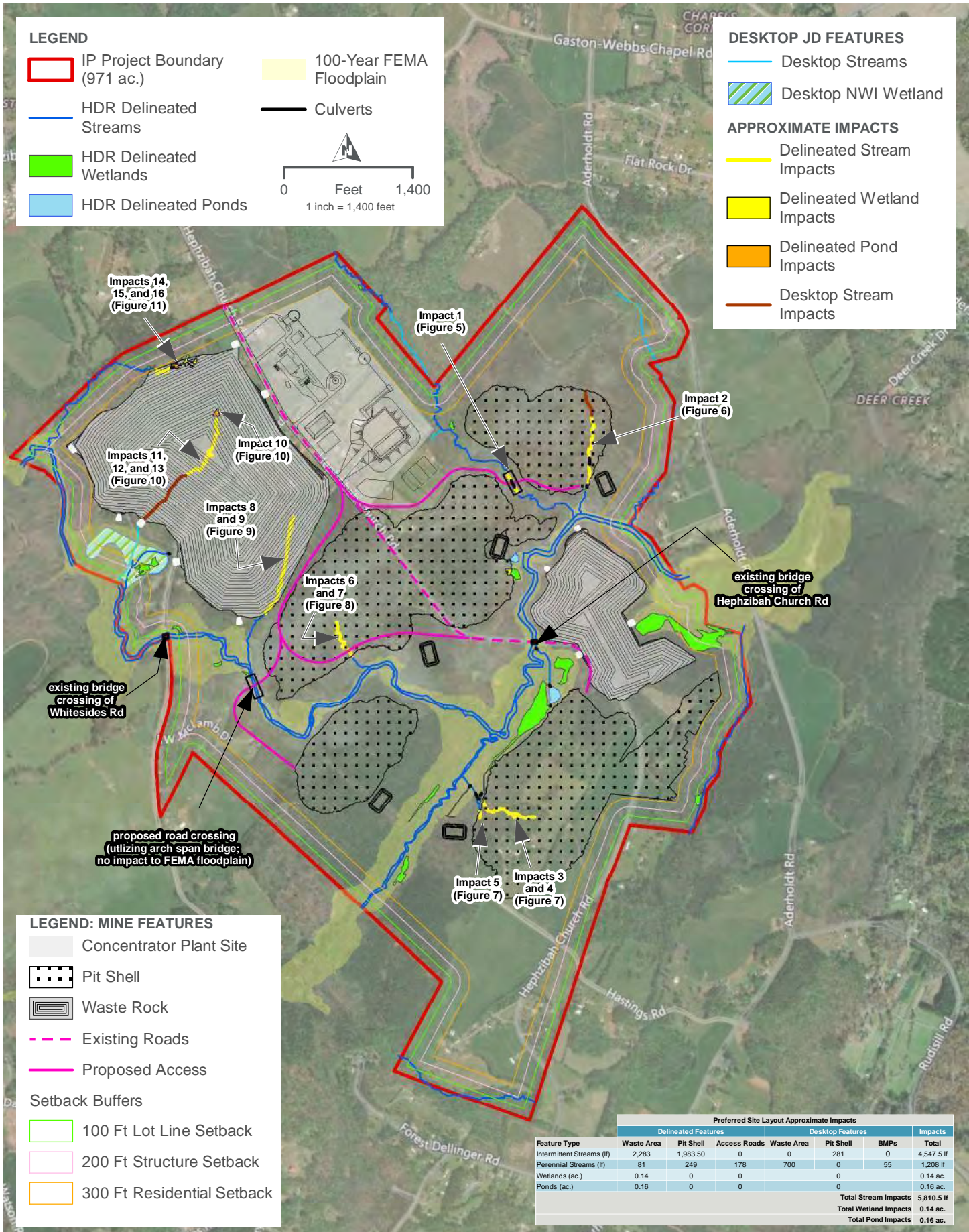
- Concentrator Plant Site
- Pit Shell
- Waste Rock Areas
- Existing Roads
- Proposed Access Roads
- Setback Buffers**
- 100 Ft Lot Line Setback
- 200 Ft Structure Setback
- 300 Ft Residential Setback

| Feature Type | Preferred Site Layout Approximate Impacts | | | | | | |
|---------------------------|---|-----------|--------------|------------------|-----------|------|--|
| | Delineated Features | | | Desktop Features | | | Impacts |
| | Waste Area | Pit Shell | Access Roads | Waste Area | Pit Shell | BMPs | Total |
| Intermittent Streams (lf) | 2,283 | 1,983.50 | 0 | 0 | 281 | 0 | 4,547.5 lf |
| Perennial Streams (lf) | 81 | 249 | 178 | 700 | 0 | 55 | 1,208 lf |
| Wetlands (ac.) | 0.14 | 0 | 0 | 0 | 0 | 0 | 0.14 ac. |
| Ponds (ac.) | 0.16 | 0 | 0 | 0 | 0 | 0 | 0.16 ac. |
| | | | | | | | Total Stream Impacts 5,810.5 lf |
| | | | | | | | Total Wetland Impacts 0.14 ac. |
| | | | | | | | Total Pond Impacts 0.16 ac. |



**PIEDMONT LITHIUM PROJECT
PREFERRED ALTERNATIVE SITE LAYOUT**

FIGURE 3



LEGEND

- IP Project Boundary (971 ac.)
- HDR Delineated Streams
- HDR Delineated Wetlands
- HDR Delineated Ponds
- 100-Year FEMA Floodplain
- Culverts

0 Feet 1,400
1 inch = 1,400 feet

DESKTOP JD FEATURES

- Desktop Streams
- Desktop NWI Wetland

APPROXIMATE IMPACTS

- Delineated Stream Impacts
- Delineated Wetland Impacts
- Delineated Pond Impacts
- Desktop Stream Impacts

LEGEND: MINE FEATURES

- Concentrator Plant Site
- Pit Shell
- Waste Rock
- Existing Roads
- Proposed Access

Setback Buffers

- 100 Ft Lot Line Setback
- 200 Ft Structure Setback
- 300 Ft Residential Setback






| Feature Type | Preferred Site Layout Approximate Impacts | | | | | | Impacts |
|------------------------------|---|-----------|--------------|------------------|-----------|------|-------------------|
| | Delineated Features | | | Desktop Features | | | |
| | Waste Area | Pit Shell | Access Roads | Waste Area | Pit Shell | BMPs | Total |
| Intermittent Streams (lf) | 2,283 | 1,983.50 | 0 | 0 | 281 | 0 | 4,547.5 lf |
| Perennial Streams (lf) | 81 | 249 | 178 | 700 | 0 | 55 | 1,208 lf |
| Wetlands (ac.) | 0.14 | 0 | 0 | 0 | 0 | 0 | 0.14 ac. |
| Ponds (ac.) | 0.16 | 0 | 0 | 0 | 0 | 0 | 0.16 ac. |
| Total Stream Impacts | | | | | | | 5,810.5 lf |
| Total Wetland Impacts | | | | | | | 0.14 ac. |
| Total Pond Impacts | | | | | | | 0.16 ac. |




**PIEDMONT LITHIUM PROJECT
PROPOSED IMPACTS - OVERVIEW**

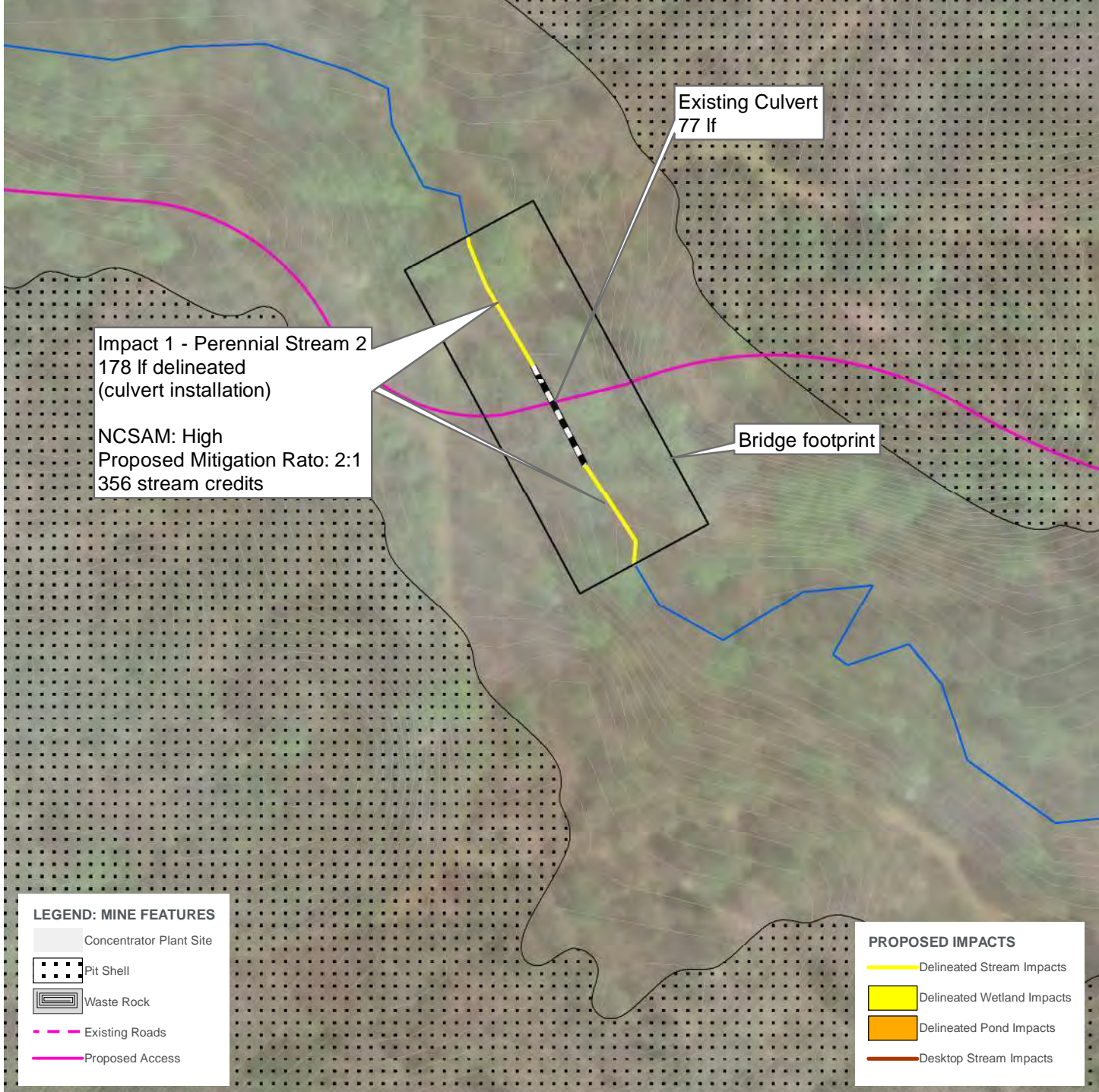
FIGURE 4

DELINEATED FEATURES

-  HDR Delineated Streams
-  HDR Delineated Wetlands
-  HDR Delineated Ponds
-  100-Year FEMA Floodplain
-  Culverts








0 1 inch = 100 feet 100



PIEDMONT LITHIUM PROJECT
IMPACT 1

FIGURE 5

DELINEATED FEATURES

-  HDR Delineated Streams
-  HDR Delineated Wetlands
-  HDR Delineated Ponds
-  100-Year FEMA Floodplain
-  Culverts











Existing Culvert
63 lf

Existing Culvert
22 lf




Impact 2 - Intermittent Stream 3
809 lf delineated
281 lf desktop
1,090 lf
(removal for pit construction)

NCSAM: High
Proposed Mitigation Ratio: 1:1
1,090 stream credits

LEGEND: MINE FEATURES

-  Concentrator Plant Site
-  Pit Shell
-  Waste Rock Areas
-  Existing Roads
-  Proposed Access Roads
-  100 Ft Lot Line Setback
-  200 Ft Structure Setback
-  300 Ft Residential Setback

PROPOSED IMPACTS

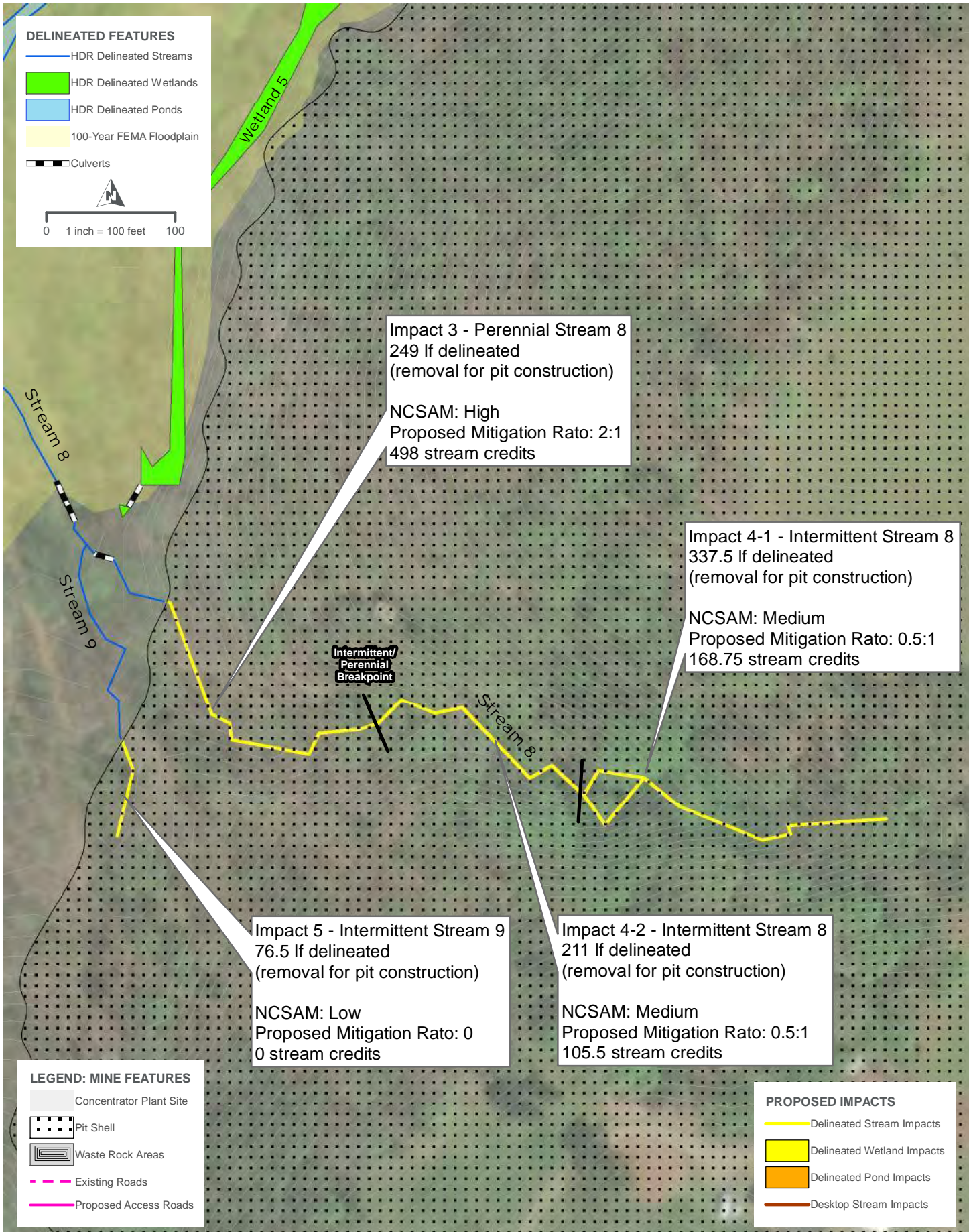
-  Delineated Stream Impacts
-  Delineated Wetland Impacts
-  Delineated Pond Impacts
-  Desktop Stream Impacts

PIEDMONT LITHIUM PROJECT

IMPACT 2

FIGURE 6






PATH: \\CLTSM\ANGIS_DATA\GIS\PROJECTS\1135_PIEDMONTLITHIUM\1088646_PIEDMONTLITHIUM\7_2_WORK_IN_PROGRESS\MAP_DOCS\MKO\PIEDMONTLITHIUM_IP_85X11_ONSITE_PREFACT_IMPACT2.MXD
USER: KTHAMES - DATE: 12/26/2018



PIEDMONT LITHIUM PROJECT
IMPACTS 3 - 5

FIGURE 7

DELINEATED FEATURES






-  HDR Delineated Streams
-  HDR Delineated Wetlands
-  HDR Delineated Ponds
-  100-Year FEMA Floodplain
-  Culverts



Impact 6 - Intermittent Stream 10
 520 If delineated
 (removal for pit construction)
 NCSAM: High
 Proposed Mitigation Ratio: 1:1
 520 stream credits

Impact 7 - Intermittent Stream 11
 30 If delineated
 (removal for pit construction)
 NCSAM: High
 Proposed Mitigation Ratio: 1:1
 30 stream credits

LEGEND: MINE FEATURES

-  Concentrator Plant Site
-  Pit Shell
-  Waste Rock Areas
-  Existing Roads
-  Proposed Access Roads

PROPOSED IMPACTS

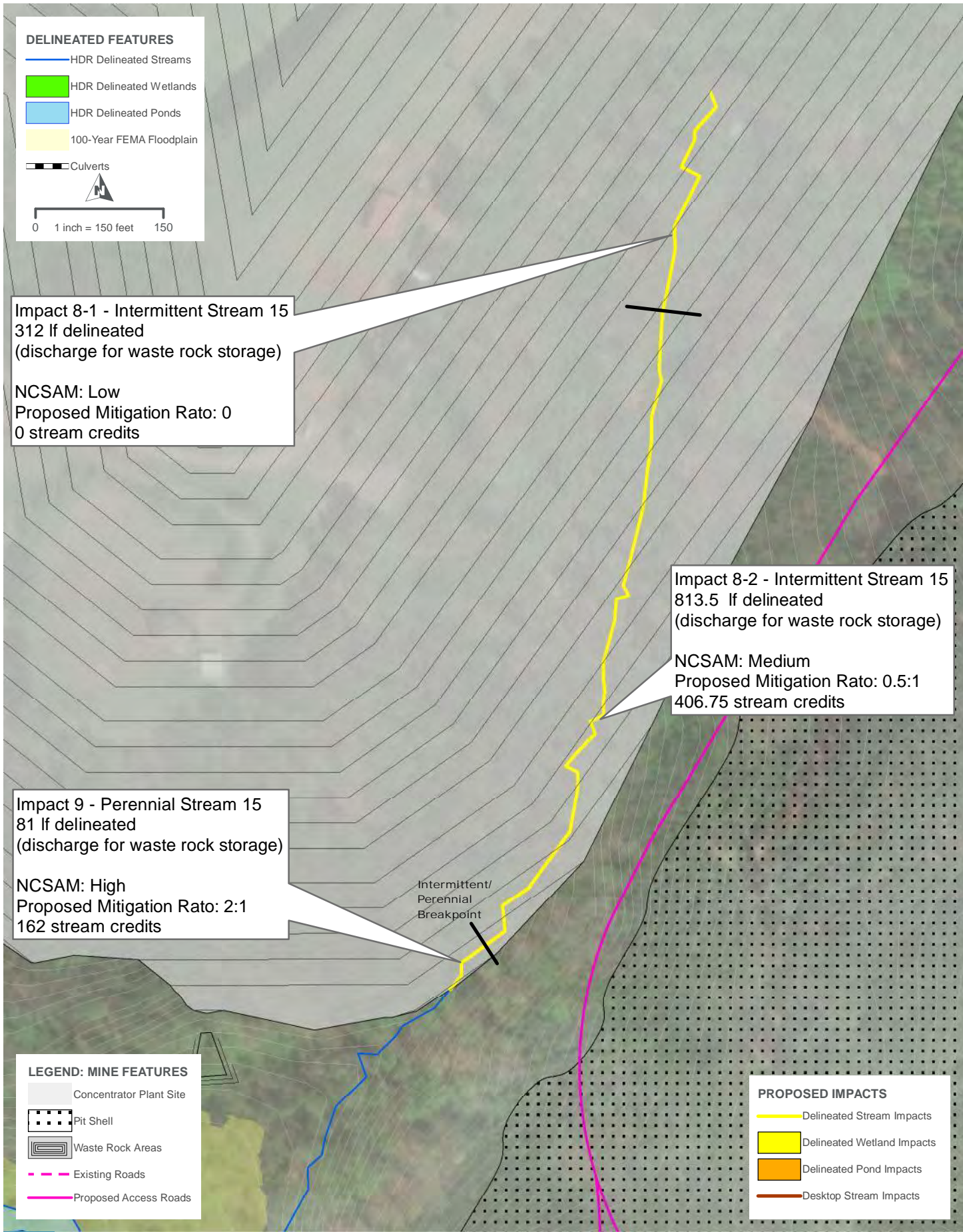
-  Delineated Stream Impacts
-  Delineated Wetland Impacts
-  Delineated Pond Impacts
-  Desktop Stream Impacts

Beaverdam Creek



**PIEDMONT LITHIUM PROJECT
 IMPACTS 6 AND 7**

FIGURE 8

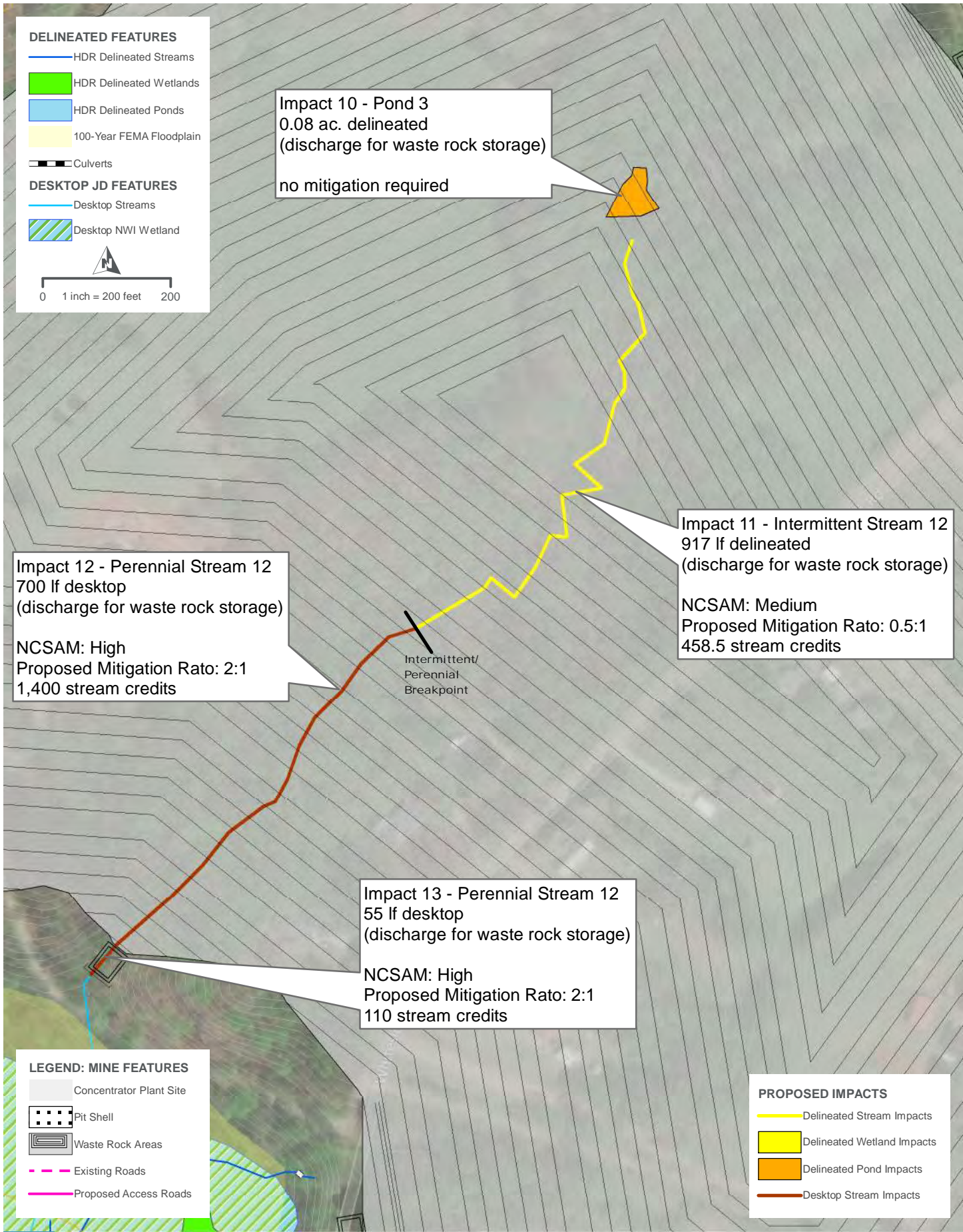


PIEDMONT LITHIUM PROJECT
IMPACTS 8 AND 9

FIGURE 9

INDIVIDUAL PERMIT





DELINEATED FEATURES

- HDR Delineated Streams
- HDR Delineated Wetlands
- HDR Delineated Ponds
- 100-Year FEMA Floodplain
- Culverts

DESKTOP JD FEATURES

- Desktop Streams
- Desktop NWI Wetland

0 1 inch = 200 feet 200

Impact 10 - Pond 3
 0.08 ac. delineated
 (discharge for waste rock storage)
 no mitigation required

Impact 11 - Intermittent Stream 12
 917 If delineated
 (discharge for waste rock storage)
 NCSAM: Medium
 Proposed Mitigation Ratio: 0.5:1
 458.5 stream credits

Impact 12 - Perennial Stream 12
 700 If desktop
 (discharge for waste rock storage)
 NCSAM: High
 Proposed Mitigation Ratio: 2:1
 1,400 stream credits

Intermittent/
 Perennial
 Breakpoint

Impact 13 - Perennial Stream 12
 55 If desktop
 (discharge for waste rock storage)
 NCSAM: High
 Proposed Mitigation Ratio: 2:1
 110 stream credits

LEGEND: MINE FEATURES

- Concentrator Plant Site
- Pit Shell
- Waste Rock Areas
- Existing Roads
- Proposed Access Roads

PROPOSED IMPACTS


- Delineated Stream Impacts
- Delineated Wetland Impacts
- Delineated Pond Impacts
- Desktop Stream Impacts

PIEDMONT LITHIUM PROJECT
IMPACTS 10 - 13

FIGURE 10

DELINEATED FEATURES

- IP Project Boundary (971 ac.)
- HDR Delineated Streams
- HDR Delineated Wetlands
- HDR Delineated Ponds
- 100-Year FEMA Floodplain
- Culverts


 0 1 inch = 150 feet 150

Impact 14 - Wetland 9
 0.14 ac. delineated
 (discharge for waste rock storage)

NCWAM: High
 Proposed Mitigation Ratio: 1:1
 0.5 acre wetland credit

Impact 15 - Pond 4
 0.08 ac. delineated
 (discharge for waste rock storage)

no mitigation required

Impact 16 - Intermittent Stream 13
 240 lf delineated
 (discharge for waste rock storage)

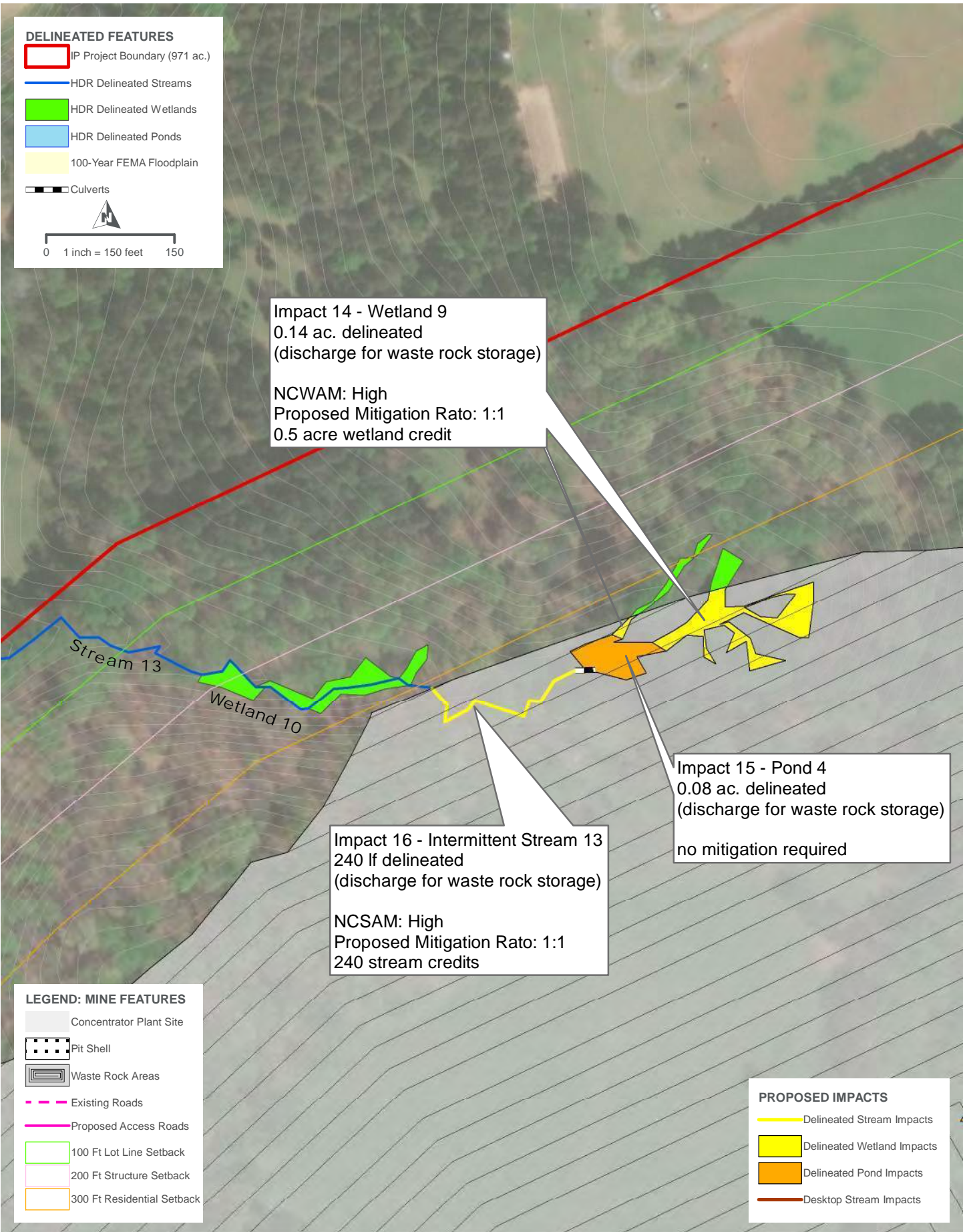
NCSAM: High
 Proposed Mitigation Ratio: 1:1
 240 stream credits

LEGEND: MINE FEATURES

- Concentrator Plant Site
- Pit Shell
- Waste Rock Areas
- Existing Roads
- Proposed Access Roads
- 100 Ft Lot Line Setback
- 200 Ft Structure Setback
- 300 Ft Residential Setback

PROPOSED IMPACTS

- Delineated Stream Impacts
- Delineated Wetland Impacts
- Delineated Pond Impacts
- Desktop Stream Impacts



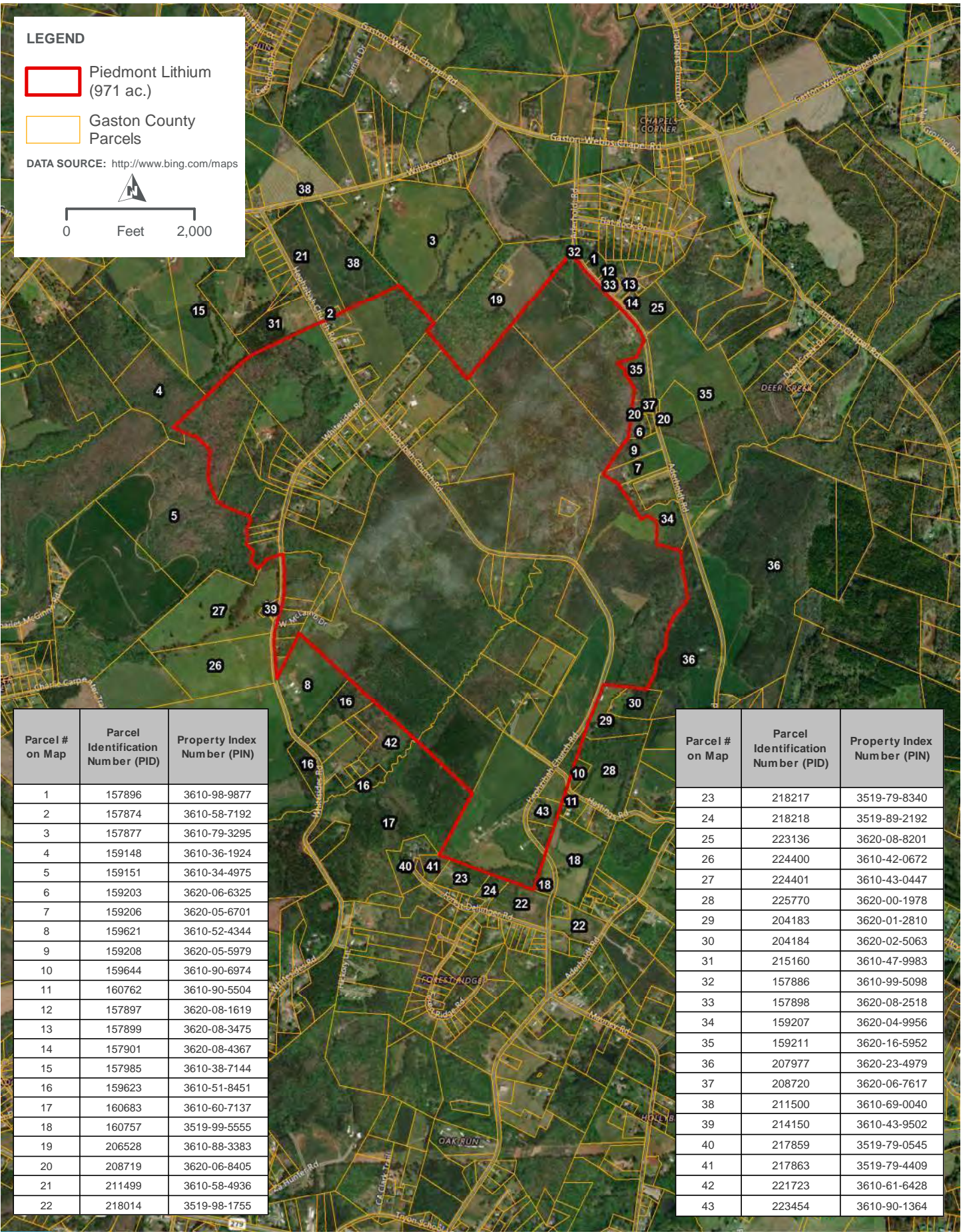
PIEDMONT LITHIUM PROJECT
IMPACTS 14 - 16

FIGURE 11

LEGEND

- Piedmont Lithium (971 ac.)
- Gaston County Parcels

DATA SOURCE: <http://www.bing.com/maps>



| Parcel # on Map | Parcel Identification Number (PID) | Property Index Number (PIN) |
|-----------------|------------------------------------|-----------------------------|
| 1 | 157896 | 3610-98-9877 |
| 2 | 157874 | 3610-58-7192 |
| 3 | 157877 | 3610-79-3295 |
| 4 | 159148 | 3610-36-1924 |
| 5 | 159151 | 3610-34-4975 |
| 6 | 159203 | 3620-06-6325 |
| 7 | 159206 | 3620-05-6701 |
| 8 | 159621 | 3610-52-4344 |
| 9 | 159208 | 3620-05-5979 |
| 10 | 159644 | 3610-90-6974 |
| 11 | 160762 | 3610-90-5504 |
| 12 | 157897 | 3620-08-1619 |
| 13 | 157899 | 3620-08-3475 |
| 14 | 157901 | 3620-08-4367 |
| 15 | 157985 | 3610-38-7144 |
| 16 | 159623 | 3610-51-8451 |
| 17 | 160683 | 3610-60-7137 |
| 18 | 160757 | 3519-99-5555 |
| 19 | 206528 | 3610-88-3383 |
| 20 | 208719 | 3620-06-8405 |
| 21 | 211499 | 3610-58-4936 |
| 22 | 218014 | 3519-98-1755 |

| Parcel # on Map | Parcel Identification Number (PID) | Property Index Number (PIN) |
|-----------------|------------------------------------|-----------------------------|
| 23 | 218217 | 3519-79-8340 |
| 24 | 218218 | 3519-89-2192 |
| 25 | 223136 | 3620-08-8201 |
| 26 | 224400 | 3610-42-0672 |
| 27 | 224401 | 3610-43-0447 |
| 28 | 225770 | 3620-00-1978 |
| 29 | 204183 | 3620-01-2810 |
| 30 | 204184 | 3620-02-5063 |
| 31 | 215160 | 3610-47-9983 |
| 32 | 157886 | 3610-99-5098 |
| 33 | 157898 | 3620-08-2518 |
| 34 | 159207 | 3620-04-9956 |
| 35 | 159211 | 3620-16-5952 |
| 36 | 207977 | 3620-23-4979 |
| 37 | 208720 | 3620-06-7617 |
| 38 | 211500 | 3610-69-0040 |
| 39 | 214150 | 3610-43-9502 |
| 40 | 217859 | 3519-79-0545 |
| 41 | 217863 | 3519-79-4409 |
| 42 | 221723 | 3610-61-6428 |
| 43 | 223454 | 3610-90-1364 |



**PIEDMONT LITHIUM PROJECT
ADJOINING PROPERTY OWNERS**

FIGURE 12

INDIVIDUAL PERMIT