



Navigation Protection Program
Suite 610, 800 Burrard Street
Vancouver, B.C. V6Z 2J8

Your file

Our file
2014-500331

May 18, 2017

BC Hydro
Suite 600 - Four Bentall Ctr
1055 Dunsmuir St.
Vancouver, BC V7X 1V5

Attention: Karen von Muehldorfer

RE: Notice to the Minister under the *Navigation Protection Act* for Approval of a Debris Boom, located on the Peace River, 56° 13' 16.85" N x 120° 56' 40.26" W, Site C Dam, on unsurveyed foreshore or land covered by water being part of the bed of Peace River, Site C, lying within Sec 28, Twp 83, Rge 19, West of the 6th Meridian Peace River District, City of Fort St. John, in the Province of British Columbia

The Minister of Transport has determined under section 5 of the *Navigation Protection Act* (NPA) that your work is likely to substantially interfere with navigation.

Enclosed please find the Approval for the above-noted work issued by the Minister of Transport in accordance with subsection s.6(1) Placement of the NPA.

The owner is responsible to ensure the temporary construction works are designed and maintained to withstand local weather conditions and the wash of vessels transiting the area.

Pursuant to Sec. 34 of the *Navigation Protection Act*, the owner shall provide unimpeded access to the Minister or their representatives for inspection purposes.

Pursuant to Sec. 5 of the *Navigable Waters Works Regulations*, no person shall permit any tools, equipment, vehicles, temporary structures or parts thereof used or maintained for the purpose of building or placing a work in a navigable water to remain in such water after the completion of the project.

Pursuant to Sec. 6 of the *Navigable Waters Works Regulations*, where a work or a portion of a work that is being constructed or maintained in a navigable water causes debris or other material to accumulate on the bed or the surface of such water, the owner of that work or portion of that work shall cause the debris or other material to be removed to the satisfaction of the minister.

This permission relates only to the effect of your work on navigation under the NPA and does not grant any rights related to the ownership of the bed of the waterway.

Please note that the NPA, amongst other obligations, requires the owner to immediately notify the Minister if your work causes or is likely to cause serious or imminent danger to navigation and take reasonable measures to remediate the danger to navigation (section 12 of the NPA).

Should you have any questions, please do not hesitate to contact our office in Vancouver by phone at (604) 775-8867 or by e-mail at NPPAC-PPNPAC@tc.gc.ca.

Respectfully,



Colin Parkinson
Officer Navigation Protection Program
Programs Group
Transport Canada
Pacific Region

CP/co

cc: DFO
Brian.Naito@dfo-mpo.gc.ca
Stephanie.Major@dfo-mpo.gc.ca

FLNRO - Keith.Hansen@gov.bc.ca

CEAA - Compliance.Conformite@ceaa-acee.gc.ca

First Nation's



Approval

OWNER: BC Hydro
Suite 600 - Four Bentall Ctr, 1055 Dunsmuir St.
Vancouver, BC V7X 1V5

WORK: Debris Boom

SITE LOCATION: Located at Approximately 56° 13' 16.85" N x 120° 56' 40.26" W,
Peace River, Site C Dam, on unsurveyed foreshore or land covered by
water being part of the bed of Peace River, Site C, lying within Sec 28,
Twp 83, Rge 19, West of the 6th Meridian Peace River District, City of
Fort St. John, in the Province of British Columbia

Regarding the notice and application to the Minister of Transport, submitted pursuant to the *Navigation Protection Act*, for an approval of a work, the Minister hereby approves the Placement of the above-described work and the attached plans pursuant to subsection 6(1) in accordance with the following terms and conditions:

1. The NPA Approval and its Terms and Conditions shall be posted at the dam site office.
2. In the event that the operation of the above works is terminated prior to completion, it will be the proponent's responsibility to remove the works and associated equipment in its entirety from the waterway including any anchors and pilings. The banks and bed of the waterway disturbed by the works shall be contoured to match the local conditions as required.
3. Both ends of the debris boom and on a buoy located at the midpoint shall be marked with flashing yellow lights. The lights are to be in operation in darkness or limited visibility. The light will display either a 0.5 second flash every 4 seconds, with a minimum nominal range of 1 nautical miles. Proponent shall regularly inspect buoy to ensure light function.
4. A minimum of 3 Yellow Cautionary buoys are to be equally spaced and maintained along the boom. These buoys are to be no less 1 metre in diameter. Horizontal bands of yellow reflective tape not less than 10 cm in width and 15 cm in length shall be: (1) Placed at intervals around the horizontal circumference of the buoys or; (2) Displayed from suitable topmarks provided a reflective surface of not less than 10 cm X 15 cm is visible from all directions. The centre buoy shall display the yellow flashing light as per Condition #3
5. The proponent shall commence with the Boater Communication Protocol and required communications 30 days prior to the installation of the Boom advising users of the boom installation date, portage system and location of the paddle boat portage.
6. As built plans of the works are to be forwarded to Transport Canada upon completion of the project.
7. The proponent shall inspect the boom every 2 weeks or after significant weather events.



8. Install and maintain warning signs on both banks of the river at locations approximately 3 kilometres, 1 kilometre, 500 meters upstream and approximately 500m downstream of the boom site. The Signs shall state:

At approximately 3km upstream

**WARNING BOOM AHEAD
River blocked 3KM, ahead**

At approximately 1000m upstream (Can be combined with Portage sign)

**WARNING BOOM AHEAD
River blocked, 1KM ahead**

At approximately 500m upstream

**WARNING BOOM AHEAD
River blocked 500m, ahead**

At approximately 500m downstream

**WARNING BOOM AHEAD
River blocked 500m ahead**

At the navigation opening of the construction bridge on the Peace River facing downstream

**WARNING
River blocked 4km ahead**

and be in accordance with the Canadian Dam Association Technical Bulletin on Public Safety around Dams, 2011 or as updated.

Portage System for the temporary Debris Boom

9. The Portage Condition for this permit shall remain in force until the river is physically closed by works approved under the Navigation Protection Act (NPA) Approval issued July 26th 2016 for NPA file # 2008-500822 or in the opinion of Transport Canada rendered unsafe for transit. At which point the portage requirement will be conducted by the Terms and Conditions of that approval.
10. A powerboat portage system includes appropriate boat launches and the transportation of vessels and allowable passengers for each such vessel. The owner is only required to portage vessels that are already waterborne, that have arrived by water to the boat launch from another location and have met the notification requirements.
11. The owner is required to portage up to the allowable number of passengers based on the certified capacity of the portaged vessel. The owner can request this information as part of its notification requirements;

The owner shall:

- (a) Upon the closure of the river, unless the upstream or downstream boat launches are blocked by ice, provide a portage system operating in both directions from downstream of the construction zone to upstream of the construction zone to transiting vessels during daylight hours. The portage system shall be able to transport the watercraft typically transiting the river including canoes and large jetboats.
- (b) If the portage system is not operating, because boat launches are blocked by ice or the reservoir is being filled, post notices of this suspension of service on the BC Hydro project website or the point of reservation and at the portage locations.



- (c) Operate the portage system if provided notification 24 hours in advance, unless multiple vessels are transiting together (a public or groups event) in which case a minimum of 2 weeks notice is required.
 - (d) Provide adequate information about the portage systems and notification requirements using the Boater Communications Protocol, and:
 - i. For the initial start of the portage systems, publicize in regional newspapers bi-weekly for the first month, weekly for the next 2 months. (can be combined with river closure information)
 - ii. For subsequent years of construction, publicize weekly for the months of April, May and June
 - iii. Permanent posted notice at the Peace Island Park boat launch
 - iv. Permanent posted notice at the Halfway river boat launch
 - v. Permanent posted notice at the Lynx Creek boat launch
 - vi. Post portage information on the owner website, on a page related to the project
12. In addition to the portage system, the owner is required to set up a portage for human powered craft at the boom site. The portage will consist of signage on the upstream and downstream ends and a marked & cleared path with launch points at each end. The location of the portage to be included the information prescribed in (d) above. Portage to be in place and operational for the duration of boom, until the river is closed by other permanent works or in the opinion of Transport Canada rendered unsafe for transit.
13. Install and maintain a sign on the opposite bank of the portage at a location approximately 1000m upstream indicating which side of the river the portage is on. Sign shall be a minimum of 72" x 48", a white background with black lettering, with text as outlined below (Use appropriate river side). Sign to be emplaced prior to and for the duration of boom, until the river is closed by other permanent works.

**PADDLE BOAT PORTAGE AHEAD
RIVER RIGHT/LEFT***

SIGNED in two copies on May 18/17 in Vancouver, B.C.

Colin Parkinson
Navigation Protection Program Officer
Programs Group
Transport Canada
Pacific Region
For the Minister of Transport



Approval

OWNER: BC Hydro
Suite 600 - Four Bentall Ctr, 1055 Dunsmuir St.
Vancouver, BC V7X 1V5

WORK: Debris Boom

SITE LOCATION: Located at Approximately 56° 13' 16.85" N x 120° 56' 40.26" W,
Peace River, Site C Dam, on unsurveyed foreshore or land covered by
water being part of the bed of Peace River, Site C, lying within Sec 28,
Twp 83, Rge 19, West of the 6th Meridian Peace River District, City of
Fort St. John, in the Province of British Columbia

Regarding the notice and application to the Minister of Transport, submitted pursuant to the *Navigation Protection Act*, for an approval of a work, the Minister hereby approves the Placement of the above-described work and the attached plans pursuant to subsection 6(1) in accordance with the following terms and conditions:

1. The NPA Approval and its Terms and Conditions shall be posted at the dam site office.
2. In the event that the operation of the above works is terminated prior to completion, it will be the proponent's responsibility to remove the works and associated equipment in its entirety from the waterway including any anchors and pilings. The banks and bed of the waterway disturbed by the works shall be contoured to match the local conditions as required.
3. Both ends of the debris boom and on a buoy located at the midpoint shall be marked with flashing yellow lights. The lights are to be in operation in darkness or limited visibility. The light will display either a 0.5 second flash every 4 seconds, with a minimum nominal range of 1 nautical miles. Proponent shall regularly inspect buoy to ensure light function.
4. A minimum of 3 Yellow Cautionary buoys are to be equally spaced and maintained along the boom. These buoys are to be no less 1 metre in diameter. Horizontal bands of yellow reflective tape not less than 10 cm in width and 15 cm in length shall be: (1) Placed at intervals around the horizontal circumference of the buoys or; (2) Displayed from suitable topmarks provided a reflective surface of not less than 10 cm X 15 cm is visible from all directions. The centre buoy shall display the yellow flashing light as per Condition #3
5. The proponent shall commence with the Boater Communication Protocol and required communications 30 days prior to the installation of the Boom advising users of the boom installation date, portage system and location of the paddle boat portage.
6. As built plans of the works are to be forwarded to Transport Canada upon completion of the project.
7. The proponent shall inspect the boom every 2 weeks or after significant weather events.



8. Install and maintain warning signs on both banks of the river at locations approximately 3 kilometres, 1 kilometre, 500 meters upstream and approximately 500m downstream of the boom site. The Signs shall state:

At approximately 3km upstream

WARNING BOOM AHEAD
River blocked 3KM, ahead

At approximately 1000m upstream (Can be combined with Portage sign)

WARNING BOOM AHEAD
River blocked, 1KM ahead

At approximately 500m upstream

WARNING BOOM AHEAD
River blocked 500m, ahead

At approximately 500m downstream

WARNING BOOM AHEAD
River blocked 500m ahead

At the navigation opening of the construction bridge on the Peace River facing downstream

WARNING
River blocked 4km ahead

and be in accordance with the Canadian Dam Association Technical Bulletin on Public Safety around Dams, 2011 or as updated.

Portage System for the temporary Debris Boom

9. The Portage Condition for this permit shall remain in force until the river is physically closed by works approved under the Navigation Protection Act (NPA) Approval issued July 26th 2016 for NPA file # 2008-500822 or in the opinion of Transport Canada rendered unsafe for transit. At which point the portage requirement will be conducted by the Terms and Conditions of that approval.
10. A powerboat portage system includes appropriate boat launches and the transportation of vessels and allowable passengers for each such vessel. The owner is only required to portage vessels that are already waterborne, that have arrived by water to the boat launch from another location and have met the notification requirements.
11. The owner is required to portage up to the allowable number of passengers based on the certified capacity of the portaged vessel. The owner can request this information as part of its notification requirements;

The owner shall:

- (a) Upon the closure of the river, unless the upstream or downstream boat launches are blocked by ice, provide a portage system operating in both directions from downstream of the construction zone to upstream of the construction zone to transiting vessels during daylight hours. The portage system shall be able to transport the watercraft typically transiting the river including canoes and large jetboats.
- (b) If the portage system is not operating, because boat launches are blocked by ice or the reservoir is being filled, post notices of this suspension of service on the BC Hydro project website or the point of reservation and at the portage locations.

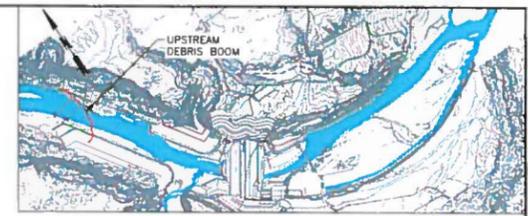
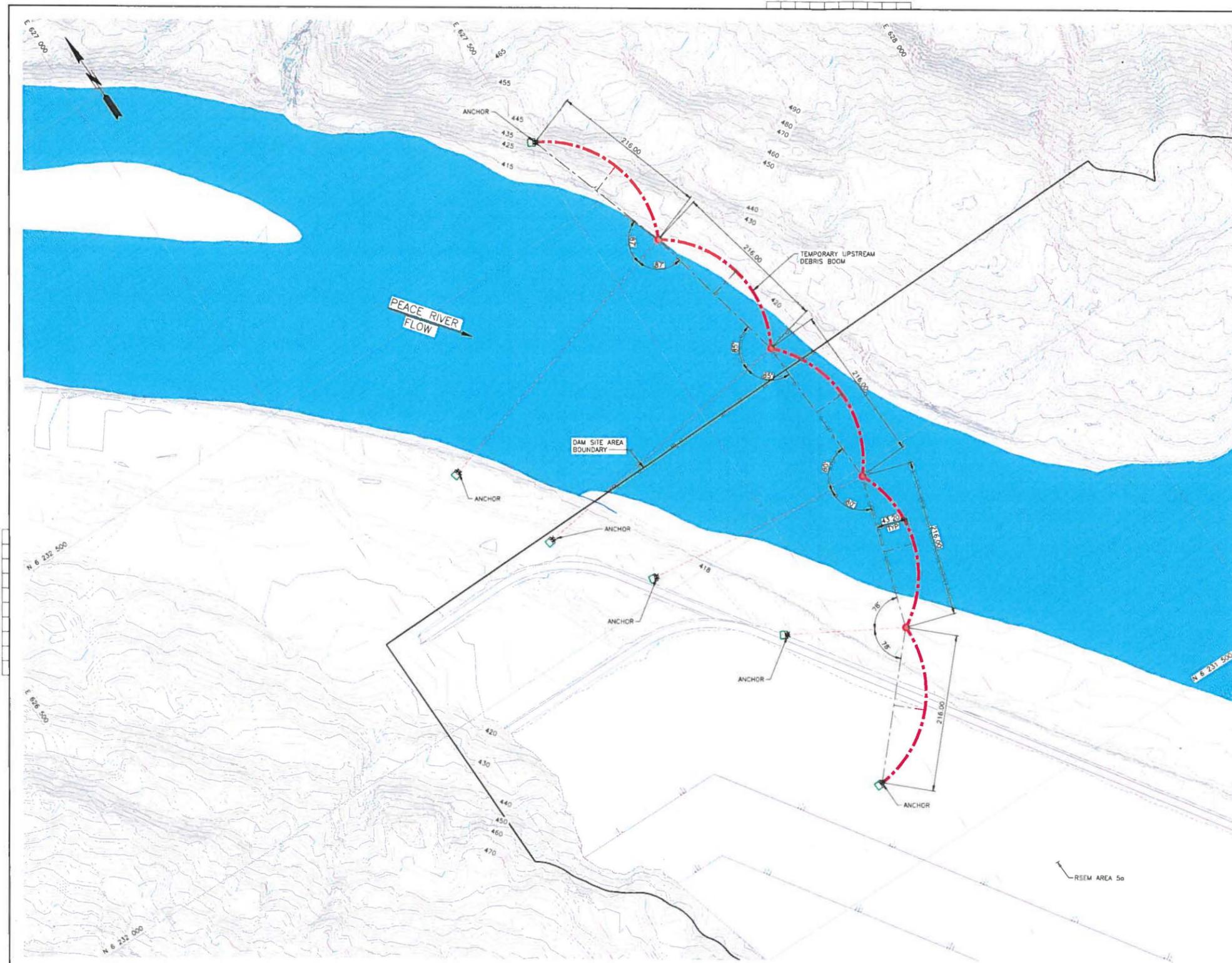


- (c) Operate the portage system if provided notification 24 hours in advance, unless multiple vessels are transiting together (a public or groups event) in which case a minimum of 2 weeks notice is required.
 - (d) Provide adequate information about the portage systems and notification requirements using the Boater Communications Protocol, and:
 - i. For the initial start of the portage systems, publicize in regional newspapers bi-weekly for the first month, weekly for the next 2 months. (can be combined with river closure information)
 - ii. For subsequent years of construction, publicize weekly for the months of April, May and June
 - iii. Permanent posted notice at the Peace Island Park boat launch
 - iv. Permanent posted notice at the Halfway river boat launch
 - v. Permanent posted notice at the Lynx Creek boat launch
 - vi. Post portage information on the owner website, on a page related to the project
12. In addition to the portage system, the owner is required to set up a portage for human powered craft at the boom site. The portage will consist of signage on the upstream and downstream ends and a marked & cleared path with launch points at each end. The location of the portage to be included the information prescribed in (d) above. Portage to be in place and operational for the duration of boom, until the river is closed by other permanent works or in the opinion of Transport Canada rendered unsafe for transit.
13. Install and maintain a sign on the opposite bank of the portage at a location approximately 1000m upstream indicating which side of the river the portage is on. Sign shall be a minimum of 72" x 48", a white background with black lettering, with text as outlined below (Use appropriate river side). Sign to be emplaced prior to and for the duration of boom, until the river is closed by other permanent works.

**PADDLE BOAT PORTAGE AHEAD
RIVER RIGHT/LEFT***

SIGNED in two copies on May 18/17 in Vancouver, B.C.

Colin Parkinson
Navigation Protection Program Officer
Programs Group
Transport Canada
Pacific Region
For the Minister of Transport



KEY PLAN
NTS

Reviewed / Examiné

Page 1 of 1
 2014-500331
 MAY 08 2017

By/par:
COLIN PARKINSON
 Navigation Protection Program /
 Programme de protection de la navigation

ISSUED FOR PROPOSAL

NOT FOR CONSTRUCTION



ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE



		SITE C CLEAN ENERGY PROJECT MAIN CIVIL WORKS PEACE RIVER TEMPORARY UPSTREAM DEBRIS BOOM PLAN	
ORIGINAL SEALED BY C.T. LUMB 24 NOV 2014 P. ENG APEGBC		DATE: 24 NOV 2014 DES: - DWG NO: 1016-C18-01011	SIZE: A0 R: 0

PLAN
1:2000

I:\DRAWINGS\07_MP_DESIGN\MP\UPSTREAMS\C18\1016-C18-01011.dwg
 11/27/2014 11:22 AM

REF #	DRAWING NUMBER	TITLE	REF #	DRAWING NUMBER	TITLE	NO	REMARKS	DATE	DESIGNED	INDEP CHK	DFTG CHK	DFTG CHK	INSP	REV	ACPT	REV	DATE	DESIGNED	INDEP CHK	DFTG CHK	DFTG CHK	INSP	REV	ACPT	
		REFERENCE DRAWINGS			REFERENCE DRAWINGS																				