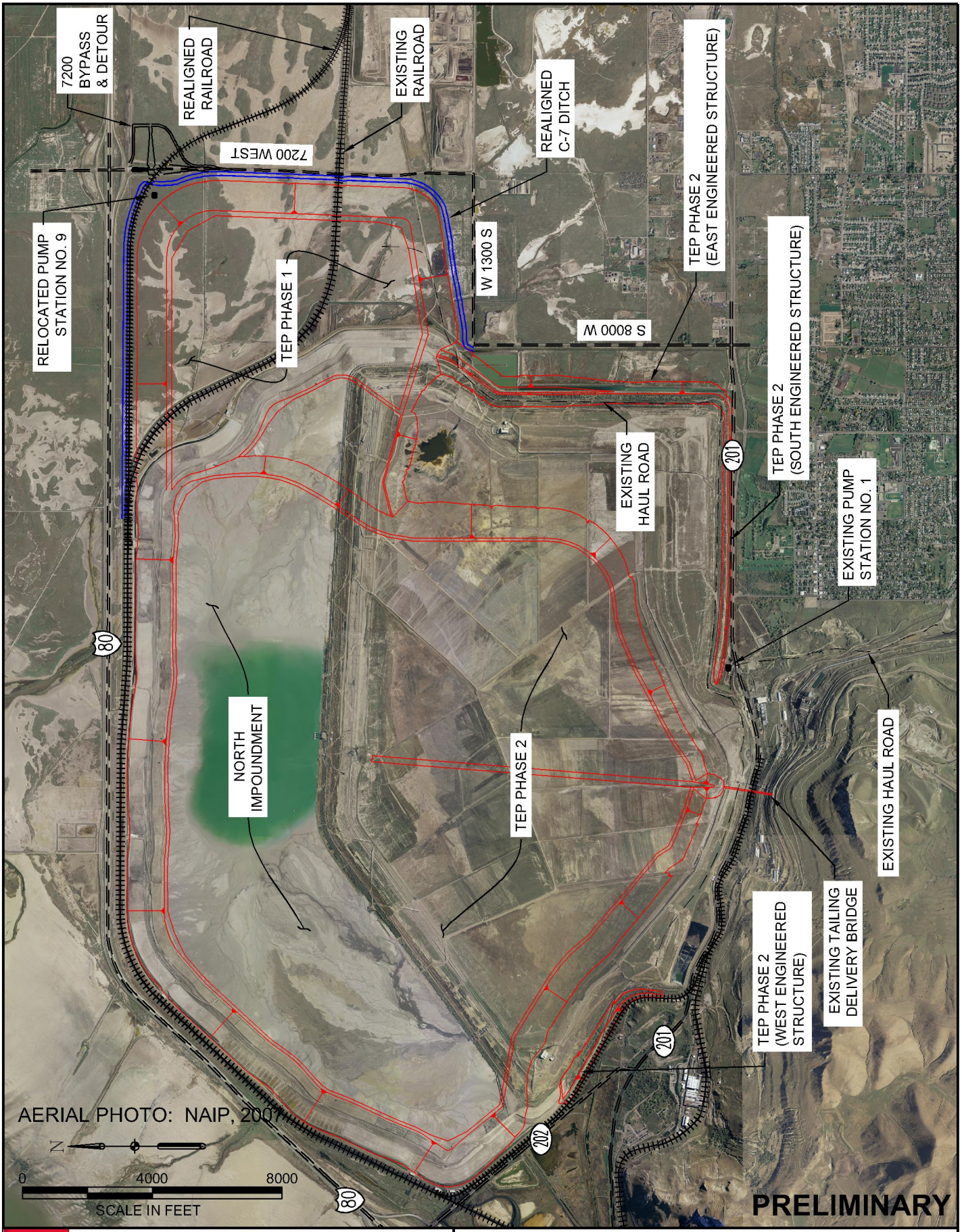
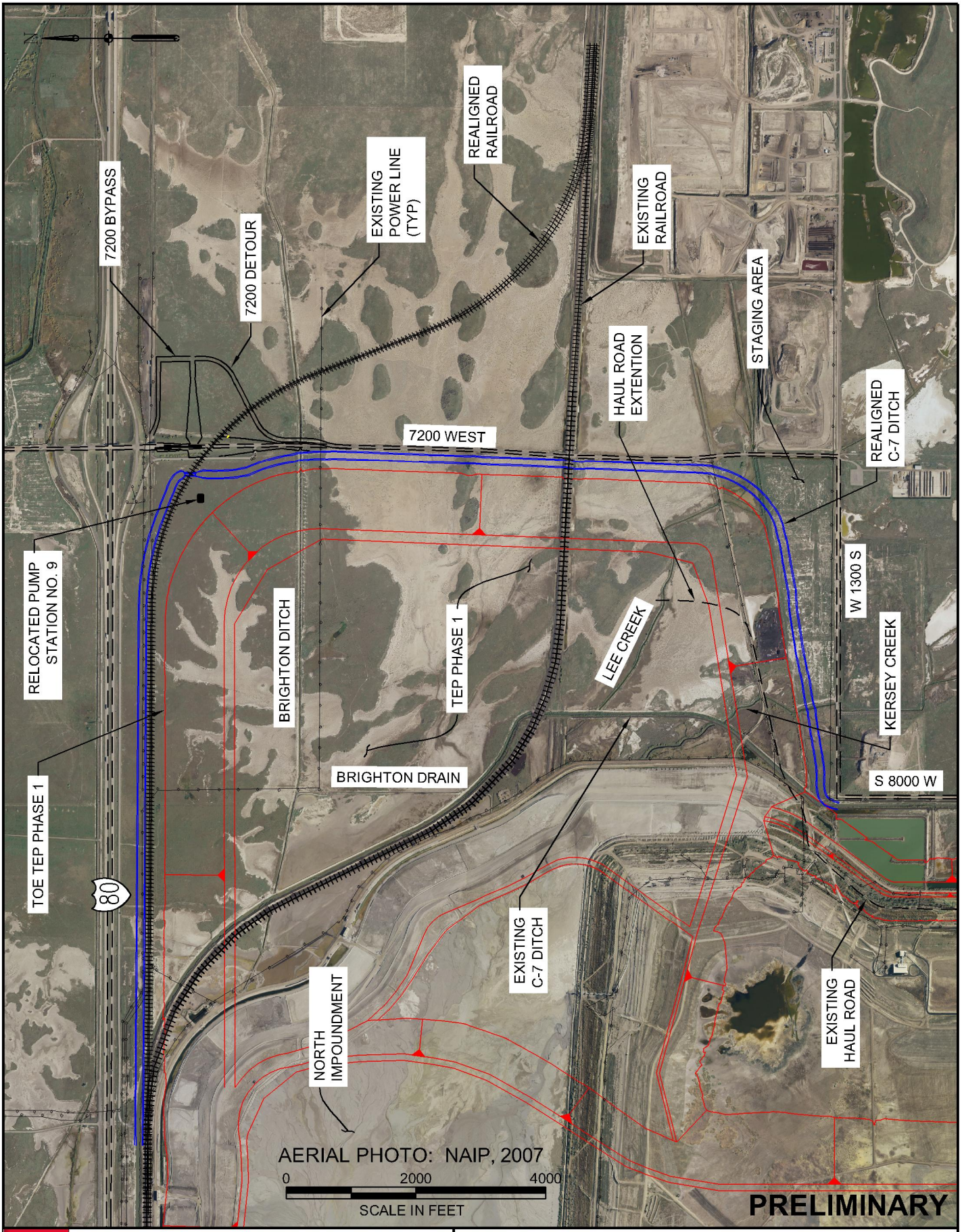
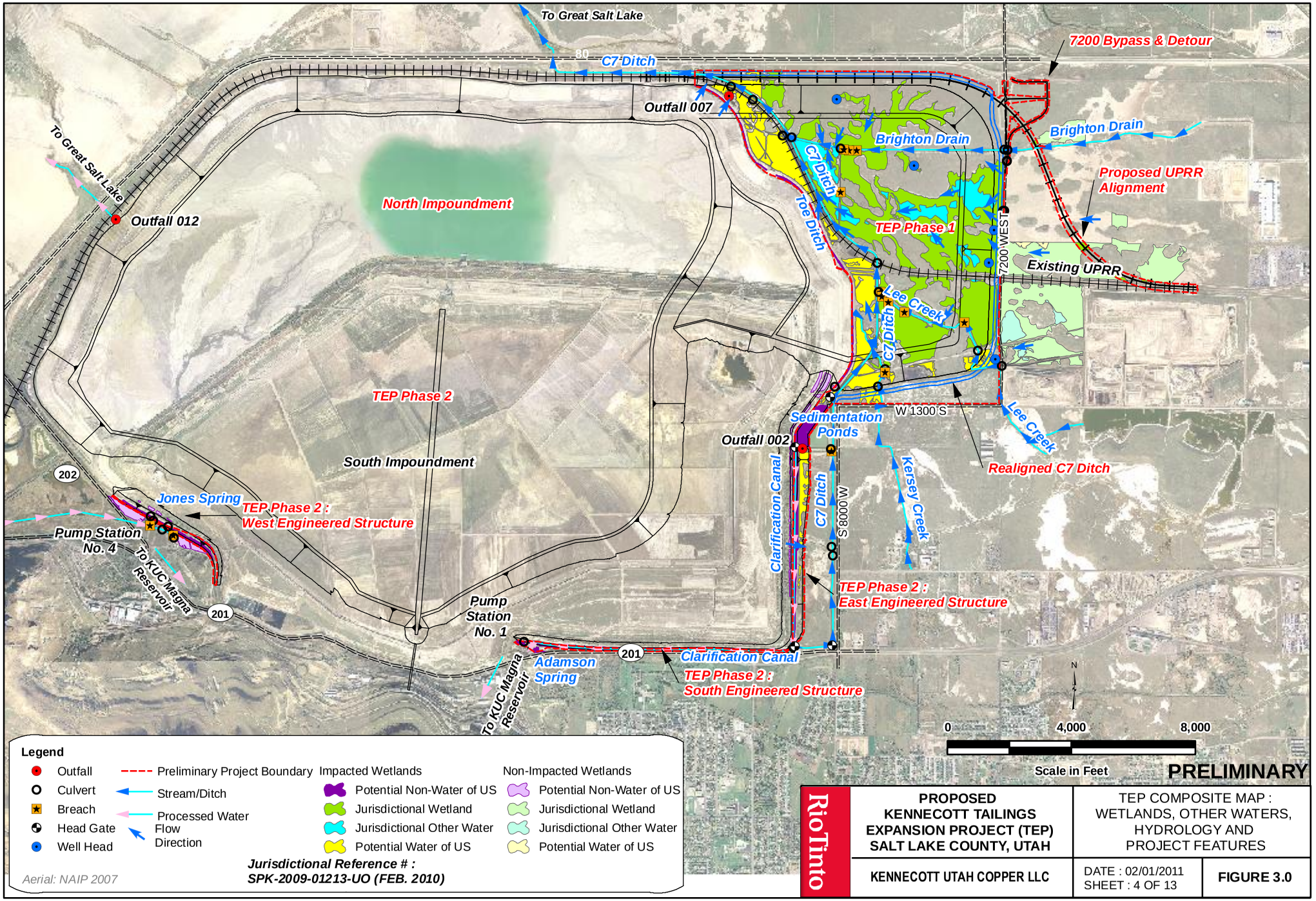
Rio Tinto	PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH	TEP VICINITY MAP	
	KENNECOTT UTAH COPPER LLC	DATE: 01/18/2011 SHEET 1 OF 13	FIGURE 1

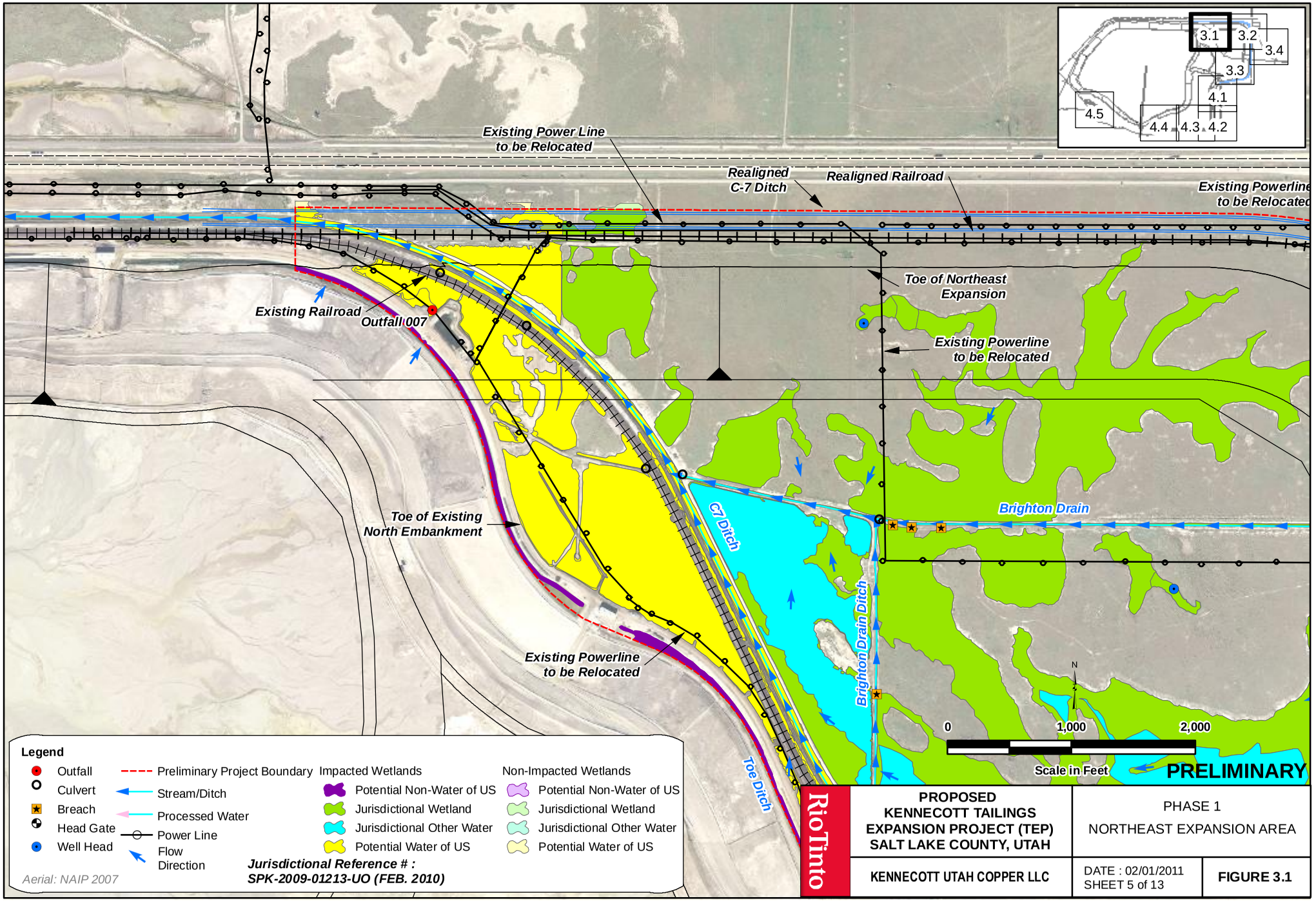


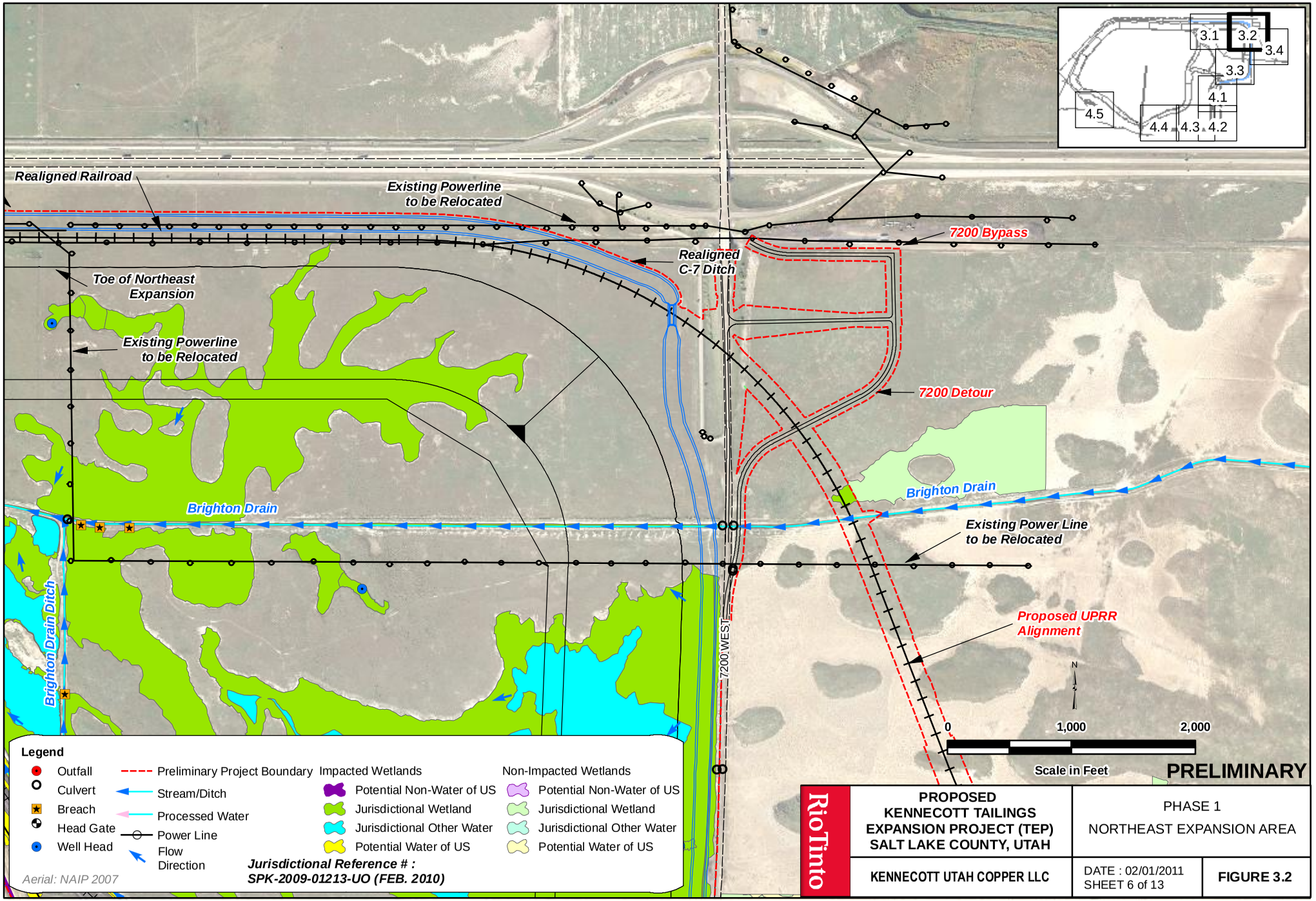
RioTinto	PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH	TEP OVERVIEW
	KENNECOTT UTAH COPPER LLC	DATE: 01/18/2011 SHEET 2 OF 13
		FIGURE 2A

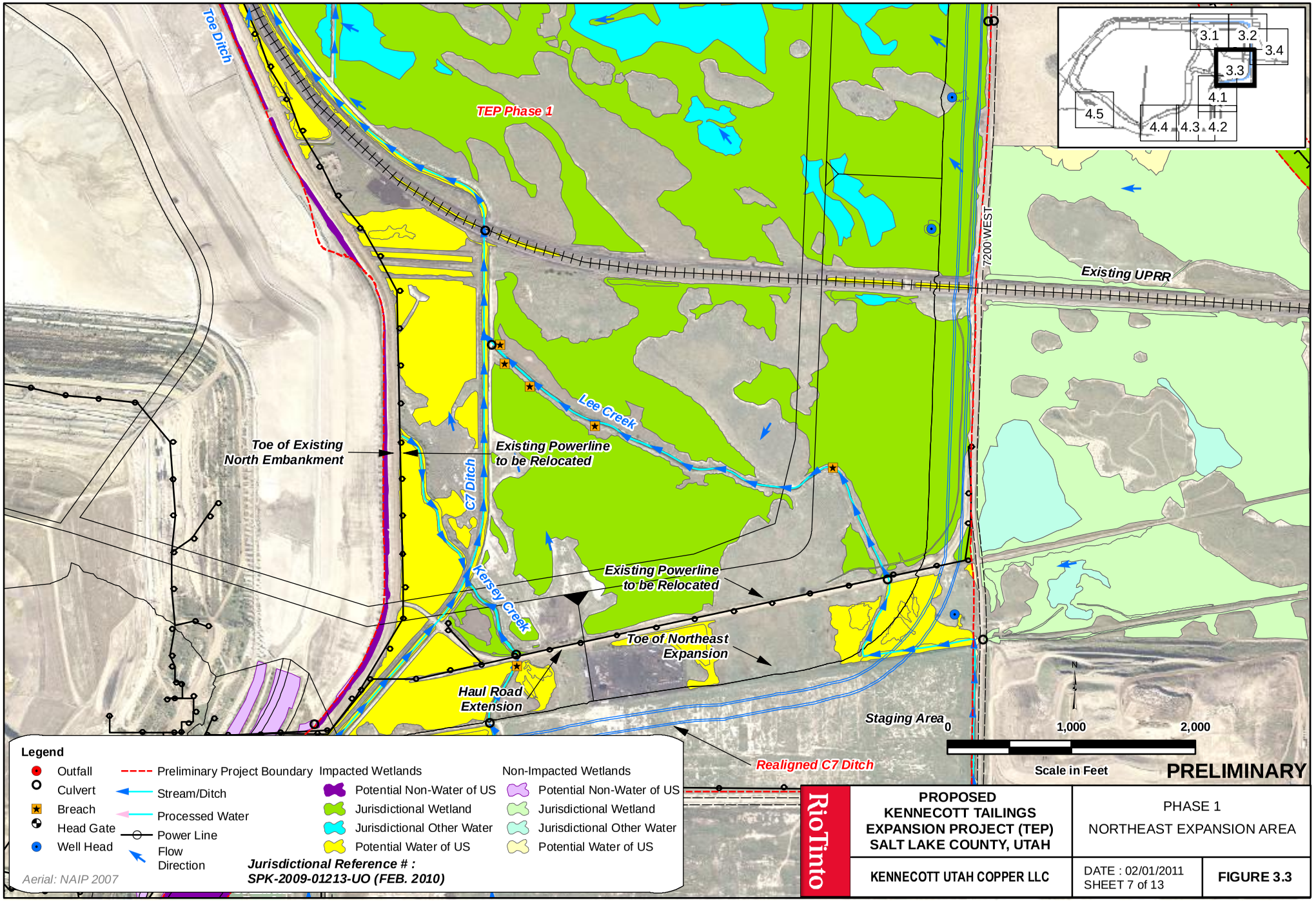


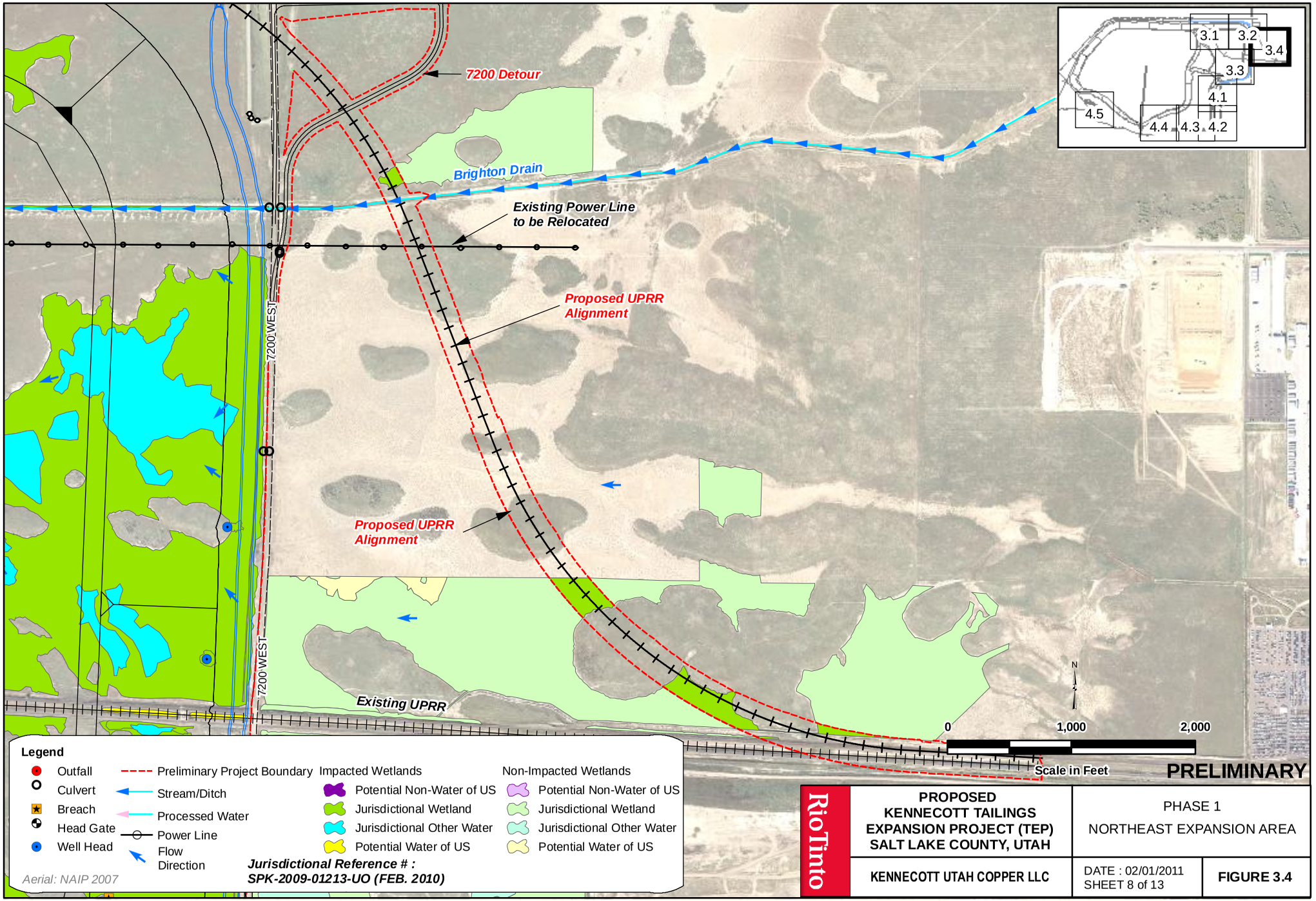
Rio Tinto	PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH	TEP OVERVIEW : TEP PHASE 1 CORNER
	KENNECOTT UTAH COPPER LLC	DATE: 01/18/2011 SHEET 3 OF 13
		FIGURE 2B

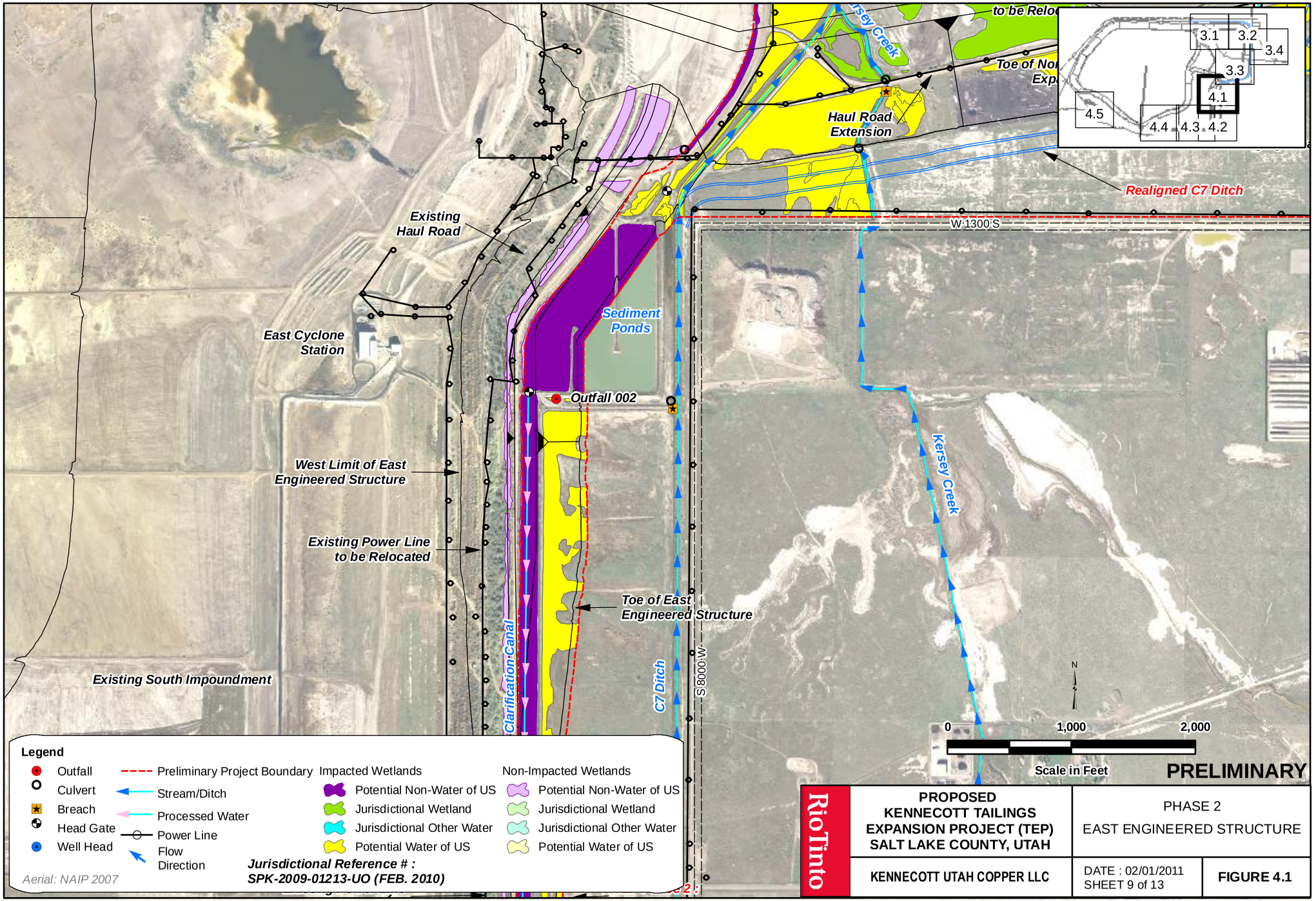

To Great Salt Lake
C7 Ditch
Outfall 007
7200 Bypass & Detour
Brighton Drain
Brighton Drain
Proposed UPRR Alignment
C7 Ditch
Toe Ditch
TEP Phase 1
7200 WEST
Existing UPRR
To Great Salt Lake
Outfall 012
North Impoundment
Lee Creek
C7 Ditch
TEP Phase 2
W 1300 S
Sedimentation Ponds
Lee Creek
Outfall 002
Realigned C7 Ditch
South Impoundment
Kersey Creek
Clarification Canal
C7 Ditch
S 8000 W
202
Jones Spring
TEP Phase 2 : West Engineered Structure
Pump Station No. 4
To KUC Magna Reservoir
TEP Phase 2 : East Engineered Structure
Pump Station No. 1
201
201
Clarification Canal
Adamson Spring
TEP Phase 2 : South Engineered Structure
To KUC Magna Reservoir
N
0
4,000
8,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # : SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
KENNECOTT UTAH COPPER LLC
TEP COMPOSITE MAP : WETLANDS, OTHER WATERS, HYDROLOGY AND PROJECT FEATURES
DATE : 02/01/2011
SHEET : 4 OF 13
FIGURE 3.0

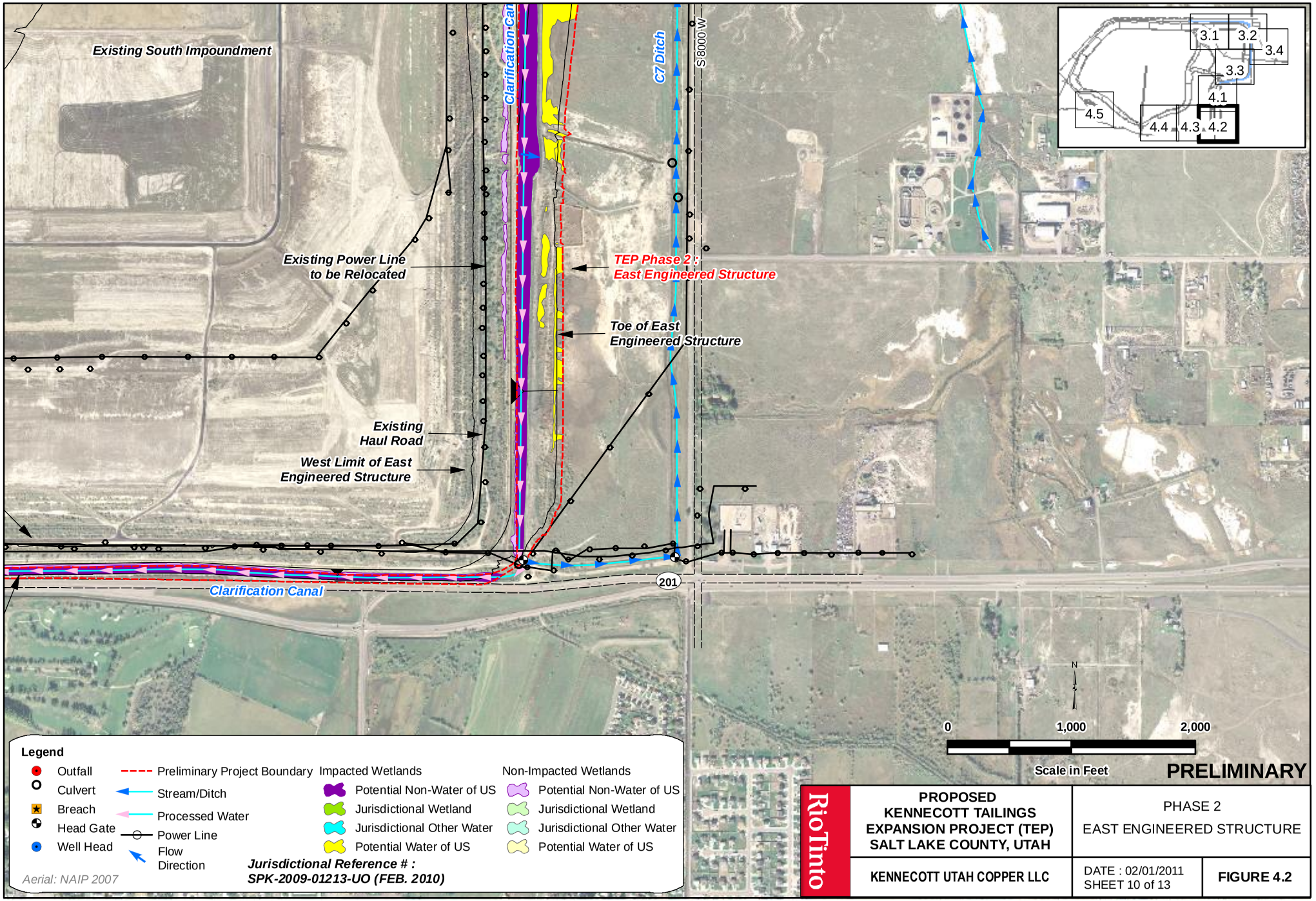

Existing Power Line to be Relocated
Realigned C-7 Ditch
Realigned Railroad
Existing Powerline to be Relocated
Toe of Northeast Expansion
Existing Railroad
Outfall 007
Existing Powerline to be Relocated
Toe of Existing North Embankment
C7 Ditch
Brighton Drain
Brighton Drain Ditch
Existing Powerline to be Relocated
Toe Ditch
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # :
SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED
KENNECOTT TAILINGS
EXPANSION PROJECT (TEP)
SALT LAKE COUNTY, UTAH
PHASE 1
NORTHEAST EXPANSION AREA
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 5 of 13
FIGURE 3.1


3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
Realigned Railroad
Existing Powerline to be Relocated
7200 Bypass
Realigned C-7 Ditch
Toe of Northeast Expansion
Existing Powerline to be Relocated
7200 Detour
Brighton Drain
Brighton Drain
Existing Power Line to be Relocated
Brighton Drain Ditch
7200 WEST
Proposed UPRR Alignment
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # :
SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
PHASE 1
NORTHEAST EXPANSION AREA
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 6 of 13
FIGURE 3.2


Toe Ditch
TEP Phase 1
7200 WEST
Existing UPRR
Lee Creek
Toe of Existing
North Embankment
Existing Powerline
to be Relocated
C7 Ditch
Kersey Creek
Existing Powerline
to be Relocated
Toe of Northeast
Expansion
Haul Road
Extension
Staging Area
Realigned C7 Ditch
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # :
SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED
KENNECOTT TAILINGS
EXPANSION PROJECT (TEP)
SALT LAKE COUNTY, UTAH
PHASE 1
NORTHEAST EXPANSION AREA
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 7 of 13
FIGURE 3.3


7200 Detour
Brighton Drain
Existing Power Line
to be Relocated
Proposed UPRR
Alignment
Proposed UPRR
Alignment
7200 WEST
7200 WEST
Existing UPRR
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # :
SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED
KENNECOTT TAILINGS
EXPANSION PROJECT (TEP)
SALT LAKE COUNTY, UTAH
PHASE 1
NORTHEAST EXPANSION AREA
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 8 of 13
FIGURE 3.4


Haul Road Extension
Realigned C7 Ditch
Existing Haul Road
W 1300 S
Sediment Ponds
East Cyclone Station
Outfall 002
West Limit of East Engineered Structure
Existing Power Line to be Relocated
Kersey Creek
Toe of East Engineered Structure
Clarification Canal
C7 Ditch
S 8000 W
Existing South Impoundment
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # :
SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
PHASE 2
EAST ENGINEERED STRUCTURE
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 9 of 13
FIGURE 4.1



RioTinto

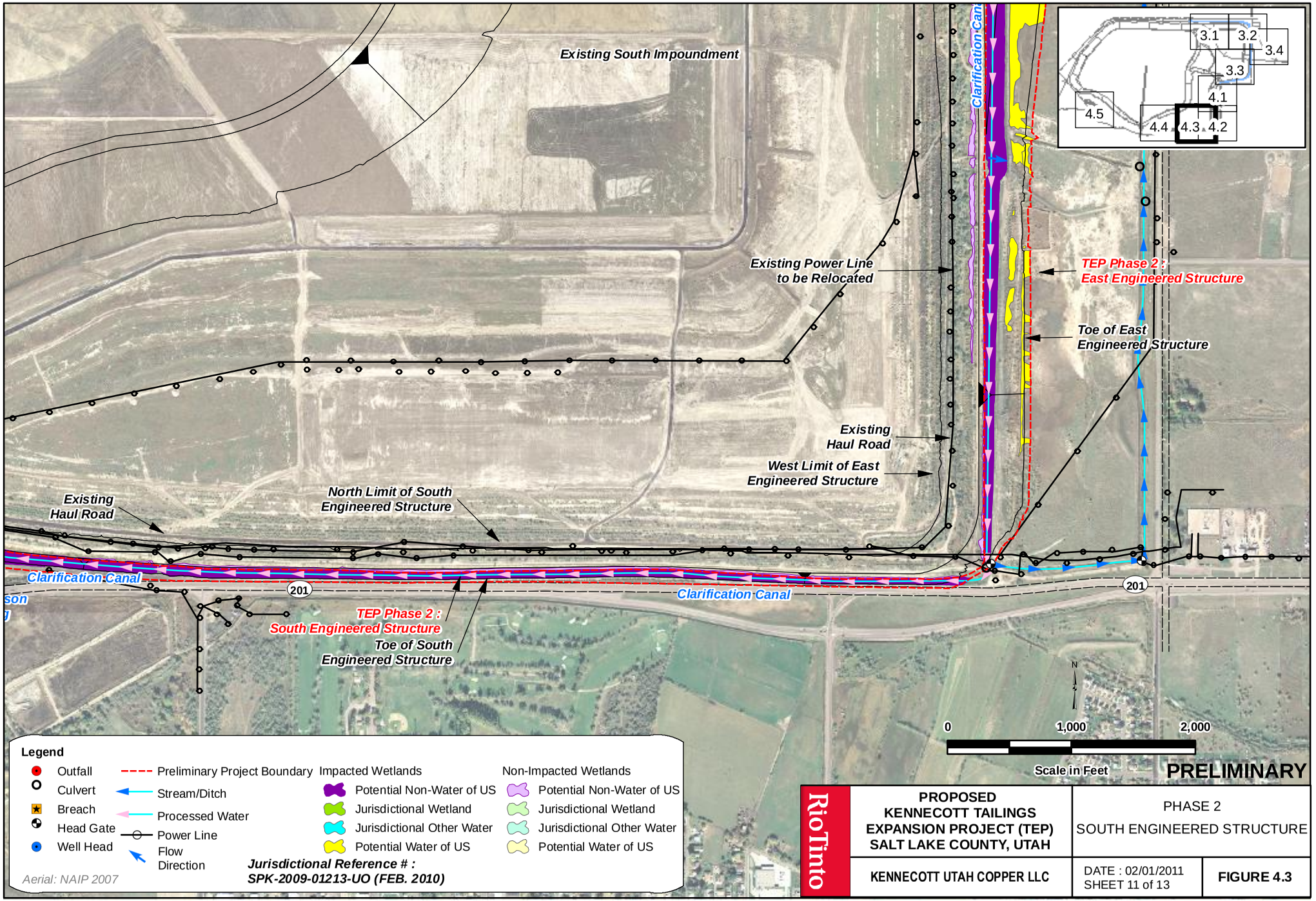
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH

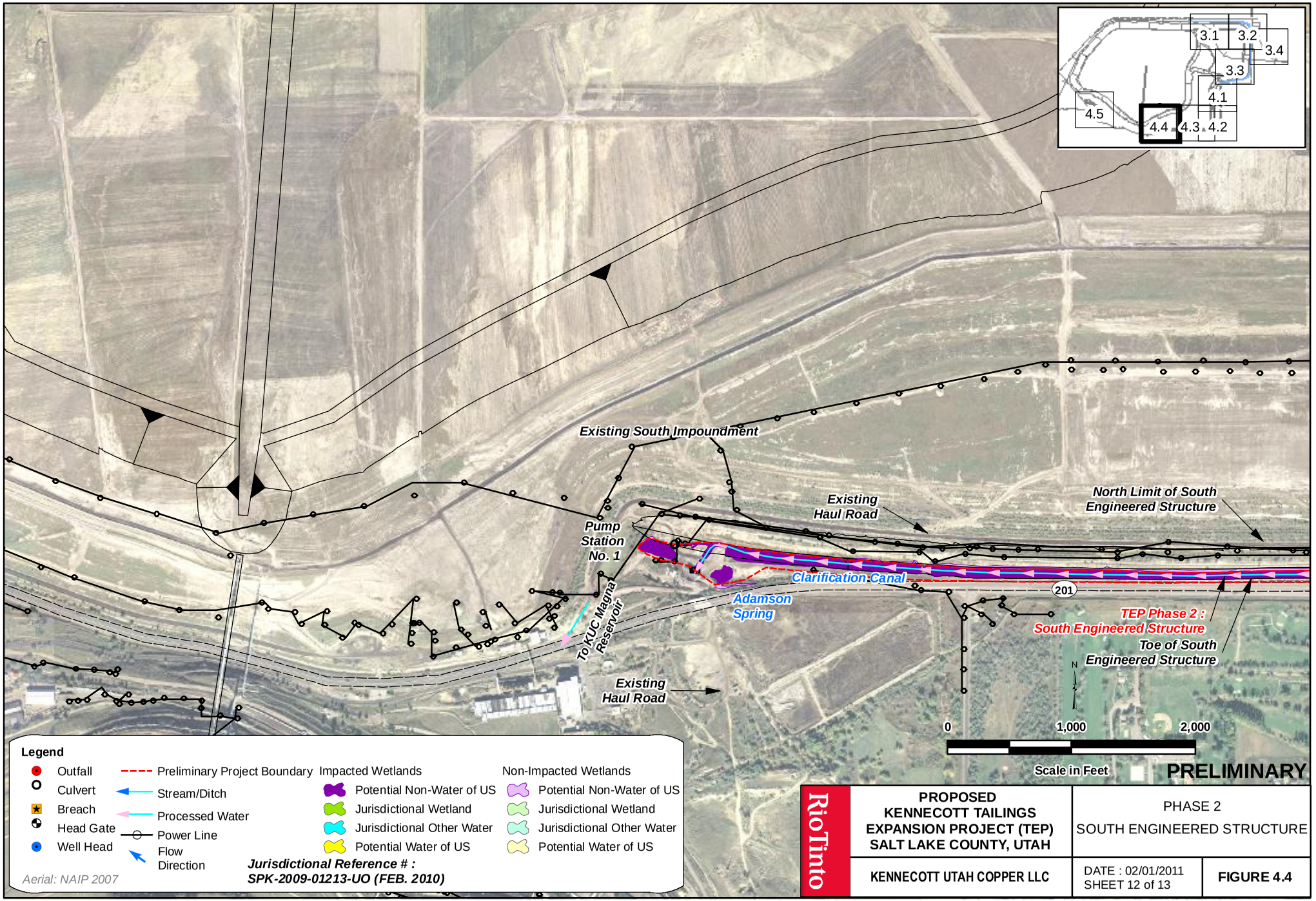
PHASE 2
EAST ENGINEERED STRUCTURE

KENNECOTT UTAH COPPER LLC

DATE : 02/01/2011
SHEET 10 of 13

FIGURE 4.2


Existing South Impoundment
Clarification Canal
Existing Power Line to be Relocated
TEP Phase 2 : East Engineered Structure
Toe of East Engineered Structure
Existing Haul Road
West Limit of East Engineered Structure
North Limit of South Engineered Structure
Existing Haul Road
Clarification Canal
201
Clarification Canal
201
TEP Phase 2 : South Engineered Structure
Toe of South Engineered Structure
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
N
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # : SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
PHASE 2
SOUTH ENGINEERED STRUCTURE
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 11 of 13
FIGURE 4.3



RioTinto

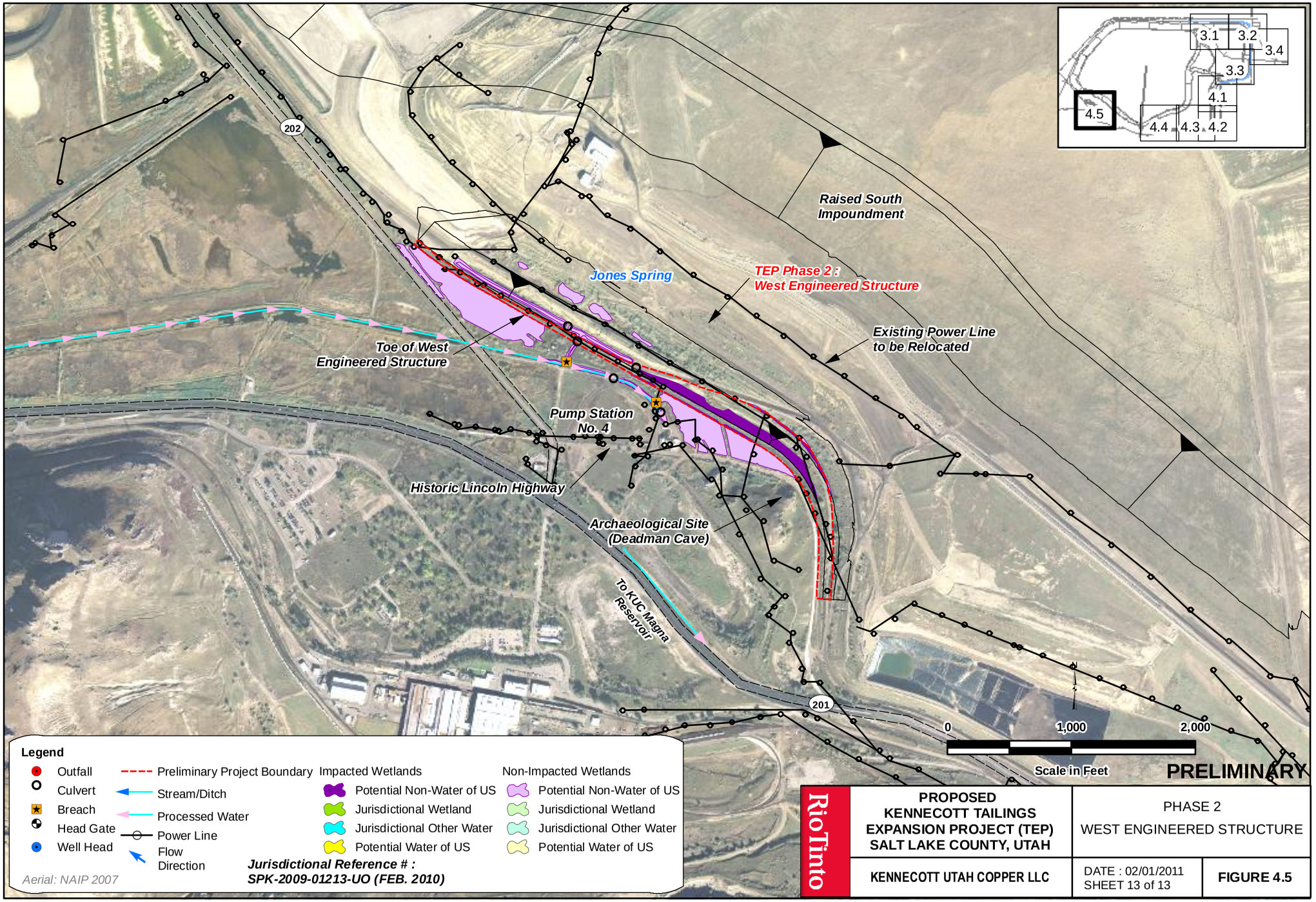
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH

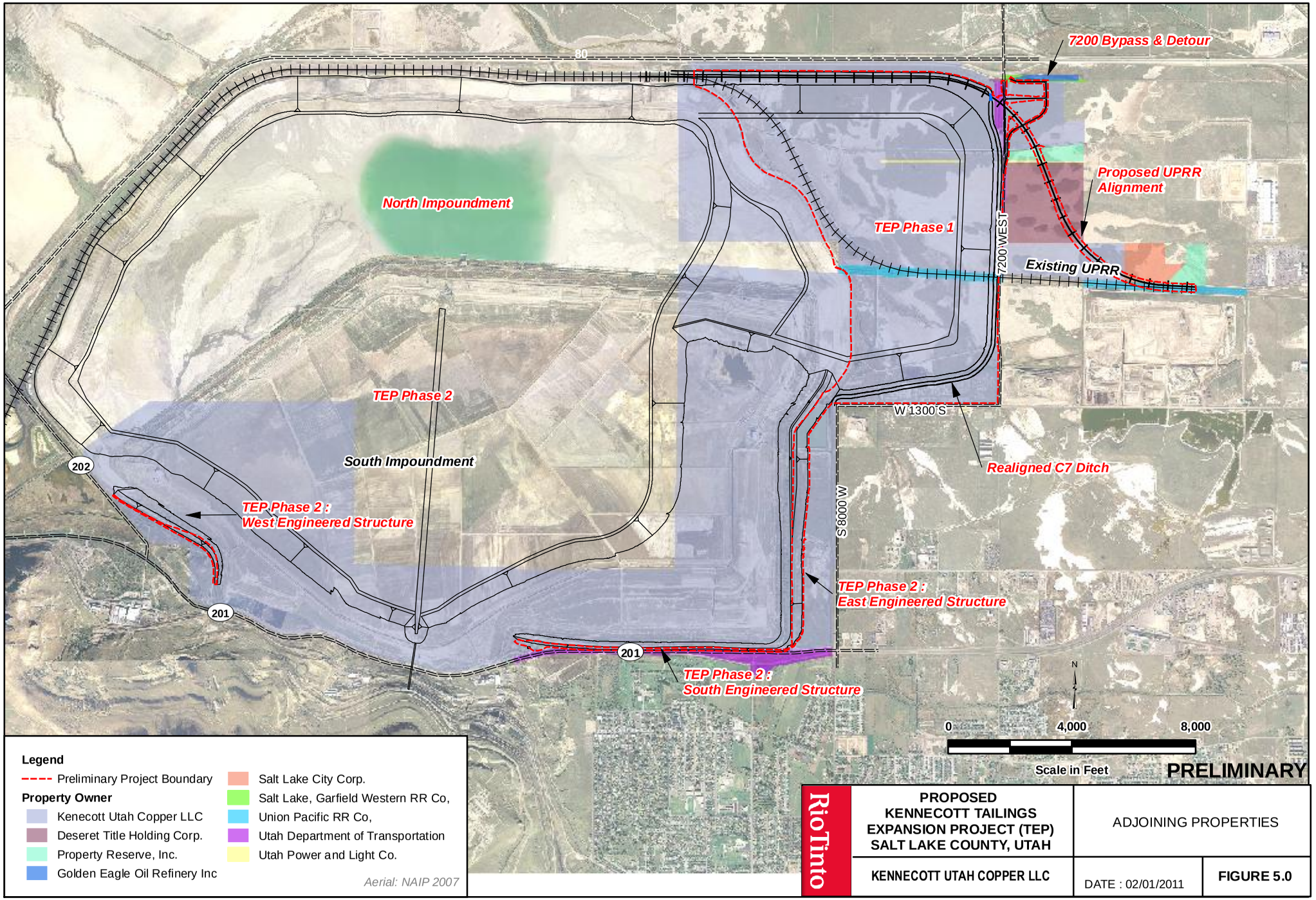
PHASE 2
SOUTH ENGINEERED STRUCTURE

KENNECOTT UTAH COPPER LLC

DATE : 02/01/2011
SHEET 12 of 13

FIGURE 4.4


202
Raised South Impoundment
Jones Spring
TEP Phase 2 : West Engineered Structure
Existing Power Line to be Relocated
Toe of West Engineered Structure
Pump Station No. 4
Historic Lincoln Highway
Archaeological Site (Deadman Cave)
To KUC Magna Reservoir
201
3.1
3.2
3.4
3.3
4.1
4.5
4.4
4.3
4.2
0
1,000
2,000
Scale in Feet
PRELIMINARY
Legend
Outfall
Culvert
Breach
Head Gate
Well Head
Preliminary Project Boundary
Stream/Ditch
Processed Water
Power Line
Flow Direction
Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Non-Impacted Wetlands
Potential Non-Water of US
Jurisdictional Wetland
Jurisdictional Other Water
Potential Water of US
Jurisdictional Reference # : SPK-2009-01213-UO (FEB. 2010)
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
PHASE 2
WEST ENGINEERED STRUCTURE
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
SHEET 13 of 13
FIGURE 4.5


80
7200 Bypass & Detour
Proposed UPRR Alignment
North Impoundment
TEP Phase 1
7200 WEST
Existing UPRR
TEP Phase 2
W 1300 S
Realigned C7 Ditch
South Impoundment
202
TEP Phase 2 : West Engineered Structure
8000 W
TEP Phase 2 : East Engineered Structure
201
201
TEP Phase 2 : South Engineered Structure
N
0
4,000
8,000
Scale in Feet
PRELIMINARY
Legend
Preliminary Project Boundary
Property Owner
Kenecott Utah Copper LLC
Deseret Title Holding Corp.
Property Reserve, Inc.
Golden Eagle Oil Refinery Inc
Salt Lake City Corp.
Salt Lake, Garfield Western RR Co,
Union Pacific RR Co,
Utah Department of Transportation
Utah Power and Light Co.
Aerial: NAIP 2007
RioTinto
PROPOSED KENNECOTT TAILINGS EXPANSION PROJECT (TEP) SALT LAKE COUNTY, UTAH
ADJOINING PROPERTIES
KENNECOTT UTAH COPPER LLC
DATE : 02/01/2011
FIGURE 5.0