

III. 3 Programa de trabajo (TECH-8)

En las páginas siguientes se muestra el programa de trabajo que se propone para realizar este proyecto haciendo un desglose de las actividades mas significativas a ser desarrolladas.

III. 3.1. Justificación para la optimización del equipo de personal

De acuerdo a lo indicado en los documentos del concurso, en la planificación de recursos para acometer este trabajo se ha llevado a cabo un ejercicio de optimización del personal clave que se ha traducido en asignaciones comunes a las distintas fases.

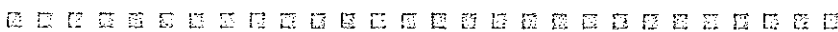
En los cronogramas presentados en el capítulo II.4 se muestra la distribución de todo el equipo; tanto clave como no clave; que se estima será necesario para la realización de esta consultoría.

En esos gráficos se puede apreciar la asignación continuada de algunos expertos que esquemáticamente se representa de la siguiente forma en cuanto al uso compartido del mismo profesional por más de una fase.

Paquete I
Propuesta de asignación compartida de profesionales clave para la Solución Base

Fase 1	Fase 1	Fase 2	
Gerente de Proyecto			} M i s r a p r o b a s e s f i a n e s I
Coordinador de Proyecto, especialista vial para NTH		X	
Ingeniero de puentes (diseño)		X	
Ingeniero de pavimentos		X	
Líder ambiental y especialista social - RAP		X	
Ingeniero de diseño de drenaje		X	
Especialista en manejo de sistemas de información			
Ingeniero geotécnico			
Fase 2			
Gerente de Proyecto			
Coordinador de Proyecto, especialista vial para NTH	X		
Ingeniero de puentes (supervisión de obras)	X		
Ingeniero de pavimentos			
Líder ambiental y especialista social - RAP	X		
Ingeniero de drenaje	X		
Especialista en manejo de sistemas de información			
Ingeniero geotécnico y de materiales			
Ingeniero residente (Sección 2)	X		
Ingeniero residente (Sección 3)	X		
Ingeniero residente (Sección 4)	X		

El Gerente del Proyecto, el Ingeniero de pavimentos, el Especialista en manejo de sistemas de información, y el Ingeniero geotécnico tendrán asignaciones continuadas en las dos Fases del Proyecto, lo cual se considera plenamente justificado por la naturaleza de los trabajos a llevar a cabo.



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ASSOCIATES



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Para la Solución Opcional el uso extendido de profesionales entre las tres fases del Proyecto se ha planificado de la siguiente forma:

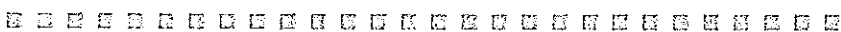
Paquete I
Propuesta de asignación de profesionales clave para la Solución Opcional

	Fase 1	Fase 2	Fase 3	
Fase 1				
Gerente de Proyecto				} Mis mo p r o f e s i o n a e l s p a r a v a r i a s
Coordinador de Proyecto, especialista vial para NTH				
Ingeniero de puentes (diseño)				
Ingeniero de pavimentos				
Líder ambiental y especialista social - RAP				
Ingeniero de diseño de drenaje				
Especialista en manejo de sistemas de información				
Ingeniero geotécnico				
Fase 2				
Gerente de Proyecto				
Coordinador de Proyecto, especialista vial para NTH				
Ingeniero de puentes (supervisión de obras)				
Ingeniero de pavimentos				
Líder ambiental y especialista social - RAP				
Ingeniero de drenaje				
Especialista en manejo de sistemas de información				
Ingeniero geotécnico y de materiales				
Ingeniero residente (Sección 2)				
Ingeniero residente (Sección 3)				
Ingeniero residente (Sección 4)				
Fase 3				
Gerente de Proyecto				
Coordinador de Proyecto, especialista vial para NTH				
Ingeniero de puentes (supervisión de obras)				
Ingeniero de pavimentos				
Líder ambiental y especialista social - RAP				
Ingeniero de drenaje				
Especialista en manejo de sistemas de información				
Ingeniero geotécnico y de materiales				
Ingeniero residente (Sección 5)				
Ingeniero residente (Sección 6)				
Ingeniero residente (Sección 7)				

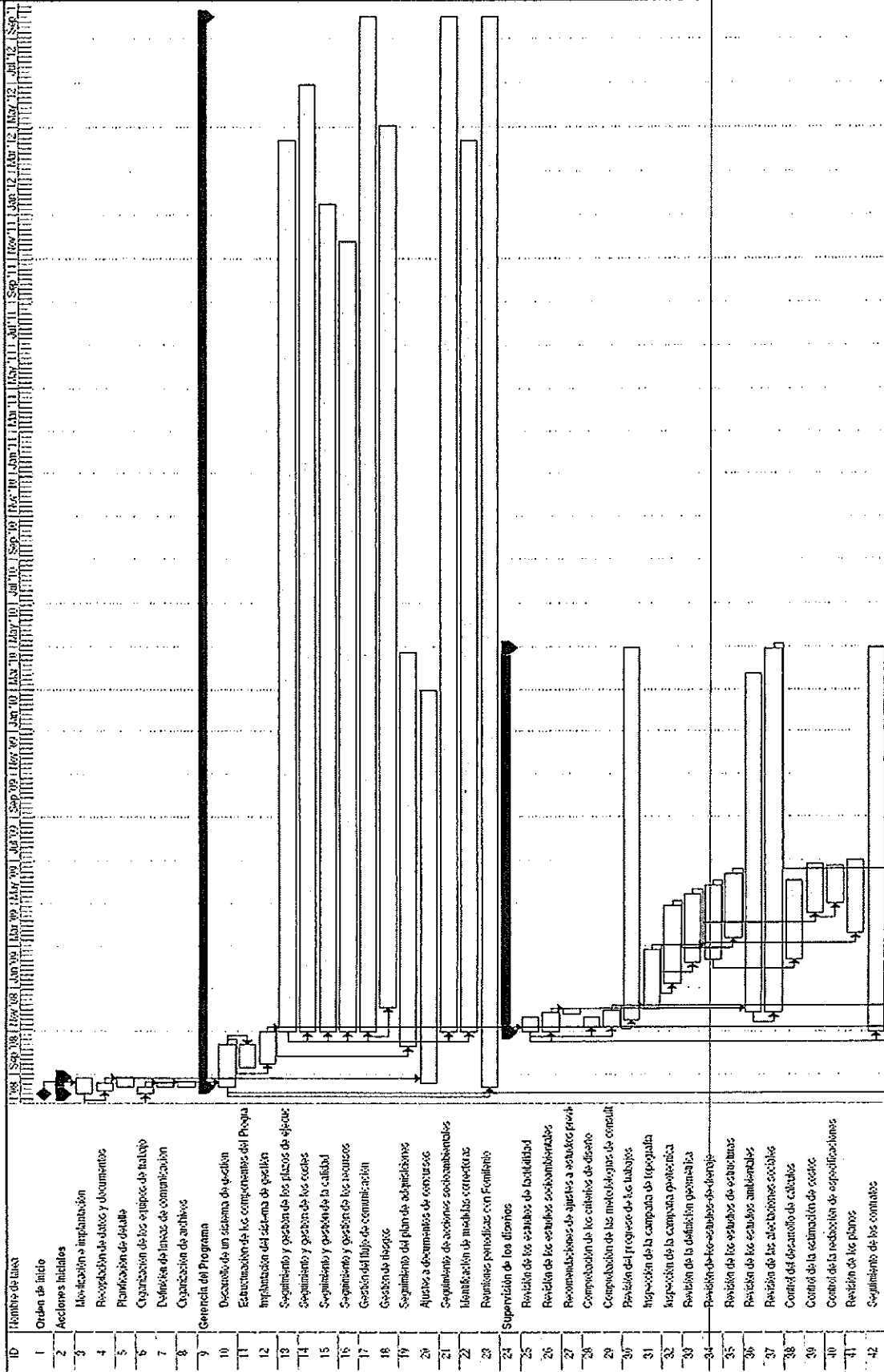
En esta Solución Opcional, adicionalmente al mismo enfoque de compartir profesionales entre las fases de diseño y de supervisión de obras, se ha previsto hacer uso del mismo equipo de profesionales en ambas fases de supervisión de obras, es decir, las Fases 2 y 3.

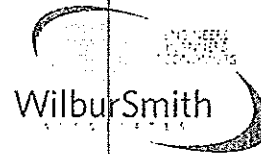
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PROYECTO DE CONECTIVIDAD DEL PROGRAMA DE FOMENTO EN EL SALVADOR
PAQUETE I
Programa de trabajo





4 de Septiembre, 2008

A: FOMILENIO
Winston Wallis – FOMILENIO Director de Adquisiciones
Charles Kendall y Asociados Ltd.
Agente de Adquisiciones para FOMILENIO
Boulevard del Hipódromo 441 – Col. San Benito
San Salvador Republica de El Salvador

Ref.: RFP FOMILENIO QCBS 2008-08 "Administración de Proyecto, Supervisión de Diseños y Construcción de la Carretera Longitudinal del Norte, y de la Red de Carreteras de Conexión del Proyecto de Conectividad"

Estimados Sres.:

Respondiendo a su solicitud el socio Wilbur Smith Associates-TYPSA (WSA-TYPSA) esta presentando la información y documentación solicitada en la reunión sostenida en sus oficinas el día primero de septiembre.

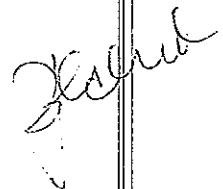
Confirmamos que el Sr. Alfonso Fidalgo y yo estaremos en sus oficinas para atender la reunión citada para el día viernes 5 de septiembre a las 3pm.

Sin otro particular me suscribo, no sin antes quedar a su disposición,

Atentamente,


Carmenza Becerra

9299



CKP



REPÚBLICA DE EL SALVADOR
FOMILENIO

COPIA

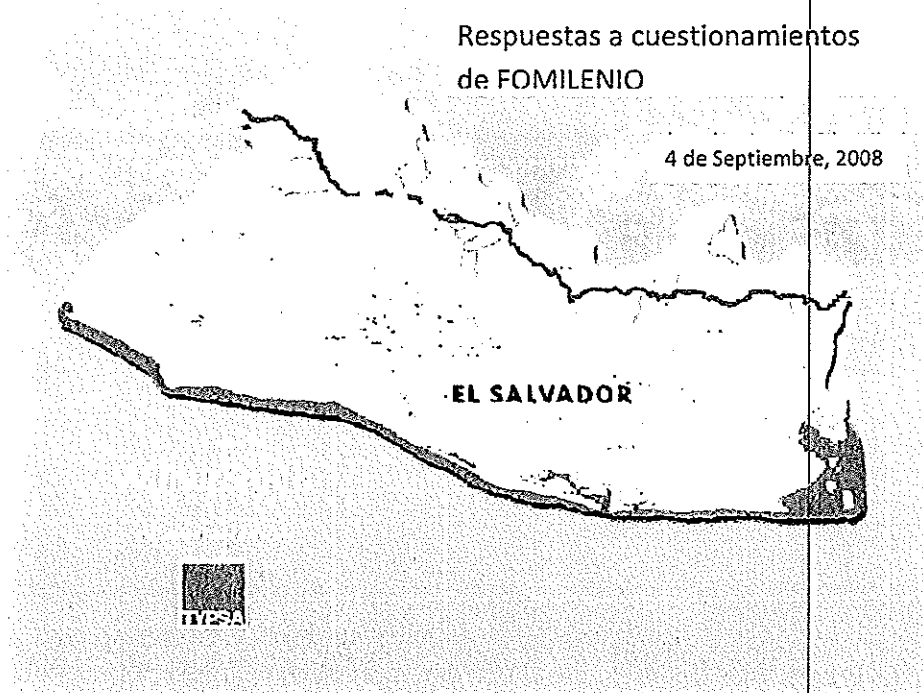
RFP FOMILENIO QCBS 2008-008

**SERVICIOS DE CONSULTORÍA PARA
GESTIÓN DE PROYECTO, SUPERVISIÓN DE DISEÑO
Y SUPERVISIÓN DE CONSTRUCCIÓN PARA EL
PROYECTO DE CONECTIVIDAD, INCLUYENDO:**

- (i) Carretera Transnacional Norte
- (ii) Red de Conectividad Vial

Respuestas a cuestionamientos
de FOMILENIO

4 de Septiembre, 2008



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RESPUESTAS A QUESTIONAMIENTOS DE FOMILENIO

REUNION DE SEPTIEMBRE 1, 2008

En carta de invitación a negociaciones enviada al socio Wilbur Smith Associates-TYPSA (WSA/TYPSA) el día 28 de agosto y en reunión entre FOMILENIO/CHARLES KENDALL y WSA/TYPSA del día primero de septiembre, 2008 se solicitó a WSA/TYPSA los documentos adjuntos y la siguiente información y aclaraciones:

1. ¿El Plan de Trabajo incluido en nuestra propuesta técnica contiene todas las Fases según se presentan en el RFP FOMILENIO QCBS 2008-08? La respuesta es afirmativa.
2. ¿El Plan de Trabajo incluye todas las Fases de la propuesta técnica? La respuesta es afirmativa.
3. ¿El Plan de Trabajo incluye todos los costos directos que se comunicó en las NOTAS AL PRECIO, incluidas con la propuesta financiera original, WSA/TYPSA interpreta FULLY LOADED MONTHLY RATE (FMLR) como costos directamente asignados al especialista propuesto y se compone de:
 - ✓ Salario del especialista
 - ✓ Gastos Generales (prestaciones sociales)
 - ✓ Ganancias de la empresa
 - ✓ IVA

En nuestra experiencia otros costos directos como:

- ✓ Renta oficinas
 - ✓ Operación oficinas
 - ✓ Papelería e insumos de oficina
 - ✓ Flotilla vehicular
 - ✓ Operación y mantenimiento flotilla vehicular
 - ✓ Mobiliario de oficina
 - ✓ Equipo de computadores
 - ✓ Licencias de software para operación de computadores
 - ✓ Operación y mantenimiento de equipo de computadores
 - ✓ Software para el Sistema de Información Gerencial (SIG)
 - ✓ Licencias y Mantenimiento del SIG
 - ✓ Capacitaciones en el SIG
 - ✓ Boletos aéreos de especialistas extranjeros
 - ✓ Hospedaje y viáticos a especialistas extranjeros y locales
 - ✓ Equipo para comunicaciones
 - ✓ Comunicaciones
 - ✓ Cargos de la Consultoría por manejo
 - ✓ IVA sobre costos listados arriba
- no forman parte de las FMLRs.

WilburSmith
ASSOCIATES



5/24/08

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Como ejemplo incluimos copias de una propuesta financiera presentada recientemente por WSA a Millenium Challenge Account de Mongolia (ver anexo I). En dicha propuesta también se pedía FLMRs, y un FIXED PRICE por toda la Consultoría que incluía:

- ✓ Costos del Personal Clave, basado en las FLMRs y los meses propuestos en el Plan de Trabajo
- ✓ Costos del Personal de Apoyo Técnico y Administrativo
- ✓ Otros Costos Directos, tales como los presentados arriba
- ✓ Costos de Garantías

Adicionalmente se solicitaban presentaciones del FIXED PRICE bajo dos enfoques:

- ✓ Por tareas de la Consultoría
- ✓ Por Opciones dentro del Programa de MCA-M para el proyecto siempre manteniendo el FIXED PRICE y las FLMRs.

Por lo tanto los costos directos del proyecto no se incluyeron, tal y como se comunicó en las NOTAS AL PRECIO incluidas con la propuesta original. A solicitud de FOMILENIO/CHARLES KENDALL WSA/TYPSA hizo una valoración de los costos directos (logística y operatividad) llegando a un precio de US\$4.901.000.00 (CUATRO MILLONES NOVECIENTOS UN MIL DOLARES con 00/100).

Para la preparación de dicha valoración FOMILENIO pidió a WSA/TYPSA utilizar los siguientes parámetros:

- ✓ Utilizar 50 meses como periodo máximo de duración del Programa
- ✓ Utilizar los tiempos incluidos en el Plan de Trabajo presentado en la propuesta técnica
- ✓ Las OFICINAS DE CAMPO serán de responsabilidad total de la empresa contratada para la Construcción. De acuerdo al RFP y a la Aclaración 13 del documento Aclaraciones No. 2, WSA/TYPSA solo ha incluido en este precio el costo de "consumibles de oficina"

4. *[Faint text]* Adjunto se presentan todas las cartas firmadas para todos los especialistas claves propuestos.

5. *[Faint text]* Adjunto se incluye el original solicitado.

6. *[Faint text]* Adjunto se anexan los desgloses solicitados. WSA/TYPSA quiere aclarar que el precio ofertado para el Contrato Base (Revisión de Diseños) hace uso de "economías de escala" y explica que el separar dicho monto, entre Paquete I y Paquete II, es únicamente a efectos de mostrar las cifras como componentes del monto global presentado originalmente. WSA/TYPSA se compromete a desempeñar sus funciones, según descritas en su propuesta técnica, dentro de ese monto combinado, no así por uno solo de los montos desglosados.



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APPENDIX J



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RFP FOMILENIO QCBS 2008-008
SERVICIOS DE CONSULTORIA

ADMINISTRACIÓN DE PROYECTO, SUPERVISIÓN DE DISEÑOS Y CONSTRUCCIÓN
DE LA CARRETERA LONGITUDINAL DEL NORTE Y DE LA RED DE CARRETERAS
DE CONEXIÓN DEL
PROYECTO DE CONECTIVIDAD

ACTA DE NEGOCIACIÓN DE CONTRATO
con
WILBUR SMITH / TYP SA

San Salvador, 15 de setiembre de 2008

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CHARLES KENDALL
& PARTERS LIMITED

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II. INICIO DE LAS NEGOCIACIONES.....	3
III. SESIONES DE NEGOCIACIÓN	4
IV. CONCLUSIONES Y RECOMENDACIONES.....	8

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I. ANTECEDENTES

El Gobierno de la República de El Salvador (GOES), ha recibido una donación de US \$ 460.9 millones del Gobierno de los Estados Unidos de América, a través de la Corporación del Reto del Milenio (MCC, por sus siglas en inglés), una corporación gubernamental de los Estados Unidos de América, creada para ayudar a facilitar la reducción de la pobreza a través del crecimiento económico. El Fondo del Milenio (FOMILENIO), la Cuenta del Reto del Milenio (MCA, por sus siglas en inglés), es la entidad establecida conforme a las leyes de El Salvador, para actuar en nombre del Gobierno y sujeto a los términos y condiciones de acuerdos relacionados y a la disponibilidad de fondos, el GOES pretende utilizar parte de los recursos indicados para pagos elegibles bajo los términos y condiciones establecidos en el contrato resultante de esta adquisición de servicios profesionales.

El proyecto de Conectividad incluido en el Convenio tiene como objeto principal la reducción de los costos y tiempo de viaje en la Zona Norte con el resto del país y con la región. Este proyecto esta dividido en las dos actividades siguientes: (i) "La Carretera Longitudinal del Norte - CLN" con una longitud de 290 km. en 7 tramos; y (ii) "La Red de Carreteras de Conexión - RCC" con una longitud de 240 km.

Las dos ofertas que pasaron la evaluación combinada (técnica y financiera) para los Paquetes I y II fueron Wilbur Smith/TYPSA y la firma NIPPON KOEI con propuestas financieras de US\$ 14,241,800.00 y US\$ 28,390,467.61 respectivamente, quedando evaluadas en ese mismo orden con 88,42 y 84,93 puntos totales cada una.

Los servicios a ser contratados de acuerdo a la solicitud de propuestas RFP FOMILENIO QCBS 2008-008 son seleccionados bajo el método de selección Basado en Calidad y Costo.

Habiéndose finalizado las Evaluaciones Técnica y Financiera respectivamente de las propuestas recibidas efectuadas por el Comité de Evaluación constituido para ese propósito, este último recomendó en su informe de evaluación proceder a negociar el contrato con el consorcio Wilbur Smith/TYPSA, la cual fue aprobada por la Dirección de FOMILENIO y con la no-objeción del MCC.

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En base a lo anterior, con fecha 28 de agosto de 2008, el PA procedió a invitar a la firma referida a iniciar las negociaciones en las oficinas de FOMILENIO a partir del 1° de setiembre de 2008 la cuales comenzaron en la fecha señalada, siguiendo las normas y procedimientos establecidos en las Guías de Adquisiciones de MCC .

II. INICIO DE LAS NEGOCIACIONES

Las negociaciones del contrato se realizaron en la Sala de Reuniones de FOMILENIO comenzando el 1° de setiembre de 2008 en cinco sesiones, a las cuales participaron los miembros de la Comisión de Negociación conformada por personal de FOMILENIO contando con la aprobación de la Dirección, siendo sus miembros los siguientes:

- Ricardo Tablas – Asesor Legal (quien actuó además como Coordinador)
- Tito Siguenza – Director de Adquisiciones
- Ricardo Hernandez – Director Financiero Institucional
- José Calderon – Coordinador del Componente Conectividad (Dirección de Implementación)
- Carlos Huezo – Coordinador de Medio Ambiente (Dirección de Implementación)
- Alex Guardado – MOP en los aspectos de Derechos de Vía y Reasentamientos

Participaron como observadores durante todas las sesiones:

- Juan Neffa de MCC El Salvador
- Mario Perez del PA CKP

Todos los miembros mencionados precedentemente firmaron la “Declaración de Imparcialidad y Confidencialidad”.

Por parte del Consorcio Wilbur Smith/TYPSA (WS/TYPSA) participaron :

- Carmenza Becerra – Director of US Government International Programs de Wilbur Smith
- Alfonso Fidalgo Suarez – Gerente Regional de TYPSA

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III. SESIONES DE NEGOCIACION

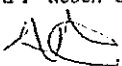
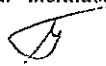

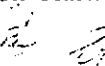

SESION DE NEGOCIACION 1-

Esta primera Sesión se llevó a cabo el 1º de setiembre de 2008 comenzando a las 15 h, habiéndose reunido los miembros de la Comisión de Negociación del Contrato compuesta de todos los miembros indicados en la Sección II anterior. Fue declarada abierta por Winston Wallis del Procurement Agent CKP.

El primer punto que se trató fue el de solicitar a los representantes del Consorcio la documentación que los acredita como autorizados para llevar a cabo la Negociación en representación del Consorcio Wilbur Smith – TYP SA. Los representantes del consorcio manifestaron que en la Propuesta fueron incluidos los respectivos Poderes de Representación, acreditándolos como responsables para realizar los trámites en esta operación en nombre de sus respectivas firmas. La Comisión manifestó estar conforme con los poderes presentados que los acredita y autoriza a llevar a cabo todas las etapas de la negociación.

Seguidamente la Comisión de FOMILENIO indicó que la negociación se iniciará siguiendo los puntos plasmados en la nota del 28 de agosto de 2008 (Memorando N° CO 018/2008 del PA), dirigida al Consorcio, siendo los mismos los siguientes:

- i. *Extensión de la validez de la propuesta* por 30 días adicionales. Dicha prórroga ya fue efectuada previamente mediante e-mail enviado al PA, solicitándole en esta Sesión que presenten el original por escrito. Los representantes del Consorcio manifestaron que el original solicitado será entregado al PA a la brevedad.
- ii. *Confirmación escrita de la disponibilidad del personal clave propuesto;* los representantes del consorcio de manera verbal, dan por confirmado el personal clave, indicando que remitirán por escrito al PA las cartas firmadas de disponibilidad de cada uno del referido personal.
- iii. *Confirmación de que todas las Fases para los dos Paquetes están incluidas en la Propuesta;* Verbalmente manifestaron que sí están incluidas todas las fases para los dos paquetes y que lo confirmarán por escrito.
- iv. *Confirmación de que todos los costos directos e indirectos necesarios para ejecutar las actividades indicadas en los RFP deben estar incluidos;* Los representantes del Consorcio

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Winston Wallis

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manifestaron que desde el punto de vista técnico ha sido todo incluido. Desde el punto de vista financiero Wilbur Smith/TYPSA ha presentado el FULLY LOADED MONTHLY RATE (FLMR) como aquellos costos directamente asignados al especialista propuesto.

- v. *Confirmación que todos los impuestos de Ley están incluidos:* Los representantes del Consorcio manifestaron que dichos impuestos han sido incluidos y que en los costos de logística a considerar tendrán en cuenta ese aspecto.
- vi. *Especialista en Estructuras y Puentes:* Se solicitó al Consorcio que reemplacen el Especialista propuesto, por incompatibilidad en la información presentada en su CV. Los representantes del Consorcio manifiestan que harán llegar la propuesta de un nuevo especialista con calificaciones que cumplan lo requerido

Las discusiones en esta primera sesión han permitido efectuar una revisión bastante profunda sobre el alcance de la Propuesta del Consorcio abordando puntos y temas claves levantados por el Comité de Evaluación en sus recomendaciones. Se acordó con el Consorcio que la información solicitada más arriba deberá ser presentada antes de la segunda sesión convocada para el 4 de setiembre a las 15 horas.

SESION DE NEGOCIACION 2

La segunda sesión se llevó a cabo el jueves 4 de setiembre de 2008 a las 15 h. Se inició con la manifestación de FOMILENIO indicando que se recibió comunicación de MCC en la que se expresa que debido a la falta de confirmación de disponibilidad de fondos para la Red de Carreteras de Conexión (RCC), FOMILENIO se deberá abstener de firmar contratos relacionados con la RCC incluyendo el Paquete II del CPM. Tal decisión fue transmitida el mismo día a las tres firmas calificadas del CPM (WS/TYPSA), NIPPON KOEI y ASP/REGIOPLAN).

Por su parte Wilbur Smith/TYPSA presentó la información y aclaraciones solicitadas en la carta de invitación a negociar del 28 de agosto de 2008 y durante la primera sesión del 1º de setiembre, la cual consistió en:

- *Confirmación de que todas las Fases para los dos Paquetes están incluidas en la propuesta presentada*
- *Confirmación de que todos los impuestos de Ley están incluidos en la propuesta presentada*

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- *Cartas de cada uno de los Especialistas Clave confirmando su continuada disponibilidad para atender el cargo asignado dentro de la propuesta*
- *Entregar el original de la carta de extensión de la validez de la propuesta hasta el 3 de octubre de 2008, misma que había sido enviada vía correo electrónico el día 25 de agosto de 2008*

Durante la sesión, partiendo de la decisión de MCC de suspender el proceso de adquisición del Paquete II, se solicitó al Consorcio: (i) que calculen el costo que tendría el Paquete I al eliminarse de la propuesta combinada (Paquete I + Paquete II) el Paquete II que incluyan la totalidad de los costos los aspectos logísticos y operativos inclusive. Dicha información debía ser presentada a la Comisión de Negociación para su revisión y consideración.

Se invitó al Consorcio a una tercera reunión el lunes 8 de setiembre para revisar y analizar el monto separado para el Paquete I solamente y el detalle de los costos no incluidos. A pedido del Consorcio la reunión debió realizarse el miércoles 10 de setiembre a las 15h.

SESION DE NEGOCIACION 3

Esta sesión se realizó el miércoles 10 de setiembre de 2008 a las 15 h. Se recibió de WS/TYPSA lo requerido en la sesión anterior correspondiente al costo que correspondería al Paquete I (Fases 1, 2 y 3) al eliminarse el Paquete II de la propuesta I + II. La propuesta presentada para la ejecución de la totalidad del Paquete I fue de **US\$ 13.568.195**.

La Comisión de Negociación procedió a revisar y aclarar con la firma el desglose y precio presentado, el cual en principio se encontró que era algo elevado. A fin de contar con un elemento de comparación se requirió del Consorcio presenten copia de la propuesta financiera que ellos incluyeron en la oferta del Paquete I solamente. El sobre con la oferta financiera permanece cerrado en la caja fuerte del PA.

En una segunda reunión de esta tercera sesión a las 19 h, el Consorcio atendió lo requerido más arriba, siendo; (i) el monto de la oferta financiera presentada para el Paquete I al momento de recepción de propuestas; y (ii) detalle de costos. Se les requirió que continúen revisando los rubros y

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costos unitarios dado que aún algunos de ellos aún se consideran elevados, y que presenten los resultados en la reunión del siguiente día jueves 11 de setiembre a las 3PM.

SESION DE NEGOCIACION 4

La sesión comenzó manifestando WS/TYPSA que ha revisado nuevamente los cálculos de costos y no les es posible modificar el monto presentado de US\$ 13.568.195 para el Paquete I. Se conversó sobre el período de ejecución de la consultoría donde en la propuesta está indicado 50 meses (de acuerdo a lo establecido en el RFP). Analizando los plazos a la luz de los atrasos incurridos se llegó a la conclusión que la consultoría difícilmente tendría una duración superior a 45 meses. Se les pidió que ajustaran los costos de acuerdo a ese período de 45 meses y revisaran rubros con posibilidad de ser reducidos en los costos. Para llegar a una decisión definitiva se los invitó a una última reunión el viernes 12 de setiembre a las 9 horas.

SESION DE NEGOCIACION 5 (última sesión)

Esta última sesión se desarrolló el viernes 12 de setiembre a las 9 h. El Consorcio manifestó que procedieron a ajustar los montos de acuerdo al período acordado de 45 meses para la ejecución de la consultoría y revisar algunos rubros.

La firma presentó su propuesta definitiva por un total de US\$ 11.950.000 el cual cubre la totalidad de lo requerido en los Términos de Referencia del RFP.

El mismo viernes 12 de setiembre a las 19 h, WS/TIPSA presentó su último documento con: (i) los nuevos formularios de lo acordado durante la reunión de las 9 horas; (ii) notas aclaratorias relativas al Precio Final; y (iii) Resumen de aclaraciones sobre Debilidades anotadas en la Evaluación Técnica. Todos estos puntos fueron discutidos en la reunión de la mañana del viernes 12, cuyas explicaciones y aclaraciones fueron encontradas satisfactorias por la Comisión de Negociación.

CONCLUSIONES Y RECOMENDACIONES

Conclusiones

Con el fin de sintetizar y visualizar los valores de las distintas instancias desde la presentación de la propuesta por el asocio WS/TYPSA y durante el proceso de negociación, se presenta a continuación una tabla resumen:

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CHARLES KENDALL
& PARTERS LIMITED

Recomendaciones

Teniendo en consideración lo acordado durante la negociación entre la Comisión de Negociación y Wilbur Smith/TYPSA se recomienda adjudicar y contratar con este Consorcio el suministro de los servicios del CPM para el Paquete I de la Carretera Longitudinal del Norte por un precio de USS 11.950.000.

No habiendo más que hacer constar, firmamos la presente Acta de Negociación el día 16 de setiembre de 2008 en San Salvador, República de El Salvador.

COMISION DE NEGOCIACION

José Tito Siguenza

Alex Guardado

Ricardo Hernandez

Carlos Huevo

Ricardo Tablas

José Calderón

OBSERVADOR POR PA (CKP)

Mario Perez

POR EL CONSORCIO WILBUR SMITH/TYPSA

WILBUR SMITH: Cannenza Becerra

TYPSA: Alfonso Fidalgo Suarez

This **CONTRACT AMENDMENT** (this "Agreement Amendment") is made as of 8th of May 2009 by and between, on the one hand, **Fondo del Milenio**, a Salvadoran autonomous public entity created pursuant to Legislative Decree No. 189, dated December 20, 2006 (hereinafter called "**FOMILENIO**"), and, on the other hand, **Wilbur Smith Associates Inc.** (the "**Consultant**") in association with **Técnica y Proyectos, S.A. (TYPASA)** each of which will be jointly as severally liable to FOMILENIO for all of the Consultant's obligations under this Contract amendment and is deemed to be included in any reference to the term "**Consultant**"; FOMILENIO and the Consultant are referred to herein collectively, as "**Parties**," and each individually a "**Party**".

RECITALS

WHEREAS, the Parties executed a **CONTRACT AGREEMENT** dated 29 of September 2008, which according to Special Condition of Contract Clauses number 2.3 and 6.1 is comprised of a Base Contract that includes an eighteen month period for Phase 1 worth US\$ 5,296,872.00 and a thirty three month period for Phase 2 worth US\$ 3,300,600.00 plus an Optional Contract identified as Phase 3, of twenty one month worth US\$ 3,352,528.00; all of which together are comprehended in a forty five month Contract Period.

WHEREAS, the services to be provided as described in detail in Appendix A are Connectivity Project Management Services, throughout Base Contract, Supervision of Design Consultants through Phase 1 and Supervision of Construction through Phases 2 and 3.

WHEREAS, the above services are auxiliary to the implementation of the Connectivity Project for the Northern Transnational Highway, as such they need to respond to its objectives in a harmonized and coordinated scheme.

WHEREAS, General Condition of Contract number 2.4 provides that modification to the terms and conditions of the Contract shall be made by written agreement between the Parties, only after written consent of MCC.

WHEREAS, FOMILENIO Infrastructure Unit has reviewed and updated the Implementation Strategy and Work Plan, while the Board of Directors of FOMILENIO approved this implementation strategy and work plan for the Connectivity Project in its meeting No. JD 60-2009, held on March 25, 2009.

WHEREAS, in order to adapt the Contract services to the mentioned strategy and to the feasibility studies and designs of Northern Transnational Highway to be delivered by the Ministerio de Obras Públicas, Transporte y Vivienda y Desarrollo Urbano to FOMILENIO it is considered necessary to modify the obligations assignments and resources to be use in each Phase in a in accordance with the terms and conditions herein.

NOW THEREFORE, the Parties agree as follows:



1. Amendments. The Parties agree to modify the Contract as follows:

a. To substitute SCC 2.3 as follows:

"The Base Period shall be 32 months from the date of this Amendment. Base Period is comprised of Three Tasks; namely Task 1 with duration of 20 months, Task 2 with duration of 32 months, Task 3 with a duration of 3 months. Tasks 4, 5, 6 and 7 will be activated only after determined by the Parties through a negotiation in good faith to agree on a fixed cost and term for each of the tasks.

b. To substitute SCC 6.1 as follows:

"The Contract Price is as follows:

- i. For Task 1 of the Base Period, a fixed price of \$ 2,331,000.00 for 20 months for the applicable Services described in Appendix A hereto; and for Task 2 of the Base Period, as fixed price of \$3,513,000.00 for 32 months for the applicable Services described in Appendix A hereto; and Task 3 for 3 months at a fixed price of \$ 230,200.00
- ii. As agreed by the Parties in advance, consistent with SCC 2.3, Tasks 4, 5, 6 and 7, a fixed price and term will be determined for each Task up to \$4,189,323.00.
In the event the Parties are unable to reach agreement on the scope and fixed price of tasks 4, 5, 6 and 7, such tasks shall not form part of this Contract.
- c. To include SCC 2.4.2
Substantial Modifications will require prior written consent of MCC according to Program Procurement Guidelines.
- d. To delete the following paragraph from SCC 3.5
"For each Key or Non- Key Personnel or technician that is not at the site, without justified reason, according to the work plan (in accordance with the profile of the staff, period of assignment, and frequency of visits) a specific penalty of Five Hundred US Dollars (US\$ 599) per day will be applied. In the case that a substitution of any professional or technician is necessary, it shall be done with a substitute with equal or higher profile than the one to be replaced, and with the prior approval of FOMILENIO."
- e. To substitute SCC 4.2.2 as follows:
"Other Personnel to be submitted to MCA Entity for review and approval shall be limited to Key Professional Personnel"
Payments for the deliverables shall be made according to the payment schedule established on Appendix E of the Contract."
- iii. To modify Contract Appendix A – Description of Services modified according to the document attached to this Amendment, Appendix A – Description of Services.
- iv. To modify Contract Appendix B – Reporting requirements and deliverables modified as the document attached to this Amendment, Appendix B – Reporting requirements and deliverables.
- v. To delete in its entirety Appendix D.
- vi. To delete in its entirety Appendix DI.

- vii. To Modify Appendix E: Revised Payment Schedules according to the document attached to this Amendment, Appendix E: Payment Schedule.
 - viii. To delete in its entirety Appendix H-The TOR and its Amendments 1 and 2, as well as the Clarifications 1 and 2.
 - ix. To delete in its entirety Appendix I – The Technical Proposal presented by Wilbur Smith/TYPSA and additional clarifications presented during the contract negotiation.
 - x. To delete in its entirety Appendix J – the negotiation minutes.
2. Payment of services rendered before the effective date of this Amendment will be liquidated as indicated in Letter of Understanding attached to this document and up to \$1,686,477.00. Any residual amount will increase the amount of item 1.b.ii.
 3. Effectiveness. This Agreement Amendment shall be effective as of the date first above written.
 4. Limitations. Except as expressly amended by this Amendment, all other terms, covenants and conditions of the Contract shall remain unchanged and in full force and effect.
 5. Applicable Law. This Amendment shall be governed by the Applicable Law.

IN WITNESS WHEREOF, each of the Parties has caused this Agreement Amendment to be executed by a duly authorized representative as of the day and year first written above.


FONDO DEL MILENIO
(FOMILENIO)

By: 
Name: José Angel Quirós
Title: Executive Director

FONDO DEL MILENIO
(FOMILENIO)

By: 
Name: Eduardo Ayala Grimaldi
Title: Board of Directors President

Wilbur Smith/TYPSA

By: 
Name: Santhosh V K Nair
Title: Regional Vice President

Appendix A – Description of Services

I. OBJECTIVE OF THE ASIGNMENT

Support the Deputy Executive Direction of Infrastructure in the management of the implementation, of the Connectivity Project for the Northern Transnational Highway from Metapán to Anamorós. The Connectivity Project Manager (CPM) shall provide the following main services for the Connectivity Project of the Compact in activities related to the Northern Transnational Highway, described in detail in the subsequent sub-sections of this appendix;

1. Connectivity Project Management Services
2. Services related to the Supervision of Design Consultants
3. Supervision of Construction Works (the Engineer as FIDIC)

CPM shall perform effective project management services in order to ensure that the Connectivity Project is completed on time, within budget and at a high level of quality. The services shall be provided to achieve the project goals and objectives as stated in the Compact and in accordance with the outcomes of prior, related activities.

II. BASE CONTRACT

Task 1

Supervision of the Construction Contractor(s) responsible for construction of Section 2 of the NTH (from Metapan to Nueva Concepcion): Activities include, but are not limited to: a) reviewing the final design of 44 km Section 2 of the NTH (from Metapán to Nueva Concepción and road access to Santa Rosa Guachipilin), in order to make all necessary adjustments to go ahead with the procurement process for construction, if any fatal flaw is detected; and, b) supervising the construction contractor(s), scheduling, managing Requests for Information (RFIs), change order requests, the provision of full or part-time supervision engineers, progress and scheduling, reviewing requests for payment and costs, reviewing as-built drawings, and providing quality assurance for the construction of about 44 km of the NTH (from Metapán to Nueva Concepcion) as described here:

- Segment 2.A: 23km section from Metapan to Santa Rosa Guachipilin. The Notice to Proceed was issued to the contractor on May 4, 2009. The contractual period for construction is 18 months.

- Segment 2.B.1: 8 km section of new road construction from Santa Rosa Guachipilin to El Matazano. The construction is expected to start by October 2009. The contractual period for construction will be 12 months.
- Segment 2.B.2: 13 km Section from El Matazano, to Nueva Concepción. The contract for this segment has been awarded and signed. The Notice to Proceed is scheduled to be issued in mid-May 2009. The contractual period for construction is 12 months.

This Section applies to the construction supervision services indicated in Base Contract for Section 2 of the NTH.

In addition to its continuing service as the Employer's Representative, the Consultant shall assume and perform all the duties and responsibilities of "the Engineer" as prescribed in the Conditions of Contract for Building and Engineering Works Designed by the Employer, FIDIC 1999, in particular for the construction supervision activities during the construction stage of the Connectivity Project. There will be no other supervisory engineer acting on behalf of FOMILENIO.

The Engineer shall provide complete construction supervision services, according to best international standards of road construction—whether noted below or not—as the supervisory representatives of FOMILENIO.

The Engineer shall prepare and manage the Connectivity Project's implementation schedule and shall monitor and report on the physical and financial progress of the works undertaken by Construction Contractors. The Engineer shall recommend preventive and corrective actions to be taken in the case of implementation delays, cost overruns, poor quality of the works that does not meet specifications, unmitigated environmental impacts, and other problems. In addition, the Engineer shall review and certify the accuracy of invoices submitted by entities providing technical and construction services.

Duties to be included in this portion of the assignment include but are not limited to:

- 1) Review the Final Design reports prepared by CPB as part of the study "Mejoramiento de la Red Vial de la Zona Norte de El Salvador" for 44 km of the NTH (from Metapan to Nueva Concepción), which are the main technical input for the further construction work. The Engineer will perform this review with additional information and clarifications provided by UIPC/MOPAs available, the Engineer shall timely advise FOMILENIO of any required modification or complementary work if any fatal flaw is detected, and after obtaining the corresponding FOMILENIO's approval, proceed to complement and modify the final reports accordingly.
- 2) Review and recommend any modification to the Scope of Work (Technical Specification and/or drawings) on the bidding document for construction works;
- 3) Prepare the agenda and presentation for the kickoff (pre-construction) meeting with the contractors of each different project and discuss the agenda with FOMILENIO prior to the meetings. During this meeting, points of contact shall be identified and procedures for exchange of information and communications are discussed and decided upon. Prepare meeting minutes for this meeting and any project meeting thereafter;
- 4) Review and comment on or approval of the programs of work submitted by construction contractors;

- 5) Review and approve construction plans and methods proposed by construction contractors, for road sections and bridges;
- 6) The Engineer through the Main Resident Engineer shall identify, analyze, evaluate and manage all risks related to this Section.
- 7) The Engineer through the Main Resident Engineer shall collect all the information regarding project implementation and update the Project Management Information System in a timely fashion. For this, the NTH-PM shall make it available in real-time on such web-based information system. Any information to be divulged by the NTH-PM shall be previously discussed with FOMILENIO.
- 8) The Engineer shall supervise the activities of the construction contractors related to ROW and RAPs, including but not limited to the following:
 - Monitor the finalization of pending cases which by any reason were not completed in the design stage. This activity shall apply in the following areas: (i) acquisition of right of way or economic compensation; and (ii) resettlement or physical relocation.
 - Ensure that construction of works by the contractors is executed according to the drawings of right of way acquired by FOMILENIO, avoiding that contractors use land or affect constructions not included in the acquisition.
 - Ensure that construction contractors provide an office space for attention of residents of the project area, resolution of claims and social problems resulting from the construction works.
 - Follow-up the processes of resettlement on those sections or segments where still exists some problems, and look for an adequate solution, in cooperation with FOMILENIO;
 - Ensure that the Contractor has attended any unforeseen social impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays, and inform FOMILENIO immediately;
 - Ensure that the construction contractors execute the access solution to properties as identified in the design stage; and
 - Cooperate with FOMILENIO to avoid the illegal occupation (usurpation) of the acquired ROW.
- 9) Monitor and report on the physical and financial progress of the works undertaken by construction contractors and recommending actions to be taken when progress is not in accordance with the approved program;
- 10) Ensure that the quality of the construction works are completed according to the design drawings and specifications, and providing quality assurance on quality control tests performed by contractors;
- 11) The Engineer shall have its own independent laboratory and equipment and test sites to control construction materials quality, independently of the Contractor's laboratory and equipment; the provisions for laboratory space and equipment will be provided to them as established in Appendix F of this contract. The Engineer shall include a quality assurance (QA) testing plan with a minimal number of respective QA

tests per unit road and/or bridge as a percentage of the number of tests in the approved QC plan of the Contractor;

- 12) Monitor and ensure that the Construction Contractors prepare and submit EMP implementation plans for the Engineer approval. Review the proposed EMP implementation plans with attention to the appropriate sequencing and integration of EMP activities with related construction works. Comment and/or approve the EMP implementation plans.
- 13) Assist FOMILENIO in the implementation of the EMP and the HIV/AIDS Awareness Plan, in accordance with the implementation plan of the EMP, including all environmental measures that apply to borrow pits, dumping areas and camp yards, as well as all public outreach and consultation activities;
- 14) Monitor the processes related to environmental issues carried out by the Contractors with MARN, such as new sites for borrow banks, camp yards and dumping areas, as well as processes with any other institution;
- 15) Ensure that the Contractor has attended any unforeseen environmental impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays;
- 16) Certify that the monthly certificates for payment from construction contractors accurately reflect the value of the works completed and recommend to proceed for payment;
- 17) Ensure that the Construction Contractors perform their work in accordance with the Compact, MCC's regulations, Salvadoran legal framework and any other provisions given in the construction contract;
- 18) In case of where the construction contractor does not meet its contractual obligation, the Engineer shall report the case immediately to FOMILENIO and compile all support documents pertaining to such case and make proper recommendations;
- 19) Compile and evaluate information for accident reports as they occur and report to FOMILENIO;
- 20) Prepare and issue site instructions to construction contractors, as necessary for Project implementation;
- 21) To maintain the Record Book (Bitacora) at the work site and use it for daily communication with contractors and to maintain sequenced registers of main events in a timely manner during the development of the works;
- 22) Review, verify the accuracy, respond, and approve all necessary shop drawings submitted by the construction contractors;
- 23) Review, approve and monitor the Quality Control Plan submitted by the Construction Contractors;
- 24) Review and comment on or recommend approval of construction contractors proposed change (variation) orders to FOMILENIO. Prior to propose to FOMILENIO, the Engineer shall discuss these matters with UIPC/MOP in relation to technical issues;
- 25) Propose change orders for the approval by FOMILENIO; this shall also include the cost and time impact of such proposed changes, if any. The Engineer shall also be required to submit the various alternatives with cost-benefit analysis and effect on time for the particular section on construction and for the project as a whole for facilitating the decision by FOMILENIO.

Prior to propose to FOMILENIO, The Engineer shall discuss these matters with UIPC/MOP in relation to technical issues;

- 26) Review and approve reports submitted by construction contractors;
- 27) Review, approve and monitor the Safety and Occupational Health Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Safety and Occupational Health Plan;
- 28) Provide photographs of construction documenting weekly and monthly progress and potential trouble areas according to the formats to be defined previous to the commencement of the construction supervision activities; these photographs should be posted on the web-based project management system.
- 29) Review and certify monthly payment certificates of construction contractors;
- 30) Analyze and make recommendations regarding claims submitted by construction contractors;
- 31) Attend claims meetings between FOMILENIO and construction contractors;
- 32) Communicate with businesses and communities affected by any of the works undertaken under the Project to keep them aware of the construction process and schedule;
- 33) Review (verify accuracy of) the as-built drawings prepared by construction contractors and compiling complete sets of these drawings for FOMILENIO on a monthly basis;
- 34) Perform pre-final and final inspections of projects sites, as well as prepare, as and if applicable, detailed punch lists and verify that all punch list items are corrected prior to recommendation of FOMILENIO acceptance of the completion of the works and issuance of the Taking Over Certificate;
- 35) Prepare a Final Report for each one of the road projects, including recommendation to FOMILENIO for Final Acceptance of all the works included in the contract documents and amendments, with a quality certification, stating that IRIs or any other evaluation parameters have been accomplished;
- 36) Maintain orderly working files and a comprehensive, computerized log for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and monthly progress reports, contract documents including amendments, notices to proceed, change orders and modifications, all in a system which is comparable with software used by FOMILENIO, which will provide deliverable inventory, scheduled dates and actual status.

During the course of the work, the Engineer shall maintain it in good order and in a reference library format in office space in San Salvador for use by FOMILENIO staff. From time to time, FOMILENIO may request the Engineer to show documents to interested parties, approved by FOMILENIO. Documents of a sensitive nature should be stored separately in the reference library. Prior to completion of the period of work, the Engineer shall pack and deliver to FOMILENIO the entire contents of the Project Library in good order and properly indexed and marked. In addition, the Engineer shall provide FOMILENIO with all electronic files of any and all project documents stored in a media acceptable to FOMILENIO including a comprehensive, well-organized electronic index of all those documents. The copyright of all Project materials will remain with FOMILENIO;

- 37) Answer, together with the construction contractors if necessary, to any comment on the performance of the works issued by FOMILENIO;
- 38) Perform all other construction supervision and project administration tasks as specified in the contracts between FOMILENIO and construction contractors;
- 39) Support or participate in third party environmental audits, as requested by FOMILENIO;
- 40) Review and verify that delivered materials meet specifications and criteria as described in the Technical Specifications and those that are required to meet the desired performance of the project. The Engineer shall perform necessary QA tests, in the field and in a laboratory as required, to ensure compliance of delivered materials to the specified criteria. The Engineer shall briefly describe its QA testing plan for expected delivered materials;
- 41) Conduct weekly meetings with the Contractors to review current work program and daily activities. The Engineer is expected to compile and report minutes from the meetings as part of scheduled deliverable reports;
- 42) For every construction project, the Engineer will facilitate periodic meetings between FOMILENIO, UIPC/MOP and the Contractor project management team to provide high-level status reports and discuss problems, delays, potential changes and other pertinent contractual impacts; and
- 43) Perform other duties as directed by the FOMILENIO.
- 44) Review and approve the Road Safety Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Road Safety Plan;
- 45) Verify and monitor the environmental auditing processes executed by the Ministry of Environment and Natural Resources (MARN as in Spanish);
- 46) Verify and monitor the process for releasing the Environmental Guarantee of the Project, as well as any guarantee for disposal sites, borrow pits and camp yards, which the Contractor or the MOPTVDU have submitted to MARN in relation with the Project.
- 47) The Quality Assurance Plan (QAP) of the Engineer shall consider as minimum the following content:
 1. Introduction (General Approach)
 2. Personnel
 - 2.1 Organization
 - 2.2 Tasks and responsibilities
 3. Construction Control
 - 3.1 Schedule Control and tracking
 - 3.2 Physical Control
 - 3.3 Financial Control
 - 3.3.1 Monthly Statements for Payments
 - 3.3.2 Liquidation
 - 3.4 Control of design changes during construction
 4. Quality Assurance of Materials and Construction Processes.
 - 4.1 Establishment of Acceptance Criteria
 - 4.2 Work inspections

- 4.3 Technical documentation (standards, specifications, others)
- 4.4 Laboratory Equipment
- 4.5 Verification of tests performed by the Contractor
- 4.6 Verification tests performed by the Engineer
- 4.7 Statistical control
5. Interrelation between Contractors and Employer
 - 5.1 Information Flow
 - 5.2 Correspondence and communication control
 - 5.3 Meetings
 - 5.4 Technical and financial reports

At commencement of the each one of the construction contracts, the QAP (presented as part of the technical proposal) shall be complemented and made compatible with the scope of works of the corresponding construction contract and submitted for approval to FOMILENIO.

TASK 2

Project Management Services for the Northern Transnational Highway (the "NTH-PM")

NTH-PM shall perform effective project management services in order to ensure that the NTH of the Connectivity Project is completed on time, within budget and at a high level of quality. The services shall be provided to achieve the project goals and objectives as stated in the Implementation Strategy and work plans of FOMILENIO and in accordance with the outcomes of prior, related activities.

The services of the NTH-PM provided to FOMILENIO shall include the following:

DESCRIPTION OF SERVICES

Monitoring the NTH Project Implementation Plan

In order to properly integrate all Compact activities, FOMILENIO has prepared an Implementation Plan, already approved by MCC. The preparation of the Implementation Plan also considered conditions in the Compact whose satisfactory completion is required to ensure continued funding from MCC.

- The NTH-PM shall review and continually monitor the development of the Implementation Plan of the Project, particularly as it pertains to the Connectivity Project, and shall recommend to FOMILENIO any adjustment or modification necessary to optimize and successfully complete the project on time, within budget and with the required quality.
- The NTH-PM shall maintain and update the existing Project Management Information System and distribute information necessary for overall monitoring and control of the project, from initiation through closing. The NTH-PM shall provide access to this system

to FOMILENIO and the UIPC/MOP during the period of services and at completion of the services to transfer the software and the rights for operation of this system to FOMILENIO. Implement training sessions for FOMILENIO and UIPC/MOP staff in using it, and all its applications.

- The NTH-PM shall continually monitor and assess the progress of activities in the Connectivity Project for the NTH in order to evaluate the initial scope statement and mitigate negative impacts to overall activity objectives, participating in meetings coordinated by FOMILENIO.
- The CPM shall continually monitor risks that could affect the Project implementation plan, immediately reporting to FOMILENIO as new risks or associated impacts to the Project are identified and developing strategies to manage the impacts, and especially to mitigate negative impacts

Project Cost Management

The NTH-PM shall assist FOMILENIO in managing the Connectivity Project budget with a financial analyst. Specific actions to ensure this objective include, but may not be limited to, the following:

1. The NTH-PM shall develop and implement a cost management plan to ensure that the Connectivity Project is completed within the project budget. The plan (introduced in its technical proposal) shall, as a minimum, determine the types and quantities of resources needed for project activities, assess and apply costs for the resources, allocate costs to project activities over the duration of the project, and manage changes to the project budget.
2. NTH-PM shall prepare timely analysis and compare the project's budget to actual costs when new design *or* construction contracts are awarded or amounts related to Right of Way or RAPs are finalized for sections of the NTH from the inception of the project to its completion. The NTH-PM shall incorporate and report any variances and change orders, tracking and monitoring all costs associated with the project against the overall project budget allocated.
3. NTH-PM shall provide FOMILENIO with timely and systematic reports of cost status and changes from the Engineer field team. This activity will gain importance in the implementation of the project when the actual designs are completed and construction cost increases are likely to exceed the total amount allocated for the Connectivity Project.

Project Schedule Management

The NTH-PM shall effectively manage the schedule of project activities to mitigate risks, such as higher project costs, non-delivery of benefits to the residents of the Northern Zone, and loss of MCC's and

GoES funds. To achieve this objective, the NTH-PM shall perform tasks, which include but may not be limited to, the following:

1. The NTH-PM shall develop a strategy and implement its proposed plan, upon acceptance by FOMILENIO, which, as a minimum, will accurately identify required activities and sub-activities, will demonstrate schedule and resource requirements, and will manage any changes and impacts that may occur.
2. As mentioned above, FOMILENIO has prepared an Implementation Plan, including a project schedule, which is already approved by MCC as the baseline for the Connectivity Project. Furthermore, the NTH-PM shall develop a more detailed MS-Project implementation plan capturing significant components of each design and construction contractors, and provide real-time progress updates and comparison to FOMILENIO's baseline plan, whenever needed by FOMILENIO. The NTH-PM shall review and continually monitor the development of this detailed implementation plan and prepare performance reporting against the schedule baseline as part of its schedule control, in which the NTH-PM shall also propose any proper and timely measures to secure the successful implementation of the Connectivity Project.

Project Cost Management

The NTH-PM shall assist FOMILENIO in managing the Connectivity Project budget with a financial analyst. Specific actions to ensure this objective include the following:

4. The NTH-PM shall develop and implement a cost management plan to ensure that the Connectivity Project is completed within the project budget at an aggregated level. The plan consolidates information of the project, and manages changes to the project budget.
5. NTH-PM shall prepare timely analysis and compare the project's budget to actual costs when new design or construction contracts are awarded or amounts related to Right of Way or RAPs are finalized for sections of the NTH from the inception of the project to its completion. The NTH-PM shall incorporate and report any variances and change orders, tracking and monitoring all costs associated with the project against the overall project budget allocated.

Task 3

Technical Services for preparation of conceptual design and Terms of Reference for bidding documents of Sections 5 and 6 under Design and Build scheme.

Task 4

Technical Services for Section 3 NTH

To be defined between the parties according to SCC 2.3.

La aprobación de FOMILENIO a los Informes Mensuales y Resumen Ejecutivo correspondiente al periodo sujeto a cobro por el Ingeniero serán requisito para realizar los pagos mensuales.

La aprobación de FOMILENIO y de MCC al Informe Final y al Manual de Mantenimiento de las Obras, y previa presentación de la Garantía de buena Supervisión, será requisito para proceder al pago final del Ingeniero.

TASK 2: Project Management Services for the Northern Transnational Highway (the "NTH-PM")

- Monitoring of the NTH Project Implementation Plan
- Project Scope Assurance and Assistance
- Project Schedule Management
- Project Cost Management
- Project Risk Management
- Project Procurement Process Assistance

Entregables:

- Informe Mensual
 - Medición y Evaluación del estado de cumplimiento de las actividades del Plan de Implementación del Proyecto de Conectividad, recomendando las medidas a tomar en caso de retraso.
 - Medición y Evaluación del grado de cumplimiento de la metas de inversión institucional (devengado y pagado) de cada contrato, y sub actividades por paquete constructivos.
 - Medición y Evaluación de la disponibilidad de fondos asignados al Proyecto de Conectividad, incluyendo proyecciones y recomendaciones.
- Informes Especiales
 - Informes Trimestrales de Proyección de Desembolsos
 - Informes Trimestrales de Proyección de Compromisos
 - Informes Trimestrales de Evaluación del Plan Financiero Multianual y de Implementación del Proyecto.
 - Reportes sobre temas estratégicos: Riesgos
 - Reprogramaciones del Plan de Implementación y Plan Financiero Multianual.
 - Diseño de nuevas estrategias de implementación que aseguren la ejecución del proyecto en tiempo, costo y calidad y optimicen su cobertura.
 - Informe Final, que, al menos, debe incluir: Evaluación de la implementación en los contextos de tiempo, costo y calidad, medidas adoptadas, factores que afectaron la implementación, factores críticos para el éxito del proyecto, lecciones aprendidas en la implementación y recomendaciones.

La aprobación de FOMILENIO a los Informes Mensuales y Especiales correspondiente al periodo sujeto a cobro por NTH-PM será requisito para realizar los pagos mensuales al NTH-PM.

Task 3: Technical Services for preparation of bidding documents for Sections 5 and 6 (D&B)

Entregables:

- Diseño Conceptual de Sección 5
- Diseño Conceptual de Sección 6
- Términos de Referencia para Licitación Diseño y Construcción 5
- Términos de Referencia para Licitación Diseño y Construcción 6
- Atención de aclaraciones y formulación de adendas.

La aprobación de FOMILENIO y de MCC a los Diseños Conceptuales y los Términos de Referencia para Licitación Diseño y Construcción, serán requisito para autorizar el pago del 90% del monto del Task 3.

El restante 10% se realizará posterior a la presentación de ofertas de los licitantes.

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Task 4: Technical Services for Section 3 NTH

Task 5: Technical Services for Section 4 NTH

Task 6: Technical Services for Sections 5 and 6 NTH

Task 7: Technical Services for Sections 7 and possibly 1

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Letter of Understanding

San Salvador, May 8, 2009

Fondo del Milenio, (hereinafter called "FOMILENIO"), and, on the other hand, Wilbur Smith Associates Inc. (the "Consultant") in association with Técnica y Proyectos, S.A. (TYPSA); FOMILENIO and the Consultant are referred to herein collectively, as "Parties," and each individually a "Part, agree to liquidate the expenses presented by the Consultant in their letter WSA 103185- Contract -004 dated May 5, 2009 for \$1,686,477.00 according to the following procedure:

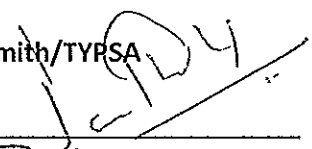
1. The Consultant will review Annex 1 to the above mentioned letter to reflect actual tariff for other technical personnel and other administrative support personnel.
2. Within the next five working days FOMILENIO will review the bill of expenses for \$ 627,177.00 in order to validate all applicable costs for the period.
3. After this review FOMILENIO will proceed to pay the final amount settled by the Parties and the Consultant will not claim on any other expense regarding this period before the Amendment.

IN WITNESS WHEREOF, each of the Parties has caused this Letter of Understanding to be executed by a duly authorized representative as of the day and year first written above.

FONDO DEL MILENIO
(FOMILENIO)

By: 
Name: José Angel Quirós Noltenius
Title: Executive Director

Wilbur Smith/TYPSA

By: 
Name: Santhosh V K Nair
Title: Regional Vice President



Contract No: 047

Contract for Consultant's Services

Fixed Price

For the provision of

Project Management, Supervision of Design and Construction Supervision
for the Connectivity Project on The Northern Transnational Highway

between

Fondo del Milenio (MCA El Salvador)

El Salvador

And

Wilbur Smith Associates Inc.
in association with
Técnica y Proyectos, S.A (TYP SA)

Second Contract Amendment

September 25, 2009

This **CONTRACT AMENDMENT** (the "Second Contract Amendment") is made as of September 25th, 2009 by and between, on the one hand, **Fondo del Milenio**, a Salvadoran autonomous public entity created pursuant to Legislative Decree No. 189, dated December 20, 2006 (hereinafter called "**FOMILENIO**"), and, on the other hand, **Wilbur Smith Associates Inc.** (the "**Consultant**") in association with **Técnica y Proyectos, S.A. (TYP SA)** each of which will be jointly as severally liable to **FOMILENIO** for all of the Consultant's obligations under the Contract and is deemed to be included in any reference to the term "Consultant".

FOMILENIO and the Consultant are referred to herein collectively, as "Parties," and each individually a "Party".

RECITALS

WHEREAS, the Parties executed a **CONTRACT AGREEMENT** dated the 29th of September 2008, which was modified as agreed in Contract Amendment executed as of the 8th of May 2009 (the Contract Agreement and the Contract Amendment, together constitute "*the Contract*").

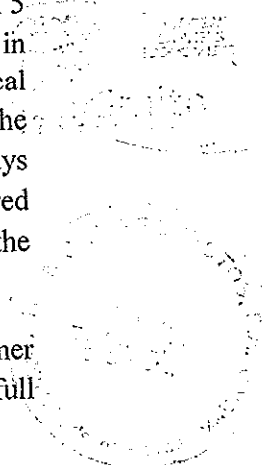
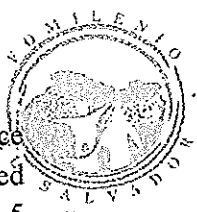
WHEREAS, in order to adapt the Contract services, obligations, assignments and resources to the strategy for the Connectivity Project, the Contract Amendment contemplates four Tasks, referred as Tasks 4, 5, 6 and 7 which are to be activated only in the event that the Parties come to agreement on the anticipated level of effort, fixed cost and term of such Tasks.

WHEREAS, **FOMILENIO** has requested that the Consultant provides technical services and the Consultant has agreed to provide such services on the terms and conditions set forth in this Second Contract Amendment for the preparation of conceptual design and Terms of Reference for bidding documents of Section 4, as well as the construction supervision of two bridges and Section 6 of the Northern Transnational Highway (NTH), as described in ANEXO A to this Second Contract Amendment.

WHEREAS, in order to adapt the remaining Contract Services to the Project implementation schedule, the Tasks referred to in the first Contract Amendment as Tasks 4, 5, 6 and 7 have been repackaged and renamed according to the need and chronology of their implementation, as further stipulated herein.

NOW THEREFORE, the Parties agree as follows:

- a. To amend the Contract Appendix A – Description of Services replacing the text in the Contract for the description for Task 1, Task 2 and Task 3 and replace it with the description set forth in ANEXO A to this Second Contract Amendment.
- b. To amend the Contract Appendix A – Description of Services replacing the text in the Contract for the description for Task 4 and replace it with the description set forth in ANEXO B to this Second Contract Amendment, in relation to the preparation of conceptual design and Terms of Reference for bidding documents of Section 4 of the NTH.
- c. To amend the Contract Appendix A - Description of Services replacing the text in the Contract for the description for Task 5, and replace it with the description set forth in



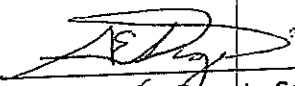
claims, damages, penalties, costs, or other expenses in connection with Tasks 5 and 6. Once activated, the effective date for each Task shall be determined as per the Notice to Proceed issued by FOMILENIO. In the event that the activation of TASK 5 or TASK 6 or both Task 5 & Task 6 is/are rendered impracticable, then the parties shall endeavor to reach agreement in good faith regarding the details of Task 7- Construction supervision and other technical services for Sections 3 and 4, including but not limited to, the scope of work of the task, the fixed cost of the task and terms of the task. In the event the Parties, following 60 calendar days from the start of negotiations, are unable to reach an agreement, Task 7 shall not be considered as part of the Contract. Likewise, Parties agree that supervision services for Section 5 of the NTH are not part of this Contract.

- j. Limitations: Except as expressly amended by this Second Amendment, all other terms, covenants and conditions of "the Contract" shall remain unchanged and in full force and effect.
- k. Effect of this Amendment: From and after the date hereof, "the Contract" and this Second Contract Amendment shall be read together and construed as one document, and any reference to the Contract shall mean and be construed as a reference to "the Contract", read in conjunction with this Second Contract Amendment.
- l. Applicable Law: This Second Contract Amendment shall be governed by the Applicable Law set forth in "the Contract".

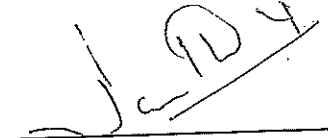
IN WITNESS WHEREOF, each of the Parties has caused this Second Amendment to be executed by a duly authorized representative as of the day and year first written above.

FONDO DEL MILENIO
(FOMILENIO)



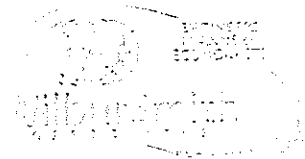
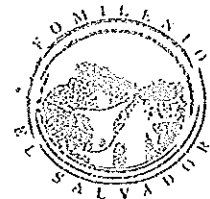
By: 
Name: Alexander Ernesto Segovia
Title: Board of Directors President

Wilbur Smith/TYPSA

By: 
Name: Santhosh V K Nair
Title: Regional Vice President

ANEXO A

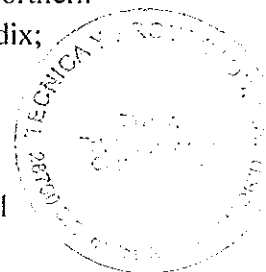
Appendix A – Description of Services



I. OBJECTIVE OF THE ASSIGNMENT

Support the Deputy Executive Direction of Infrastructure in the management of the implementation, of the Connectivity Project for the Northern Transnational Highway from Metapán to Anamorós. The Connectivity Project Manager (CPM) shall provide the following main services for the Connectivity Project of the Compact in activities related to the Northern Transnational Highway, described in detail in the subsequent sub-sections of this appendix;

1. Connectivity Project Management Services
2. Services related to the Supervision of Design Consultants
3. Supervision of Construction Works (the Engineer as per International Federation of Consulting Engineers (FIDIC) – see note below)



CPM shall perform effective project management services in order to ensure that the Connectivity Project is completed on time, within budget and at a high level of quality. The services shall be provided to achieve the project goals and objectives as stated in the Compact and in accordance with the outcomes of prior, related activities.

Regarding Item 3 above, in the event of any conflict or inconsistency between the requirements, definitions, roles, or responsibilities of the Engineer as defined in this Second Amendment and the ones defined by FIDIC, this Contract Amendment shall prevail over FIDIC.

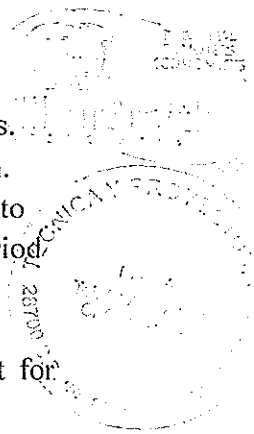
II. BASE CONTRACT

Task 1

Supervision of the Construction Contractor(s) responsible for construction of Section 2 of the NTH (from Metapan to Nueva Concepcion): Activities include, but are not limited to: a) reviewing the final design of 44 km Section 2 of the NTH (from Metapán to Nueva Concepción and road access to Santa Rosa Guachipilin), in order recommend the necessary actions if any fatal flaw is detected; and, b) supervising the construction contractor(s), scheduling, managing Requests for Information (RFIs), change order requests, the provision of full or part-time supervision engineers, progress and scheduling, reviewing requests for payment and costs, reviewing as-built drawings, and providing quality assurance for the construction of about 44 km of the NTH (from Metapán to Nueva Concepcion) as described here:



- Segment 2.A: 23km section from Metapan to Santa Rosa Guachipilin. The Notice to Proceed was issued to the contractor on May 4, 2009. The contractual period for construction is 18 months.
- Segment 2.B.1: 8 km section of new road construction from Santa Rosa Guachipilin to El Matazano. The construction is expected to start by October 2009. The contractual period for construction will be 12 months.
- Segment 2.B.2: 13 km Section from El Matazano, to Nueva Concepción. The contract for this segment has been awarded and signed. The Notice to Proceed is scheduled to be issued in mid-May 2009. The contractual period for construction is 12 months.



This Section applies to the construction supervision services indicated in Base Contract for Section 2 of the NTH.

In addition to its continuing service as the Employer's Representative, the Consultant shall assume and perform all the duties and responsibilities of "the Engineer" as prescribed in the Conditions of Contract for Building and Engineering Works Designed by the Employer, FIDIC 1999, in particular for the construction supervision activities during the construction stage of the Connectivity Project. There will be no other supervisory engineer acting on behalf of FOMILENIO.

The Engineer shall provide complete construction supervision services, according to best international standards of road construction—whether noted below or not—as the supervisory representatives of FOMILENIO.

The Engineer shall recommend preventive and corrective actions to be taken in the case of implementation delays, cost overruns, poor quality of the works that does not meet specifications, unmitigated environmental impacts, and other problems. In addition, the Engineer shall review and certify the accuracy of invoices submitted by entities providing technical and construction services.

Duties to be included in this portion of the assignment include but are not limited to:

- 1) Review the Final Design reports prepared by CPB as part of the study "Mejoramiento de la Red Vial de la Zona Norte de El Salvador" for 44 km of the NTH (from Metapan to Nueva Concepcion), which are the main technical input for the further construction work. The Engineer will perform this review with additional information and clarifications provided by UIPC/MOPAs available, the Engineer shall timely advise FOMILENIO of any required modification or complementary work if any fatal flaw is detected.
- 2) Review and recommend any modification to the Scope of Work (Technical Specification and/or drawings) on the bidding document for construction works;
- 3) Prepare the agenda and presentation for the kickoff (pre-construction) meeting with the contractors of each different project and discuss the agenda with FOMILENIO prior to the meetings. During this meeting, points of contact shall be identified and procedures for



exchange of information and communications are discussed and decided upon. Prepare meeting minutes for this meeting and any project meeting thereafter;

4) Review and comment on or approval of the programs of work submitted by construction contractors;

5) Review and approve construction plans and methods proposed by construction contractors, for road sections and bridges;

6) The Engineer through the Main Resident Engineer shall identify, analyze, evaluate and recommend appropriate management of all risks related to this Section.

7) The Engineer through the Main Resident Engineer shall collect all the information regarding project implementation and update the Project Management Information System in a timely fashion. Any information to be divulged by the NTH-PM shall be previously discussed with FOMILENIO.

8) The Engineer shall supervise the activities of the construction contractors related to ROW and RAPs, including but not limited to the following:

- Monitor the finalization of pending cases which by any reason were not completed in the design stage. This activity shall apply in the following areas: (i) acquisition of right of way or economic compensation; and (ii) resettlement or physical relocation.
- Ensure that construction of works by the contractors is executed according to the drawings of right of way acquired by FOMILENIO, avoiding that contractors use land or affect constructions not included in the acquisition.
- Ensure that construction contractors provide an office space for attention of residents of the project area, resolution of claims and social problems resulting from the construction works.
- Follow-up the processes of resettlement on those sections or segments where still exists some problems, and cooperate with FOMILENIO in finding an adequate solution;
- Ensure that the Contractor has attended any unforeseen social impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays, and inform FOMILENIO immediately;
- Ensure that the construction contractors execute the access solution to properties as identified in the design stage; and
- Cooperate with FOMILENIO to avoid the illegal occupation (usurpation) of the acquired ROW.

9) Monitor and report on the physical and financial progress of the works undertaken by construction contractors and recommending actions to be taken when progress is not in



accordance with the approved program. For this monitoring, the Engineer shall maintain tabulated and graphic data including the approved financial plan, the actual financial progress (certified invoices and actual payments), and actual physical progress (earned value). At a minimum, these should be updated monthly, and included in the monthly reports.

10) Ensure that the quality of the construction works are completed according to the design drawings and specifications, and providing quality assurance on quality control tests performed by contractors;

11) The Engineer shall have its own independent laboratory and equipment and test sites to control construction materials quality, independently of the Contractor's laboratory and equipment. The provisions for laboratory space and equipment will be provided by the Contractor. The Engineer shall include a quality assurance (QA) testing plan with a minimal number of respective QA tests per unit road and/or bridge as a percentage of the number of tests in the approved QC plan of the Contractor;

12) Monitor and ensure that the Construction Contractors prepare and submit EMP implementation plans for the Engineer approval. Review the proposed EMP implementation plans with attention to the appropriate sequencing and integration of EMP activities with related construction works. Comment and/or approve the EMP implementation plans.

13) Assist FOMILENIO in the implementation of the EMP and the HIV/AIDS Awareness Plan, in accordance with the implementation plan of the EMP, including all environmental measures that apply to borrow pits, dumping areas and camp yards, as well as all public outreach and consultation activities;

14) Monitor the processes related to environmental issues carried out by the Contractors with MARN, such as new sites for borrow banks, camp yards and dumping areas, as well as processes with any other institution;

15) Ensure that the Contractor has attended any unforeseen environmental impact that could arise during the construction period and that necessary mitigation measures have been taken, and support as necessary to avoid delays;

16) Certify that the monthly certificates for payment from construction contractors accurately reflect the value of the works completed and recommend to proceed for payment;

17) Ensure that the Construction Contractors perform their work in accordance with the Compact, MCC's regulations, Salvadoran legal framework and any other provisions given in the construction contract;

18) In case of where the construction contractor does not meet its contractual obligation, the Engineer shall report the case immediately to FOMILENIO and compile all support documents pertaining to such case and make proper recommendations;

19) Compile and evaluate information for accident reports as they occur and report to FOMILENIO;

20) Prepare and issue site instructions to construction contractors, as necessary for Project implementation;



- 21) To maintain the Record Book (Bitacora) at the work site and use it for daily communication with contractors and to maintain sequenced registers of main events in a timely manner during the development of the works;
- 22) Review, verify the accuracy, respond, and approve all necessary shop drawings submitted by the construction contractors;
- 23) Review, approve and monitor the Quality Control Plan submitted by the Construction Contractors;
- 24) Review and comment on or recommend approval of construction contractors proposed change (variation) orders to FOMILENIO. Prior to propose to FOMILENIO, the Engineer shall discuss these matters with UIPC/MOP in relation to technical issues;
- 25) Propose change orders for the approval by FOMILENIO; this shall also include the cost and time impact of such proposed changes, if any. The Engineer shall also be required to submit the various alternatives with cost-benefit analysis and effect on time for the particular section on construction and for the project as a whole for facilitating the decision by FOMILENIO.

Prior to propose to FOMILENIO, The Engineer shall discuss these matters with UIPC/MOP in relation to technical issues;
- 26) Review and approve reports submitted by construction contractors;
- 27) Review, approve and monitor the Safety and Occupational Health Plan submitted by the construction contractors, and include comments and recommendations in the Monthly Reports related to the execution of such Safety and Occupational Health Plan;
- 28) Provide photographs of construction documenting weekly and monthly progress and potential trouble areas according to the formats to be defined previous to the commencement of the construction supervision activities; these photographs should be posted on the web-based project management system.
- 29) Review and certify monthly payment certificates of construction contractors;
- 30) Analyze and make recommendations regarding claims submitted by construction contractors;
- 31) Attend claims meetings between FOMILENIO and construction contractors;
- 32) Communicate with businesses and communities affected by any of the works undertaken under the Project to keep them aware of the construction process and schedule;
- 33) Review (verify accuracy of) the as-built drawings prepared by construction contractors and compiling complete sets of these drawings for FOMILENIO on a monthly basis;
- 34) Perform pre-final and final inspections of projects sites, as well as prepare, as and if applicable, detailed punch lists and verify that all punch list items are corrected prior to recommendation of FOMILENIO acceptance of the completion of the works and issuance of the Taking Over Certificate;

