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## **1. Introducción**

Se redacta el presente informe en relación a los efectos sobre la hidrología derivados de la ejecución y operación de las Plantas Solares Fotovoltaicas (PFV) que conforman el grupo de plantas denominado GP04: Morena Solar, Postor Solar y Rececho Solar.

En el informe se analiza el contexto climatológico (apartado 3) del entorno en el que se desarrolla la actividad prestando atención no sólo a las precipitaciones diarias y eventos extremos (apartado 3.1) sino también al estudio de tormentas específicas (apartado 3.2). Con esta información se realizan los cálculos hidrológicos (apartado 4) que permitirán analizar las consecuencias sobre la dinámica hidrológica de los cauces en cuyo entorno se ejecutan las plantas (apartado 4.1) y en detalle los efectos sobre los fenómenos infiltración/escorrentía derivados de tormentas concretas (apartado 4.2). Se analizan igualmente las consecuencias derivadas de la ejecución de las plantas sobre la planificación hidrológica (apartado 5) y finalmente se abordan los posibles efectos erosivos derivados de la dinámica hidrológica (apartado 6) y se estiman los posibles efectos sobre la hidrología derivados de la ejecución de las obras (apartado 7).

## **2. Descripción de las infraestructuras**

Los proyectos de plantas e infraestructuras incluidos dentro del presente estudio son los siguientes:

- Anteproyecto Planta Fotovoltaica Postor Solar 61,27 MWp / 57,5 MWn. T.M. Campo Real (Madrid – Comunidad de Madrid).
- Anteproyecto Planta Fotovoltaica Rececho Solar 65,94 MWp / 57,5 MWn. T.M. Campo Real (Madrid – Comunidad de Madrid).
- Anteproyecto Planta Fotovoltaica Morena Solar 105,62 MWp / 95 MWn T.M. Campo Real /Arganda del Rey (Madrid – Comunidad de Madrid).
- Anteproyecto Línea Subterránea Media Tensión 30 kV entre Planta Fotovoltaica Morena Solar y ST Rececho 30/220 kV. T.M. Campo Real (Madrid – Comunidad de Madrid).
- Anteproyecto Línea Subterránea Media Tensión 30 kV entre Planta Fotovoltaica Postor Solar y ST Rececho 30/220 kV. T.M. Campo Real (Madrid – Comunidad de Madrid).

Las infraestructuras de GP04 son tres nuevas instalaciones de generación de energía fotovoltaica que contarán con una superficie total de vallado de 343,73 Ha. La agrupación de las tres plantas tiene una potencia pico instalada de 232,83 MWp y una potencia nominal de 210 MWn.

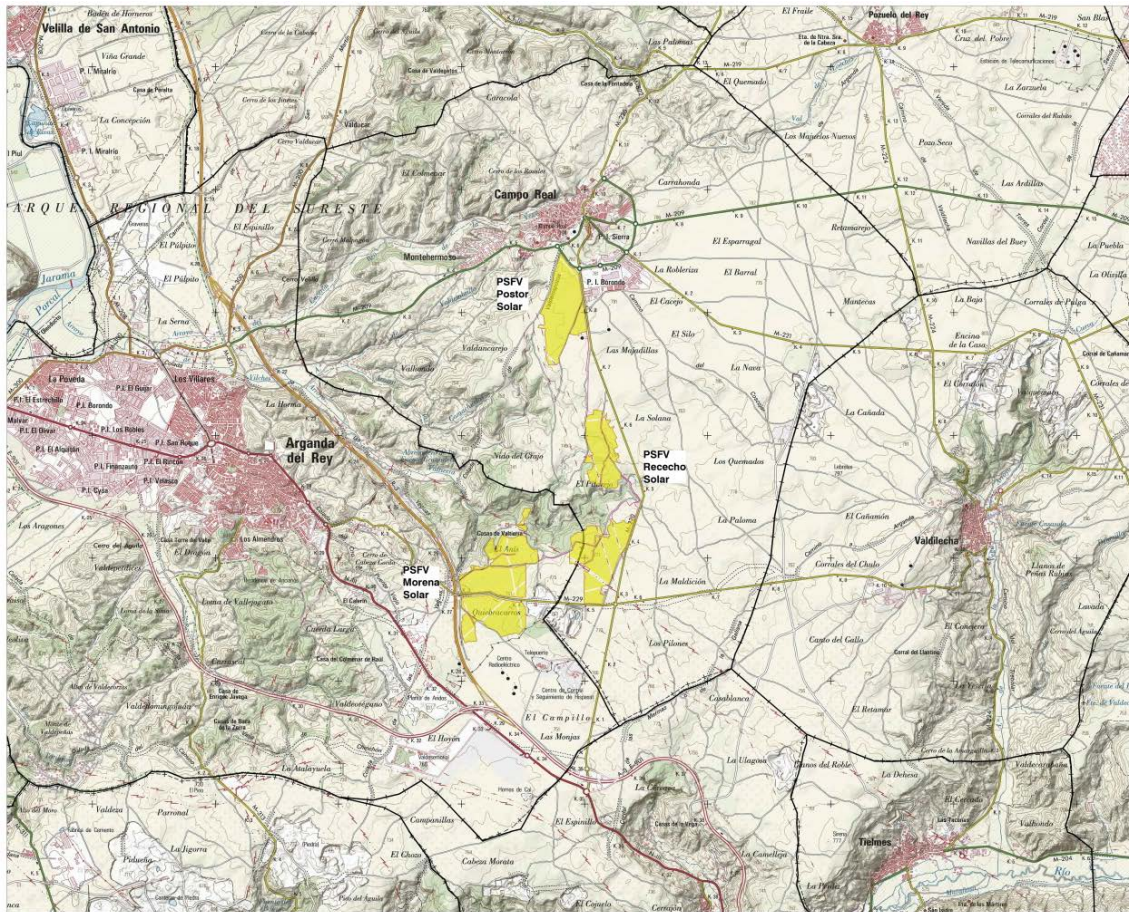


Figura 1. Ubicación de las PFVs consideradas en el presente estudio

### 3. Cálculos climatológicos

El presente apartado comprende en primer lugar el análisis de las precipitaciones diarias históricas en términos descriptivos inicialmente y posteriormente ajustando los datos a una distribución de valores extremos (Gümbel) de cara a obtener las precipitaciones para períodos de retorno de 2, 5, 10, 25, 50, 100 y 500 años cumpliendo no solo con los requisitos establecidos en MITERD (2020) sino también incluyendo otros valores de interés para la gestión hidrológica.

El análisis de los eventos individuales se ha completado empleando datos horarios de cara a profundizar en el estudio de los fenómenos de infiltración/escorrentía que deben conducir a tomar decisiones precisas de cara a reponer las condiciones previas en términos de aportaciones a los cauces existentes e infiltración sobre el terreno.

#### 3.1. Análisis de datos diarios de precipitaciones y eventos extremos

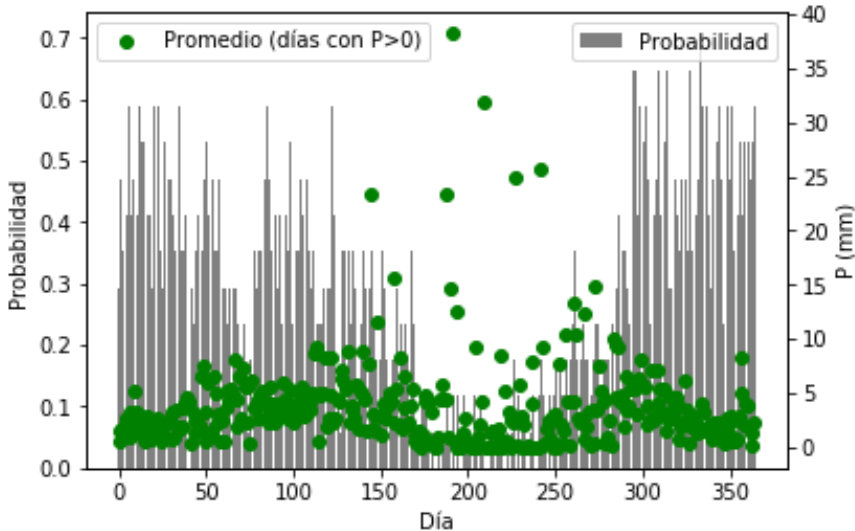
Para el estudio de tormentas se ha empleado la estación meteorológica perteneciente a la red de estaciones del Sistema de Información Agroclimática para el Regadío (SIAR) ubicada en el término municipal de Arganda (coordenadas X/Y: 457693/4462410). Se han empleado registros diarios de precipitación entre los años 2004 y 2020.

La Tabla 1 resumen los estadísticos más representativos de los datos diarios registrados en la estación analizada.

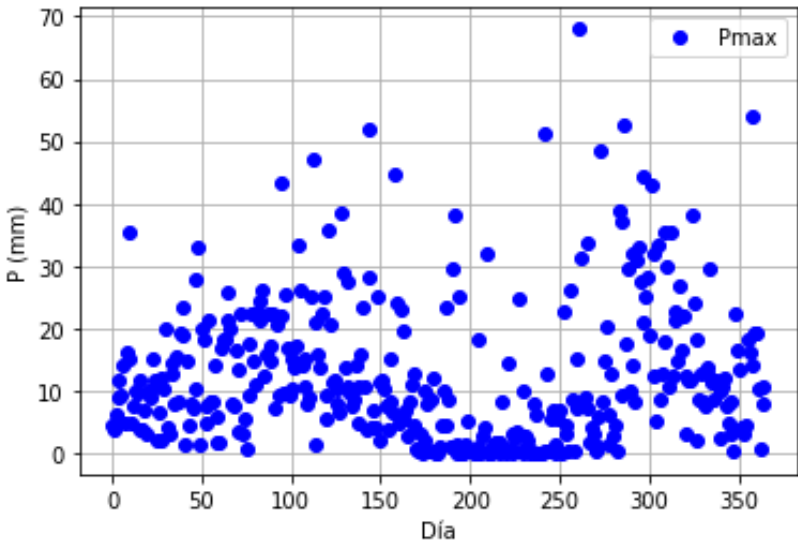
*Tabla 1. Características de las tormentas registradas a lo largo de todo el periodo*

Variable	Todos los datos	Excluyendo P=0
Volumen promedio (mm)	1.06	3.63
Desviación típica (mm)	3.62	5.97
Coefficiente de asimetría	6.01	3.25
Curtosis	49.35	14.59
Cuantil 90 volumen (mm)	2.67	10.00

Las figuras 2 y 3 muestran los valores promedio diarios de precipitación registrados en la estación y período referidos y tanto la probabilidad de precipitación como los valores de precipitación máximos registrados.

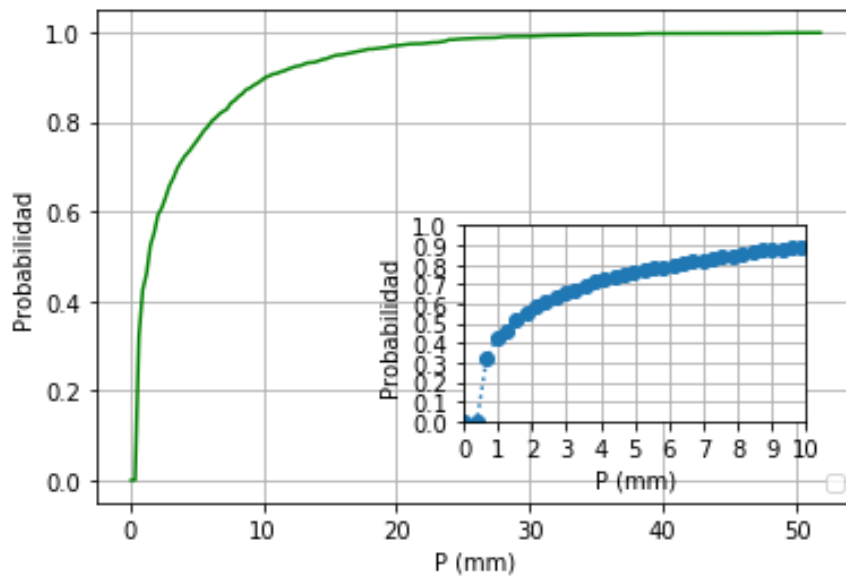


*Figura 2. Valores promedio diarios y probabilidad de precipitación.*



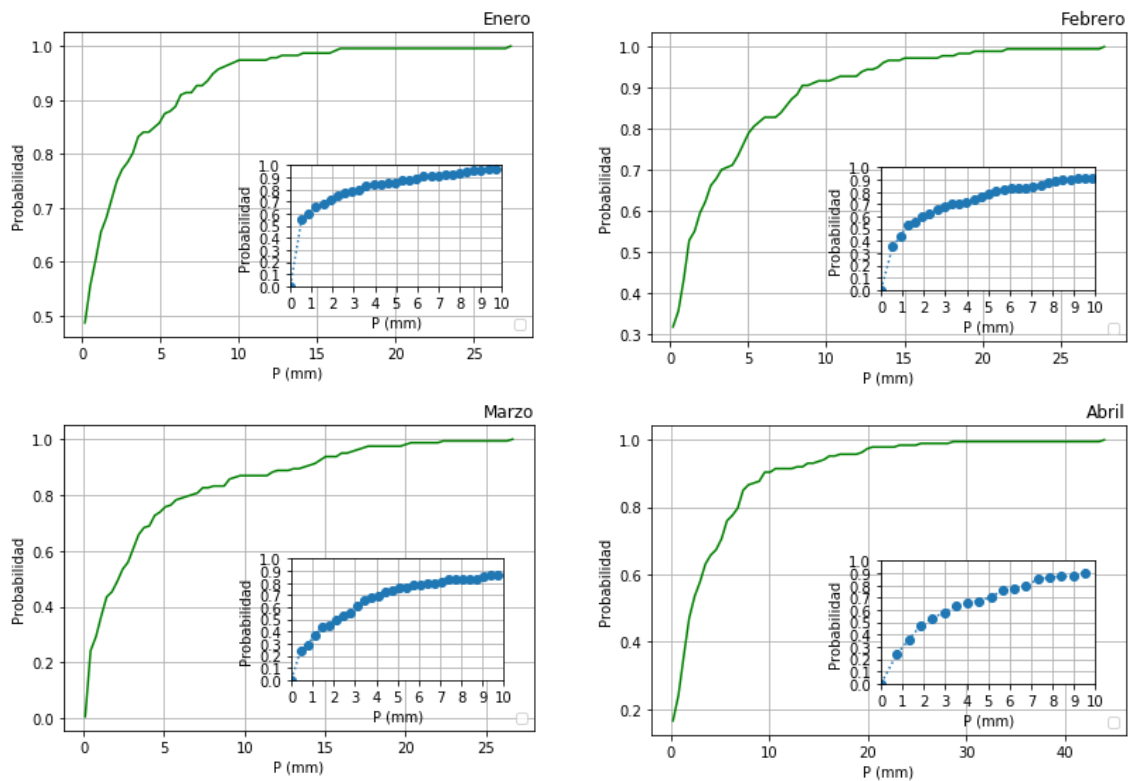
*Figura 3. Valores máximos diarios registrados.*

La mayor parte de las tormentas son de escasa magnitud tal y como se observa en la figura 4 que presenta la distribución de probabilidad registrada de las tormentas.



*Figura 4. Distribución de probabilidad por volumen de precipitación a partir de los datos registrados en la estación analizada.*

La figura 5 presenta la distribución de probabilidad de tormentas por meses.



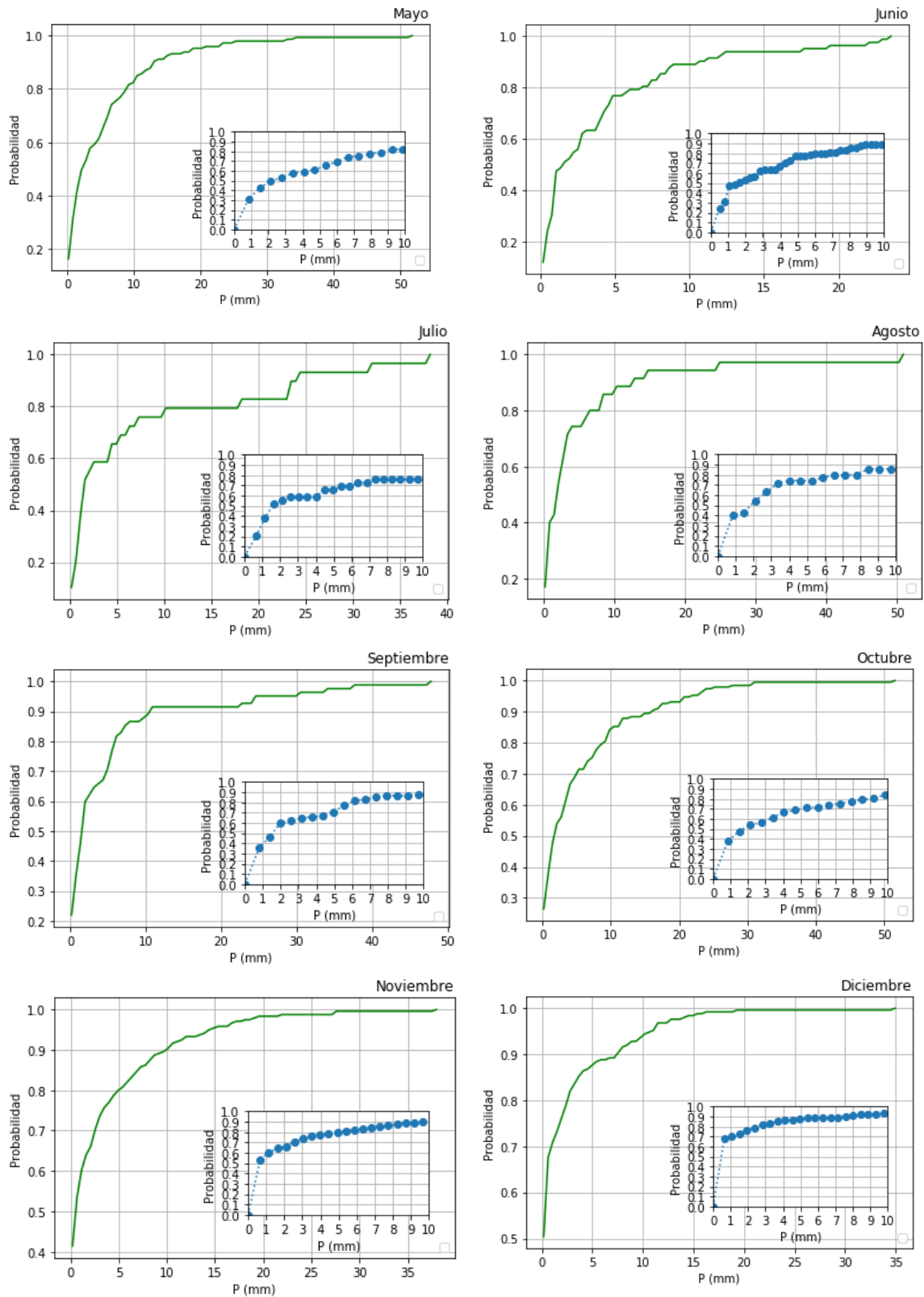


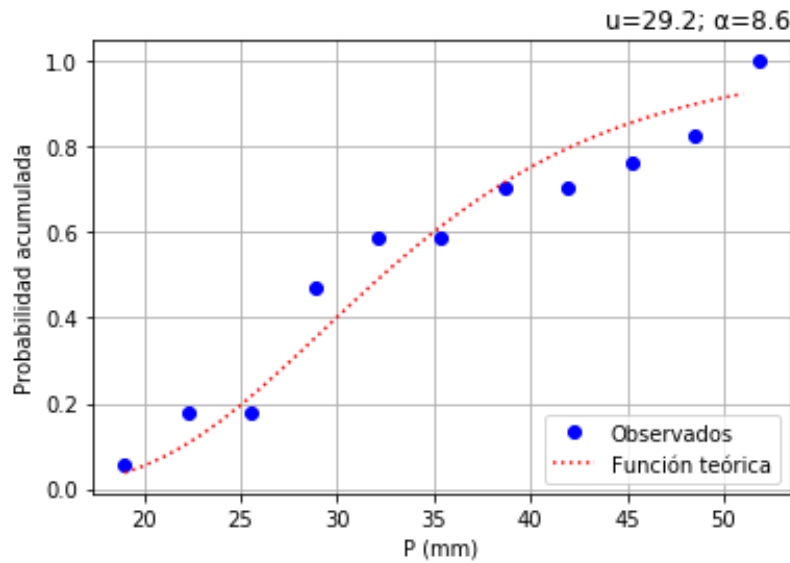
Figura 5. Distribución de probabilidad de tormentas por meses.

Se han ajustado los de precipitación máximos diarios a una distribución de valores extremos (Gümbel, ecuación 1), observándose el resultado en la figura 5.

$$F(x) = \exp\left\{-\exp\left[-(x-u)/\alpha\right]\right\} \quad [1]$$



Donde  $F(x)$  representa la función de distribución de probabilidad de la variable aleatoria  $x$  (precipitación),  $\exp$  la función exponencial y tanto  $u$  como  $\alpha$  los parámetros de la distribución de Gumbel que se han ajustado por mínimos cuadrados.



*Figura 6. Ajuste de los datos a la distribución de probabilidad de Gumbel*

A partir de [1] y de la definición de período de retorno como el período que en promedio ocurre entre dos eventos de una determinada magnitud se despejan los valores de precipitación vinculados a cada período de retorno previsto (ecuación 2).

$$x_T = u - \alpha \ln \left[ \ln \left( \frac{T}{T-1} \right) \right] \quad [2]$$

Donde  $x_T$  representa la precipitación para un período de retorno  $T$  dado,  $u$  y  $\alpha$  son los parámetros de la función de Gumbel y  $\ln$  la función logaritmo natural.

La Tabla 2 muestra tanto los valores de precipitación estimados a partir de la distribución de Gumbel ajustada como aquellos deducidos de la monografía Máximas Lluvias Diarias en la España Peninsular (MFOM, 1999). Se han seleccionado como precipitaciones de proyecto aquellas más desfavorables entre ambos valores (marcadas en negrita en la tabla 2).



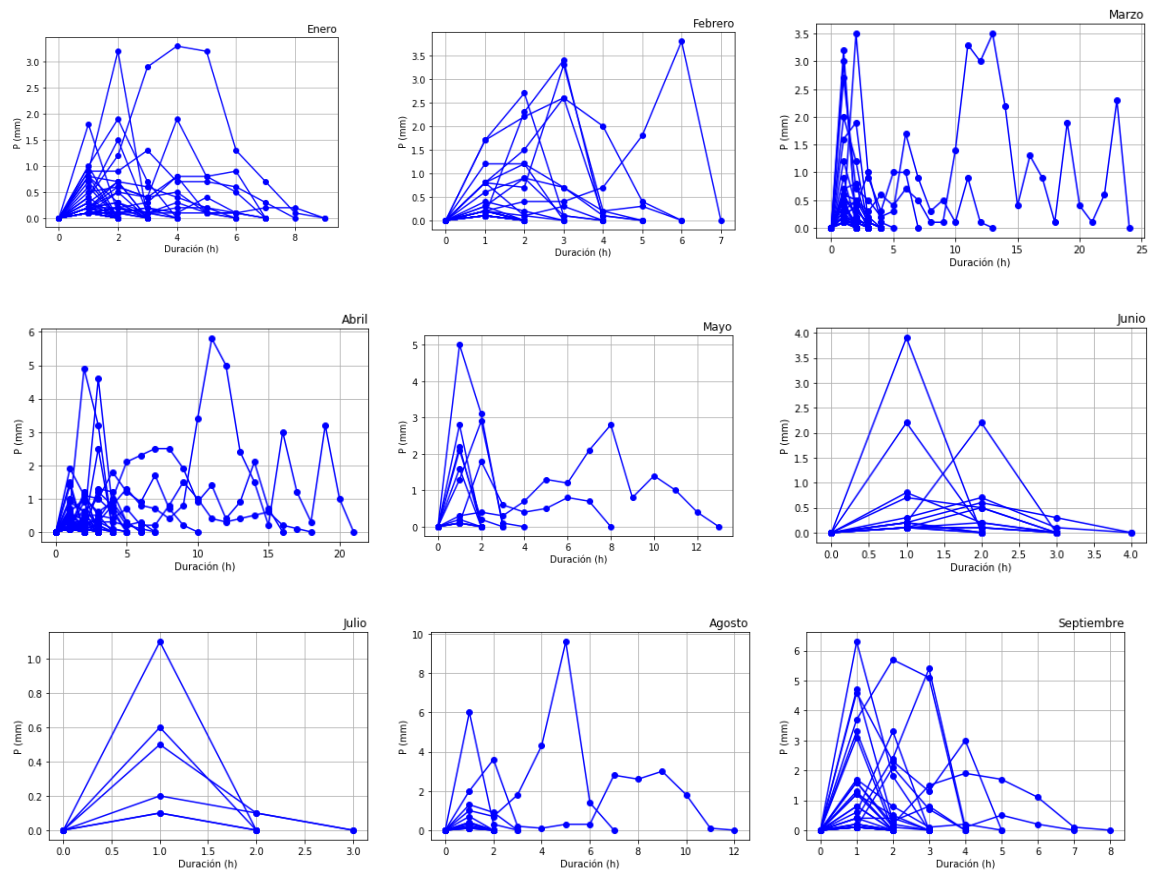
Tabla 2. Valores de precipitación (mm) para diferentes períodos de retorno

Período de retorno	P (ajuste Gumbel)	P (MFOM, 1999) ( $cv/Y_t$ )/ $P=38\text{mm}$
2	27.45	<b>36.06</b> (0.34/.924)
5	35.56	<b>47.24</b> (0.34/1.2113)
10	41.06	<b>56.08</b> (0.34/1.438)
25	48.01	<b>66.96</b> (0.34/1.717)
50	53.16	<b>75.27</b> (0.34/1.93)
100	58.28	<b>84.78</b> (0.34/2.17)
500	70.11	<b>108.61</b> (0.34/2.785)

### 3.2. Análisis de tormentas individuales

Para el estudio de las tormentas individuales se han empleado las estaciones meteorológicas de la red municipal del ayuntamiento de Madrid por disponer de registros horarios disponibles de los años 2019, 2020 y 2021. En concreto se han empleado datos de la estación meteorológica ubicada en el Parque Juan Carlos I. El principal objetivo de este apartado es determinar ejemplos de tormentas representativas que pudieran extrapolarse a las zonas de estudio y por eso se han seleccionado las estaciones cuyas condiciones pudieran resultar más extrapolables por estar fuera de entornos puramente urbanos.

La figura 7 representa los hietogramas de la totalidad de tormentas registradas por meses en la estación referida.



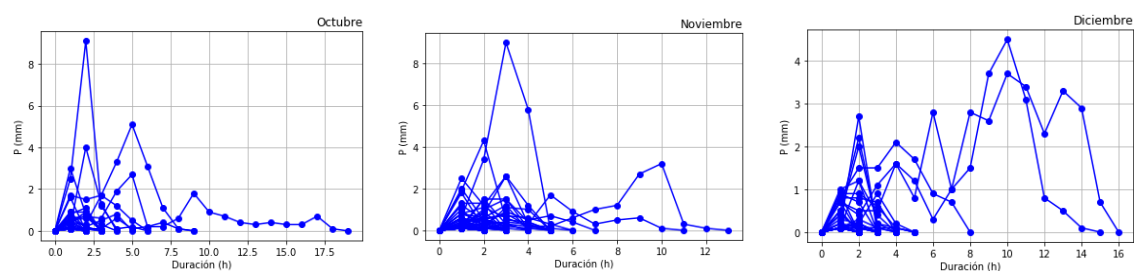


Figura 7. Hietogramas de las tormentas registradas por meses

La Tabla 3 presenta algunas de las características de las tormentas registradas en función de las duraciones.

Tabla 3. Características de las tormentas por duración

Duración	Número de eventos	Promedio (mm)	P (mm)	Cuantil 80 P (mm)	Máxima (mm)
1	181	0.34	0.4	3.9	
2	89	1.26	1.8	8.1	
3	36	2.58	3.6	14.5	
4	23	4.10	6.6	18.8	
5	12	4.1	6.3	13.09	
6	12	5.24	7.3	18.79	
7	4	7.32	9.79	9.79	
8	4	9.77	17.59	17.59	
9	1	8.7	8.7	8.7	
10	1	8.0	8.0	8.0	
11	1	16.8	16.8	16.8	
12	3	11.46	12.79	12.79	
14	1	20.0	20.0	20.0	
15	2	24.75	30.09	30.09	
17	1	8.79	8.79	8.79	
18	1	8.7	8.7	8.7	
20	1	33.0	33.0	33.0	
23	1	25.2	25.2	25.2	

La tabla 4 muestra algunas de las características más relevantes de las tormentas registradas por meses.

Tabla 4. Características de las tormentas por meses

Mes	D promedio (h)	P promedio (mm)	D max (h)	P max (mm)	Cuantil 80 P D (h)	Cuantil 80 P (mm)
En	2.52	1.21	8	13.1	5	1.7
Fb	2.14	1.73	6	7.3	4	4.5
Mz	2.63	1.83	23	25.2	3	1.7
Ab	3.2	25	20	33	4	3.2
My	2.75	3.28	12	12.7	3	4.9
Jn	1.8	0.99	3	3.9	2	2.3
Jl	1.33	0.47	2	1.1	2	0.6
Ag	2.21	3.34	11	18.8	2	6.3

Mes	D promedio (h)	P promedio (mm)	D max (h)	P max (mm)	Cuantil 80 D (h)	Cuantil 80 P (mm)
Sp	1.97	2.77	7	14.5	3	5.8
Oc	2.8	2.52	18	17.6	4	4.1
Nv	2.45	1.76	12	18.8	4	2.3
Dc	2.52	2.0	15	30.1	3	2.3

La tabla 5 resume algunas de las características más relevantes observadas.

*Tabla 5. Características de las tormentas registradas a lo largo de todo el periodo*

Variable	Valor
Número de eventos	373
Duración promedio (h)	2.51
Volumen promedio (mm)	2.02
Duración máxima (h)	23
Volumen máximo (mm/h)	33
Duración más frecuente (h)	1
Cuantil 80 duración (h)	3
Cuantil 80 volumen (mm)	2.6

#### 4. Análisis y simulación hidrológica

En el presente apartado se explican y presentan los resultados de la simulación hidrológica. Este proceso comienza con la delimitación de las cuencas empleando los algoritmos existentes en QGIS sobre cartografía del Instituto Geográfico Nacional (Modelo Digital del Terreno MDT25 del PNOA) y corregido de forma manual empleando los mapas raster publicados por dicho Instituto (MTN25). Las cuencas se han delimitado definiendo la sección de control en el punto identificable más aguas abajo del cauce en cuya cuenca se ubican las instalaciones (generalmente en el punto de confluencia con otro cauce).

Una vez delimitadas las cuencas se ha procedido a la identificación de usos del suelo interiores para lo cual se han empleado la información temática contenida en CORINE CORINE Land Cover (2018).

Para la generación de los modelos espaciales para su importación a HECRAS se han empleado los modelos digitales del terreno con curvas de nivel a 2 m (MDT02) publicados por el Instituto Geográfico Nacional.

Para la estimación de la escorrentía se ha empleado el modelo del número de curva de la EPA de USA (USDA, 1986).

$$E = (P - P_0)^2 / (P - P_0 + S) \quad [3]$$

Empíricamente se determina  $P_0 = 0.2 S$  y  $S = 25.4 (1000 / CN - 10)$ . Siendo CN el número de curva. Los resultados del modelo del número de curva son muy sensibles a las condiciones iniciales del suelo y por eso se han considerado las correcciones para suelos húmedos y secos definidos en USDA (1986).

La tabla 6 muestra los números de curva seleccionados de entre los definidos en USDA (1986) para los usos del suelo incluidos en la capa CORINE Land Cover (2018).

*Tabla 6. Usos del suelo de CORINE Land Cover (2018) y CN asignado*

Uso del suelo	CN
1.1.1 Tejido urbano continuo	98
1.1.2 Tejido urbano discontinuo	85
1.2.1. Zonas industriales o comerciales	88
1.2.2. Redes viarias, ferroviarias y terrenos asociados	98
1.2.3. Zonas portuarias	98
1.2.4. Aeropuertos	98
1.3.1. Zonas de extracción minera	74
1.3.2. Escombreras y vertederos	74
1.3.3. Zonas en construcción	86
1.4.1. Zonas verdes urbanas	69
1.4.2. Instalaciones deportivas y recreativas	69
2.1.1. Tierras de labor en secano	78
2.1.2. Terrenos regados permanentemente	78
2.1.3. Arrozales	81
2.2.1. Viñedos	60
2.2.2. Frutales	60
2.2.3. Olivares	60
2.3.1. Praderas	69
2.4.1. Cultivos anuales asociados con cultivos permanentes	72
2.4.2. Mosaico de cultivos	72
2.4.3. Terrenos principalmente agrícolas, pero con importantes espacios de vegetación natural	72
2.4.4. Sistemas agroforestales	65
3.1.1. Bosques de frondosas	48
3.1.2. Bosques de coníferas	58
3.1.3. Bosque mixto	58
3.2.1. Pastizales naturales	69
3.2.2. Landas y matorrales	51
3.2.3. Vegetación esclerófila	51
3.2.4. Matorral boscoso de transición	51
3.3.1 Playas, dunas y arenales	79
3.3.2 Roquedo	79
3.3.3 Espacios con vegetación escasa	79
3.3.4 Zonas quemadas	79
3.3.5 Glaciares y nieves permanentes	98
4.1.1 Humedales y zonas pantanosas	98
4.1.2 Turberas	98
4.2.1 Marismas	98
4.2.2 Salinas	98

Se ha supuesto que el CN en los terrenos afectados por las PFVs se incrementa un 20% respecto del CN original del uso del suelo en el que se ubica teniendo en consideración la ocupación efectiva del suelo por elementos de cimentación, el vuelo de las placas y la parte de instalaciones auxiliares que conllevan impermeabilizaciones reales de terreno (edificaciones o viales). La incertidumbre existente en cuanto a la validez de los coeficientes asignados recomienda su comprobación en fases posteriores de desarrollo y la realización de trabajos de comprobación en campo del comportamiento real y los efectos de este tipo de instalaciones (en realidad no conllevan impermeabilización como tal de la superficie sino intercepción de la precipitación que no tiene necesariamente que traducirse en impermeabilización).

Para estimar el caudal generado en la cuenca se ha empleado el método racional (eq. 4) empleando la expresión para la intensidad horaria (ecuación artículo 2.2.4 a)) definida en la Instrucción de Drenaje de Carreteras (FOM, 2016) (eq. 5). Para la estimación del caudal punta orientado a la determinación de calados vinculados a los diferentes períodos de retorno se ha supuesto una tormenta de duración igual al tiempo de concentración empleando la expresión de Kirpich (1940) (eq. 6).

$$Q = I \sum c_i A_i \quad [4]$$

$$I = I_d \left( \frac{I_1}{I_d} \right)^{\left( \frac{28^{0.1} - t_c^{0.1}}{28^{0.1} - 1} \right)} \quad [5]$$

$$t_c = 3.976 \frac{L^{0.77}}{I_0^{0.385}} \quad [6]$$

Donde I es la intensidad horaria de una tormenta de duración igual al tiempo de concentración ( $t_c$ ),  $c_i$  es el coeficiente de escorrentía ( $c=E/P$ ),  $A_i$  es el área de cada uso del suelo,  $I_d$  es la intensidad promedio horaria ( $I_d=P/24$ ),  $I_1/I_d$  es un índice de torrencialidad ( $I_1/I_d=10$  según la figura 2.4 de FOM, 2016), L es la longitud de la cuenca e  $I_0$  la pendiente.

Para la simulación de eventos concretos se han generado hietogramas sintéticos empleando el método del bloque alterno (Te Chow et al., 1998) y estimado la abstracción empleando las expresiones de Green and Ampt (1911), ecuaciones 7 y 8.

$$k_s \Delta t = F_{t+\Delta t} - F_t - \tau \Delta \theta \ln \left[ \frac{F_{t+\Delta t} + \tau \Delta \theta}{F_t + \tau \Delta \theta} \right] \quad [7]$$

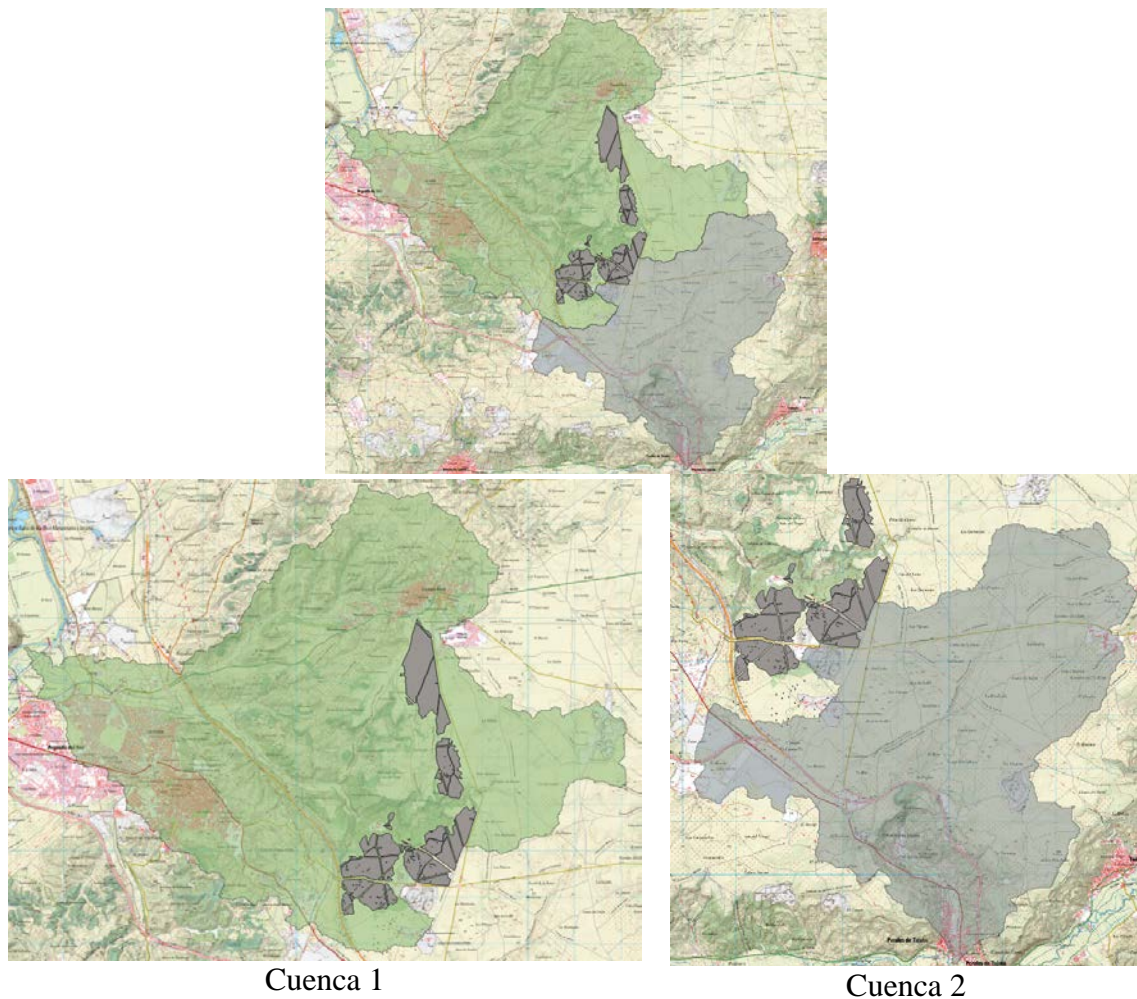
$$f_t = k_s \left( 1 + \frac{\tau \Delta \theta}{F_t} \right) \quad [8]$$

Donde F y f representan respectivamente la infiltración acumulada e instantánea,  $\tau$  es la sorptividad (calculada mediante la expresión de Neuman, 1976),  $k_s$  la conductividad

hidráulica en saturación,  $\Delta\theta$  el intervalo de agua útil del suelo, y  $\Delta t$  el salto de tiempo. Se han empleado los parámetros definidos por Carsel and Parrish (1988) para cada tipo de suelo.

#### 4.1. Efectos sobre la generación de caudales de escorrentía

Se han simulado las condiciones preoperacionales y postoperacionales en términos de generación de caudal. Se han identificado un total de 2 cuencas potencialmente afectadas por el proyecto. Las figuras 8 y 9 muestran la identificación de las cuencas, los usos del suelo afectados y la superposición de las cuencas con las PFVs objeto del presente estudio, respectivamente.



*Figura 8. Delimitación de cuencas afectadas por el proyecto.*



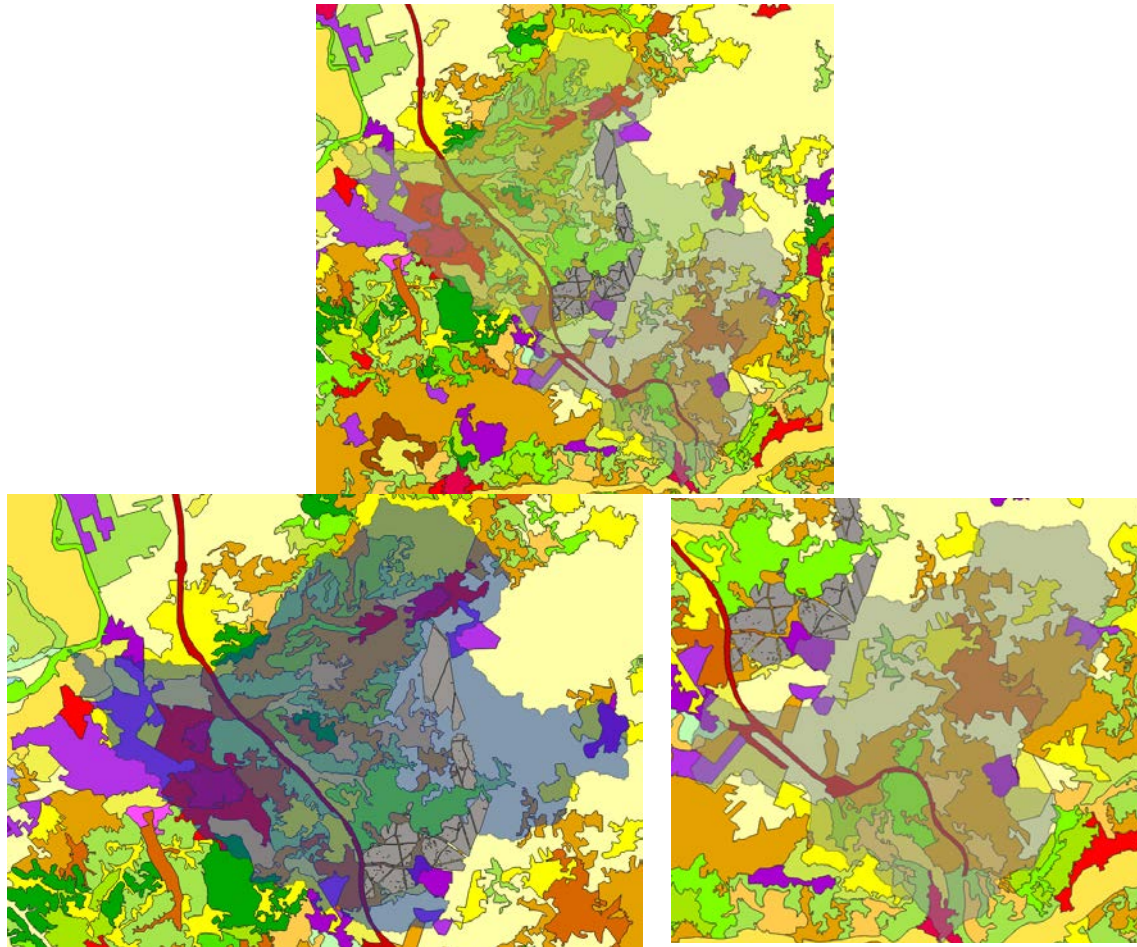


Figura 9. Corte de la capa de usos del suelo CORINE Land Cover (2018) con las cuencas afectadas.

Las tablas 7 y 8 muestran las superficies de cada uso del suelo en las fases pre y postoperacional.

Tabla 7. Superficies de usos del suelo en las cuencas afectadas. Situación preoperacional ( $m^2$ ).

Uso del suelo	Cuenca 1	Cuenca 2
1.1.1	1733845.47	332359.226
1.1.2	3812909.06	0
1.2.1	2843287.33	712102.119
1.2.2.	769555.854	927691.223
1.3.1	896388.099	876500.321
2.1.1	13787390.4	12280813.1
2.1.2	2518623	565635.933
2.2.1	3171422.52	2028467.05
2.2.2	50240.847	213884.125
2.2.3	9328458.74	8010349.45
2.3.1	1264938.39	1288767.17
2.4.2	6663375.18	2332215.51
2.4.3	2600272.13	1533104.63



Uso del suelo	Cuenca 1	Cuenca 2
3.1.1	3109136.31	1203588.26
3.1.2	878930.643	0
3.2.1	0	181051.375
3.2.3	6508628.15	1147336.39
3.2.4	3136229.2	603626.284
3.3.3	0	111088.01

*Tabla 8. Superficies de usos del suelo en las cuencas afectadas. Situación postoperacional sin incluir superficie PFVs (m<sup>2</sup>).*

Uso del suelo	Cuenca 1	Cuenca 2
1.1.1	1733845.47	[332359.226
1.1.2	3812909.06	0
1.2.1	2843287.33	712102.119
1.2.2.	769487.838	927691.223
1.3.1	896299.074	876500.321
2.1.1	11763758.3	11924484.9
2.1.2	2518623	565635.933
2.2.1	2943259.36	2028467.05
2.2.2	50240.847	213884.125
2.2.3	8025443.63	7916960.03
2.3.1	1049032.61	1288767.17
2.4.2	6663375.18	2332215.51
2.4.3	2600272.13	1533104.63
3.1.1	3106004.46	1203588.26
3.1.2	878930.643	0
3.2.1	0	181051.375
3.2.3	6496948.16	1147336.39
3.2.4	3136229.2	603626.284
3.3.3	0	111088.01

Las tablas 9 y 10 muestran los resultados obtenidos para los caudales generados en las cuencas y escenarios considerados para las situaciones preoperacional y postoperacional.

*Tabla 9. Caudales obtenidos ( $m^3/s$ ) para las cuencas y escenarios analizados. Situación preoperacional.*

Condiciones iniciales	P. retorno	Cuenca 1	Cuenca 2
AMCI (suelo seco)	T=2	5.05	10.68
	T=5	9.33	16.19
	T=10	14.22	31.09
	T=25	22.07	50.36
	T=50	29.26	68.53
	T=100	38.64	92.69
	T=500	67.8	171.23
AMC II (condiciones normales)	T=2	16.68	40.12
	T=5	30.75	78.18
	T=10	44.46	116.29
	T=25	64.27	171.43
	T=50	81.25	218.67
	T=100	102.37	277.38
	T=500	161.15	441.51

*Tabla 10. Caudales obtenidos ( $m^3/s$ ) para las cuencas y escenarios analizados. Situación postoperacional*

Condiciones iniciales	P. retorno	Cuenca 1	Cuenca 2
AMCI (suelo seco)	T=2	6.5	11.93
	T=5	11.7	21.71
	T=10	17.32	33.7
	T=25	26.12	53.68
	T=50	34.06	72.37
	T=100	44.29	97.12
	T=500	75.46	176.99
AMC II (condiciones normales)	T=2	19.09	42.0
	T=5	34.1	90.69
	T=10	48.48	119.22
	T=25	69.03	174.82
	T=50	86.53	222.37
	T=100	108.18	281.4
	T=500	161.5	446.19

Los caudales que se prevé se generen son elevados especialmente en la cuenca 2 aunque tal y como se pudo observar comparando las simulaciones pre y postoperacional el efecto derivado de la implantación de las PFVs no es elevado en términos relativos en ninguna de las dos cuencas.

#### **4.2 Efectos sobre la dinámica hidrológica**

Los caudales anteriores se han simulado en HECRAS, suponiendo número de Manning (rugosidad del cauce)  $n=0.03$ , que se corresponde con un cauce con hierbas bajas. Se han simulado los tramos de cauces delimitados en la figura 10 (arroyos Pilarejo y

Valtierra, ambos en cabecera de la cuenca 1) potencialmente afectados de forma directa por la implantación de las PFVs (como criterio general se han considerado tramos potencialmente afectados aquellos ubicados a una distancia inferior a 100 m desde cualquier punto de la PFVs, independientemente de que los efectos sobre la escorrentía generada en el apartado anterior se hayan circunscrito a una cuenca de diferente entidad). En general se han considerado para las simulaciones que la totalidad de los caudales estimados para cada (expuestos en las tablas 9 y 10) circularían por los tramos de cauce estudiados. Esto sin duda es una situación no real pero que se adopta desde el lado de la prudencia de cara a proveer la mayor protección posible de la variable hidrológica.

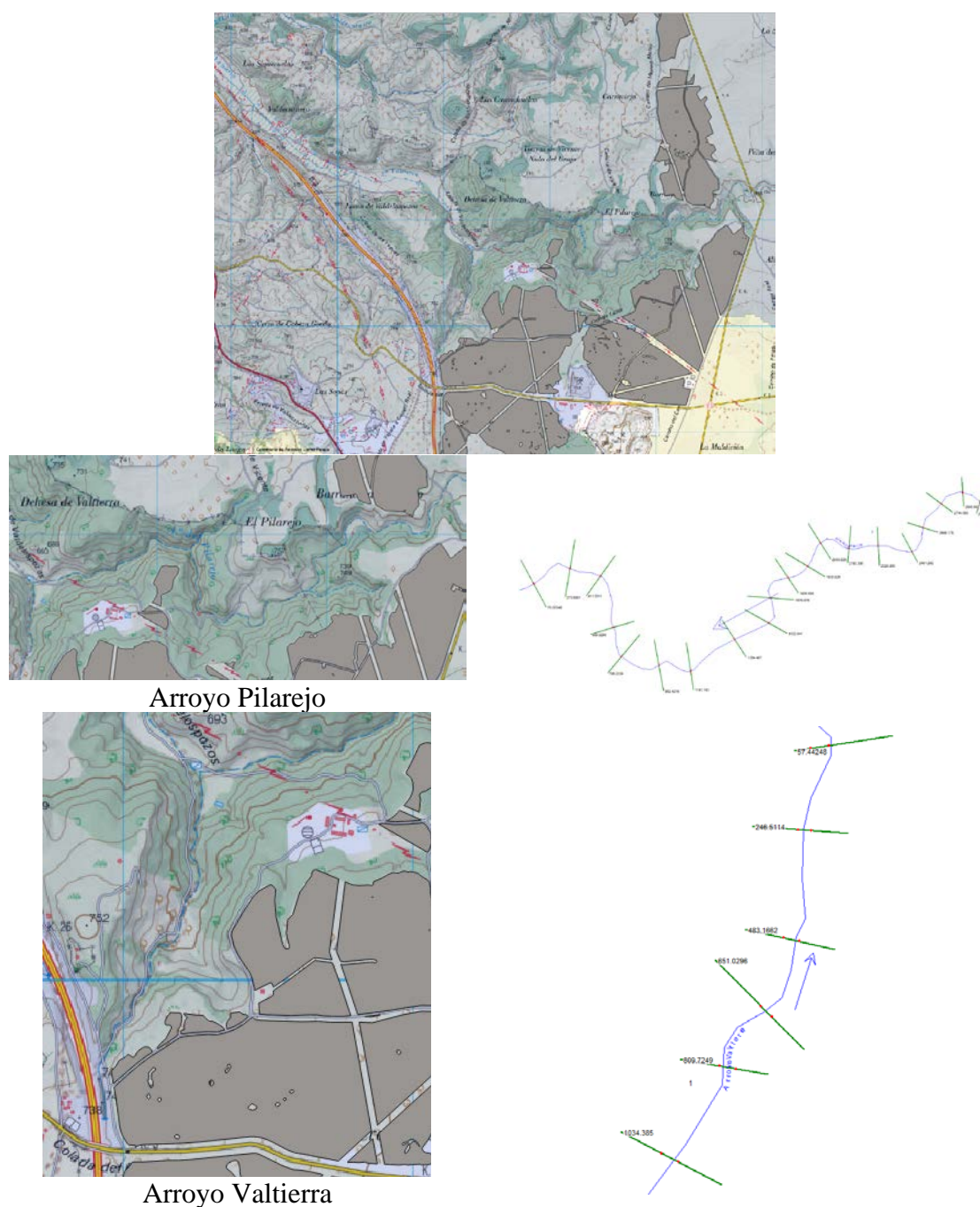
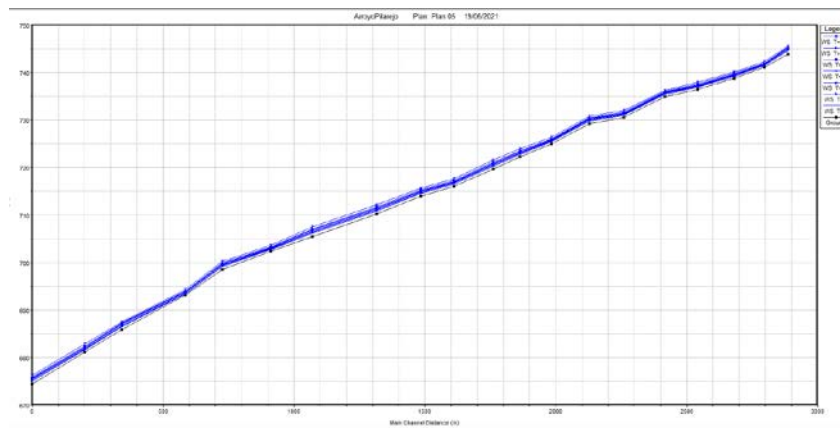
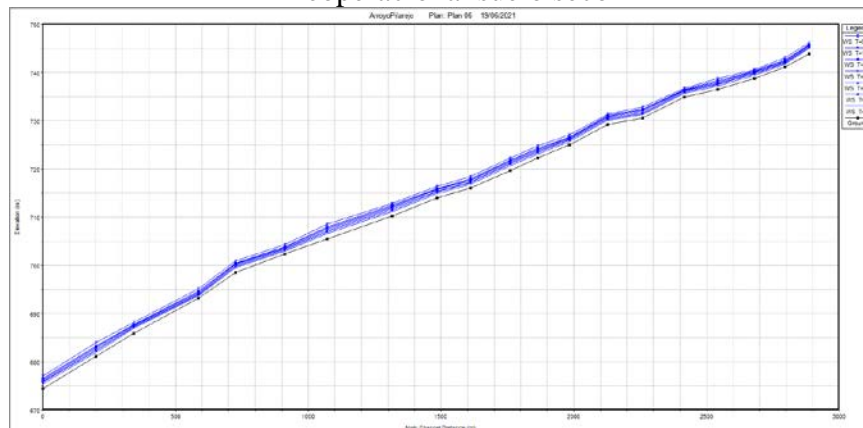


Figura 10. Tramos de cauce simulados

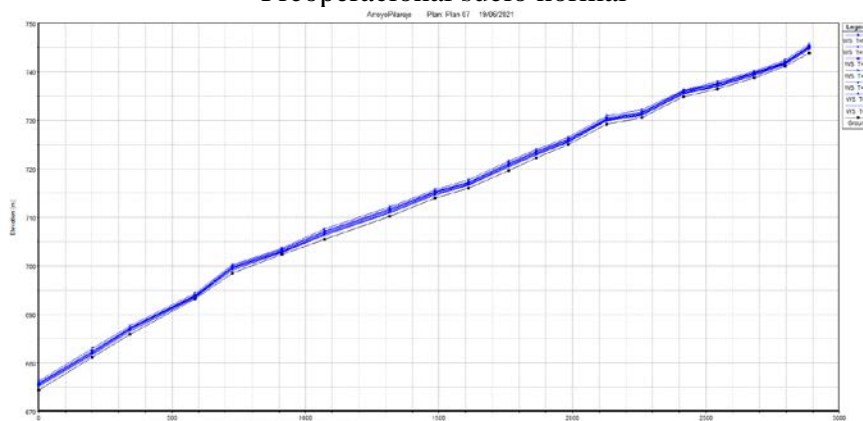
Los resultados de la simulación de las situaciones pre y postoperacional sobre las secciones transversales se incluyen en los apéndices 1 y 2 del presente documento en tanto que las tablas con los parámetros hidráulicos se han incluido en los apéndices 3 y 4, para las situaciones pre y postoperacional, respectivamente. Las figuras 11 y 12 muestran los perfiles longitudinales del calado para los cauces estudiados.



## Preoperacional suelo seco



### Preoperacional suelo normal



## Postoperacional suelo seco



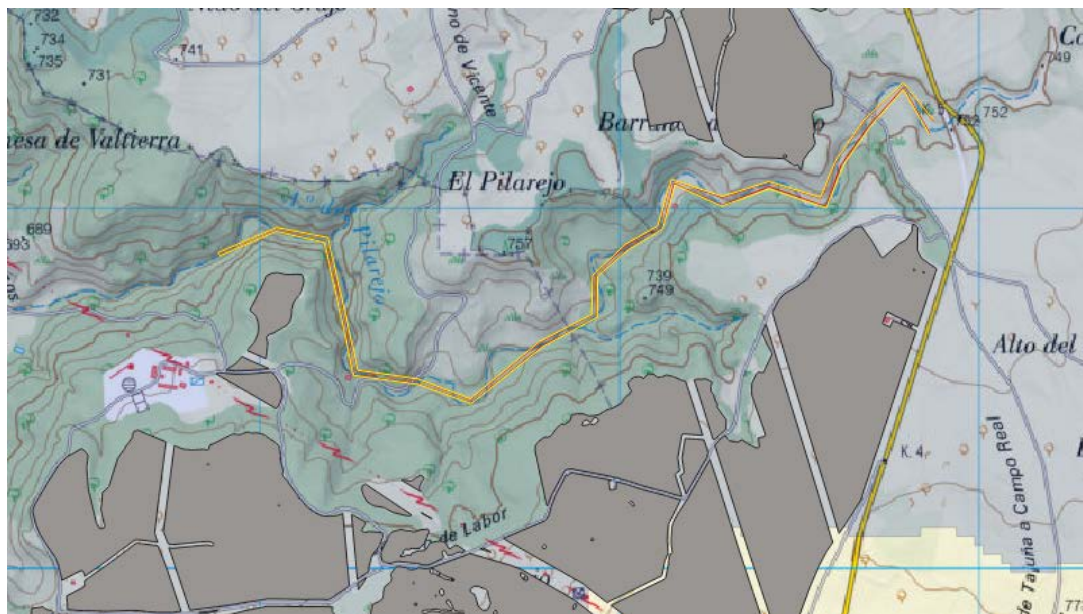
*Figura 12. Sección longitudinal Arroyo Valtierra.*

The map shows a topographic view of a region. Key features include:
 

- Water Bodies:** Río de los Yegros (top left), Río de las Yegras (center left), and Río de Labor (center right).
- Topography:** Contour lines indicating elevations such as 683, 699, 709, 719, 730, 742, 749, 752, 758, 764, 772, 785, 795, 805, 815, 825, 835, 845, 855, 865, 875, 885, 895, 905, 915, 925, 935, 945, 955, 965, 975, 985, 995, 1005, 1015, 1025, 1035, 1045, 1055, 1065, 1075, 1085, 1095, 1105, 1115, 1125, 1135, 1145, 1155, 1165, 1175, 1185, 1195, 1205, 1215, 1225, 1235, 1245, 1255, 1265, 1275, 1285, 1295, 1305, 1315, 1325, 1335, 1345, 1355, 1365, 1375, 1385, 1395, 1405, 1415, 1425, 1435, 1445, 1455, 1465, 1475, 1485, 1495, 1505, 1515, 1525, 1535, 1545, 1555, 1565, 1575, 1585, 1595, 1605, 1615, 1625, 1635, 1645, 1655, 1665, 1675, 1685, 1695, 1705, 1715, 1725, 1735, 1745, 1755, 1765, 1775, 1785, 1795, 1805, 1815, 1825, 1835, 1845, 1855, 1865, 1875, 1885, 1895, 1905, 1915, 1925, 1935, 1945, 1955, 1965, 1975, 1985, 1995, 2005, 2015, 2025, 2035, 2045, 2055, 2065, 2075, 2085, 2095, 2105, 2115, 2125, 2135, 2145, 2155, 2165, 2175, 2185, 2195, 2205, 2215, 2225, 2235, 2245, 2255, 2265, 2275, 2285, 2295, 2305, 2315, 2325, 2335, 2345, 2355, 2365, 2375, 2385, 2395, 2405, 2415, 2425, 2435, 2445, 2455, 2465, 2475, 2485, 2495, 2505, 2515, 2525, 2535, 2545, 2555, 2565, 2575, 2585, 2595, 2605, 2615, 2625, 2635, 2645, 2655, 2665, 2675, 2685, 2695, 2705, 2715, 2725, 2735, 2745, 2755, 2765, 2775, 2785, 2795, 2805, 2815, 2825, 2835, 2845, 2855, 2865, 2875, 2885, 2895, 2905, 2915, 2925, 2935, 2945, 2955, 2965, 2975, 2985, 2995, 3005, 3015, 3025, 3035, 3045, 3055, 3065, 3075, 3085, 3095, 3105, 3115, 3125, 3135, 3145, 3155, 3165, 3175, 3185, 3195, 3205, 3215, 3225, 3235, 3245, 3255, 3265, 3275, 3285, 3295, 3305, 3315, 3325, 3335, 3345, 3355, 3365, 3375, 3385, 3395, 3405, 3415, 3425, 3435, 3445, 3455, 3465, 3475, 3485, 3495, 3505, 3515, 3525, 3535, 3545, 3555, 3565, 3575, 3585, 3595, 3605, 3615, 3625, 3635, 3645, 3655, 3665, 3675, 3685, 3695, 3705, 3715, 3725, 3735, 3745, 3755, 3765, 3775, 3785, 3795, 3805, 3815, 3825, 3835, 3845, 3855, 3865, 3875, 3885, 3895, 3905, 3915, 3925, 3935, 3945, 3955, 3965, 3975, 3985, 3995, 4005, 4015, 4025, 4035, 4045, 4055, 4065, 4075, 4085, 4095, 4105, 4115, 4125, 4135, 4145, 4155, 4165, 4175, 4185, 4195, 4205, 4215, 4225, 4235, 4245, 4255, 4265, 4275, 4285, 4295, 4305, 4315, 4325, 4335, 4345, 4355, 4365, 4375, 4385, 4395, 4405, 4415, 4425, 4435, 4445, 4455, 4465, 4475, 4485, 4495, 4505, 4515, 4525, 4535, 4545, 4555, 4565, 4575, 4585, 4595, 4605, 4615, 4625, 4635, 4645, 4655, 4665, 4675, 4685, 4695, 4705, 4715, 4725, 4735, 4745, 4755, 4765, 4775, 4785, 4795, 4805, 4815, 4825, 4835, 4845, 4855, 4865, 4875, 4885, 4895, 4905, 4915, 4925, 4935, 4945, 4955, 4965, 4975, 4985, 4995, 5005, 5015, 5025, 5035, 5045, 5055, 5065, 5075, 5085, 5095, 5105, 5115, 5125, 5135, 5145, 5155, 5165, 5175, 5185, 5195, 5205, 5215, 5225, 5235, 5245, 5255, 5265, 5275, 5285, 5295, 5305, 5315, 5325, 5335, 5345, 5355, 5365, 5375, 5385, 5395, 5405, 5415, 5425, 5435, 5445, 5455, 5465, 5475, 5485, 5495, 5505, 5515, 5525, 5535, 5545, 5555, 5565, 5575, 5585, 5595, 5605, 5615, 5625, 5635, 5645, 5655, 5665, 5675, 5685, 5695, 5705, 5715, 5725, 5735, 5745, 5755, 5765, 5775, 5785, 5795, 5805, 5815, 5825, 5835, 5845, 5855, 5865, 5875, 5885, 5895, 5905, 5915, 5925, 5935, 5945, 5955, 5965, 5975, 5985, 5995, 6005, 6015, 6025, 6035, 6045, 6055, 6065, 6075, 6085, 6095, 6105, 6115, 6125, 6135, 6145, 6155, 6165, 6175, 6185, 6195, 6205, 6215, 6225, 6235, 6245, 6255, 6265, 6275, 6285, 6295, 6305, 6315, 6325, 6335, 6345, 6355, 6365, 6375, 6385, 6395, 6405, 6415, 6425, 6435, 6445, 6455, 6465, 6475, 6485, 6495, 6505, 6515, 6525, 6535, 6545, 6555, 6565, 6575, 6585, 6595, 6605, 6615, 6625, 6635, 6645, 6655, 6665, 6675, 6685, 6695, 6705, 6715, 6725, 6735, 6745, 6755, 6765, 6775, 6785, 6795, 6805, 6815, 6825, 6835, 6845, 6855, 6865, 6875, 6885, 6895, 6905, 6915, 6925, 6935, 6945, 6955, 6965, 6975, 6985, 6995, 7005, 7015, 7025, 7035, 7045, 7055, 7065, 7075, 7085, 7095, 7105, 7115, 7125, 7135, 7145, 7155, 7165, 7175, 7185, 7195, 7205, 7215, 7225, 7235, 7245, 7255, 7265, 7275, 7285, 7295, 7305, 7315, 7325, 73

Arroyo Valtierra





Arroyo Pilarejo

*Figura 13. Avenidas de 10 (rojo) y 100 (amarillo) años de período de retorno sobre plantas de las PFVs*

En las anteriores figuras, se representa en color rojo la línea de inundación correspondiente a un periodo de retorno de 10 años, y en color amarillo la línea de inundación de periodo de retorno 100 años. En ambos casos, se representa la situación pre y postoperacional (con y sin PFV), pero resultan prácticamente coincidentes, debido a que no se produce una variación de flujo significativa una vez implantadas las PFV.

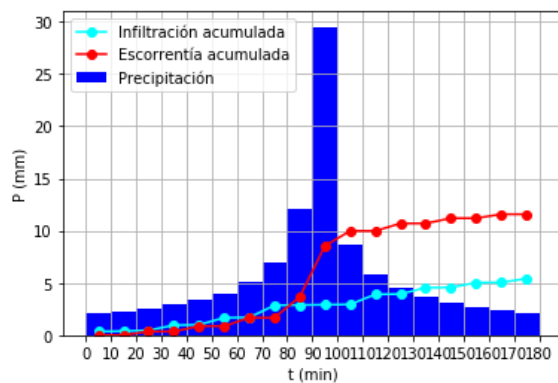
No existe ocupación por parte de las PFVs y el efecto derivado del incremento del caudal es despreciable debido a la geometría del cauce. El efecto de la incorporación de las PFVs no supone un efecto significativo sobre ninguna de las dos llanuras de inundación analizadas en ninguno de los cauces.

Más allá de la simulación de eventos extremos, la determinación de los efectos concretos sobre la relación infiltración/escorrentía recomienda el estudio del régimen variable vinculado a tormentas concretas. Los eventos vinculados a periodos de retorno son artificios estadísticos que se espera que ocurran en promedio una vez cada tantos años como marque el período de retorno. El uso de eventos extremos está relacionado con la prevención de efectos adversos y no tanto con la adecuada gestión del recurso. Por ejemplo, diseñar una estructura de retención e infiltración para el caudal vinculado a un período de retorno de 100 años implicaría que todas las tormentas que no llegasen a ese volumen quedarían retenidas impidiendo los aportes, necesarios, por escorrentía superficial, a los cauces de agua naturales. Por otra parte, el empleo del tiempo de concentración, y su significado físico, está sometido a críticas muy relevantes que recomiendan ponerlo en cuestión si de verdad se persigue una gestión eficiente de los recursos hídricos en lugar de la gestión única de eventos extremos.

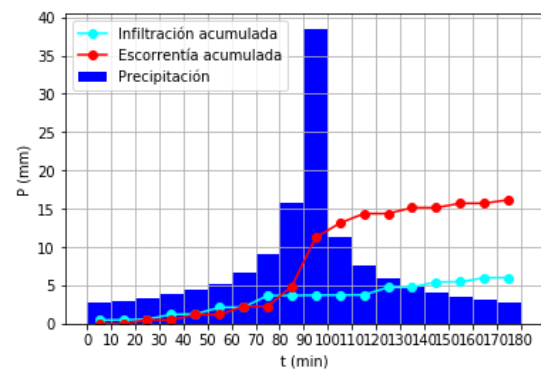


Del estudio de los datos horarios se deriva que el 80% de las tormentas duran 3 horas o menos. El análisis de los datos diarios registrados muestra que el 90 % de las tormentas no superan los 10 mm (tabla 1).

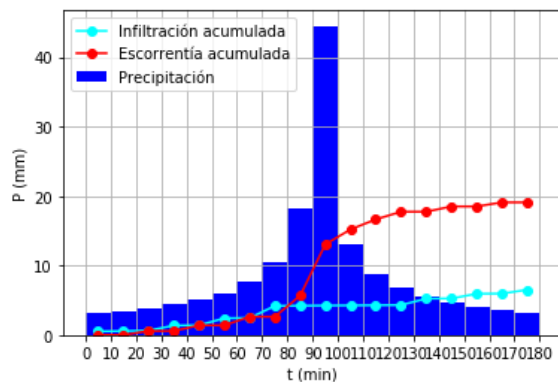
Las figuras 14, 15 y 16 presentan la evolución prevista de infiltración y escorrentía para los hietogramas sintéticos de tormentas con volúmenes iguales a los períodos de retorno consideradas y duraciones igual a 3 horas. Se han realizado para la situación preoperacional (figura 14), la situación postoperacional sin medidas (figura 15) y la situación postoperacional definiendo un elemento de detención e infiltración de 1.5 mm (figura 16).



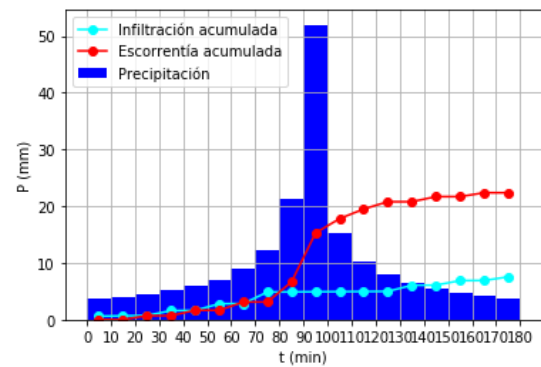
T=2



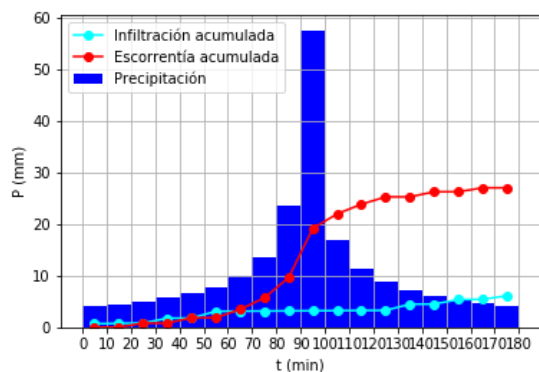
T=5



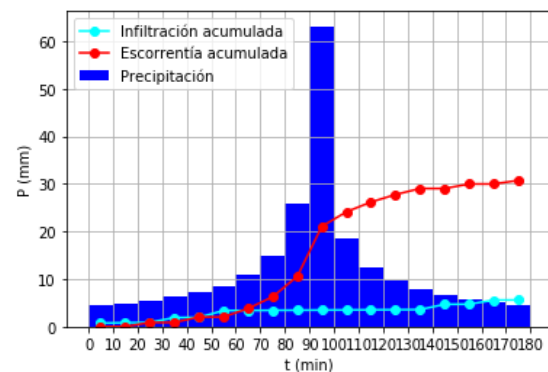
T=10



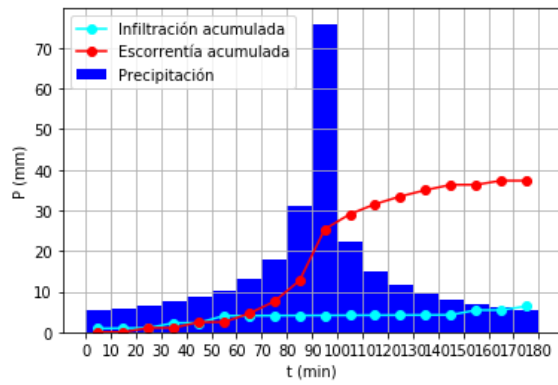
T=25



T=50

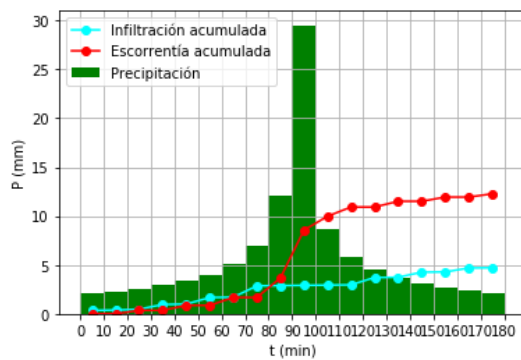


T=100

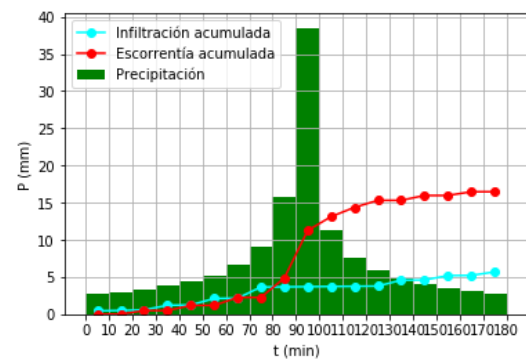


T=500

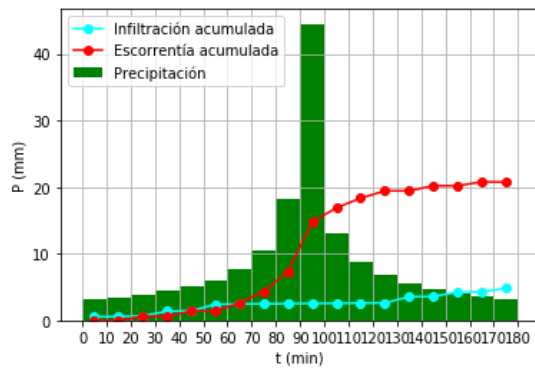
Figura 14. Hietogramas sintéticos e hidrogramas de escorrentía e infiltración para los escenarios descritos. Situación preoperacional.



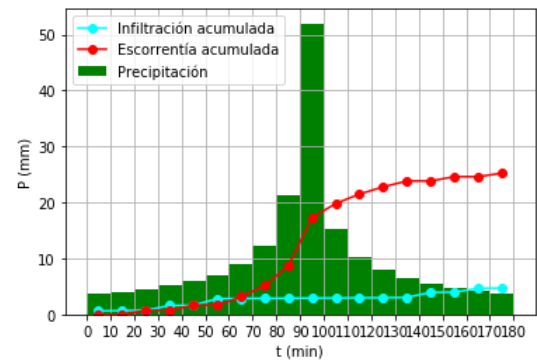
T=2



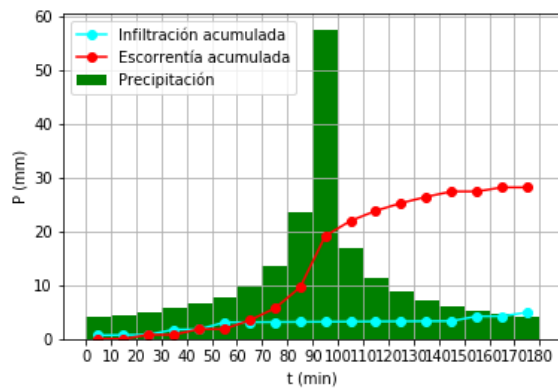
T=5



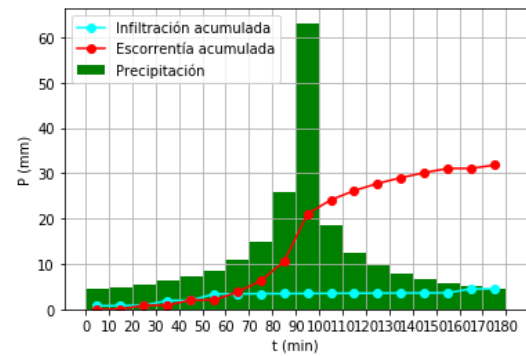
T=10



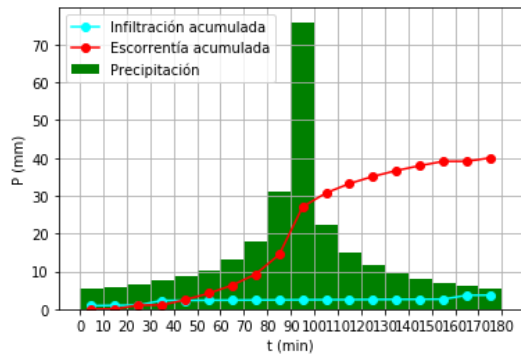
T=25



T=50

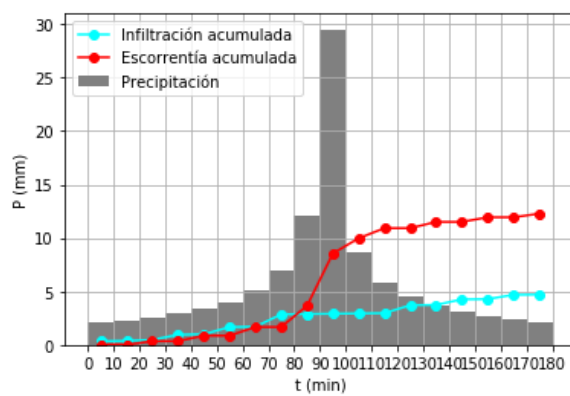


T=100

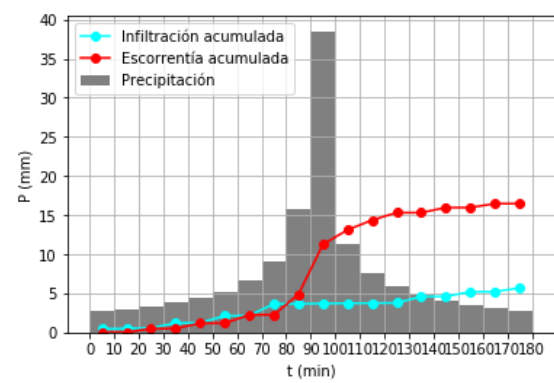


T=500

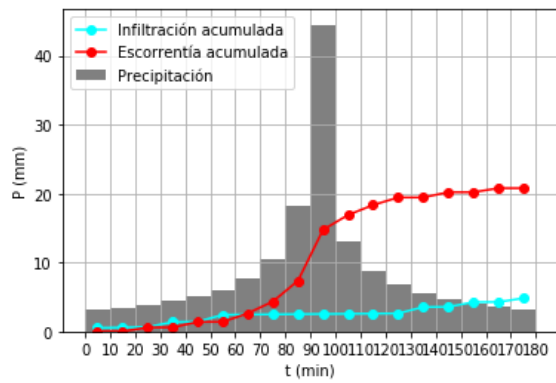
Figura 15. Hietogramas sintéticos e hidrogramas de escorrentía e infiltración para los escenarios descritos. Situación postoperacional sin medidas.



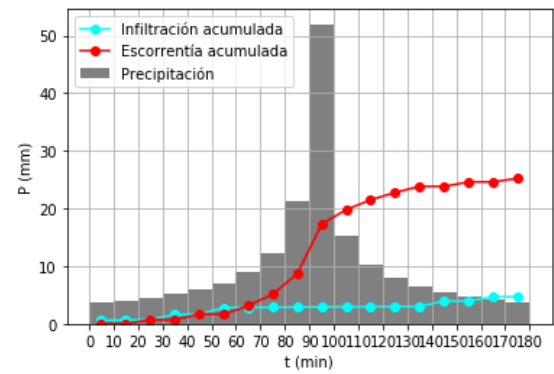
T=2



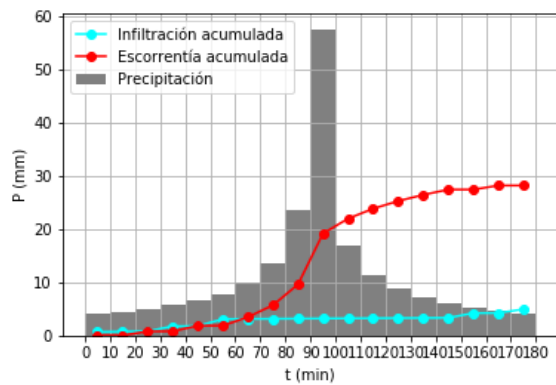
T=5



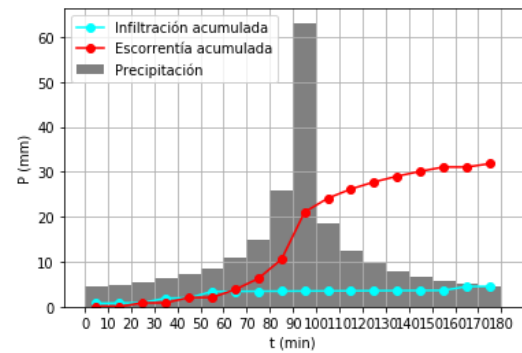
T=10



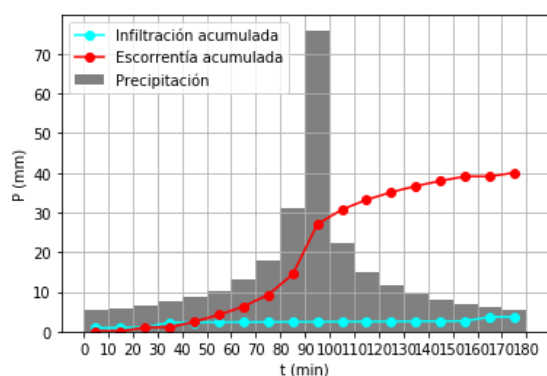
T=25



T=50



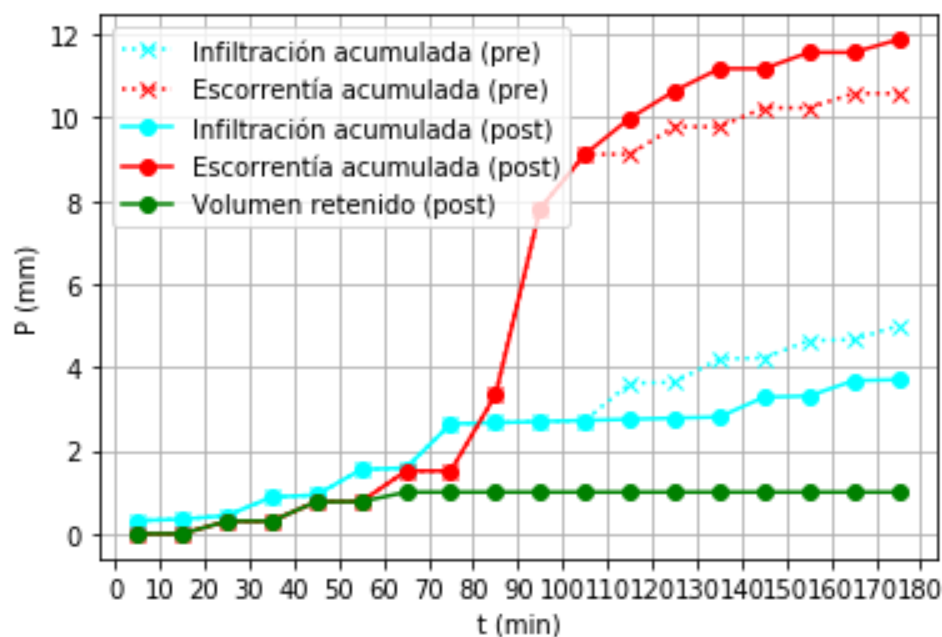
T=100



T=500

*Figura 16. Hietogramas sintéticos e hidrogramas de escorrentía e infiltración para los escenarios descritos. Situación postoperacional con medidas.*

En la figura 17 se presenta la simulación del comportamiento en detalle de las principales variables hidráulicas para el caso de la implantación de las medidas preventivas descritas para una tormenta de P=10 mm (cuantil 90) de duración 3 horas



*Figura 17. Simulación de la evolución prevista de las principales variables hidrológicas ante una tormenta de 3 horas de duración y precipitación igual al cuantil de orden 90.*

## 5. Relación con la planificación hidrológica

La planificación hidrológica de la zona objeto de estudio viene definida por el Plan hidrológico de la parte española de la Demarcación Hidrográfica del Tago aprobado por Real Decreto 1/2016, de 8 de enero, por el que se aprueba la revisión de los Planes Hidrológicos de las demarcaciones hidrográficas del Cantábrico Occidental, Guadalquivir, Ceuta, Melilla, Segura y Júcar, y de la parte española de las

demarcaciones hidrográficas del Cantábrico Oriental, Miño-Sil, Duero, Tajo, Guadiana y Ebro.

En concreto, en lo relativo a la cuenca del Tajo, el Plan viene a recoger las del artículo 42 del texto refundido de la Ley de aguas. En concreto, los objetivos de la planificación hidrológica recogidos por el plan son los siguientes:

*Los objetivos medioambientales para las masas de agua, se concretan en el artículo 92 bis del TRLA y Art. 35 y 36 del Reglamento de Planificación Hidrológica (RPH):*

*Para las aguas superficiales:*

- *Prevenir el deterioro del estado de las masas de agua superficial.*
- *Proteger, mejorar y regenera todas las masas de agua superficial con el objeto de alcanzar un buen estado de las mismas a más tardar el 31 de diciembre de 2015. El buen estado de las aguas superficiales se alcanza cuando tanto el estado ecológico como el químico son al menos buenos.*
- *Reducir progresivamente la contaminación procedente de sustancias prioritarias y eliminar o suprimir gradualmente los vertidos, las emisiones y las pérdidas de sustancias peligrosas y prioritarias.*

*Para las aguas subterráneas:*

- *Evitar o eliminar la entrada de contaminantes en las aguas subterráneas y evitar el deterioro del estado de todas las masas de agua subterránea*
- *Proteger, mejorar y regenerar las masas de agua subterránea y garantizar el equilibrio entre la extracción y la recarga a fin de conseguir el buen estado de las aguas subterráneas a más tardar el 31 de diciembre de 2015. El buen estado de las aguas subterráneas se alcanza cuando tanto el estado cuantitativo como el químico son al menos buenos.*
- *Invertir tendencias significativas y sostenidas en el aumento de la concertación de cualquier contaminante derivada de la actividad humana a fin de reducir progresivamente la contaminación de las aguas subterráneas.*

*Para las zonas protegidas:*

- *Cumplir las exigencias de las normas de protección que resulten aplicables en una zona y alcanzar los objetivos ambientales particulares que en ellas se determinen. El plan hidrológico debe identificar cada una de las zonas protegidas, sus objetivos específicos y su grado de cumplimiento. Los objetivos correspondientes a la legislación específica de las zonas protegidas no deben ser objeto de prórrogas u objetivos menos rigurosos.*

A priori y en términos generales a expensas de una mayor concreción en cuanto a las condiciones de ejecución en detalle de las infraestructuras, no se espera que las PFVs generen impactos significativos sobre los objetivos de la planificación hidrológica descritos en los párrafos anteriores.

Por otra parte, el propio plan establece una serie de posibles situaciones excepcionales de cara al cumplimiento de los objetivos anteriores. El RPH, prevé la posibilidad de considerar, en el caso de cumplirse una serie de requisitos, el establecimiento de prórrogas para alcanzar los objetivos, así como las posibles excepcionalidades al cumplimiento de dichos objetivos que se relaciona a continuación:

- *Masas de agua con objetivos menos rigurosos*

*Cuando existan masas de agua muy afectadas por la actividad humana o sus condiciones naturales hagan inviable la consecución de los objetivos señalados o su consecución exija un coste desproporcionado, se establecerán objetivos ambientales menos rigurosos en las condiciones que se señalaran en cada caso, mediante los planes hidrológicos (art. 92 bis3 del TRLA y art. 37 del RPH). Las condiciones que deben reunirse para acogerse a esta posibilidad son las siguientes:*

- *Que las necesidades socioeconómicas y ecológicas a las que atiende la actividad humana que presiona la masa no puedan lograrse por otros medios que constituyan una alternativa significativamente mejor desde el punto de vista ambiental y que no suponga un coste desproporcionado.*
- *Que se garanticen el mejor estado ecológico y químico posibles para las aguas superficiales y los mínimos cambios posible del buen estado de las aguas subterráneas, teniendo en cuenta, en ambos casos, las repercusiones que no hayan podido evitarse razonablemente debido a la naturaleza de la actividad humana o de la contaminación.*
- *Que no se produzca deterioro ulterior del estado de la masa de agua afectada.*
- *Situaciones excepcionales de deterioro temporal del estado de las masas de agua*

*El artículo 38 del RPH establece que se podrá admitir el deterioro temporal del estado de las masas de agua si éste se debe a causas naturales o de fuerza mayor que sean excepcionales o no hayan podido preverse razonablemente, en particular graves inundaciones y sequías prolongadas, o al resultado de circunstancias derivadas de accidentes que tampoco hayan podido ser previsto razonablemente.*

- *Nuevas modificaciones o alteraciones de las características físicas de masas de agua superficial o alteraciones del nivel de las masas de agua subterránea.*

*Bajo una serie de condiciones, definidas en el artículo 39 del RPH, se podrán admitir nuevas modificaciones de las características físicas de una masa de agua superficial o alteraciones del nivel de las masas de agua subterráneas aunque ello impida lograr un buen estado ecológico, un buen estado de las aguas subterráneas o un buen potencial ecológico, en su caso, o supongan el deterioro del estado de una masa de agua superficial o subterránea. Asimismo, y bajo idénticas condiciones, se podrán realizar*

*nuevas actividades humanas de desarrollo sostenible aunque supongan el deterioro desde el muy buen estado al buen estado de una masa de agua superficial.*

El plan se refiere también a las demandas de agua estableciendo, en el momento de su publicación, *la estimación de las demandas actuales y previsibles en el escenario tendencial correspondiente a los años 2021 y 2033.*

La memoria del Plan reconoce la existencia de una situación de especial presión sobre los recursos hídricos de la cuenca *Las masas de agua de la cuenca del Tajo están afectadas por numerosas presiones, resultado de una gran densidad de población y de una actividad humana intensa, comparada con otras cuencas españolas resultado de Cabe destacar la alta densidad de zonas urbanas en la Comunidad de Madrid: Madrid núcleo y su conurbación con las infraestructuras de transporte que llevan asociadas, que ejercen una fuerte presión sobre las masas de agua de su territorio así como de El alto número de vertidos, en su mayoría urbanos, junto con la importancia de otras presiones difusas como las debidas a la explotación agraria intensiva, resultan también en una merma de la calidad de las aguas. Como vertidos industriales que ejercen gran presión sobre las aguas, hay ejemplos relevantes como el río Cuerpo de Hombre aguas abajo de Béjar.* En el anejo 7 del plan se detallan las presiones identificadas quedando resumidas en la siguiente tabla.

*Tabla 11. Presiones identificadas en la planificación hidrológica de la cuenca del Tajo sobre las aguas superficiales y subterráneas*

Tipo de masa de agua	Tipo de presión	Número
Masas superficiales	Vertidos	858
	Vertederos	380
	Extracciones	5961
	Presas	253
	Azudes	451
	Canalizaciones	31
	Protección de márgenes	28
	Cobertura de cauces	2
	Modificación de conexiones	1
	Puentes con efecto azud	14
	Trasvases	11
	Desvíos hidroeléctricos	25
	Suelos contaminados	2
	Vertidos	274
	Vertederos	56
Masas subterráneas	Extracciones	28206
	Recarga artificial	2
	Suelos contaminados	43

Según reconoce el plan, los principales problemas a los que se enfrenta la cuenca son los siguientes:



- *La concentración de población y actividades económicas en la Comunidad de Madrid y áreas limítrofes de Toledo y Guadalajara, más de 6,5 millones de habitantes (año 2006), origina un gran volumen de aguas residuales que, aun cumpliendo la normativa de vertidos (Directiva 91/271/CEE), da lugar a notables problemas de calidad de las aguas en los ríos y embalses que se propagan hasta el tramo bajo de la cuenca.*
- *En la cabecera del Tajo (embalses de Entrepeñas y Buendía) las aportaciones en el periodo 1980-2006 se han reducido a la mitad de las previstas en el anteproyecto del trasvase Tajo-Segura de 1967. En dicho periodo, los volúmenes trasvasados han sido del orden de la mitad de los previstos, manteniendo dichos embalses con volúmenes mínimos durante largos periodos, causando malestar a los ribereños al anular las posibilidades de desarrollo ligadas al agua.*
- *El fuerte crecimiento de población de la Comunidad de Madrid y Castilla-La Mancha se ha de abastecer desde recursos regulados en la cabecera (embalses de Entrepeñas y Buendía), por carecer de otras posibilidades.*
- *En la cuenca alta del Tajo, se generan el 45% de los recursos y se consume el 85% del total de la cuenca. Talavera de la Reina con una cuenca vertientes de 35000 km<sup>2</sup>, constituye el punto crítico, con caudales medios circulantes en el mes de julio de algunos años inferiores a 2 m<sup>3</sup>/s y problemas en la calidad del agua y degradación de cauces y riberas.*
- *Cumplimiento del Convenio de Albufeira, con la obligación de transferir a Portugal un volumen mínimo anual de 2700 hm<sup>3</sup>/año, salvo situaciones de excepción. También existen obligaciones para volúmenes trimestrales y semanales.*

En cuanto a los usos del recurso, el plan reconoce la necesidad de dotar a los principales cauces de caudales ecológicos que garanticen unos mínimos objetivos ambientales. Los caudales inicialmente fijados fueron los expuestos en la tabla 11.

*Tabla 11. Caudales ecológicos fijados por la planificación hidrológica para la cuenca del tajo para el horizonte 2015.*

Cauce	Oct-Dic	Ene-Mar	Abr-Jun	Jul-Sept
Alagón (Valdeobispo)	2.91	2.75	1.32	0.40
Alberche (Cazalegas)	1.44	1.28	1.16	0.93
Árrago (Bobollón)	0.35	0.52	0.27	0.15
Bornova (Alcorlo)	0.17	0.22	0.27	0.14
Cañamares (Pálmaces)	0.07	0.08	0.11	0.07
Cuervo (La Tosca)	0.50	0.50	0.5	0.50
Guadiela (Molino de Chinchá)	1.44	1.46	1.46	1.41
Jarama (El Vado)	0.40	0.52	0.57	0.32
Jerte (Plasencia)	1.07	0.96	0.91	0.50
Lozoya (El Atazar)	0.82	0.90	1.12	0.52
Manzanares (Santillana)	0.52	0.59	0.63	0.26
Manzanares (El Pardo)	0.82	0.93	0.97	0.49

Cauce	Oct-Dic	Ene-Mar	Abr-Jun	Jul-Sept
Rivera de Gata (Rivera de Gata)	0.28	0.25	0.15	0.10
Sorbe (Veleña)	0.53	0.68	0.41	0.41
Tajo (Aranjuez)	6.00	6.00	6.00	6.00
Tajo (Toledo)	10.00	10.00	10.00	10.00
Tajo (Talavera de la Reina)	10.00	10.00	10.00	10.00
Tajuña (Tejera)	0.36	0.36	0.36	0.36
Tiétar (Rosarito)	0.85	1.00	0.60	0.35

No existe tampoco a priori ninguna relación adversa relevante sobre los usos del recurso, los caudales ecológicos (tal y como se ha estudiado en los apartados anteriores, no existen cambios significativos en la proporción infiltración/escorrentía) los problemas identificados o las presiones que identifica la planificación derivados de la ejecución de las PFVs objeto de estudio.

El plan relaciona también una serie de zonas protegidas por la existencia de diferentes factores:

Zonas de captación de agua para abastecimiento, tanto superficiales como subterráneas respecto de las cuales el plan establece lo siguiente:

*Conforme a los criterios establecidos en la IPH de las zonas protegidas, en el caso de las captaciones en ríos, se establece como zona protegida el tramo de río comprendido entre la propia captación o captaciones y la masa de agua situada inmediatamente aguas arriba, pudiendo extenderse a otras masas de agua en el caso de que se considere necesaria para una adecuada protección. En el caso de las captaciones en lagos y embalses, se definen como zonas protegidas los propios lagos o embalses excepto para el embalse de Valdecañas y Alcántara que debido a su gran dimensión se ha procedido a zonificar por zonas.*

*De las captaciones subterráneas registradas en la Confederación Hidrográfica del Tajo, se seleccionan las captaciones para abastecimiento con un volumen medio de, al menos, 10m<sup>3</sup> diarios, en total 199 tomas más significativas, distribuidas en el ámbito geográfico de la cuenca del Tajo.*

*Las zonas protegidas en masas de agua subterránea, se define provisionalmente y aplicando el Principio de precaución hasta que se defina y se apruebe, un perímetro de protección de 1 km de radio. Dentro del perímetro de protección se cumplirán las medidas básicas y otras medidas ambientales que sean de aplicación según la legislación vigente. La zona de reserva total se define como una superficie rectangular de 20x20 m con centro en el punto de la captación.*

*En la cuenca del Tajo, se establece como zona futura de captación para abastecimiento el Embalse del Portaje.*

La distancia existente entre la PFV analizada y la zona de captación de agua para abastecimiento más próxima supera los 18 km con lo que no cabe esperar efectos de ningún tipo.

Zonas de especies acuáticas económicamente significativas.

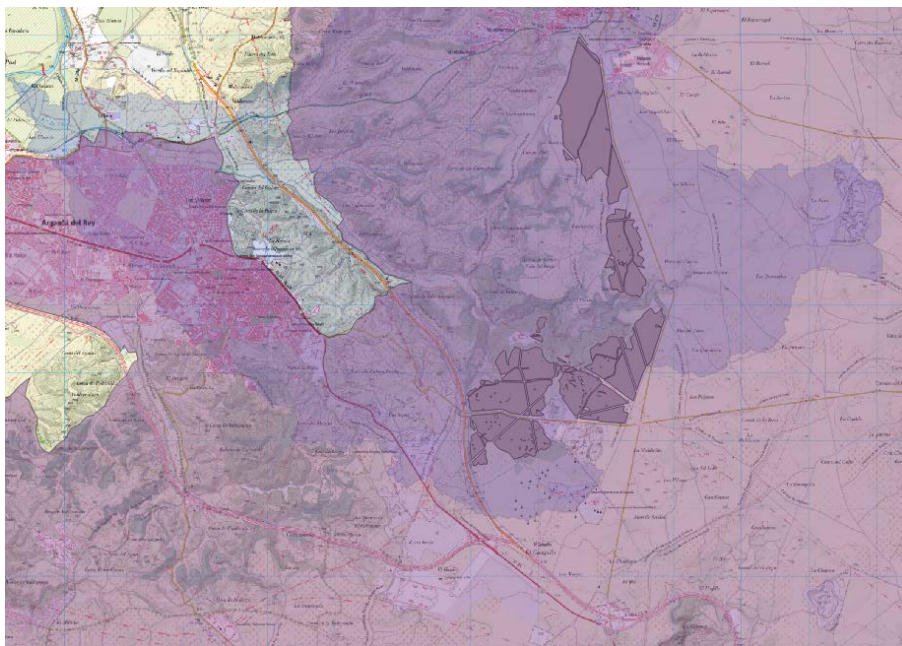
La relación entre las PFVs y estas zonas ha sido ampliamente analizada en el estudio de impacto ambiental al que el presente estudio hidrológico se anexa con lo que se remite a ese documento para un análisis mucho más preciso.

Masas de agua de uso recreativo

La distancia existente entre la PFV analizada y la masa de agua de uso recreativo más próxima asciende a más de 52 km con lo que no cabe esperar efectos de ningún tipo.

Zonas vulnerables a la contaminación por nitratos

Las PFVs se encuentran dentro de las zonas vulnerables por contaminación por nitratos denominada Masa de Agua Subterránea La Alcarria. No se espera que la ejecución del proyecto genere impactos de ningún tipo respecto de la vulnerabilidad asociada a los nitratos en esta zona.



*Figura 18. Zonas vulnerables por contaminación por nitratos*

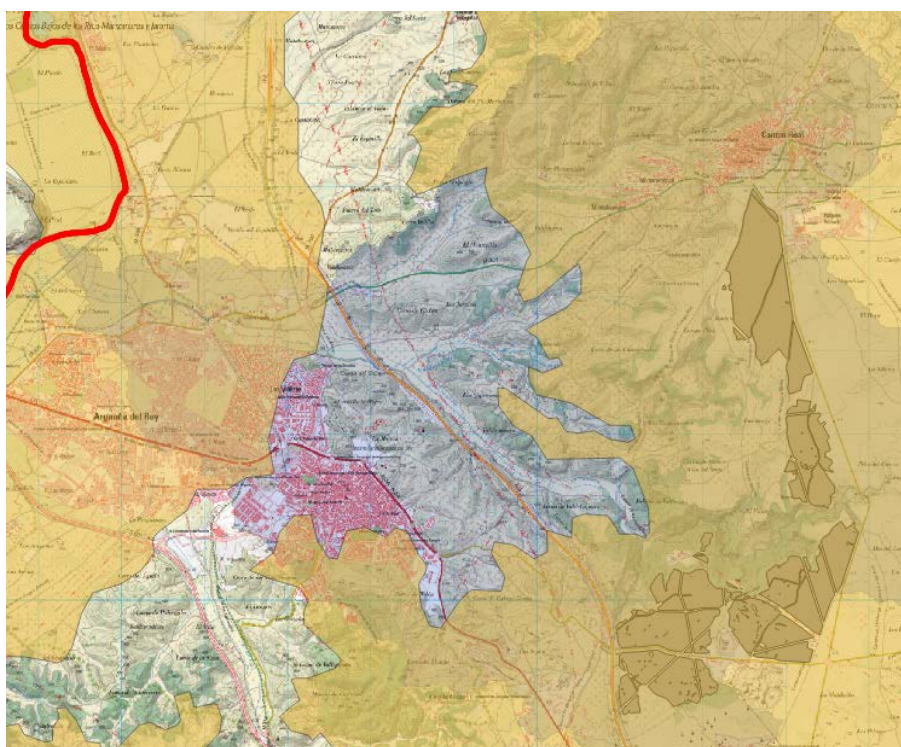
Zonas sensibles, definidas en términos de lo descrito en el Real Decreto 509/1996, de 15 de marzo:

*a) Lagos, lagunas, embalses, estuarios y aguas marítimas que sean eutróficas o que podrían llegar a ser eutróficas en un futuro próximo si no se adoptan medidas de protección.*

*b) Aguas continentales superficiales destinadas a la obtención de agua potable que podrían contener una concentración de nitratos superior a la que establecen las disposiciones pertinentes del Real Decreto 927/1988, de 29 de julio, por el que se aprueba el Reglamento de la Administración Pública del Agua y de la Planificación Hidrológica.*

*c) Masas de agua en las que sea necesario un tratamiento adicional al tratamiento secundario establecido en el artículo 5 del Real Decreto-ley y en este Real Decreto para cumplir lo establecido en la normativa comunitaria.*

No consta la existencia de ninguna de las figuras anteriores más allá de lo ya referido respecto de las zonas de captación de aguas para abastecimiento. Las PFVs se ubican sobre las masas de agua subsuperficial denominadas La Alcarria (esta figura 19) y aluviales Morata-Tajuña (oeste en la figura 19) y en el entorno del río Jarama como masa de agua superficial (trama roja figura 19).



*Figura 19. Masas de agua subsuperficial (azul) y superficial (rojo)*

Zonas de protección de hábitat o especies que incluyen las figuras de protección ambiental definidas como tales en los instrumentos de carácter ambiental sectorial.

La relación entre las PFVs y estas zonas ha sido ampliamente analizada en el estudio de impacto ambiental al que el presente estudio hidrológico se anexa con lo que se remite a ese documento para un análisis mucho más preciso.

Perímetros de protección de aguas minerales y termales.



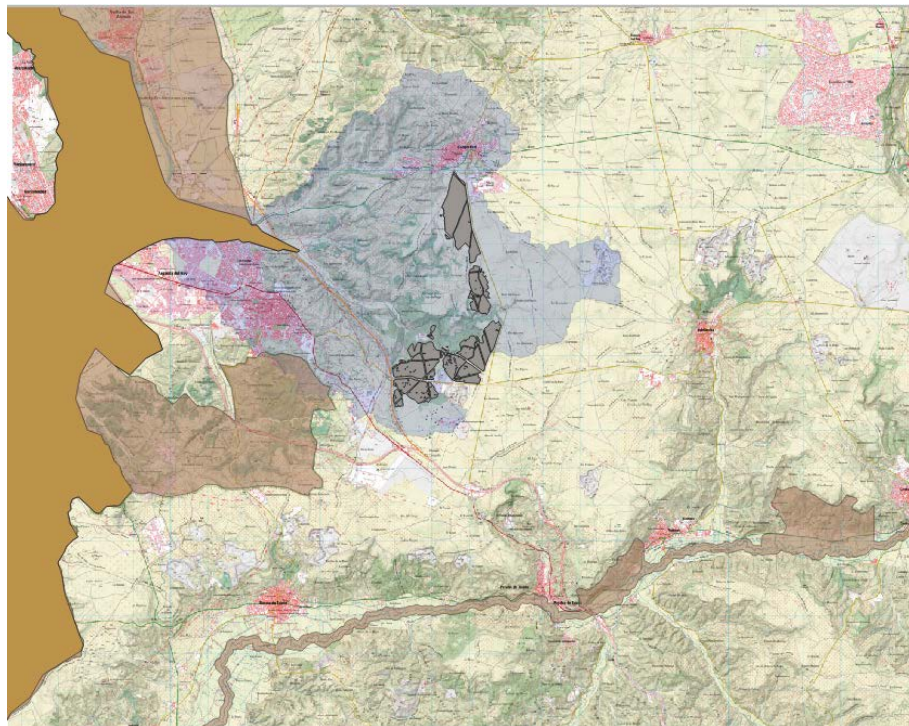
La distancia existente entre la PFV analizada y el perímetro de protección de aguas minerales y termales más próximo asciende a 35 km con lo que no cabe esperar efectos de ningún tipo.

Reservas naturales fluviales.

La distancia existente entre la PFV analizada y la reserva natural fluvial más próxima asciende a 69 km con lo que no cabe esperar efectos de ningún tipo.

Zonas de protección especial

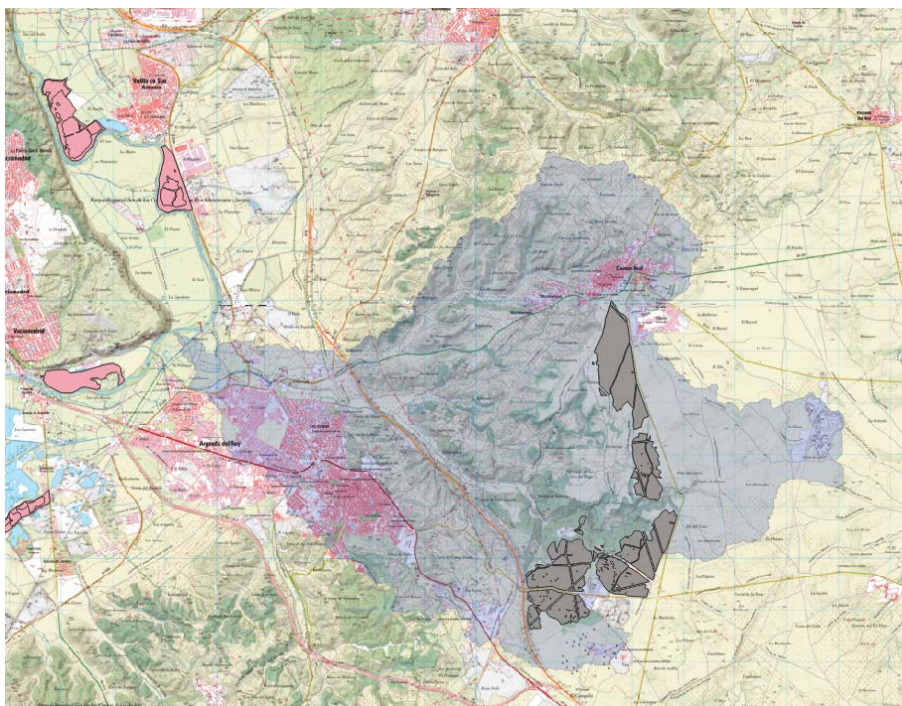
La relación entre las PFVs y estas zonas (ZEC Vegas, Cuestas y Páramos del Sureste de Madrid, trama marrón traslúcida figura 20 y ZEPA Cortados y Cantiles de los ríos Jarama y Manzanares, trama marrón solida figura 20) ha sido ampliamente analizada en el estudio de impacto ambiental al que el presente estudio hidrológico se anexa con lo que se remite a ese documento para un análisis mucho más preciso.



*Figura 20. ZECs en el entorno de las PFVs*

Zonas húmedas.

Las PFVs se encuentran de la Laguna del Campillo (la más próxima al oeste), Lagunas de Velilla y de Sotillo y Picón de los Conejos (al norte) y de las Mares (suroeste). Estas lagunas, especialmente las dos últimas se encuentran en el entorno de la cuenca y aguas abajo del punto de vertido de la cuenca en la que se ubica el proyecto en el río Henares. Aunque no se esperan efectos directos deberán vigilarse los posibles efectos indirectos en las fases de construcción y explotación.



*Figura 21. Zonas húmedas en el entorno del proyecto*

Finalmente el plan define los objetivos medioambientales para las masas de agua haciendo explícito lo siguiente:

*Un objetivo esencial de la planificación hidrológica es la protección de las aguas, prevenir el deterioro, proteger y mejorar el estado de los ecosistemas acuáticos, así como de los ecosistemas terrestres y humedales que dependan de modo directo de los acuáticos en relación con sus necesidades de agua.*

*Para conseguir una adecuada protección de las aguas, se deben alcanzar los objetivos medioambientales establecidos en el artículo 92 bis del texto refundido de la Ley de Aguas.*

La ejecución de las PFVs no generará ningún impacto negativo que comprometa la ejecución de tales objetivos medioambientales.

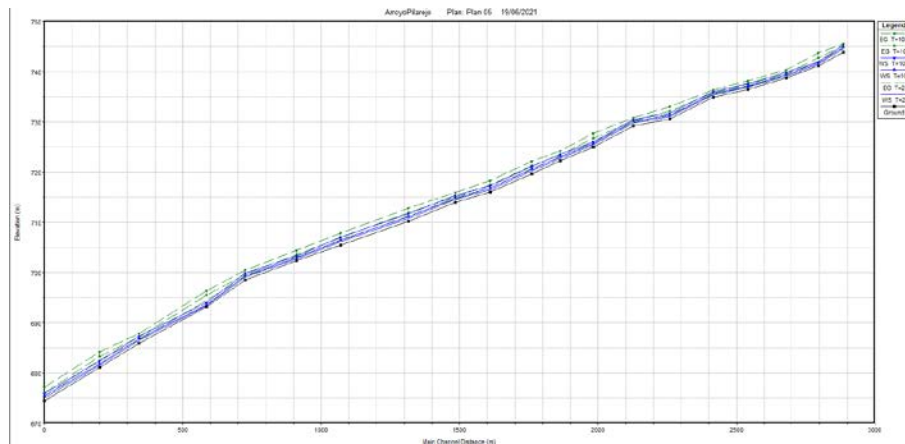
## **6. Estimación de riesgos erosivos vinculados a fenómenos hidrológicos**

Las plantas se ubican sobre terrenos de escasa pendiente (en torno a 0.02 m/m) y tal y como se ha discutido en los apartados anteriores, el principal efecto derivado de la ejecución de las PFVs es la interceptación de la precipitación con carácter previo a su infiltración. La simulación del efecto sobre la erosión de tal interceptación y su vertido de forma más concentrada es muy compleja y por un lado podría reducir los efectos sobre la separación de partículas en superficie al reducir la velocidad de impacto de la gota y, por otro, facilitar la separación al concentrar el flujo. En todo caso, se prevé la ejecución de medidas para la retención de la escorrentía superficial adicional generada por la

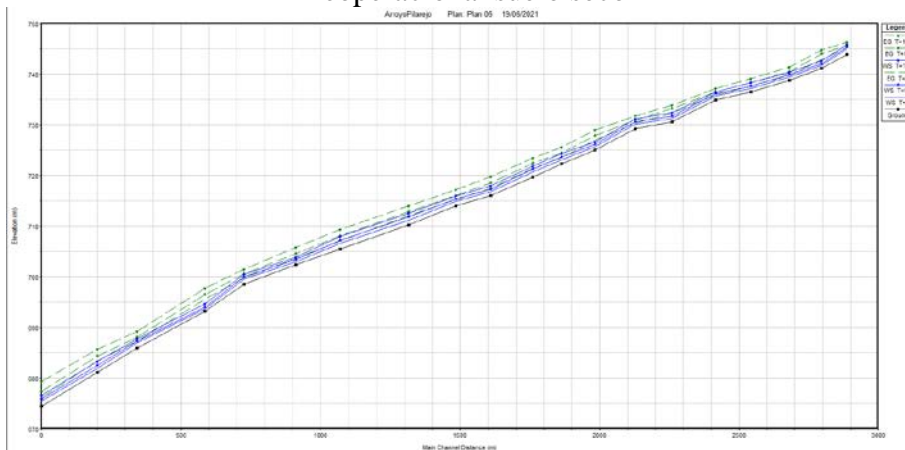
instalación de las plantas que contribuirá también a la deposición de posibles partículas adicionales arrastradas por el flujo de escorrentía superficial.

El diseño definitivo de tales medidas (zanjas de infiltración, balsas de retención, etc.) deberá realizarse en la fase de diseño de detalle del proyecto con arreglo.

Por otro lado, tal y como se observa en las tablas de parámetros hidráulicos detalladas en los apéndices 3 y 4, así como en los perfiles longitudinales incluidos a continuación, la mayoría de los tramos circulan en régimen subcrítico lo que no favorece la deposición de partículas. Existen determinados puntos en los que podría haber transiciones a régimen rápido (postoperacional Arroyo Valtierra) mientras que no existen puntos de cambio de régimen (especialmente resaltos) que favorezcan la deposición de partículas.

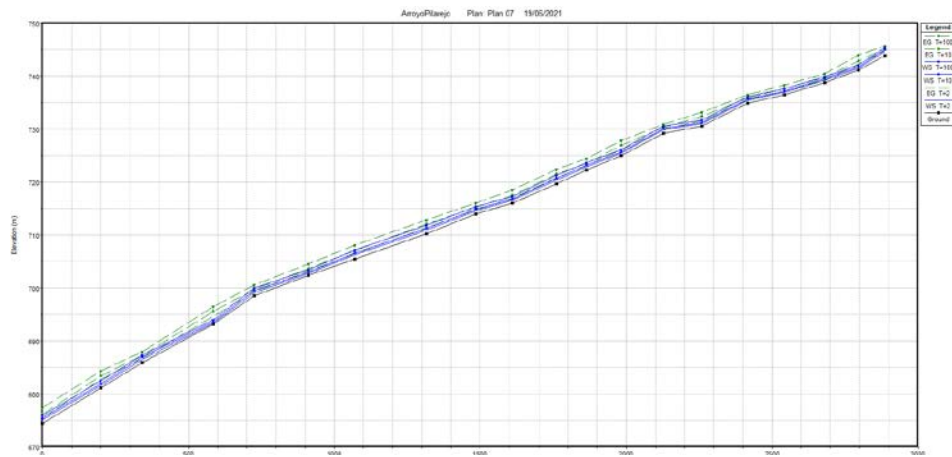


Preoperacional suelo seco

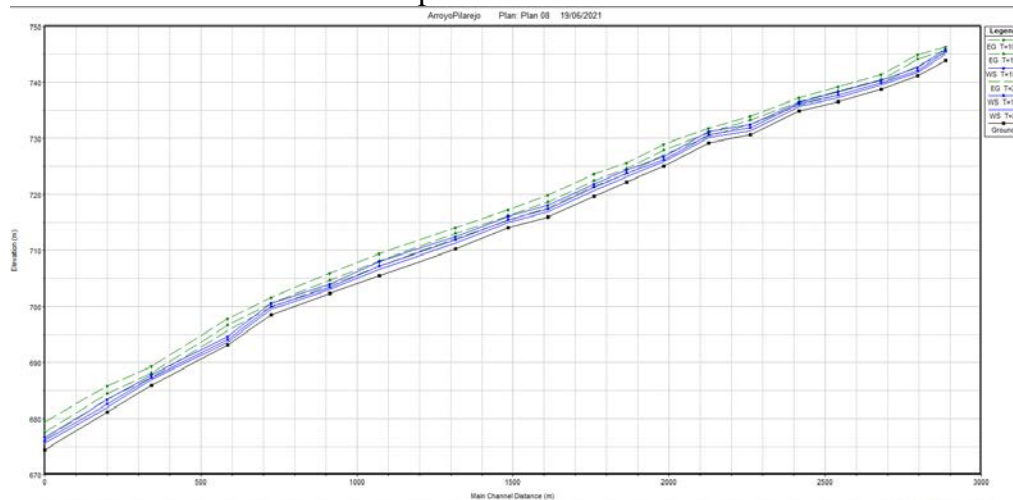


Preoperacional suelo normal



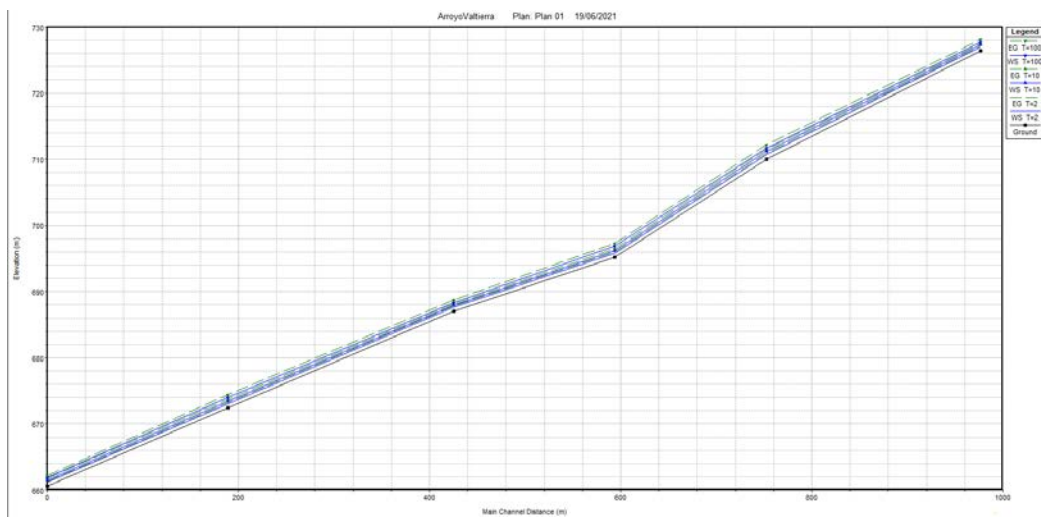


Postoperacional suelo seco

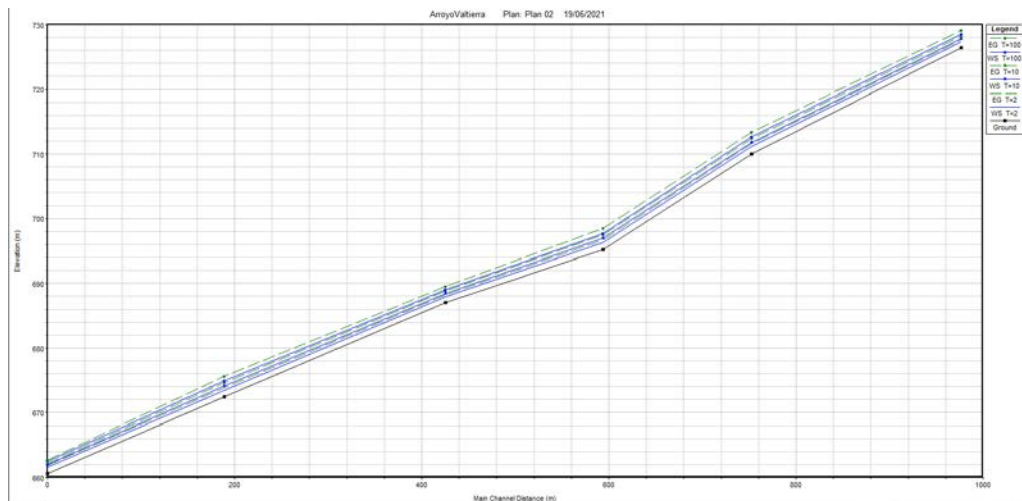


Postoperacional suelo normal

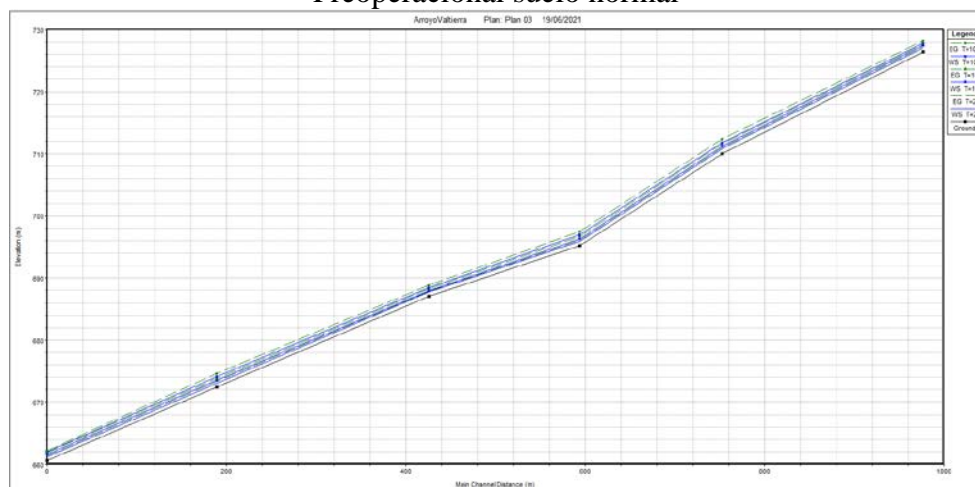
Figura 22. Perfiles longitudinales calado y energía Arroyo Pilarejo.



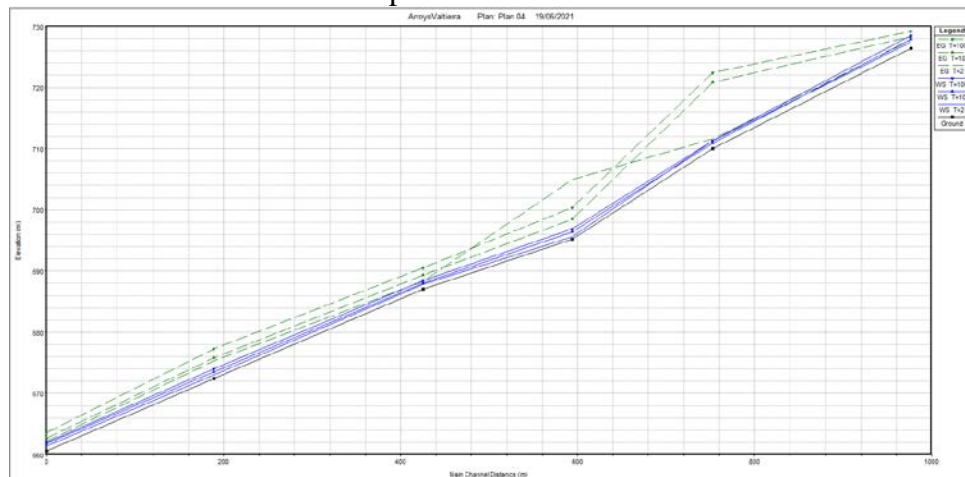
Preoperacional suelo seco



Preoperacional suelo normal



Postoperacional suelo seco



Postoperacional suelo normal

Figura 23. Perfiles longitudinales calado y energía Arroyo Valtierra

## 7. Estimación de impactos derivados de la ejecución de las obras

Los impactos derivados de la ejecución de las obras son compatibles con los objetivos de preservación ambiental. En términos generales el estudio de impacto ambiental al que el presente estudio se anexa incluye una detallada determinación de los impactos

derivados tanto del propio diseño como de la construcción y explotación de las PFVs. A continuación se relacionan una serie de medidas de índole general que en todo caso vienen a complementar las disposiciones en esta materia incluidas en el estudio de impacto ambiental.

Jalonamientos de cauces durante la ejecución de las obras. Se propone el jalonamiento de los cauces en el entorno de las zonas de obras. Se trata de un jalonamiento preventivo que impida ocupaciones del cauce por parte de la maquinaria, vehículos u operarios. Quedará resuelto mediante el hincado de redondos de hierro de 1,20 m de longitud a una distancia máxima de 10 m entre ellos y la colocación de una cuerda con banderolas asida a los redondos antes mencionados.

Intercepción de cauces en los tránsitos de maquinaria, equipos o personal para el acceso a las obras o instalaciones auxiliares. En caso de que se diera esta situación se procederá a la delimitación del cauce, la ejecución de obras encaminadas a mantener la integridad física y la continuidad hidráulica del cauce y la prevención del arrastre de sedimentos mediante las barreras de las que se hablará a continuación.

Se instalarán elementos de protección de los cauces frente al arrastre de partículas procedentes de las obras. Se propone el uso de barreras de láminas filtrantes. Se construyen con postes, telas metálicas, geotextiles. Son estructuras temporales con una vida útil de unos 6 meses y cuyo caudal límite de agua para estas barreras es de 30 l/s. Por cada 1000 m<sup>2</sup> de superficie afectada debe disponerse de unos 30 m de barrera. La longitud máxima de talud no debe exceder de 30 m. y la pendiente del mismo debe ser inferior al 50% ó 2:1. La altura de la barrera no debe ser superior a 90 cm. Estos dispositivos se ubicarán, consecuentemente, en aquellas zonas de las obras en las que existiese riesgo de arrastre de partículas en la escorrentía superficial.

Se propondrán igualmente balsas de decantación permanentes que garanticen que el arrastre de materiales que produzcan las lluvias no se deposite en las zonas protegidas si las hubiera en el entorno directamente afectado por la ejecución de las obras.

Para la prevención de la contaminación de las aguas subterráneas se proponen las siguientes medidas:

- En ningún caso se verterán directamente al terreno ni a los cursos de agua los aceites, combustibles, restos de hormigonado, escombros, etc. originados por las obras. Los productos residuales se gestionarán de acuerdo con la normativa vigente aplicable.
- Las instalaciones auxiliares de las obras deberán tener un sistema de gestión de las aguas residuales y pluviales.
- Los parques de maquinaria incorporarán plataformas completamente impermeabilizadas y con sistemas de recogida de residuos y, específicamente, de aceites usados, para las operaciones de repostaje, cambio de lubricantes y lavado.

- La totalidad de superficies sobre las que se realicen acopios de materiales potencialmente contaminantes de las aguas o el suelo, serán impermeables y dispondrán de sistema de gestión y depuración de las aguas interiores a la instalación (al menos separación de grasas y sedimentación-filtración).
- Se prohibirá el acopio de materiales potencialmente contaminantes de las aguas y los suelos en el interior de la excavación para la realización del saneo de terrenos y en todo el trazado proyectado.
- Con respecto a los líquidos desencofrantes, así como los riegos de imprimación para las emulsiones asfálticas, éstos se realizarán de manera que se minimicen las posibles afecciones sobre el medio circundante.
- Con respecto a la puesta en obra de hormigón, estabilizados, emulsiones o betunes, ésta se realizará sin generar afección sobre las aguas o los suelos. Las canaletas de las hormigoneras se limpiarán sobre zona habilitada. Respecto del lavado de la cisterna, éste se realizará únicamente en la planta de hormigón.
- El agotamiento de las zanjas se realizará habilitando una zona sobre excavada en la que se acumulen las aguas extraídas de la zanja para permitir la infiltración de nuevo al terreno.

Gestión de las aguas residuales de las instalaciones auxiliares. Los principales contaminantes respecto de la calidad de las aguas que pueden originarse en estas instalaciones auxiliares son de siguientes tipos:

- Contaminantes físicos a base de sólidos en suspensión y disueltos arrastrados por el agua escorrentía superficial procedente del interior de las campas, especialmente relevante en los primeros instantes de los episodios de lluvia.
- Contaminantes químicos principalmente relacionados con las grasas y aceites que pudieran arrastrarse en el agua de escorrentía procedente de las zonas de aparcamiento o reparación de maquinaria.
- Por otro lado, también existe riesgo de contaminación consecuencia de las aguas sanitarias generadas en oficinas y vestuarios.

Frente a dichas fuentes potenciales de contaminación se propone un sistema de gestión separativo de las aguas con los siguientes criterios:

- Las aguas pluviales interiores a las campas (que contarán con superficies impermeables) serán conducidas mediante gravedad al punto más bajo en el que se proyectan una balsa de decantación, un separador de grasas y una arqueta de registro con carácter previo a su vertido. Existirá igualmente una cuneta interior que dirija las aguas de escorrentía interior hacia las instalaciones de depuración y un murete que evite la entrada de aguas procedentes de la escorrentía exterior.

- Para las aguas sanitarias se plantean depósitos estancos (no suponen infiltración al terreno) que acumulan el agua y que periódicamente son vaciados mediante cisterna que transporta el contenido directamente a la EDAR más próxima.

Sistemas de gestión de las aguas pluviales. Se plantea un sistema basado en la recogida de las aguas interiores mediante una base impermeabilizada y una cuneta interior y el tratamiento de las mismas mediante decantación y desengrasado, con carácter previo a su vertido. En cada uno de los siguientes apartados se definirán las características básicas de cada uno de los elementos requeridos para el funcionamiento de este sistema.

Impermeabilización de las superficies. Para evitar las infiltraciones al terreno subyacente, toda la superficie sobre la que se ubiquen las instalaciones auxiliares contará con un tratamiento superficial de la superficie que asegure la impermeabilización del mismo. Este acabado estará definido con una pendiente del 2 % en dirección al punto en el que se ubiquen las instalaciones de decantación y depuración de las aguas. El tamaño de las superficies soladas se justificará en función de las dimensiones de los parques de maquinaria de las obras. La impermeabilización de las zonas interiores se propone con la siguiente sección:

- Suelo natural
- Geomembrana impermeable instalada entre geotextiles
- Capa drenante
- Firme de zahorra compactada

El contratista podrá proponer modificaciones a la sección tipo anterior que habrán de ser aprobadas por la dirección ambiental de las obras siempre y cuando que garantizada la impermeabilización de la superficie de la instalación auxiliar.

Las zonas interiores a las campas que se propongan de manera específica para las operaciones de mantenimiento de maquinaria contarán con una cuneta delimitadora que dirija las aguas hacia la balsa.

Balsas de decantación de sedimentos: Se dispondrán balsas de decantación en cada una de las zonas de instalaciones auxiliares proyectadas.

Separador de grasas: Aguas abajo de la balsa de decantación se ubicará un separador de grasas que gracias a la diferencia entre pesos específicos proceda a la separación de ambas fases líquidas.

Arquetas de registro: El último paso con carácter previo al vertido de las aguas residuales será la interposición de una arqueta de registro para la toma de muestras.

Cunetas interiores: Se proyectan cunetas interiores a las zonas de instalaciones auxiliares que gestionen las aguas y las envíen hacia los elementos de decantación.

Sistemas de gestión de las aguas residuales: Para la recogida de las aguas procedentes de las instalaciones para la higiene del personal y de las oficinas, así como el resto de aguas equiparables a las residuales de esta naturaleza serán recogidas y almacenadas en un depósito estanco enterrado.

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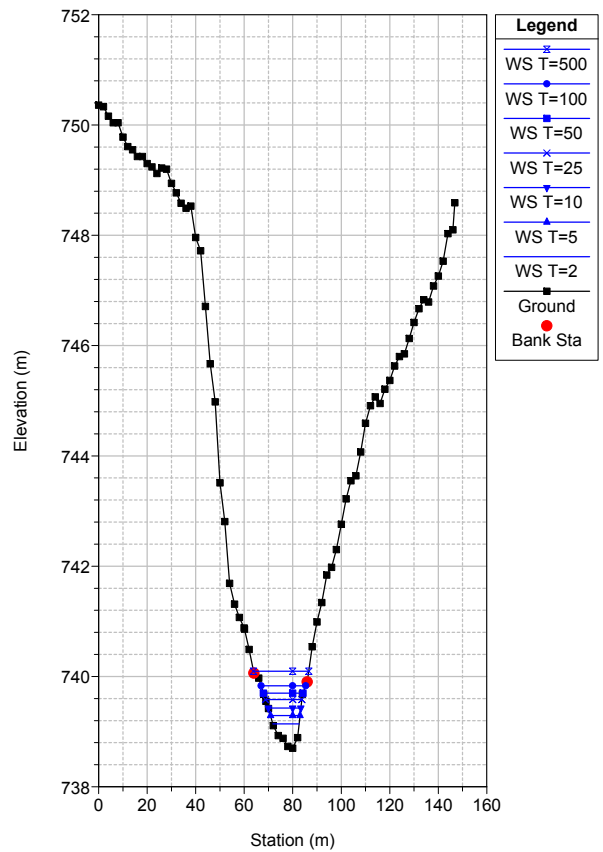
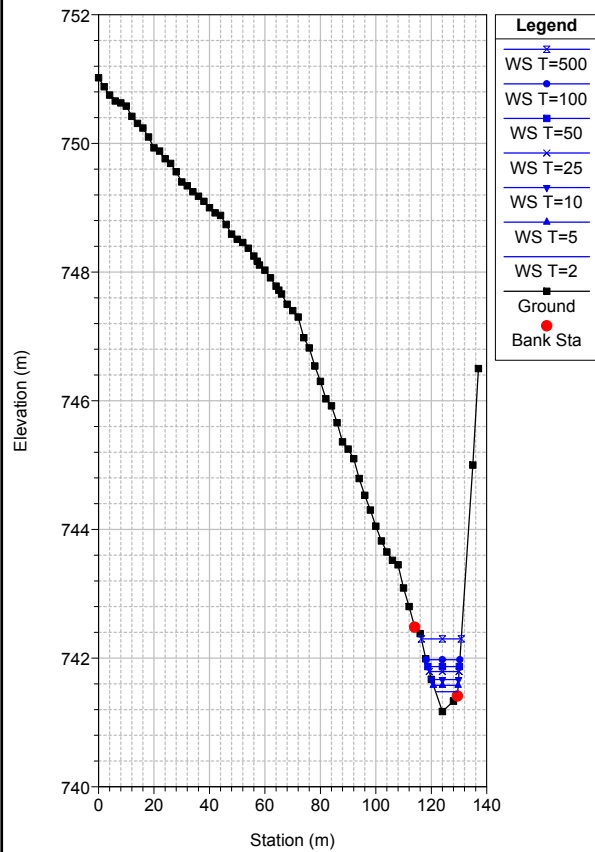
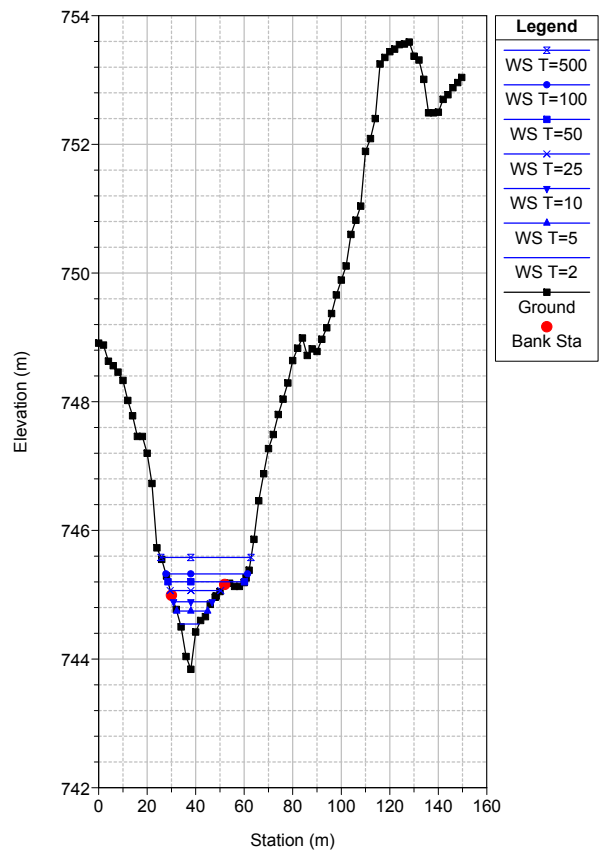
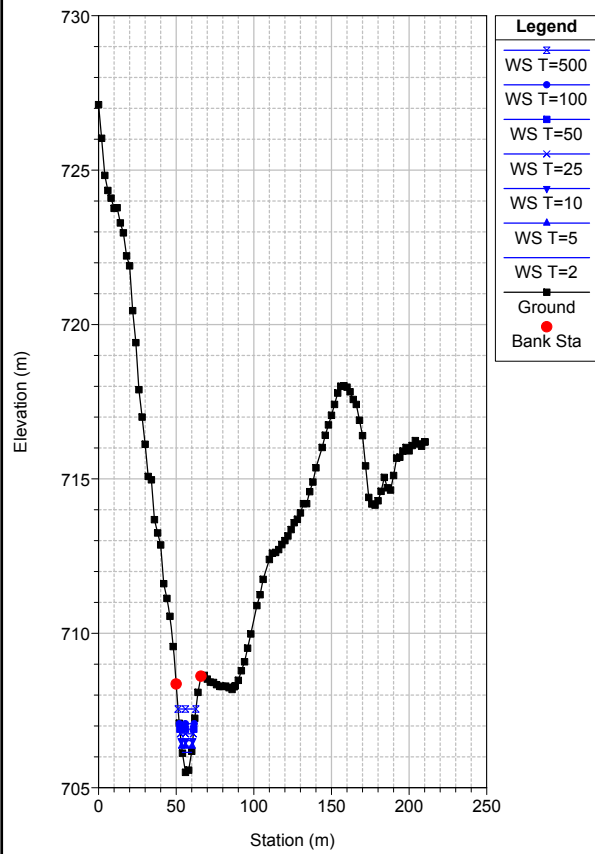
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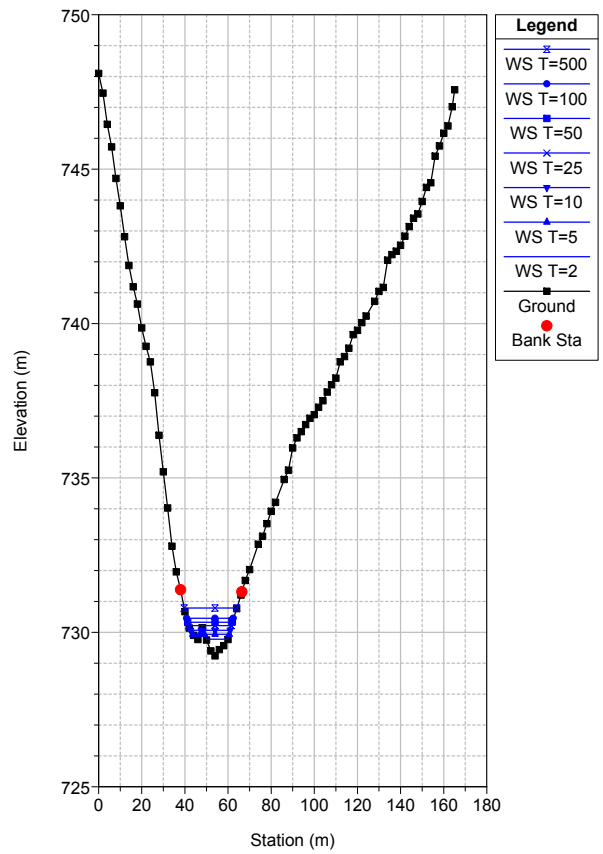
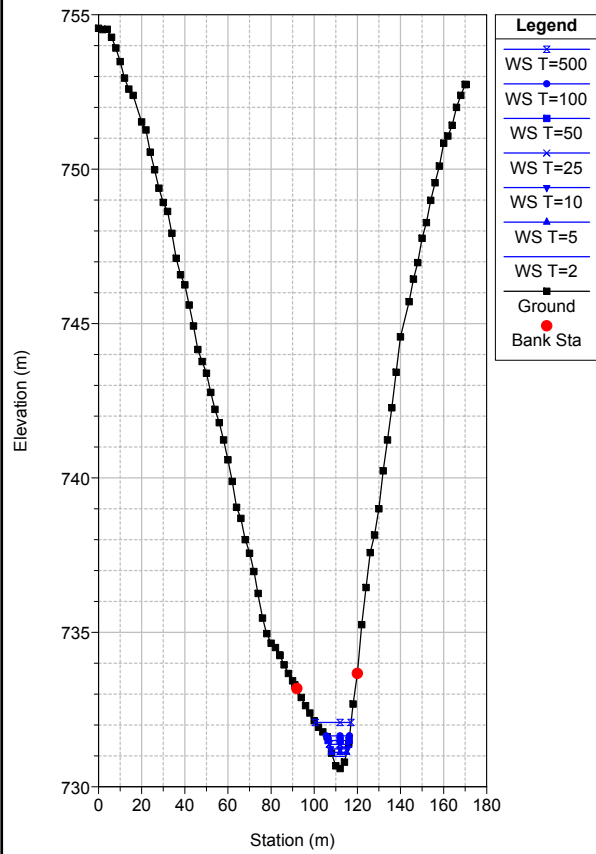
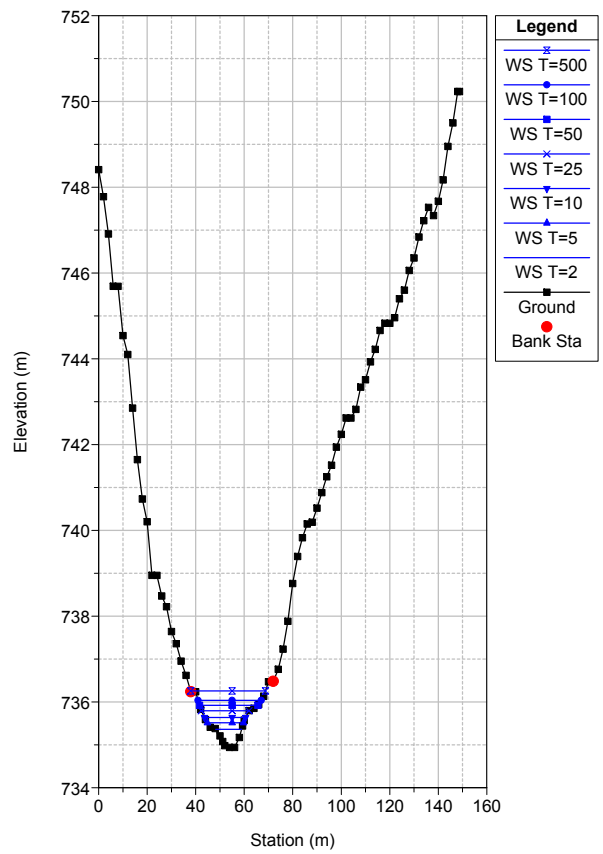
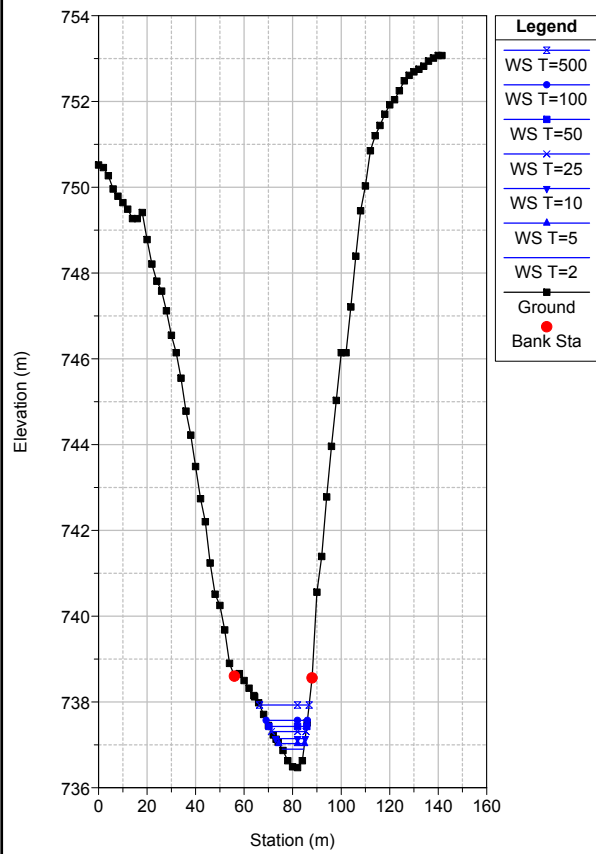
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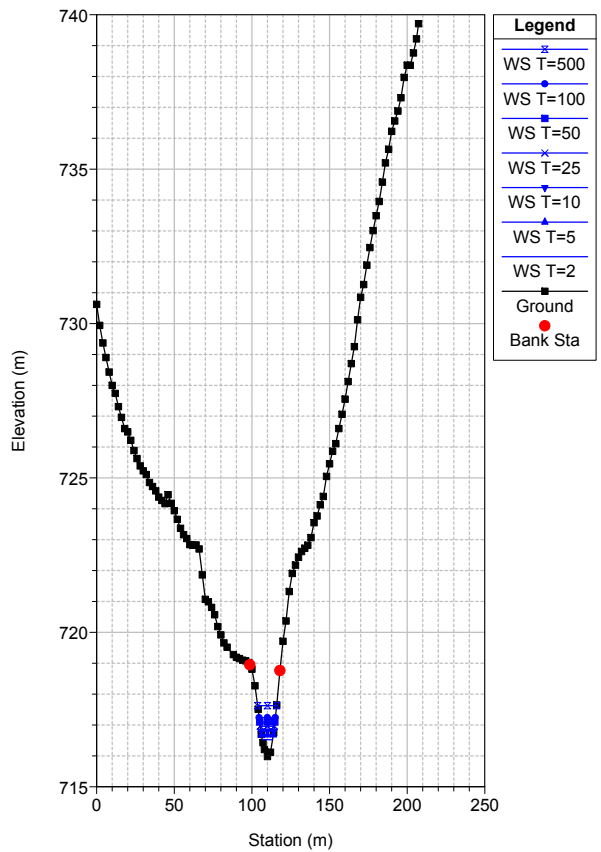
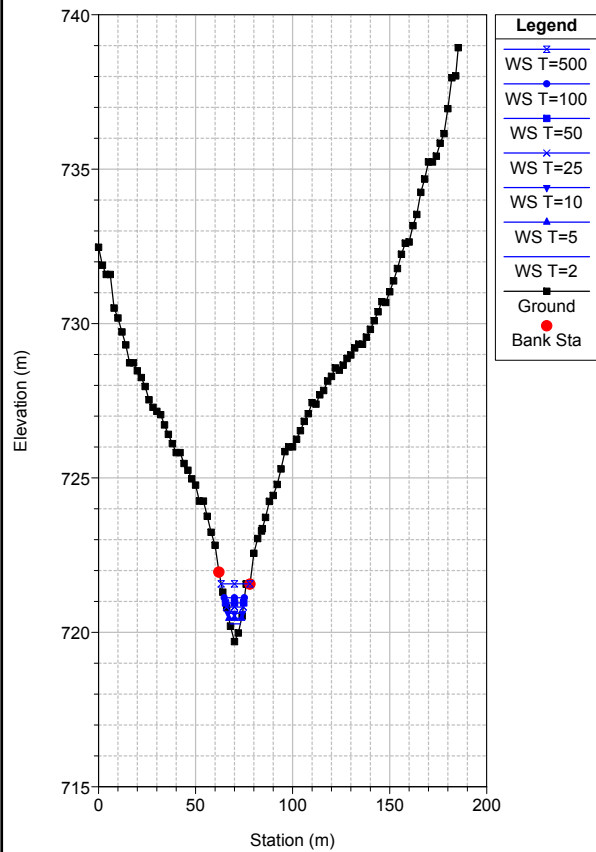
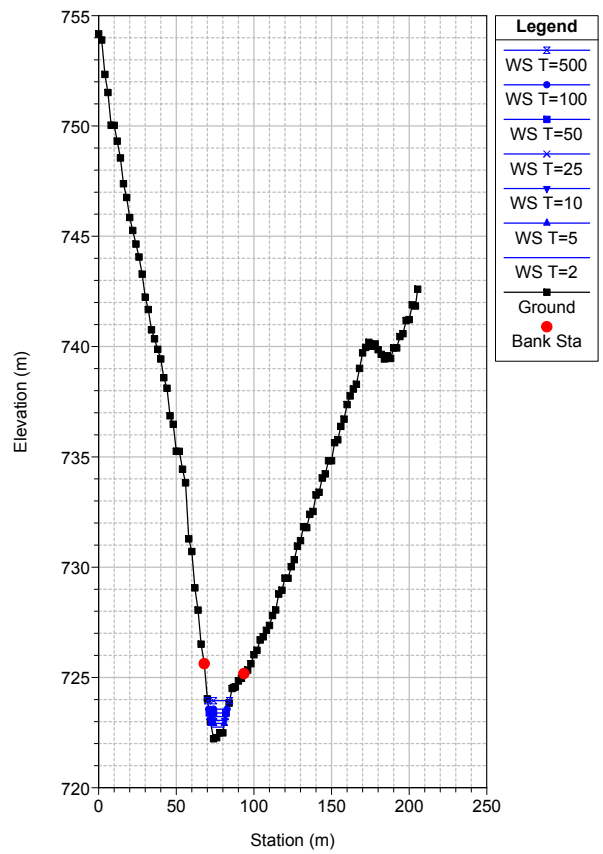
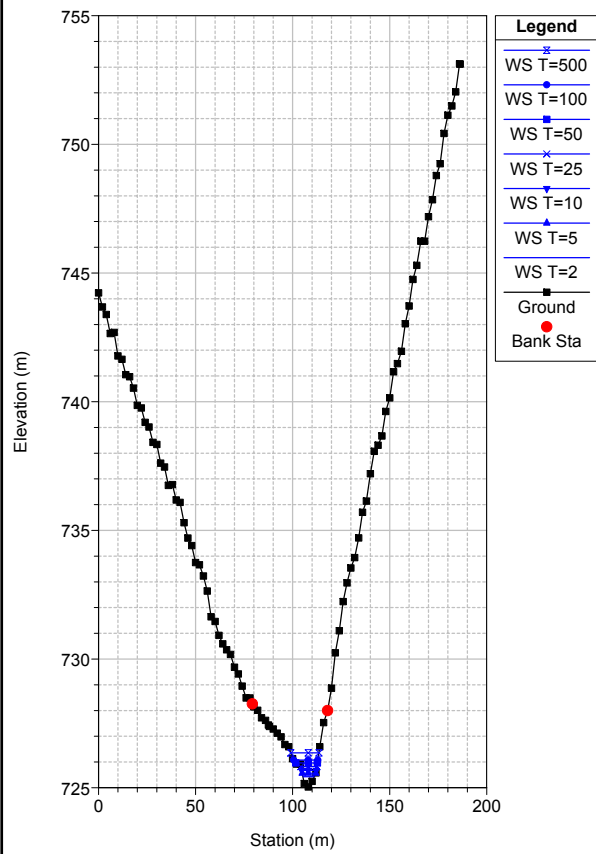
## APÉNDICE 1 PERFILES TRANSVERSALES SITUACIÓN PREOPERACIONAL

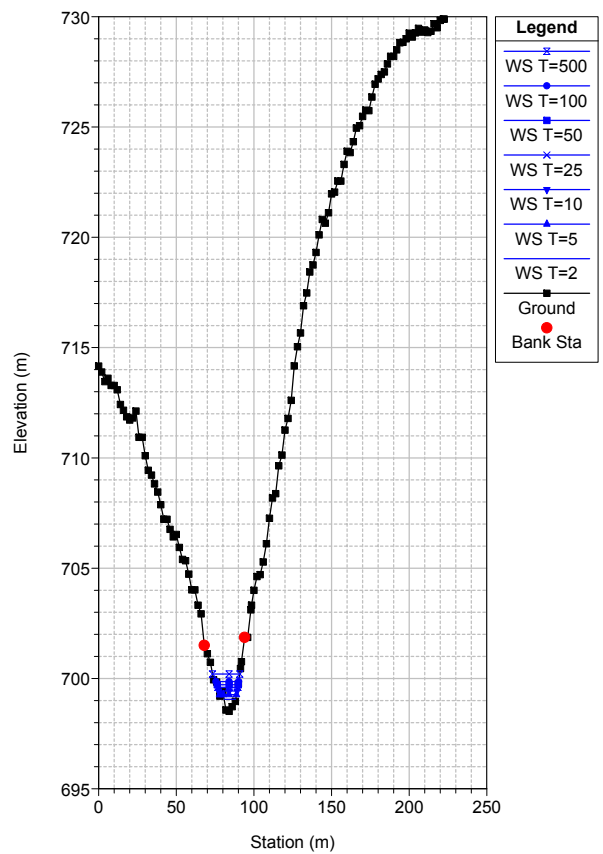
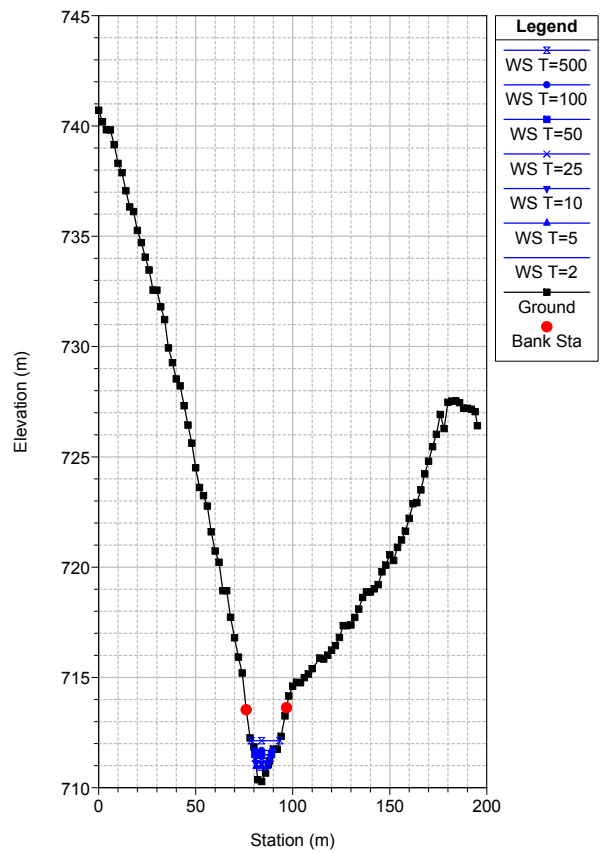
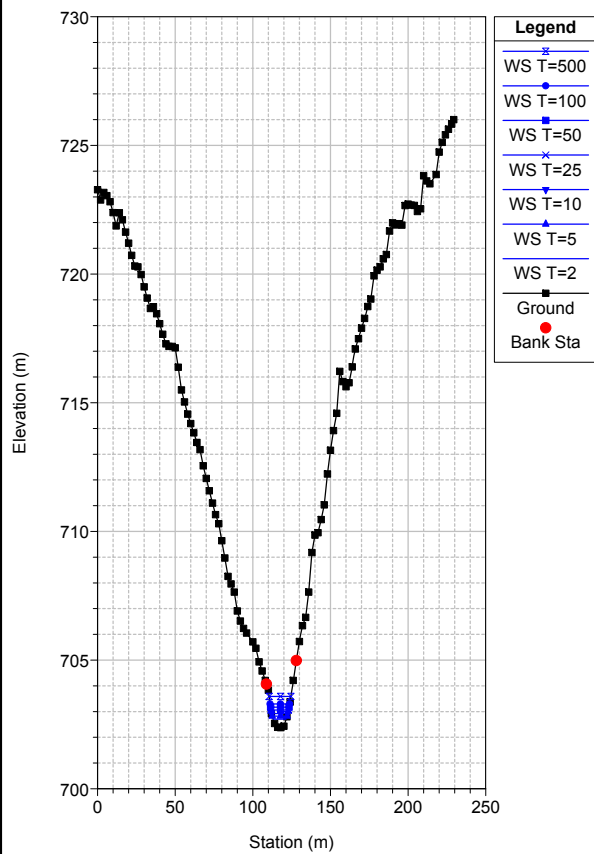
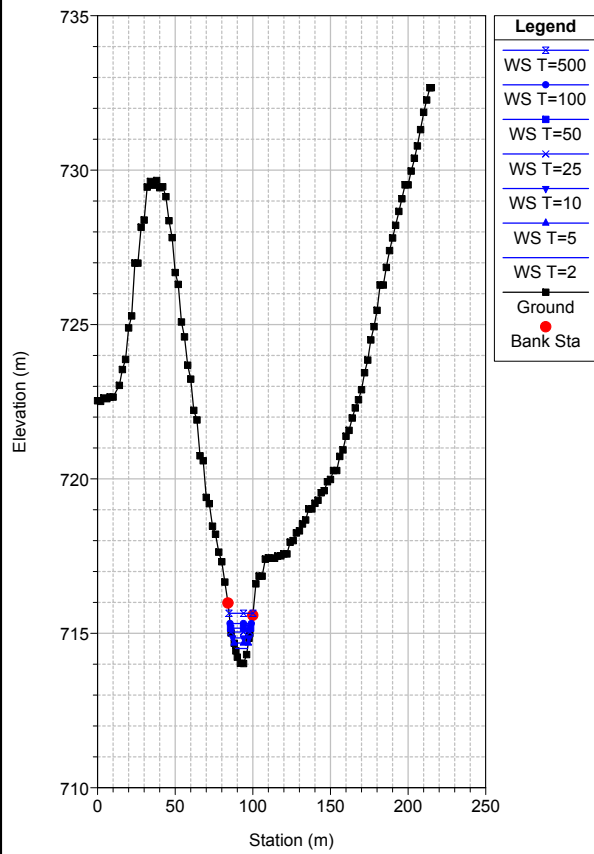


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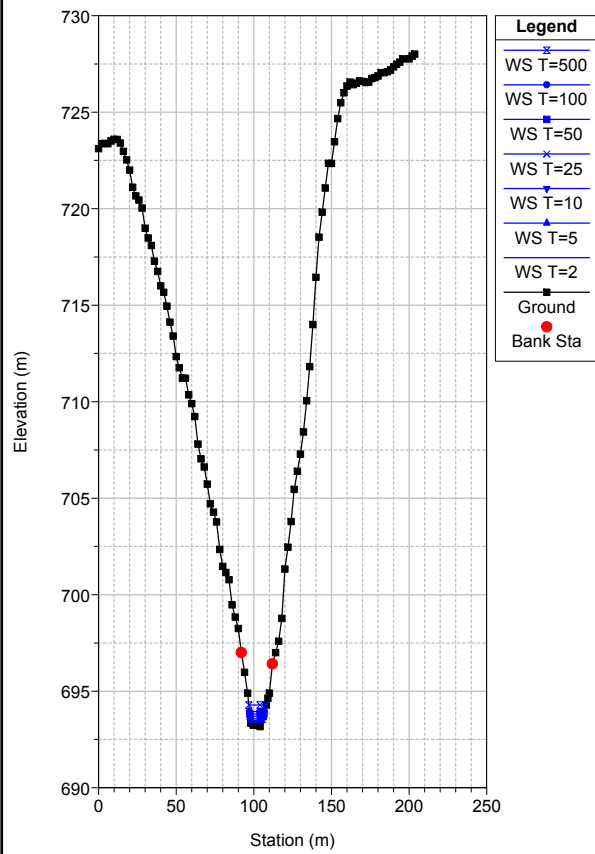






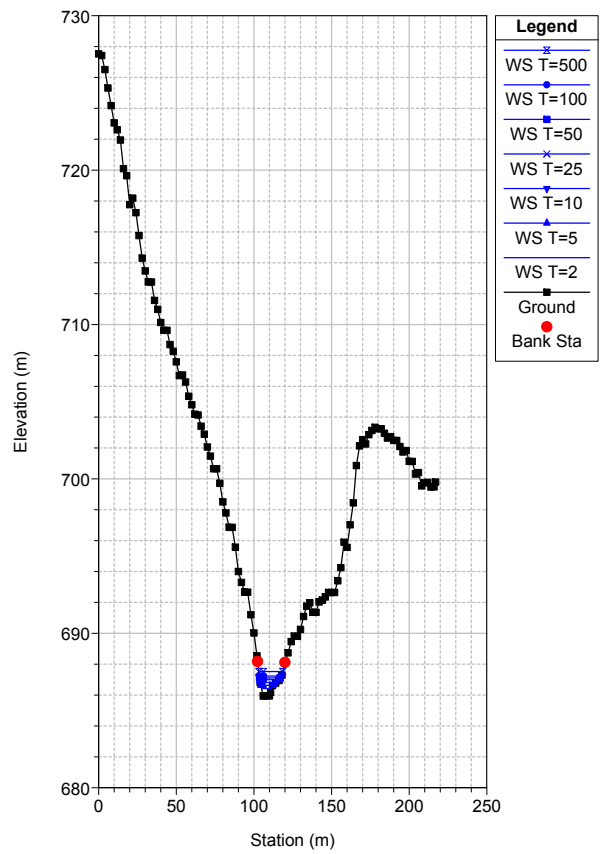


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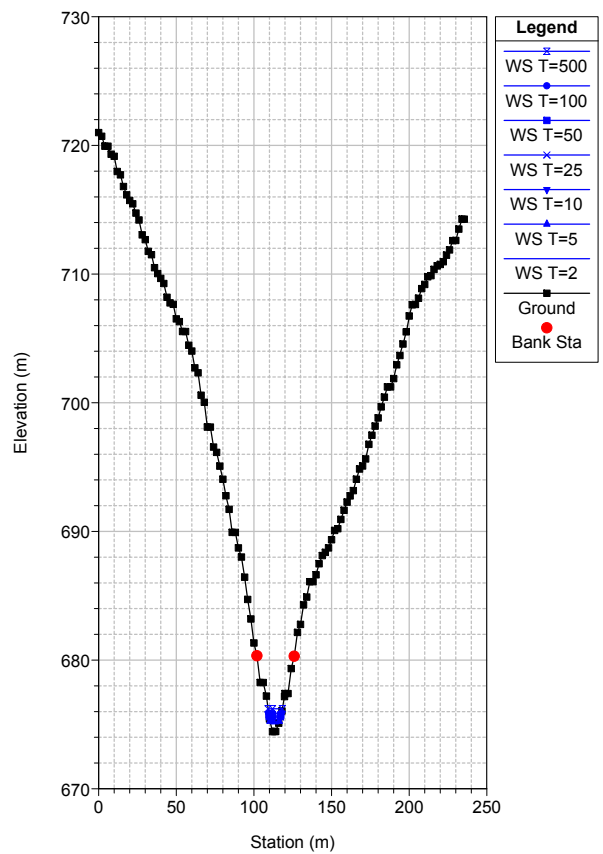
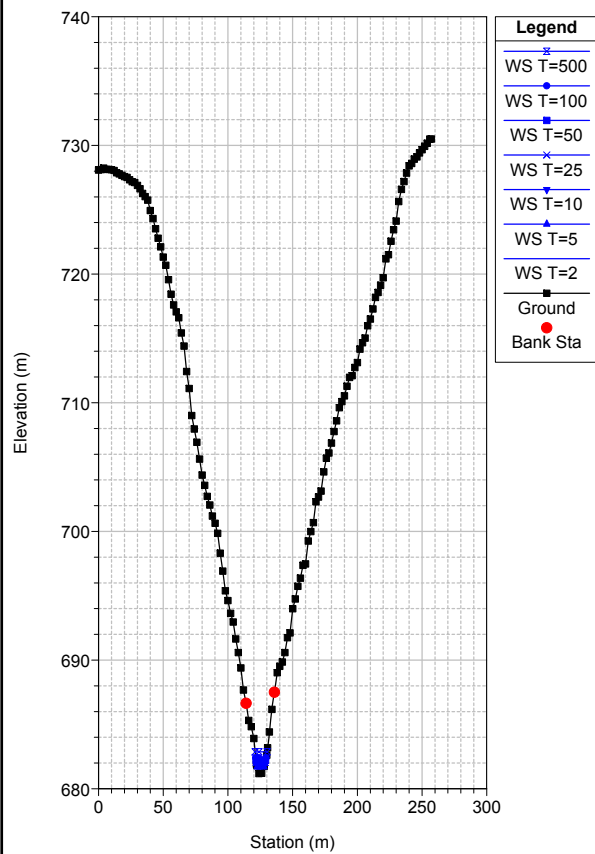


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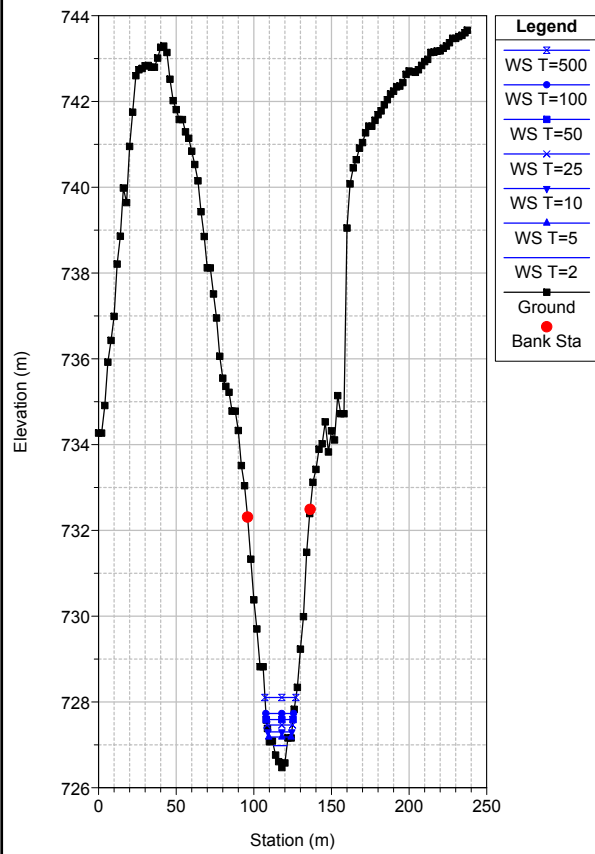
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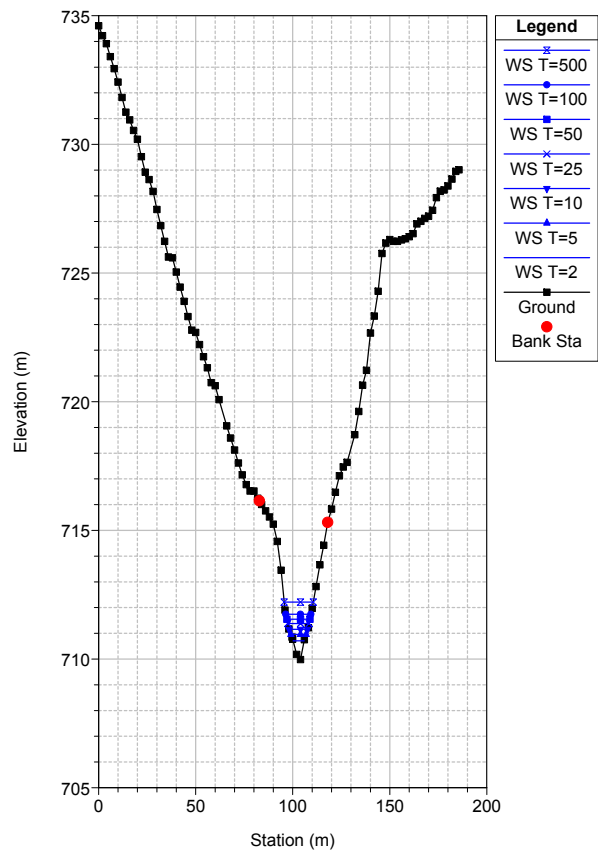


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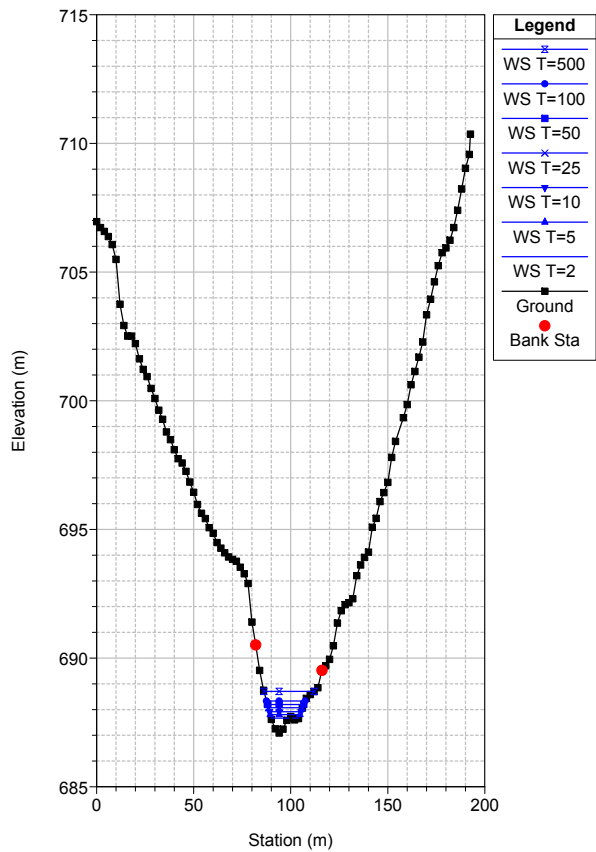
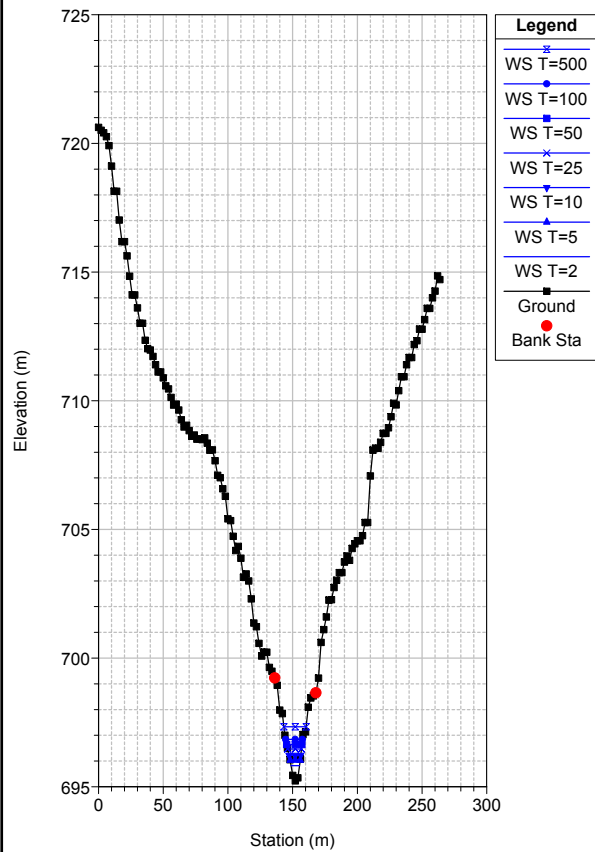


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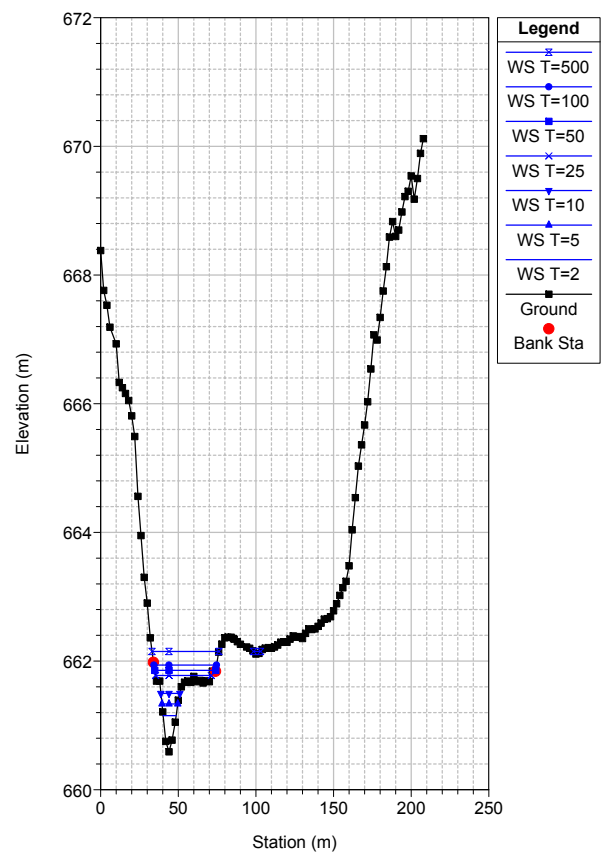
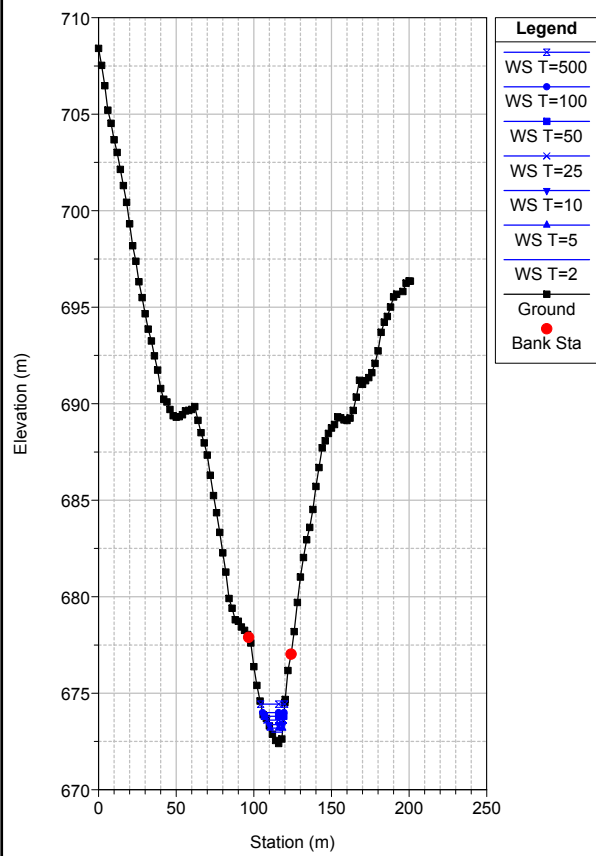
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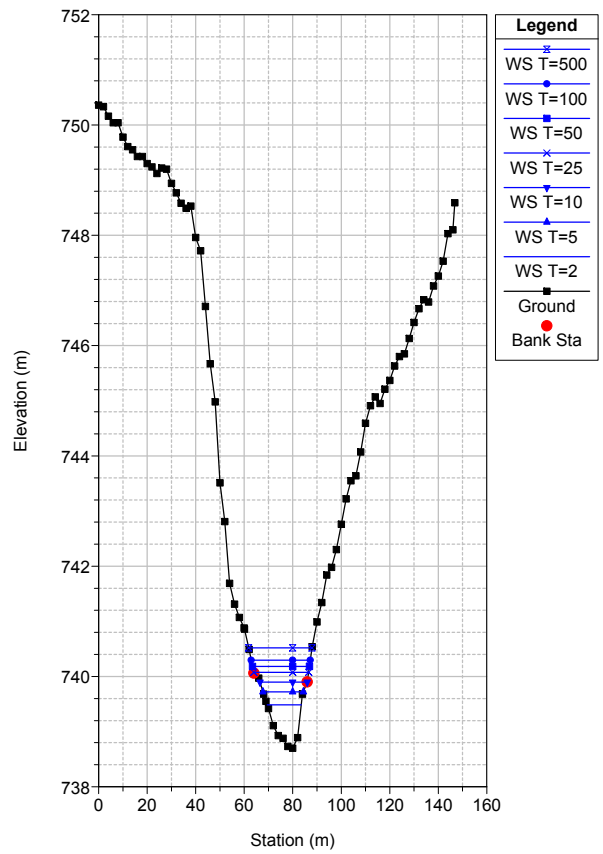
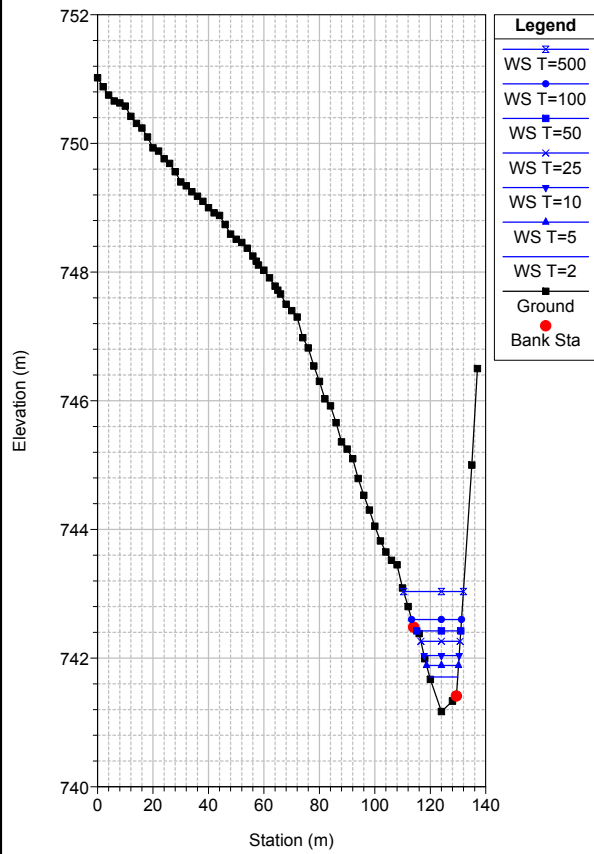
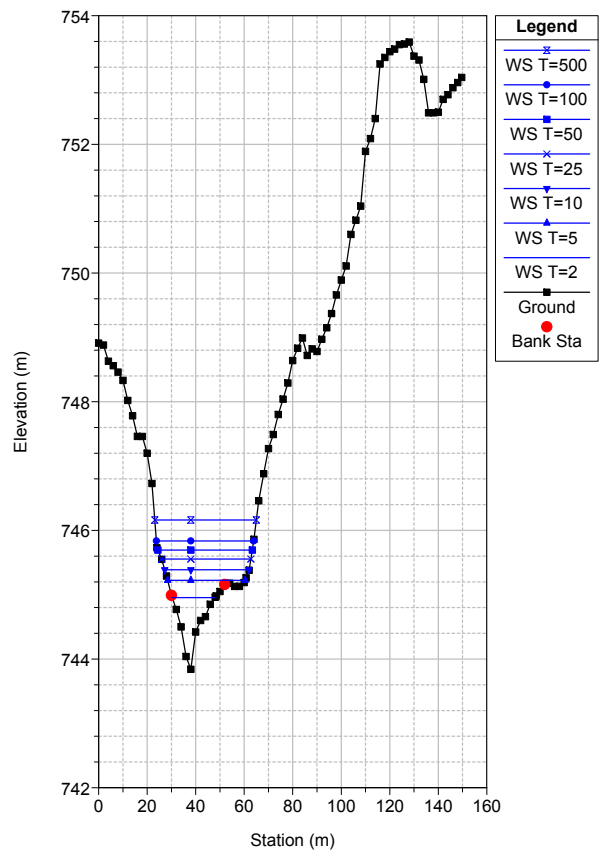
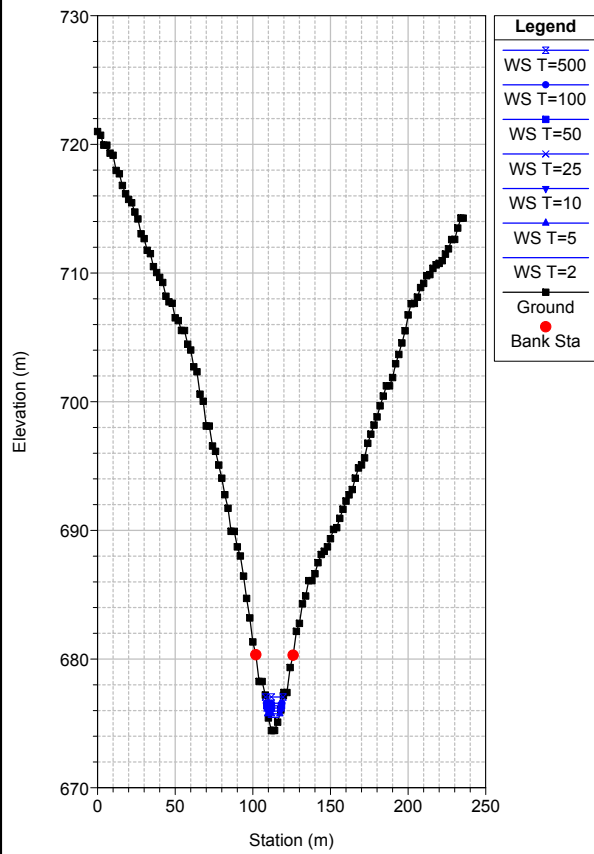
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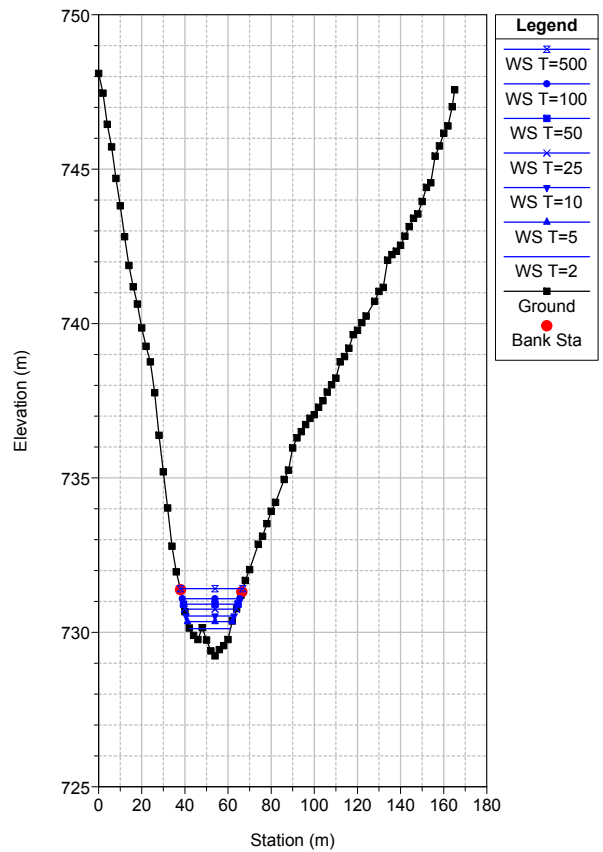
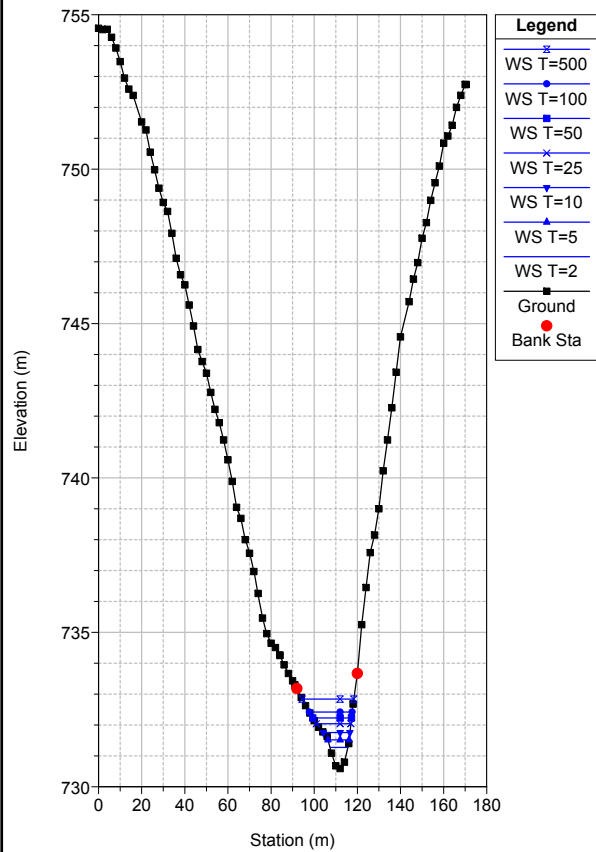
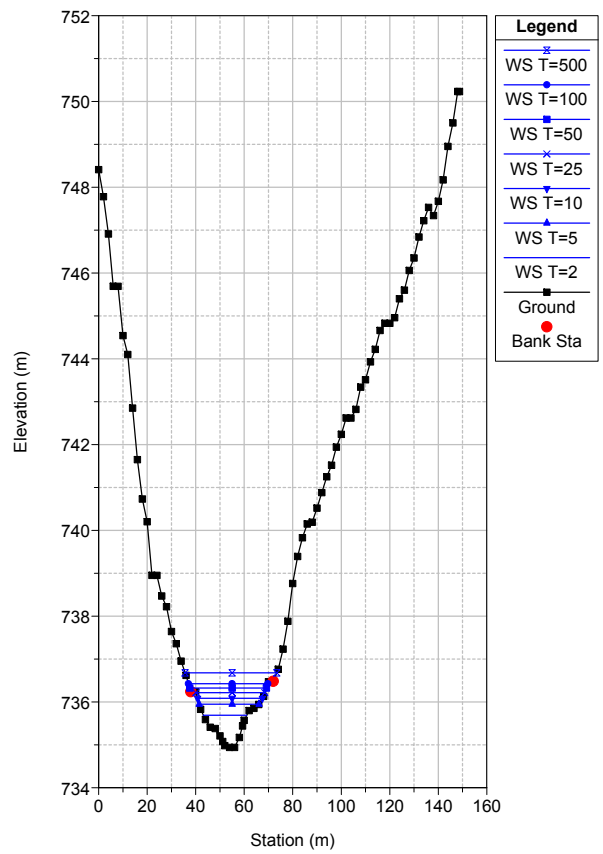
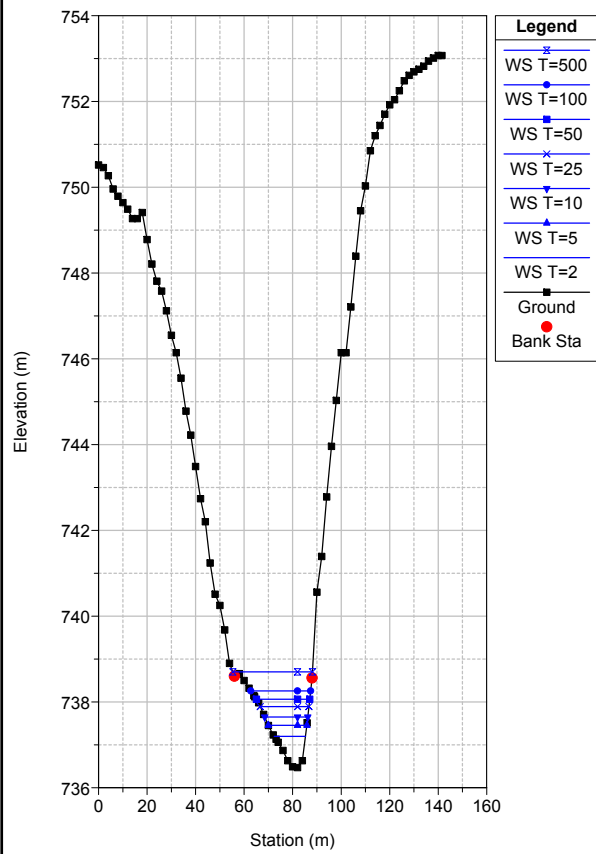


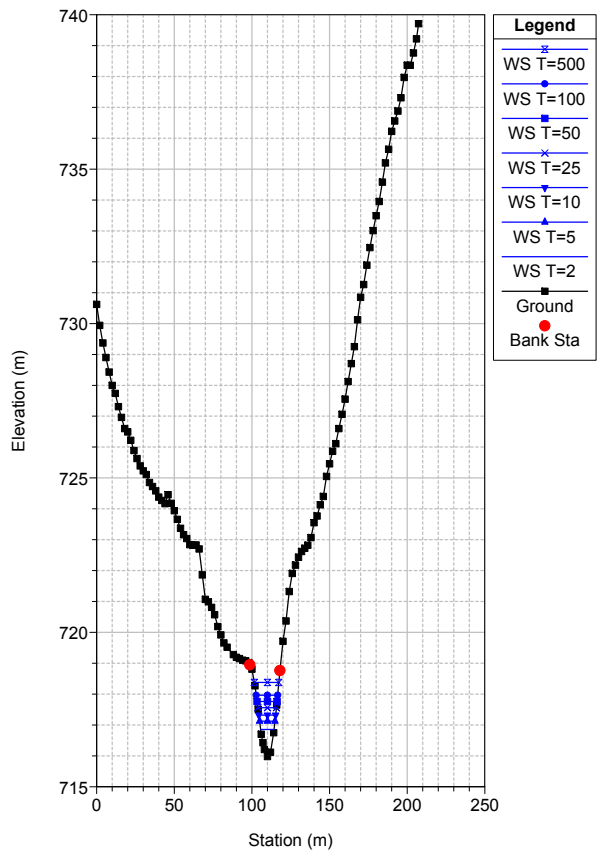
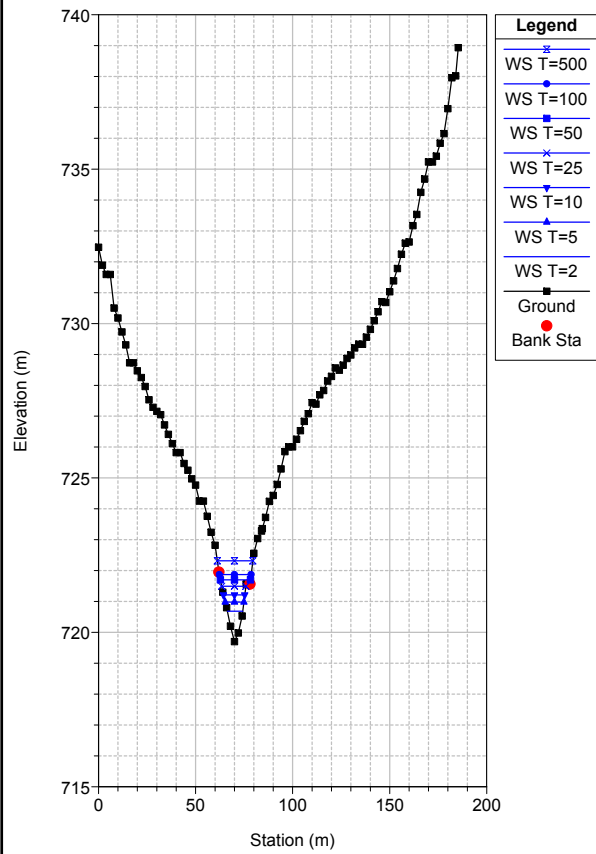
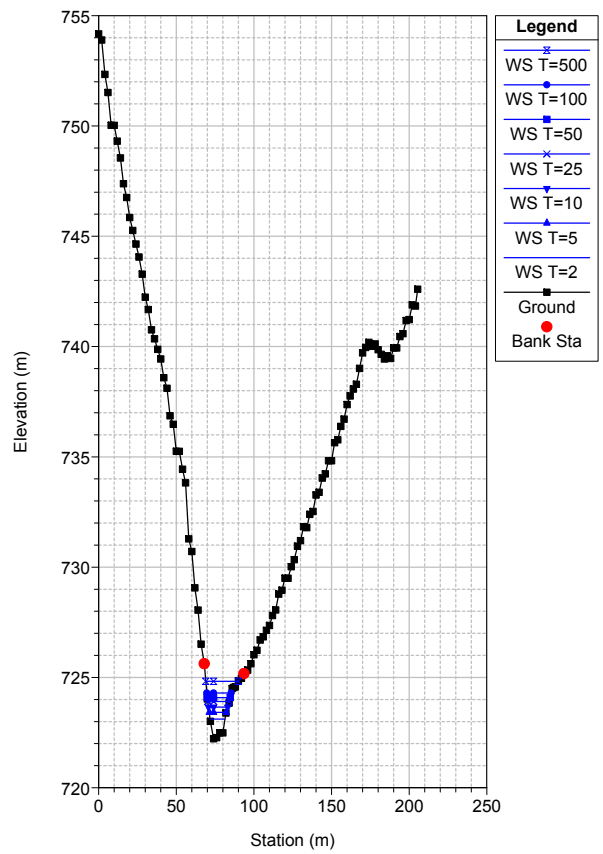
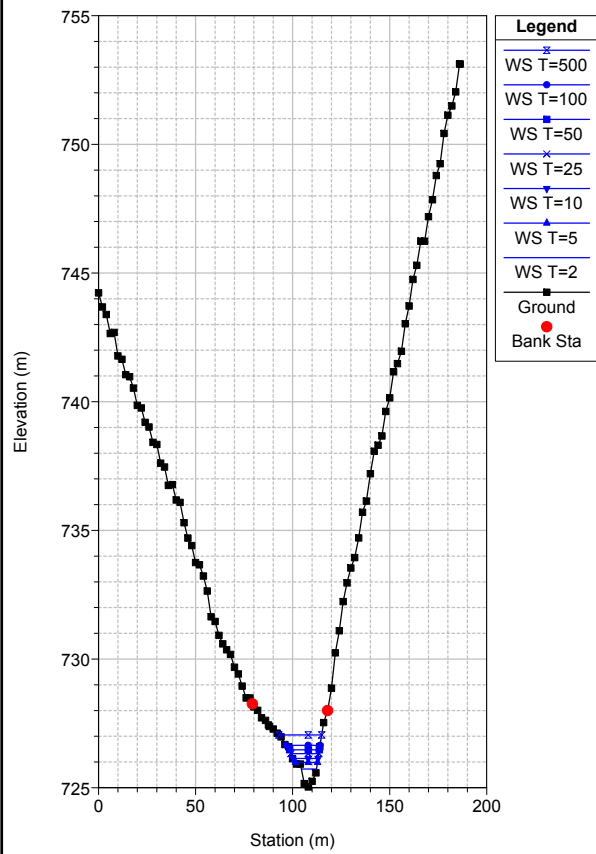


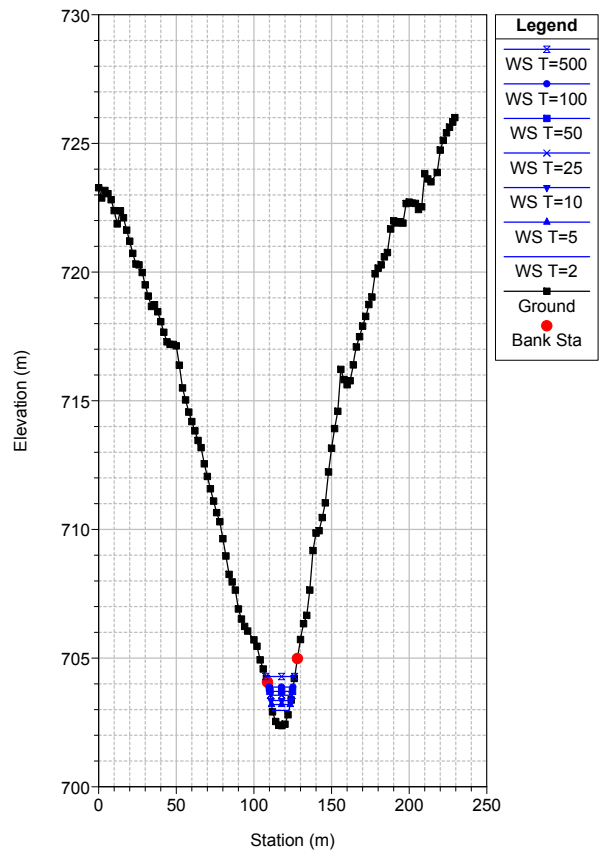
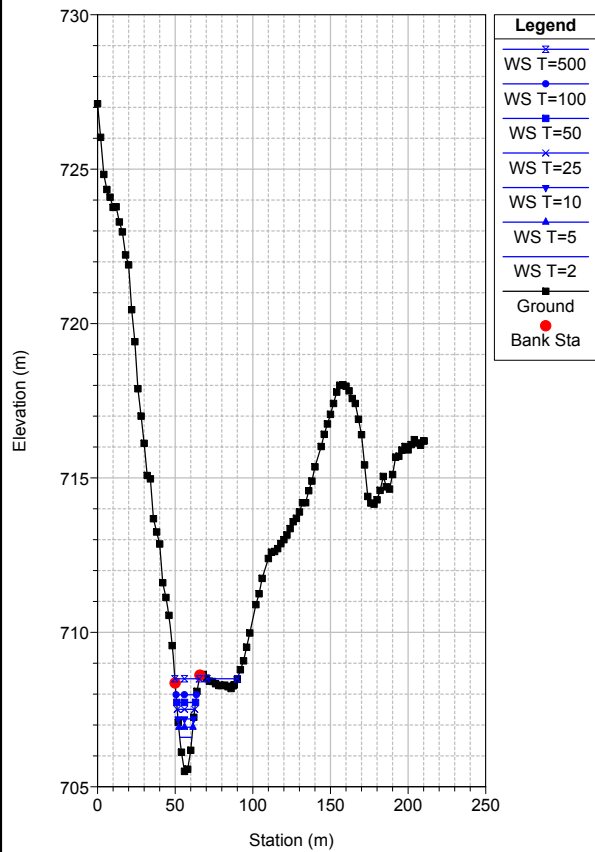
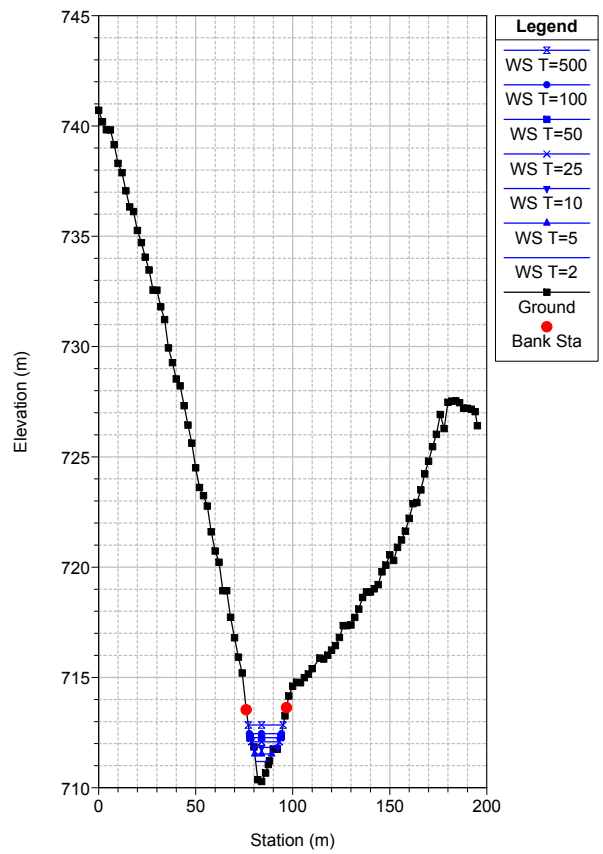
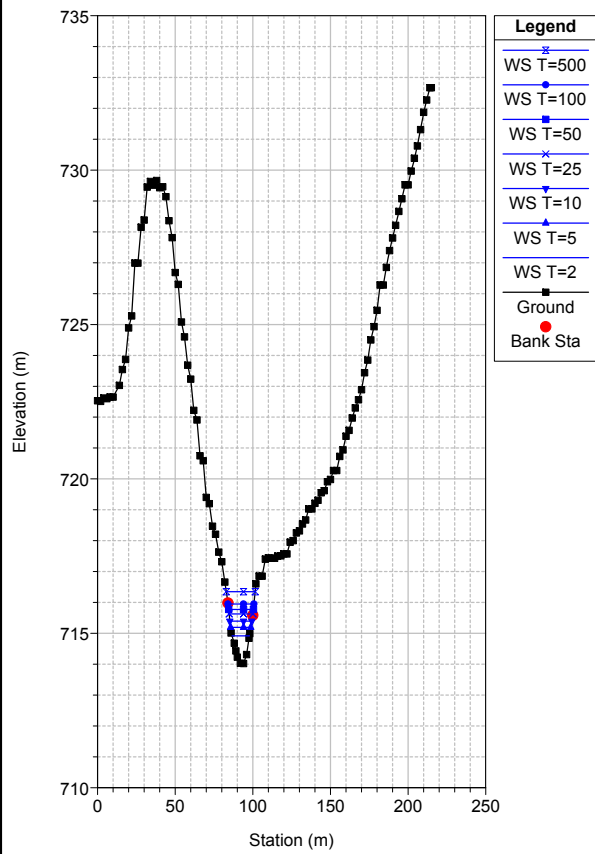


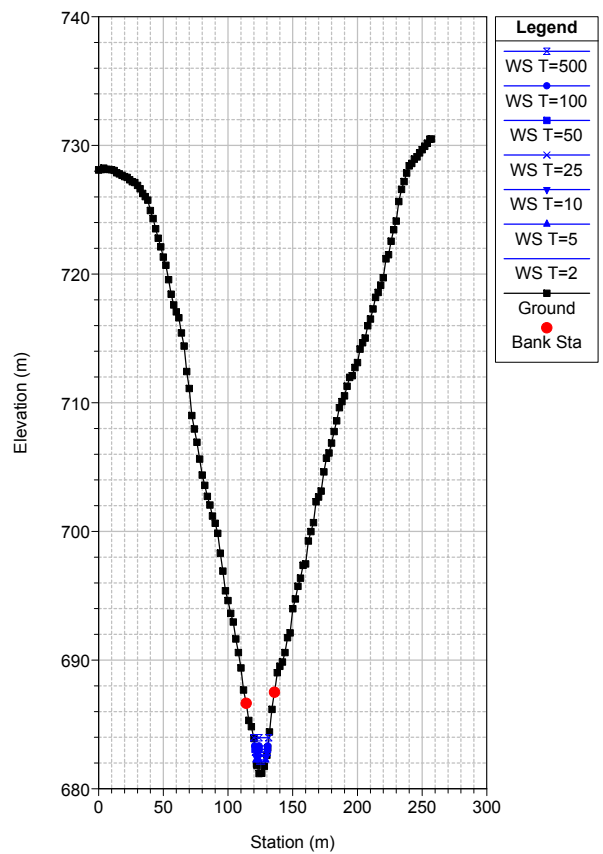
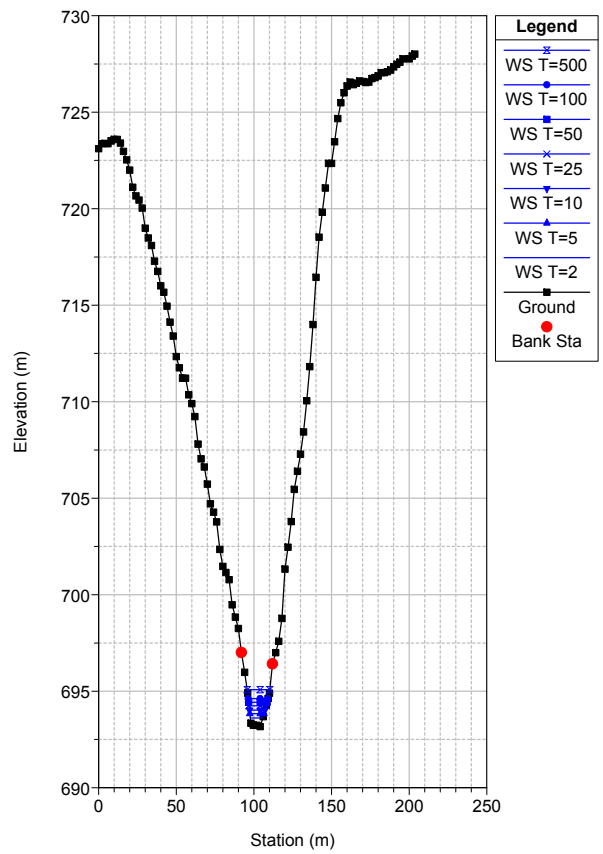
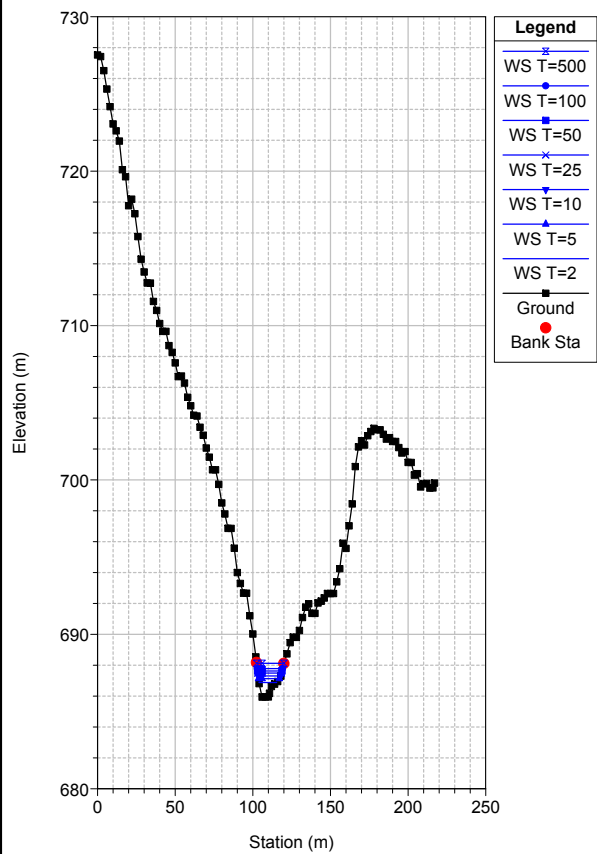
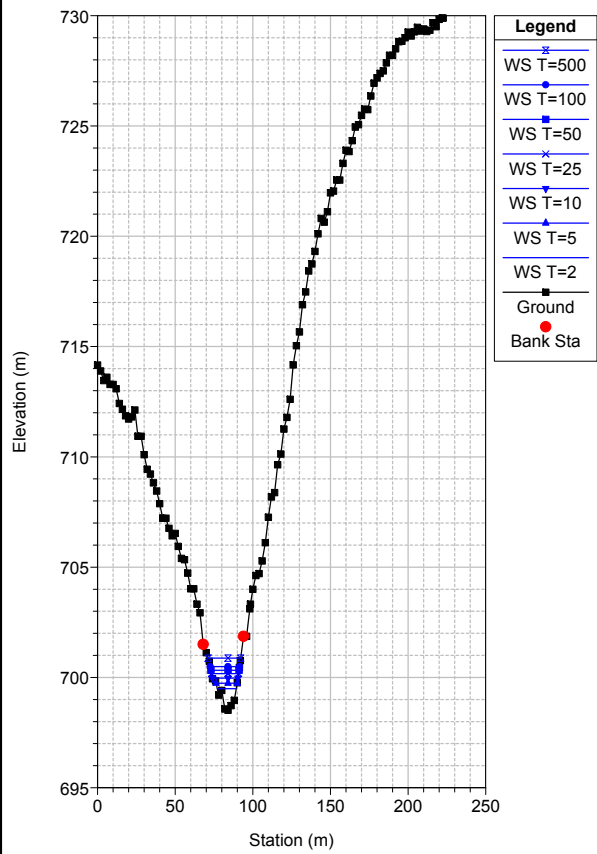
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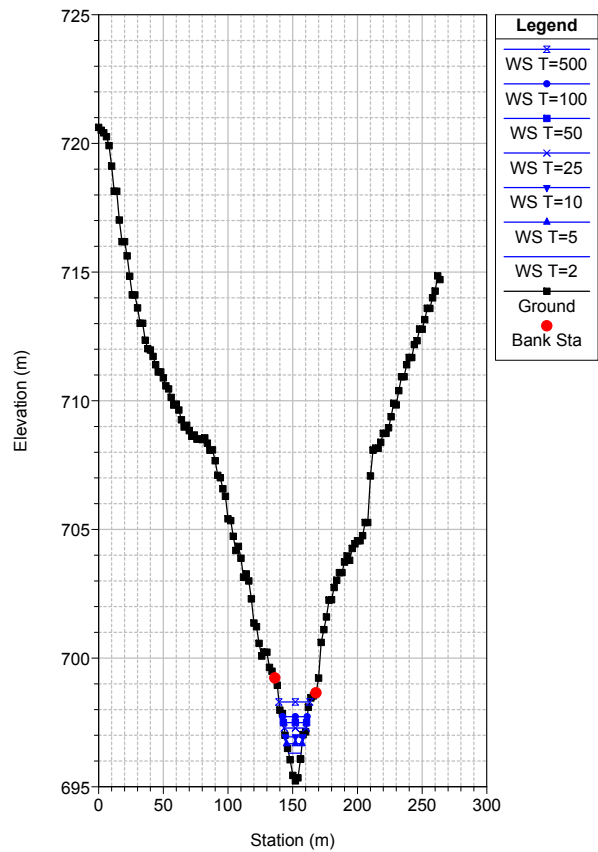
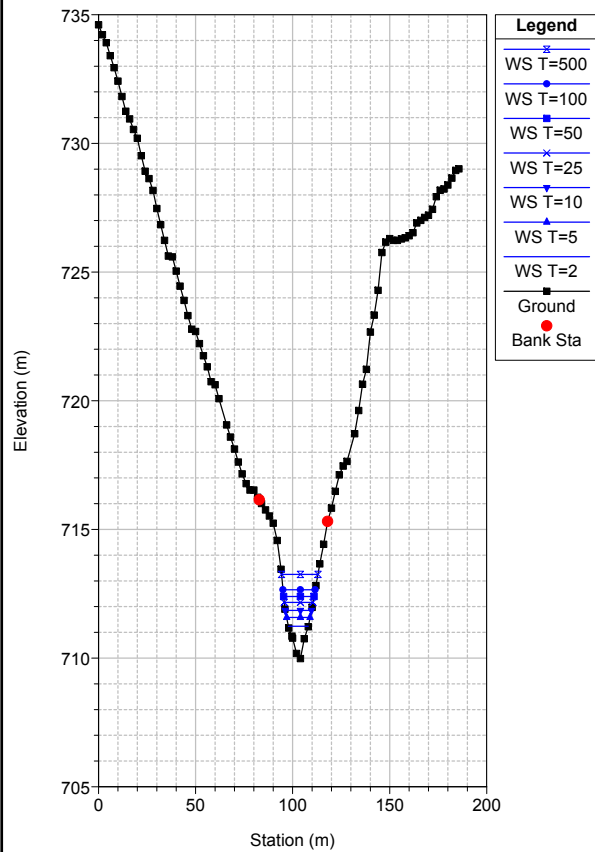
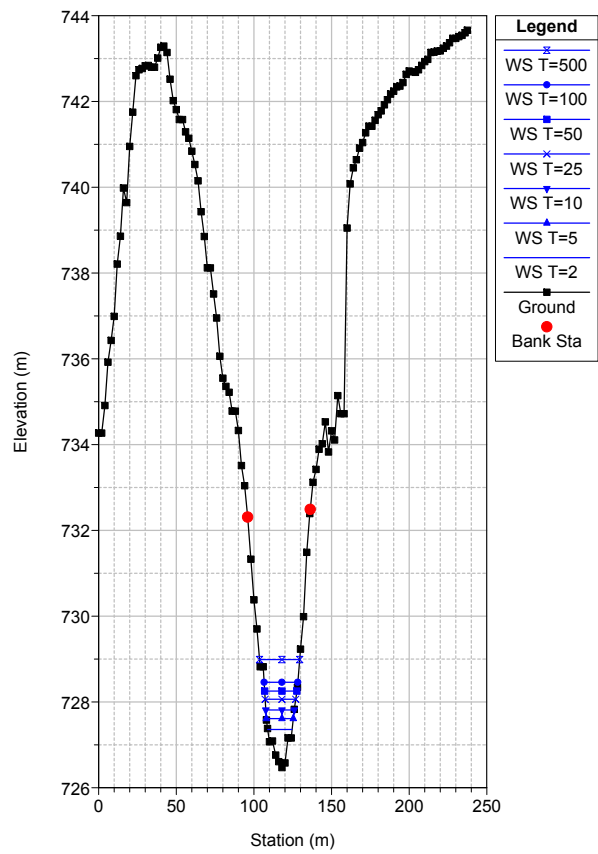
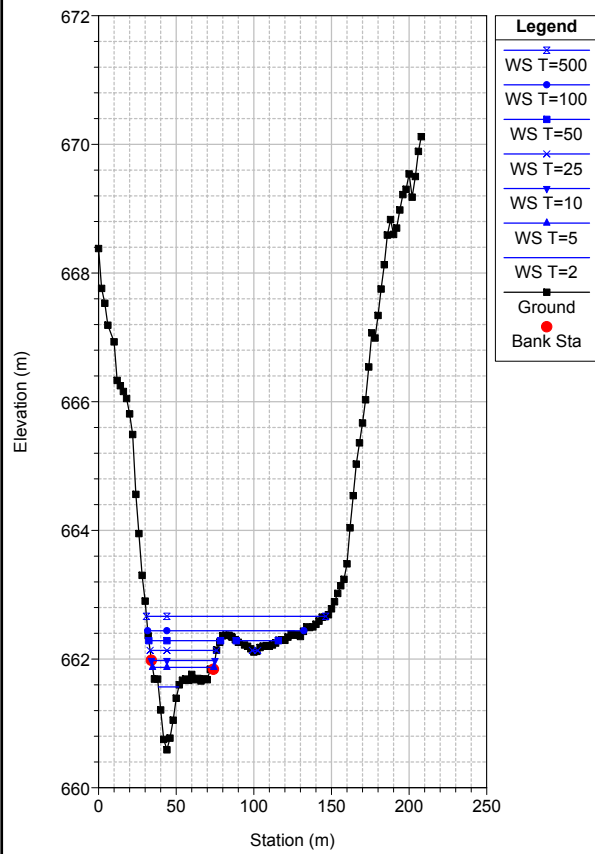


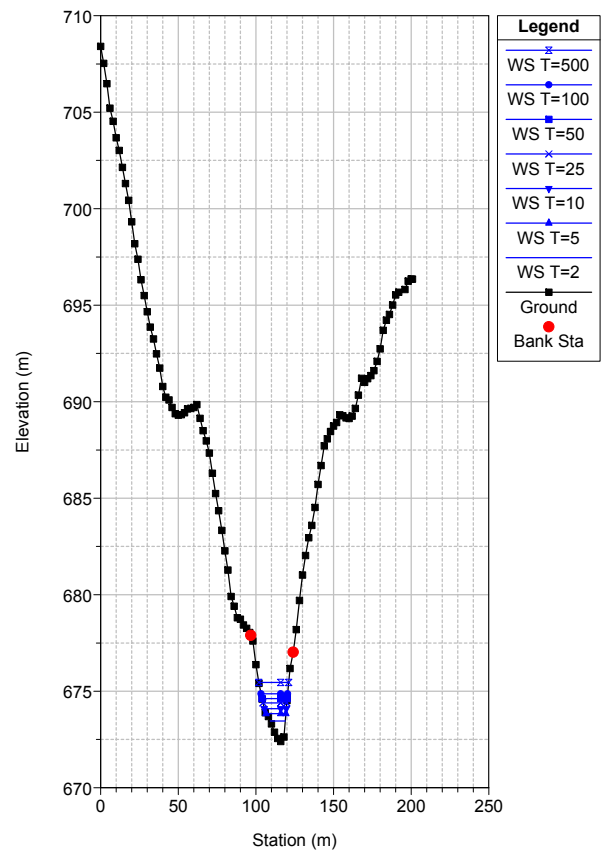
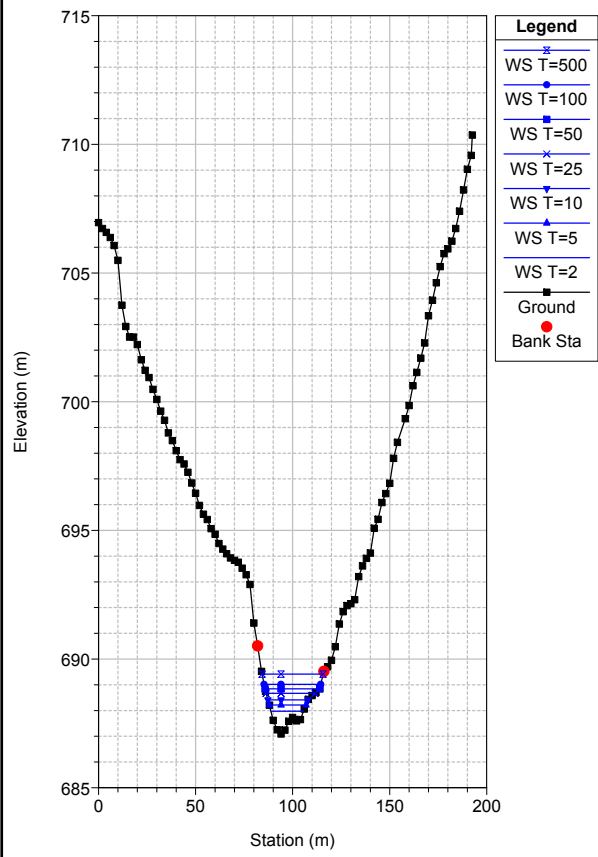






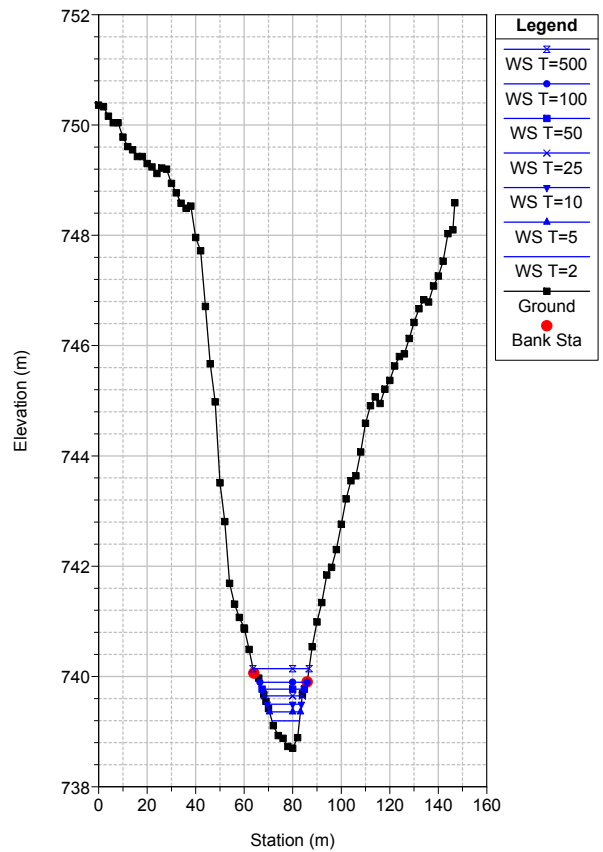
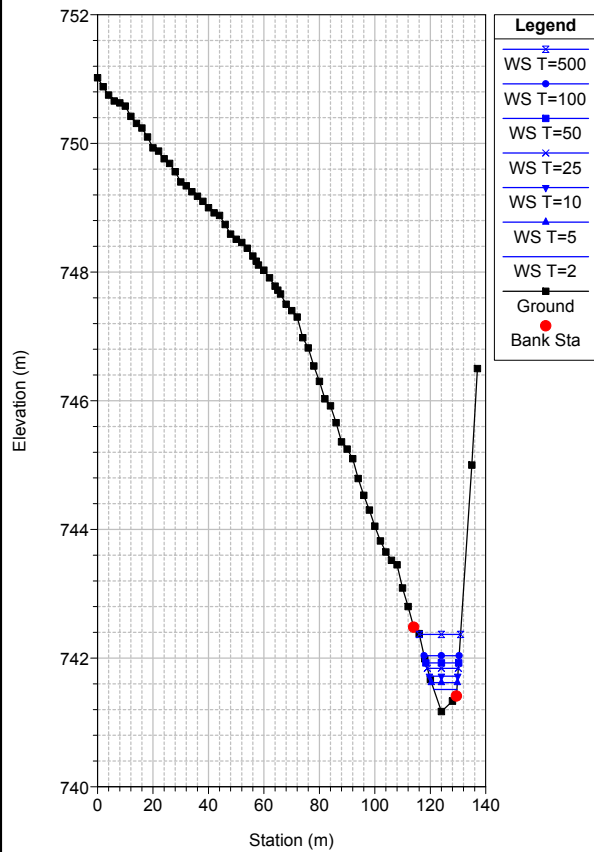
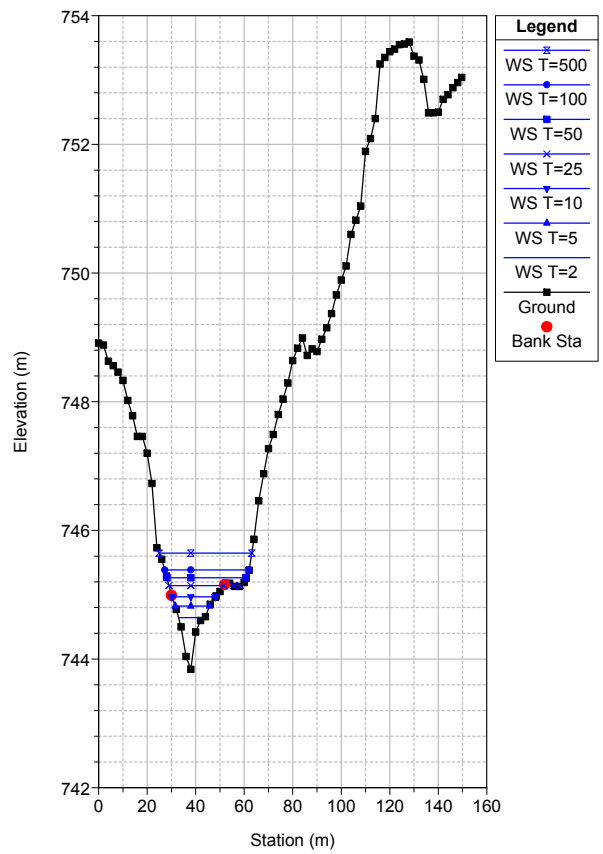
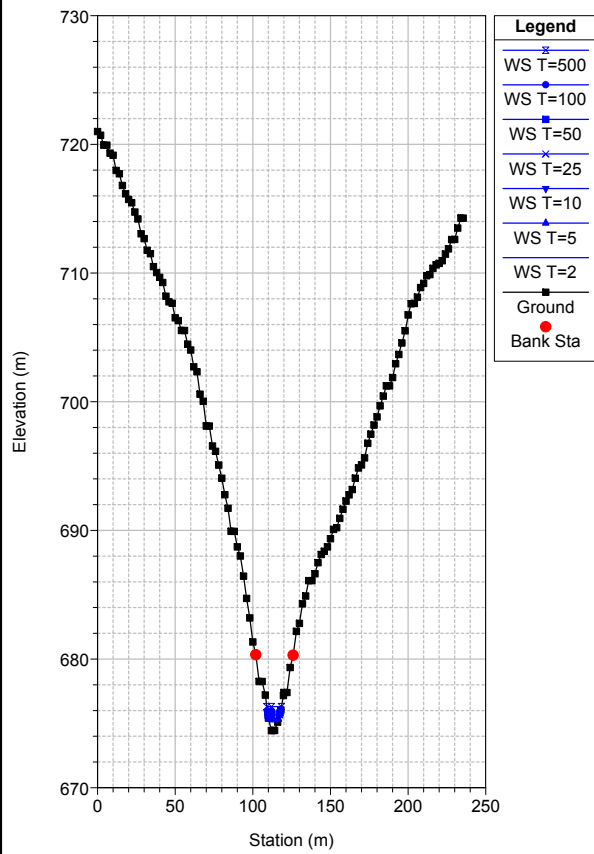


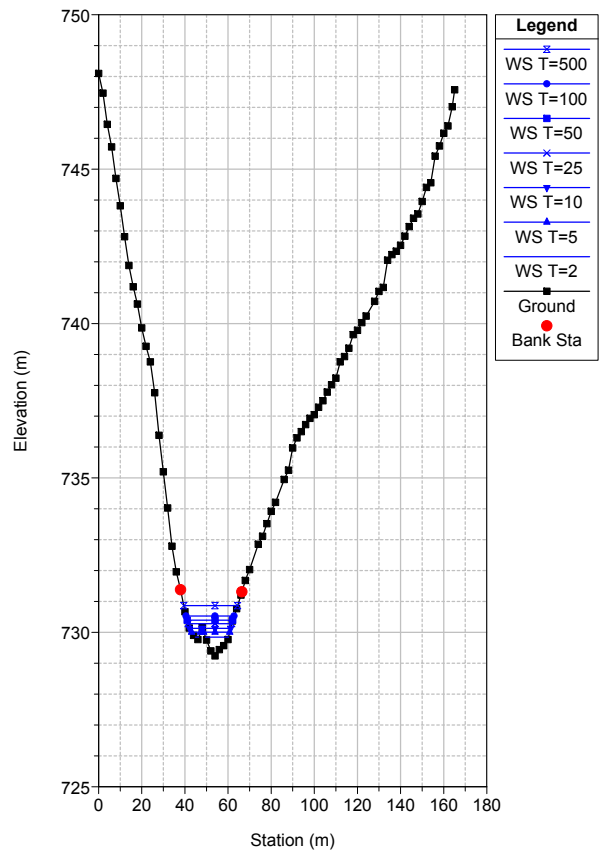
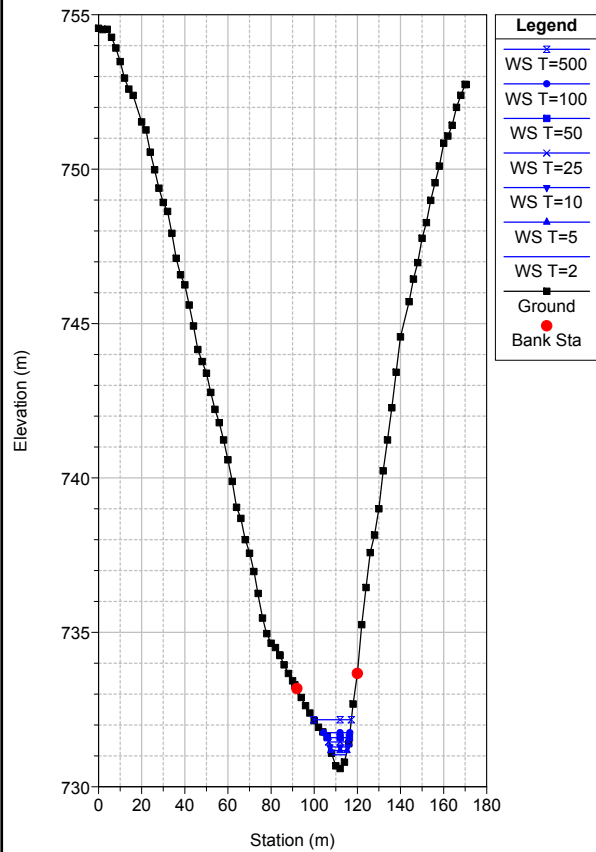
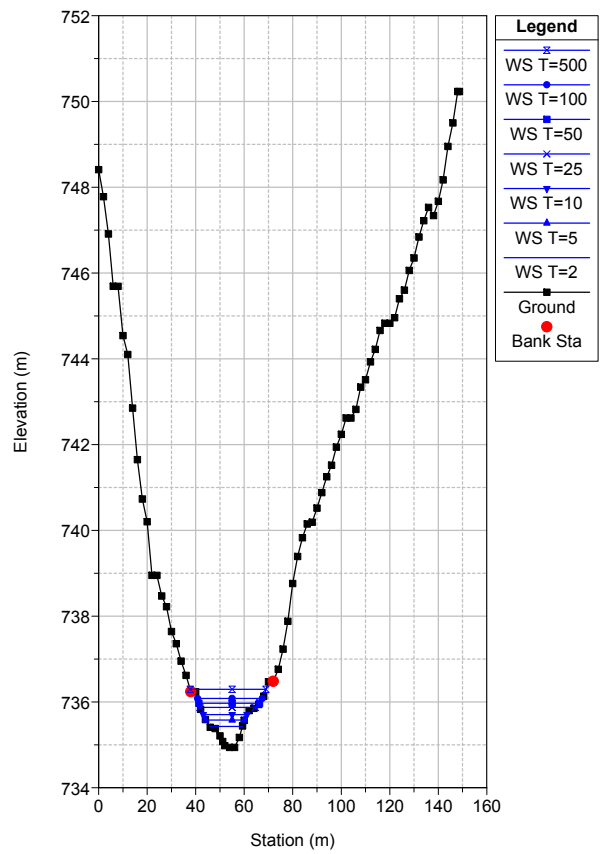
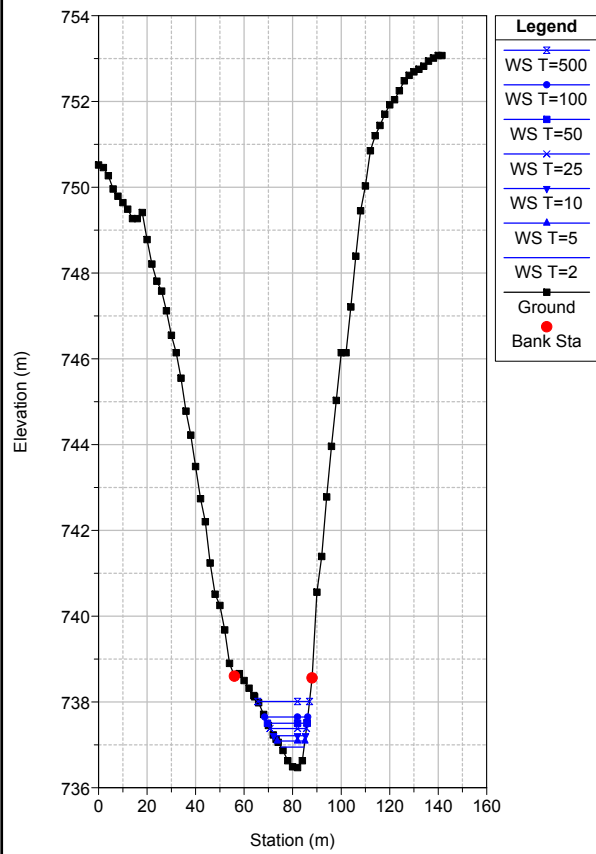




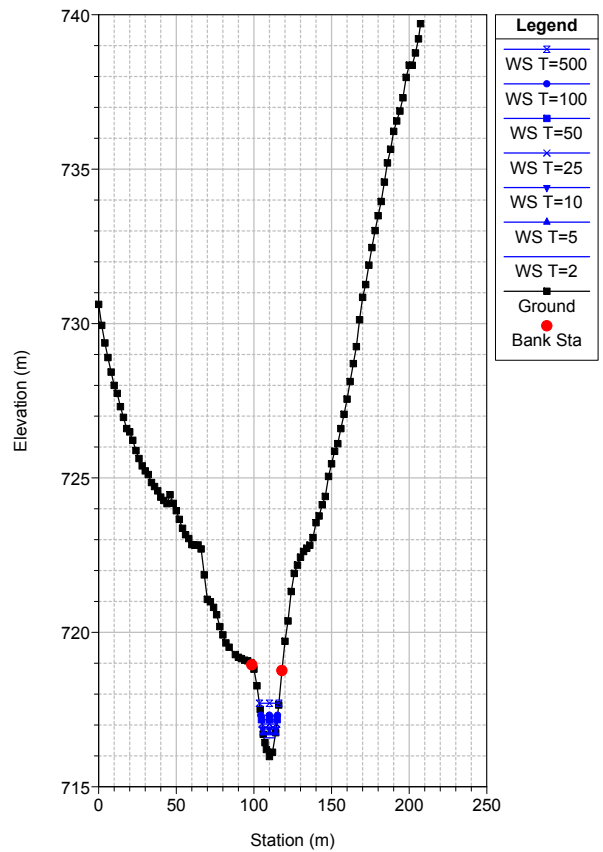
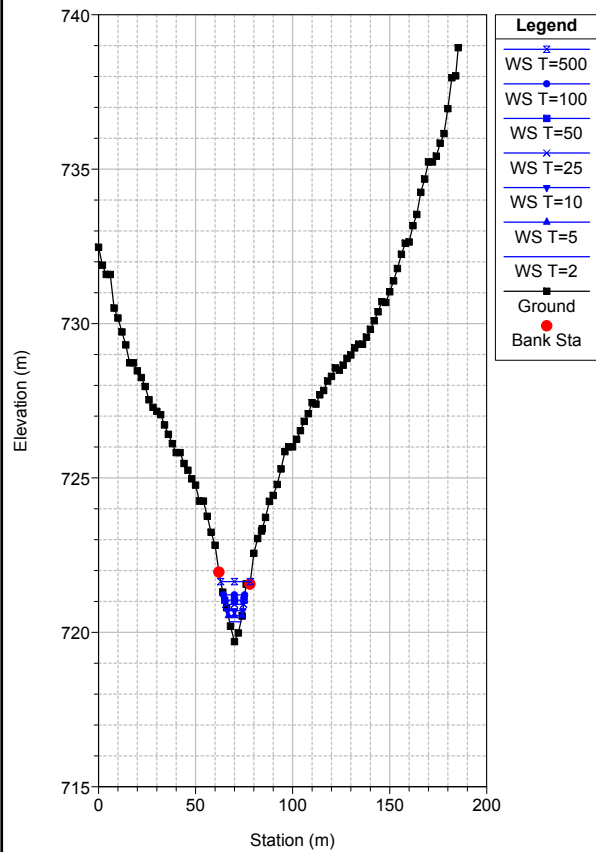
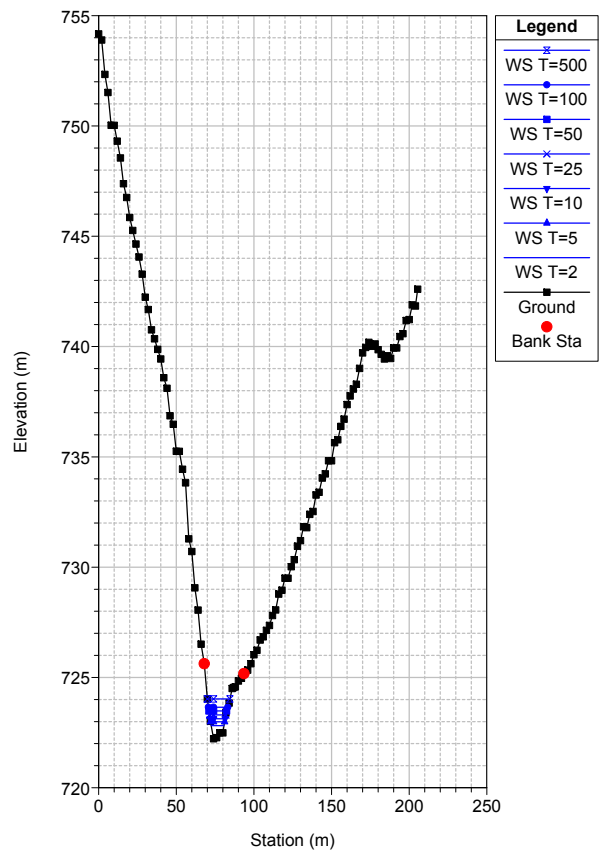
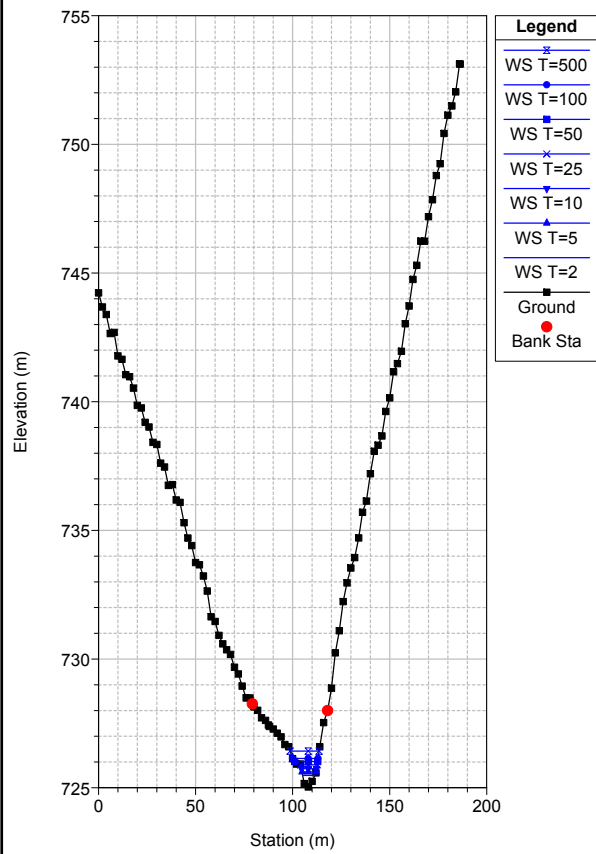
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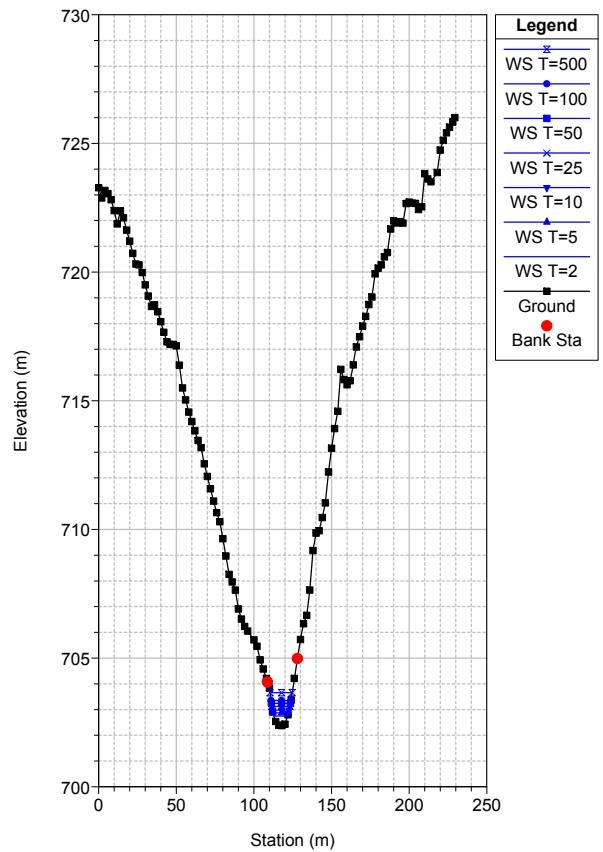
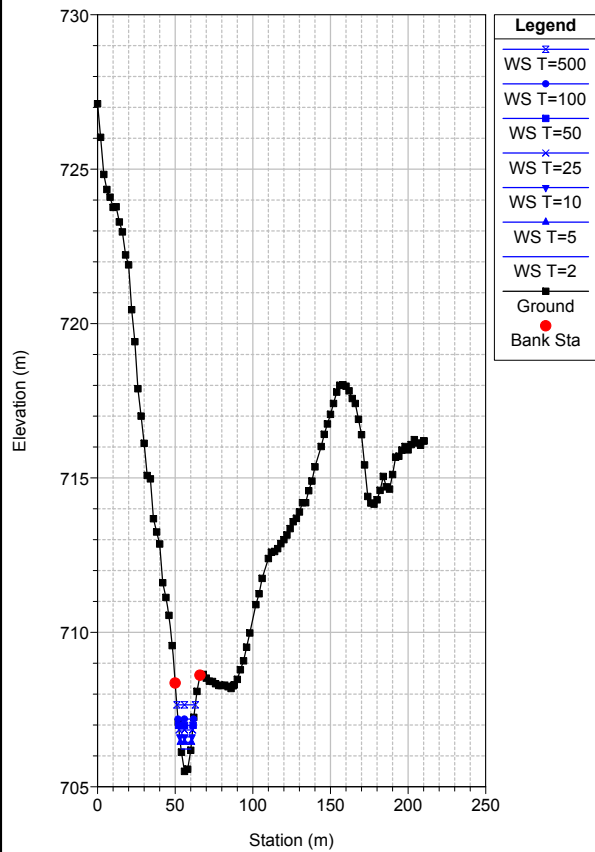
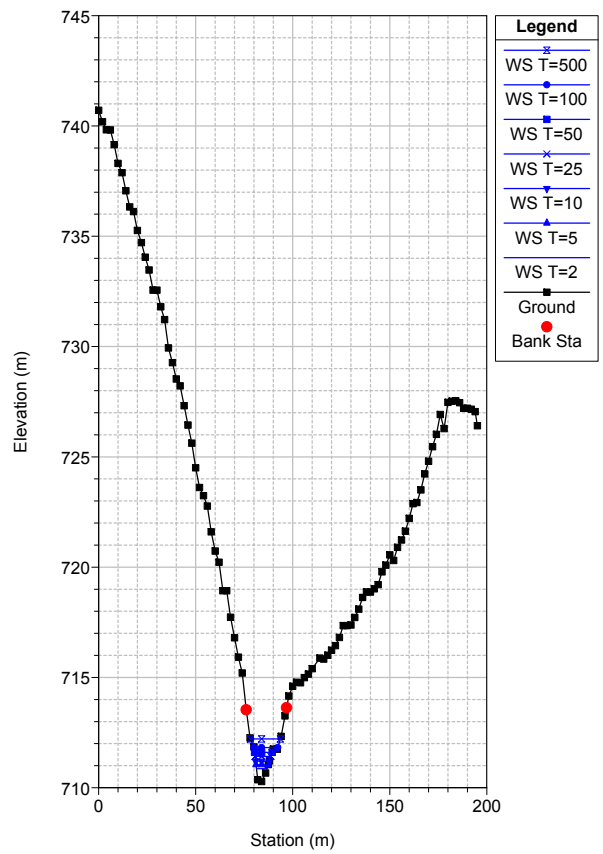
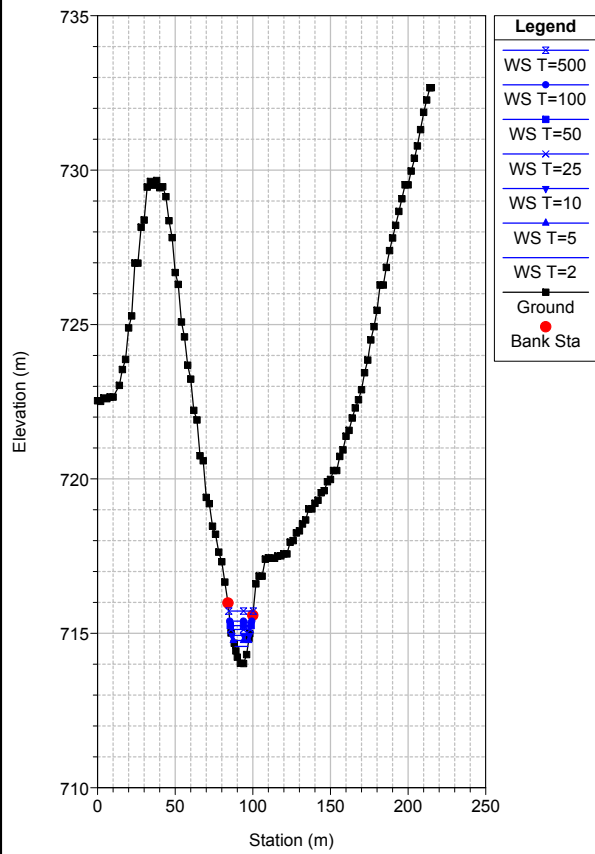
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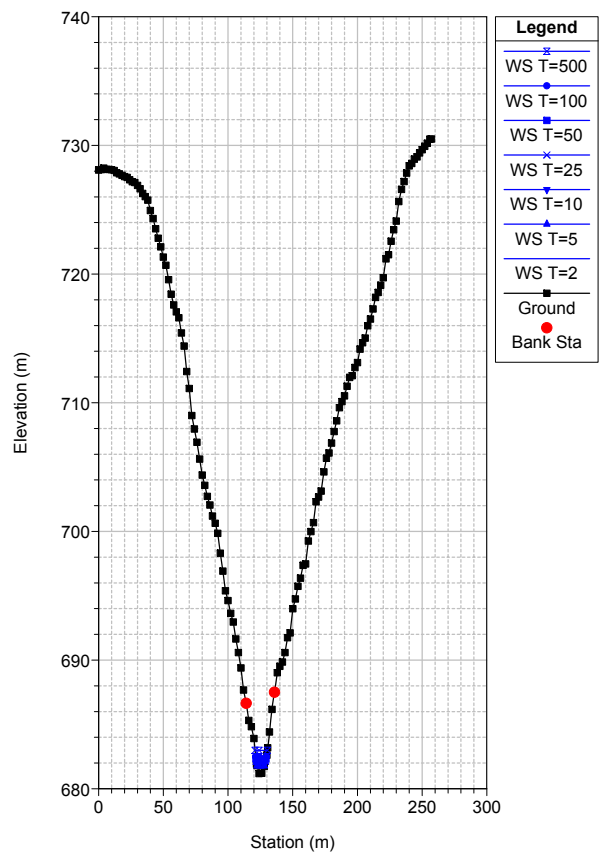
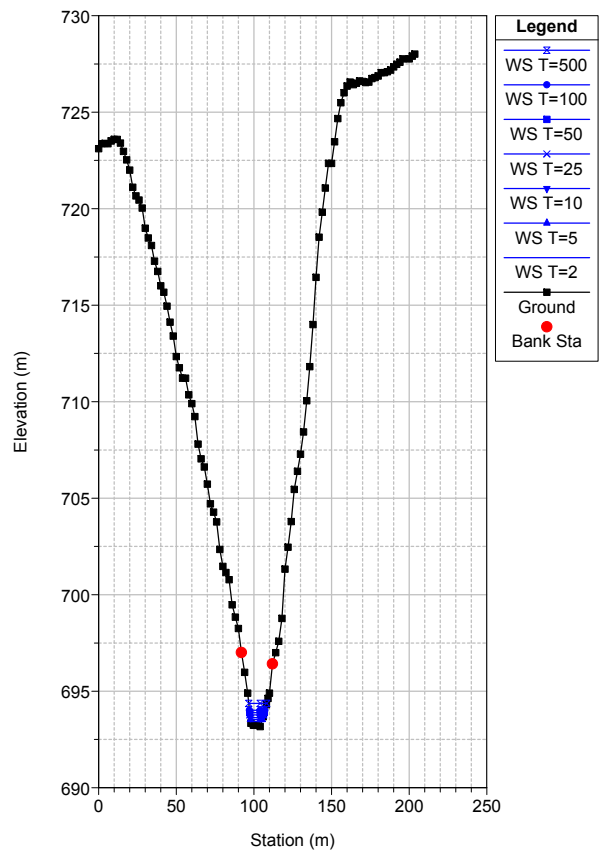
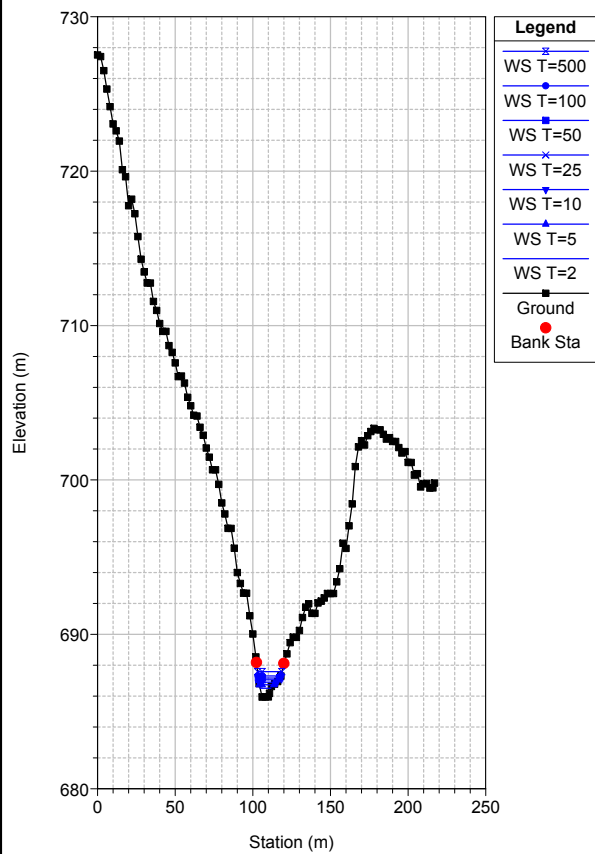
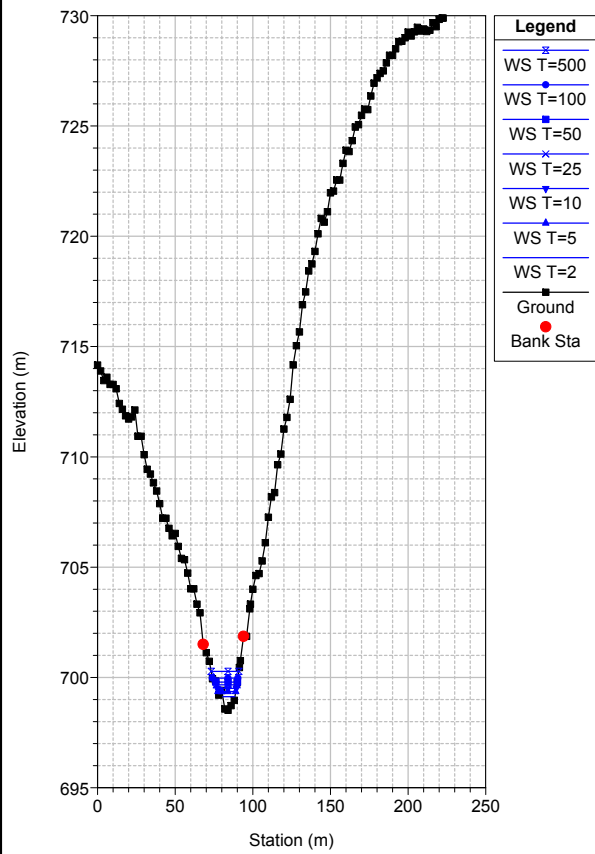


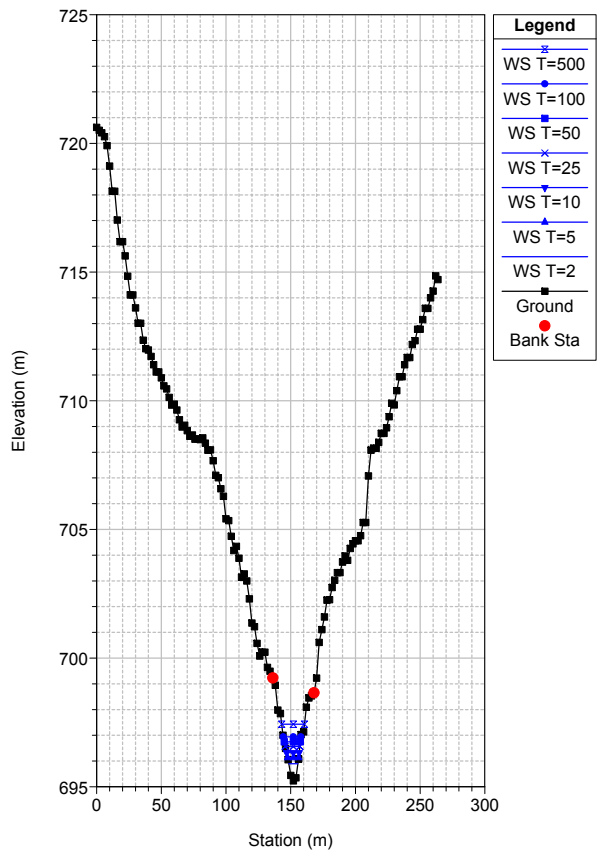
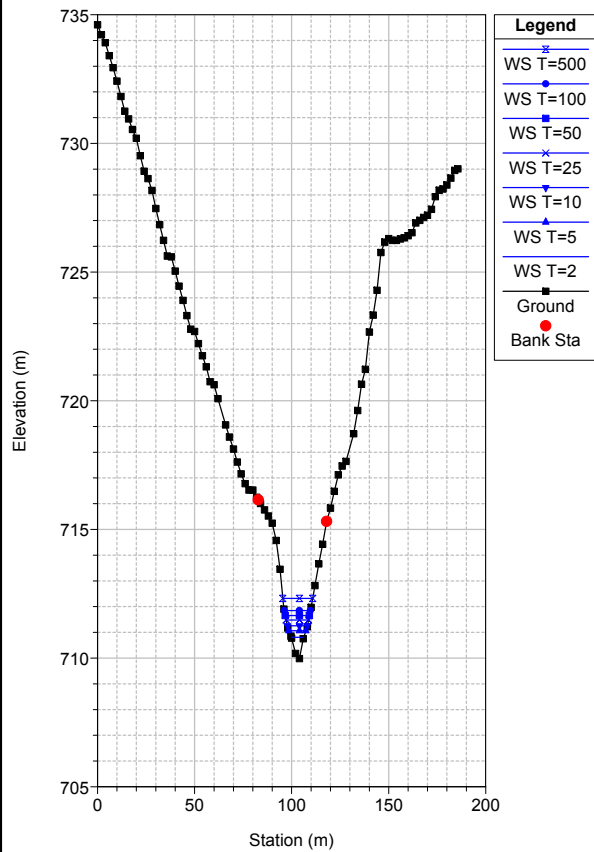
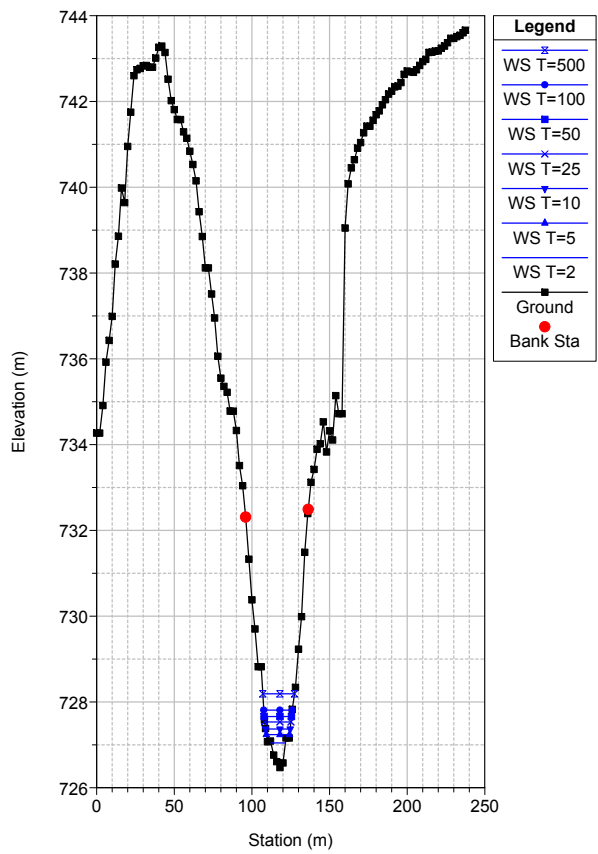
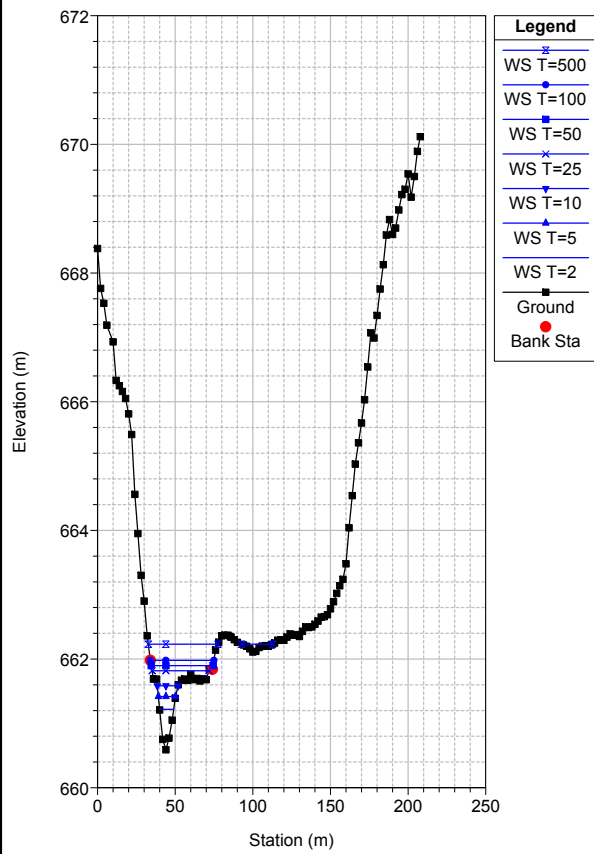


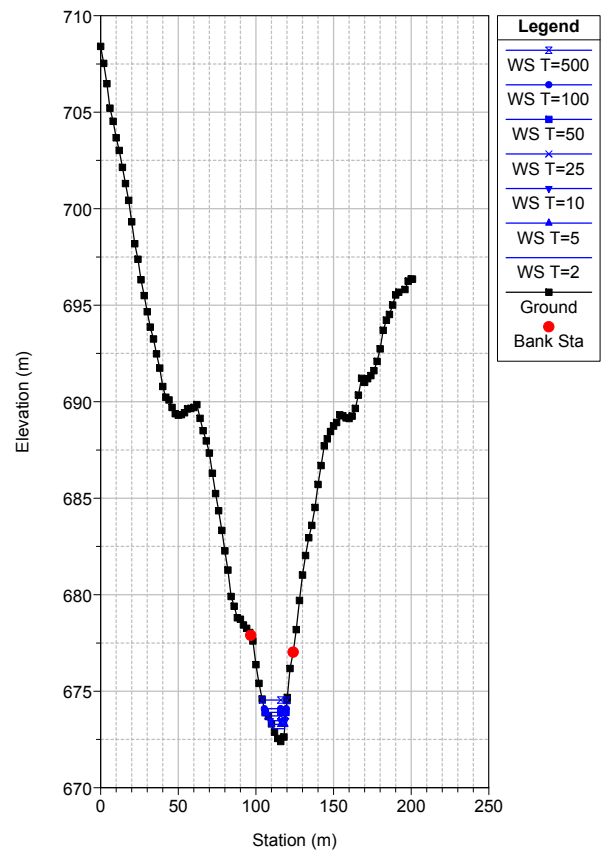
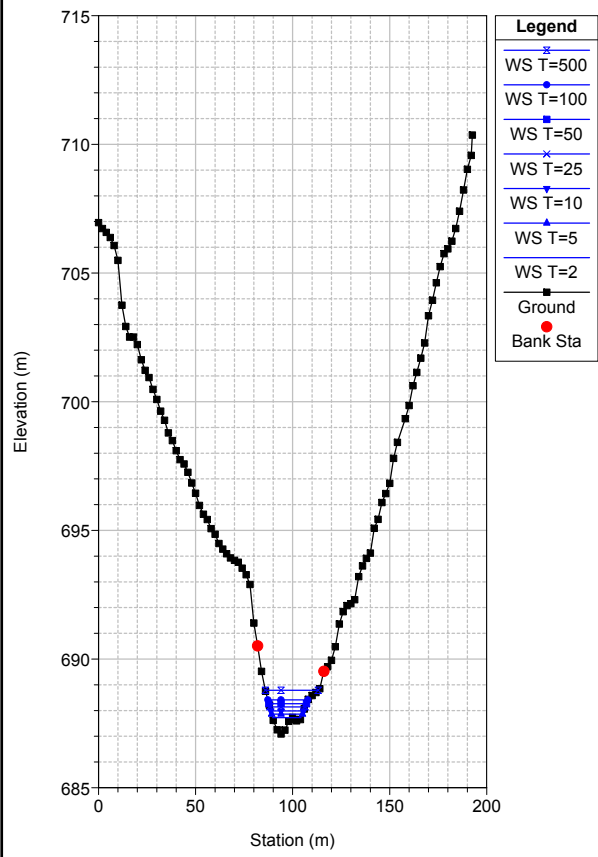




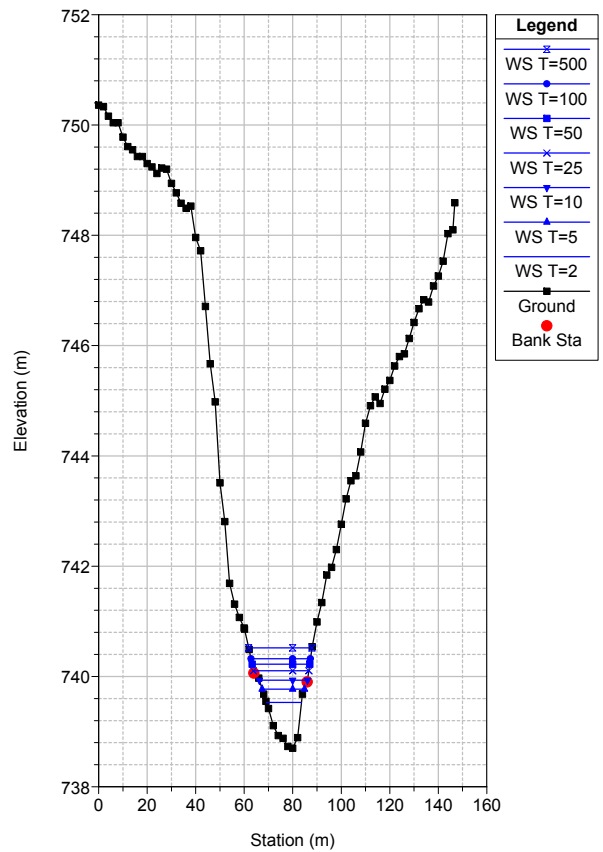
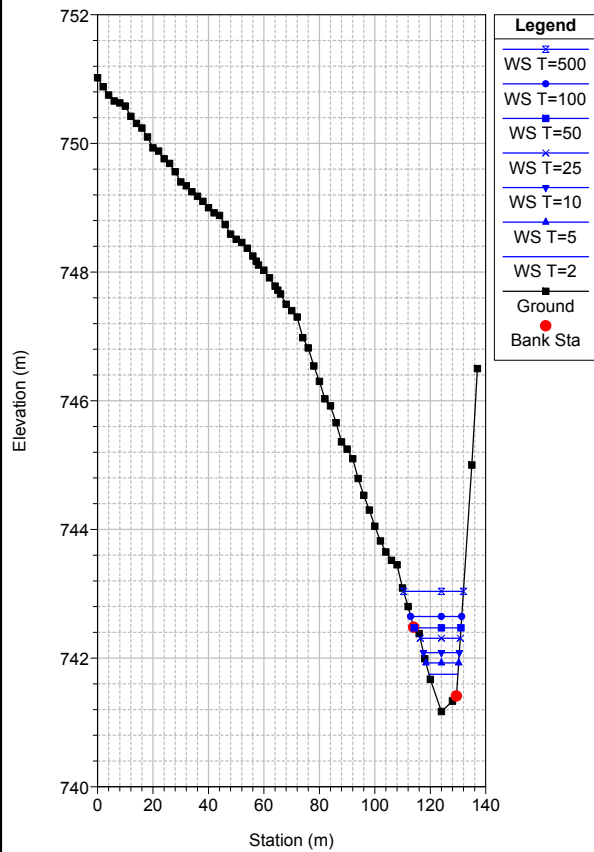
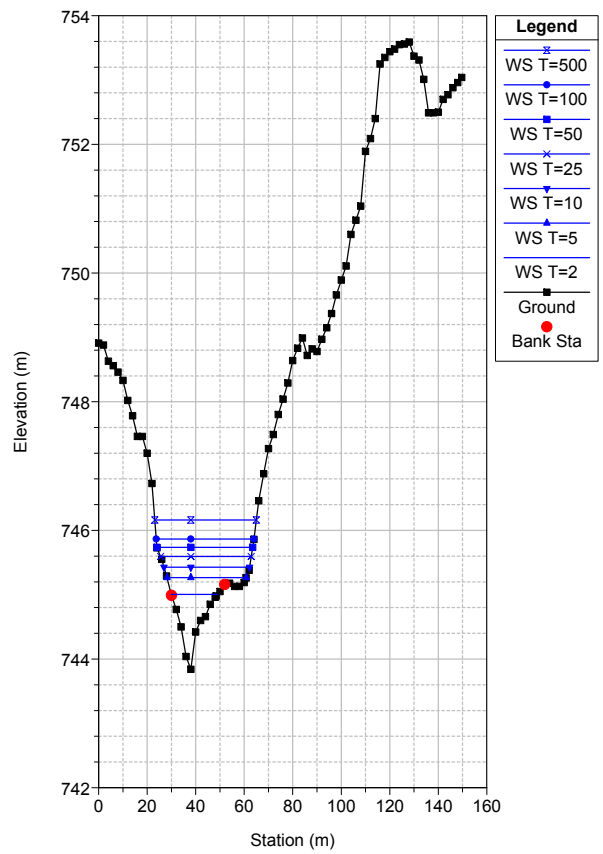
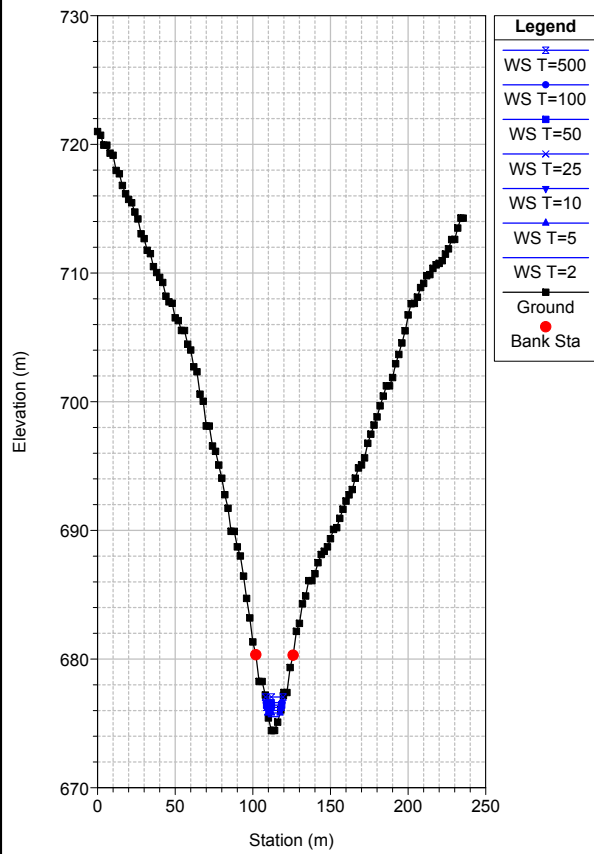




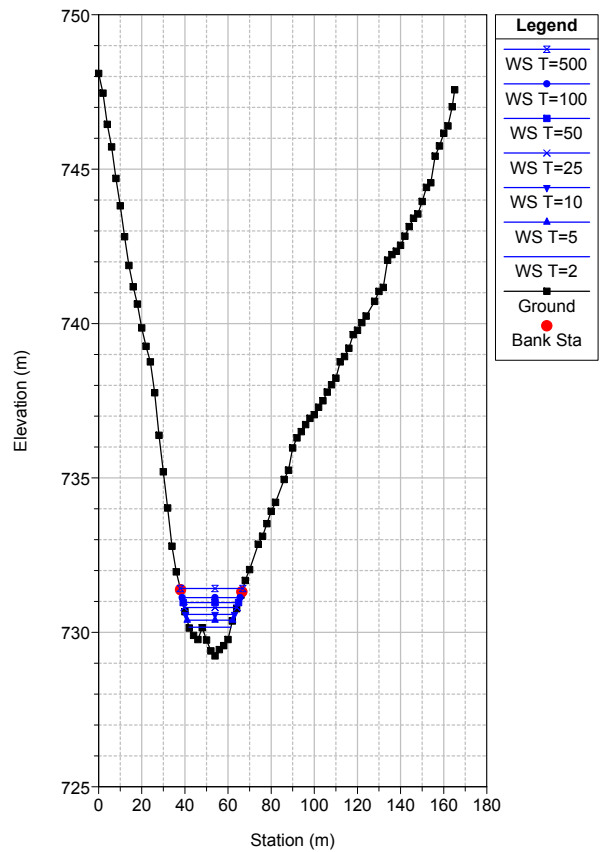
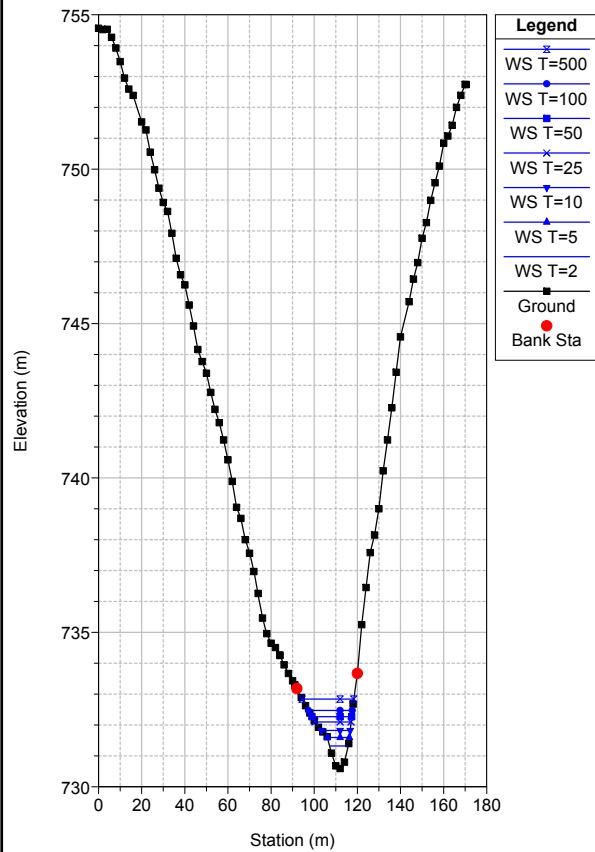
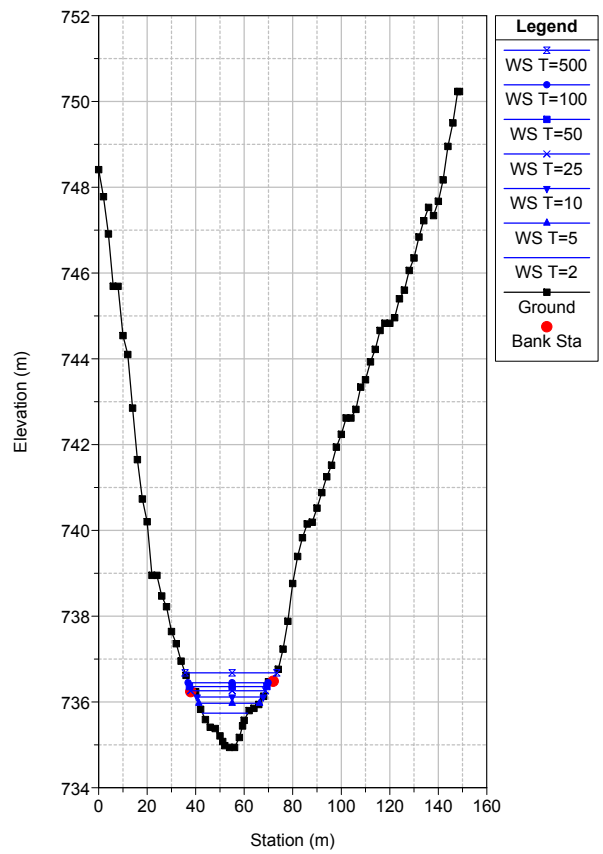
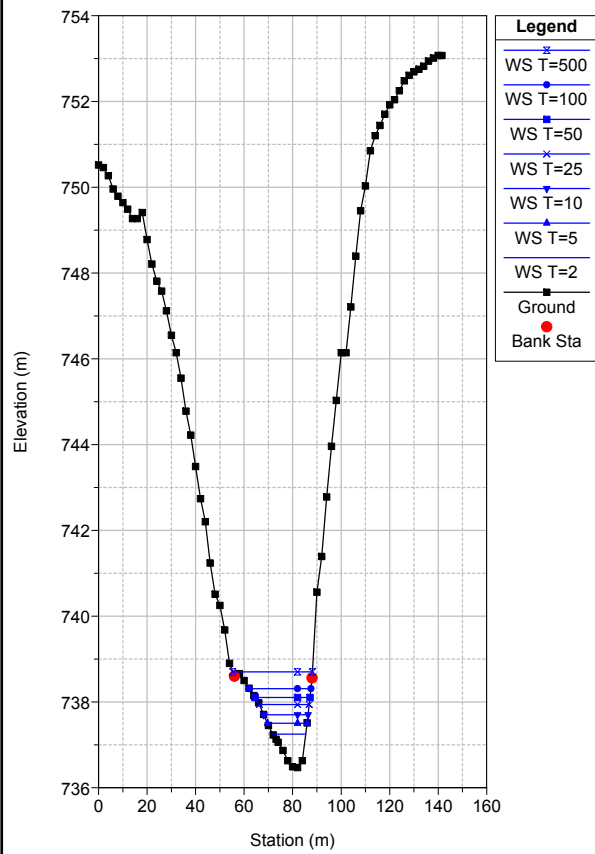


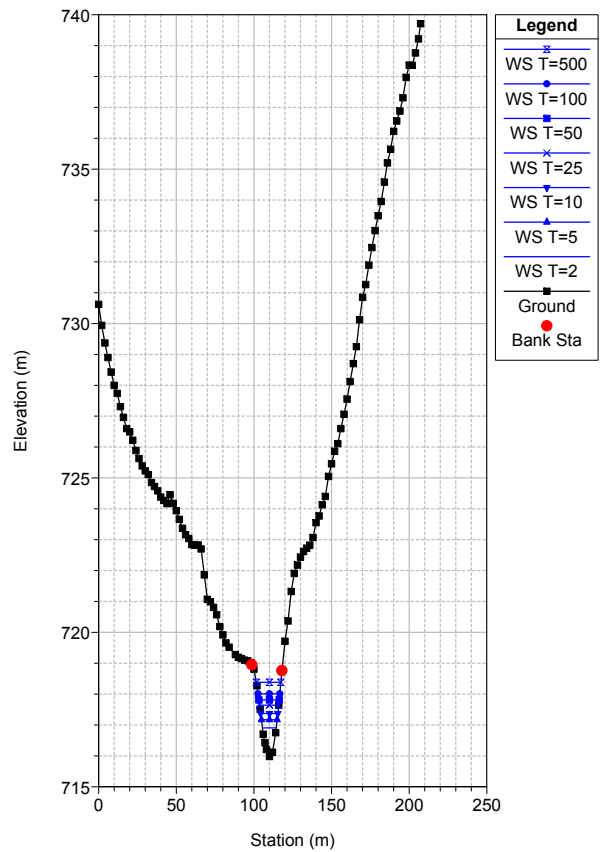
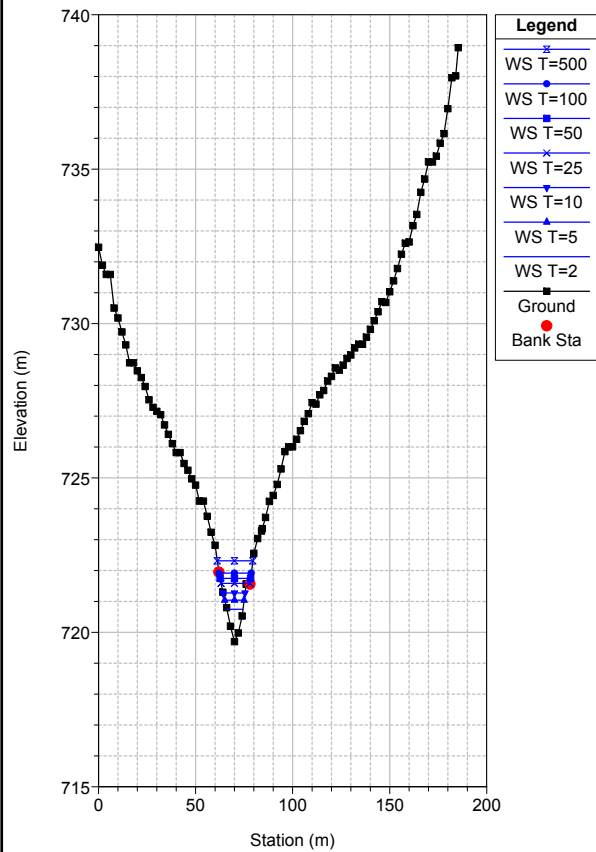
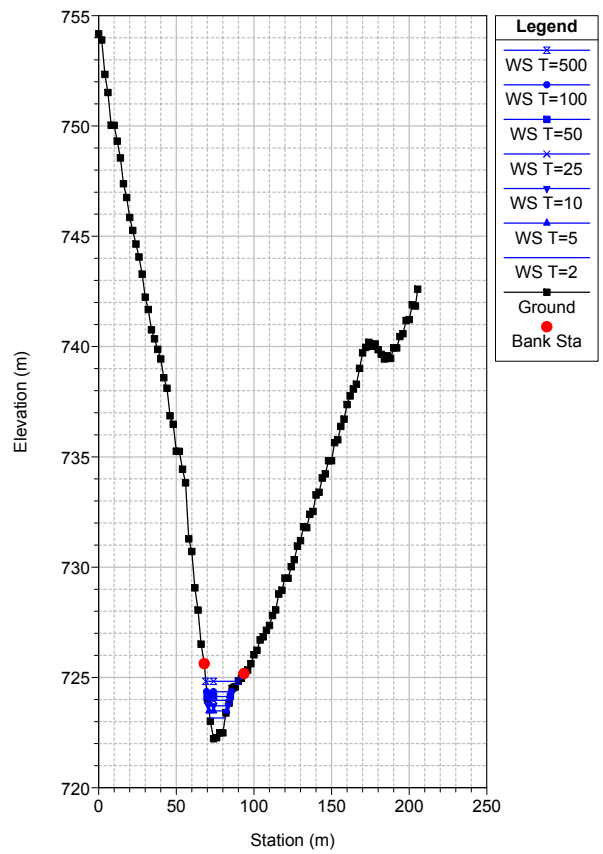
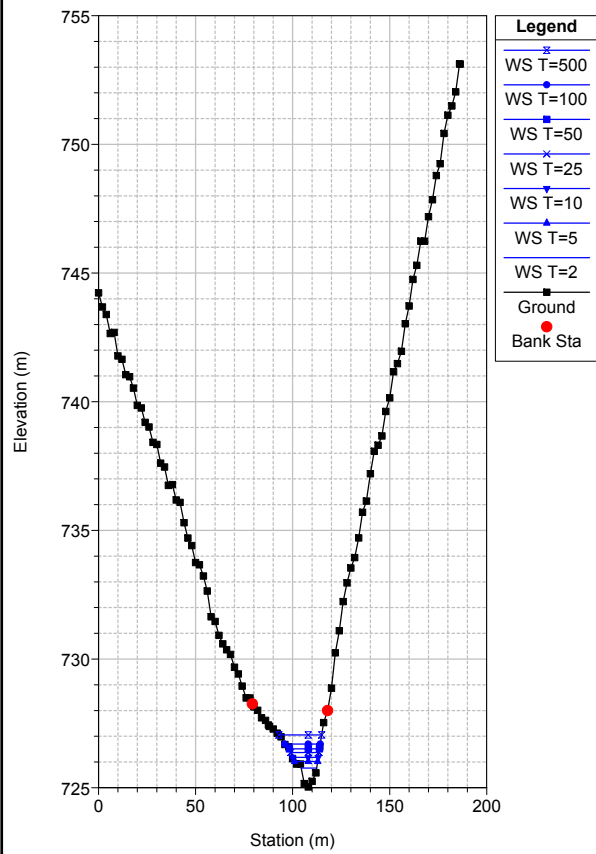


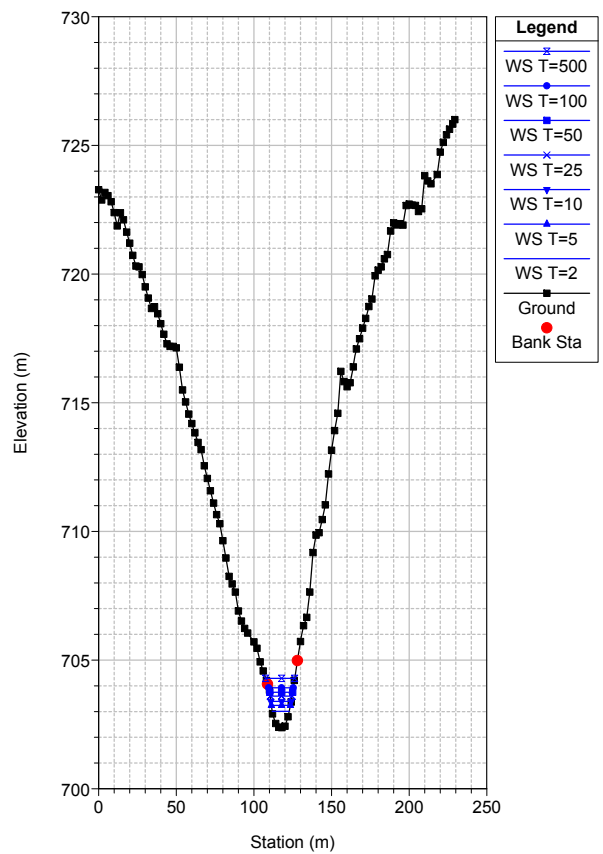
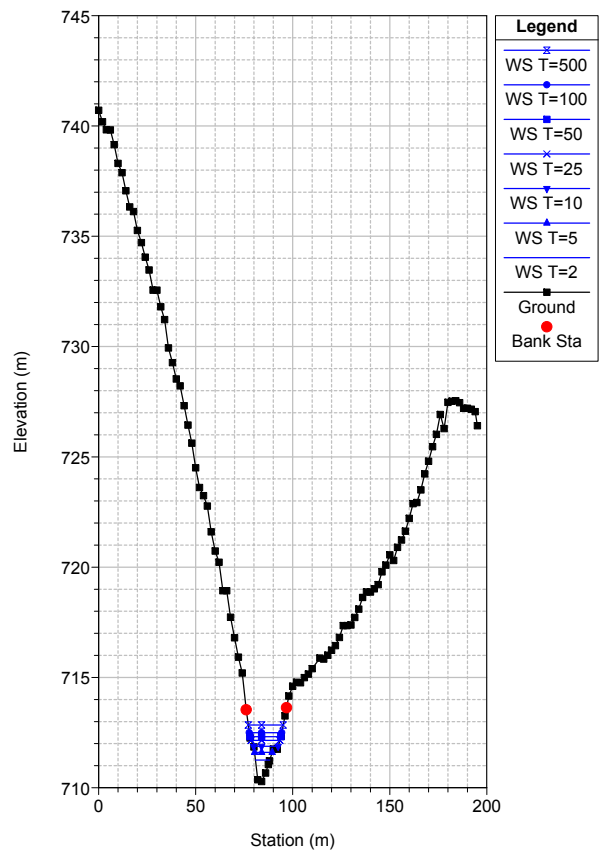
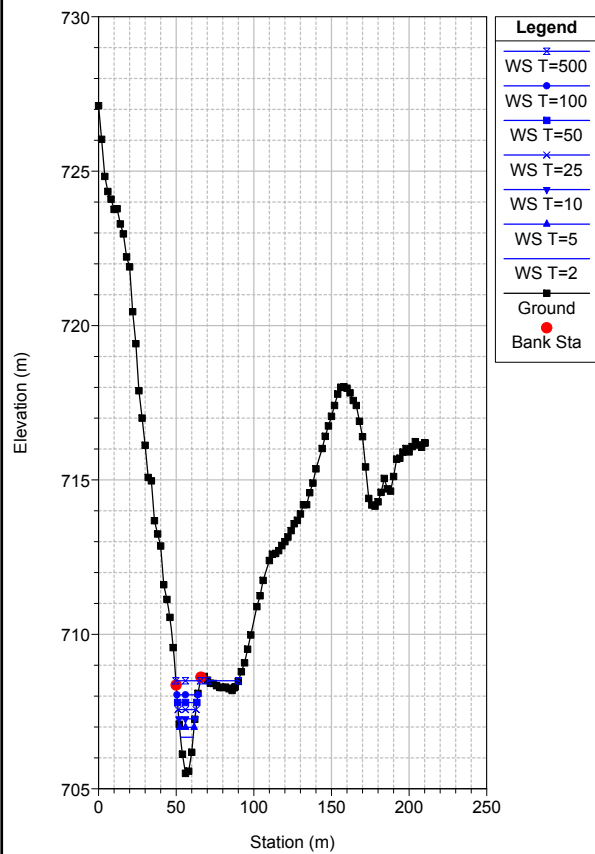
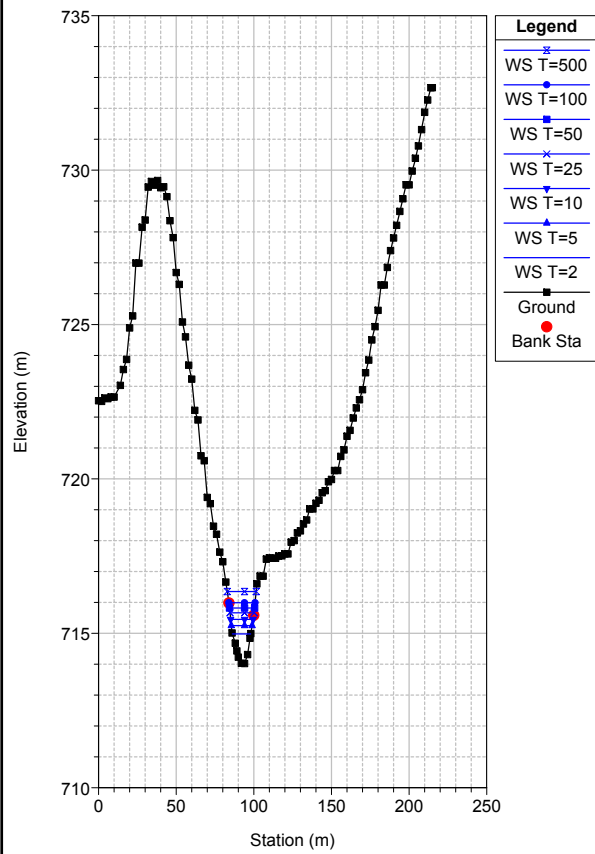
## ESCENARIO SUELO NORMAL



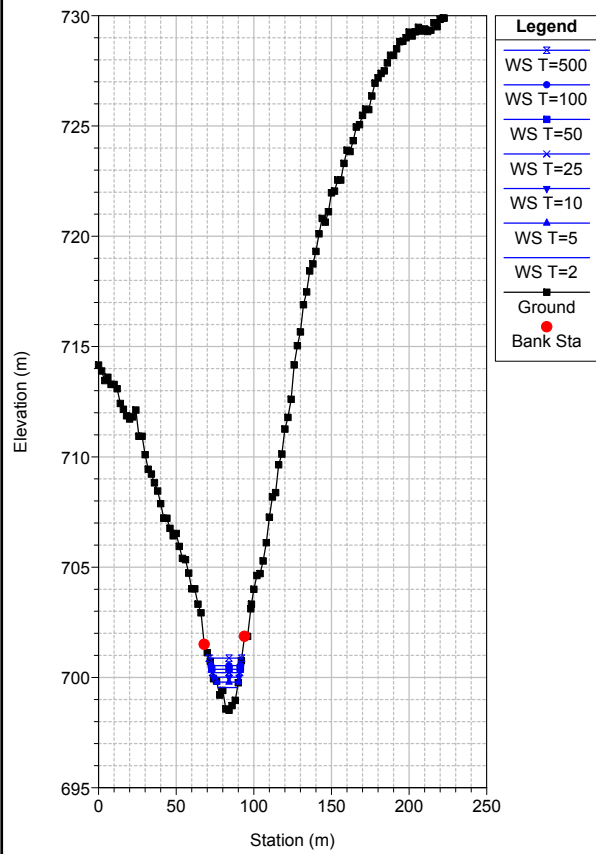






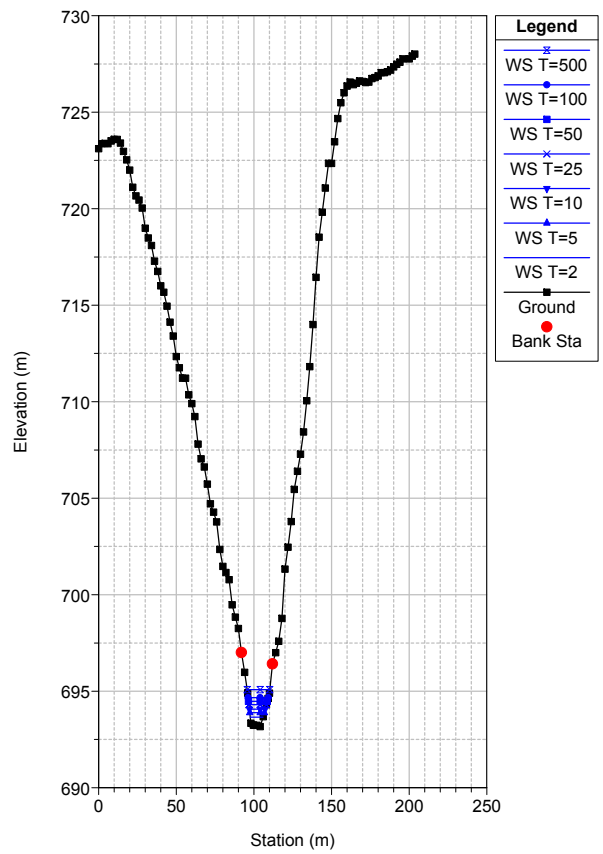


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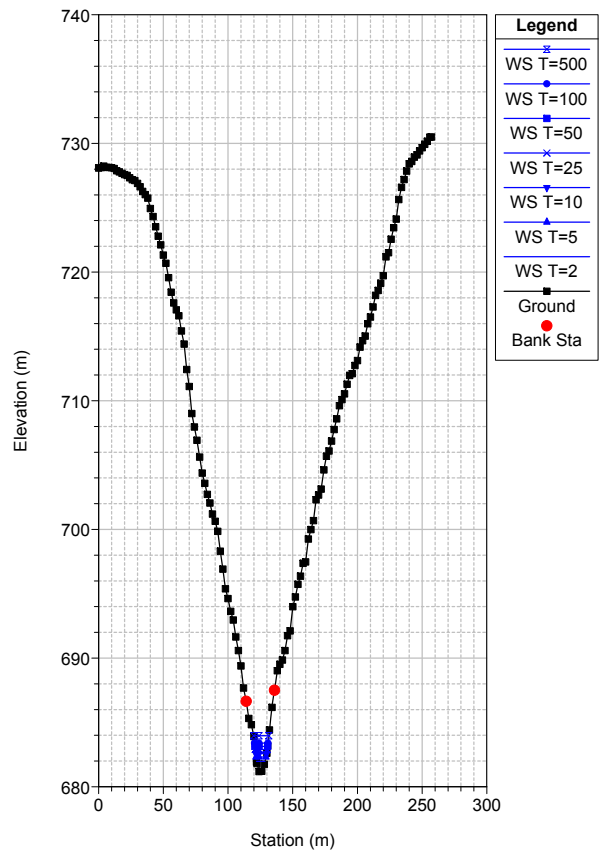
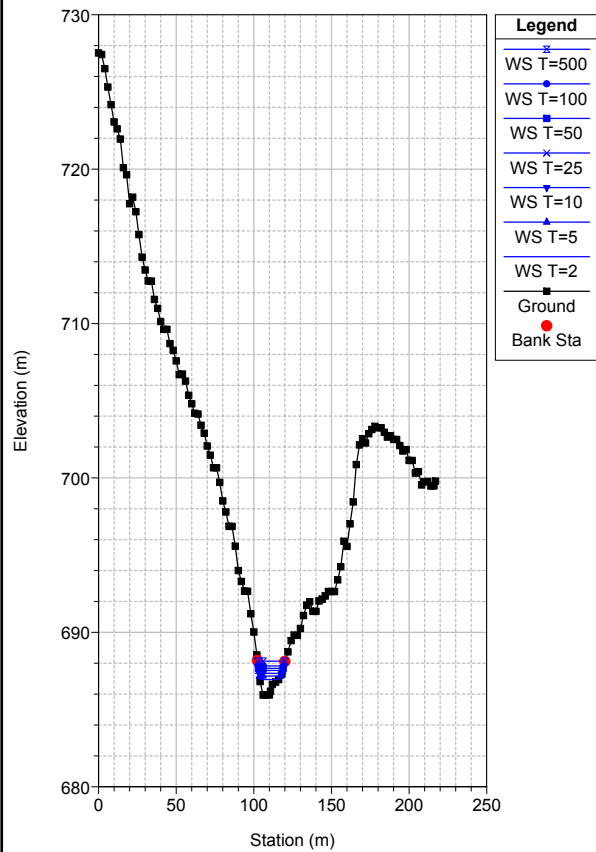


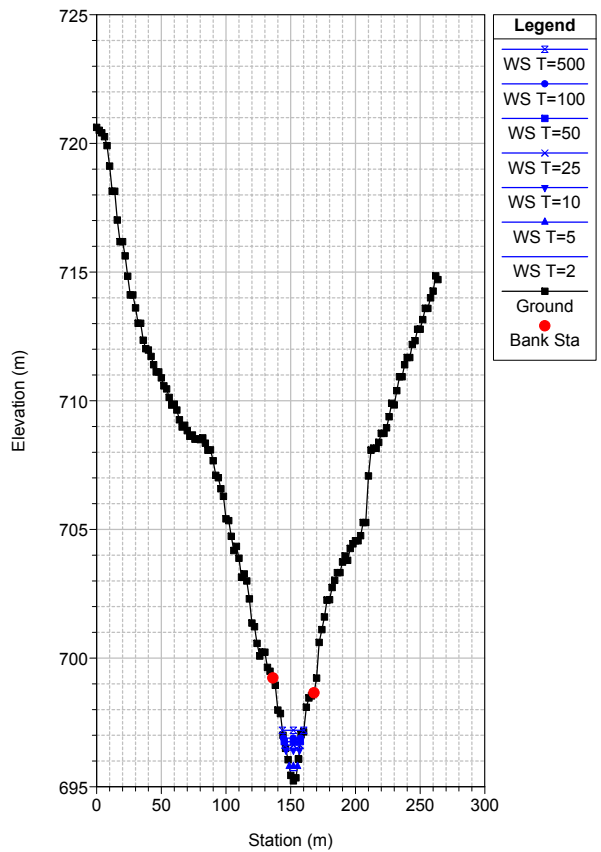
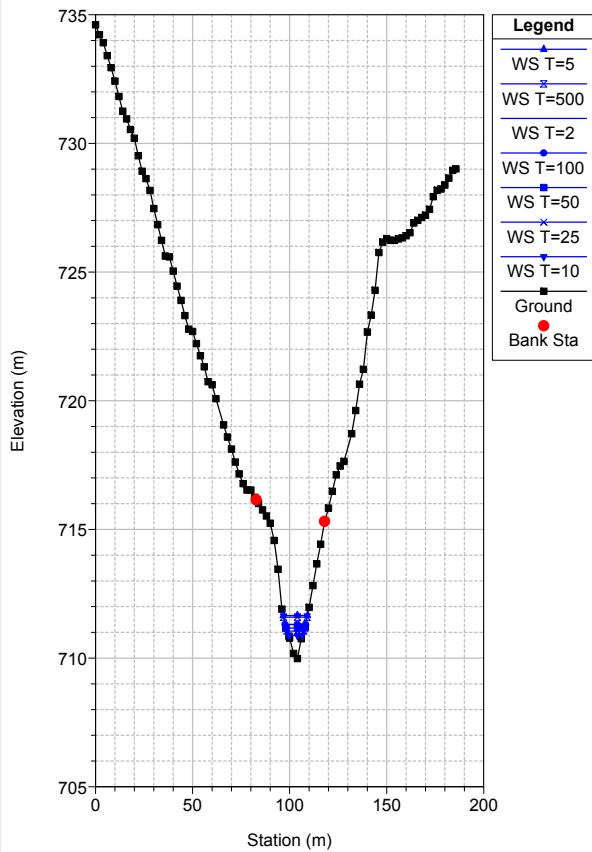
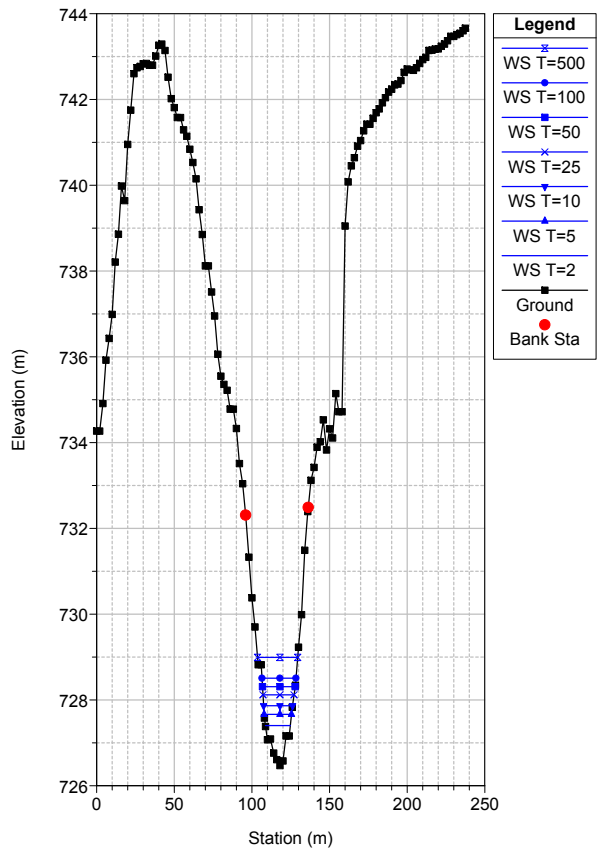
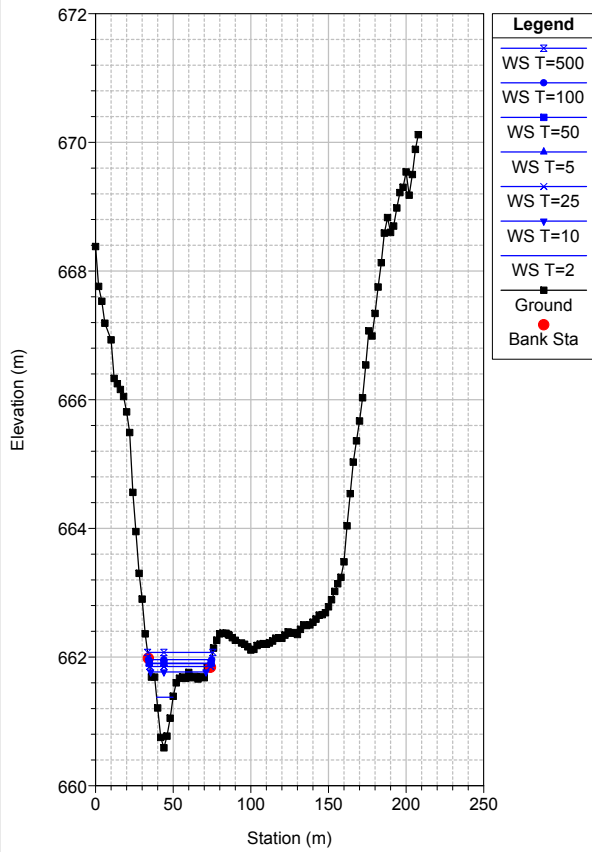
ArroyoPilarejo Plan: Plan 08 19/06/2021

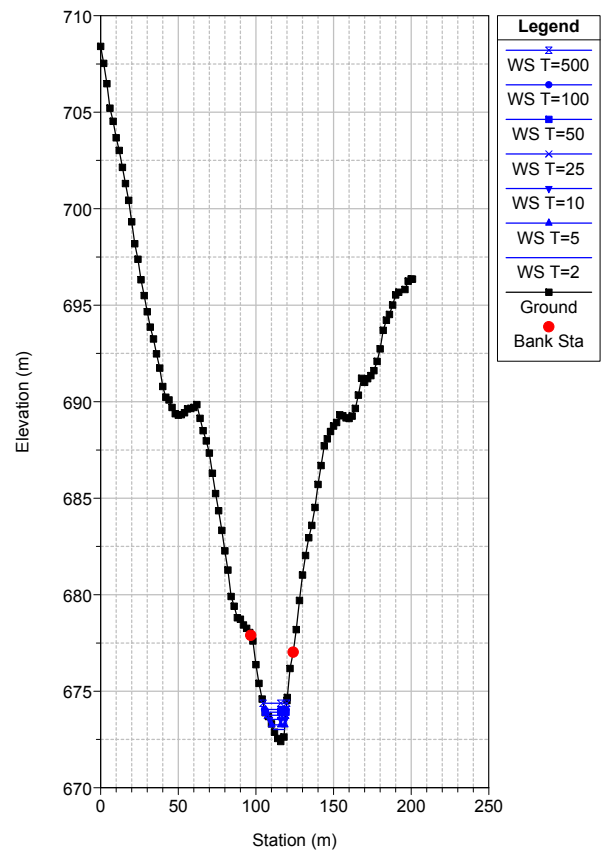
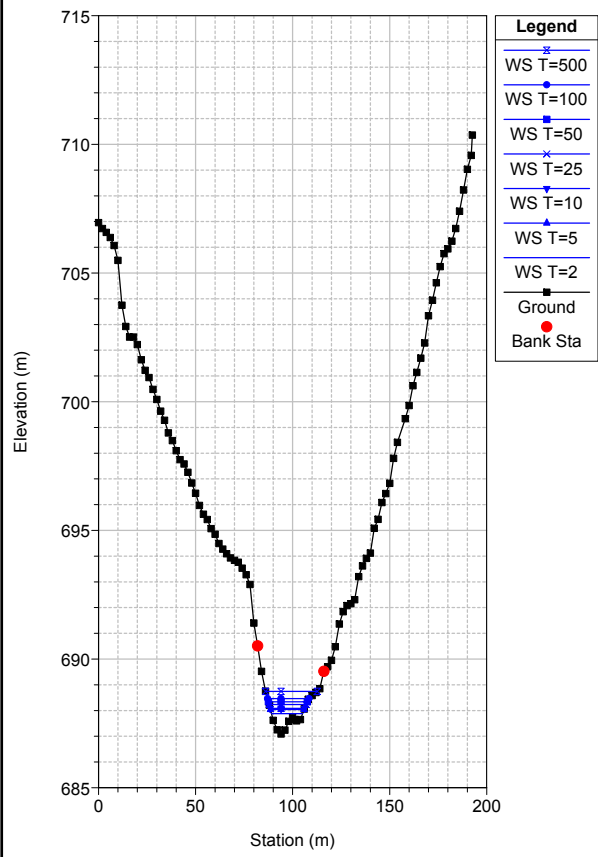
ArroyoPilarejo Plan: Plan 08 19/06/2021



ArroyoPilarejo Plan: Plan 08 19/06/2021







APÉNDICE 3 TABLAS RESUMEN DE PARÁMETROS HIDRÁULICOS DE LAS  
SECCIONES ESTUDIADAS. SITUACIÓN PREOPERACIONAL



## ESCENARIO SUELO SECO

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=2

E.G. Elev (m)	744.73	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.030	
W.S. Elev (m)	744.55	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.55	Flow Area (m2)		2.69	
E.G. Slope (m/m)	0.013295	Area (m2)		2.69	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	7.74	Top Width (m)		7.74	
Vel Total (m/s)	1.88	Avg. Vel. (m/s)		1.88	
Max Chl Dpth (m)	0.71	Hydr. Depth (m)		0.35	
Conv. Total (m3/s)	43.8	Conv. (m3/s)		43.8	
Length Wtd. (m)	89.98	Wetted Per. (m)		7.89	
Min Ch El (m)	743.84	Shear (N/m2)		44.46	
Alpha	1.00	Stream Power (N/m s)		83.40	
Frctn Loss (m)	2.59	Cum Volume (1000 m3)		6.22	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		20.68	0.01

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=5

E.G. Elev (m)	744.94	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	744.75	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.75	Flow Area (m2)		4.78	
E.G. Slope (m/m)	0.012902	Area (m2)		4.78	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	12.76	Top Width (m)		12.76	
Vel Total (m/s)	1.95	Avg. Vel. (m/s)		1.95	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	82.1	Conv. (m3/s)		82.1	
Length Wtd. (m)	90.00	Wetted Per. (m)		12.93	
Min Ch El (m)	743.84	Shear (N/m2)		46.80	
Alpha	1.00	Stream Power (N/m s)		91.29	
Frctn Loss (m)	2.45	Cum Volume (1000 m3)		9.78	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		24.90	0.03

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=10

E.G. Elev (m)	745.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	744.89	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.89	Flow Area (m2)		6.83	
E.G. Slope (m/m)	0.012203	Area (m2)		6.83	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	15.87	Top Width (m)		15.87	
Vel Total (m/s)	2.08	Avg. Vel. (m/s)		2.08	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	128.7	Conv. (m3/s)		128.7	
Length Wtd. (m)	90.03	Wetted Per. (m)		16.06	
Min Ch El (m)	743.84	Shear (N/m2)		50.89	
Alpha	1.00	Stream Power (N/m s)		105.97	
Frctn Loss (m)	2.30	Cum Volume (1000 m3)		13.43	0.01
C & E Loss (m)	0.08	Cum SA (1000 m2)		28.55	0.05

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25

E.G. Elev (m)	745.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	745.07	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.07	Flow Area (m2)	0.02	10.00	
E.G. Slope (m/m)	0.011409	Area (m2)	0.02	10.00	
Q Total (m3/s)	22.07	Flow (m3/s)	0.01	22.06	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25 (Continued)

Top Width (m)	20.79	Top Width (m)	0.50	20.29	
Vel Total (m/s)	2.20	Avg. Vel. (m/s)	0.40	2.21	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)	0.04	0.49	
Conv. Total (m3/s)	206.6	Conv. (m3/s)	0.1	206.5	
Length Wtd. (m)	90.06	Wetted Per. (m)	0.51	20.48	
Min Ch El (m)	743.84	Shear (N/m2)	4.19	54.60	
Alpha	1.00	Stream Power (N/m s)	1.67	120.50	
Frctn Loss (m)	2.12	Cum Volume (1000 m3)	0.00	18.51	0.01
C & E Loss (m)	0.11	Cum SA (1000 m2)	0.02	32.19	0.08

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=50

E.G. Elev (m)	745.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.20	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.20	Flow Area (m2)	0.15	12.91	0.39
E.G. Slope (m/m)	0.009349	Area (m2)	0.15	12.91	0.39
Q Total (m3/s)	29.26	Flow (m3/s)	0.11	28.99	0.16
Top Width (m)	31.54	Top Width (m)	1.41	22.00	8.13
Vel Total (m/s)	2.18	Avg. Vel. (m/s)	0.72	2.25	0.42
Max Chl Dpth (m)	1.36	Hydr. Depth (m)	0.11	0.59	0.05
Conv. Total (m3/s)	302.6	Conv. (m3/s)	1.1	299.8	1.7
Length Wtd. (m)	90.10	Wetted Per. (m)	1.43	22.20	8.13
Min Ch El (m)	743.84	Shear (N/m2)	9.60	53.31	4.35
Alpha	1.06	Stream Power (N/m s)	6.87	119.71	1.84
Frctn Loss (m)	1.85	Cum Volume (1000 m3)	0.01	22.79	0.04
C & E Loss (m)	0.13	Cum SA (1000 m2)	0.06	35.14	0.51

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=100

E.G. Elev (m)	745.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.32	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.32	Flow Area (m2)	0.37	15.57	1.45
E.G. Slope (m/m)	0.008183	Area (m2)	0.37	15.57	1.45
Q Total (m3/s)	38.64	Flow (m3/s)	0.33	37.06	1.25
Top Width (m)	33.66	Top Width (m)	2.25	22.00	9.41
Vel Total (m/s)	2.22	Avg. Vel. (m/s)	0.90	2.38	0.86
Max Chl Dpth (m)	1.48	Hydr. Depth (m)	0.16	0.71	0.15
Conv. Total (m3/s)	427.1	Conv. (m3/s)	3.7	409.6	13.8
Length Wtd. (m)	90.27	Wetted Per. (m)	2.28	22.20	9.42
Min Ch El (m)	743.84	Shear (N/m2)	13.03	56.28	12.33
Alpha	1.11	Stream Power (N/m s)	11.69	133.95	10.66
Frctn Loss (m)	1.65	Cum Volume (1000 m3)	0.01	27.93	0.11
C & E Loss (m)	0.15	Cum SA (1000 m2)	0.09	37.95	0.59

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500

E.G. Elev (m)	745.95	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.58	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.58	Flow Area (m2)	1.20	21.23	4.09
E.G. Slope (m/m)	0.007660	Area (m2)	1.20	21.23	4.09
Q Total (m3/s)	67.80	Flow (m3/s)	1.49	60.10	6.21
Top Width (m)	37.17	Top Width (m)	4.33	22.00	10.83
Vel Total (m/s)	2.56	Avg. Vel. (m/s)	1.24	2.83	1.52
Max Chl Dpth (m)	1.74	Hydr. Depth (m)	0.28	0.96	0.38
Conv. Total (m3/s)	774.7	Conv. (m3/s)	17.0	686.7	70.9
Length Wtd. (m)	90.64	Wetted Per. (m)	4.37	22.20	10.87
Min Ch El (m)	743.84	Shear (N/m2)	20.69	71.82	28.24

Plan: Plan 05 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500 (Continued)

Alpha	1.12	Stream Power (N/m s)	25.56	203.37	42.92
Frctn Loss (m)	1.45	Cum Volume (1000 m3)	0.05	42.30	0.30
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.20	45.48	0.85

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=2

E.G. Elev (m)	742.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.48	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	741.64	Flow Area (m2)		1.45	0.00
E.G. Slope (m/m)	0.105000	Area (m2)		1.45	0.00
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	0.00
Top Width (m)	8.00	Top Width (m)		7.90	0.11
Vel Total (m/s)	3.48	Avg. Vel. (m/s)		3.48	1.01
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.18	0.03
Conv. Total (m3/s)	15.6	Conv. (m3/s)		15.6	0.0
Length Wtd. (m)	116.62	Wetted Per. (m)		7.92	0.13
Min Ch El (m)	741.17	Shear (N/m2)		188.41	29.56
Alpha	1.00	Stream Power (N/m s)		655.93	29.94
Frctn Loss (m)	1.58	Cum Volume (1000 m3)		6.03	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)		19.98	0.01

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=5

E.G. Elev (m)	742.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.58	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	741.81	Flow Area (m2)		2.27	0.02
E.G. Slope (m/m)	0.090931	Area (m2)		2.27	0.02
Q Total (m3/s)	9.33	Flow (m3/s)		9.29	0.04
Top Width (m)	8.95	Top Width (m)		8.69	0.26
Vel Total (m/s)	4.07	Avg. Vel. (m/s)		4.10	1.71
Max Chl Dpth (m)	0.41	Hydr. Depth (m)		0.26	0.08
Conv. Total (m3/s)	30.9	Conv. (m3/s)		30.8	0.1
Length Wtd. (m)	116.76	Wetted Per. (m)		8.72	0.31
Min Ch El (m)	741.17	Shear (N/m2)		232.03	62.61
Alpha	1.01	Stream Power (N/m s)		950.58	107.10
Frctn Loss (m)	1.42	Cum Volume (1000 m3)		9.47	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		23.94	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=10

E.G. Elev (m)	742.73	Element	Left OB	Channel	Right OB
Vel Head (m)	1.06	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.67	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	741.95	Flow Area (m2)		3.08	0.05
E.G. Slope (m/m)	0.083895	Area (m2)		3.08	0.05
Q Total (m3/s)	14.22	Flow (m3/s)		14.11	0.11
Top Width (m)	9.80	Top Width (m)		9.41	0.40
Vel Total (m/s)	4.54	Avg. Vel. (m/s)		4.58	2.19
Max Chl Dpth (m)	0.50	Hydr. Depth (m)		0.33	0.13
Conv. Total (m3/s)	49.1	Conv. (m3/s)		48.7	0.4
Length Wtd. (m)	116.89	Wetted Per. (m)		9.44	0.47
Min Ch El (m)	741.17	Shear (N/m2)		268.55	88.87
Alpha	1.01	Stream Power (N/m s)		1229.19	194.61
Frctn Loss (m)	1.32	Cum Volume (1000 m3)		12.98	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		27.42	0.03

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=25

E.G. Elev (m)	743.09	Element	Left OB	Channel	Right OB
Vel Head (m)	1.30	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.79	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.15	Flow Area (m2)		4.29	0.11
E.G. Slope (m/m)	0.073974	Area (m2)		4.29	0.11
Q Total (m3/s)	22.07	Flow (m3/s)		21.77	0.30
Top Width (m)	10.77	Top Width (m)		10.18	0.59
Vel Total (m/s)	5.02	Avg. Vel. (m/s)		5.08	2.67
Max Chl Dpth (m)	0.62	Hydr. Depth (m)		0.42	0.19
Conv. Total (m3/s)	81.1	Conv. (m3/s)		80.0	1.1
Length Wtd. (m)	116.75	Wetted Per. (m)		10.23	0.70
Min Ch El (m)	741.17	Shear (N/m2)		304.11	115.86
Alpha	1.01	Stream Power (N/m s)		1544.30	309.22
Frctn Loss (m)	2.89	Cum Volume (1000 m3)		17.86	0.01
C & E Loss (m)	0.29	Cum SA (1000 m2)		30.81	0.05

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=50

E.G. Elev (m)	743.47	Element	Left OB	Channel	Right OB
Vel Head (m)	1.60	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.87	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.30	Flow Area (m2)		5.10	0.16
E.G. Slope (m/m)	0.077017	Area (m2)		5.10	0.16
Q Total (m3/s)	29.26	Flow (m3/s)		28.76	0.50
Top Width (m)	11.38	Top Width (m)		10.67	0.71
Vel Total (m/s)	5.56	Avg. Vel. (m/s)		5.64	3.08
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.48	0.23
Conv. Total (m3/s)	105.4	Conv. (m3/s)		103.6	1.8
Length Wtd. (m)	116.82	Wetted Per. (m)		10.72	0.85
Min Ch El (m)	741.17	Shear (N/m2)		359.34	145.41
Alpha	1.02	Stream Power (N/m s)		2025.85	448.48
Frctn Loss (m)	3.01	Cum Volume (1000 m3)		21.98	0.01
C & E Loss (m)	0.36	Cum SA (1000 m2)		33.67	0.05

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=100

E.G. Elev (m)	743.79	Element	Left OB	Channel	Right OB
Vel Head (m)	1.82	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.98	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.49	Flow Area (m2)		6.28	0.25
E.G. Slope (m/m)	0.072159	Area (m2)		6.28	0.25
Q Total (m3/s)	38.64	Flow (m3/s)		37.79	0.85
Top Width (m)	12.22	Top Width (m)		11.34	0.88
Vel Total (m/s)	5.92	Avg. Vel. (m/s)		6.02	3.43
Max Chl Dpth (m)	0.81	Hydr. Depth (m)		0.55	0.28
Conv. Total (m3/s)	143.8	Conv. (m3/s)		140.7	3.2
Length Wtd. (m)	116.91	Wetted Per. (m)		11.40	1.04
Min Ch El (m)	741.17	Shear (N/m2)		389.82	168.10
Alpha	1.02	Stream Power (N/m s)		2345.61	577.35
Frctn Loss (m)	3.09	Cum Volume (1000 m3)		26.95	0.02
C & E Loss (m)	0.41	Cum SA (1000 m2)		36.45	0.07

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500

E.G. Elev (m)	744.34	Element	Left OB	Channel	Right OB
Vel Head (m)	2.04	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.30	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.88	Flow Area (m2)		10.21	0.61
E.G. Slope (m/m)	0.051424	Area (m2)		10.21	0.61
Q Total (m3/s)	67.80	Flow (m3/s)		65.40	2.40

Plan: Plan 05 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500 (Continued)

Top Width (m)	14.39	Top Width (m)		13.01	1.38
Vel Total (m/s)	6.26	Avg. Vel. (m/s)		6.40	3.92
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.79	0.44
Conv. Total (m3/s)	299.0	Conv. (m3/s)		288.4	10.6
Length Wtd. (m)	117.18	Wetted Per. (m)		13.10	1.64
Min Ch El (m)	741.17	Shear (N/m2)		393.12	188.25
Alpha	1.02	Stream Power (N/m s)		2517.03	737.70
Frctn Loss (m)	3.14	Cum Volume (1000 m3)	0.00	40.88	0.06
C & E Loss (m)	0.40	Cum SA (1000 m2)	0.03	43.91	0.22

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=2

E.G. Elev (m)	739.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.030	
W.S. Elev (m)	739.14	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.14	Flow Area (m2)		3.02	
E.G. Slope (m/m)	0.013962	Area (m2)		3.02	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	10.84	Top Width (m)		10.84	
Vel Total (m/s)	1.67	Avg. Vel. (m/s)		1.67	
Max Chl Dpth (m)	0.44	Hydr. Depth (m)		0.28	
Conv. Total (m3/s)	42.7	Conv. (m3/s)		42.7	
Length Wtd. (m)	138.24	Wetted Per. (m)		10.91	
Min Ch El (m)	738.70	Shear (N/m2)		37.88	
Alpha	1.00	Stream Power (N/m s)		63.35	
Frctn Loss (m)	2.19	Cum Volume (1000 m3)		5.77	
C & E Loss (m)	0.01	Cum SA (1000 m2)		18.89	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=5

E.G. Elev (m)	739.49	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	
W.S. Elev (m)	739.29	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.29	Flow Area (m2)		4.73	
E.G. Slope (m/m)	0.012523	Area (m2)		4.73	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	12.18	Top Width (m)		12.18	
Vel Total (m/s)	1.97	Avg. Vel. (m/s)		1.97	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	83.4	Conv. (m3/s)		83.4	
Length Wtd. (m)	138.24	Wetted Per. (m)		12.29	
Min Ch El (m)	738.70	Shear (N/m2)		47.25	
Alpha	1.00	Stream Power (N/m s)		93.24	
Frctn Loss (m)	2.15	Cum Volume (1000 m3)		9.06	
C & E Loss (m)	0.01	Cum SA (1000 m2)		22.72	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10

E.G. Elev (m)	739.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	739.43	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.43	Flow Area (m2)		6.47	
E.G. Slope (m/m)	0.011651	Area (m2)		6.47	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	13.41	Top Width (m)		13.41	
Vel Total (m/s)	2.20	Avg. Vel. (m/s)		2.20	
Max Chl Dpth (m)	0.73	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	131.7	Conv. (m3/s)		131.7	
Length Wtd. (m)	138.24	Wetted Per. (m)		13.56	
Min Ch El (m)	738.70	Shear (N/m2)		54.53	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		119.82	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		12.42	
C & E Loss (m)	0.01	Cum SA (1000 m2)		26.09	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=25

E.G. Elev (m)	739.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	739.58	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.61	Flow Area (m2)		8.69	
E.G. Slope (m/m)	0.012251	Area (m2)		8.69	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	15.02	Top Width (m)		15.02	
Vel Total (m/s)	2.54	Avg. Vel. (m/s)		2.54	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	199.4	Conv. (m3/s)		199.4	
Length Wtd. (m)	138.24	Wetted Per. (m)		15.21	
Min Ch EI (m)	738.70	Shear (N/m2)		68.64	
Alpha	1.00	Stream Power (N/m s)		174.36	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		17.11	
C & E Loss (m)	0.01	Cum SA (1000 m2)		29.35	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=50

E.G. Elev (m)	740.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.40	Wt. n-Val.		0.030	
W.S. Elev (m)	739.70	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.75	Flow Area (m2)		10.50	
E.G. Slope (m/m)	0.012772	Area (m2)		10.50	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	16.30	Top Width (m)		16.30	
Vel Total (m/s)	2.79	Avg. Vel. (m/s)		2.79	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	258.9	Conv. (m3/s)		258.9	
Length Wtd. (m)	138.24	Wetted Per. (m)		16.51	
Min Ch EI (m)	738.70	Shear (N/m2)		79.66	
Alpha	1.00	Stream Power (N/m s)		221.94	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		21.07	
C & E Loss (m)	0.01	Cum SA (1000 m2)		32.10	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=100

E.G. Elev (m)	740.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	739.83	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.91	Flow Area (m2)		12.78	
E.G. Slope (m/m)	0.013601	Area (m2)		12.78	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	18.40	Top Width (m)		18.40	
Vel Total (m/s)	3.02	Avg. Vel. (m/s)		3.02	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	331.3	Conv. (m3/s)		331.3	
Length Wtd. (m)	138.24	Wetted Per. (m)		18.63	
Min Ch EI (m)	738.70	Shear (N/m2)		91.49	
Alpha	1.00	Stream Power (N/m s)		276.65	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		25.84	
C & E Loss (m)	0.01	Cum SA (1000 m2)		34.72	



Plan: Plan 05 ArroyoPilarejo 1 RS: 2744.093 Profile: T=500

E.G. Elev (m)	740.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.10	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.27	Flow Area (m2)	0.00	18.17	0.06
E.G. Slope (m/m)	0.016376	Area (m2)	0.00	18.17	0.06
Q Total (m3/s)	67.80	Flow (m3/s)	0.00	67.75	0.05
Top Width (m)	22.78	Top Width (m)	0.17	22.00	0.61
Vel Total (m/s)	3.72	Avg. Vel. (m/s)	0.29	3.73	0.88
Max Chl Dpth (m)	1.40	Hydr. Depth (m)	0.02	0.83	0.10
Conv. Total (m3/s)	529.8	Conv. (m3/s)	0.0	529.4	0.4
Length Wtd. (m)	138.25	Wetted Per. (m)	0.17	22.25	0.64
Min Ch El (m)	738.70	Shear (N/m2)	2.83	131.18	15.00
Alpha	1.00	Stream Power (N/m s)	0.82	488.97	13.17
Frctn Loss (m)	2.16	Cum Volume (1000 m3)	0.00	39.23	0.01
C & E Loss (m)	0.00	Cum SA (1000 m2)	0.02	41.87	0.07

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=2

E.G. Elev (m)	737.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	736.90	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	736.93	Flow Area (m2)		2.59	
E.G. Slope (m/m)	0.018055	Area (m2)		2.59	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	8.90	Top Width (m)		8.90	
Vel Total (m/s)	1.95	Avg. Vel. (m/s)		1.95	
Max Chl Dpth (m)	0.43	Hydr. Depth (m)		0.29	
Conv. Total (m3/s)	37.6	Conv. (m3/s)		37.6	
Length Wtd. (m)	124.79	Wetted Per. (m)		8.98	
Min Ch El (m)	736.47	Shear (N/m2)		50.97	
Alpha	1.00	Stream Power (N/m s)		99.54	
Frctn Loss (m)	1.58	Cum Volume (1000 m3)		5.38	
C & E Loss (m)	0.00	Cum SA (1000 m2)		17.52	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=5

E.G. Elev (m)	737.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	737.03	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.10	Flow Area (m2)		3.89	
E.G. Slope (m/m)	0.019992	Area (m2)		3.89	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	10.61	Top Width (m)		10.61	
Vel Total (m/s)	2.40	Avg. Vel. (m/s)		2.40	
Max Chl Dpth (m)	0.56	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	66.0	Conv. (m3/s)		66.0	
Length Wtd. (m)		Wetted Per. (m)		10.73	
Min Ch El (m)	736.47	Shear (N/m2)		71.12	
Alpha	1.00	Stream Power (N/m s)		170.49	
Frctn Loss (m)		Cum Volume (1000 m3)		8.46	
C & E Loss (m)		Cum SA (1000 m2)		21.15	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10

E.G. Elev (m)	737.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	737.15	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.25	Flow Area (m2)		5.18	
E.G. Slope (m/m)	0.021489	Area (m2)		5.18	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10 (Continued)

Top Width (m)	12.18	Top Width (m)		12.18	
Vel Total (m/s)	2.74	Avg. Vel. (m/s)		2.74	
Max Chl Dpth (m)	0.68	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	97.0	Conv. (m3/s)		97.0	
Length Wtd. (m)		Wetted Per. (m)		12.33	
Min Ch El (m)	736.47	Shear (N/m2)		88.62	
Alpha	1.00	Stream Power (N/m s)		243.06	
Frctn Loss (m)		Cum Volume (1000 m3)		11.62	
C & E Loss (m)		Cum SA (1000 m2)		24.32	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=25

E.G. Elev (m)	737.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	737.31	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.43	Flow Area (m2)		7.35	
E.G. Slope (m/m)	0.019969	Area (m2)		7.35	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	14.25	Top Width (m)		14.25	
Vel Total (m/s)	3.00	Avg. Vel. (m/s)		3.00	
Max Chl Dpth (m)	0.84	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	156.2	Conv. (m3/s)		156.2	
Length Wtd. (m)	124.79	Wetted Per. (m)		14.44	
Min Ch El (m)	736.47	Shear (N/m2)		99.67	
Alpha	1.00	Stream Power (N/m s)		299.29	
Frctn Loss (m)	1.38	Cum Volume (1000 m3)		16.00	
C & E Loss (m)	0.01	Cum SA (1000 m2)		27.32	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=50

E.G. Elev (m)	737.95	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	737.43	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.56	Flow Area (m2)		9.17	
E.G. Slope (m/m)	0.019005	Area (m2)		9.17	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	15.64	Top Width (m)		15.64	
Vel Total (m/s)	3.19	Avg. Vel. (m/s)		3.19	
Max Chl Dpth (m)	0.96	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	212.2	Conv. (m3/s)		212.2	
Length Wtd. (m)	124.79	Wetted Per. (m)		15.86	
Min Ch El (m)	736.47	Shear (N/m2)		107.79	
Alpha	1.00	Stream Power (N/m s)		343.85	
Frctn Loss (m)	1.35	Cum Volume (1000 m3)		19.71	
C & E Loss (m)	0.02	Cum SA (1000 m2)		29.90	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100

E.G. Elev (m)	738.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	737.57	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.72	Flow Area (m2)		11.47	
E.G. Slope (m/m)	0.017692	Area (m2)		11.47	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	17.04	Top Width (m)		17.04	
Vel Total (m/s)	3.37	Avg. Vel. (m/s)		3.37	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	290.5	Conv. (m3/s)		290.5	
Length Wtd. (m)	124.79	Wetted Per. (m)		17.30	
Min Ch El (m)	736.47	Shear (N/m2)		114.97	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		387.44	
Frctn Loss (m)	1.72	Cum Volume (1000 m3)		24.16	
C & E Loss (m)	0.08	Cum SA (1000 m2)		32.27	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2606.178 Profile: T=500

E.G. Elev (m)	738.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.030	
W.S. Elev (m)	737.93	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.10	Flow Area (m2)		18.17	
E.G. Slope (m/m)	0.014981	Area (m2)		18.17	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	20.41	Top Width (m)		20.41	
Vel Total (m/s)	3.73	Avg. Vel. (m/s)		3.73	
Max Chl Dpth (m)	1.46	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	553.9	Conv. (m3/s)		553.9	
Length Wtd. (m)	124.79	Wetted Per. (m)		20.79	
Min Ch EI (m)	736.47	Shear (N/m2)		128.44	
Alpha	1.00	Stream Power (N/m s)		479.15	
Frctn Loss (m)	1.82	Cum Volume (1000 m3)	0.00	36.71	0.00
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.01	38.94	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=2

E.G. Elev (m)	735.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.030	
W.S. Elev (m)	735.36	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.36	Flow Area (m2)		3.00	
E.G. Slope (m/m)	0.013944	Area (m2)		3.00	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	10.71	Top Width (m)		10.71	
Vel Total (m/s)	1.68	Avg. Vel. (m/s)		1.68	
Max Chl Dpth (m)	0.42	Hydr. Depth (m)		0.28	
Conv. Total (m3/s)	42.8	Conv. (m3/s)		42.8	
Length Wtd. (m)	156.83	Wetted Per. (m)		10.76	
Min Ch EI (m)	734.94	Shear (N/m2)		38.17	
Alpha	1.00	Stream Power (N/m s)		64.17	
Frctn Loss (m)	3.94	Cum Volume (1000 m3)		5.03	
C & E Loss (m)	0.04	Cum SA (1000 m2)		16.30	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=5

E.G. Elev (m)	735.69	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.030	
W.S. Elev (m)	735.52	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.52	Flow Area (m2)		5.06	
E.G. Slope (m/m)	0.012998	Area (m2)		5.06	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	14.89	Top Width (m)		14.89	
Vel Total (m/s)	1.84	Avg. Vel. (m/s)		1.84	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	81.8	Conv. (m3/s)		81.8	
Length Wtd. (m)	156.83	Wetted Per. (m)		14.96	
Min Ch EI (m)	734.94	Shear (N/m2)		43.09	
Alpha	1.00	Stream Power (N/m s)		79.47	
Frctn Loss (m)	3.76	Cum Volume (1000 m3)		7.91	
C & E Loss (m)	0.06	Cum SA (1000 m2)		19.55	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=10

E.G. Elev (m)	735.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	735.64	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.64	Flow Area (m2)		7.00	
E.G. Slope (m/m)	0.012210	Area (m2)		7.00	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	16.98	Top Width (m)		16.98	
Vel Total (m/s)	2.03	Avg. Vel. (m/s)		2.03	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	128.7	Conv. (m3/s)		128.7	
Length Wtd. (m)	156.83	Wetted Per. (m)		17.07	
Min Ch El (m)	734.94	Shear (N/m2)		49.08	
Alpha	1.00	Stream Power (N/m s)		99.77	
Frctn Loss (m)	3.58	Cum Volume (1000 m3)		10.86	
C & E Loss (m)	0.08	Cum SA (1000 m2)		22.50	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=25

E.G. Elev (m)	736.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	735.80	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.80	Flow Area (m2)		9.90	
E.G. Slope (m/m)	0.011246	Area (m2)		9.90	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	19.68	Top Width (m)		19.68	
Vel Total (m/s)	2.23	Avg. Vel. (m/s)		2.23	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	208.1	Conv. (m3/s)		208.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		19.79	
Min Ch El (m)	734.94	Shear (N/m2)		55.20	
Alpha	1.00	Stream Power (N/m s)		123.01	
Frctn Loss (m)	3.36	Cum Volume (1000 m3)		14.92	
C & E Loss (m)	0.10	Cum SA (1000 m2)		25.21	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=50

E.G. Elev (m)	736.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	735.92	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.92	Flow Area (m2)		12.72	
E.G. Slope (m/m)	0.011234	Area (m2)		12.72	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	24.07	Top Width (m)		24.07	
Vel Total (m/s)	2.30	Avg. Vel. (m/s)		2.30	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.53	
Conv. Total (m3/s)	276.1	Conv. (m3/s)		276.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		24.20	
Min Ch El (m)	734.94	Shear (N/m2)		57.90	
Alpha	1.00	Stream Power (N/m s)		133.22	
Frctn Loss (m)	3.24	Cum Volume (1000 m3)		18.35	
C & E Loss (m)	0.11	Cum SA (1000 m2)		27.42	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100

E.G. Elev (m)	736.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	736.04	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.05	Flow Area (m2)		15.59	
E.G. Slope (m/m)	0.011034	Area (m2)		15.59	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100 (Continued)

Top Width (m)	26.03	Top Width (m)		26.03	
Vel Total (m/s)	2.48	Avg. Vel. (m/s)		2.48	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	367.8	Conv. (m3/s)		367.8	
Length Wtd. (m)	156.83	Wetted Per. (m)		26.17	
Min Ch El (m)	734.94	Shear (N/m2)		64.45	
Alpha	1.00	Stream Power (N/m s)		159.77	
Frctn Loss (m)	3.12	Cum Volume (1000 m3)		22.47	
C & E Loss (m)	0.12	Cum SA (1000 m2)		29.58	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2481.292 Profile: T=500

E.G. Elev (m)	736.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.26	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.35	Flow Area (m2)	0.00	21.65	
E.G. Slope (m/m)	0.014182	Area (m2)	0.00	21.65	
Q Total (m3/s)	67.80	Flow (m3/s)	0.00	67.80	
Top Width (m)	30.83	Top Width (m)	0.08	30.74	
Vel Total (m/s)	3.13	Avg. Vel. (m/s)	0.16	3.13	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)	0.01	0.70	
Conv. Total (m3/s)	569.3	Conv. (m3/s)	0.0	569.3	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.09	30.92	
Min Ch El (m)	734.94	Shear (N/m2)	1.09	97.42	
Alpha	1.00	Stream Power (N/m s)	0.17	305.01	
Frctn Loss (m)	3.25	Cum Volume (1000 m3)	0.00	34.23	0.00
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.01	35.75	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=2

E.G. Elev (m)	731.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.54	Wt. n-Val.		0.030	
W.S. Elev (m)	730.98	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.15	Flow Area (m2)		1.55	
E.G. Slope (m/m)	0.059579	Area (m2)		1.55	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	6.09	Top Width (m)		6.09	
Vel Total (m/s)	3.25	Avg. Vel. (m/s)		3.25	
Max Chl Dpth (m)	0.39	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	20.7	Conv. (m3/s)		20.7	
Length Wtd. (m)	132.83	Wetted Per. (m)		6.16	
Min Ch El (m)	730.59	Shear (N/m2)		147.39	
Alpha	1.00	Stream Power (N/m s)		478.76	
Frctn Loss (m)	1.42	Cum Volume (1000 m3)		4.68	
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.98	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5

E.G. Elev (m)	731.87	Element	Left OB	Channel	Right OB
Vel Head (m)	0.76	Wt. n-Val.		0.030	
W.S. Elev (m)	731.11	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.34	Flow Area (m2)		2.42	
E.G. Slope (m/m)	0.057981	Area (m2)		2.42	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	7.13	Top Width (m)		7.13	
Vel Total (m/s)	3.86	Avg. Vel. (m/s)		3.86	
Max Chl Dpth (m)	0.52	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	38.7	Conv. (m3/s)		38.7	
Length Wtd. (m)	132.83	Wetted Per. (m)		7.24	
Min Ch El (m)	730.59	Shear (N/m2)		189.79	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		733.00	
Frctn Loss (m)	1.47	Cum Volume (1000 m3)		7.32	
C & E Loss (m)	0.01	Cum SA (1000 m2)		17.83	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=10

E.G. Elev (m)	732.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.97	Wt. n-Val.		0.030	
W.S. Elev (m)	731.23	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.51	Flow Area (m2)		3.27	
E.G. Slope (m/m)	0.057014	Area (m2)		3.27	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	7.94	Top Width (m)		7.94	
Vel Total (m/s)	4.35	Avg. Vel. (m/s)		4.35	
Max Chl Dpth (m)	0.64	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	59.6	Conv. (m3/s)		59.6	
Length Wtd. (m)	132.83	Wetted Per. (m)		8.07	
Min Ch EI (m)	730.59	Shear (N/m2)		226.24	
Alpha	1.00	Stream Power (N/m s)		985.14	
Frctn Loss (m)	1.52	Cum Volume (1000 m3)		10.05	
C & E Loss (m)	0.03	Cum SA (1000 m2)		20.55	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=25

E.G. Elev (m)	732.60	Element	Left OB	Channel	Right OB
Vel Head (m)	1.22	Wt. n-Val.		0.030	
W.S. Elev (m)	731.37	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.76	Flow Area (m2)		4.50	
E.G. Slope (m/m)	0.055591	Area (m2)		4.50	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	8.98	Top Width (m)		8.98	
Vel Total (m/s)	4.90	Avg. Vel. (m/s)		4.90	
Max Chl Dpth (m)	0.78	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	93.6	Conv. (m3/s)		93.6	
Length Wtd. (m)	132.83	Wetted Per. (m)		9.15	
Min Ch EI (m)	730.59	Shear (N/m2)		268.32	
Alpha	1.00	Stream Power (N/m s)		1314.57	
Frctn Loss (m)	2.86	Cum Volume (1000 m3)		13.79	
C & E Loss (m)	0.29	Cum SA (1000 m2)		22.96	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=50

E.G. Elev (m)	732.85	Element	Left OB	Channel	Right OB
Vel Head (m)	1.35	Wt. n-Val.		0.030	
W.S. Elev (m)	731.50	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.93	Flow Area (m2)		5.69	
E.G. Slope (m/m)	0.050090	Area (m2)		5.69	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	9.70	Top Width (m)		9.70	
Vel Total (m/s)	5.15	Avg. Vel. (m/s)		5.15	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	130.7	Conv. (m3/s)		130.7	
Length Wtd. (m)	132.83	Wetted Per. (m)		9.92	
Min Ch EI (m)	730.59	Shear (N/m2)		281.44	
Alpha	1.00	Stream Power (N/m s)		1448.38	
Frctn Loss (m)	1.39	Cum Volume (1000 m3)		16.91	
C & E Loss (m)	0.02	Cum SA (1000 m2)		24.77	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=100

E.G. Elev (m)	733.12	Element	Left OB	Channel	Right OB
Vel Head (m)	1.47	Wt. n-Val.		0.030	
W.S. Elev (m)	731.65	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.11	Flow Area (m2)		7.19	
E.G. Slope (m/m)	0.045865	Area (m2)		7.19	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	10.74	Top Width (m)		10.74	
Vel Total (m/s)	5.37	Avg. Vel. (m/s)		5.37	
Max Chl Dpth (m)	1.06	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	180.4	Conv. (m3/s)		180.4	
Length Wtd. (m)	132.83	Wetted Per. (m)		11.03	
Min Ch El (m)	730.59	Shear (N/m2)		293.50	
Alpha	1.00	Stream Power (N/m s)		1576.29	
Frctn Loss (m)	1.33	Cum Volume (1000 m3)		20.69	
C & E Loss (m)	0.02	Cum SA (1000 m2)		26.70	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2326.265 Profile: T=500

E.G. Elev (m)	733.43	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	
W.S. Elev (m)	732.09	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.51	Flow Area (m2)		13.23	
E.G. Slope (m/m)	0.033011	Area (m2)		13.23	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	16.55	Top Width (m)		16.55	
Vel Total (m/s)	5.13	Avg. Vel. (m/s)		5.13	
Max Chl Dpth (m)	1.50	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	373.2	Conv. (m3/s)		373.2	
Length Wtd. (m)	132.83	Wetted Per. (m)		16.98	
Min Ch El (m)	730.59	Shear (N/m2)		252.11	
Alpha	1.00	Stream Power (N/m s)		1292.42	
Frctn Loss (m)	1.22	Cum Volume (1000 m3)		31.49	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		32.04	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=2

E.G. Elev (m)	729.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.15	Wt. n-Val.		0.030	
W.S. Elev (m)	729.78	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	729.78	Flow Area (m2)		2.98	
E.G. Slope (m/m)	0.013765	Area (m2)		2.98	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	10.38	Top Width (m)		10.38	
Vel Total (m/s)	1.69	Avg. Vel. (m/s)		1.69	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.29	
Conv. Total (m3/s)	43.0	Conv. (m3/s)		43.0	
Length Wtd. (m)	143.99	Wetted Per. (m)		10.44	
Min Ch El (m)	729.24	Shear (N/m2)		38.51	
Alpha	1.00	Stream Power (N/m s)		65.28	
Frctn Loss (m)	3.82	Cum Volume (1000 m3)		4.37	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.89	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5

E.G. Elev (m)	730.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.030	
W.S. Elev (m)	729.94	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	729.94	Flow Area (m2)		5.03	
E.G. Slope (m/m)	0.013171	Area (m2)		5.03	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	



Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5 (Continued)

Top Width (m)	14.77	Top Width (m)		14.77	
Vel Total (m/s)	1.85	Avg. Vel. (m/s)		1.85	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	81.3	Conv. (m3/s)		81.3	
Length Wtd. (m)	143.99	Wetted Per. (m)		14.90	
Min Ch El (m)	729.24	Shear (N/m2)		43.60	
Alpha	1.00	Stream Power (N/m s)		80.86	
Frctn Loss (m)	3.64	Cum Volume (1000 m3)		6.83	
C & E Loss (m)	0.07	Cum SA (1000 m2)		16.37	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=10

E.G. Elev (m)	730.27	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	730.07	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.07	Flow Area (m2)		7.05	
E.G. Slope (m/m)	0.012501	Area (m2)		7.05	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	17.52	Top Width (m)		17.52	
Vel Total (m/s)	2.02	Avg. Vel. (m/s)		2.02	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.40	
Conv. Total (m3/s)	127.2	Conv. (m3/s)		127.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		17.69	
Min Ch El (m)	729.24	Shear (N/m2)		48.83	
Alpha	1.00	Stream Power (N/m s)		98.52	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		9.37	
C & E Loss (m)	0.09	Cum SA (1000 m2)		18.86	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=25

E.G. Elev (m)	730.47	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	730.22	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.22	Flow Area (m2)		9.92	
E.G. Slope (m/m)	0.011344	Area (m2)		9.92	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	19.79	Top Width (m)		19.79	
Vel Total (m/s)	2.22	Avg. Vel. (m/s)		2.22	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	207.2	Conv. (m3/s)		207.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		20.02	
Min Ch El (m)	729.24	Shear (N/m2)		55.14	
Alpha	1.00	Stream Power (N/m s)		122.63	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		12.83	
C & E Loss (m)	0.11	Cum SA (1000 m2)		21.05	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50

E.G. Elev (m)	730.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.030	
W.S. Elev (m)	730.33	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.33	Flow Area (m2)		12.14	
E.G. Slope (m/m)	0.010749	Area (m2)		12.14	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	20.57	Top Width (m)		20.57	
Vel Total (m/s)	2.41	Avg. Vel. (m/s)		2.41	
Max Chl Dpth (m)	1.09	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	282.2	Conv. (m3/s)		282.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		20.83	
Min Ch El (m)	729.24	Shear (N/m2)		61.42	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		148.07	
Frctn Loss (m)	3.13	Cum Volume (1000 m3)		15.72	
C & E Loss (m)	0.11	Cum SA (1000 m2)		22.76	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=100

E.G. Elev (m)	730.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	730.46	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.46	Flow Area (m2)		14.87	
E.G. Slope (m/m)	0.010196	Area (m2)		14.87	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	21.64	Top Width (m)		21.64	
Vel Total (m/s)	2.60	Avg. Vel. (m/s)		2.60	
Max Chl Dpth (m)	1.22	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	382.7	Conv. (m3/s)		382.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		21.93	
Min Ch EI (m)	729.24	Shear (N/m2)		67.81	
Alpha	1.00	Stream Power (N/m s)		176.18	
Frctn Loss (m)	3.00	Cum Volume (1000 m3)		19.22	
C & E Loss (m)	0.13	Cum SA (1000 m2)		24.55	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2193.396 Profile: T=500

E.G. Elev (m)	731.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	730.79	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.79	Flow Area (m2)		22.53	
E.G. Slope (m/m)	0.009266	Area (m2)		22.53	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	24.42	Top Width (m)		24.42	
Vel Total (m/s)	3.01	Avg. Vel. (m/s)		3.01	
Max Chl Dpth (m)	1.55	Hydr. Depth (m)		0.92	
Conv. Total (m3/s)	704.4	Conv. (m3/s)		704.4	
Length Wtd. (m)	143.99	Wetted Per. (m)		24.80	
Min Ch EI (m)	729.24	Shear (N/m2)		82.54	
Alpha	1.00	Stream Power (N/m s)		248.42	
Frctn Loss (m)	2.70	Cum Volume (1000 m3)		29.12	0.00
C & E Loss (m)	0.16	Cum SA (1000 m2)		29.32	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=2

E.G. Elev (m)	726.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	725.43	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	725.61	Flow Area (m2)		1.44	
E.G. Slope (m/m)	0.071515	Area (m2)		1.44	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	5.80	Top Width (m)		5.80	
Vel Total (m/s)	3.50	Avg. Vel. (m/s)		3.50	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.25	
Conv. Total (m3/s)	18.9	Conv. (m3/s)		18.9	
Length Wtd. (m)	118.81	Wetted Per. (m)		5.88	
Min Ch EI (m)	725.03	Shear (N/m2)		172.21	
Alpha	1.00	Stream Power (N/m s)		601.96	
Frctn Loss (m)	1.55	Cum Volume (1000 m3)		4.06	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.72	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=5

E.G. Elev (m)	726.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	725.56	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	725.81	Flow Area (m2)		2.29	
E.G. Slope (m/m)	0.067030	Area (m2)		2.29	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	6.96	Top Width (m)		6.96	
Vel Total (m/s)	4.07	Avg. Vel. (m/s)		4.07	
Max Chl Dpth (m)	0.53	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	36.0	Conv. (m3/s)		36.0	
Length Wtd. (m)	118.81	Wetted Per. (m)		7.07	
Min Ch El (m)	725.03	Shear (N/m2)		212.99	
Alpha	1.00	Stream Power (N/m s)		867.13	
Frctn Loss (m)	3.05	Cum Volume (1000 m3)		6.30	
C & E Loss (m)	0.17	Cum SA (1000 m2)		14.81	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=10

E.G. Elev (m)	726.74	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	725.67	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.02	Flow Area (m2)		3.10	
E.G. Slope (m/m)	0.063474	Area (m2)		3.10	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	7.54	Top Width (m)		7.54	
Vel Total (m/s)	4.58	Avg. Vel. (m/s)		4.58	
Max Chl Dpth (m)	0.64	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	56.4	Conv. (m3/s)		56.4	
Length Wtd. (m)	118.81	Wetted Per. (m)		7.70	
Min Ch El (m)	725.03	Shear (N/m2)		250.84	
Alpha	1.00	Stream Power (N/m s)		1149.32	
Frctn Loss (m)	3.12	Cum Volume (1000 m3)		8.64	
C & E Loss (m)	0.21	Cum SA (1000 m2)		17.05	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=25

E.G. Elev (m)	727.19	Element	Left OB	Channel	Right OB
Vel Head (m)	1.37	Wt. n-Val.		0.030	
W.S. Elev (m)	725.82	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.22	Flow Area (m2)		4.26	
E.G. Slope (m/m)	0.059991	Area (m2)		4.26	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	8.22	Top Width (m)		8.22	
Vel Total (m/s)	5.18	Avg. Vel. (m/s)		5.18	
Max Chl Dpth (m)	0.79	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	90.1	Conv. (m3/s)		90.1	
Length Wtd. (m)	118.81	Wetted Per. (m)		8.44	
Min Ch El (m)	725.03	Shear (N/m2)		297.07	
Alpha	1.00	Stream Power (N/m s)		1538.00	
Frctn Loss (m)	3.20	Cum Volume (1000 m3)		11.81	
C & E Loss (m)	0.26	Cum SA (1000 m2)		19.03	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50

E.G. Elev (m)	727.38	Element	Left OB	Channel	Right OB
Vel Head (m)	1.42	Wt. n-Val.		0.030	
W.S. Elev (m)	725.96	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.36	Flow Area (m2)		5.55	
E.G. Slope (m/m)	0.065638	Area (m2)		5.55	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50 (Continued)

Top Width (m)	11.15	Top Width (m)		11.15	
Vel Total (m/s)	5.27	Avg. Vel. (m/s)		5.27	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	114.2	Conv. (m3/s)		114.2	
Length Wtd. (m)	118.81	Wetted Per. (m)		11.43	
Min Ch El (m)	725.03	Shear (N/m2)		312.46	
Alpha	1.00	Stream Power (N/m s)		1648.16	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		14.45	
C & E Loss (m)	0.25	Cum SA (1000 m2)		20.48	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=100

E.G. Elev (m)	727.68	Element	Left OB	Channel	Right OB
Vel Head (m)	1.60	Wt. n-Val.		0.030	
W.S. Elev (m)	726.08	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.52	Flow Area (m2)		6.90	
E.G. Slope (m/m)	0.064219	Area (m2)		6.90	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	12.47	Top Width (m)		12.47	
Vel Total (m/s)	5.60	Avg. Vel. (m/s)		5.60	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	152.5	Conv. (m3/s)		152.5	
Length Wtd. (m)	118.81	Wetted Per. (m)		12.78	
Min Ch El (m)	725.03	Shear (N/m2)		340.02	
Alpha	1.00	Stream Power (N/m s)		1904.47	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		17.65	
C & E Loss (m)	0.28	Cum SA (1000 m2)		22.09	

Plan: Plan 05 ArroyoPilarejo 1 RS: 2050.529 Profile: T=500

E.G. Elev (m)	728.40	Element	Left OB	Channel	Right OB
Vel Head (m)	2.04	Wt. n-Val.		0.030	
W.S. Elev (m)	726.36	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.96	Flow Area (m2)		10.72	
E.G. Slope (m/m)	0.056025	Area (m2)		10.72	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	14.52	Top Width (m)		14.52	
Vel Total (m/s)	6.33	Avg. Vel. (m/s)		6.33	
Max Chl Dpth (m)	1.33	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	286.4	Conv. (m3/s)		286.4	
Length Wtd. (m)	118.81	Wetted Per. (m)		14.93	
Min Ch El (m)	725.03	Shear (N/m2)		394.45	
Alpha	1.00	Stream Power (N/m s)		2495.28	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		26.73	0.00
C & E Loss (m)	0.33	Cum SA (1000 m2)		26.51	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2

E.G. Elev (m)	722.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.030	
W.S. Elev (m)	722.75	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	722.75	Flow Area (m2)		2.72	
E.G. Slope (m/m)	0.013254	Area (m2)		2.72	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	7.93	Top Width (m)		7.93	
Vel Total (m/s)	1.85	Avg. Vel. (m/s)		1.85	
Max Chl Dpth (m)	0.53	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	43.9	Conv. (m3/s)		43.9	
Length Wtd. (m)	104.48	Wetted Per. (m)		8.10	
Min Ch El (m)	722.22	Shear (N/m2)		43.67	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		81.00	
Frctn Loss (m)	2.17	Cum Volume (1000 m3)		3.81	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.91	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=5

E.G. Elev (m)	723.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	722.92	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	722.93	Flow Area (m2)		4.07	
E.G. Slope (m/m)	0.013474	Area (m2)		4.07	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	8.70	Top Width (m)		8.70	
Vel Total (m/s)	2.29	Avg. Vel. (m/s)		2.29	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	80.4	Conv. (m3/s)		80.4	
Length Wtd. (m)	104.48	Wetted Per. (m)		8.94	
Min Ch EI (m)	722.22	Shear (N/m2)		60.19	
Alpha	1.00	Stream Power (N/m s)		137.89	
Frctn Loss (m)	2.12	Cum Volume (1000 m3)		5.92	
C & E Loss (m)	0.03	Cum SA (1000 m2)		13.88	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=10

E.G. Elev (m)	723.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	723.05	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.10	Flow Area (m2)		5.31	
E.G. Slope (m/m)	0.014238	Area (m2)		5.31	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	9.33	Top Width (m)		9.33	
Vel Total (m/s)	2.68	Avg. Vel. (m/s)		2.68	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	119.2	Conv. (m3/s)		119.2	
Length Wtd. (m)	104.48	Wetted Per. (m)		9.63	
Min Ch EI (m)	722.22	Shear (N/m2)		77.06	
Alpha	1.00	Stream Power (N/m s)		206.23	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		8.14	
C & E Loss (m)	0.03	Cum SA (1000 m2)		16.05	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=25

E.G. Elev (m)	723.73	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	723.23	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.32	Flow Area (m2)		7.00	
E.G. Slope (m/m)	0.015205	Area (m2)		7.00	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	10.06	Top Width (m)		10.06	
Vel Total (m/s)	3.15	Avg. Vel. (m/s)		3.15	
Max Chl Dpth (m)	1.01	Hydr. Depth (m)		0.70	
Conv. Total (m3/s)	179.0	Conv. (m3/s)		179.0	
Length Wtd. (m)	104.48	Wetted Per. (m)		10.44	
Min Ch EI (m)	722.22	Shear (N/m2)		100.08	
Alpha	1.00	Stream Power (N/m s)		315.33	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		11.14	
C & E Loss (m)	0.03	Cum SA (1000 m2)		17.95	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=50

E.G. Elev (m)	723.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	723.39	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.50	Flow Area (m2)		8.69	
E.G. Slope (m/m)	0.014312	Area (m2)		8.69	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	10.74	Top Width (m)		10.74	
Vel Total (m/s)	3.37	Avg. Vel. (m/s)		3.37	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	244.6	Conv. (m3/s)		244.6	
Length Wtd. (m)	104.48	Wetted Per. (m)		11.19	
Min Ch El (m)	722.22	Shear (N/m2)		108.98	
Alpha	1.00	Stream Power (N/m s)		367.13	
Frctn Loss (m)	2.02	Cum Volume (1000 m3)		13.60	
C & E Loss (m)	0.04	Cum SA (1000 m2)		19.18	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=100

E.G. Elev (m)	724.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	723.56	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.71	Flow Area (m2)		10.64	
E.G. Slope (m/m)	0.014477	Area (m2)		10.64	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	11.84	Top Width (m)		11.84	
Vel Total (m/s)	3.63	Avg. Vel. (m/s)		3.63	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	321.1	Conv. (m3/s)		321.1	
Length Wtd. (m)	104.48	Wetted Per. (m)		12.35	
Min Ch El (m)	722.22	Shear (N/m2)		122.30	
Alpha	1.00	Stream Power (N/m s)		444.10	
Frctn Loss (m)	2.00	Cum Volume (1000 m3)		16.61	
C & E Loss (m)	0.04	Cum SA (1000 m2)		20.65	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1930.629 Profile: T=500

E.G. Elev (m)	724.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.95	Wt. n-Val.		0.030	
W.S. Elev (m)	723.95	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.19	Flow Area (m2)		15.70	
E.G. Slope (m/m)	0.015554	Area (m2)		15.70	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	14.17	Top Width (m)		14.17	
Vel Total (m/s)	4.32	Avg. Vel. (m/s)		4.32	
Max Chl Dpth (m)	1.73	Hydr. Depth (m)		1.11	
Conv. Total (m3/s)	543.6	Conv. (m3/s)		543.6	
Length Wtd. (m)	104.48	Wetted Per. (m)		14.82	
Min Ch El (m)	722.22	Shear (N/m2)		161.55	
Alpha	1.00	Stream Power (N/m s)		697.85	
Frctn Loss (m)	2.05	Cum Volume (1000 m3)		25.16	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		24.81	0.02

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2

E.G. Elev (m)	720.73	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.030	
W.S. Elev (m)	720.28	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.42	Flow Area (m2)		1.70	
E.G. Slope (m/m)	0.037923	Area (m2)		1.70	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2 (Continued)

Top Width (m)	5.33	Top Width (m)		5.33	
Vel Total (m/s)	2.98	Avg. Vel. (m/s)		2.98	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	25.9	Conv. (m3/s)		25.9	
Length Wtd. (m)	148.89	Wetted Per. (m)		5.47	
Min Ch El (m)	719.70	Shear (N/m2)		115.44	
Alpha	1.00	Stream Power (N/m s)		343.55	
Frctn Loss (m)	3.89	Cum Volume (1000 m3)		3.58	
C & E Loss (m)	0.06	Cum SA (1000 m2)		11.21	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=5

E.G. Elev (m)	721.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	720.46	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.64	Flow Area (m2)		2.76	
E.G. Slope (m/m)	0.033821	Area (m2)		2.76	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	6.58	Top Width (m)		6.58	
Vel Total (m/s)	3.38	Avg. Vel. (m/s)		3.38	
Max Chl Dpth (m)	0.76	Hydr. Depth (m)		0.42	
Conv. Total (m3/s)	50.7	Conv. (m3/s)		50.7	
Length Wtd. (m)	148.89	Wetted Per. (m)		6.77	
Min Ch El (m)	719.70	Shear (N/m2)		135.51	
Alpha	1.00	Stream Power (N/m s)		457.39	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		5.56	
C & E Loss (m)	0.06	Cum SA (1000 m2)		13.08	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=10

E.G. Elev (m)	721.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.68	Wt. n-Val.		0.030	
W.S. Elev (m)	720.62	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.83	Flow Area (m2)		3.90	
E.G. Slope (m/m)	0.030200	Area (m2)		3.90	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	7.55	Top Width (m)		7.55	
Vel Total (m/s)	3.65	Avg. Vel. (m/s)		3.65	
Max Chl Dpth (m)	0.92	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	81.8	Conv. (m3/s)		81.8	
Length Wtd. (m)	148.89	Wetted Per. (m)		7.79	
Min Ch El (m)	719.70	Shear (N/m2)		148.17	
Alpha	1.00	Stream Power (N/m s)		540.89	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		7.66	
C & E Loss (m)	0.04	Cum SA (1000 m2)		15.17	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25

E.G. Elev (m)	721.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.81	Wt. n-Val.		0.030	
W.S. Elev (m)	720.82	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.08	Flow Area (m2)		5.54	
E.G. Slope (m/m)	0.027054	Area (m2)		5.54	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	8.64	Top Width (m)		8.64	
Vel Total (m/s)	3.98	Avg. Vel. (m/s)		3.98	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	134.2	Conv. (m3/s)		134.2	
Length Wtd. (m)	148.89	Wetted Per. (m)		8.95	
Min Ch El (m)	719.70	Shear (N/m2)		164.25	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		654.12	
Frctn Loss (m)	3.90	Cum Volume (1000 m3)		10.49	
C & E Loss (m)	0.02	Cum SA (1000 m2)		16.97	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=50

E.G. Elev (m)	721.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.95	Wt. n-Val.		0.030	
W.S. Elev (m)	720.95	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.26	Flow Area (m2)		6.76	
E.G. Slope (m/m)	0.027663	Area (m2)		6.76	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	9.44	Top Width (m)		9.44	
Vel Total (m/s)	4.33	Avg. Vel. (m/s)		4.33	
Max Chl Dpth (m)	1.25	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	175.9	Conv. (m3/s)		175.9	
Length Wtd. (m)	148.89	Wetted Per. (m)		9.80	
Min Ch EI (m)	719.70	Shear (N/m2)		187.10	
Alpha	1.00	Stream Power (N/m s)		809.76	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		12.80	
C & E Loss (m)	0.02	Cum SA (1000 m2)		18.12	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=100

E.G. Elev (m)	722.19	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	721.12	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.46	Flow Area (m2)		8.43	
E.G. Slope (m/m)	0.026487	Area (m2)		8.43	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	10.44	Top Width (m)		10.44	
Vel Total (m/s)	4.58	Avg. Vel. (m/s)		4.58	
Max Chl Dpth (m)	1.42	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	237.4	Conv. (m3/s)		237.4	
Length Wtd. (m)	148.89	Wetted Per. (m)		10.86	
Min Ch EI (m)	719.70	Shear (N/m2)		201.63	
Alpha	1.00	Stream Power (N/m s)		923.91	
Frctn Loss (m)	3.89	Cum Volume (1000 m3)		15.61	
C & E Loss (m)	0.00	Cum SA (1000 m2)		19.48	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1826.699 Profile: T=500

E.G. Elev (m)	722.82	Element	Left OB	Channel	Right OB
Vel Head (m)	1.24	Wt. n-Val.		0.030	0.000
W.S. Elev (m)	721.57	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.95	Flow Area (m2)		13.73	0.00
E.G. Slope (m/m)	0.025651	Area (m2)		13.73	0.00
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	0.00
Top Width (m)	14.86	Top Width (m)		14.84	0.03
Vel Total (m/s)	4.94	Avg. Vel. (m/s)		4.94	0.17
Max Chl Dpth (m)	1.87	Hydr. Depth (m)		0.93	0.01
Conv. Total (m3/s)	423.3	Conv. (m3/s)		423.3	0.0
Length Wtd. (m)	148.89	Wetted Per. (m)		15.44	0.03
Min Ch EI (m)	719.70	Shear (N/m2)		223.75	
Alpha	1.00	Stream Power (N/m s)		1104.80	
Frctn Loss (m)	3.76	Cum Volume (1000 m3)		23.62	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		23.29	0.02



Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=2

E.G. Elev (m)	716.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	716.52	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	716.57	Flow Area (m2)		2.26	
E.G. Slope (m/m)	0.019105	Area (m2)		2.26	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	6.56	Top Width (m)		6.56	
Vel Total (m/s)	2.24	Avg. Vel. (m/s)		2.24	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	36.5	Conv. (m3/s)		36.5	
Length Wtd. (m)	126.54	Wetted Per. (m)		6.68	
Min Ch El (m)	715.98	Shear (N/m2)		63.35	
Alpha	1.00	Stream Power (N/m s)		141.66	
Frctn Loss (m)	2.06	Cum Volume (1000 m3)		3.28	
C & E Loss (m)	0.02	Cum SA (1000 m2)		10.33	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=5

E.G. Elev (m)	717.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	716.68	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	716.78	Flow Area (m2)		3.39	
E.G. Slope (m/m)	0.020983	Area (m2)		3.39	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	7.70	Top Width (m)		7.70	
Vel Total (m/s)	2.75	Avg. Vel. (m/s)		2.75	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	64.4	Conv. (m3/s)		64.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		7.86	
Min Ch El (m)	715.98	Shear (N/m2)		88.64	
Alpha	1.00	Stream Power (N/m s)		244.11	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		5.10	
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.02	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=10

E.G. Elev (m)	717.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	716.81	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	716.95	Flow Area (m2)		4.39	
E.G. Slope (m/m)	0.023047	Area (m2)		4.39	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	8.38	Top Width (m)		8.38	
Vel Total (m/s)	3.24	Avg. Vel. (m/s)		3.24	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	93.7	Conv. (m3/s)		93.7	
Length Wtd. (m)	126.54	Wetted Per. (m)		8.59	
Min Ch El (m)	715.98	Shear (N/m2)		115.60	
Alpha	1.00	Stream Power (N/m s)		374.11	
Frctn Loss (m)	2.11	Cum Volume (1000 m3)		7.04	
C & E Loss (m)	0.07	Cum SA (1000 m2)		13.98	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25

E.G. Elev (m)	717.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.75	Wt. n-Val.		0.030	
W.S. Elev (m)	716.96	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.19	Flow Area (m2)		5.76	
E.G. Slope (m/m)	0.025368	Area (m2)		5.76	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25 (Continued)

Top Width (m)	9.12	Top Width (m)		9.12	
Vel Total (m/s)	3.83	Avg. Vel. (m/s)		3.83	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	138.6	Conv. (m3/s)		138.6	
Length Wtd. (m)	126.54	Wetted Per. (m)		9.39	
Min Ch El (m)	715.98	Shear (N/m2)		152.61	
Alpha	1.00	Stream Power (N/m s)		584.96	
Frctn Loss (m)	2.17	Cum Volume (1000 m3)		9.65	
C & E Loss (m)	0.11	Cum SA (1000 m2)		15.65	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=50

E.G. Elev (m)	717.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.88	Wt. n-Val.		0.030	
W.S. Elev (m)	717.10	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.37	Flow Area (m2)		7.05	
E.G. Slope (m/m)	0.024964	Area (m2)		7.05	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	9.76	Top Width (m)		9.76	
Vel Total (m/s)	4.15	Avg. Vel. (m/s)		4.15	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	185.2	Conv. (m3/s)		185.2	
Length Wtd. (m)	126.54	Wetted Per. (m)		10.09	
Min Ch El (m)	715.98	Shear (N/m2)		171.18	
Alpha	1.00	Stream Power (N/m s)		710.26	
Frctn Loss (m)	2.21	Cum Volume (1000 m3)		11.77	
C & E Loss (m)	0.12	Cum SA (1000 m2)		16.69	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=100

E.G. Elev (m)	718.30	Element	Left OB	Channel	Right OB
Vel Head (m)	1.06	Wt. n-Val.		0.030	
W.S. Elev (m)	717.24	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.57	Flow Area (m2)		8.48	
E.G. Slope (m/m)	0.025777	Area (m2)		8.48	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	10.42	Top Width (m)		10.42	
Vel Total (m/s)	4.55	Avg. Vel. (m/s)		4.55	
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	240.7	Conv. (m3/s)		240.7	
Length Wtd. (m)	126.54	Wetted Per. (m)		10.81	
Min Ch El (m)	715.98	Shear (N/m2)		198.42	
Alpha	1.00	Stream Power (N/m s)		903.59	
Frctn Loss (m)	2.27	Cum Volume (1000 m3)		14.35	
C & E Loss (m)	0.15	Cum SA (1000 m2)		17.93	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500

E.G. Elev (m)	719.04	Element	Left OB	Channel	Right OB
Vel Head (m)	1.42	Wt. n-Val.		0.030	
W.S. Elev (m)	717.63	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.08	Flow Area (m2)		12.87	
E.G. Slope (m/m)	0.024805	Area (m2)		12.87	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	12.26	Top Width (m)		12.26	
Vel Total (m/s)	5.27	Avg. Vel. (m/s)		5.27	
Max Chl Dpth (m)	1.65	Hydr. Depth (m)		1.05	
Conv. Total (m3/s)	430.5	Conv. (m3/s)		430.5	
Length Wtd. (m)	126.54	Wetted Per. (m)		12.80	
Min Ch El (m)	715.98	Shear (N/m2)		244.56	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		1288.50	
Frctn Loss (m)	2.36	Cum Volume (1000 m3)		21.64	0.00
C & E Loss (m)	0.16	Cum SA (1000 m2)		21.27	0.01

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=2

E.G. Elev (m)	714.69	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	714.51	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.52	Flow Area (m2)		2.65	
E.G. Slope (m/m)	0.014086	Area (m2)		2.65	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	7.84	Top Width (m)		7.84	
Vel Total (m/s)	1.91	Avg. Vel. (m/s)		1.91	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	42.6	Conv. (m3/s)		42.6	
Length Wtd. (m)	168.56	Wetted Per. (m)		7.93	
Min Ch EI (m)	714.02	Shear (N/m2)		46.16	
Alpha	1.00	Stream Power (N/m s)		87.95	
Frctn Loss (m)	3.45	Cum Volume (1000 m3)		2.97	
C & E Loss (m)	0.02	Cum SA (1000 m2)		9.42	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=5

E.G. Elev (m)	714.94	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	
W.S. Elev (m)	714.69	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.71	Flow Area (m2)		4.15	
E.G. Slope (m/m)	0.013283	Area (m2)		4.15	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	9.15	Top Width (m)		9.15	
Vel Total (m/s)	2.25	Avg. Vel. (m/s)		2.25	
Max Chl Dpth (m)	0.67	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	81.0	Conv. (m3/s)		81.0	
Length Wtd. (m)	168.56	Wetted Per. (m)		9.29	
Min Ch EI (m)	714.02	Shear (N/m2)		58.24	
Alpha	1.00	Stream Power (N/m s)		130.82	
Frctn Loss (m)	3.33	Cum Volume (1000 m3)		4.63	
C & E Loss (m)	0.04	Cum SA (1000 m2)		10.95	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=10

E.G. Elev (m)	715.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	714.85	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.88	Flow Area (m2)		5.77	
E.G. Slope (m/m)	0.012619	Area (m2)		5.77	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	10.62	Top Width (m)		10.62	
Vel Total (m/s)	2.46	Avg. Vel. (m/s)		2.46	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	126.6	Conv. (m3/s)		126.6	
Length Wtd. (m)	168.56	Wetted Per. (m)		10.80	
Min Ch EI (m)	714.02	Shear (N/m2)		66.09	
Alpha	1.00	Stream Power (N/m s)		162.88	
Frctn Loss (m)	3.22	Cum Volume (1000 m3)		6.40	
C & E Loss (m)	0.05	Cum SA (1000 m2)		12.78	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=25

E.G. Elev (m)	715.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	715.05	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.08	Flow Area (m2)		8.01	
E.G. Slope (m/m)	0.012362	Area (m2)		8.01	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	12.26	Top Width (m)		12.26	
Vel Total (m/s)	2.76	Avg. Vel. (m/s)		2.76	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	198.5	Conv. (m3/s)		198.5	
Length Wtd. (m)	168.56	Wetted Per. (m)		12.50	
Min Ch El (m)	714.02	Shear (N/m2)		77.71	
Alpha	1.00	Stream Power (N/m s)		214.12	
Frctn Loss (m)	3.11	Cum Volume (1000 m3)		8.78	
C & E Loss (m)	0.05	Cum SA (1000 m2)		14.30	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=50

E.G. Elev (m)	715.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.		0.030	
W.S. Elev (m)	715.17	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.24	Flow Area (m2)		9.57	
E.G. Slope (m/m)	0.012922	Area (m2)		9.57	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	12.94	Top Width (m)		12.94	
Vel Total (m/s)	3.06	Avg. Vel. (m/s)		3.06	
Max Chl Dpth (m)	1.15	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	257.4	Conv. (m3/s)		257.4	
Length Wtd. (m)	168.56	Wetted Per. (m)		13.22	
Min Ch El (m)	714.02	Shear (N/m2)		91.78	
Alpha	1.00	Stream Power (N/m s)		280.50	
Frctn Loss (m)	3.08	Cum Volume (1000 m3)		10.72	
C & E Loss (m)	0.05	Cum SA (1000 m2)		15.26	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=100

E.G. Elev (m)	715.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.57	Wt. n-Val.		0.030	
W.S. Elev (m)	715.32	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.41	Flow Area (m2)		11.54	
E.G. Slope (m/m)	0.013167	Area (m2)		11.54	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	13.74	Top Width (m)		13.74	
Vel Total (m/s)	3.35	Avg. Vel. (m/s)		3.35	
Max Chl Dpth (m)	1.30	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	336.7	Conv. (m3/s)		336.7	
Length Wtd. (m)	168.56	Wetted Per. (m)		14.08	
Min Ch El (m)	714.02	Shear (N/m2)		105.82	
Alpha	1.00	Stream Power (N/m s)		354.46	
Frctn Loss (m)	3.03	Cum Volume (1000 m3)		13.09	
C & E Loss (m)	0.05	Cum SA (1000 m2)		16.40	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500

E.G. Elev (m)	716.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.87	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.65	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.85	Flow Area (m2)		16.43	0.00
E.G. Slope (m/m)	0.014520	Area (m2)		16.43	0.00
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	0.00

Plan: Plan 05 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500 (Continued)

Top Width (m)	15.46	Top Width (m)		15.32	0.14
Vel Total (m/s)	4.13	Avg. Vel. (m/s)		4.13	0.40
Max Chl Dpth (m)	1.63	Hydr. Depth (m)		1.07	0.04
Conv. Total (m3/s)	562.7	Conv. (m3/s)		562.6	0.0
Length Wtd. (m)	168.56	Wetted Per. (m)		15.77	0.16
Min Ch El (m)	714.02	Shear (N/m2)		148.29	4.50
Alpha	1.00	Stream Power (N/m s)		611.99	1.81
Frctn Loss (m)	3.14	Cum Volume (1000 m3)		19.79	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		19.53	0.01

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=2

E.G. Elev (m)	711.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	710.80	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	710.93	Flow Area (m2)		1.75	
E.G. Slope (m/m)	0.032418	Area (m2)		1.75	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	5.05	Top Width (m)		5.05	
Vel Total (m/s)	2.89	Avg. Vel. (m/s)		2.89	
Max Chl Dpth (m)	0.52	Hydr. Depth (m)		0.35	
Conv. Total (m3/s)	28.0	Conv. (m3/s)		28.0	
Length Wtd. (m)	244.74	Wetted Per. (m)		5.25	
Min Ch El (m)	710.28	Shear (N/m2)		105.99	
Alpha	1.00	Stream Power (N/m s)		305.84	
Frctn Loss (m)	4.79	Cum Volume (1000 m3)		2.60	
C & E Loss (m)	0.06	Cum SA (1000 m2)		8.33	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=5

E.G. Elev (m)	711.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	710.97	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.16	Flow Area (m2)		2.70	
E.G. Slope (m/m)	0.032468	Area (m2)		2.70	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	5.92	Top Width (m)		5.92	
Vel Total (m/s)	3.45	Avg. Vel. (m/s)		3.45	
Max Chl Dpth (m)	0.69	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	51.8	Conv. (m3/s)		51.8	
Length Wtd. (m)	244.74	Wetted Per. (m)		6.20	
Min Ch El (m)	710.28	Shear (N/m2)		138.73	
Alpha	1.00	Stream Power (N/m s)		478.92	
Frctn Loss (m)	4.82	Cum Volume (1000 m3)		4.05	
C & E Loss (m)	0.09	Cum SA (1000 m2)		9.68	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10

E.G. Elev (m)	711.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.77	Wt. n-Val.		0.030	
W.S. Elev (m)	711.12	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.37	Flow Area (m2)		3.66	
E.G. Slope (m/m)	0.032351	Area (m2)		3.66	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	6.68	Top Width (m)		6.68	
Vel Total (m/s)	3.88	Avg. Vel. (m/s)		3.88	
Max Chl Dpth (m)	0.84	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	79.1	Conv. (m3/s)		79.1	
Length Wtd. (m)	244.74	Wetted Per. (m)		7.03	
Min Ch El (m)	710.28	Shear (N/m2)		165.32	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		641.86	
Frctn Loss (m)	4.85	Cum Volume (1000 m3)		5.60	
C & E Loss (m)	0.11	Cum SA (1000 m2)		11.32	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=25

E.G. Elev (m)	712.27	Element	Left OB	Channel	Right OB
Vel Head (m)	0.94	Wt. n-Val.		0.030	
W.S. Elev (m)	711.33	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.63	Flow Area (m2)		5.15	
E.G. Slope (m/m)	0.030531	Area (m2)		5.15	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	7.71	Top Width (m)		7.71	
Vel Total (m/s)	4.29	Avg. Vel. (m/s)		4.29	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	126.3	Conv. (m3/s)		126.3	
Length Wtd. (m)	244.74	Wetted Per. (m)		8.16	
Min Ch El (m)	710.28	Shear (N/m2)		188.97	
Alpha	1.00	Stream Power (N/m s)		809.81	
Frctn Loss (m)	4.86	Cum Volume (1000 m3)		7.67	
C & E Loss (m)	0.12	Cum SA (1000 m2)		12.61	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=50

E.G. Elev (m)	712.51	Element	Left OB	Channel	Right OB
Vel Head (m)	1.01	Wt. n-Val.		0.030	
W.S. Elev (m)	711.50	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.87	Flow Area (m2)		6.57	
E.G. Slope (m/m)	0.027728	Area (m2)		6.57	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	8.60	Top Width (m)		8.60	
Vel Total (m/s)	4.46	Avg. Vel. (m/s)		4.46	
Max Chl Dpth (m)	1.22	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	175.7	Conv. (m3/s)		175.7	
Length Wtd. (m)	244.74	Wetted Per. (m)		9.13	
Min Ch El (m)	710.28	Shear (N/m2)		195.59	
Alpha	1.00	Stream Power (N/m s)		871.59	
Frctn Loss (m)	4.84	Cum Volume (1000 m3)		9.36	
C & E Loss (m)	0.10	Cum SA (1000 m2)		13.44	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=100

E.G. Elev (m)	712.80	Element	Left OB	Channel	Right OB
Vel Head (m)	1.12	Wt. n-Val.		0.030	
W.S. Elev (m)	711.69	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.06	Flow Area (m2)		8.26	
E.G. Slope (m/m)	0.025985	Area (m2)		8.26	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	9.55	Top Width (m)		9.55	
Vel Total (m/s)	4.68	Avg. Vel. (m/s)		4.68	
Max Chl Dpth (m)	1.41	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	239.7	Conv. (m3/s)		239.7	
Length Wtd. (m)	244.74	Wetted Per. (m)		10.17	
Min Ch El (m)	710.28	Shear (N/m2)		206.99	
Alpha	1.00	Stream Power (N/m s)		968.26	
Frctn Loss (m)	4.83	Cum Volume (1000 m3)		11.42	
C & E Loss (m)	0.09	Cum SA (1000 m2)		14.44	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1384.467 Profile: T=500

E.G. Elev (m)	713.35	Element	Left OB	Channel	Right OB
Vel Head (m)	1.21	Wt. n-Val.		0.030	
W.S. Elev (m)	712.13	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.51	Flow Area (m2)		13.89	
E.G. Slope (m/m)	0.024724	Area (m2)		13.89	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	14.70	Top Width (m)		14.70	
Vel Total (m/s)	4.88	Avg. Vel. (m/s)		4.88	
Max Chl Dpth (m)	1.85	Hydr. Depth (m)		0.94	
Conv. Total (m3/s)	431.2	Conv. (m3/s)		431.2	
Length Wtd. (m)	244.74	Wetted Per. (m)		15.46	
Min Ch El (m)	710.28	Shear (N/m2)		217.85	
Alpha	1.00	Stream Power (N/m s)		1063.16	
Frctn Loss (m)	4.67	Cum Volume (1000 m3)		17.23	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.00	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=2

E.G. Elev (m)	706.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	706.15	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.15	Flow Area (m2)		2.44	
E.G. Slope (m/m)	0.013101	Area (m2)		2.44	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	5.95	Top Width (m)		5.95	
Vel Total (m/s)	2.07	Avg. Vel. (m/s)		2.07	
Max Chl Dpth (m)	0.65	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	44.1	Conv. (m3/s)		44.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		6.13	
Min Ch El (m)	705.50	Shear (N/m2)		51.19	
Alpha	1.00	Stream Power (N/m s)		105.77	
Frctn Loss (m)	3.32	Cum Volume (1000 m3)		2.09	
C & E Loss (m)	0.01	Cum SA (1000 m2)		6.98	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=5

E.G. Elev (m)	706.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	706.35	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.38	Flow Area (m2)		3.73	
E.G. Slope (m/m)	0.013223	Area (m2)		3.73	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	6.78	Top Width (m)		6.78	
Vel Total (m/s)	2.50	Avg. Vel. (m/s)		2.50	
Max Chl Dpth (m)	0.85	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	81.1	Conv. (m3/s)		81.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		7.06	
Min Ch El (m)	705.50	Shear (N/m2)		68.42	
Alpha	1.00	Stream Power (N/m s)		171.26	
Frctn Loss (m)	3.35	Cum Volume (1000 m3)		3.26	
C & E Loss (m)	0.02	Cum SA (1000 m2)		8.12	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10

E.G. Elev (m)	706.94	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	706.53	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.58	Flow Area (m2)		4.99	
E.G. Slope (m/m)	0.013351	Area (m2)		4.99	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10 (Continued)

Top Width (m)	7.48	Top Width (m)		7.48	
Vel Total (m/s)	2.85	Avg. Vel. (m/s)		2.85	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	123.1	Conv. (m3/s)		123.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		7.85	
Min Ch El (m)	705.50	Shear (N/m2)		83.29	
Alpha	1.00	Stream Power (N/m s)		237.30	
Frctn Loss (m)	3.37	Cum Volume (1000 m3)		4.54	
C & E Loss (m)	0.02	Cum SA (1000 m2)		9.59	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=25

E.G. Elev (m)	707.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	
W.S. Elev (m)	706.74	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.84	Flow Area (m2)		6.72	
E.G. Slope (m/m)	0.013918	Area (m2)		6.72	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	8.34	Top Width (m)		8.34	
Vel Total (m/s)	3.28	Avg. Vel. (m/s)		3.28	
Max Chl Dpth (m)	1.24	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	187.1	Conv. (m3/s)		187.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		8.81	
Min Ch El (m)	705.50	Shear (N/m2)		104.12	
Alpha	1.00	Stream Power (N/m s)		341.87	
Frctn Loss (m)	3.40	Cum Volume (1000 m3)		6.21	
C & E Loss (m)	0.03	Cum SA (1000 m2)		10.65	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=50

E.G. Elev (m)	707.57	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	706.90	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.04	Flow Area (m2)		8.05	
E.G. Slope (m/m)	0.014816	Area (m2)		8.05	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	8.94	Top Width (m)		8.94	
Vel Total (m/s)	3.64	Avg. Vel. (m/s)		3.64	
Max Chl Dpth (m)	1.40	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	240.4	Conv. (m3/s)		240.4	
Length Wtd. (m)	158.72	Wetted Per. (m)		9.49	
Min Ch El (m)	705.50	Shear (N/m2)		123.24	
Alpha	1.00	Stream Power (N/m s)		448.08	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		7.57	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.30	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100

E.G. Elev (m)	707.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.81	Wt. n-Val.		0.030	
W.S. Elev (m)	707.07	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.26	Flow Area (m2)		9.68	
E.G. Slope (m/m)	0.015491	Area (m2)		9.68	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	9.64	Top Width (m)		9.64	
Vel Total (m/s)	3.99	Avg. Vel. (m/s)		3.99	
Max Chl Dpth (m)	1.57	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	310.4	Conv. (m3/s)		310.4	
Length Wtd. (m)	158.72	Wetted Per. (m)		10.26	
Min Ch El (m)	705.50	Shear (N/m2)		143.31	



Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		571.88	
Frctn Loss (m)	3.48	Cum Volume (1000 m3)		9.22	
C & E Loss (m)	0.03	Cum SA (1000 m2)		12.09	

Plan: Plan 05 ArroyoPilarejo 1 RS: 1141.143 Profile: T=500

E.G. Elev (m)	708.64	Element	Left OB	Channel	Right OB
Vel Head (m)	1.09	Wt. n-Val.		0.030	
W.S. Elev (m)	707.55	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.83	Flow Area (m2)		14.67	
E.G. Slope (m/m)	0.015189	Area (m2)		14.67	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	11.43	Top Width (m)		11.43	
Vel Total (m/s)	4.62	Avg. Vel. (m/s)		4.62	
Max Chl Dpth (m)	2.05	Hydr. Depth (m)		1.28	
Conv. Total (m3/s)	550.1	Conv. (m3/s)		550.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		12.30	
Min Ch EI (m)	705.50	Shear (N/m2)		177.67	
Alpha	1.00	Stream Power (N/m s)		820.91	
Frctn Loss (m)	3.45	Cum Volume (1000 m3)		13.74	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.80	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=2

E.G. Elev (m)	703.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	702.71	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	702.81	Flow Area (m2)		2.01	
E.G. Slope (m/m)	0.038723	Area (m2)		2.01	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	8.39	Top Width (m)		8.39	
Vel Total (m/s)	2.52	Avg. Vel. (m/s)		2.52	
Max Chl Dpth (m)	0.33	Hydr. Depth (m)		0.24	
Conv. Total (m3/s)	25.7	Conv. (m3/s)		25.7	
Length Wtd. (m)	187.19	Wetted Per. (m)		8.43	
Min Ch EI (m)	702.38	Shear (N/m2)		90.32	
Alpha	1.00	Stream Power (N/m s)		227.41	
Frctn Loss (m)	2.47	Cum Volume (1000 m3)		1.73	
C & E Loss (m)	0.00	Cum SA (1000 m2)		5.85	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=5

E.G. Elev (m)	703.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.		0.030	
W.S. Elev (m)	702.82	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	702.97	Flow Area (m2)		3.06	
E.G. Slope (m/m)	0.039022	Area (m2)		3.06	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	9.60	Top Width (m)		9.60	
Vel Total (m/s)	3.05	Avg. Vel. (m/s)		3.05	
Max Chl Dpth (m)	0.44	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	47.2	Conv. (m3/s)		47.2	
Length Wtd. (m)	187.19	Wetted Per. (m)		9.67	
Min Ch EI (m)	702.38	Shear (N/m2)		120.87	
Alpha	1.00	Stream Power (N/m s)		369.14	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		2.72	
C & E Loss (m)	0.07	Cum SA (1000 m2)		6.82	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=10

E.G. Elev (m)	703.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	702.92	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.11	Flow Area (m2)		4.08	
E.G. Slope (m/m)	0.038966	Area (m2)		4.08	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	10.46	Top Width (m)		10.46	
Vel Total (m/s)	3.49	Avg. Vel. (m/s)		3.49	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	72.0	Conv. (m3/s)		72.0	
Length Wtd. (m)	187.19	Wetted Per. (m)		10.56	
Min Ch El (m)	702.38	Shear (N/m2)		147.52	
Alpha	1.00	Stream Power (N/m s)		514.64	
Frctn Loss (m)	3.73	Cum Volume (1000 m3)		3.82	
C & E Loss (m)	0.10	Cum SA (1000 m2)		8.17	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=25

E.G. Elev (m)	703.87	Element	Left OB	Channel	Right OB
Vel Head (m)	0.81	Wt. n-Val.		0.030	
W.S. Elev (m)	703.06	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.31	Flow Area (m2)		5.54	
E.G. Slope (m/m)	0.037178	Area (m2)		5.54	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	11.23	Top Width (m)		11.23	
Vel Total (m/s)	3.98	Avg. Vel. (m/s)		3.98	
Max Chl Dpth (m)	0.68	Hydr. Depth (m)		0.49	
Conv. Total (m3/s)	114.5	Conv. (m3/s)		114.5	
Length Wtd. (m)	187.19	Wetted Per. (m)		11.38	
Min Ch El (m)	702.38	Shear (N/m2)		177.69	
Alpha	1.00	Stream Power (N/m s)		707.31	
Frctn Loss (m)	3.77	Cum Volume (1000 m3)		5.24	
C & E Loss (m)	0.13	Cum SA (1000 m2)		9.10	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=50

E.G. Elev (m)	704.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.93	Wt. n-Val.		0.030	
W.S. Elev (m)	703.17	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.46	Flow Area (m2)		6.86	
E.G. Slope (m/m)	0.034804	Area (m2)		6.86	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	11.88	Top Width (m)		11.88	
Vel Total (m/s)	4.27	Avg. Vel. (m/s)		4.27	
Max Chl Dpth (m)	0.79	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	156.8	Conv. (m3/s)		156.8	
Length Wtd. (m)	187.19	Wetted Per. (m)		12.06	
Min Ch El (m)	702.38	Shear (N/m2)		194.01	
Alpha	1.00	Stream Power (N/m s)		827.92	
Frctn Loss (m)	3.78	Cum Volume (1000 m3)		6.39	
C & E Loss (m)	0.14	Cum SA (1000 m2)		9.64	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100

E.G. Elev (m)	704.38	Element	Left OB	Channel	Right OB
Vel Head (m)	1.08	Wt. n-Val.		0.030	
W.S. Elev (m)	703.30	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.64	Flow Area (m2)		8.40	
E.G. Slope (m/m)	0.033431	Area (m2)		8.40	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100 (Continued)

Top Width (m)	12.60	Top Width (m)		12.60	
Vel Total (m/s)	4.60	Avg. Vel. (m/s)		4.60	
Max Chl Dpth (m)	0.92	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	211.3	Conv. (m3/s)		211.3	
Length Wtd. (m)	187.19	Wetted Per. (m)		12.83	
Min Ch El (m)	702.38	Shear (N/m2)		214.82	
Alpha	1.00	Stream Power (N/m s)		987.69	
Frctn Loss (m)	3.81	Cum Volume (1000 m3)		7.79	
C & E Loss (m)	0.16	Cum SA (1000 m2)		10.33	

Plan: Plan 05 ArroyoPilarejo 1 RS: 982.4216 Profile: T=500

E.G. Elev (m)	705.14	Element	Left OB	Channel	Right OB
Vel Head (m)	1.55	Wt. n-Val.		0.030	
W.S. Elev (m)	703.59	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.08	Flow Area (m2)		12.30	
E.G. Slope (m/m)	0.033635	Area (m2)		12.30	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	14.01	Top Width (m)		14.01	
Vel Total (m/s)	5.51	Avg. Vel. (m/s)		5.51	
Max Chl Dpth (m)	1.21	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	369.7	Conv. (m3/s)		369.7	
Length Wtd. (m)	187.19	Wetted Per. (m)		14.35	
Min Ch El (m)	702.38	Shear (N/m2)		282.55	
Alpha	1.00	Stream Power (N/m s)		1558.02	
Frctn Loss (m)	3.93	Cum Volume (1000 m3)		11.59	
C & E Loss (m)	0.23	Cum SA (1000 m2)		11.78	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=2

E.G. Elev (m)	699.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.030	
W.S. Elev (m)	699.06	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.06	Flow Area (m2)		2.66	
E.G. Slope (m/m)	0.012979	Area (m2)		2.66	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	7.41	Top Width (m)		7.41	
Vel Total (m/s)	1.90	Avg. Vel. (m/s)		1.90	
Max Chl Dpth (m)	0.55	Hydr. Depth (m)		0.36	
Conv. Total (m3/s)	44.3	Conv. (m3/s)		44.3	
Length Wtd. (m)	138.61	Wetted Per. (m)		7.56	
Min Ch El (m)	698.51	Shear (N/m2)		44.87	
Alpha	1.00	Stream Power (N/m s)		85.05	
Frctn Loss (m)	4.68	Cum Volume (1000 m3)		1.30	
C & E Loss (m)	0.09	Cum SA (1000 m2)		4.37	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5

E.G. Elev (m)	699.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	699.26	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.27	Flow Area (m2)		4.31	
E.G. Slope (m/m)	0.012029	Area (m2)		4.31	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	9.22	Top Width (m)		9.22	
Vel Total (m/s)	2.16	Avg. Vel. (m/s)		2.16	
Max Chl Dpth (m)	0.75	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	85.1	Conv. (m3/s)		85.1	
Length Wtd. (m)	138.61	Wetted Per. (m)		9.46	
Min Ch El (m)	698.51	Shear (N/m2)		53.74	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		116.31	
Frctn Loss (m)	4.32	Cum Volume (1000 m3)		2.04	
C & E Loss (m)	0.13	Cum SA (1000 m2)		5.06	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=10

E.G. Elev (m)	699.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	699.44	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.45	Flow Area (m2)		6.15	
E.G. Slope (m/m)	0.012072	Area (m2)		6.15	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	11.93	Top Width (m)		11.93	
Vel Total (m/s)	2.31	Avg. Vel. (m/s)		2.31	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	129.4	Conv. (m3/s)		129.4	
Length Wtd. (m)	138.61	Wetted Per. (m)		12.26	
Min Ch EI (m)	698.51	Shear (N/m2)		59.38	
Alpha	1.00	Stream Power (N/m s)		137.29	
Frctn Loss (m)	4.14	Cum Volume (1000 m3)		2.87	
C & E Loss (m)	0.16	Cum SA (1000 m2)		6.07	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=25

E.G. Elev (m)	699.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	699.60	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.64	Flow Area (m2)		8.15	
E.G. Slope (m/m)	0.012580	Area (m2)		8.15	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	12.84	Top Width (m)		12.84	
Vel Total (m/s)	2.71	Avg. Vel. (m/s)		2.71	
Max Chl Dpth (m)	1.09	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	196.8	Conv. (m3/s)		196.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		13.23	
Min Ch EI (m)	698.51	Shear (N/m2)		76.03	
Alpha	1.00	Stream Power (N/m s)		205.84	
Frctn Loss (m)	4.03	Cum Volume (1000 m3)		3.96	
C & E Loss (m)	0.17	Cum SA (1000 m2)		6.84	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=50

E.G. Elev (m)	700.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	699.72	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.78	Flow Area (m2)		9.72	
E.G. Slope (m/m)	0.013186	Area (m2)		9.72	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	13.51	Top Width (m)		13.51	
Vel Total (m/s)	3.01	Avg. Vel. (m/s)		3.01	
Max Chl Dpth (m)	1.21	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	254.8	Conv. (m3/s)		254.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		13.94	
Min Ch EI (m)	698.51	Shear (N/m2)		90.17	
Alpha	1.00	Stream Power (N/m s)		271.43	
Frctn Loss (m)	3.98	Cum Volume (1000 m3)		4.83	
C & E Loss (m)	0.17	Cum SA (1000 m2)		7.27	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=100

E.G. Elev (m)	700.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	
W.S. Elev (m)	699.86	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.98	Flow Area (m2)		11.75	
E.G. Slope (m/m)	0.013653	Area (m2)		11.75	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	14.65	Top Width (m)		14.65	
Vel Total (m/s)	3.29	Avg. Vel. (m/s)		3.29	
Max Chl Dpth (m)	1.35	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	330.7	Conv. (m3/s)		330.7	
Length Wtd. (m)	138.61	Wetted Per. (m)		15.13	
Min Ch El (m)	698.51	Shear (N/m2)		103.93	
Alpha	1.00	Stream Power (N/m s)		341.91	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		5.90	
C & E Loss (m)	0.18	Cum SA (1000 m2)		7.78	

Plan: Plan 05 ArroyoPilarejo 1 RS: 795.2336 Profile: T=500

E.G. Elev (m)	700.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.77	Wt. n-Val.		0.030	
W.S. Elev (m)	700.20	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.37	Flow Area (m2)		17.44	
E.G. Slope (m/m)	0.014365	Area (m2)		17.44	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	17.56	Top Width (m)		17.56	
Vel Total (m/s)	3.89	Avg. Vel. (m/s)		3.89	
Max Chl Dpth (m)	1.69	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	565.7	Conv. (m3/s)		565.7	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.18	
Min Ch El (m)	698.51	Shear (N/m2)		135.18	
Alpha	1.00	Stream Power (N/m s)		525.40	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		8.81	
C & E Loss (m)	0.20	Cum SA (1000 m2)		8.83	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=2

E.G. Elev (m)	694.48	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	693.40	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	693.62	Flow Area (m2)		1.10	
E.G. Slope (m/m)	0.225052	Area (m2)		1.10	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	7.00	Top Width (m)		7.00	
Vel Total (m/s)	4.59	Avg. Vel. (m/s)		4.59	
Max Chl Dpth (m)	0.23	Hydr. Depth (m)		0.16	
Conv. Total (m3/s)	10.6	Conv. (m3/s)		10.6	
Length Wtd. (m)	244.93	Wetted Per. (m)		7.05	
Min Ch El (m)	693.17	Shear (N/m2)		344.65	
Alpha	1.00	Stream Power (N/m s)		1580.49	
Frctn Loss (m)	3.18	Cum Volume (1000 m3)		1.04	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.37	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5

E.G. Elev (m)	695.05	Element	Left OB	Channel	Right OB
Vel Head (m)	1.57	Wt. n-Val.		0.030	
W.S. Elev (m)	693.48	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	693.80	Flow Area (m2)		1.68	
E.G. Slope (m/m)	0.203764	Area (m2)		1.68	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5 (Continued)

Top Width (m)	7.42	Top Width (m)		7.42	
Vel Total (m/s)	5.55	Avg. Vel. (m/s)		5.55	
Max Chl Dpth (m)	0.31	Hydr. Depth (m)		0.23	
Conv. Total (m3/s)	20.7	Conv. (m3/s)		20.7	
Length Wtd. (m)	244.93	Wetted Per. (m)		7.51	
Min Ch El (m)	693.17	Shear (N/m2)		447.48	
Alpha	1.00	Stream Power (N/m s)		2482.95	
Frctn Loss (m)	7.75	Cum Volume (1000 m3)		1.62	
C & E Loss (m)	0.39	Cum SA (1000 m2)		3.91	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=10

E.G. Elev (m)	695.41	Element	Left OB	Channel	Right OB
Vel Head (m)	1.84	Wt. n-Val.		0.030	
W.S. Elev (m)	693.57	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	693.97	Flow Area (m2)		2.37	
E.G. Slope (m/m)	0.164526	Area (m2)		2.37	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	7.88	Top Width (m)		7.88	
Vel Total (m/s)	6.00	Avg. Vel. (m/s)		6.00	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	35.1	Conv. (m3/s)		35.1	
Length Wtd. (m)	244.93	Wetted Per. (m)		8.02	
Min Ch El (m)	693.17	Shear (N/m2)		476.88	
Alpha	1.00	Stream Power (N/m s)		2860.93	
Frctn Loss (m)	7.82	Cum Volume (1000 m3)		2.27	
C & E Loss (m)	0.46	Cum SA (1000 m2)		4.70	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=25

E.G. Elev (m)	695.78	Element	Left OB	Channel	Right OB
Vel Head (m)	2.07	Wt. n-Val.		0.030	
W.S. Elev (m)	693.71	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.19	Flow Area (m2)		3.46	
E.G. Slope (m/m)	0.125872	Area (m2)		3.46	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	8.56	Top Width (m)		8.56	
Vel Total (m/s)	6.37	Avg. Vel. (m/s)		6.37	
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.40	
Conv. Total (m3/s)	62.2	Conv. (m3/s)		62.2	
Length Wtd. (m)	244.93	Wetted Per. (m)		8.75	
Min Ch El (m)	693.17	Shear (N/m2)		488.28	
Alpha	1.00	Stream Power (N/m s)		3111.65	
Frctn Loss (m)	7.87	Cum Volume (1000 m3)		3.15	
C & E Loss (m)	0.50	Cum SA (1000 m2)		5.36	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50

E.G. Elev (m)	696.03	Element	Left OB	Channel	Right OB
Vel Head (m)	2.21	Wt. n-Val.		0.030	
W.S. Elev (m)	693.82	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.36	Flow Area (m2)		4.45	
E.G. Slope (m/m)	0.104356	Area (m2)		4.45	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	9.06	Top Width (m)		9.06	
Vel Total (m/s)	6.58	Avg. Vel. (m/s)		6.58	
Max Chl Dpth (m)	0.65	Hydr. Depth (m)		0.49	
Conv. Total (m3/s)	90.6	Conv. (m3/s)		90.6	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.31	
Min Ch El (m)	693.17	Shear (N/m2)		488.68	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		3214.83	
Frctn Loss (m)	7.89	Cum Volume (1000 m3)		3.85	
C & E Loss (m)	0.51	Cum SA (1000 m2)		5.70	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=100

E.G. Elev (m)	696.32	Element	Left OB	Channel	Right OB
Vel Head (m)	2.37	Wt. n-Val.		0.030	
W.S. Elev (m)	693.95	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.55	Flow Area (m2)		5.66	
E.G. Slope (m/m)	0.089038	Area (m2)		5.66	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	9.65	Top Width (m)		9.65	
Vel Total (m/s)	6.82	Avg. Vel. (m/s)		6.82	
Max Chl Dpth (m)	0.78	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	129.5	Conv. (m3/s)		129.5	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.96	
Min Ch EI (m)	693.17	Shear (N/m2)		496.19	
Alpha	1.00	Stream Power (N/m s)		3386.06	
Frctn Loss (m)	7.93	Cum Volume (1000 m3)		4.70	
C & E Loss (m)	0.52	Cum SA (1000 m2)		6.09	

Plan: Plan 05 ArroyoPilarejo 1 RS: 656.6266 Profile: T=500

E.G. Elev (m)	697.06	Element	Left OB	Channel	Right OB
Vel Head (m)	2.77	Wt. n-Val.		0.030	
W.S. Elev (m)	694.29	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.04	Flow Area (m2)		9.20	
E.G. Slope (m/m)	0.067035	Area (m2)		9.20	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	11.18	Top Width (m)		11.18	
Vel Total (m/s)	7.37	Avg. Vel. (m/s)		7.37	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	261.9	Conv. (m3/s)		261.9	
Length Wtd. (m)	244.93	Wetted Per. (m)		11.66	
Min Ch EI (m)	693.17	Shear (N/m2)		518.57	
Alpha	1.00	Stream Power (N/m s)		3820.94	
Frctn Loss (m)	7.99	Cum Volume (1000 m3)		6.96	
C & E Loss (m)	0.53	Cum SA (1000 m2)		6.84	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=2

E.G. Elev (m)	686.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	
W.S. Elev (m)	686.43	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.43	Flow Area (m2)		2.56	
E.G. Slope (m/m)	0.012763	Area (m2)		2.56	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	6.57	Top Width (m)		6.57	
Vel Total (m/s)	1.97	Avg. Vel. (m/s)		1.97	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	44.7	Conv. (m3/s)		44.7	
Length Wtd. (m)	141.09	Wetted Per. (m)		6.75	
Min Ch EI (m)	685.94	Shear (N/m2)		47.47	
Alpha	1.00	Stream Power (N/m s)		93.67	
Frctn Loss (m)	3.98	Cum Volume (1000 m3)		0.59	
C & E Loss (m)	0.08	Cum SA (1000 m2)		1.71	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=5

E.G. Elev (m)	686.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	686.64	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.65	Flow Area (m2)		4.02	
E.G. Slope (m/m)	0.012277	Area (m2)		4.02	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	7.81	Top Width (m)		7.81	
Vel Total (m/s)	2.32	Avg. Vel. (m/s)		2.32	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	84.2	Conv. (m3/s)		84.2	
Length Wtd. (m)	141.09	Wetted Per. (m)		8.06	
Min Ch El (m)	685.94	Shear (N/m2)		60.02	
Alpha	1.00	Stream Power (N/m s)		139.37	
Frctn Loss (m)	3.78	Cum Volume (1000 m3)		0.92	
C & E Loss (m)	0.10	Cum SA (1000 m2)		2.04	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=10

E.G. Elev (m)	687.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	686.82	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.85	Flow Area (m2)		5.71	
E.G. Slope (m/m)	0.013122	Area (m2)		5.71	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	10.52	Top Width (m)		10.52	
Vel Total (m/s)	2.49	Avg. Vel. (m/s)		2.49	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	124.1	Conv. (m3/s)		124.1	
Length Wtd. (m)	141.09	Wetted Per. (m)		10.82	
Min Ch El (m)	685.94	Shear (N/m2)		67.86	
Alpha	1.00	Stream Power (N/m s)		169.13	
Frctn Loss (m)	3.74	Cum Volume (1000 m3)		1.29	
C & E Loss (m)	0.11	Cum SA (1000 m2)		2.44	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=25

E.G. Elev (m)	687.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	687.00	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.06	Flow Area (m2)		7.75	
E.G. Slope (m/m)	0.014385	Area (m2)		7.75	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	12.53	Top Width (m)		12.53	
Vel Total (m/s)	2.85	Avg. Vel. (m/s)		2.85	
Max Chl Dpth (m)	1.06	Hydr. Depth (m)		0.62	
Conv. Total (m3/s)	184.0	Conv. (m3/s)		184.0	
Length Wtd. (m)	141.09	Wetted Per. (m)		12.90	
Min Ch El (m)	685.94	Shear (N/m2)		84.75	
Alpha	1.00	Stream Power (N/m s)		241.26	
Frctn Loss (m)	3.67	Cum Volume (1000 m3)		1.78	
C & E Loss (m)	0.12	Cum SA (1000 m2)		2.78	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50

E.G. Elev (m)	687.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	687.11	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.22	Flow Area (m2)		9.21	
E.G. Slope (m/m)	0.015451	Area (m2)		9.21	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	



Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50 (Continued)

Top Width (m)	13.29	Top Width (m)		13.29	
Vel Total (m/s)	3.18	Avg. Vel. (m/s)		3.18	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	235.4	Conv. (m3/s)		235.4	
Length Wtd. (m)	141.09	Wetted Per. (m)		13.71	
Min Ch El (m)	685.94	Shear (N/m2)		101.75	
Alpha	1.00	Stream Power (N/m s)		323.27	
Frctn Loss (m)	3.64	Cum Volume (1000 m3)		2.18	
C & E Loss (m)	0.11	Cum SA (1000 m2)		2.97	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=100

E.G. Elev (m)	687.87	Element	Left OB	Channel	Right OB
Vel Head (m)	0.64	Wt. n-Val.		0.030	
W.S. Elev (m)	687.23	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.39	Flow Area (m2)		10.93	
E.G. Slope (m/m)	0.016589	Area (m2)		10.93	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	14.13	Top Width (m)		14.13	
Vel Total (m/s)	3.54	Avg. Vel. (m/s)		3.54	
Max Chl Dpth (m)	1.29	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	300.0	Conv. (m3/s)		300.0	
Length Wtd. (m)	141.09	Wetted Per. (m)		14.61	
Min Ch El (m)	685.94	Shear (N/m2)		121.63	
Alpha	1.00	Stream Power (N/m s)		430.15	
Frctn Loss (m)	3.60	Cum Volume (1000 m3)		2.66	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.18	

Plan: Plan 05 ArroyoPilarejo 1 RS: 411.7011 Profile: T=500

E.G. Elev (m)	688.54	Element	Left OB	Channel	Right OB
Vel Head (m)	1.02	Wt. n-Val.		0.030	
W.S. Elev (m)	687.52	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.81	Flow Area (m2)		15.19	
E.G. Slope (m/m)	0.019242	Area (m2)		15.19	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	15.37	Top Width (m)		15.37	
Vel Total (m/s)	4.46	Avg. Vel. (m/s)		4.46	
Max Chl Dpth (m)	1.58	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	488.8	Conv. (m3/s)		488.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		16.01	
Min Ch El (m)	685.94	Shear (N/m2)		179.01	
Alpha	1.00	Stream Power (N/m s)		799.13	
Frctn Loss (m)	3.52	Cum Volume (1000 m3)		3.98	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.59	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2

E.G. Elev (m)	682.57	Element	Left OB	Channel	Right OB
Vel Head (m)	1.01	Wt. n-Val.		0.030	
W.S. Elev (m)	681.56	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	681.82	Flow Area (m2)		1.13	
E.G. Slope (m/m)	0.109097	Area (m2)		1.13	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	4.30	Top Width (m)		4.30	
Vel Total (m/s)	4.45	Avg. Vel. (m/s)		4.45	
Max Chl Dpth (m)	0.38	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	15.3	Conv. (m3/s)		15.3	
Length Wtd. (m)	200.54	Wetted Per. (m)		4.42	
Min Ch El (m)	681.18	Shear (N/m2)		274.89	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		1223.21	
Frctn Loss (m)	7.01	Cum Volume (1000 m3)		0.33	
C & E Loss (m)	0.22	Cum SA (1000 m2)		0.94	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=5

E.G. Elev (m)	683.02	Element	Left OB	Channel	Right OB
Vel Head (m)	1.32	Wt. n-Val.		0.030	
W.S. Elev (m)	681.70	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.04	Flow Area (m2)		1.83	
E.G. Slope (m/m)	0.098478	Area (m2)		1.83	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	5.24	Top Width (m)		5.24	
Vel Total (m/s)	5.09	Avg. Vel. (m/s)		5.09	
Max Chl Dpth (m)	0.52	Hydr. Depth (m)		0.35	
Conv. Total (m3/s)	29.7	Conv. (m3/s)		29.7	
Length Wtd. (m)	200.54	Wetted Per. (m)		5.40	
Min Ch El (m)	681.18	Shear (N/m2)		327.70	
Alpha	1.00	Stream Power (N/m s)		1667.67	
Frctn Loss (m)	7.08	Cum Volume (1000 m3)		0.51	
C & E Loss (m)	0.27	Cum SA (1000 m2)		1.12	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=10

E.G. Elev (m)	683.29	Element	Left OB	Channel	Right OB
Vel Head (m)	1.44	Wt. n-Val.		0.030	
W.S. Elev (m)	681.85	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.24	Flow Area (m2)		2.68	
E.G. Slope (m/m)	0.078979	Area (m2)		2.68	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	6.07	Top Width (m)		6.07	
Vel Total (m/s)	5.31	Avg. Vel. (m/s)		5.31	
Max Chl Dpth (m)	0.67	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	50.6	Conv. (m3/s)		50.6	
Length Wtd. (m)	200.54	Wetted Per. (m)		6.28	
Min Ch El (m)	681.18	Shear (N/m2)		330.40	
Alpha	1.00	Stream Power (N/m s)		1753.93	
Frctn Loss (m)	7.05	Cum Volume (1000 m3)		0.69	
C & E Loss (m)	0.26	Cum SA (1000 m2)		1.27	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=25

E.G. Elev (m)	683.62	Element	Left OB	Channel	Right OB
Vel Head (m)	1.57	Wt. n-Val.		0.030	
W.S. Elev (m)	682.05	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.50	Flow Area (m2)		3.98	
E.G. Slope (m/m)	0.060710	Area (m2)		3.98	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	6.84	Top Width (m)		6.84	
Vel Total (m/s)	5.55	Avg. Vel. (m/s)		5.55	
Max Chl Dpth (m)	0.87	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	89.6	Conv. (m3/s)		89.6	
Length Wtd. (m)	200.54	Wetted Per. (m)		7.16	
Min Ch El (m)	681.18	Shear (N/m2)		330.62	
Alpha	1.00	Stream Power (N/m s)		1834.61	
Frctn Loss (m)	6.99	Cum Volume (1000 m3)		0.95	
C & E Loss (m)	0.23	Cum SA (1000 m2)		1.41	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=50

E.G. Elev (m)	683.87	Element	Left OB	Channel	Right OB
Vel Head (m)	1.66	Wt. n-Val.		0.030	
W.S. Elev (m)	682.21	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.71	Flow Area (m2)		5.13	
E.G. Slope (m/m)	0.051308	Area (m2)		5.13	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	7.38	Top Width (m)		7.38	
Vel Total (m/s)	5.71	Avg. Vel. (m/s)		5.71	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	129.2	Conv. (m3/s)		129.2	
Length Wtd. (m)	200.54	Wetted Per. (m)		7.80	
Min Ch El (m)	681.18	Shear (N/m2)		330.70	
Alpha	1.00	Stream Power (N/m s)		1887.54	
Frctn Loss (m)	6.93	Cum Volume (1000 m3)		1.17	
C & E Loss (m)	0.19	Cum SA (1000 m2)		1.51	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=100

E.G. Elev (m)	684.16	Element	Left OB	Channel	Right OB
Vel Head (m)	1.76	Wt. n-Val.		0.030	
W.S. Elev (m)	682.40	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.94	Flow Area (m2)		6.57	
E.G. Slope (m/m)	0.044125	Area (m2)		6.57	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	8.00	Top Width (m)		8.00	
Vel Total (m/s)	5.88	Avg. Vel. (m/s)		5.88	
Max Chl Dpth (m)	1.22	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	183.9	Conv. (m3/s)		183.9	
Length Wtd. (m)	200.54	Wetted Per. (m)		8.54	
Min Ch El (m)	681.18	Shear (N/m2)		332.94	
Alpha	1.00	Stream Power (N/m s)		1957.51	
Frctn Loss (m)	6.86	Cum Volume (1000 m3)		1.43	
C & E Loss (m)	0.14	Cum SA (1000 m2)		1.62	

Plan: Plan 05 ArroyoPilarejo 1 RS: 270.6081 Profile: T=500

E.G. Elev (m)	684.92	Element	Left OB	Channel	Right OB
Vel Head (m)	2.04	Wt. n-Val.		0.030	
W.S. Elev (m)	682.88	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.52	Flow Area (m2)		10.71	
E.G. Slope (m/m)	0.033541	Area (m2)		10.71	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	9.26	Top Width (m)		9.26	
Vel Total (m/s)	6.33	Avg. Vel. (m/s)		6.33	
Max Chl Dpth (m)	1.70	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	370.2	Conv. (m3/s)		370.2	
Length Wtd. (m)	200.54	Wetted Per. (m)		10.14	
Min Ch El (m)	681.18	Shear (N/m2)		347.38	
Alpha	1.00	Stream Power (N/m s)		2199.26	
Frctn Loss (m)	6.66	Cum Volume (1000 m3)		2.15	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.85	

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2

E.G. Elev (m)	675.33	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	675.05	Reach Len. (m)			
Crit W.S. (m)	675.10	Flow Area (m2)		2.14	
E.G. Slope (m/m)	0.017011	Area (m2)		2.14	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2 (Continued)

Top Width (m)	5.09	Top Width (m)		5.09	
Vel Total (m/s)	2.36	Avg. Vel. (m/s)		2.36	
Max Chl Dpth (m)	0.61	Hydr. Depth (m)		0.42	
Conv. Total (m3/s)	38.7	Conv. (m3/s)		38.7	
Length Wtd. (m)		Wetted Per. (m)		5.32	
Min Ch El (m)	674.44	Shear (N/m2)		66.93	
Alpha	1.00	Stream Power (N/m s)		158.27	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=5

E.G. Elev (m)	675.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	675.25	Reach Len. (m)			
Crit W.S. (m)	675.34	Flow Area (m2)		3.24	
E.G. Slope (m/m)	0.017997	Area (m2)		3.24	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	5.97	Top Width (m)		5.97	
Vel Total (m/s)	2.88	Avg. Vel. (m/s)		2.88	
Max Chl Dpth (m)	0.81	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	69.5	Conv. (m3/s)		69.5	
Length Wtd. (m)		Wetted Per. (m)		6.29	
Min Ch El (m)	674.44	Shear (N/m2)		91.00	
Alpha	1.00	Stream Power (N/m s)		261.68	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=10

E.G. Elev (m)	675.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.57	Wt. n-Val.		0.030	
W.S. Elev (m)	675.41	Reach Len. (m)			
Crit W.S. (m)	675.56	Flow Area (m2)		4.24	
E.G. Slope (m/m)	0.019781	Area (m2)		4.24	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	6.63	Top Width (m)		6.63	
Vel Total (m/s)	3.35	Avg. Vel. (m/s)		3.35	
Max Chl Dpth (m)	0.97	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	101.1	Conv. (m3/s)		101.1	
Length Wtd. (m)		Wetted Per. (m)		7.03	
Min Ch El (m)	674.44	Shear (N/m2)		117.18	
Alpha	1.00	Stream Power (N/m s)		392.56	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25

E.G. Elev (m)	676.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.81	Wt. n-Val.		0.030	
W.S. Elev (m)	675.59	Reach Len. (m)			
Crit W.S. (m)	675.83	Flow Area (m2)		5.52	
E.G. Slope (m/m)	0.022581	Area (m2)		5.52	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	7.24	Top Width (m)		7.24	
Vel Total (m/s)	4.00	Avg. Vel. (m/s)		4.00	
Max Chl Dpth (m)	1.15	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	146.9	Conv. (m3/s)		146.9	
Length Wtd. (m)		Wetted Per. (m)		7.75	
Min Ch El (m)	674.44	Shear (N/m2)		157.86	

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		631.02	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=50

E.G. Elev (m)	676.75	Element	Left OB	Channel	Right OB
Vel Head (m)	1.03	Wt. n-Val.		0.030	
W.S. Elev (m)	675.73	Reach Len. (m)			
Crit W.S. (m)	676.04	Flow Area (m2)		6.52	
E.G. Slope (m/m)	0.024851	Area (m2)		6.52	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	7.68	Top Width (m)		7.68	
Vel Total (m/s)	4.49	Avg. Vel. (m/s)		4.49	
Max Chl Dpth (m)	1.29	Hydr. Depth (m)		0.85	
Conv. Total (m3/s)	185.6	Conv. (m3/s)		185.6	
Length Wtd. (m)		Wetted Per. (m)		8.26	
Min Ch El (m)	674.44	Shear (N/m2)		192.33	
Alpha	1.00	Stream Power (N/m s)		863.12	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=100

E.G. Elev (m)	677.16	Element	Left OB	Channel	Right OB
Vel Head (m)	1.29	Wt. n-Val.		0.030	
W.S. Elev (m)	675.87	Reach Len. (m)			
Crit W.S. (m)	676.28	Flow Area (m2)		7.69	
E.G. Slope (m/m)	0.027292	Area (m2)		7.69	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	8.16	Top Width (m)		8.16	
Vel Total (m/s)	5.02	Avg. Vel. (m/s)		5.02	
Max Chl Dpth (m)	1.43	Hydr. Depth (m)		0.94	
Conv. Total (m3/s)	233.9	Conv. (m3/s)		233.9	
Length Wtd. (m)		Wetted Per. (m)		8.83	
Min Ch El (m)	674.44	Shear (N/m2)		233.11	
Alpha	1.00	Stream Power (N/m s)		1170.78	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 05 ArroyoPilarejo 1 RS: 70.07248 Profile: T=500

E.G. Elev (m)	678.26	Element	Left OB	Channel	Right OB
Vel Head (m)	2.03	Wt. n-Val.		0.030	
W.S. Elev (m)	676.22	Reach Len. (m)			
Crit W.S. (m)	676.87	Flow Area (m2)		10.74	
E.G. Slope (m/m)	0.032916	Area (m2)		10.74	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	9.18	Top Width (m)		9.18	
Vel Total (m/s)	6.31	Avg. Vel. (m/s)		6.31	
Max Chl Dpth (m)	1.78	Hydr. Depth (m)		1.17	
Conv. Total (m3/s)	373.7	Conv. (m3/s)		373.7	
Length Wtd. (m)		Wetted Per. (m)		10.08	
Min Ch El (m)	674.44	Shear (N/m2)		344.08	
Alpha	1.00	Stream Power (N/m s)		2171.36	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=2

E.G. Elev (m)	727.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.16	Wt. n-Val.		0.030	
W.S. Elev (m)	726.98	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	726.98	Flow Area (m2)		2.82	
E.G. Slope (m/m)	0.013214	Area (m2)		2.82	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	8.73	Top Width (m)		8.73	
Vel Total (m/s)	1.79	Avg. Vel. (m/s)		1.79	
Max Chl Dpth (m)	0.51	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	43.9	Conv. (m3/s)		43.9	
Length Wtd. (m)	224.66	Wetted Per. (m)		8.82	
Min Ch El (m)	726.47	Shear (N/m2)		41.42	
Alpha	1.00	Stream Power (N/m s)		74.20	
Frctn Loss (m)	2.91	Cum Volume (1000 m3)		2.66	
C & E Loss (m)	0.01	Cum SA (1000 m2)		7.92	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=5

E.G. Elev (m)	727.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.		0.030	
W.S. Elev (m)	727.18	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.18	Flow Area (m2)		5.00	
E.G. Slope (m/m)	0.013136	Area (m2)		5.00	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	14.51	Top Width (m)		14.51	
Vel Total (m/s)	1.87	Avg. Vel. (m/s)		1.87	
Max Chl Dpth (m)	0.71	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	81.4	Conv. (m3/s)		81.4	
Length Wtd. (m)	224.66	Wetted Per. (m)		14.65	
Min Ch El (m)	726.47	Shear (N/m2)		43.97	
Alpha	1.00	Stream Power (N/m s)		82.04	
Frctn Loss (m)	2.78	Cum Volume (1000 m3)		4.35	
C & E Loss (m)	0.01	Cum SA (1000 m2)		10.18	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=10

E.G. Elev (m)	727.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	727.30	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.30	Flow Area (m2)		6.81	
E.G. Slope (m/m)	0.011770	Area (m2)		6.81	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	15.35	Top Width (m)		15.35	
Vel Total (m/s)	2.09	Avg. Vel. (m/s)		2.09	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	131.1	Conv. (m3/s)		131.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		15.53	
Min Ch El (m)	726.47	Shear (N/m2)		50.63	
Alpha	1.00	Stream Power (N/m s)		105.70	
Frctn Loss (m)	2.57	Cum Volume (1000 m3)		6.02	
C & E Loss (m)	0.01	Cum SA (1000 m2)		11.46	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=25

E.G. Elev (m)	727.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	727.46	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.46	Flow Area (m2)		9.34	
E.G. Slope (m/m)	0.010866	Area (m2)		9.34	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=25 (Continued)

Top Width (m)	16.45	Top Width (m)		16.45	
Vel Total (m/s)	2.36	Avg. Vel. (m/s)		2.36	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	211.7	Conv. (m3/s)		211.7	
Length Wtd. (m)	224.66	Wetted Per. (m)		16.67	
Min Ch El (m)	726.47	Shear (N/m2)		59.72	
Alpha	1.00	Stream Power (N/m s)		141.07	
Frctn Loss (m)	2.40	Cum Volume (1000 m3)		8.70	
C & E Loss (m)	0.01	Cum SA (1000 m2)		14.91	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=50

E.G. Elev (m)	727.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	727.59	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.59	Flow Area (m2)		11.47	
E.G. Slope (m/m)	0.010341	Area (m2)		11.47	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	17.29	Top Width (m)		17.29	
Vel Total (m/s)	2.55	Avg. Vel. (m/s)		2.55	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.66	
Conv. Total (m3/s)	287.7	Conv. (m3/s)		287.7	
Length Wtd. (m)	224.66	Wetted Per. (m)		17.55	
Min Ch El (m)	726.47	Shear (N/m2)		66.25	
Alpha	1.00	Stream Power (N/m s)		169.07	
Frctn Loss (m)	2.29	Cum Volume (1000 m3)		10.82	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		16.26	0.01

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=100

E.G. Elev (m)	728.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	727.73	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.73	Flow Area (m2)		13.98	
E.G. Slope (m/m)	0.009833	Area (m2)		13.98	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	17.95	Top Width (m)		17.95	
Vel Total (m/s)	2.76	Avg. Vel. (m/s)		2.76	
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	389.7	Conv. (m3/s)		389.7	
Length Wtd. (m)	224.66	Wetted Per. (m)		18.27	
Min Ch El (m)	726.47	Shear (N/m2)		73.77	
Alpha	1.00	Stream Power (N/m s)		203.95	
Frctn Loss (m)	2.18	Cum Volume (1000 m3)		13.36	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		17.33	0.07

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=500

E.G. Elev (m)	728.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	728.11	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.11	Flow Area (m2)		21.05	
E.G. Slope (m/m)	0.008953	Area (m2)		21.05	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	19.93	Top Width (m)		19.93	
Vel Total (m/s)	3.22	Avg. Vel. (m/s)		3.22	
Max Chl Dpth (m)	1.63	Hydr. Depth (m)		1.06	
Conv. Total (m3/s)	716.6	Conv. (m3/s)		716.6	
Length Wtd. (m)	224.66	Wetted Per. (m)		20.41	
Min Ch El (m)	726.47	Shear (N/m2)		90.58	

Plan: Plan 01 ArroyoValtierra 1 RS: 1034.385 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		291.72	
Frctn Loss (m)	1.98	Cum Volume (1000 m3)	0.01	20.54	0.04
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.08	20.25	0.68

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=2

E.G. Elev (m)	710.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	710.71	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	710.71	Flow Area (m2)		2.43	
E.G. Slope (m/m)	0.012670	Area (m2)		2.43	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	5.67	Top Width (m)		5.67	
Vel Total (m/s)	2.08	Avg. Vel. (m/s)		2.08	
Max Chl Dpth (m)	0.73	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	44.9	Conv. (m3/s)		44.9	
Length Wtd. (m)	158.70	Wetted Per. (m)		5.90	
Min Ch EI (m)	709.98	Shear (N/m2)		51.20	
Alpha	1.00	Stream Power (N/m s)		106.39	
Frctn Loss (m)	2.01	Cum Volume (1000 m3)		2.07	
C & E Loss (m)	0.01	Cum SA (1000 m2)		6.30	

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=5

E.G. Elev (m)	711.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	710.96	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	710.96	Flow Area (m2)		4.08	
E.G. Slope (m/m)	0.011711	Area (m2)		4.08	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	7.80	Top Width (m)		7.80	
Vel Total (m/s)	2.29	Avg. Vel. (m/s)		2.29	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	86.2	Conv. (m3/s)		86.2	
Length Wtd. (m)	158.70	Wetted Per. (m)		8.08	
Min Ch EI (m)	709.98	Shear (N/m2)		57.97	
Alpha	1.00	Stream Power (N/m s)		132.58	
Frctn Loss (m)	1.84	Cum Volume (1000 m3)		3.33	
C & E Loss (m)	0.00	Cum SA (1000 m2)		7.68	

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=10

E.G. Elev (m)	711.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	711.16	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.16	Flow Area (m2)		5.81	
E.G. Slope (m/m)	0.011099	Area (m2)		5.81	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	9.67	Top Width (m)		9.67	
Vel Total (m/s)	2.45	Avg. Vel. (m/s)		2.45	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	135.0	Conv. (m3/s)		135.0	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.00	
Min Ch EI (m)	709.98	Shear (N/m2)		63.28	
Alpha	1.00	Stream Power (N/m s)		154.81	
Frctn Loss (m)	1.75	Cum Volume (1000 m3)		4.60	
C & E Loss (m)	0.00	Cum SA (1000 m2)		8.65	



Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=25

E.G. Elev (m)	711.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	711.38	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.38	Flow Area (m2)		8.11	
E.G. Slope (m/m)	0.010481	Area (m2)		8.11	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	11.00	Top Width (m)		11.00	
Vel Total (m/s)	2.72	Avg. Vel. (m/s)		2.72	
Max Chl Dpth (m)	1.40	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	215.6	Conv. (m3/s)		215.6	
Length Wtd. (m)	158.70	Wetted Per. (m)		11.40	
Min Ch El (m)	709.98	Shear (N/m2)		73.16	
Alpha	1.00	Stream Power (N/m s)		199.02	
Frctn Loss (m)	1.64	Cum Volume (1000 m3)		6.74	
C & E Loss (m)	0.00	Cum SA (1000 m2)		11.82	

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=50

E.G. Elev (m)	711.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	711.55	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.55	Flow Area (m2)		10.06	
E.G. Slope (m/m)	0.010035	Area (m2)		10.06	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	11.92	Top Width (m)		11.92	
Vel Total (m/s)	2.91	Avg. Vel. (m/s)		2.91	
Max Chl Dpth (m)	1.57	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	292.1	Conv. (m3/s)		292.1	
Length Wtd. (m)	158.70	Wetted Per. (m)		12.38	
Min Ch El (m)	709.98	Shear (N/m2)		79.99	
Alpha	1.00	Stream Power (N/m s)		232.63	
Frctn Loss (m)	1.58	Cum Volume (1000 m3)		8.40	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.98	0.01

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=100

E.G. Elev (m)	712.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	711.74	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.74	Flow Area (m2)		12.46	
E.G. Slope (m/m)	0.009615	Area (m2)		12.46	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	12.96	Top Width (m)		12.96	
Vel Total (m/s)	3.10	Avg. Vel. (m/s)		3.10	
Max Chl Dpth (m)	1.76	Hydr. Depth (m)		0.96	
Conv. Total (m3/s)	394.1	Conv. (m3/s)		394.1	
Length Wtd. (m)	158.70	Wetted Per. (m)		13.49	
Min Ch El (m)	709.98	Shear (N/m2)		87.11	
Alpha	1.00	Stream Power (N/m s)		270.06	
Frctn Loss (m)	1.51	Cum Volume (1000 m3)		10.39	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.86	0.07

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=500

E.G. Elev (m)	712.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.64	Wt. n-Val.		0.030	
W.S. Elev (m)	712.22	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.22	Flow Area (m2)		19.14	
E.G. Slope (m/m)	0.008712	Area (m2)		19.14	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	

Plan: Plan 01 ArroyoValtierra 1 RS: 809.7249 Profile: T=500 (Continued)

Top Width (m)	14.99	Top Width (m)		14.99	
Vel Total (m/s)	3.54	Avg. Vel. (m/s)		3.54	
Max Chl Dpth (m)	2.24	Hydr. Depth (m)		1.28	
Conv. Total (m3/s)	726.4	Conv. (m3/s)		726.4	
Length Wtd. (m)	158.70	Wetted Per. (m)		15.75	
Min Ch El (m)	709.98	Shear (N/m2)		103.82	
Alpha	1.00	Stream Power (N/m s)		367.85	
Frctn Loss (m)	1.40	Cum Volume (1000 m3)	0.01	16.02	0.04
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.08	16.33	0.68

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=2

E.G. Elev (m)	696.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	
W.S. Elev (m)	695.82	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	695.82	Flow Area (m2)		2.55	
E.G. Slope (m/m)	0.012634	Area (m2)		2.55	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	6.51	Top Width (m)		6.51	
Vel Total (m/s)	1.98	Avg. Vel. (m/s)		1.98	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	44.9	Conv. (m3/s)		44.9	
Length Wtd. (m)	167.86	Wetted Per. (m)		6.66	
Min Ch El (m)	695.23	Shear (N/m2)		47.50	
Alpha	1.00	Stream Power (N/m s)		93.91	
Frctn Loss (m)	2.25	Cum Volume (1000 m3)		1.67	
C & E Loss (m)	0.02	Cum SA (1000 m2)		5.34	

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=5

E.G. Elev (m)	696.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	696.03	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.03	Flow Area (m2)		4.09	
E.G. Slope (m/m)	0.011499	Area (m2)		4.09	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	7.79	Top Width (m)		7.79	
Vel Total (m/s)	2.28	Avg. Vel. (m/s)		2.28	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	87.0	Conv. (m3/s)		87.0	
Length Wtd. (m)	167.86	Wetted Per. (m)		8.02	
Min Ch El (m)	695.23	Shear (N/m2)		57.51	
Alpha	1.00	Stream Power (N/m s)		131.21	
Frctn Loss (m)	2.05	Cum Volume (1000 m3)		2.68	
C & E Loss (m)	0.03	Cum SA (1000 m2)		6.44	

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=10

E.G. Elev (m)	696.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	696.22	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.22	Flow Area (m2)		5.69	
E.G. Slope (m/m)	0.010908	Area (m2)		5.69	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	9.07	Top Width (m)		9.07	
Vel Total (m/s)	2.50	Avg. Vel. (m/s)		2.50	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	136.2	Conv. (m3/s)		136.2	
Length Wtd. (m)	167.86	Wetted Per. (m)		9.35	
Min Ch El (m)	695.23	Shear (N/m2)		65.07	

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		162.63	
Frctn Loss (m)	1.91	Cum Volume (1000 m3)		3.69	
C & E Loss (m)	0.03	Cum SA (1000 m2)		7.16	

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=25

E.G. Elev (m)	696.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	696.47	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.47	Flow Area (m2)		8.09	
E.G. Slope (m/m)	0.010144	Area (m2)		8.09	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	10.69	Top Width (m)		10.69	
Vel Total (m/s)	2.73	Avg. Vel. (m/s)		2.73	
Max Chl Dpth (m)	1.24	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	219.1	Conv. (m3/s)		219.1	
Length Wtd. (m)	167.86	Wetted Per. (m)		11.06	
Min Ch El (m)	695.23	Shear (N/m2)		72.81	
Alpha	1.00	Stream Power (N/m s)		198.53	
Frctn Loss (m)	1.77	Cum Volume (1000 m3)		5.45	
C & E Loss (m)	0.03	Cum SA (1000 m2)		10.10	

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=50

E.G. Elev (m)	697.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	696.64	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.64	Flow Area (m2)		10.04	
E.G. Slope (m/m)	0.009884	Area (m2)		10.04	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	11.76	Top Width (m)		11.76	
Vel Total (m/s)	2.91	Avg. Vel. (m/s)		2.91	
Max Chl Dpth (m)	1.41	Hydr. Depth (m)		0.85	
Conv. Total (m3/s)	294.3	Conv. (m3/s)		294.3	
Length Wtd. (m)	167.86	Wetted Per. (m)		12.18	
Min Ch El (m)	695.23	Shear (N/m2)		79.90	
Alpha	1.00	Stream Power (N/m s)		232.79	
Frctn Loss (m)	1.71	Cum Volume (1000 m3)		6.81	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.10	0.01

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=100

E.G. Elev (m)	697.33	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	696.84	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.84	Flow Area (m2)		12.52	
E.G. Slope (m/m)	0.009448	Area (m2)		12.52	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	12.97	Top Width (m)		12.97	
Vel Total (m/s)	3.09	Avg. Vel. (m/s)		3.09	
Max Chl Dpth (m)	1.61	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	397.5	Conv. (m3/s)		397.5	
Length Wtd. (m)	167.86	Wetted Per. (m)		13.47	
Min Ch El (m)	695.23	Shear (N/m2)		86.14	
Alpha	1.00	Stream Power (N/m s)		265.87	
Frctn Loss (m)	1.64	Cum Volume (1000 m3)		8.41	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.80	0.07

Plan: Plan 01 ArroyoValtierra 1 RS: 651.0296 Profile: T=500

E.G. Elev (m)	697.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.		0.030	
W.S. Elev (m)	697.33	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.33	Flow Area (m2)		19.98	
E.G. Slope (m/m)	0.008937	Area (m2)		19.98	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	17.21	Top Width (m)		17.21	
Vel Total (m/s)	3.39	Avg. Vel. (m/s)		3.39	
Max Chl Dpth (m)	2.10	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	717.2	Conv. (m3/s)		717.2	
Length Wtd. (m)	167.86	Wetted Per. (m)		17.88	
Min Ch El (m)	695.23	Shear (N/m2)		97.93	
Alpha	1.00	Stream Power (N/m s)		332.28	
Frctn Loss (m)	1.55	Cum Volume (1000 m3)	0.01	12.92	0.04
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.08	13.77	0.68

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=2

E.G. Elev (m)	687.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.13	Wt. n-Val.		0.030	
W.S. Elev (m)	687.67	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.67	Flow Area (m2)		3.18	
E.G. Slope (m/m)	0.014261	Area (m2)		3.18	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	12.55	Top Width (m)		12.55	
Vel Total (m/s)	1.59	Avg. Vel. (m/s)		1.59	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.25	
Conv. Total (m3/s)	42.3	Conv. (m3/s)		42.3	
Length Wtd. (m)	236.65	Wetted Per. (m)		12.64	
Min Ch El (m)	687.09	Shear (N/m2)		35.20	
Alpha	1.00	Stream Power (N/m s)		55.86	
Frctn Loss (m)	3.21	Cum Volume (1000 m3)		1.19	
C & E Loss (m)	0.01	Cum SA (1000 m2)		3.74	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=5

E.G. Elev (m)	687.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.030	
W.S. Elev (m)	687.80	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.80	Flow Area (m2)		5.14	
E.G. Slope (m/m)	0.012946	Area (m2)		5.14	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	15.38	Top Width (m)		15.38	
Vel Total (m/s)	1.82	Avg. Vel. (m/s)		1.82	
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	82.0	Conv. (m3/s)		82.0	
Length Wtd. (m)	236.65	Wetted Per. (m)		15.51	
Min Ch El (m)	687.09	Shear (N/m2)		42.06	
Alpha	1.00	Stream Power (N/m s)		76.37	
Frctn Loss (m)	2.92	Cum Volume (1000 m3)		1.91	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.49	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=10

E.G. Elev (m)	688.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	687.92	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.92	Flow Area (m2)		6.95	
E.G. Slope (m/m)	0.011902	Area (m2)		6.95	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=10 (Continued)

Top Width (m)	16.33	Top Width (m)		16.33	
Vel Total (m/s)	2.05	Avg. Vel. (m/s)		2.05	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	130.3	Conv. (m3/s)		130.3	
Length Wtd. (m)	236.65	Wetted Per. (m)		16.48	
Min Ch El (m)	687.09	Shear (N/m2)		49.23	
Alpha	1.00	Stream Power (N/m s)		100.69	
Frctn Loss (m)	2.72	Cum Volume (1000 m3)		2.63	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.03	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=25

E.G. Elev (m)	688.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	688.07	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.07	Flow Area (m2)		9.55	
E.G. Slope (m/m)	0.011006	Area (m2)		9.55	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	17.60	Top Width (m)		17.60	
Vel Total (m/s)	2.31	Avg. Vel. (m/s)		2.31	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	210.4	Conv. (m3/s)		210.4	
Length Wtd. (m)	236.65	Wetted Per. (m)		17.80	
Min Ch El (m)	687.09	Shear (N/m2)		57.95	
Alpha	1.00	Stream Power (N/m s)		133.85	
Frctn Loss (m)	2.54	Cum Volume (1000 m3)		3.97	
C & E Loss (m)	0.01	Cum SA (1000 m2)		7.73	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=50

E.G. Elev (m)	688.51	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	688.19	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.19	Flow Area (m2)		11.76	
E.G. Slope (m/m)	0.010489	Area (m2)		11.76	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	18.67	Top Width (m)		18.67	
Vel Total (m/s)	2.49	Avg. Vel. (m/s)		2.49	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	285.7	Conv. (m3/s)		285.7	
Length Wtd. (m)	236.65	Wetted Per. (m)		18.89	
Min Ch El (m)	687.09	Shear (N/m2)		64.01	
Alpha	1.00	Stream Power (N/m s)		159.30	
Frctn Loss (m)	2.43	Cum Volume (1000 m3)		4.98	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.55	0.01

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=100

E.G. Elev (m)	688.70	Element	Left OB	Channel	Right OB
Vel Head (m)	0.36	Wt. n-Val.		0.030	
W.S. Elev (m)	688.33	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.33	Flow Area (m2)		14.45	
E.G. Slope (m/m)	0.010056	Area (m2)		14.45	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	
Top Width (m)	19.94	Top Width (m)		19.94	
Vel Total (m/s)	2.67	Avg. Vel. (m/s)		2.67	
Max Chl Dpth (m)	1.24	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	385.3	Conv. (m3/s)		385.3	
Length Wtd. (m)	236.65	Wetted Per. (m)		20.19	
Min Ch El (m)	687.09	Shear (N/m2)		70.57	

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		188.73	
Frctn Loss (m)	2.34	Cum Volume (1000 m3)		6.14	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		9.04	0.07

Plan: Plan 01 ArroyoValtierra 1 RS: 483.1662 Profile: T=500

E.G. Elev (m)	689.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.030	
W.S. Elev (m)	688.71	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.71	Flow Area (m2)		22.90	
E.G. Slope (m/m)	0.009486	Area (m2)		22.90	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	25.96	Top Width (m)		25.96	
Vel Total (m/s)	2.96	Avg. Vel. (m/s)		2.96	
Max Chl Dpth (m)	1.62	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	696.1	Conv. (m3/s)		696.1	
Length Wtd. (m)	236.65	Wetted Per. (m)		26.28	
Min Ch El (m)	687.09	Shear (N/m2)		81.03	
Alpha	1.00	Stream Power (N/m s)		239.96	
Frctn Loss (m)	2.19	Cum Volume (1000 m3)	0.01	9.32	0.04
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.08	10.15	0.68

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=2

E.G. Elev (m)	673.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	672.99	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	672.99	Flow Area (m2)		2.60	
E.G. Slope (m/m)	0.012913	Area (m2)		2.60	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	6.87	Top Width (m)		6.87	
Vel Total (m/s)	1.94	Avg. Vel. (m/s)		1.94	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	44.4	Conv. (m3/s)		44.4	
Length Wtd. (m)	189.07	Wetted Per. (m)		7.07	
Min Ch El (m)	672.40	Shear (N/m2)		46.55	
Alpha	1.00	Stream Power (N/m s)		90.48	
Frctn Loss (m)	2.47	Cum Volume (1000 m3)		0.51	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.44	

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=5

E.G. Elev (m)	673.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	
W.S. Elev (m)	673.19	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.19	Flow Area (m2)		4.12	
E.G. Slope (m/m)	0.011811	Area (m2)		4.12	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	8.04	Top Width (m)		8.04	
Vel Total (m/s)	2.26	Avg. Vel. (m/s)		2.26	
Max Chl Dpth (m)	0.79	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	85.9	Conv. (m3/s)		85.9	
Length Wtd. (m)	189.07	Wetted Per. (m)		8.34	
Min Ch El (m)	672.40	Shear (N/m2)		57.24	
Alpha	1.00	Stream Power (N/m s)		129.61	
Frctn Loss (m)	2.26	Cum Volume (1000 m3)		0.81	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.72	

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=10

E.G. Elev (m)	673.69	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	673.37	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.37	Flow Area (m2)		5.70	
E.G. Slope (m/m)	0.011111	Area (m2)		5.70	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	9.13	Top Width (m)		9.13	
Vel Total (m/s)	2.50	Avg. Vel. (m/s)		2.50	
Max Chl Dpth (m)	0.97	Hydr. Depth (m)		0.62	
Conv. Total (m3/s)	134.9	Conv. (m3/s)		134.9	
Length Wtd. (m)	189.07	Wetted Per. (m)		9.52	
Min Ch El (m)	672.40	Shear (N/m2)		65.22	
Alpha	1.00	Stream Power (N/m s)		162.74	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		1.13	
C & E Loss (m)	0.02	Cum SA (1000 m2)		2.02	

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=25

E.G. Elev (m)	674.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	673.61	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.61	Flow Area (m2)		8.03	
E.G. Slope (m/m)	0.010490	Area (m2)		8.03	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	10.62	Top Width (m)		10.62	
Vel Total (m/s)	2.75	Avg. Vel. (m/s)		2.75	
Max Chl Dpth (m)	1.21	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	215.5	Conv. (m3/s)		215.5	
Length Wtd. (m)	189.07	Wetted Per. (m)		11.13	
Min Ch El (m)	672.40	Shear (N/m2)		74.24	
Alpha	1.00	Stream Power (N/m s)		203.95	
Frctn Loss (m)	2.22	Cum Volume (1000 m3)		1.89	
C & E Loss (m)	0.06	Cum SA (1000 m2)		4.39	

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=50

E.G. Elev (m)	674.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	673.80	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.80	Flow Area (m2)		10.24	
E.G. Slope (m/m)	0.010079	Area (m2)		10.24	
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	
Top Width (m)	12.39	Top Width (m)		12.39	
Vel Total (m/s)	2.86	Avg. Vel. (m/s)		2.86	
Max Chl Dpth (m)	1.40	Hydr. Depth (m)		0.83	
Conv. Total (m3/s)	291.4	Conv. (m3/s)		291.4	
Length Wtd. (m)	189.07	Wetted Per. (m)		12.99	
Min Ch El (m)	672.40	Shear (N/m2)		77.94	
Alpha	1.00	Stream Power (N/m s)		222.61	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		2.37	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		4.87	0.01

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=100

E.G. Elev (m)	674.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	673.99	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.99	Flow Area (m2)		12.75	
E.G. Slope (m/m)	0.009754	Area (m2)		12.75	
Q Total (m3/s)	38.64	Flow (m3/s)		38.64	

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=100 (Continued)

Top Width (m)	13.74	Top Width (m)		13.74	
Vel Total (m/s)	3.03	Avg. Vel. (m/s)		3.03	
Max Chl Dpth (m)	1.59	Hydr. Depth (m)		0.93	
Conv. Total (m3/s)	391.2	Conv. (m3/s)		391.2	
Length Wtd. (m)	189.07	Wetted Per. (m)		14.44	
Min Ch El (m)	672.40	Shear (N/m2)		84.47	
Alpha	1.00	Stream Power (N/m s)		255.96	
Frctn Loss (m)	2.01	Cum Volume (1000 m3)		2.92	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		5.05	0.07

Plan: Plan 01 ArroyoValtierra 1 RS: 246.5114 Profile: T=500

E.G. Elev (m)	675.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	674.44	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.44	Flow Area (m2)		19.24	
E.G. Slope (m/m)	0.009051	Area (m2)		19.24	
Q Total (m3/s)	67.80	Flow (m3/s)		67.80	
Top Width (m)	15.48	Top Width (m)		15.48	
Vel Total (m/s)	3.52	Avg. Vel. (m/s)		3.52	
Max Chl Dpth (m)	2.04	Hydr. Depth (m)		1.24	
Conv. Total (m3/s)	712.7	Conv. (m3/s)		712.7	
Length Wtd. (m)	189.09	Wetted Per. (m)		16.43	
Min Ch El (m)	672.40	Shear (N/m2)		103.95	
Alpha	1.00	Stream Power (N/m s)		366.25	
Frctn Loss (m)	1.80	Cum Volume (1000 m3)	0.01	4.33	0.04
C & E Loss (m)	0.09	Cum SA (1000 m2)	0.08	5.24	0.68

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=2

E.G. Elev (m)	661.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.030	
W.S. Elev (m)	661.15	Reach Len. (m)			
Crit W.S. (m)	661.15	Flow Area (m2)		2.77	
E.G. Slope (m/m)	0.013256	Area (m2)		2.77	
Q Total (m3/s)	5.05	Flow (m3/s)		5.05	
Top Width (m)	8.34	Top Width (m)		8.34	
Vel Total (m/s)	1.83	Avg. Vel. (m/s)		1.83	
Max Chl Dpth (m)	0.56	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	43.9	Conv. (m3/s)		43.9	
Length Wtd. (m)		Wetted Per. (m)		8.43	
Min Ch El (m)	660.59	Shear (N/m2)		42.67	
Alpha	1.00	Stream Power (N/m s)		77.91	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=5

E.G. Elev (m)	661.56	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	661.33	Reach Len. (m)			
Crit W.S. (m)	661.33	Flow Area (m2)		4.46	
E.G. Slope (m/m)	0.012049	Area (m2)		4.46	
Q Total (m3/s)	9.33	Flow (m3/s)		9.33	
Top Width (m)	10.18	Top Width (m)		10.18	
Vel Total (m/s)	2.09	Avg. Vel. (m/s)		2.09	
Max Chl Dpth (m)	0.74	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	85.0	Conv. (m3/s)		85.0	
Length Wtd. (m)		Wetted Per. (m)		10.31	
Min Ch El (m)	660.59	Shear (N/m2)		51.10	



Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		106.93	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=10

E.G. Elev (m)	661.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	
W.S. Elev (m)	661.50	Reach Len. (m)			
Crit W.S. (m)	661.50	Flow Area (m2)		6.27	
E.G. Slope (m/m)	0.011424	Area (m2)		6.27	
Q Total (m3/s)	14.22	Flow (m3/s)		14.22	
Top Width (m)	12.21	Top Width (m)		12.21	
Vel Total (m/s)	2.27	Avg. Vel. (m/s)		2.27	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	133.0	Conv. (m3/s)		133.0	
Length Wtd. (m)		Wetted Per. (m)		12.37	
Min Ch El (m)	660.59	Shear (N/m2)		56.84	
Alpha	1.00	Stream Power (N/m s)		128.82	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=25

E.G. Elev (m)	661.95	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.030	
W.S. Elev (m)	661.78	Reach Len. (m)			
Crit W.S. (m)	661.78	Flow Area (m2)		11.97	
E.G. Slope (m/m)	0.013270	Area (m2)		11.97	
Q Total (m3/s)	22.07	Flow (m3/s)		22.07	
Top Width (m)	35.80	Top Width (m)		35.80	
Vel Total (m/s)	1.84	Avg. Vel. (m/s)		1.84	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	191.6	Conv. (m3/s)		191.6	
Length Wtd. (m)		Wetted Per. (m)		36.00	
Min Ch El (m)	660.59	Shear (N/m2)		43.28	
Alpha	1.00	Stream Power (N/m s)		79.77	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=50

E.G. Elev (m)	662.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.85	Reach Len. (m)			
Crit W.S. (m)	661.85	Flow Area (m2)		14.86	0.00
E.G. Slope (m/m)	0.012777	Area (m2)		14.86	0.00
Q Total (m3/s)	29.26	Flow (m3/s)		29.26	0.00
Top Width (m)	39.23	Top Width (m)		39.14	0.10
Vel Total (m/s)	1.97	Avg. Vel. (m/s)		1.97	0.14
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.38	0.01
Conv. Total (m3/s)	258.9	Conv. (m3/s)		258.9	0.0
Length Wtd. (m)		Wetted Per. (m)		39.34	0.10
Min Ch El (m)	660.59	Shear (N/m2)		47.33	0.91
Alpha	1.00	Stream Power (N/m s)		93.19	0.13
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=100

E.G. Elev (m)	662.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.94	Reach Len. (m)			
Crit W.S. (m)	661.94	Flow Area (m2)		18.17	0.03
E.G. Slope (m/m)	0.011617	Area (m2)		18.17	0.03
Q Total (m3/s)	38.64	Flow (m3/s)		38.62	0.02
Top Width (m)	40.37	Top Width (m)		39.72	0.66
Vel Total (m/s)	2.12	Avg. Vel. (m/s)		2.13	0.48
Max Chl Dpth (m)	1.35	Hydr. Depth (m)		0.46	0.05
Conv. Total (m3/s)	358.5	Conv. (m3/s)		358.4	0.1
Length Wtd. (m)		Wetted Per. (m)		39.93	0.67
Min Ch El (m)	660.59	Shear (N/m2)		51.85	5.56
Alpha	1.00	Stream Power (N/m s)		110.21	2.67
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 01 ArroyoValtierra 1 RS: 57.44248 Profile: T=500

E.G. Elev (m)	662.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.15	Reach Len. (m)			
Crit W.S. (m)	662.15	Flow Area (m2)	0.08	26.60	0.44
E.G. Slope (m/m)	0.010029	Area (m2)	0.08	26.60	0.44
Q Total (m3/s)	67.80	Flow (m3/s)	0.05	67.42	0.33
Top Width (m)	47.63	Top Width (m)	0.89	40.00	6.73
Vel Total (m/s)	2.50	Avg. Vel. (m/s)	0.64	2.53	0.76
Max Chl Dpth (m)	1.56	Hydr. Depth (m)	0.08	0.67	0.06
Conv. Total (m3/s)	677.0	Conv. (m3/s)	0.5	673.2	3.3
Length Wtd. (m)		Wetted Per. (m)	0.91	40.22	6.76
Min Ch El (m)	660.59	Shear (N/m2)	8.20	65.06	6.34
Alpha	1.02	Stream Power (N/m s)	5.22	164.88	4.81
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

## ESCENARIO SUELO NORMAL

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=2

E.G. Elev (m)	745.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	744.96	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.96	Flow Area (m2)		7.90	
E.G. Slope (m/m)	0.011876	Area (m2)		7.90	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	17.61	Top Width (m)		17.61	
Vel Total (m/s)	2.11	Avg. Vel. (m/s)		2.11	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	153.1	Conv. (m3/s)		153.1	
Length Wtd. (m)	90.04	Wetted Per. (m)		17.80	
Min Ch El (m)	743.84	Shear (N/m2)		51.66	
Alpha	1.00	Stream Power (N/m s)		109.14	
Frctn Loss (m)	2.23	Cum Volume (1000 m3)		15.10	0.01
C & E Loss (m)	0.09	Cum SA (1000 m2)		29.92	0.06

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=5

E.G. Elev (m)	745.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.22	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.22	Flow Area (m2)	0.18	13.37	0.56
E.G. Slope (m/m)	0.009101	Area (m2)	0.18	13.37	0.56
Q Total (m3/s)	30.75	Flow (m3/s)	0.14	30.32	0.29
Top Width (m)	31.91	Top Width (m)	1.55	22.00	8.36
Vel Total (m/s)	2.18	Avg. Vel. (m/s)	0.75	2.27	0.52
Max Chl Dpth (m)	1.38	Hydr. Depth (m)	0.12	0.61	0.07
Conv. Total (m3/s)	322.3	Conv. (m3/s)	1.4	317.8	3.1
Length Wtd. (m)	90.12	Wetted Per. (m)	1.57	22.20	8.36
Min Ch El (m)	743.84	Shear (N/m2)	10.27	53.75	5.96
Alpha	1.07	Stream Power (N/m s)	7.73	121.90	3.12
Frctn Loss (m)	1.81	Cum Volume (1000 m3)	0.01	23.64	0.05
C & E Loss (m)	0.14	Cum SA (1000 m2)	0.06	35.63	0.52

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=10

E.G. Elev (m)	745.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.39	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.39	Flow Area (m2)	0.53	17.01	2.09
E.G. Slope (m/m)	0.007747	Area (m2)	0.53	17.01	2.09
Q Total (m3/s)	44.46	Flow (m3/s)	0.52	41.79	2.15
Top Width (m)	34.79	Top Width (m)	2.76	22.00	10.03
Vel Total (m/s)	2.26	Avg. Vel. (m/s)	0.98	2.46	1.03
Max Chl Dpth (m)	1.55	Hydr. Depth (m)	0.19	0.77	0.21
Conv. Total (m3/s)	505.1	Conv. (m3/s)	5.9	474.8	24.4
Length Wtd. (m)	90.36	Wetted Per. (m)	2.78	22.20	10.05
Min Ch El (m)	743.84	Shear (N/m2)	14.56	58.21	15.78
Alpha	1.12	Stream Power (N/m s)	14.20	143.02	16.23
Frctn Loss (m)	1.57	Cum Volume (1000 m3)	0.02	31.14	0.15
C & E Loss (m)	0.16	Cum SA (1000 m2)	0.11	40.21	0.64

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25

E.G. Elev (m)	745.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.36	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.55	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.55	Flow Area (m2)	1.10	20.67	3.81
E.G. Slope (m/m)	0.007635	Area (m2)	1.10	20.67	3.81
Q Total (m3/s)	64.27	Flow (m3/s)	1.33	57.38	5.56

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25 (Continued)

Top Width (m)	36.78	Top Width (m)	4.05	22.00	10.73
Vel Total (m/s)	2.51	Avg. Vel. (m/s)	1.21	2.78	1.46
Max Chl Dpth (m)	1.71	Hydr. Depth (m)	0.27	0.94	0.36
Conv. Total (m3/s)	735.5	Conv. (m3/s)	15.2	656.7	63.6
Length Wtd. (m)	90.61	Wetted Per. (m)	4.09	22.20	10.76
Min Ch El (m)	743.84	Shear (N/m2)	20.10	69.70	26.52
Alpha	1.12	Stream Power (N/m s)	24.37	193.53	38.67
Frctn Loss (m)	1.46	Cum Volume (1000 m3)	0.04	40.55	0.27
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.17	44.32	0.81

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=50

E.G. Elev (m)	746.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.40	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.69	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.69	Flow Area (m2)	1.78	23.75	5.36
E.G. Slope (m/m)	0.007107	Area (m2)	1.78	23.75	5.36
Q Total (m3/s)	81.25	Flow (m3/s)	2.30	69.82	9.12
Top Width (m)	38.92	Top Width (m)	5.61	22.00	11.31
Vel Total (m/s)	2.63	Avg. Vel. (m/s)	1.30	2.94	1.70
Max Chl Dpth (m)	1.85	Hydr. Depth (m)	0.32	1.08	0.47
Conv. Total (m3/s)	963.8	Conv. (m3/s)	27.3	828.3	108.2
Length Wtd. (m)	90.77	Wetted Per. (m)	5.65	22.20	11.36
Min Ch El (m)	743.84	Shear (N/m2)	21.89	74.57	32.87
Alpha	1.13	Stream Power (N/m s)	28.42	219.20	55.96
Frctn Loss (m)	1.36	Cum Volume (1000 m3)	0.08	48.05	0.40
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.35	47.41	1.00

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=100

E.G. Elev (m)	746.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.84	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.84	Flow Area (m2)	2.63	26.87	7.00
E.G. Slope (m/m)	0.006932	Area (m2)	2.63	26.87	7.00
Q Total (m3/s)	102.37	Flow (m3/s)	4.08	84.69	13.59
Top Width (m)	40.11	Top Width (m)	6.21	22.00	11.90
Vel Total (m/s)	2.80	Avg. Vel. (m/s)	1.55	3.15	1.94
Max Chl Dpth (m)	2.00	Hydr. Depth (m)	0.42	1.22	0.59
Conv. Total (m3/s)	1229.5	Conv. (m3/s)	49.0	1017.2	163.3
Length Wtd. (m)	90.86	Wetted Per. (m)	6.28	22.20	11.97
Min Ch El (m)	743.84	Shear (N/m2)	28.44	82.28	39.78
Alpha	1.12	Stream Power (N/m s)	44.16	259.34	77.23
Frctn Loss (m)	1.29	Cum Volume (1000 m3)	0.14	56.57	0.57
C & E Loss (m)	0.18	Cum SA (1000 m2)	0.58	50.09	1.21

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500

E.G. Elev (m)	746.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	746.16	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	746.16	Flow Area (m2)	4.75	34.01	11.05
E.G. Slope (m/m)	0.006779	Area (m2)	4.75	34.01	11.05
Q Total (m3/s)	161.15	Flow (m3/s)	10.06	124.05	27.04
Top Width (m)	41.86	Top Width (m)	6.86	22.00	13.00
Vel Total (m/s)	3.24	Avg. Vel. (m/s)	2.12	3.65	2.45
Max Chl Dpth (m)	2.32	Hydr. Depth (m)	0.69	1.55	0.85
Conv. Total (m3/s)	1957.2	Conv. (m3/s)	122.2	1506.6	328.4
Length Wtd. (m)	90.93	Wetted Per. (m)	7.01	22.20	13.11
Min Ch El (m)	743.84	Shear (N/m2)	45.06	101.85	56.00

Plan: Plan 06 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500 (Continued)

Alpha	1.10	Stream Power (N/m s)	95.41	371.46	137.07
Frctn Loss (m)	1.12	Cum Volume (1000 m3)	0.48	77.82	1.70
C & E Loss (m)	0.18	Cum SA (1000 m2)	1.83	56.15	5.40

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=2

E.G. Elev (m)	742.86	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.71	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.02	Flow Area (m2)		3.46	0.07
E.G. Slope (m/m)	0.081403	Area (m2)		3.46	0.07
Q Total (m3/s)	16.68	Flow (m3/s)		16.52	0.16
Top Width (m)	10.12	Top Width (m)		9.66	0.46
Vel Total (m/s)	4.73	Avg. Vel. (m/s)		4.78	2.37
Max Chl Dpth (m)	0.54	Hydr. Depth (m)		0.36	0.15
Conv. Total (m3/s)	58.5	Conv. (m3/s)		57.9	0.6
Length Wtd. (m)	116.67	Wetted Per. (m)		9.70	0.55
Min Ch El (m)	741.17	Shear (N/m2)		284.50	99.36
Alpha	1.01	Stream Power (N/m s)		1360.05	235.58
Frctn Loss (m)	2.84	Cum Volume (1000 m3)		14.59	0.01
C & E Loss (m)	0.27	Cum SA (1000 m2)		28.70	0.04

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=5

E.G. Elev (m)	743.53	Element	Left OB	Channel	Right OB
Vel Head (m)	1.64	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.89	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.32	Flow Area (m2)		5.28	0.18
E.G. Slope (m/m)	0.076505	Area (m2)		5.28	0.18
Q Total (m3/s)	30.75	Flow (m3/s)		30.20	0.55
Top Width (m)	11.51	Top Width (m)		10.78	0.74
Vel Total (m/s)	5.63	Avg. Vel. (m/s)		5.71	3.15
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.49	0.24
Conv. Total (m3/s)	111.2	Conv. (m3/s)		109.2	2.0
Length Wtd. (m)	116.83	Wetted Per. (m)		10.83	0.88
Min Ch El (m)	741.17	Shear (N/m2)		366.09	149.84
Alpha	1.02	Stream Power (N/m s)		2092.02	472.00
Frctn Loss (m)	3.03	Cum Volume (1000 m3)		22.80	0.01
C & E Loss (m)	0.37	Cum SA (1000 m2)		34.16	0.06

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=10

E.G. Elev (m)	743.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.91	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.04	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.57	Flow Area (m2)		7.02	0.31
E.G. Slope (m/m)	0.068220	Area (m2)		7.02	0.31
Q Total (m3/s)	44.46	Flow (m3/s)		43.36	1.10
Top Width (m)	12.66	Top Width (m)		11.69	0.98
Vel Total (m/s)	6.07	Avg. Vel. (m/s)		6.18	3.59
Max Chl Dpth (m)	0.87	Hydr. Depth (m)		0.60	0.31
Conv. Total (m3/s)	170.2	Conv. (m3/s)		166.0	4.2
Length Wtd. (m)	116.96	Wetted Per. (m)		11.75	1.16
Min Ch El (m)	741.17	Shear (N/m2)		399.66	177.00
Alpha	1.02	Stream Power (N/m s)		2468.14	635.11
Frctn Loss (m)	3.12	Cum Volume (1000 m3)		30.06	0.02
C & E Loss (m)	0.42	Cum SA (1000 m2)		38.70	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=25

E.G. Elev (m)	744.29	Element	Left OB	Channel	Right OB
Vel Head (m)	2.03	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.26	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.83	Flow Area (m2)		9.73	0.56
E.G. Slope (m/m)	0.053399	Area (m2)		9.73	0.56
Q Total (m3/s)	64.27	Flow (m3/s)		62.09	2.18
Top Width (m)	14.14	Top Width (m)		12.82	1.32
Vel Total (m/s)	6.24	Avg. Vel. (m/s)		6.38	3.88
Max Chl Dpth (m)	1.09	Hydr. Depth (m)		0.76	0.43
Conv. Total (m3/s)	278.1	Conv. (m3/s)		268.7	9.4
Length Wtd. (m)	117.15	Wetted Per. (m)		12.91	1.57
Min Ch El (m)	741.17	Shear (N/m2)		394.79	187.24
Alpha	1.02	Stream Power (N/m s)		2518.97	726.54
Frctn Loss (m)	3.14	Cum Volume (1000 m3)	0.00	39.18	0.05
C & E Loss (m)	0.41	Cum SA (1000 m2)	0.01	42.76	0.20

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=50

E.G. Elev (m)	744.56	Element	Left OB	Channel	Right OB
Vel Head (m)	2.14	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.42	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.04	Flow Area (m2)		11.89	0.80
E.G. Slope (m/m)	0.049853	Area (m2)		11.89	0.80
Q Total (m3/s)	81.25	Flow (m3/s)		77.90	3.35
Top Width (m)	15.86	Top Width (m)		14.29	1.57
Vel Total (m/s)	6.41	Avg. Vel. (m/s)		6.55	4.21
Max Chl Dpth (m)	1.25	Hydr. Depth (m)		0.83	0.51
Conv. Total (m3/s)	363.9	Conv. (m3/s)		348.9	15.0
Length Wtd. (m)	117.30	Wetted Per. (m)		14.39	1.87
Min Ch El (m)	741.17	Shear (N/m2)		403.94	208.06
Alpha	1.02	Stream Power (N/m s)		2647.22	876.10
Frctn Loss (m)	3.15	Cum Volume (1000 m3)	0.01	46.44	0.09
C & E Loss (m)	0.39	Cum SA (1000 m2)	0.13	45.78	0.34

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=100

E.G. Elev (m)	744.82	Element	Left OB	Channel	Right OB
Vel Head (m)	2.22	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	742.60	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.27	Flow Area (m2)	0.04	14.57	1.10
E.G. Slope (m/m)	0.043849	Area (m2)	0.04	14.57	1.10
Q Total (m3/s)	102.37	Flow (m3/s)	0.05	97.50	4.82
Top Width (m)	18.02	Top Width (m)	0.74	15.43	1.84
Vel Total (m/s)	6.51	Avg. Vel. (m/s)	1.06	6.69	4.40
Max Chl Dpth (m)	1.43	Hydr. Depth (m)	0.06	0.94	0.59
Conv. Total (m3/s)	488.9	Conv. (m3/s)	0.2	465.6	23.0
Length Wtd. (m)	117.43	Wetted Per. (m)	0.75	15.53	2.19
Min Ch El (m)	741.17	Shear (N/m2)	25.28	403.49	214.86
Alpha	1.03	Stream Power (N/m s)	26.67	2699.41	944.36
Frctn Loss (m)	3.13	Cum Volume (1000 m3)	0.03	54.70	0.15
C & E Loss (m)	0.36	Cum SA (1000 m2)	0.30	48.41	0.51

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500

E.G. Elev (m)	745.44	Element	Left OB	Channel	Right OB
Vel Head (m)	2.41	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	743.03	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.84	Flow Area (m2)	0.98	21.28	2.05
E.G. Slope (m/m)	0.029292	Area (m2)	0.98	21.28	2.05
Q Total (m3/s)	161.15	Flow (m3/s)	2.31	149.80	9.04

Plan: Plan 06 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500 (Continued)

Top Width (m)	21.56	Top Width (m)	3.61	15.43	2.52
Vel Total (m/s)	6.63	Avg. Vel. (m/s)	2.37	7.04	4.42
Max Chl Dpth (m)	1.86	Hydr. Depth (m)	0.27	1.38	0.81
Conv. Total (m3/s)	941.6	Conv. (m3/s)	13.5	875.2	52.8
Length Wtd. (m)	117.45	Wetted Per. (m)	3.66	15.53	3.00
Min Ch El (m)	741.17	Shear (N/m2)	76.71	393.62	196.02
Alpha	1.07	Stream Power (N/m s)	181.50	2770.38	866.81
Frctn Loss (m)	3.02	Cum Volume (1000 m3)	0.26	75.33	1.03
C & E Loss (m)	0.22	Cum SA (1000 m2)	1.41	54.47	4.60

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=2

E.G. Elev (m)	739.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	739.48	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.49	Flow Area (m2)		7.27	
E.G. Slope (m/m)	0.011547	Area (m2)		7.27	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	14.01	Top Width (m)		14.01	
Vel Total (m/s)	2.29	Avg. Vel. (m/s)		2.29	
Max Chl Dpth (m)	0.78	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	155.2	Conv. (m3/s)		155.2	
Length Wtd. (m)	138.24	Wetted Per. (m)		14.18	
Min Ch El (m)	738.70	Shear (N/m2)		58.06	
Alpha	1.00	Stream Power (N/m s)		133.22	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		13.97	
C & E Loss (m)	0.01	Cum SA (1000 m2)		27.32	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=5

E.G. Elev (m)	740.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	739.72	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.78	Flow Area (m2)		10.88	
E.G. Slope (m/m)	0.012915	Area (m2)		10.88	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	16.66	Top Width (m)		16.66	
Vel Total (m/s)	2.83	Avg. Vel. (m/s)		2.83	
Max Chl Dpth (m)	1.02	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	270.6	Conv. (m3/s)		270.6	
Length Wtd. (m)	138.24	Wetted Per. (m)		16.88	
Min Ch El (m)	738.70	Shear (N/m2)		81.62	
Alpha	1.00	Stream Power (N/m s)		230.68	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		21.86	
C & E Loss (m)	0.01	Cum SA (1000 m2)		32.56	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10

E.G. Elev (m)	740.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	739.90	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.00	Flow Area (m2)		14.06	
E.G. Slope (m/m)	0.014136	Area (m2)		14.06	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	19.48	Top Width (m)		19.48	
Vel Total (m/s)	3.16	Avg. Vel. (m/s)		3.16	
Max Chl Dpth (m)	1.20	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	373.9	Conv. (m3/s)		373.9	
Length Wtd. (m)	138.24	Wetted Per. (m)		19.72	
Min Ch El (m)	738.70	Shear (N/m2)		98.83	



Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		312.57	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		28.83	
C & E Loss (m)	0.01	Cum SA (1000 m2)		36.88	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=25

E.G. Elev (m)	740.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.07	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.23	Flow Area (m2)	0.00	17.70	0.05
E.G. Slope (m/m)	0.016074	Area (m2)	0.00	17.70	0.05
Q Total (m3/s)	64.27	Flow (m3/s)	0.00	64.23	0.04
Top Width (m)	22.61	Top Width (m)	0.07	22.00	0.55
Vel Total (m/s)	3.62	Avg. Vel. (m/s)	0.16	3.63	0.81
Max Chl Dpth (m)	1.37	Hydr. Depth (m)	0.01	0.80	0.09
Conv. Total (m3/s)	506.9	Conv. (m3/s)	0.0	506.6	0.3
Length Wtd. (m)	138.25	Wetted Per. (m)	0.07	22.25	0.57
Min Ch El (m)	738.70	Shear (N/m2)	1.12	125.41	13.11
Alpha	1.00	Stream Power (N/m s)	0.18	455.05	10.56
Frctn Loss (m)	2.16	Cum Volume (1000 m3)	0.00	37.58	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)	0.00	40.73	0.05

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=50

E.G. Elev (m)	741.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.83	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.18	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.40	Flow Area (m2)	0.04	20.10	0.13
E.G. Slope (m/m)	0.016784	Area (m2)	0.04	20.10	0.13
Q Total (m3/s)	81.25	Flow (m3/s)	0.02	81.08	0.14
Top Width (m)	23.46	Top Width (m)	0.57	22.00	0.89
Vel Total (m/s)	4.01	Avg. Vel. (m/s)	0.66	4.03	1.14
Max Chl Dpth (m)	1.48	Hydr. Depth (m)	0.06	0.91	0.14
Conv. Total (m3/s)	627.2	Conv. (m3/s)	0.2	625.9	1.1
Length Wtd. (m)	138.26	Wetted Per. (m)	0.59	22.25	0.93
Min Ch El (m)	738.70	Shear (N/m2)	9.93	148.66	22.22
Alpha	1.01	Stream Power (N/m s)	6.59	599.83	25.25
Frctn Loss (m)	2.17	Cum Volume (1000 m3)	0.01	44.58	0.02
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.11	43.67	0.15

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=100

E.G. Elev (m)	741.33	Element	Left OB	Channel	Right OB
Vel Head (m)	1.03	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.30	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.58	Flow Area (m2)	0.13	22.59	0.25
E.G. Slope (m/m)	0.017935	Area (m2)	0.13	22.59	0.25
Q Total (m3/s)	102.37	Flow (m3/s)	0.14	101.87	0.36
Top Width (m)	24.34	Top Width (m)	1.10	22.00	1.24
Vel Total (m/s)	4.46	Avg. Vel. (m/s)	1.06	4.51	1.47
Max Chl Dpth (m)	1.60	Hydr. Depth (m)	0.12	1.03	0.20
Conv. Total (m3/s)	764.4	Conv. (m3/s)	1.0	760.7	2.7
Length Wtd. (m)	138.27	Wetted Per. (m)	1.13	22.25	1.30
Min Ch El (m)	738.70	Shear (N/m2)	20.36	178.57	33.24
Alpha	1.02	Stream Power (N/m s)	21.58	805.27	48.86
Frctn Loss (m)	2.19	Cum Volume (1000 m3)	0.02	52.54	0.05
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.22	46.23	0.27

Plan: Plan 06 ArroyoPilarejo 1 RS: 2744.093 Profile: T=500

E.G. Elev (m)	742.20	Element	Left OB	Channel	Right OB
Vel Head (m)	1.69	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.52	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	741.05	Flow Area (m2)	0.49	27.47	0.60
E.G. Slope (m/m)	0.022740	Area (m2)	0.49	27.47	0.60
Q Total (m3/s)	161.15	Flow (m3/s)	0.90	158.91	1.33
Top Width (m)	26.08	Top Width (m)	2.15	22.00	1.93
Vel Total (m/s)	5.64	Avg. Vel. (m/s)	1.85	5.78	2.23
Max Chl Dpth (m)	1.82	Hydr. Depth (m)	0.23	1.25	0.31
Conv. Total (m3/s)	1068.7	Conv. (m3/s)	6.0	1053.8	8.8
Length Wtd. (m)	138.29	Wetted Per. (m)	2.20	22.25	2.03
Min Ch El (m)	738.70	Shear (N/m2)	49.70	275.32	65.70
Alpha	1.04	Stream Power (N/m s)	91.85	1592.74	146.22
Frctn Loss (m)	2.35	Cum Volume (1000 m3)	0.19	72.50	0.83
C & E Loss (m)	0.23	Cum SA (1000 m2)	1.15	52.29	4.26

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=2

E.G. Elev (m)	737.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	737.20	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.31	Flow Area (m2)		5.84	
E.G. Slope (m/m)	0.021469	Area (m2)		5.84	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	12.91	Top Width (m)		12.91	
Vel Total (m/s)	2.86	Avg. Vel. (m/s)		2.86	
Max Chl Dpth (m)	0.73	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	113.8	Conv. (m3/s)		113.8	
Length Wtd. (m)		Wetted Per. (m)		13.07	
Min Ch El (m)	736.47	Shear (N/m2)		94.10	
Alpha	1.00	Stream Power (N/m s)		268.69	
Frctn Loss (m)		Cum Volume (1000 m3)		13.06	
C & E Loss (m)		Cum SA (1000 m2)		25.46	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=5

E.G. Elev (m)	737.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	737.45	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.59	Flow Area (m2)		9.55	
E.G. Slope (m/m)	0.018775	Area (m2)		9.55	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	15.90	Top Width (m)		15.90	
Vel Total (m/s)	3.22	Avg. Vel. (m/s)		3.22	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	224.4	Conv. (m3/s)		224.4	
Length Wtd. (m)	124.79	Wetted Per. (m)		16.13	
Min Ch El (m)	736.47	Shear (N/m2)		108.99	
Alpha	1.00	Stream Power (N/m s)		350.96	
Frctn Loss (m)	1.33	Cum Volume (1000 m3)		20.45	
C & E Loss (m)	0.02	Cum SA (1000 m2)		30.31	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10

E.G. Elev (m)	738.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	737.65	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.80	Flow Area (m2)		12.86	
E.G. Slope (m/m)	0.016962	Area (m2)		12.86	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10 (Continued)

Top Width (m)	17.81	Top Width (m)		17.81	
Vel Total (m/s)	3.46	Avg. Vel. (m/s)		3.46	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	341.4	Conv. (m3/s)		341.4	
Length Wtd. (m)	124.79	Wetted Per. (m)		18.10	
Min Ch El (m)	736.47	Shear (N/m2)		118.21	
Alpha	1.00	Stream Power (N/m s)		408.70	
Frctn Loss (m)	1.75	Cum Volume (1000 m3)		26.97	
C & E Loss (m)	0.08	Cum SA (1000 m2)		34.30	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=25

E.G. Elev (m)	738.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	737.89	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.06	Flow Area (m2)		17.42	
E.G. Slope (m/m)	0.015143	Area (m2)		17.42	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	20.07	Top Width (m)		20.07	
Vel Total (m/s)	3.69	Avg. Vel. (m/s)		3.69	
Max Chl Dpth (m)	1.42	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	522.3	Conv. (m3/s)		522.3	
Length Wtd. (m)	124.79	Wetted Per. (m)		20.43	
Min Ch El (m)	736.47	Shear (N/m2)		126.64	
Alpha	1.00	Stream Power (N/m s)		467.13	
Frctn Loss (m)	1.81	Cum Volume (1000 m3)		35.16	0.00
C & E Loss (m)	0.06	Cum SA (1000 m2)		37.82	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=50

E.G. Elev (m)	738.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.76	Wt. n-Val.		0.030	
W.S. Elev (m)	738.06	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.25	Flow Area (m2)		21.01	
E.G. Slope (m/m)	0.014700	Area (m2)		21.01	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	22.03	Top Width (m)		22.03	
Vel Total (m/s)	3.87	Avg. Vel. (m/s)		3.87	
Max Chl Dpth (m)	1.59	Hydr. Depth (m)		0.95	
Conv. Total (m3/s)	670.1	Conv. (m3/s)		670.1	
Length Wtd. (m)	124.79	Wetted Per. (m)		22.44	
Min Ch El (m)	736.47	Shear (N/m2)		134.95	
Alpha	1.00	Stream Power (N/m s)		521.94	
Frctn Loss (m)	1.86	Cum Volume (1000 m3)	0.00	41.74	0.01
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.07	40.62	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100

E.G. Elev (m)	739.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.82	Wt. n-Val.		0.030	
W.S. Elev (m)	738.26	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.46	Flow Area (m2)		25.59	
E.G. Slope (m/m)	0.014090	Area (m2)		25.59	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	24.70	Top Width (m)		24.70	
Vel Total (m/s)	4.00	Avg. Vel. (m/s)		4.00	
Max Chl Dpth (m)	1.79	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	862.4	Conv. (m3/s)		862.4	
Length Wtd. (m)	124.80	Wetted Per. (m)		25.17	
Min Ch El (m)	736.47	Shear (N/m2)		140.48	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		561.98	
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.01	49.21	0.03
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.15	43.00	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 2606.178 Profile: T=500

E.G. Elev (m)	739.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.92	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	738.70	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.90	Flow Area (m2)	0.03	37.95	0.01
E.G. Slope (m/m)	0.013224	Area (m2)	0.03	37.95	0.01
Q Total (m3/s)	161.15	Flow (m3/s)	0.02	161.13	0.01
Top Width (m)	32.81	Top Width (m)	0.67	32.00	0.14
Vel Total (m/s)	4.24	Avg. Vel. (m/s)	0.52	4.25	0.52
Max Chl Dpth (m)	2.23	Hydr. Depth (m)	0.05	1.19	0.07
Conv. Total (m3/s)	1401.4	Conv. (m3/s)	0.2	1401.2	0.0
Length Wtd. (m)	124.82	Wetted Per. (m)	0.68	32.56	0.20
Min Ch El (m)	736.47	Shear (N/m2)	6.48	151.15	6.47
Alpha	1.00	Stream Power (N/m s)	3.37	641.67	3.36
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.16	67.97	0.78
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.97	48.56	4.10

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=2

E.G. Elev (m)	735.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	735.69	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.69	Flow Area (m2)		7.92	
E.G. Slope (m/m)	0.011897	Area (m2)		7.92	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	17.88	Top Width (m)		17.88	
Vel Total (m/s)	2.11	Avg. Vel. (m/s)		2.11	
Max Chl Dpth (m)	0.75	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	152.9	Conv. (m3/s)		152.9	
Length Wtd. (m)	156.83	Wetted Per. (m)		17.98	
Min Ch El (m)	734.94	Shear (N/m2)		51.42	
Alpha	1.00	Stream Power (N/m s)		108.26	
Frctn Loss (m)	3.50	Cum Volume (1000 m3)		12.20	
C & E Loss (m)	0.08	Cum SA (1000 m2)		23.53	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=5

E.G. Elev (m)	736.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	735.95	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.95	Flow Area (m2)		13.33	
E.G. Slope (m/m)	0.010954	Area (m2)		13.33	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	24.66	Top Width (m)		24.66	
Vel Total (m/s)	2.31	Avg. Vel. (m/s)		2.31	
Max Chl Dpth (m)	1.01	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	293.8	Conv. (m3/s)		293.8	
Length Wtd. (m)	156.83	Wetted Per. (m)		24.78	
Min Ch El (m)	734.94	Shear (N/m2)		57.77	
Alpha	1.00	Stream Power (N/m s)		133.27	
Frctn Loss (m)	3.19	Cum Volume (1000 m3)		19.02	
C & E Loss (m)	0.11	Cum SA (1000 m2)		27.78	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=10

E.G. Elev (m)	736.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.36	Wt. n-Val.		0.030	
W.S. Elev (m)	736.08	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.11	Flow Area (m2)		16.83	
E.G. Slope (m/m)	0.011747	Area (m2)		16.83	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	26.75	Top Width (m)		26.75	
Vel Total (m/s)	2.64	Avg. Vel. (m/s)		2.64	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	410.2	Conv. (m3/s)		410.2	
Length Wtd. (m)	156.83	Wetted Per. (m)		26.90	
Min Ch El (m)	734.94	Shear (N/m2)		72.06	
Alpha	1.00	Stream Power (N/m s)		190.41	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		25.12	
C & E Loss (m)	0.11	Cum SA (1000 m2)		31.52	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=25

E.G. Elev (m)	736.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.		0.030	
W.S. Elev (m)	736.22	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.32	Flow Area (m2)		20.45	
E.G. Slope (m/m)	0.013870	Area (m2)		20.45	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	28.38	Top Width (m)		28.38	
Vel Total (m/s)	3.14	Avg. Vel. (m/s)		3.14	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	545.7	Conv. (m3/s)		545.7	
Length Wtd. (m)	156.83	Wetted Per. (m)		28.55	
Min Ch El (m)	734.94	Shear (N/m2)		97.44	
Alpha	1.00	Stream Power (N/m s)		306.24	
Frctn Loss (m)	3.25	Cum Volume (1000 m3)		32.79	0.00
C & E Loss (m)	0.08	Cum SA (1000 m2)		34.80	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=50

E.G. Elev (m)	736.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.33	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.46	Flow Area (m2)	0.02	23.83	
E.G. Slope (m/m)	0.015075	Area (m2)	0.02	23.83	
Q Total (m3/s)	81.25	Flow (m3/s)	0.01	81.24	
Top Width (m)	31.61	Top Width (m)	0.45	31.15	
Vel Total (m/s)	3.41	Avg. Vel. (m/s)	0.50	3.41	
Max Chl Dpth (m)	1.39	Hydr. Depth (m)	0.04	0.76	
Conv. Total (m3/s)	661.7	Conv. (m3/s)	0.1	661.7	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.46	31.33	
Min Ch El (m)	734.94	Shear (N/m2)	6.26	112.42	
Alpha	1.00	Stream Power (N/m s)	3.11	383.30	
Frctn Loss (m)	3.24	Cum Volume (1000 m3)	0.00	38.94	0.01
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.04	37.30	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100

E.G. Elev (m)	737.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.74	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.42	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.62	Flow Area (m2)	0.09	26.92	
E.G. Slope (m/m)	0.016315	Area (m2)	0.09	26.92	
Q Total (m3/s)	102.37	Flow (m3/s)	0.08	102.29	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100 (Continued)

Top Width (m)	32.70	Top Width (m)	0.97	31.73	
Vel Total (m/s)	3.79	Avg. Vel. (m/s)	0.86	3.80	
Max Chl Dpth (m)	1.48	Hydr. Depth (m)	0.09	0.85	
Conv. Total (m3/s)	801.5	Conv. (m3/s)	0.6	800.9	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.99	31.92	
Min Ch El (m)	734.94	Shear (N/m2)	14.50	134.91	
Alpha	1.00	Stream Power (N/m s)	12.45	512.70	
Frctn Loss (m)	3.24	Cum Volume (1000 m3)	0.01	45.93	0.03
C & E Loss (m)	0.07	Cum SA (1000 m2)	0.08	39.48	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 2481.292 Profile: T=500

E.G. Elev (m)	737.72	Element	Left OB	Channel	Right OB
Vel Head (m)	1.04	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	736.68	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.97	Flow Area (m2)	0.51	35.42	0.14
E.G. Slope (m/m)	0.017564	Area (m2)	0.51	35.42	0.14
Q Total (m3/s)	161.15	Flow (m3/s)	0.79	160.22	0.13
Top Width (m)	37.77	Top Width (m)	2.35	34.00	1.41
Vel Total (m/s)	4.47	Avg. Vel. (m/s)	1.57	4.52	0.94
Max Chl Dpth (m)	1.74	Hydr. Depth (m)	0.22	1.04	0.10
Conv. Total (m3/s)	1215.9	Conv. (m3/s)	6.0	1209.0	1.0
Length Wtd. (m)	156.83	Wetted Per. (m)	2.39	34.19	1.43
Min Ch El (m)	734.94	Shear (N/m2)	36.44	178.45	16.88
Alpha	1.02	Stream Power (N/m s)	57.15	807.16	15.85
Frctn Loss (m)	3.18	Cum Volume (1000 m3)	0.12	63.39	0.77
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.75	44.44	4.04

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=2

E.G. Elev (m)	732.33	Element	Left OB	Channel	Right OB
Vel Head (m)	1.05	Wt. n-Val.		0.030	
W.S. Elev (m)	731.28	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.59	Flow Area (m2)		3.67	
E.G. Slope (m/m)	0.056385	Area (m2)		3.67	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	8.29	Top Width (m)		8.29	
Vel Total (m/s)	4.54	Avg. Vel. (m/s)		4.54	
Max Chl Dpth (m)	0.69	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	70.2	Conv. (m3/s)		70.2	
Length Wtd. (m)	132.83	Wetted Per. (m)		8.44	
Min Ch El (m)	730.59	Shear (N/m2)		240.51	
Alpha	1.00	Stream Power (N/m s)		1092.88	
Frctn Loss (m)	3.01	Cum Volume (1000 m3)		11.29	
C & E Loss (m)	0.25	Cum SA (1000 m2)		21.48	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5

E.G. Elev (m)	732.91	Element	Left OB	Channel	Right OB
Vel Head (m)	1.40	Wt. n-Val.		0.030	
W.S. Elev (m)	731.52	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.96	Flow Area (m2)		5.88	
E.G. Slope (m/m)	0.050309	Area (m2)		5.88	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	9.80	Top Width (m)		9.80	
Vel Total (m/s)	5.23	Avg. Vel. (m/s)		5.23	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	137.1	Conv. (m3/s)		137.1	
Length Wtd. (m)	132.83	Wetted Per. (m)		10.04	
Min Ch El (m)	730.59	Shear (N/m2)		288.87	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		1511.61	
Frctn Loss (m)	1.37	Cum Volume (1000 m3)		17.52	
C & E Loss (m)	0.02	Cum SA (1000 m2)		25.08	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=10

E.G. Elev (m)	733.17	Element	Left OB	Channel	Right OB
Vel Head (m)	1.41	Wt. n-Val.		0.030	
W.S. Elev (m)	731.76	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.20	Flow Area (m2)		8.45	
E.G. Slope (m/m)	0.042467	Area (m2)		8.45	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	12.27	Top Width (m)		12.27	
Vel Total (m/s)	5.26	Avg. Vel. (m/s)		5.26	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	215.7	Conv. (m3/s)		215.7	
Length Wtd. (m)	132.83	Wetted Per. (m)		12.59	
Min Ch EI (m)	730.59	Shear (N/m2)		279.36	
Alpha	1.00	Stream Power (N/m s)		1470.49	
Frctn Loss (m)	1.30	Cum Volume (1000 m3)		23.13	
C & E Loss (m)	0.02	Cum SA (1000 m2)		28.46	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=25

E.G. Elev (m)	733.39	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	
W.S. Elev (m)	732.04	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.47	Flow Area (m2)		12.52	
E.G. Slope (m/m)	0.034232	Area (m2)		12.52	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	16.07	Top Width (m)		16.07	
Vel Total (m/s)	5.13	Avg. Vel. (m/s)		5.13	
Max Chl Dpth (m)	1.45	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	347.4	Conv. (m3/s)		347.4	
Length Wtd. (m)	132.83	Wetted Per. (m)		16.49	
Min Ch EI (m)	730.59	Shear (N/m2)		254.91	
Alpha	1.00	Stream Power (N/m s)		1308.54	
Frctn Loss (m)	1.23	Cum Volume (1000 m3)		30.21	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		31.31	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=50

E.G. Elev (m)	733.60	Element	Left OB	Channel	Right OB
Vel Head (m)	1.37	Wt. n-Val.		0.030	
W.S. Elev (m)	732.23	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.66	Flow Area (m2)		15.67	
E.G. Slope (m/m)	0.030117	Area (m2)		15.67	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	17.99	Top Width (m)		17.99	
Vel Total (m/s)	5.18	Avg. Vel. (m/s)		5.18	
Max Chl Dpth (m)	1.64	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	468.2	Conv. (m3/s)		468.2	
Length Wtd. (m)	132.83	Wetted Per. (m)		18.47	
Min Ch EI (m)	730.59	Shear (N/m2)		250.62	
Alpha	1.00	Stream Power (N/m s)		1299.43	
Frctn Loss (m)	1.20	Cum Volume (1000 m3)		35.84	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		33.45	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=100

E.G. Elev (m)	733.85	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	
W.S. Elev (m)	732.42	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.88	Flow Area (m2)		19.35	
E.G. Slope (m/m)	0.027051	Area (m2)		19.35	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	19.85	Top Width (m)		19.85	
Vel Total (m/s)	5.29	Avg. Vel. (m/s)		5.29	
Max Chl Dpth (m)	1.83	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	622.4	Conv. (m3/s)		622.4	
Length Wtd. (m)	132.83	Wetted Per. (m)		20.41	
Min Ch El (m)	730.59	Shear (N/m2)		251.52	
Alpha	1.00	Stream Power (N/m s)		1330.87	
Frctn Loss (m)	1.92	Cum Volume (1000 m3)		42.30	0.03
C & E Loss (m)	0.25	Cum SA (1000 m2)		35.44	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 2326.265 Profile: T=500

E.G. Elev (m)	734.47	Element	Left OB	Channel	Right OB
Vel Head (m)	1.63	Wt. n-Val.		0.030	
W.S. Elev (m)	732.84	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	733.34	Flow Area (m2)		28.47	
E.G. Slope (m/m)	0.023742	Area (m2)		28.47	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	23.91	Top Width (m)		23.91	
Vel Total (m/s)	5.66	Avg. Vel. (m/s)		5.66	
Max Chl Dpth (m)	2.25	Hydr. Depth (m)		1.19	
Conv. Total (m3/s)	1045.8	Conv. (m3/s)		1045.8	
Length Wtd. (m)	132.83	Wetted Per. (m)		24.60	
Min Ch El (m)	730.59	Shear (N/m2)		269.40	
Alpha	1.00	Stream Power (N/m s)		1524.99	
Frctn Loss (m)	1.96	Cum Volume (1000 m3)	0.08	58.38	0.76
C & E Loss (m)	0.23	Cum SA (1000 m2)	0.56	39.90	3.96

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=2

E.G. Elev (m)	730.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	730.12	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.12	Flow Area (m2)		8.03	
E.G. Slope (m/m)	0.012173	Area (m2)		8.03	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	18.70	Top Width (m)		18.70	
Vel Total (m/s)	2.08	Avg. Vel. (m/s)		2.08	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	151.2	Conv. (m3/s)		151.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		18.90	
Min Ch El (m)	729.24	Shear (N/m2)		50.69	
Alpha	1.00	Stream Power (N/m s)		105.33	
Frctn Loss (m)	3.36	Cum Volume (1000 m3)		10.51	
C & E Loss (m)	0.09	Cum SA (1000 m2)		19.69	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5

E.G. Elev (m)	730.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.030	
W.S. Elev (m)	730.35	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.35	Flow Area (m2)		12.59	
E.G. Slope (m/m)	0.010623	Area (m2)		12.59	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	



Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5 (Continued)

Top Width (m)	20.72	Top Width (m)		20.72	
Vel Total (m/s)	2.44	Avg. Vel. (m/s)		2.44	
Max Chl Dpth (m)	1.11	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	298.3	Conv. (m3/s)		298.3	
Length Wtd. (m)	143.99	Wetted Per. (m)		20.99	
Min Ch El (m)	729.24	Shear (N/m2)		62.47	
Alpha	1.00	Stream Power (N/m s)		152.61	
Frctn Loss (m)	3.11	Cum Volume (1000 m3)		16.29	
C & E Loss (m)	0.11	Cum SA (1000 m2)		23.05	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=10

E.G. Elev (m)	730.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	730.53	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.53	Flow Area (m2)		16.49	
E.G. Slope (m/m)	0.009953	Area (m2)		16.49	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	22.28	Top Width (m)		22.28	
Vel Total (m/s)	2.70	Avg. Vel. (m/s)		2.70	
Max Chl Dpth (m)	1.29	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	445.7	Conv. (m3/s)		445.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		22.59	
Min Ch El (m)	729.24	Shear (N/m2)		71.24	
Alpha	1.00	Stream Power (N/m s)		192.06	
Frctn Loss (m)	2.94	Cum Volume (1000 m3)		21.48	
C & E Loss (m)	0.13	Cum SA (1000 m2)		26.17	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=25

E.G. Elev (m)	731.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.030	
W.S. Elev (m)	730.75	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.75	Flow Area (m2)		21.67	
E.G. Slope (m/m)	0.009341	Area (m2)		21.67	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	24.16	Top Width (m)		24.16	
Vel Total (m/s)	2.97	Avg. Vel. (m/s)		2.97	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	665.0	Conv. (m3/s)		665.0	
Length Wtd. (m)	143.99	Wetted Per. (m)		24.52	
Min Ch El (m)	729.24	Shear (N/m2)		80.94	
Alpha	1.00	Stream Power (N/m s)		240.10	
Frctn Loss (m)	2.73	Cum Volume (1000 m3)		27.94	0.00
C & E Loss (m)	0.15	Cum SA (1000 m2)		28.64	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50

E.G. Elev (m)	731.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	730.91	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.91	Flow Area (m2)		25.58	
E.G. Slope (m/m)	0.009150	Area (m2)		25.58	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	25.33	Top Width (m)		25.33	
Vel Total (m/s)	3.18	Avg. Vel. (m/s)		3.18	
Max Chl Dpth (m)	1.67	Hydr. Depth (m)		1.01	
Conv. Total (m3/s)	849.4	Conv. (m3/s)		849.4	
Length Wtd. (m)	143.99	Wetted Per. (m)		25.74	
Min Ch El (m)	729.24	Shear (N/m2)		89.19	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		283.26	
Frctn Loss (m)	2.62	Cum Volume (1000 m3)		33.10	0.01
C & E Loss (m)	0.17	Cum SA (1000 m2)		30.57	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=100

E.G. Elev (m)	731.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.		0.030	
W.S. Elev (m)	731.09	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	731.10	Flow Area (m2)		30.16	
E.G. Slope (m/m)	0.008982	Area (m2)		30.16	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	26.63	Top Width (m)		26.63	
Vel Total (m/s)	3.39	Avg. Vel. (m/s)		3.39	
Max Chl Dpth (m)	1.85	Hydr. Depth (m)		1.13	
Conv. Total (m3/s)	1080.2	Conv. (m3/s)		1080.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		27.08	
Min Ch EI (m)	729.24	Shear (N/m2)		98.09	
Alpha	1.00	Stream Power (N/m s)		332.91	
Frctn Loss (m)	2.56	Cum Volume (1000 m3)		39.02	0.03
C & E Loss (m)	0.17	Cum SA (1000 m2)		32.35	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 2193.396 Profile: T=500

E.G. Elev (m)	732.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.86	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	731.42	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	731.53	Flow Area (m2)	0.00	39.30	0.02
E.G. Slope (m/m)	0.010079	Area (m2)	0.00	39.30	0.02
Q Total (m3/s)	161.15	Flow (m3/s)	0.00	161.14	0.01
Top Width (m)	29.02	Top Width (m)	0.13	28.44	0.45
Vel Total (m/s)	4.10	Avg. Vel. (m/s)	0.23	4.10	0.47
Max Chl Dpth (m)	2.18	Hydr. Depth (m)	0.02	1.38	0.05
Conv. Total (m3/s)	1605.2	Conv. (m3/s)	0.0	1605.1	0.1
Length Wtd. (m)	143.99	Wetted Per. (m)	0.14	28.97	0.47
Min Ch EI (m)	729.24	Shear (N/m2)	1.79	134.06	5.18
Alpha	1.00	Stream Power (N/m s)	0.41	549.69	2.43
Frctn Loss (m)	2.61	Cum Volume (1000 m3)	0.08	53.88	0.76
C & E Loss (m)	0.16	Cum SA (1000 m2)	0.55	36.42	3.93

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=2

E.G. Elev (m)	726.89	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	
W.S. Elev (m)	725.73	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.09	Flow Area (m2)		3.49	
E.G. Slope (m/m)	0.061498	Area (m2)		3.49	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	7.78	Top Width (m)		7.78	
Vel Total (m/s)	4.77	Avg. Vel. (m/s)		4.77	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	67.3	Conv. (m3/s)		67.3	
Length Wtd. (m)	118.81	Wetted Per. (m)		7.96	
Min Ch EI (m)	725.03	Shear (N/m2)		264.75	
Alpha	1.00	Stream Power (N/m s)		1264.11	
Frctn Loss (m)	3.14	Cum Volume (1000 m3)		9.69	
C & E Loss (m)	0.22	Cum SA (1000 m2)		17.78	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=5

E.G. Elev (m)	727.43	Element	Left OB	Channel	Right OB
Vel Head (m)	1.45	Wt. n-Val.		0.030	
W.S. Elev (m)	725.98	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.39	Flow Area (m2)		5.76	
E.G. Slope (m/m)	0.065510	Area (m2)		5.76	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	11.37	Top Width (m)		11.37	
Vel Total (m/s)	5.34	Avg. Vel. (m/s)		5.34	
Max Chl Dpth (m)	0.95	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	120.1	Conv. (m3/s)		120.1	
Length Wtd. (m)	118.81	Wetted Per. (m)		11.65	
Min Ch El (m)	725.03	Shear (N/m2)		317.71	
Alpha	1.00	Stream Power (N/m s)		1695.10	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		14.97	
C & E Loss (m)	0.26	Cum SA (1000 m2)		20.74	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=10

E.G. Elev (m)	727.83	Element	Left OB	Channel	Right OB
Vel Head (m)	1.70	Wt. n-Val.		0.030	
W.S. Elev (m)	726.14	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.64	Flow Area (m2)		7.71	
E.G. Slope (m/m)	0.063004	Area (m2)		7.71	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	13.15	Top Width (m)		13.15	
Vel Total (m/s)	5.77	Avg. Vel. (m/s)		5.77	
Max Chl Dpth (m)	1.11	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	177.1	Conv. (m3/s)		177.1	
Length Wtd. (m)	118.81	Wetted Per. (m)		13.48	
Min Ch El (m)	725.03	Shear (N/m2)		353.50	
Alpha	1.00	Stream Power (N/m s)		2038.43	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		19.74	
C & E Loss (m)	0.29	Cum SA (1000 m2)		23.62	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=25

E.G. Elev (m)	728.32	Element	Left OB	Channel	Right OB
Vel Head (m)	2.00	Wt. n-Val.		0.030	
W.S. Elev (m)	726.33	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.92	Flow Area (m2)		10.27	
E.G. Slope (m/m)	0.056998	Area (m2)		10.27	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	14.33	Top Width (m)		14.33	
Vel Total (m/s)	6.26	Avg. Vel. (m/s)		6.26	
Max Chl Dpth (m)	1.30	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	269.2	Conv. (m3/s)		269.2	
Length Wtd. (m)	118.81	Wetted Per. (m)		14.72	
Min Ch El (m)	725.03	Shear (N/m2)		389.90	
Alpha	1.00	Stream Power (N/m s)		2440.53	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		25.64	0.00
C & E Loss (m)	0.32	Cum SA (1000 m2)		25.87	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50

E.G. Elev (m)	728.64	Element	Left OB	Channel	Right OB
Vel Head (m)	2.17	Wt. n-Val.		0.030	
W.S. Elev (m)	726.47	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.13	Flow Area (m2)		12.45	
E.G. Slope (m/m)	0.052195	Area (m2)		12.45	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50 (Continued)

Top Width (m)	15.26	Top Width (m)		15.26	
Vel Total (m/s)	6.52	Avg. Vel. (m/s)		6.52	
Max Chl Dpth (m)	1.44	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	355.6	Conv. (m3/s)		355.6	
Length Wtd. (m)	118.81	Wetted Per. (m)		15.71	
Min Ch El (m)	725.03	Shear (N/m2)		405.85	
Alpha	1.00	Stream Power (N/m s)		2647.72	
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		30.36	0.01
C & E Loss (m)	0.33	Cum SA (1000 m2)		27.65	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=100

E.G. Elev (m)	728.95	Element	Left OB	Channel	Right OB
Vel Head (m)	2.30	Wt. n-Val.		0.030	
W.S. Elev (m)	726.65	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.36	Flow Area (m2)		15.24	
E.G. Slope (m/m)	0.050323	Area (m2)		15.24	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	17.40	Top Width (m)		17.40	
Vel Total (m/s)	6.72	Avg. Vel. (m/s)		6.72	
Max Chl Dpth (m)	1.62	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	456.3	Conv. (m3/s)		456.3	
Length Wtd. (m)	118.81	Wetted Per. (m)		17.90	
Min Ch El (m)	725.03	Shear (N/m2)		420.17	
Alpha	1.00	Stream Power (N/m s)		2822.39	
Frctn Loss (m)	3.10	Cum Volume (1000 m3)		35.75	0.03
C & E Loss (m)	0.32	Cum SA (1000 m2)		29.18	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 2050.529 Profile: T=500

E.G. Elev (m)	729.50	Element	Left OB	Channel	Right OB
Vel Head (m)	2.45	Wt. n-Val.		0.030	
W.S. Elev (m)	727.05	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.82	Flow Area (m2)		23.24	
E.G. Slope (m/m)	0.041805	Area (m2)		23.24	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	22.03	Top Width (m)		22.03	
Vel Total (m/s)	6.93	Avg. Vel. (m/s)		6.93	
Max Chl Dpth (m)	2.02	Hydr. Depth (m)		1.05	
Conv. Total (m3/s)	788.2	Conv. (m3/s)		788.2	
Length Wtd. (m)	118.81	Wetted Per. (m)		22.65	
Min Ch El (m)	725.03	Shear (N/m2)		420.68	
Alpha	1.00	Stream Power (N/m s)		2916.83	
Frctn Loss (m)	2.94	Cum Volume (1000 m3)	0.08	49.38	0.76
C & E Loss (m)	0.31	Cum SA (1000 m2)	0.54	32.79	3.89

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2

E.G. Elev (m)	723.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	723.11	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.18	Flow Area (m2)		5.86	
E.G. Slope (m/m)	0.014630	Area (m2)		5.86	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	9.58	Top Width (m)		9.58	
Vel Total (m/s)	2.84	Avg. Vel. (m/s)		2.84	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	137.9	Conv. (m3/s)		137.9	
Length Wtd. (m)	104.48	Wetted Per. (m)		9.90	
Min Ch El (m)	722.22	Shear (N/m2)		85.01	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		241.78	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		9.13	
C & E Loss (m)	0.03	Cum SA (1000 m2)		16.75	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=5

E.G. Elev (m)	724.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.		0.030	
W.S. Elev (m)	723.42	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.54	Flow Area (m2)		9.01	
E.G. Slope (m/m)	0.014340	Area (m2)		9.01	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	10.92	Top Width (m)		10.92	
Vel Total (m/s)	3.41	Avg. Vel. (m/s)		3.41	
Max Chl Dpth (m)	1.20	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	256.8	Conv. (m3/s)		256.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		11.38	
Min Ch EI (m)	722.22	Shear (N/m2)		111.26	
Alpha	1.00	Stream Power (N/m s)		379.92	
Frctn Loss (m)	2.02	Cum Volume (1000 m3)		14.09	
C & E Loss (m)	0.04	Cum SA (1000 m2)		19.41	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=10

E.G. Elev (m)	724.38	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.030	
W.S. Elev (m)	723.66	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.82	Flow Area (m2)		11.78	
E.G. Slope (m/m)	0.014600	Area (m2)		11.78	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	12.45	Top Width (m)		12.45	
Vel Total (m/s)	3.77	Avg. Vel. (m/s)		3.77	
Max Chl Dpth (m)	1.44	Hydr. Depth (m)		0.95	
Conv. Total (m3/s)	368.0	Conv. (m3/s)		368.0	
Length Wtd. (m)	104.48	Wetted Per. (m)		12.99	
Min Ch EI (m)	722.22	Shear (N/m2)		129.87	
Alpha	1.00	Stream Power (N/m s)		490.16	
Frctn Loss (m)	1.99	Cum Volume (1000 m3)		18.58	
C & E Loss (m)	0.04	Cum SA (1000 m2)		22.10	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=25

E.G. Elev (m)	724.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.92	Wt. n-Val.		0.030	
W.S. Elev (m)	723.91	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.14	Flow Area (m2)		15.15	
E.G. Slope (m/m)	0.015422	Area (m2)		15.15	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	13.98	Top Width (m)		13.98	
Vel Total (m/s)	4.24	Avg. Vel. (m/s)		4.24	
Max Chl Dpth (m)	1.69	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	517.5	Conv. (m3/s)		517.5	
Length Wtd. (m)	104.48	Wetted Per. (m)		14.61	
Min Ch EI (m)	722.22	Shear (N/m2)		156.85	
Alpha	1.00	Stream Power (N/m s)		665.23	
Frctn Loss (m)	1.99	Cum Volume (1000 m3)		24.13	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		24.19	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=50

E.G. Elev (m)	725.16	Element	Left OB	Channel	Right OB
Vel Head (m)	1.08	Wt. n-Val.		0.030	
W.S. Elev (m)	724.08	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.36	Flow Area (m2)		17.66	
E.G. Slope (m/m)	0.016025	Area (m2)		17.66	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	14.81	Top Width (m)		14.81	
Vel Total (m/s)	4.60	Avg. Vel. (m/s)		4.60	
Max Chl Dpth (m)	1.86	Hydr. Depth (m)		1.19	
Conv. Total (m3/s)	641.8	Conv. (m3/s)		641.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		15.52	
Min Ch El (m)	722.22	Shear (N/m2)		178.87	
Alpha	1.00	Stream Power (N/m s)		822.79	
Frctn Loss (m)	2.06	Cum Volume (1000 m3)		28.58	0.01
C & E Loss (m)	0.03	Cum SA (1000 m2)		25.87	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=100

E.G. Elev (m)	725.52	Element	Left OB	Channel	Right OB
Vel Head (m)	1.23	Wt. n-Val.		0.030	
W.S. Elev (m)	724.29	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.68	Flow Area (m2)		20.83	
E.G. Slope (m/m)	0.015958	Area (m2)		20.83	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	15.70	Top Width (m)		15.70	
Vel Total (m/s)	4.92	Avg. Vel. (m/s)		4.92	
Max Chl Dpth (m)	2.07	Hydr. Depth (m)		1.33	
Conv. Total (m3/s)	810.4	Conv. (m3/s)		810.4	
Length Wtd. (m)	104.46	Wetted Per. (m)		16.51	
Min Ch El (m)	722.22	Shear (N/m2)		197.37	
Alpha	1.00	Stream Power (N/m s)		970.15	
Frctn Loss (m)	2.03	Cum Volume (1000 m3)		33.60	0.03
C & E Loss (m)	0.04	Cum SA (1000 m2)		27.21	0.17

Plan: Plan 06 ArroyoPilarejo 1 RS: 1930.629 Profile: T=500

E.G. Elev (m)	726.26	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	
W.S. Elev (m)	724.82	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	725.25	Flow Area (m2)		30.39	
E.G. Slope (m/m)	0.016357	Area (m2)		30.39	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	20.86	Top Width (m)		20.86	
Vel Total (m/s)	5.30	Avg. Vel. (m/s)		5.30	
Max Chl Dpth (m)	2.60	Hydr. Depth (m)		1.46	
Conv. Total (m3/s)	1260.0	Conv. (m3/s)		1260.0	
Length Wtd. (m)	104.37	Wetted Per. (m)		21.91	
Min Ch El (m)	722.22	Shear (N/m2)		222.49	
Alpha	1.00	Stream Power (N/m s)		1179.73	
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.08	46.20	0.76
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.54	30.24	3.89

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2

E.G. Elev (m)	721.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.		0.030	
W.S. Elev (m)	720.68	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.91	Flow Area (m2)		4.43	
E.G. Slope (m/m)	0.028845	Area (m2)		4.43	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2 (Continued)

Top Width (m)	7.92	Top Width (m)		7.92	
Vel Total (m/s)	3.76	Avg. Vel. (m/s)		3.76	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	98.2	Conv. (m3/s)		98.2	
Length Wtd. (m)	148.89	Wetted Per. (m)		8.18	
Min Ch El (m)	719.70	Shear (N/m2)		153.29	
Alpha	1.00	Stream Power (N/m s)		576.82	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		8.59	
C & E Loss (m)	0.03	Cum SA (1000 m2)		15.84	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=5

E.G. Elev (m)	721.96	Element	Left OB	Channel	Right OB
Vel Head (m)	0.98	Wt. n-Val.		0.030	
W.S. Elev (m)	720.98	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.30	Flow Area (m2)		7.03	
E.G. Slope (m/m)	0.027460	Area (m2)		7.03	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	9.61	Top Width (m)		9.61	
Vel Total (m/s)	4.37	Avg. Vel. (m/s)		4.37	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.73	
Conv. Total (m3/s)	185.6	Conv. (m3/s)		185.6	
Length Wtd. (m)	148.89	Wetted Per. (m)		9.98	
Min Ch El (m)	719.70	Shear (N/m2)		189.70	
Alpha	1.00	Stream Power (N/m s)		829.60	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		13.26	
C & E Loss (m)	0.02	Cum SA (1000 m2)		18.34	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=10

E.G. Elev (m)	722.35	Element	Left OB	Channel	Right OB
Vel Head (m)	1.13	Wt. n-Val.		0.030	
W.S. Elev (m)	721.21	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.61	Flow Area (m2)		9.43	
E.G. Slope (m/m)	0.025946	Area (m2)		9.43	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	10.99	Top Width (m)		10.99	
Vel Total (m/s)	4.72	Avg. Vel. (m/s)		4.72	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	276.0	Conv. (m3/s)		276.0	
Length Wtd. (m)	148.89	Wetted Per. (m)		11.45	
Min Ch El (m)	719.70	Shear (N/m2)		209.50	
Alpha	1.00	Stream Power (N/m s)		988.15	
Frctn Loss (m)	3.87	Cum Volume (1000 m3)		17.47	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.87	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25

E.G. Elev (m)	722.80	Element	Left OB	Channel	Right OB
Vel Head (m)	1.31	Wt. n-Val.		0.030	
W.S. Elev (m)	721.49	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.90	Flow Area (m2)		12.68	
E.G. Slope (m/m)	0.023988	Area (m2)		12.68	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	12.45	Top Width (m)		12.45	
Vel Total (m/s)	5.07	Avg. Vel. (m/s)		5.07	
Max Chl Dpth (m)	1.79	Hydr. Depth (m)		1.02	
Conv. Total (m3/s)	415.0	Conv. (m3/s)		415.0	
Length Wtd. (m)	148.89	Wetted Per. (m)		13.02	
Min Ch El (m)	719.70	Shear (N/m2)		228.96	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		1160.91	
Frctn Loss (m)	3.77	Cum Volume (1000 m3)		22.67	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		22.81	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=50

E.G. Elev (m)	723.08	Element	Left OB	Channel	Right OB
Vel Head (m)	1.38	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.70	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.12	Flow Area (m2)		15.63	0.02
E.G. Slope (m/m)	0.024773	Area (m2)		15.63	0.02
Q Total (m3/s)	81.25	Flow (m3/s)		81.23	0.02
Top Width (m)	15.50	Top Width (m)		15.23	0.28
Vel Total (m/s)	5.19	Avg. Vel. (m/s)		5.20	0.82
Max Chl Dpth (m)	2.00	Hydr. Depth (m)		1.03	0.07
Conv. Total (m3/s)	516.2	Conv. (m3/s)		516.1	0.1
Length Wtd. (m)	148.90	Wetted Per. (m)		15.84	0.31
Min Ch El (m)	719.70	Shear (N/m2)		239.59	15.07
Alpha	1.00	Stream Power (N/m s)		1245.47	12.39
Frctn Loss (m)	3.71	Cum Volume (1000 m3)		26.84	0.01
C & E Loss (m)	0.02	Cum SA (1000 m2)		24.30	0.07

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=100

E.G. Elev (m)	723.46	Element	Left OB	Channel	Right OB
Vel Head (m)	1.58	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.87	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.35	Flow Area (m2)		18.33	0.10
E.G. Slope (m/m)	0.024174	Area (m2)		18.33	0.10
Q Total (m3/s)	102.37	Flow (m3/s)		102.23	0.14
Top Width (m)	16.39	Top Width (m)		15.76	0.63
Vel Total (m/s)	5.56	Avg. Vel. (m/s)		5.58	1.40
Max Chl Dpth (m)	2.17	Hydr. Depth (m)		1.16	0.16
Conv. Total (m3/s)	658.4	Conv. (m3/s)		657.5	0.9
Length Wtd. (m)	148.94	Wetted Per. (m)		16.41	0.70
Min Ch El (m)	719.70	Shear (N/m2)		264.75	33.16
Alpha	1.01	Stream Power (N/m s)		1477.00	46.32
Frctn Loss (m)	3.67	Cum Volume (1000 m3)		31.56	0.02
C & E Loss (m)	0.02	Cum SA (1000 m2)		25.57	0.15

Plan: Plan 06 ArroyoPilarejo 1 RS: 1826.699 Profile: T=500

E.G. Elev (m)	724.31	Element	Left OB	Channel	Right OB
Vel Head (m)	1.99	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	722.32	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.93	Flow Area (m2)	0.16	25.43	0.57
E.G. Slope (m/m)	0.020164	Area (m2)	0.16	25.43	0.57
Q Total (m3/s)	161.15	Flow (m3/s)	0.22	159.61	1.32
Top Width (m)	18.36	Top Width (m)	0.85	16.00	1.51
Vel Total (m/s)	6.16	Avg. Vel. (m/s)	1.44	6.28	2.30
Max Chl Dpth (m)	2.62	Hydr. Depth (m)	0.18	1.59	0.38
Conv. Total (m3/s)	1134.8	Conv. (m3/s)	1.6	1124.0	9.3
Length Wtd. (m)	149.16	Wetted Per. (m)	0.92	16.66	1.69
Min Ch El (m)	719.70	Shear (N/m2)	33.33	301.90	66.99
Alpha	1.03	Stream Power (N/m s)	48.15	1894.67	154.09
Frctn Loss (m)	3.47	Cum Volume (1000 m3)	0.07	43.28	0.74
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.49	28.31	3.83



Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=2

E.G. Elev (m)	717.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	716.86	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.04	Flow Area (m2)		4.84	
E.G. Slope (m/m)	0.023984	Area (m2)		4.84	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	8.63	Top Width (m)		8.63	
Vel Total (m/s)	3.45	Avg. Vel. (m/s)		3.45	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	107.7	Conv. (m3/s)		107.7	
Length Wtd. (m)	126.54	Wetted Per. (m)		8.86	
Min Ch El (m)	715.98	Shear (N/m2)		128.44	
Alpha	1.00	Stream Power (N/m s)		443.00	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		7.90	
C & E Loss (m)	0.08	Cum SA (1000 m2)		14.61	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=5

E.G. Elev (m)	718.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.91	Wt. n-Val.		0.030	
W.S. Elev (m)	717.12	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.40	Flow Area (m2)		7.29	
E.G. Slope (m/m)	0.025109	Area (m2)		7.29	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	9.87	Top Width (m)		9.87	
Vel Total (m/s)	4.22	Avg. Vel. (m/s)		4.22	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	194.1	Conv. (m3/s)		194.1	
Length Wtd. (m)	126.54	Wetted Per. (m)		10.21	
Min Ch El (m)	715.98	Shear (N/m2)		175.79	
Alpha	1.00	Stream Power (N/m s)		741.73	
Frctn Loss (m)	2.22	Cum Volume (1000 m3)		12.19	
C & E Loss (m)	0.12	Cum SA (1000 m2)		16.89	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=10

E.G. Elev (m)	718.48	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	
W.S. Elev (m)	717.32	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.68	Flow Area (m2)		9.34	
E.G. Slope (m/m)	0.026041	Area (m2)		9.34	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	10.80	Top Width (m)		10.80	
Vel Total (m/s)	4.76	Avg. Vel. (m/s)		4.76	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	275.5	Conv. (m3/s)		275.5	
Length Wtd. (m)	126.54	Wetted Per. (m)		11.22	
Min Ch El (m)	715.98	Shear (N/m2)		212.58	
Alpha	1.00	Stream Power (N/m s)		1011.88	
Frctn Loss (m)	2.29	Cum Volume (1000 m3)		16.07	
C & E Loss (m)	0.16	Cum SA (1000 m2)		19.25	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25

E.G. Elev (m)	719.01	Element	Left OB	Channel	Right OB
Vel Head (m)	1.45	Wt. n-Val.		0.030	
W.S. Elev (m)	717.56	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.02	Flow Area (m2)		12.03	
E.G. Slope (m/m)	0.026833	Area (m2)		12.03	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25 (Continued)

Top Width (m)	11.92	Top Width (m)		11.92	
Vel Total (m/s)	5.34	Avg. Vel. (m/s)		5.34	
Max Chl Dpth (m)	1.58	Hydr. Depth (m)		1.01	
Conv. Total (m3/s)	392.4	Conv. (m3/s)		392.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		12.44	
Min Ch El (m)	715.98	Shear (N/m2)		254.58	
Alpha	1.00	Stream Power (N/m s)		1359.80	
Frctn Loss (m)	2.38	Cum Volume (1000 m3)		20.83	0.00
C & E Loss (m)	0.19	Cum SA (1000 m2)		20.99	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=50

E.G. Elev (m)	719.34	Element	Left OB	Channel	Right OB
Vel Head (m)	1.58	Wt. n-Val.		0.030	
W.S. Elev (m)	717.76	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.27	Flow Area (m2)		14.60	
E.G. Slope (m/m)	0.025076	Area (m2)		14.60	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	12.88	Top Width (m)		12.88	
Vel Total (m/s)	5.57	Avg. Vel. (m/s)		5.57	
Max Chl Dpth (m)	1.78	Hydr. Depth (m)		1.13	
Conv. Total (m3/s)	513.1	Conv. (m3/s)		513.1	
Length Wtd. (m)	126.53	Wetted Per. (m)		13.48	
Min Ch El (m)	715.98	Shear (N/m2)		266.30	
Alpha	1.00	Stream Power (N/m s)		1482.37	
Frctn Loss (m)	2.39	Cum Volume (1000 m3)		24.59	0.00
C & E Loss (m)	0.17	Cum SA (1000 m2)		22.20	0.04

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=100

E.G. Elev (m)	719.76	Element	Left OB	Channel	Right OB
Vel Head (m)	1.80	Wt. n-Val.		0.030	
W.S. Elev (m)	717.96	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.55	Flow Area (m2)		17.22	
E.G. Slope (m/m)	0.025151	Area (m2)		17.22	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	13.75	Top Width (m)		13.75	
Vel Total (m/s)	5.94	Avg. Vel. (m/s)		5.94	
Max Chl Dpth (m)	1.98	Hydr. Depth (m)		1.25	
Conv. Total (m3/s)	645.5	Conv. (m3/s)		645.5	
Length Wtd. (m)	126.50	Wetted Per. (m)		14.44	
Min Ch El (m)	715.98	Shear (N/m2)		294.14	
Alpha	1.00	Stream Power (N/m s)		1748.61	
Frctn Loss (m)	2.44	Cum Volume (1000 m3)		28.91	0.01
C & E Loss (m)	0.18	Cum SA (1000 m2)		23.37	0.08

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500

E.G. Elev (m)	720.80	Element	Left OB	Channel	Right OB
Vel Head (m)	2.42	Wt. n-Val.		0.030	
W.S. Elev (m)	718.38	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	719.26	Flow Area (m2)		23.39	
E.G. Slope (m/m)	0.027058	Area (m2)		23.39	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	15.73	Top Width (m)		15.73	
Vel Total (m/s)	6.89	Avg. Vel. (m/s)		6.89	
Max Chl Dpth (m)	2.40	Hydr. Depth (m)		1.49	
Conv. Total (m3/s)	979.7	Conv. (m3/s)		979.7	
Length Wtd. (m)	126.38	Wetted Per. (m)		16.60	
Min Ch El (m)	715.98	Shear (N/m2)		373.85	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		2576.17	
Frctn Loss (m)	2.53	Cum Volume (1000 m3)	0.06	39.65	0.67
C & E Loss (m)	0.21	Cum SA (1000 m2)	0.46	25.95	3.66

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=2

E.G. Elev (m)	715.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	714.92	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.95	Flow Area (m2)		6.52	
E.G. Slope (m/m)	0.012463	Area (m2)		6.52	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	11.24	Top Width (m)		11.24	
Vel Total (m/s)	2.56	Avg. Vel. (m/s)		2.56	
Max Chl Dpth (m)	0.90	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	149.4	Conv. (m3/s)		149.4	
Length Wtd. (m)	168.56	Wetted Per. (m)		11.44	
Min Ch EI (m)	714.02	Shear (N/m2)		69.67	
Alpha	1.00	Stream Power (N/m s)		178.23	
Frctn Loss (m)	3.18	Cum Volume (1000 m3)		7.18	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.35	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=5

E.G. Elev (m)	715.69	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	715.19	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.27	Flow Area (m2)		9.90	
E.G. Slope (m/m)	0.012956	Area (m2)		9.90	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	13.07	Top Width (m)		13.07	
Vel Total (m/s)	3.11	Avg. Vel. (m/s)		3.11	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	270.2	Conv. (m3/s)		270.2	
Length Wtd. (m)	168.56	Wetted Per. (m)		13.36	
Min Ch EI (m)	714.02	Shear (N/m2)		94.11	
Alpha	1.00	Stream Power (N/m s)		292.34	
Frctn Loss (m)	3.07	Cum Volume (1000 m3)		11.10	
C & E Loss (m)	0.05	Cum SA (1000 m2)		15.44	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=10

E.G. Elev (m)	716.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	715.40	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.52	Flow Area (m2)		12.67	
E.G. Slope (m/m)	0.013330	Area (m2)		12.67	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	14.18	Top Width (m)		14.18	
Vel Total (m/s)	3.51	Avg. Vel. (m/s)		3.51	
Max Chl Dpth (m)	1.38	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	385.1	Conv. (m3/s)		385.1	
Length Wtd. (m)	168.56	Wetted Per. (m)		14.55	
Min Ch EI (m)	714.02	Shear (N/m2)		113.83	
Alpha	1.00	Stream Power (N/m s)		399.47	
Frctn Loss (m)	3.10	Cum Volume (1000 m3)		14.68	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.67	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=25

E.G. Elev (m)	716.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.81	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.63	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.80	Flow Area (m2)		16.10	0.00
E.G. Slope (m/m)	0.013894	Area (m2)		16.10	0.00
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	0.00
Top Width (m)	15.37	Top Width (m)		15.28	0.10
Vel Total (m/s)	3.99	Avg. Vel. (m/s)		3.99	0.31
Max Chl Dpth (m)	1.61	Hydr. Depth (m)		1.05	0.02
Conv. Total (m3/s)	545.3	Conv. (m3/s)		545.2	0.0
Length Wtd. (m)	168.56	Wetted Per. (m)		15.73	0.11
Min Ch El (m)	714.02	Shear (N/m2)		139.51	3.01
Alpha	1.00	Stream Power (N/m s)		556.85	0.93
Frctn Loss (m)	3.10	Cum Volume (1000 m3)		19.05	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		19.27	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=50

E.G. Elev (m)	716.77	Element	Left OB	Channel	Right OB
Vel Head (m)	1.00	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.77	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.02	Flow Area (m2)		18.34	0.04
E.G. Slope (m/m)	0.014785	Area (m2)		18.34	0.04
Q Total (m3/s)	81.25	Flow (m3/s)		81.22	0.03
Top Width (m)	15.96	Top Width (m)		15.58	0.38
Vel Total (m/s)	4.42	Avg. Vel. (m/s)		4.43	0.79
Max Chl Dpth (m)	1.75	Hydr. Depth (m)		1.18	0.10
Conv. Total (m3/s)	668.2	Conv. (m3/s)		668.0	0.2
Length Wtd. (m)	168.55	Wetted Per. (m)		16.06	0.43
Min Ch El (m)	714.02	Shear (N/m2)		165.59	12.58
Alpha	1.00	Stream Power (N/m s)		733.35	9.99
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		22.50	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		20.40	0.02

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=100

E.G. Elev (m)	717.15	Element	Left OB	Channel	Right OB
Vel Head (m)	1.20	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.95	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.26	Flow Area (m2)		21.07	0.13
E.G. Slope (m/m)	0.015223	Area (m2)		21.07	0.13
Q Total (m3/s)	102.37	Flow (m3/s)		102.21	0.16
Top Width (m)	16.66	Top Width (m)		15.93	0.72
Vel Total (m/s)	4.83	Avg. Vel. (m/s)		4.85	1.23
Max Chl Dpth (m)	1.93	Hydr. Depth (m)		1.32	0.18
Conv. Total (m3/s)	829.7	Conv. (m3/s)		828.4	1.3
Length Wtd. (m)	168.53	Wetted Per. (m)		16.45	0.81
Min Ch El (m)	714.02	Shear (N/m2)		191.18	24.48
Alpha	1.01	Stream Power (N/m s)		927.27	30.17
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		26.49	0.01
C & E Loss (m)	0.03	Cum SA (1000 m2)		21.49	0.05

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500

E.G. Elev (m)	718.06	Element	Left OB	Channel	Right OB
Vel Head (m)	1.71	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	716.35	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.93	Flow Area (m2)	0.20	27.49	0.58
E.G. Slope (m/m)	0.015423	Area (m2)	0.20	27.49	0.58
Q Total (m3/s)	161.15	Flow (m3/s)	0.26	159.72	1.18

Plan: Plan 06 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500 (Continued)

Top Width (m)	18.59	Top Width (m)	1.08	16.00	1.51
Vel Total (m/s)	5.70	Avg. Vel. (m/s)	1.29	5.81	2.03
Max Chl Dpth (m)	2.33	Hydr. Depth (m)	0.18	1.72	0.38
Conv. Total (m3/s)	1297.6	Conv. (m3/s)	2.1	1286.1	9.5
Length Wtd. (m)	168.44	Wetted Per. (m)	1.15	16.53	1.69
Min Ch El (m)	714.02	Shear (N/m2)	26.41	251.52	51.81
Alpha	1.03	Stream Power (N/m s)	34.15	1461.48	105.01
Frctn Loss (m)	3.18	Cum Volume (1000 m3)	0.05	36.43	0.65
C & E Loss (m)	0.03	Cum SA (1000 m2)	0.38	23.94	3.60

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=2

E.G. Elev (m)	712.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.83	Wt. n-Val.		0.030	
W.S. Elev (m)	711.19	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.46	Flow Area (m2)		4.13	
E.G. Slope (m/m)	0.031887	Area (m2)		4.13	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	7.01	Top Width (m)		7.01	
Vel Total (m/s)	4.04	Avg. Vel. (m/s)		4.04	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	93.4	Conv. (m3/s)		93.4	
Length Wtd. (m)	244.74	Wetted Per. (m)		7.39	
Min Ch El (m)	710.28	Shear (N/m2)		174.70	
Alpha	1.00	Stream Power (N/m s)		705.40	
Frctn Loss (m)	4.85	Cum Volume (1000 m3)		6.29	
C & E Loss (m)	0.11	Cum SA (1000 m2)		11.81	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=5

E.G. Elev (m)	712.56	Element	Left OB	Channel	Right OB
Vel Head (m)	1.03	Wt. n-Val.		0.030	
W.S. Elev (m)	711.53	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.90	Flow Area (m2)		6.84	
E.G. Slope (m/m)	0.027413	Area (m2)		6.84	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	8.76	Top Width (m)		8.76	
Vel Total (m/s)	4.50	Avg. Vel. (m/s)		4.50	
Max Chl Dpth (m)	1.25	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	185.7	Conv. (m3/s)		185.7	
Length Wtd. (m)	244.74	Wetted Per. (m)		9.30	
Min Ch El (m)	710.28	Shear (N/m2)		197.63	
Alpha	1.00	Stream Power (N/m s)		888.46	
Frctn Loss (m)	4.84	Cum Volume (1000 m3)		9.69	
C & E Loss (m)	0.10	Cum SA (1000 m2)		13.60	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10

E.G. Elev (m)	712.88	Element	Left OB	Channel	Right OB
Vel Head (m)	1.06	Wt. n-Val.		0.030	
W.S. Elev (m)	711.83	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.17	Flow Area (m2)		9.77	
E.G. Slope (m/m)	0.026997	Area (m2)		9.77	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	12.23	Top Width (m)		12.23	
Vel Total (m/s)	4.55	Avg. Vel. (m/s)		4.55	
Max Chl Dpth (m)	1.55	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	270.6	Conv. (m3/s)		270.6	
Length Wtd. (m)	244.74	Wetted Per. (m)		12.91	
Min Ch El (m)	710.28	Shear (N/m2)		200.40	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		911.64	
Frctn Loss (m)	4.77	Cum Volume (1000 m3)		12.79	
C & E Loss (m)	0.06	Cum SA (1000 m2)		15.44	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=25

E.G. Elev (m)	713.30	Element	Left OB	Channel	Right OB
Vel Head (m)	1.21	Wt. n-Val.		0.030	
W.S. Elev (m)	712.08	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.46	Flow Area (m2)		13.18	
E.G. Slope (m/m)	0.025541	Area (m2)		13.18	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	14.29	Top Width (m)		14.29	
Vel Total (m/s)	4.88	Avg. Vel. (m/s)		4.88	
Max Chl Dpth (m)	1.80	Hydr. Depth (m)		0.92	
Conv. Total (m3/s)	402.2	Conv. (m3/s)		402.2	
Length Wtd. (m)	244.74	Wetted Per. (m)		15.04	
Min Ch EI (m)	710.28	Shear (N/m2)		219.45	
Alpha	1.00	Stream Power (N/m s)		1070.40	
Frctn Loss (m)	4.69	Cum Volume (1000 m3)		16.59	
C & E Loss (m)	0.05	Cum SA (1000 m2)		16.78	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=50

E.G. Elev (m)	713.59	Element	Left OB	Channel	Right OB
Vel Head (m)	1.32	Wt. n-Val.		0.030	
W.S. Elev (m)	712.27	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.67	Flow Area (m2)		15.99	
E.G. Slope (m/m)	0.024458	Area (m2)		15.99	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	15.81	Top Width (m)		15.81	
Vel Total (m/s)	5.08	Avg. Vel. (m/s)		5.08	
Max Chl Dpth (m)	1.99	Hydr. Depth (m)		1.01	
Conv. Total (m3/s)	519.5	Conv. (m3/s)		519.5	
Length Wtd. (m)	244.74	Wetted Per. (m)		16.60	
Min Ch EI (m)	710.28	Shear (N/m2)		230.90	
Alpha	1.00	Stream Power (N/m s)		1173.60	
Frctn Loss (m)	4.63	Cum Volume (1000 m3)		19.61	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.76	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=100

E.G. Elev (m)	713.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.50	Wt. n-Val.		0.030	
W.S. Elev (m)	712.45	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.91	Flow Area (m2)		18.88	
E.G. Slope (m/m)	0.023788	Area (m2)		18.88	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	16.55	Top Width (m)		16.55	
Vel Total (m/s)	5.42	Avg. Vel. (m/s)		5.42	
Max Chl Dpth (m)	2.17	Hydr. Depth (m)		1.14	
Conv. Total (m3/s)	663.7	Conv. (m3/s)		663.7	
Length Wtd. (m)	244.74	Wetted Per. (m)		17.43	
Min Ch EI (m)	710.28	Shear (N/m2)		252.63	
Alpha	1.00	Stream Power (N/m s)		1369.69	
Frctn Loss (m)	4.58	Cum Volume (1000 m3)		23.12	
C & E Loss (m)	0.05	Cum SA (1000 m2)		18.76	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1384.467 Profile: T=500

E.G. Elev (m)	714.84	Element	Left OB	Channel	Right OB
Vel Head (m)	2.00	Wt. n-Val.		0.030	
W.S. Elev (m)	712.85	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	713.46	Flow Area (m2)		25.74	
E.G. Slope (m/m)	0.023724	Area (m2)		25.74	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	18.03	Top Width (m)		18.03	
Vel Total (m/s)	6.26	Avg. Vel. (m/s)		6.26	
Max Chl Dpth (m)	2.57	Hydr. Depth (m)		1.43	
Conv. Total (m3/s)	1046.2	Conv. (m3/s)		1046.2	
Length Wtd. (m)	244.23	Wetted Per. (m)		19.12	
Min Ch El (m)	710.28	Shear (N/m2)		313.28	
Alpha	1.00	Stream Power (N/m s)		1961.33	
Frctn Loss (m)	4.61	Cum Volume (1000 m3)	0.03	31.94	0.61
C & E Loss (m)	0.11	Cum SA (1000 m2)	0.28	21.08	3.50

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=2

E.G. Elev (m)	707.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	706.60	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.67	Flow Area (m2)		5.57	
E.G. Slope (m/m)	0.013507	Area (m2)		5.57	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	7.78	Top Width (m)		7.78	
Vel Total (m/s)	3.00	Avg. Vel. (m/s)		3.00	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	143.5	Conv. (m3/s)		143.5	
Length Wtd. (m)	158.72	Wetted Per. (m)		8.18	
Min Ch El (m)	705.50	Shear (N/m2)		90.14	
Alpha	1.00	Stream Power (N/m s)		270.16	
Frctn Loss (m)	3.38	Cum Volume (1000 m3)		5.10	
C & E Loss (m)	0.02	Cum SA (1000 m2)		10.00	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=5

E.G. Elev (m)	707.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.70	Wt. n-Val.		0.030	
W.S. Elev (m)	706.93	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.08	Flow Area (m2)		8.31	
E.G. Slope (m/m)	0.014953	Area (m2)		8.31	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	9.06	Top Width (m)		9.06	
Vel Total (m/s)	3.70	Avg. Vel. (m/s)		3.70	
Max Chl Dpth (m)	1.43	Hydr. Depth (m)		0.92	
Conv. Total (m3/s)	251.5	Conv. (m3/s)		251.5	
Length Wtd. (m)	158.72	Wetted Per. (m)		9.62	
Min Ch El (m)	705.50	Shear (N/m2)		126.75	
Alpha	1.00	Stream Power (N/m s)		468.79	
Frctn Loss (m)	3.45	Cum Volume (1000 m3)		7.84	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.42	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10

E.G. Elev (m)	708.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	707.20	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.39	Flow Area (m2)		10.89	
E.G. Slope (m/m)	0.014746	Area (m2)		10.89	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10 (Continued)

Top Width (m)	10.07	Top Width (m)		10.07	
Vel Total (m/s)	4.08	Avg. Vel. (m/s)		4.08	
Max Chl Dpth (m)	1.70	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	366.1	Conv. (m3/s)		366.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		10.76	
Min Ch El (m)	705.50	Shear (N/m2)		146.39	
Alpha	1.00	Stream Power (N/m s)		597.43	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		10.26	
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.72	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=25

E.G. Elev (m)	708.55	Element	Left OB	Channel	Right OB
Vel Head (m)	1.05	Wt. n-Val.		0.030	
W.S. Elev (m)	707.51	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.77	Flow Area (m2)		14.20	
E.G. Slope (m/m)	0.014933	Area (m2)		14.20	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	11.27	Top Width (m)		11.27	
Vel Total (m/s)	4.53	Avg. Vel. (m/s)		4.53	
Max Chl Dpth (m)	2.01	Hydr. Depth (m)		1.26	
Conv. Total (m3/s)	525.9	Conv. (m3/s)		525.9	
Length Wtd. (m)	158.72	Wetted Per. (m)		12.12	
Min Ch El (m)	705.50	Shear (N/m2)		171.60	
Alpha	1.00	Stream Power (N/m s)		776.88	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		13.24	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.65	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=50

E.G. Elev (m)	708.92	Element	Left OB	Channel	Right OB
Vel Head (m)	1.19	Wt. n-Val.		0.030	
W.S. Elev (m)	707.73	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	708.03	Flow Area (m2)		16.82	
E.G. Slope (m/m)	0.015060	Area (m2)		16.82	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	12.15	Top Width (m)		12.15	
Vel Total (m/s)	4.83	Avg. Vel. (m/s)		4.83	
Max Chl Dpth (m)	2.23	Hydr. Depth (m)		1.38	
Conv. Total (m3/s)	662.1	Conv. (m3/s)		662.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		13.11	
Min Ch El (m)	705.50	Shear (N/m2)		189.47	
Alpha	1.00	Stream Power (N/m s)		915.08	
Frctn Loss (m)	3.43	Cum Volume (1000 m3)		15.60	
C & E Loss (m)	0.05	Cum SA (1000 m2)		14.34	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100

E.G. Elev (m)	709.32	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	
W.S. Elev (m)	707.98	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	708.60	Flow Area (m2)		19.94	
E.G. Slope (m/m)	0.015093	Area (m2)		19.94	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	13.13	Top Width (m)		13.13	
Vel Total (m/s)	5.13	Avg. Vel. (m/s)		5.13	
Max Chl Dpth (m)	2.48	Hydr. Depth (m)		1.52	
Conv. Total (m3/s)	833.3	Conv. (m3/s)		833.3	
Length Wtd. (m)	158.72	Wetted Per. (m)		14.21	
Min Ch El (m)	705.50	Shear (N/m2)		207.71	



Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		1066.20	
Frctn Loss (m)	3.42	Cum Volume (1000 m3)		18.37	
C & E Loss (m)	0.06	Cum SA (1000 m2)		15.12	

Plan: Plan 06 ArroyoPilarejo 1 RS: 1141.143 Profile: T=500

E.G. Elev (m)	710.12	Element	Left OB	Channel	Right OB
Vel Head (m)	1.62	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	708.50	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	709.04	Flow Area (m2)	0.02	27.39	3.44
E.G. Slope (m/m)	0.015383	Area (m2)	0.02	27.39	3.44
Q Total (m3/s)	161.15	Flow (m3/s)	0.01	156.68	4.46
Top Width (m)	35.41	Top Width (m)	0.22	15.56	19.62
Vel Total (m/s)	5.22	Avg. Vel. (m/s)	0.62	5.72	1.30
Max Chl Dpth (m)	3.00	Hydr. Depth (m)	0.07	1.76	0.18
Conv. Total (m3/s)	1299.3	Conv. (m3/s)	0.1	1263.3	36.0
Length Wtd. (m)	158.58	Wetted Per. (m)	0.26	16.83	19.64
Min Ch El (m)	705.50	Shear (N/m2)	8.77	245.52	26.45
Alpha	1.17	Stream Power (N/m s)	5.44	1404.49	34.25
Frctn Loss (m)	3.33	Cum Volume (1000 m3)	0.03	25.44	0.26
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.25	16.96	1.46

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=2

E.G. Elev (m)	703.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	702.97	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.18	Flow Area (m2)		4.55	
E.G. Slope (m/m)	0.038438	Area (m2)		4.55	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	10.72	Top Width (m)		10.72	
Vel Total (m/s)	3.67	Avg. Vel. (m/s)		3.67	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.42	
Conv. Total (m3/s)	85.1	Conv. (m3/s)		85.1	
Length Wtd. (m)	187.19	Wetted Per. (m)		10.83	
Min Ch El (m)	702.38	Shear (N/m2)		158.38	
Alpha	1.00	Stream Power (N/m s)		580.64	
Frctn Loss (m)	3.74	Cum Volume (1000 m3)		4.30	
C & E Loss (m)	0.11	Cum SA (1000 m2)		8.54	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=5

E.G. Elev (m)	704.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.95	Wt. n-Val.		0.030	
W.S. Elev (m)	703.19	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.49	Flow Area (m2)		7.11	
E.G. Slope (m/m)	0.034494	Area (m2)		7.11	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	12.00	Top Width (m)		12.00	
Vel Total (m/s)	4.32	Avg. Vel. (m/s)		4.32	
Max Chl Dpth (m)	0.81	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	165.6	Conv. (m3/s)		165.6	
Length Wtd. (m)	187.19	Wetted Per. (m)		12.19	
Min Ch El (m)	702.38	Shear (N/m2)		197.37	
Alpha	1.00	Stream Power (N/m s)		853.17	
Frctn Loss (m)	3.79	Cum Volume (1000 m3)		6.61	
C & E Loss (m)	0.14	Cum SA (1000 m2)		9.75	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=10

E.G. Elev (m)	704.57	Element	Left OB	Channel	Right OB
Vel Head (m)	1.21	Wt. n-Val.		0.030	
W.S. Elev (m)	703.35	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.73	Flow Area (m2)		9.11	
E.G. Slope (m/m)	0.034973	Area (m2)		9.11	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	12.91	Top Width (m)		12.91	
Vel Total (m/s)	4.88	Avg. Vel. (m/s)		4.88	
Max Chl Dpth (m)	0.97	Hydr. Depth (m)		0.71	
Conv. Total (m3/s)	237.7	Conv. (m3/s)		237.7	
Length Wtd. (m)	187.19	Wetted Per. (m)		13.16	
Min Ch El (m)	702.38	Shear (N/m2)		237.46	
Alpha	1.00	Stream Power (N/m s)		1158.53	
Frctn Loss (m)	3.84	Cum Volume (1000 m3)		8.67	
C & E Loss (m)	0.20	Cum SA (1000 m2)		10.89	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=25

E.G. Elev (m)	705.07	Element	Left OB	Channel	Right OB
Vel Head (m)	1.51	Wt. n-Val.		0.030	
W.S. Elev (m)	703.55	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.04	Flow Area (m2)		11.79	
E.G. Slope (m/m)	0.034156	Area (m2)		11.79	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	13.84	Top Width (m)		13.84	
Vel Total (m/s)	5.45	Avg. Vel. (m/s)		5.45	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.85	
Conv. Total (m3/s)	347.8	Conv. (m3/s)		347.8	
Length Wtd. (m)	187.19	Wetted Per. (m)		14.17	
Min Ch El (m)	702.38	Shear (N/m2)		278.69	
Alpha	1.00	Stream Power (N/m s)		1518.78	
Frctn Loss (m)	3.93	Cum Volume (1000 m3)		11.17	
C & E Loss (m)	0.23	Cum SA (1000 m2)		11.66	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=50

E.G. Elev (m)	705.44	Element	Left OB	Channel	Right OB
Vel Head (m)	1.73	Wt. n-Val.		0.030	
W.S. Elev (m)	703.71	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.25	Flow Area (m2)		13.93	
E.G. Slope (m/m)	0.033536	Area (m2)		13.93	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	14.53	Top Width (m)		14.53	
Vel Total (m/s)	5.83	Avg. Vel. (m/s)		5.83	
Max Chl Dpth (m)	1.33	Hydr. Depth (m)		0.96	
Conv. Total (m3/s)	443.7	Conv. (m3/s)		443.7	
Length Wtd. (m)	187.19	Wetted Per. (m)		14.93	
Min Ch El (m)	702.38	Shear (N/m2)		307.04	
Alpha	1.00	Stream Power (N/m s)		1790.34	
Frctn Loss (m)	3.98	Cum Volume (1000 m3)		13.15	
C & E Loss (m)	0.26	Cum SA (1000 m2)		12.22	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100

E.G. Elev (m)	705.84	Element	Left OB	Channel	Right OB
Vel Head (m)	1.97	Wt. n-Val.		0.030	
W.S. Elev (m)	703.88	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.50	Flow Area (m2)		16.48	
E.G. Slope (m/m)	0.033120	Area (m2)		16.48	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100 (Continued)

Top Width (m)	15.44	Top Width (m)		15.44	
Vel Total (m/s)	6.21	Avg. Vel. (m/s)		6.21	
Max Chl Dpth (m)	1.50	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	562.5	Conv. (m3/s)		562.5	
Length Wtd. (m)	187.19	Wetted Per. (m)		15.91	
Min Ch El (m)	702.38	Shear (N/m2)		336.53	
Alpha	1.00	Stream Power (N/m s)		2090.39	
Frctn Loss (m)	4.03	Cum Volume (1000 m3)		15.48	
C & E Loss (m)	0.28	Cum SA (1000 m2)		12.86	

Plan: Plan 06 ArroyoPilarejo 1 RS: 982.4216 Profile: T=500

E.G. Elev (m)	706.71	Element	Left OB	Channel	Right OB
Vel Head (m)	2.43	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	704.29	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	705.06	Flow Area (m2)	0.13	23.33	
E.G. Slope (m/m)	0.030337	Area (m2)	0.13	23.33	
Q Total (m3/s)	161.15	Flow (m3/s)	0.17	160.98	
Top Width (m)	18.61	Top Width (m)	1.17	17.44	
Vel Total (m/s)	6.87	Avg. Vel. (m/s)	1.30	6.90	
Max Chl Dpth (m)	1.91	Hydr. Depth (m)	0.11	1.34	
Conv. Total (m3/s)	925.2	Conv. (m3/s)	1.0	924.3	
Length Wtd. (m)	187.22	Wetted Per. (m)	1.19	18.00	
Min Ch El (m)	702.38	Shear (N/m2)	31.67	385.54	
Alpha	1.01	Stream Power (N/m s)	41.30	2660.66	
Frctn Loss (m)	4.10	Cum Volume (1000 m3)	0.02	21.41	0.00
C & E Loss (m)	0.29	Cum SA (1000 m2)	0.14	14.35	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=2

E.G. Elev (m)	699.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	699.49	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.51	Flow Area (m2)		6.81	
E.G. Slope (m/m)	0.012238	Area (m2)		6.81	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	12.24	Top Width (m)		12.24	
Vel Total (m/s)	2.45	Avg. Vel. (m/s)		2.45	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	150.8	Conv. (m3/s)		150.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		12.59	
Min Ch El (m)	698.51	Shear (N/m2)		64.94	
Alpha	1.00	Stream Power (N/m s)		159.01	
Frctn Loss (m)	4.10	Cum Volume (1000 m3)		3.23	
C & E Loss (m)	0.16	Cum SA (1000 m2)		6.39	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5

E.G. Elev (m)	700.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.		0.030	
W.S. Elev (m)	699.74	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.81	Flow Area (m2)		10.03	
E.G. Slope (m/m)	0.013276	Area (m2)		10.03	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	13.64	Top Width (m)		13.64	
Vel Total (m/s)	3.06	Avg. Vel. (m/s)		3.06	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	266.9	Conv. (m3/s)		266.9	
Length Wtd. (m)	138.61	Wetted Per. (m)		14.08	
Min Ch El (m)	698.51	Shear (N/m2)		92.80	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		284.39	
Frctn Loss (m)	3.97	Cum Volume (1000 m3)		5.01	
C & E Loss (m)	0.18	Cum SA (1000 m2)		7.35	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=10

E.G. Elev (m)	700.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.56	Wt. n-Val.		0.030	
W.S. Elev (m)	699.97	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.06	Flow Area (m2)		13.44	
E.G. Slope (m/m)	0.013489	Area (m2)		13.44	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	16.49	Top Width (m)		16.49	
Vel Total (m/s)	3.31	Avg. Vel. (m/s)		3.31	
Max Chl Dpth (m)	1.46	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	382.8	Conv. (m3/s)		382.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		17.01	
Min Ch El (m)	698.51	Shear (N/m2)		104.50	
Alpha	1.00	Stream Power (N/m s)		345.72	
Frctn Loss (m)	3.82	Cum Volume (1000 m3)		6.56	
C & E Loss (m)	0.19	Cum SA (1000 m2)		8.14	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=25

E.G. Elev (m)	700.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.74	Wt. n-Val.		0.030	
W.S. Elev (m)	700.17	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.32	Flow Area (m2)		16.90	
E.G. Slope (m/m)	0.014174	Area (m2)		16.90	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	17.42	Top Width (m)		17.42	
Vel Total (m/s)	3.80	Avg. Vel. (m/s)		3.80	
Max Chl Dpth (m)	1.66	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	539.8	Conv. (m3/s)		539.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.03	
Min Ch El (m)	698.51	Shear (N/m2)		130.35	
Alpha	1.00	Stream Power (N/m s)		495.60	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		8.49	
C & E Loss (m)	0.20	Cum SA (1000 m2)		8.74	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=50

E.G. Elev (m)	701.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.88	Wt. n-Val.		0.030	
W.S. Elev (m)	700.32	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.53	Flow Area (m2)		19.57	
E.G. Slope (m/m)	0.014678	Area (m2)		19.57	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	18.10	Top Width (m)		18.10	
Vel Total (m/s)	4.15	Avg. Vel. (m/s)		4.15	
Max Chl Dpth (m)	1.81	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	670.6	Conv. (m3/s)		670.6	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.77	
Min Ch El (m)	698.51	Shear (N/m2)		150.06	
Alpha	1.00	Stream Power (N/m s)		623.09	
Frctn Loss (m)	3.67	Cum Volume (1000 m3)		10.02	
C & E Loss (m)	0.20	Cum SA (1000 m2)		9.17	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=100

E.G. Elev (m)	701.53	Element	Left OB	Channel	Right OB
Vel Head (m)	1.04	Wt. n-Val.		0.030	
W.S. Elev (m)	700.49	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.76	Flow Area (m2)		22.66	
E.G. Slope (m/m)	0.015130	Area (m2)		22.66	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	18.86	Top Width (m)		18.86	
Vel Total (m/s)	4.52	Avg. Vel. (m/s)		4.52	
Max Chl Dpth (m)	1.98	Hydr. Depth (m)		1.20	
Conv. Total (m3/s)	832.3	Conv. (m3/s)		832.3	
Length Wtd. (m)	138.61	Wetted Per. (m)		19.60	
Min Ch El (m)	698.51	Shear (N/m2)		171.56	
Alpha	1.00	Stream Power (N/m s)		774.94	
Frctn Loss (m)	3.62	Cum Volume (1000 m3)		11.82	
C & E Loss (m)	0.20	Cum SA (1000 m2)		9.65	

Plan: Plan 06 ArroyoPilarejo 1 RS: 795.2336 Profile: T=500

E.G. Elev (m)	702.32	Element	Left OB	Channel	Right OB
Vel Head (m)	1.45	Wt. n-Val.		0.030	
W.S. Elev (m)	700.88	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	701.30	Flow Area (m2)		30.27	
E.G. Slope (m/m)	0.016525	Area (m2)		30.27	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	20.96	Top Width (m)		20.96	
Vel Total (m/s)	5.32	Avg. Vel. (m/s)		5.32	
Max Chl Dpth (m)	2.37	Hydr. Depth (m)		1.44	
Conv. Total (m3/s)	1253.6	Conv. (m3/s)		1253.6	
Length Wtd. (m)	138.61	Wetted Per. (m)		21.85	
Min Ch El (m)	698.51	Shear (N/m2)		224.47	
Alpha	1.00	Stream Power (N/m s)		1195.20	
Frctn Loss (m)	3.56	Cum Volume (1000 m3)		16.40	0.00
C & E Loss (m)	0.20	Cum SA (1000 m2)		10.75	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=2

E.G. Elev (m)	695.54	Element	Left OB	Channel	Right OB
Vel Head (m)	1.92	Wt. n-Val.		0.030	
W.S. Elev (m)	693.62	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.04	Flow Area (m2)		2.72	
E.G. Slope (m/m)	0.149178	Area (m2)		2.72	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	8.11	Top Width (m)		8.11	
Vel Total (m/s)	6.13	Avg. Vel. (m/s)		6.13	
Max Chl Dpth (m)	0.45	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	43.2	Conv. (m3/s)		43.2	
Length Wtd. (m)	244.93	Wetted Per. (m)		8.27	
Min Ch El (m)	693.17	Shear (N/m2)		481.17	
Alpha	1.00	Stream Power (N/m s)		2951.73	
Frctn Loss (m)	7.83	Cum Volume (1000 m3)		2.57	
C & E Loss (m)	0.47	Cum SA (1000 m2)		4.98	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5

E.G. Elev (m)	696.08	Element	Left OB	Channel	Right OB
Vel Head (m)	2.24	Wt. n-Val.		0.030	
W.S. Elev (m)	693.84	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.39	Flow Area (m2)		4.64	
E.G. Slope (m/m)	0.101326	Area (m2)		4.64	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5 (Continued)

Top Width (m)	9.16	Top Width (m)		9.16	
Vel Total (m/s)	6.62	Avg. Vel. (m/s)		6.62	
Max Chl Dpth (m)	0.67	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	96.6	Conv. (m3/s)		96.6	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.42	
Min Ch El (m)	693.17	Shear (N/m2)		489.79	
Alpha	1.00	Stream Power (N/m s)		3242.86	
Frctn Loss (m)	7.90	Cum Volume (1000 m3)		3.99	
C & E Loss (m)	0.51	Cum SA (1000 m2)		5.77	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=10

E.G. Elev (m)	696.52	Element	Left OB	Channel	Right OB
Vel Head (m)	2.50	Wt. n-Val.		0.030	
W.S. Elev (m)	694.02	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.66	Flow Area (m2)		6.35	
E.G. Slope (m/m)	0.084263	Area (m2)		6.35	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	9.96	Top Width (m)		9.96	
Vel Total (m/s)	7.00	Avg. Vel. (m/s)		7.00	
Max Chl Dpth (m)	0.85	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	153.2	Conv. (m3/s)		153.2	
Length Wtd. (m)	244.93	Wetted Per. (m)		10.31	
Min Ch El (m)	693.17	Shear (N/m2)		508.68	
Alpha	1.00	Stream Power (N/m s)		3561.77	
Frctn Loss (m)	7.97	Cum Volume (1000 m3)		5.19	
C & E Loss (m)	0.54	Cum SA (1000 m2)		6.31	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=25

E.G. Elev (m)	696.99	Element	Left OB	Channel	Right OB
Vel Head (m)	2.74	Wt. n-Val.		0.030	
W.S. Elev (m)	694.25	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.99	Flow Area (m2)		8.77	
E.G. Slope (m/m)	0.069167	Area (m2)		8.77	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	11.00	Top Width (m)		11.00	
Vel Total (m/s)	7.33	Avg. Vel. (m/s)		7.33	
Max Chl Dpth (m)	1.08	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	244.4	Conv. (m3/s)		244.4	
Length Wtd. (m)	244.93	Wetted Per. (m)		11.47	
Min Ch El (m)	693.17	Shear (N/m2)		518.56	
Alpha	1.00	Stream Power (N/m s)		3800.85	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		6.71	
C & E Loss (m)	0.53	Cum SA (1000 m2)		6.77	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50

E.G. Elev (m)	697.33	Element	Left OB	Channel	Right OB
Vel Head (m)	2.90	Wt. n-Val.		0.030	
W.S. Elev (m)	694.42	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.22	Flow Area (m2)		10.77	
E.G. Slope (m/m)	0.061544	Area (m2)		10.77	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	11.81	Top Width (m)		11.81	
Vel Total (m/s)	7.54	Avg. Vel. (m/s)		7.54	
Max Chl Dpth (m)	1.25	Hydr. Depth (m)		0.91	
Conv. Total (m3/s)	327.5	Conv. (m3/s)		327.5	
Length Wtd. (m)	244.93	Wetted Per. (m)		12.36	
Min Ch El (m)	693.17	Shear (N/m2)		525.89	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		3967.30	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		7.92	
C & E Loss (m)	0.52	Cum SA (1000 m2)		7.09	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=100

E.G. Elev (m)	697.71	Element	Left OB	Channel	Right OB
Vel Head (m)	3.09	Wt. n-Val.		0.030	
W.S. Elev (m)	694.62	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.49	Flow Area (m2)		13.16	
E.G. Slope (m/m)	0.055555	Area (m2)		13.16	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	12.71	Top Width (m)		12.71	
Vel Total (m/s)	7.78	Avg. Vel. (m/s)		7.78	
Max Chl Dpth (m)	1.45	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	434.3	Conv. (m3/s)		434.3	
Length Wtd. (m)	244.93	Wetted Per. (m)		13.36	
Min Ch EI (m)	693.17	Shear (N/m2)		536.79	
Alpha	1.00	Stream Power (N/m s)		4176.00	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		9.34	
C & E Loss (m)	0.50	Cum SA (1000 m2)		7.46	

Plan: Plan 06 ArroyoPilarejo 1 RS: 656.6266 Profile: T=500

E.G. Elev (m)	698.56	Element	Left OB	Channel	Right OB
Vel Head (m)	3.48	Wt. n-Val.		0.030	
W.S. Elev (m)	695.08	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	696.11	Flow Area (m2)		19.50	
E.G. Slope (m/m)	0.045136	Area (m2)		19.50	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	14.58	Top Width (m)		14.58	
Vel Total (m/s)	8.26	Avg. Vel. (m/s)		8.26	
Max Chl Dpth (m)	1.91	Hydr. Depth (m)		1.34	
Conv. Total (m3/s)	758.5	Conv. (m3/s)		758.5	
Length Wtd. (m)	244.93	Wetted Per. (m)		15.47	
Min Ch EI (m)	693.17	Shear (N/m2)		557.96	
Alpha	1.00	Stream Power (N/m s)		4610.90	
Frctn Loss (m)	7.93	Cum Volume (1000 m3)		12.95	0.00
C & E Loss (m)	0.42	Cum SA (1000 m2)		8.29	0.01

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=2

E.G. Elev (m)	687.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	686.89	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.93	Flow Area (m2)		6.43	
E.G. Slope (m/m)	0.013540	Area (m2)		6.43	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	11.42	Top Width (m)		11.42	
Vel Total (m/s)	2.60	Avg. Vel. (m/s)		2.60	
Max Chl Dpth (m)	0.95	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	143.3	Conv. (m3/s)		143.3	
Length Wtd. (m)	141.09	Wetted Per. (m)		11.75	
Min Ch EI (m)	685.94	Shear (N/m2)		72.66	
Alpha	1.00	Stream Power (N/m s)		188.56	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		1.45	
C & E Loss (m)	0.11	Cum SA (1000 m2)		2.59	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=5

E.G. Elev (m)	687.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	687.13	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.24	Flow Area (m2)		9.49	
E.G. Slope (m/m)	0.015650	Area (m2)		9.49	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	13.43	Top Width (m)		13.43	
Vel Total (m/s)	3.24	Avg. Vel. (m/s)		3.24	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.71	
Conv. Total (m3/s)	245.8	Conv. (m3/s)		245.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		13.87	
Min Ch El (m)	685.94	Shear (N/m2)		105.06	
Alpha	1.00	Stream Power (N/m s)		340.31	
Frctn Loss (m)	3.63	Cum Volume (1000 m3)		2.26	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.00	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=10

E.G. Elev (m)	688.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.030	
W.S. Elev (m)	687.30	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.48	Flow Area (m2)		11.93	
E.G. Slope (m/m)	0.017122	Area (m2)		11.93	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	14.58	Top Width (m)		14.58	
Vel Total (m/s)	3.73	Avg. Vel. (m/s)		3.73	
Max Chl Dpth (m)	1.36	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	339.8	Conv. (m3/s)		339.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		15.10	
Min Ch El (m)	685.94	Shear (N/m2)		132.62	
Alpha	1.00	Stream Power (N/m s)		494.29	
Frctn Loss (m)	3.57	Cum Volume (1000 m3)		2.95	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.30	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=25

E.G. Elev (m)	688.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.97	Wt. n-Val.		0.030	
W.S. Elev (m)	687.49	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.75	Flow Area (m2)		14.73	
E.G. Slope (m/m)	0.018937	Area (m2)		14.73	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	15.26	Top Width (m)		15.26	
Vel Total (m/s)	4.36	Avg. Vel. (m/s)		4.36	
Max Chl Dpth (m)	1.55	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	467.0	Conv. (m3/s)		467.0	
Length Wtd. (m)	141.09	Wetted Per. (m)		15.89	
Min Ch El (m)	685.94	Shear (N/m2)		172.23	
Alpha	1.00	Stream Power (N/m s)		751.33	
Frctn Loss (m)	3.52	Cum Volume (1000 m3)		3.83	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.55	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50

E.G. Elev (m)	688.81	Element	Left OB	Channel	Right OB
Vel Head (m)	1.18	Wt. n-Val.		0.030	
W.S. Elev (m)	687.63	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.98	Flow Area (m2)		16.87	
E.G. Slope (m/m)	0.020195	Area (m2)		16.87	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	



Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50 (Continued)

Top Width (m)	15.76	Top Width (m)		15.76	
Vel Total (m/s)	4.82	Avg. Vel. (m/s)		4.82	
Max Chl Dpth (m)	1.69	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	571.7	Conv. (m3/s)		571.7	
Length Wtd. (m)	141.09	Wetted Per. (m)		16.46	
Min Ch El (m)	685.94	Shear (N/m2)		202.99	
Alpha	1.00	Stream Power (N/m s)		977.52	
Frctn Loss (m)	3.49	Cum Volume (1000 m3)		4.53	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.72	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=100

E.G. Elev (m)	689.21	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	
W.S. Elev (m)	687.78	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	688.21	Flow Area (m2)		19.32	
E.G. Slope (m/m)	0.021455	Area (m2)		19.32	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	16.31	Top Width (m)		16.31	
Vel Total (m/s)	5.30	Avg. Vel. (m/s)		5.30	
Max Chl Dpth (m)	1.84	Hydr. Depth (m)		1.19	
Conv. Total (m3/s)	698.9	Conv. (m3/s)		698.9	
Length Wtd. (m)	141.09	Wetted Per. (m)		17.10	
Min Ch El (m)	685.94	Shear (N/m2)		237.79	
Alpha	1.00	Stream Power (N/m s)		1259.73	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		5.36	
C & E Loss (m)	0.09	Cum SA (1000 m2)		3.90	

Plan: Plan 06 ArroyoPilarejo 1 RS: 411.7011 Profile: T=500

E.G. Elev (m)	690.21	Element	Left OB	Channel	Right OB
Vel Head (m)	2.08	Wt. n-Val.		0.030	0.000
W.S. Elev (m)	688.13	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	688.77	Flow Area (m2)		25.22	0.00
E.G. Slope (m/m)	0.024348	Area (m2)		25.22	0.00
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	0.00
Top Width (m)	17.57	Top Width (m)		17.53	0.03
Vel Total (m/s)	6.39	Avg. Vel. (m/s)		6.39	0.16
Max Chl Dpth (m)	2.19	Hydr. Depth (m)		1.44	0.01
Conv. Total (m3/s)	1032.8	Conv. (m3/s)		1032.8	0.0
Length Wtd. (m)	141.09	Wetted Per. (m)		18.52	0.04
Min Ch El (m)	685.94	Shear (N/m2)		325.12	
Alpha	1.00	Stream Power (N/m s)		2077.52	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		7.47	0.00
C & E Loss (m)	0.06	Cum SA (1000 m2)		4.36	0.00

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2

E.G. Elev (m)	683.40	Element	Left OB	Channel	Right OB
Vel Head (m)	1.48	Wt. n-Val.		0.030	
W.S. Elev (m)	681.92	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.33	Flow Area (m2)		3.10	
E.G. Slope (m/m)	0.072100	Area (m2)		3.10	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	6.40	Top Width (m)		6.40	
Vel Total (m/s)	5.38	Avg. Vel. (m/s)		5.38	
Max Chl Dpth (m)	0.74	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	62.1	Conv. (m3/s)		62.1	
Length Wtd. (m)	200.54	Wetted Per. (m)		6.64	
Min Ch El (m)	681.18	Shear (N/m2)		329.95	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		1776.79	
Frctn Loss (m)	7.02	Cum Volume (1000 m3)		0.78	
C & E Loss (m)	0.25	Cum SA (1000 m2)		1.33	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=5

E.G. Elev (m)	683.92	Element	Left OB	Channel	Right OB
Vel Head (m)	1.68	Wt. n-Val.		0.030	
W.S. Elev (m)	682.24	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.75	Flow Area (m2)		5.36	
E.G. Slope (m/m)	0.049876	Area (m2)		5.36	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	7.48	Top Width (m)		7.48	
Vel Total (m/s)	5.74	Avg. Vel. (m/s)		5.74	
Max Chl Dpth (m)	1.06	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	137.7	Conv. (m3/s)		137.7	
Length Wtd. (m)	200.54	Wetted Per. (m)		7.92	
Min Ch EI (m)	681.18	Shear (N/m2)		330.87	
Alpha	1.00	Stream Power (N/m s)		1898.05	
Frctn Loss (m)	6.92	Cum Volume (1000 m3)		1.21	
C & E Loss (m)	0.18	Cum SA (1000 m2)		1.53	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=10

E.G. Elev (m)	684.33	Element	Left OB	Channel	Right OB
Vel Head (m)	1.82	Wt. n-Val.		0.030	
W.S. Elev (m)	682.51	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.06	Flow Area (m2)		7.44	
E.G. Slope (m/m)	0.041199	Area (m2)		7.44	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	8.36	Top Width (m)		8.36	
Vel Total (m/s)	5.98	Avg. Vel. (m/s)		5.98	
Max Chl Dpth (m)	1.33	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	219.0	Conv. (m3/s)		219.0	
Length Wtd. (m)	200.54	Wetted Per. (m)		8.96	
Min Ch EI (m)	681.18	Shear (N/m2)		335.44	
Alpha	1.00	Stream Power (N/m s)		2004.83	
Frctn Loss (m)	6.82	Cum Volume (1000 m3)		1.59	
C & E Loss (m)	0.12	Cum SA (1000 m2)		1.68	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=25

E.G. Elev (m)	684.84	Element	Left OB	Channel	Right OB
Vel Head (m)	2.01	Wt. n-Val.		0.030	
W.S. Elev (m)	682.82	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.45	Flow Area (m2)		10.23	
E.G. Slope (m/m)	0.034388	Area (m2)		10.23	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	9.15	Top Width (m)		9.15	
Vel Total (m/s)	6.28	Avg. Vel. (m/s)		6.28	
Max Chl Dpth (m)	1.64	Hydr. Depth (m)		1.12	
Conv. Total (m3/s)	346.6	Conv. (m3/s)		346.6	
Length Wtd. (m)	200.54	Wetted Per. (m)		9.99	
Min Ch EI (m)	681.18	Shear (N/m2)		345.42	
Alpha	1.00	Stream Power (N/m s)		2169.58	
Frctn Loss (m)	6.68	Cum Volume (1000 m3)		2.07	
C & E Loss (m)	0.02	Cum SA (1000 m2)		1.83	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=50

E.G. Elev (m)	685.22	Element	Left OB	Channel	Right OB
Vel Head (m)	2.16	Wt. n-Val.		0.030	
W.S. Elev (m)	683.06	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.74	Flow Area (m2)		12.48	
E.G. Slope (m/m)	0.030991	Area (m2)		12.48	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	9.65	Top Width (m)		9.65	
Vel Total (m/s)	6.51	Avg. Vel. (m/s)		6.51	
Max Chl Dpth (m)	1.88	Hydr. Depth (m)		1.29	
Conv. Total (m3/s)	461.5	Conv. (m3/s)		461.5	
Length Wtd. (m)	200.54	Wetted Per. (m)		10.68	
Min Ch El (m)	681.18	Shear (N/m2)		355.04	
Alpha	1.00	Stream Power (N/m s)		2311.00	
Frctn Loss (m)	6.53	Cum Volume (1000 m3)		2.46	
C & E Loss (m)	0.02	Cum SA (1000 m2)		1.92	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=100

E.G. Elev (m)	685.66	Element	Left OB	Channel	Right OB
Vel Head (m)	2.33	Wt. n-Val.		0.030	
W.S. Elev (m)	683.33	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	684.08	Flow Area (m2)		15.15	
E.G. Slope (m/m)	0.028361	Area (m2)		15.15	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	10.22	Top Width (m)		10.22	
Vel Total (m/s)	6.76	Avg. Vel. (m/s)		6.76	
Max Chl Dpth (m)	2.15	Hydr. Depth (m)		1.48	
Conv. Total (m3/s)	607.9	Conv. (m3/s)		607.9	
Length Wtd. (m)	200.54	Wetted Per. (m)		11.46	
Min Ch El (m)	681.18	Shear (N/m2)		367.44	
Alpha	1.00	Stream Power (N/m s)		2483.44	
Frctn Loss (m)	6.34	Cum Volume (1000 m3)		2.93	
C & E Loss (m)	0.04	Cum SA (1000 m2)		2.03	

Plan: Plan 06 ArroyoPilarejo 1 RS: 270.6081 Profile: T=500

E.G. Elev (m)	686.69	Element	Left OB	Channel	Right OB
Vel Head (m)	2.73	Wt. n-Val.		0.030	
W.S. Elev (m)	683.96	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	684.86	Flow Area (m2)		22.04	
E.G. Slope (m/m)	0.024693	Area (m2)		22.04	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	11.62	Top Width (m)		11.62	
Vel Total (m/s)	7.31	Avg. Vel. (m/s)		7.31	
Max Chl Dpth (m)	2.78	Hydr. Depth (m)		1.90	
Conv. Total (m3/s)	1025.5	Conv. (m3/s)		1025.5	
Length Wtd. (m)	200.54	Wetted Per. (m)		13.36	
Min Ch El (m)	681.18	Shear (N/m2)		399.45	
Alpha	1.00	Stream Power (N/m s)		2921.04	
Frctn Loss (m)	5.98	Cum Volume (1000 m3)		4.14	
C & E Loss (m)	0.09	Cum SA (1000 m2)		2.30	

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2

E.G. Elev (m)	676.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.65	Wt. n-Val.		0.030	
W.S. Elev (m)	675.47	Reach Len. (m)			
Crit W.S. (m)	675.65	Flow Area (m2)		4.68	
E.G. Slope (m/m)	0.020633	Area (m2)		4.68	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2 (Continued)

Top Width (m)	6.85	Top Width (m)		6.85	
Vel Total (m/s)	3.56	Avg. Vel. (m/s)		3.56	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	116.1	Conv. (m3/s)		116.1	
Length Wtd. (m)		Wetted Per. (m)		7.28	
Min Ch El (m)	674.44	Shear (N/m2)		129.97	
Alpha	1.00	Stream Power (N/m s)		463.31	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=5

E.G. Elev (m)	676.82	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	675.75	Reach Len. (m)			
Crit W.S. (m)	676.08	Flow Area (m2)		6.71	
E.G. Slope (m/m)	0.025280	Area (m2)		6.71	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	7.76	Top Width (m)		7.76	
Vel Total (m/s)	4.58	Avg. Vel. (m/s)		4.58	
Max Chl Dpth (m)	1.31	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	193.4	Conv. (m3/s)		193.4	
Length Wtd. (m)		Wetted Per. (m)		8.36	
Min Ch El (m)	674.44	Shear (N/m2)		199.14	
Alpha	1.00	Stream Power (N/m s)		912.04	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=10

E.G. Elev (m)	677.39	Element	Left OB	Channel	Right OB
Vel Head (m)	1.44	Wt. n-Val.		0.030	
W.S. Elev (m)	675.96	Reach Len. (m)			
Crit W.S. (m)	676.41	Flow Area (m2)		8.37	
E.G. Slope (m/m)	0.028548	Area (m2)		8.37	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	8.42	Top Width (m)		8.42	
Vel Total (m/s)	5.31	Avg. Vel. (m/s)		5.31	
Max Chl Dpth (m)	1.52	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	263.1	Conv. (m3/s)		263.1	
Length Wtd. (m)		Wetted Per. (m)		9.15	
Min Ch El (m)	674.44	Shear (N/m2)		256.24	
Alpha	1.00	Stream Power (N/m s)		1360.43	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25

E.G. Elev (m)	678.13	Element	Left OB	Channel	Right OB
Vel Head (m)	1.94	Wt. n-Val.		0.030	
W.S. Elev (m)	676.19	Reach Len. (m)			
Crit W.S. (m)	676.80	Flow Area (m2)		10.41	
E.G. Slope (m/m)	0.032325	Area (m2)		10.41	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	9.08	Top Width (m)		9.08	
Vel Total (m/s)	6.17	Avg. Vel. (m/s)		6.17	
Max Chl Dpth (m)	1.75	Hydr. Depth (m)		1.15	
Conv. Total (m3/s)	357.5	Conv. (m3/s)		357.5	
Length Wtd. (m)		Wetted Per. (m)		9.96	
Min Ch El (m)	674.44	Shear (N/m2)		331.37	

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		2045.54	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=50

E.G. Elev (m)	678.68	Element	Left OB	Channel	Right OB
Vel Head (m)	2.32	Wt. n-Val.		0.030	
W.S. Elev (m)	676.36	Reach Len. (m)			
Crit W.S. (m)	677.10	Flow Area (m2)		12.05	
E.G. Slope (m/m)	0.034217	Area (m2)		12.05	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	9.54	Top Width (m)		9.54	
Vel Total (m/s)	6.74	Avg. Vel. (m/s)		6.74	
Max Chl Dpth (m)	1.92	Hydr. Depth (m)		1.26	
Conv. Total (m3/s)	439.2	Conv. (m3/s)		439.2	
Length Wtd. (m)		Wetted Per. (m)		10.54	
Min Ch El (m)	674.44	Shear (N/m2)		383.72	
Alpha	1.00	Stream Power (N/m s)		2587.30	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=100

E.G. Elev (m)	679.28	Element	Left OB	Channel	Right OB
Vel Head (m)	2.71	Wt. n-Val.		0.030	
W.S. Elev (m)	676.57	Reach Len. (m)			
Crit W.S. (m)	677.51	Flow Area (m2)		14.03	
E.G. Slope (m/m)	0.035480	Area (m2)		14.03	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	10.06	Top Width (m)		10.06	
Vel Total (m/s)	7.30	Avg. Vel. (m/s)		7.30	
Max Chl Dpth (m)	2.13	Hydr. Depth (m)		1.39	
Conv. Total (m3/s)	543.5	Conv. (m3/s)		543.5	
Length Wtd. (m)		Wetted Per. (m)		11.20	
Min Ch El (m)	674.44	Shear (N/m2)		435.85	
Alpha	1.00	Stream Power (N/m s)		3180.04	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 06 ArroyoPilarejo 1 RS: 70.07248 Profile: T=500

E.G. Elev (m)	680.63	Element	Left OB	Channel	Right OB
Vel Head (m)	3.58	Wt. n-Val.		0.030	
W.S. Elev (m)	677.05	Reach Len. (m)			
Crit W.S. (m)	678.19	Flow Area (m2)		19.24	
E.G. Slope (m/m)	0.036677	Area (m2)		19.24	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	11.32	Top Width (m)		11.32	
Vel Total (m/s)	8.38	Avg. Vel. (m/s)		8.38	
Max Chl Dpth (m)	2.61	Hydr. Depth (m)		1.70	
Conv. Total (m3/s)	841.5	Conv. (m3/s)		841.5	
Length Wtd. (m)		Wetted Per. (m)		12.80	
Min Ch El (m)	674.44	Shear (N/m2)		540.64	
Alpha	1.00	Stream Power (N/m s)		4528.82	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=2

E.G. Elev (m)	727.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	727.36	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.36	Flow Area (m2)		7.64	
E.G. Slope (m/m)	0.011416	Area (m2)		7.64	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	15.72	Top Width (m)		15.72	
Vel Total (m/s)	2.18	Avg. Vel. (m/s)		2.18	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.49	
Conv. Total (m3/s)	156.1	Conv. (m3/s)		156.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		15.91	
Min Ch El (m)	726.47	Shear (N/m2)		53.74	
Alpha	1.00	Stream Power (N/m s)		117.35	
Frctn Loss (m)	2.49	Cum Volume (1000 m3)		6.81	
C & E Loss (m)	0.01	Cum SA (1000 m2)		11.98	

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=5

E.G. Elev (m)	727.95	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	727.61	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.61	Flow Area (m2)		11.88	
E.G. Slope (m/m)	0.010246	Area (m2)		11.88	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	17.40	Top Width (m)		17.40	
Vel Total (m/s)	2.59	Avg. Vel. (m/s)		2.59	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	303.8	Conv. (m3/s)		303.8	
Length Wtd. (m)	224.66	Wetted Per. (m)		17.67	
Min Ch El (m)	726.47	Shear (N/m2)		67.54	
Alpha	1.00	Stream Power (N/m s)		174.86	
Frctn Loss (m)	2.27	Cum Volume (1000 m3)		11.25	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		16.48	0.02

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=10

E.G. Elev (m)	728.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	727.81	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.81	Flow Area (m2)		15.45	
E.G. Slope (m/m)	0.009593	Area (m2)		15.45	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	18.32	Top Width (m)		18.32	
Vel Total (m/s)	2.88	Avg. Vel. (m/s)		2.88	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	453.9	Conv. (m3/s)		453.9	
Length Wtd. (m)	224.66	Wetted Per. (m)		18.68	
Min Ch El (m)	726.47	Shear (N/m2)		77.82	
Alpha	1.00	Stream Power (N/m s)		223.90	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		14.80	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		17.84	0.09

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=25

E.G. Elev (m)	728.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	728.06	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.06	Flow Area (m2)		20.24	
E.G. Slope (m/m)	0.009025	Area (m2)		20.24	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=25 (Continued)

Top Width (m)	19.70	Top Width (m)		19.70	
Vel Total (m/s)	3.18	Avg. Vel. (m/s)		3.18	
Max Chl Dpth (m)	1.59	Hydr. Depth (m)		1.03	
Conv. Total (m3/s)	676.5	Conv. (m3/s)		676.5	
Length Wtd. (m)	224.66	Wetted Per. (m)		20.16	
Min Ch El (m)	726.47	Shear (N/m2)		88.85	
Alpha	1.00	Stream Power (N/m s)		282.11	
Frctn Loss (m)	2.00	Cum Volume (1000 m3)	0.01	19.76	0.03
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.07	19.96	0.54

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=50

E.G. Elev (m)	728.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	728.25	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.25	Flow Area (m2)		24.08	
E.G. Slope (m/m)	0.008695	Area (m2)		24.08	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	20.75	Top Width (m)		20.75	
Vel Total (m/s)	3.37	Avg. Vel. (m/s)		3.37	
Max Chl Dpth (m)	1.78	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	871.3	Conv. (m3/s)		871.3	
Length Wtd. (m)	224.66	Wetted Per. (m)		21.29	
Min Ch El (m)	726.47	Shear (N/m2)		96.44	
Alpha	1.00	Stream Power (N/m s)		325.41	
Frctn Loss (m)	1.93	Cum Volume (1000 m3)	0.02	23.75	0.31
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.14	21.19	3.17

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=100

E.G. Elev (m)	729.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.66	Wt. n-Val.		0.030	
W.S. Elev (m)	728.46	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.46	Flow Area (m2)		28.48	
E.G. Slope (m/m)	0.008411	Area (m2)		28.48	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	21.69	Top Width (m)		21.69	
Vel Total (m/s)	3.60	Avg. Vel. (m/s)		3.60	
Max Chl Dpth (m)	1.99	Hydr. Depth (m)		1.31	
Conv. Total (m3/s)	1116.3	Conv. (m3/s)		1116.3	
Length Wtd. (m)	224.66	Wetted Per. (m)		22.33	
Min Ch El (m)	726.47	Shear (N/m2)		105.19	
Alpha	1.00	Stream Power (N/m s)		378.15	
Frctn Loss (m)	1.87	Cum Volume (1000 m3)	0.05	28.17	1.05
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.20	22.03	5.85

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=500

E.G. Elev (m)	729.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.79	Wt. n-Val.		0.030	
W.S. Elev (m)	728.99	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.99	Flow Area (m2)		40.83	
E.G. Slope (m/m)	0.007970	Area (m2)		40.83	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	25.84	Top Width (m)		25.84	
Vel Total (m/s)	3.95	Avg. Vel. (m/s)		3.95	
Max Chl Dpth (m)	2.52	Hydr. Depth (m)		1.58	
Conv. Total (m3/s)	1805.1	Conv. (m3/s)		1805.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		26.73	
Min Ch El (m)	726.47	Shear (N/m2)		119.39	

Plan: Plan 02 ArroyoValtierra 1 RS: 1034.385 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		471.21	
Frctn Loss (m)	1.77	Cum Volume (1000 m3)	0.10	39.21	2.52
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.27	24.63	7.25

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=2

E.G. Elev (m)	711.56	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	711.24	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.24	Flow Area (m2)		6.60	
E.G. Slope (m/m)	0.010771	Area (m2)		6.60	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	10.23	Top Width (m)		10.23	
Vel Total (m/s)	2.53	Avg. Vel. (m/s)		2.53	
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	160.7	Conv. (m3/s)		160.7	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.58	
Min Ch EI (m)	709.98	Shear (N/m2)		65.93	
Alpha	1.00	Stream Power (N/m s)		166.57	
Frctn Loss (m)	1.69	Cum Volume (1000 m3)		5.21	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.07	

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=5

E.G. Elev (m)	712.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.030	
W.S. Elev (m)	711.58	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.58	Flow Area (m2)		10.46	
E.G. Slope (m/m)	0.009946	Area (m2)		10.46	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	12.10	Top Width (m)		12.10	
Vel Total (m/s)	2.94	Avg. Vel. (m/s)		2.94	
Max Chl Dpth (m)	1.60	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	308.3	Conv. (m3/s)		308.3	
Length Wtd. (m)	158.70	Wetted Per. (m)		12.57	
Min Ch EI (m)	709.98	Shear (N/m2)		81.15	
Alpha	1.00	Stream Power (N/m s)		238.63	
Frctn Loss (m)	1.57	Cum Volume (1000 m3)		8.74	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.17	0.02

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=10

E.G. Elev (m)	712.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	711.85	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.85	Flow Area (m2)		13.89	
E.G. Slope (m/m)	0.009410	Area (m2)		13.89	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	13.55	Top Width (m)		13.55	
Vel Total (m/s)	3.20	Avg. Vel. (m/s)		3.20	
Max Chl Dpth (m)	1.87	Hydr. Depth (m)		1.03	
Conv. Total (m3/s)	458.3	Conv. (m3/s)		458.3	
Length Wtd. (m)	158.70	Wetted Per. (m)		14.11	
Min Ch EI (m)	709.98	Shear (N/m2)		90.84	
Alpha	1.00	Stream Power (N/m s)		290.69	
Frctn Loss (m)	1.50	Cum Volume (1000 m3)		11.50	0.01
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.26	0.09



Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=25

E.G. Elev (m)	712.79	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	712.17	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.17	Flow Area (m2)		18.39	
E.G. Slope (m/m)	0.008775	Area (m2)		18.39	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	14.81	Top Width (m)		14.81	
Vel Total (m/s)	3.49	Avg. Vel. (m/s)		3.49	
Max Chl Dpth (m)	2.19	Hydr. Depth (m)		1.24	
Conv. Total (m3/s)	686.1	Conv. (m3/s)		686.1	
Length Wtd. (m)	158.70	Wetted Per. (m)		15.54	
Min Ch El (m)	709.98	Shear (N/m2)		101.87	
Alpha	1.00	Stream Power (N/m s)		355.95	
Frctn Loss (m)	1.41	Cum Volume (1000 m3)	0.01	15.42	0.03
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.07	16.08	0.54

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=50

E.G. Elev (m)	713.10	Element	Left OB	Channel	Right OB
Vel Head (m)	0.70	Wt. n-Val.		0.030	
W.S. Elev (m)	712.40	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.40	Flow Area (m2)		21.90	
E.G. Slope (m/m)	0.008496	Area (m2)		21.90	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	15.65	Top Width (m)		15.65	
Vel Total (m/s)	3.71	Avg. Vel. (m/s)		3.71	
Max Chl Dpth (m)	2.42	Hydr. Depth (m)		1.40	
Conv. Total (m3/s)	881.5	Conv. (m3/s)		881.5	
Length Wtd. (m)	158.70	Wetted Per. (m)		16.50	
Min Ch El (m)	709.98	Shear (N/m2)		110.56	
Alpha	1.00	Stream Power (N/m s)		410.20	
Frctn Loss (m)	1.36	Cum Volume (1000 m3)	0.02	18.58	0.31
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.14	17.10	3.17

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=100

E.G. Elev (m)	713.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.79	Wt. n-Val.		0.030	
W.S. Elev (m)	712.65	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.65	Flow Area (m2)		26.03	
E.G. Slope (m/m)	0.008245	Area (m2)		26.03	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	16.58	Top Width (m)		16.58	
Vel Total (m/s)	3.93	Avg. Vel. (m/s)		3.93	
Max Chl Dpth (m)	2.67	Hydr. Depth (m)		1.57	
Conv. Total (m3/s)	1127.4	Conv. (m3/s)		1127.4	
Length Wtd. (m)	158.70	Wetted Per. (m)		17.58	
Min Ch El (m)	709.98	Shear (N/m2)		119.75	
Alpha	1.00	Stream Power (N/m s)		470.92	
Frctn Loss (m)	1.33	Cum Volume (1000 m3)	0.05	22.04	1.05
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.20	17.73	5.85

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=500

E.G. Elev (m)	714.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.98	Wt. n-Val.		0.030	
W.S. Elev (m)	713.26	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	713.26	Flow Area (m2)		36.67	
E.G. Slope (m/m)	0.007801	Area (m2)		36.67	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	

Plan: Plan 02 ArroyoValtierra 1 RS: 809.7249 Profile: T=500 (Continued)

Top Width (m)	18.79	Top Width (m)		18.79	
Vel Total (m/s)	4.39	Avg. Vel. (m/s)		4.39	
Max Chl Dpth (m)	3.28	Hydr. Depth (m)		1.95	
Conv. Total (m3/s)	1824.5	Conv. (m3/s)		1824.5	
Length Wtd. (m)	158.70	Wetted Per. (m)		20.11	
Min Ch El (m)	709.98	Shear (N/m2)		139.51	
Alpha	1.00	Stream Power (N/m s)		613.10	
Frctn Loss (m)	1.27	Cum Volume (1000 m3)	0.10	30.50	2.52
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.27	19.62	7.25

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=2

E.G. Elev (m)	696.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	696.31	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.31	Flow Area (m2)		6.49	
E.G. Slope (m/m)	0.010524	Area (m2)		6.49	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	9.64	Top Width (m)		9.64	
Vel Total (m/s)	2.57	Avg. Vel. (m/s)		2.57	
Max Chl Dpth (m)	1.08	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	162.6	Conv. (m3/s)		162.6	
Length Wtd. (m)	167.86	Wetted Per. (m)		9.95	
Min Ch El (m)	695.23	Shear (N/m2)		67.28	
Alpha	1.00	Stream Power (N/m s)		172.98	
Frctn Loss (m)	1.85	Cum Volume (1000 m3)		4.17	
C & E Loss (m)	0.03	Cum SA (1000 m2)		7.49	

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=5

E.G. Elev (m)	697.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.030	
W.S. Elev (m)	696.67	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.67	Flow Area (m2)		10.43	
E.G. Slope (m/m)	0.009835	Area (m2)		10.43	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	11.96	Top Width (m)		11.96	
Vel Total (m/s)	2.95	Avg. Vel. (m/s)		2.95	
Max Chl Dpth (m)	1.44	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	310.1	Conv. (m3/s)		310.1	
Length Wtd. (m)	167.86	Wetted Per. (m)		12.39	
Min Ch El (m)	695.23	Shear (N/m2)		81.19	
Alpha	1.00	Stream Power (N/m s)		239.27	
Frctn Loss (m)	1.70	Cum Volume (1000 m3)		7.09	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.26	0.02

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=10

E.G. Elev (m)	697.47	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	696.94	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.94	Flow Area (m2)		13.88	
E.G. Slope (m/m)	0.009447	Area (m2)		13.88	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	13.59	Top Width (m)		13.59	
Vel Total (m/s)	3.20	Avg. Vel. (m/s)		3.20	
Max Chl Dpth (m)	1.71	Hydr. Depth (m)		1.02	
Conv. Total (m3/s)	457.4	Conv. (m3/s)		457.4	
Length Wtd. (m)	167.86	Wetted Per. (m)		14.12	
Min Ch El (m)	695.23	Shear (N/m2)		91.06	

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		291.67	
Frctn Loss (m)	1.61	Cum Volume (1000 m3)		9.30	0.01
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.11	0.09

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=25

E.G. Elev (m)	697.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.57	Wt. n-Val.		0.030	
W.S. Elev (m)	697.28	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.28	Flow Area (m2)		19.19	
E.G. Slope (m/m)	0.009036	Area (m2)		19.19	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	17.00	Top Width (m)		17.00	
Vel Total (m/s)	3.35	Avg. Vel. (m/s)		3.35	
Max Chl Dpth (m)	2.05	Hydr. Depth (m)		1.13	
Conv. Total (m3/s)	676.1	Conv. (m3/s)		676.1	
Length Wtd. (m)	167.86	Wetted Per. (m)		17.65	
Min Ch EI (m)	695.23	Shear (N/m2)		96.30	
Alpha	1.00	Stream Power (N/m s)		322.56	
Frctn Loss (m)	1.56	Cum Volume (1000 m3)	0.01	12.44	0.03
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.07	13.56	0.54

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=50

E.G. Elev (m)	698.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.64	Wt. n-Val.		0.030	
W.S. Elev (m)	697.50	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.50	Flow Area (m2)		22.88	
E.G. Slope (m/m)	0.008665	Area (m2)		22.88	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	17.94	Top Width (m)		17.94	
Vel Total (m/s)	3.55	Avg. Vel. (m/s)		3.55	
Max Chl Dpth (m)	2.27	Hydr. Depth (m)		1.28	
Conv. Total (m3/s)	872.8	Conv. (m3/s)		872.8	
Length Wtd. (m)	167.86	Wetted Per. (m)		18.69	
Min Ch EI (m)	695.23	Shear (N/m2)		104.03	
Alpha	1.00	Stream Power (N/m s)		369.42	
Frctn Loss (m)	1.50	Cum Volume (1000 m3)	0.02	15.03	0.31
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.14	14.43	3.17

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=100

E.G. Elev (m)	698.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.030	
W.S. Elev (m)	697.72	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.72	Flow Area (m2)		27.06	
E.G. Slope (m/m)	0.008488	Area (m2)		27.06	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	18.96	Top Width (m)		18.96	
Vel Total (m/s)	3.78	Avg. Vel. (m/s)		3.78	
Max Chl Dpth (m)	2.49	Hydr. Depth (m)		1.43	
Conv. Total (m3/s)	1111.2	Conv. (m3/s)		1111.2	
Length Wtd. (m)	167.86	Wetted Per. (m)		19.80	
Min Ch EI (m)	695.23	Shear (N/m2)		113.78	
Alpha	1.00	Stream Power (N/m s)		430.37	
Frctn Loss (m)	1.45	Cum Volume (1000 m3)	0.05	17.83	1.05
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.20	14.91	5.85

Plan: Plan 02 ArroyoValtierra 1 RS: 651.0296 Profile: T=500

E.G. Elev (m)	699.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	698.30	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	698.30	Flow Area (m2)		39.39	
E.G. Slope (m/m)	0.008154	Area (m2)		39.39	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	23.81	Top Width (m)		23.81	
Vel Total (m/s)	4.09	Avg. Vel. (m/s)		4.09	
Max Chl Dpth (m)	3.07	Hydr. Depth (m)		1.65	
Conv. Total (m3/s)	1784.6	Conv. (m3/s)		1784.6	
Length Wtd. (m)	167.86	Wetted Per. (m)		24.86	
Min Ch El (m)	695.23	Shear (N/m2)		126.72	
Alpha	1.00	Stream Power (N/m s)		518.43	
Frctn Loss (m)	1.37	Cum Volume (1000 m3)	0.10	24.47	2.52
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.27	16.24	7.25

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=2

E.G. Elev (m)	688.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	687.97	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.97	Flow Area (m2)		7.80	
E.G. Slope (m/m)	0.011565	Area (m2)		7.80	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	16.75	Top Width (m)		16.75	
Vel Total (m/s)	2.14	Avg. Vel. (m/s)		2.14	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	155.1	Conv. (m3/s)		155.1	
Length Wtd. (m)	236.65	Wetted Per. (m)		16.92	
Min Ch El (m)	687.09	Shear (N/m2)		52.27	
Alpha	1.00	Stream Power (N/m s)		111.81	
Frctn Loss (m)	2.66	Cum Volume (1000 m3)		2.97	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.28	

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=5

E.G. Elev (m)	688.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	688.22	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.22	Flow Area (m2)		12.19	
E.G. Slope (m/m)	0.010429	Area (m2)		12.19	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	18.88	Top Width (m)		18.88	
Vel Total (m/s)	2.52	Avg. Vel. (m/s)		2.52	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	301.1	Conv. (m3/s)		301.1	
Length Wtd. (m)	236.65	Wetted Per. (m)		19.10	
Min Ch El (m)	687.09	Shear (N/m2)		65.25	
Alpha	1.00	Stream Power (N/m s)		164.62	
Frctn Loss (m)	2.42	Cum Volume (1000 m3)		5.19	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.67	0.02

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=10

E.G. Elev (m)	688.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	688.41	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.41	Flow Area (m2)		16.08	
E.G. Slope (m/m)	0.009790	Area (m2)		16.08	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=10 (Continued)

Top Width (m)	20.67	Top Width (m)		20.67	
Vel Total (m/s)	2.77	Avg. Vel. (m/s)		2.77	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	449.4	Conv. (m3/s)		449.4	
Length Wtd. (m)	236.65	Wetted Per. (m)		20.94	
Min Ch El (m)	687.09	Shear (N/m2)		73.71	
Alpha	1.00	Stream Power (N/m s)		203.84	
Frctn Loss (m)	2.28	Cum Volume (1000 m3)		6.78	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		9.24	0.09

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=25

E.G. Elev (m)	689.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.030	
W.S. Elev (m)	688.67	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.67	Flow Area (m2)		21.88	
E.G. Slope (m/m)	0.009520	Area (m2)		21.88	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	25.18	Top Width (m)		25.18	
Vel Total (m/s)	2.94	Avg. Vel. (m/s)		2.94	
Max Chl Dpth (m)	1.58	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	658.7	Conv. (m3/s)		658.7	
Length Wtd. (m)	236.65	Wetted Per. (m)		25.50	
Min Ch El (m)	687.09	Shear (N/m2)		80.12	
Alpha	1.00	Stream Power (N/m s)		235.34	
Frctn Loss (m)	2.20	Cum Volume (1000 m3)	0.01	8.99	0.03
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.07	10.02	0.54

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=50

E.G. Elev (m)	689.32	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	688.85	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.85	Flow Area (m2)		26.63	
E.G. Slope (m/m)	0.009194	Area (m2)		26.63	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	28.20	Top Width (m)		28.20	
Vel Total (m/s)	3.05	Avg. Vel. (m/s)		3.05	
Max Chl Dpth (m)	1.76	Hydr. Depth (m)		0.94	
Conv. Total (m3/s)	847.4	Conv. (m3/s)		847.4	
Length Wtd. (m)	236.65	Wetted Per. (m)		28.55	
Min Ch El (m)	687.09	Shear (N/m2)		84.10	
Alpha	1.00	Stream Power (N/m s)		256.61	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)	0.02	10.87	0.31
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.14	10.56	3.17

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=100

E.G. Elev (m)	689.55	Element	Left OB	Channel	Right OB
Vel Head (m)	0.54	Wt. n-Val.		0.030	
W.S. Elev (m)	689.01	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	689.01	Flow Area (m2)		31.46	
E.G. Slope (m/m)	0.008788	Area (m2)		31.46	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	
Top Width (m)	29.19	Top Width (m)		29.19	
Vel Total (m/s)	3.25	Avg. Vel. (m/s)		3.25	
Max Chl Dpth (m)	1.92	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	1092.0	Conv. (m3/s)		1092.0	
Length Wtd. (m)	236.65	Wetted Per. (m)		29.60	
Min Ch El (m)	687.09	Shear (N/m2)		91.59	

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		298.06	
Frctn Loss (m)	2.04	Cum Volume (1000 m3)	0.05	12.92	1.05
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.20	10.87	5.85

Plan: Plan 02 ArroyoValtierra 1 RS: 483.1662 Profile: T=500

E.G. Elev (m)	690.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	689.42	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	689.42	Flow Area (m2)		43.66	
E.G. Slope (m/m)	0.008112	Area (m2)		43.66	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	31.47	Top Width (m)		31.47	
Vel Total (m/s)	3.69	Avg. Vel. (m/s)		3.69	
Max Chl Dpth (m)	2.33	Hydr. Depth (m)		1.39	
Conv. Total (m3/s)	1789.2	Conv. (m3/s)		1789.2	
Length Wtd. (m)	236.65	Wetted Per. (m)		32.02	
Min Ch El (m)	687.09	Shear (N/m2)		108.46	
Alpha	1.00	Stream Power (N/m s)		400.37	
Frctn Loss (m)	1.90	Cum Volume (1000 m3)	0.10	17.50	2.52
C & E Loss (m)	0.03	Cum SA (1000 m2)	0.27	11.60	7.25

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=2

E.G. Elev (m)	673.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	673.45	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.45	Flow Area (m2)		6.45	
E.G. Slope (m/m)	0.010895	Area (m2)		6.45	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	9.63	Top Width (m)		9.63	
Vel Total (m/s)	2.59	Avg. Vel. (m/s)		2.59	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	159.8	Conv. (m3/s)		159.8	
Length Wtd. (m)	189.07	Wetted Per. (m)		10.07	
Min Ch El (m)	672.40	Shear (N/m2)		68.46	
Alpha	1.00	Stream Power (N/m s)		177.04	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		1.29	
C & E Loss (m)	0.02	Cum SA (1000 m2)		2.16	

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=5

E.G. Elev (m)	674.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	673.84	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.84	Flow Area (m2)		10.71	
E.G. Slope (m/m)	0.010014	Area (m2)		10.71	
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	
Top Width (m)	12.80	Top Width (m)		12.80	
Vel Total (m/s)	2.87	Avg. Vel. (m/s)		2.87	
Max Chl Dpth (m)	1.44	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	307.3	Conv. (m3/s)		307.3	
Length Wtd. (m)	189.07	Wetted Per. (m)		13.42	
Min Ch El (m)	672.40	Shear (N/m2)		78.39	
Alpha	1.00	Stream Power (N/m s)		225.00	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		2.48	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		4.92	0.02

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=10

E.G. Elev (m)	674.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.		0.030	
W.S. Elev (m)	674.10	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.10	Flow Area (m2)		14.17	
E.G. Slope (m/m)	0.009467	Area (m2)		14.17	
Q Total (m3/s)	44.46	Flow (m3/s)		44.46	
Top Width (m)	14.14	Top Width (m)		14.14	
Vel Total (m/s)	3.14	Avg. Vel. (m/s)		3.14	
Max Chl Dpth (m)	1.70	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	457.0	Conv. (m3/s)		457.0	
Length Wtd. (m)	189.07	Wetted Per. (m)		14.90	
Min Ch El (m)	672.40	Shear (N/m2)		88.32	
Alpha	1.00	Stream Power (N/m s)		277.08	
Frctn Loss (m)	2.00	Cum Volume (1000 m3)		3.20	0.01
C & E Loss (m)	0.07	Cum SA (1000 m2)		5.12	0.09

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=25

E.G. Elev (m)	675.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	674.39	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.39	Flow Area (m2)		18.55	
E.G. Slope (m/m)	0.009041	Area (m2)		18.55	
Q Total (m3/s)	64.27	Flow (m3/s)		64.27	
Top Width (m)	15.30	Top Width (m)		15.30	
Vel Total (m/s)	3.46	Avg. Vel. (m/s)		3.46	
Max Chl Dpth (m)	1.99	Hydr. Depth (m)		1.21	
Conv. Total (m3/s)	675.9	Conv. (m3/s)		675.9	
Length Wtd. (m)	189.09	Wetted Per. (m)		16.23	
Min Ch El (m)	672.40	Shear (N/m2)		101.33	
Alpha	1.00	Stream Power (N/m s)		351.09	
Frctn Loss (m)	1.78	Cum Volume (1000 m3)	0.01	4.21	0.03
C & E Loss (m)	0.09	Cum SA (1000 m2)	0.07	5.23	0.54

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=50

E.G. Elev (m)	675.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	674.62	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.62	Flow Area (m2)		22.04	
E.G. Slope (m/m)	0.008807	Area (m2)		22.04	
Q Total (m3/s)	81.25	Flow (m3/s)		81.25	
Top Width (m)	16.17	Top Width (m)		16.17	
Vel Total (m/s)	3.69	Avg. Vel. (m/s)		3.69	
Max Chl Dpth (m)	2.21	Hydr. Depth (m)		1.36	
Conv. Total (m3/s)	865.8	Conv. (m3/s)		865.8	
Length Wtd. (m)	189.19	Wetted Per. (m)		17.22	
Min Ch El (m)	672.40	Shear (N/m2)		110.51	
Alpha	1.00	Stream Power (N/m s)		407.46	
Frctn Loss (m)	1.53	Cum Volume (1000 m3)	0.02	5.11	0.31
C & E Loss (m)	0.12	Cum SA (1000 m2)	0.14	5.31	3.17

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=100

E.G. Elev (m)	675.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.78	Wt. n-Val.		0.030	
W.S. Elev (m)	674.87	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.87	Flow Area (m2)		26.21	
E.G. Slope (m/m)	0.008484	Area (m2)		26.21	
Q Total (m3/s)	102.37	Flow (m3/s)		102.37	

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=100 (Continued)

Top Width (m)	17.09	Top Width (m)		17.09	
Vel Total (m/s)	3.91	Avg. Vel. (m/s)		3.91	
Max Chl Dpth (m)	2.47	Hydr. Depth (m)		1.53	
Conv. Total (m3/s)	1111.4	Conv. (m3/s)		1111.4	
Length Wtd. (m)	189.51	Wetted Per. (m)		18.28	
Min Ch El (m)	672.40	Shear (N/m2)		119.34	
Alpha	1.00	Stream Power (N/m s)		466.03	
Frctn Loss (m)	1.31	Cum Volume (1000 m3)	0.05	6.10	1.05
C & E Loss (m)	0.15	Cum SA (1000 m2)	0.20	5.40	5.85

Plan: Plan 02 ArroyoValtierra 1 RS: 246.5114 Profile: T=500

E.G. Elev (m)	676.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.97	Wt. n-Val.		0.030	
W.S. Elev (m)	675.46	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	675.46	Flow Area (m2)		36.97	
E.G. Slope (m/m)	0.007914	Area (m2)		36.97	
Q Total (m3/s)	161.15	Flow (m3/s)		161.15	
Top Width (m)	19.23	Top Width (m)		19.23	
Vel Total (m/s)	4.36	Avg. Vel. (m/s)		4.36	
Max Chl Dpth (m)	3.06	Hydr. Depth (m)		1.92	
Conv. Total (m3/s)	1811.5	Conv. (m3/s)		1811.5	
Length Wtd. (m)	190.11	Wetted Per. (m)		20.75	
Min Ch El (m)	672.40	Shear (N/m2)		138.30	
Alpha	1.00	Stream Power (N/m s)		602.78	
Frctn Loss (m)	1.24	Cum Volume (1000 m3)	0.10	7.96	2.52
C & E Loss (m)	0.19	Cum SA (1000 m2)	0.27	5.60	7.25

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=2

E.G. Elev (m)	661.84	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	661.57	Reach Len. (m)			
Crit W.S. (m)	661.57	Flow Area (m2)		7.17	
E.G. Slope (m/m)	0.011163	Area (m2)		7.17	
Q Total (m3/s)	16.68	Flow (m3/s)		16.68	
Top Width (m)	13.18	Top Width (m)		13.18	
Vel Total (m/s)	2.33	Avg. Vel. (m/s)		2.33	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	157.9	Conv. (m3/s)		157.9	
Length Wtd. (m)		Wetted Per. (m)		13.34	
Min Ch El (m)	660.59	Shear (N/m2)		58.81	
Alpha	1.00	Stream Power (N/m s)		136.86	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=5

E.G. Elev (m)	662.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.87	Reach Len. (m)			
Crit W.S. (m)	661.87	Flow Area (m2)		15.50	0.00
E.G. Slope (m/m)	0.012304	Area (m2)		15.50	0.00
Q Total (m3/s)	30.75	Flow (m3/s)		30.75	0.00
Top Width (m)	39.46	Top Width (m)		39.25	0.21
Vel Total (m/s)	1.98	Avg. Vel. (m/s)		1.98	0.23
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.39	0.02
Conv. Total (m3/s)	277.2	Conv. (m3/s)		277.2	0.0
Length Wtd. (m)		Wetted Per. (m)		39.46	0.21
Min Ch El (m)	660.59	Shear (N/m2)		47.41	1.86



Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		94.03	0.42
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=10

E.G. Elev (m)	662.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.98	Reach Len. (m)			
Crit W.S. (m)	661.98	Flow Area (m2)		19.70	0.06
E.G. Slope (m/m)	0.011836	Area (m2)		19.70	0.06
Q Total (m3/s)	44.46	Flow (m3/s)		44.42	0.04
Top Width (m)	40.90	Top Width (m)		39.98	0.91
Vel Total (m/s)	2.25	Avg. Vel. (m/s)		2.25	0.60
Max Chl Dpth (m)	1.39	Hydr. Depth (m)		0.49	0.07
Conv. Total (m3/s)	408.7	Conv. (m3/s)		408.3	0.3
Length Wtd. (m)		Wetted Per. (m)		40.20	0.92
Min Ch El (m)	660.59	Shear (N/m2)		56.90	7.87
Alpha	1.00	Stream Power (N/m s)		128.27	4.75
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=25

E.G. Elev (m)	662.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.13	Reach Len. (m)			
Crit W.S. (m)	662.13	Flow Area (m2)	0.06	25.98	0.34
E.G. Slope (m/m)	0.009774	Area (m2)	0.06	25.98	0.34
Q Total (m3/s)	64.27	Flow (m3/s)	0.04	63.96	0.27
Top Width (m)	46.19	Top Width (m)	0.81	40.00	5.38
Vel Total (m/s)	2.44	Avg. Vel. (m/s)	0.59	2.46	0.80
Max Chl Dpth (m)	1.54	Hydr. Depth (m)	0.08	0.65	0.06
Conv. Total (m3/s)	650.1	Conv. (m3/s)	0.4	647.0	2.8
Length Wtd. (m)		Wetted Per. (m)	0.83	40.22	5.40
Min Ch El (m)	660.59	Shear (N/m2)	7.25	61.91	6.04
Alpha	1.02	Stream Power (N/m s)	4.28	152.43	4.85
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=50

E.G. Elev (m)	662.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.29	Reach Len. (m)			
Crit W.S. (m)	662.29	Flow Area (m2)	0.25	32.05	3.05
E.G. Slope (m/m)	0.007420	Area (m2)	0.25	32.05	3.05
Q Total (m3/s)	81.25	Flow (m3/s)	0.20	79.12	1.93
Top Width (m)	73.23	Top Width (m)	1.61	40.00	31.62
Vel Total (m/s)	2.30	Avg. Vel. (m/s)	0.81	2.47	0.63
Max Chl Dpth (m)	1.70	Hydr. Depth (m)	0.15	0.80	0.10
Conv. Total (m3/s)	943.3	Conv. (m3/s)	2.3	918.5	22.5
Length Wtd. (m)		Wetted Per. (m)	1.64	40.22	31.65
Min Ch El (m)	660.59	Shear (N/m2)	10.94	57.99	7.01
Alpha	1.13	Stream Power (N/m s)	8.88	143.14	4.45
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=100

E.G. Elev (m)	662.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.44	Reach Len. (m)			
Crit W.S. (m)	662.44	Flow Area (m2)	0.55	38.26	10.48
E.G. Slope (m/m)	0.005733	Area (m2)	0.55	38.26	10.48
Q Total (m3/s)	102.37	Flow (m3/s)	0.54	93.42	8.41
Top Width (m)	100.62	Top Width (m)	2.30	40.00	58.32
Vel Total (m/s)	2.08	Avg. Vel. (m/s)	0.96	2.44	0.80
Max Chl Dpth (m)	1.85	Hydr. Depth (m)	0.24	0.96	0.18
Conv. Total (m3/s)	1352.0	Conv. (m3/s)	7.1	1233.8	111.1
Length Wtd. (m)		Wetted Per. (m)	2.35	40.22	58.35
Min Ch El (m)	660.59	Shear (N/m2)	13.29	53.49	10.09
Alpha	1.27	Stream Power (N/m s)	12.82	130.61	8.11
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 02 ArroyoValtierra 1 RS: 57.44248 Profile: T=500

E.G. Elev (m)	662.99	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.66	Reach Len. (m)			
Crit W.S. (m)	662.66	Flow Area (m2)	1.16	47.18	25.07
E.G. Slope (m/m)	0.005457	Area (m2)	1.16	47.18	25.07
Q Total (m3/s)	161.15	Flow (m3/s)	1.45	129.23	30.47
Top Width (m)	115.40	Top Width (m)	3.13	40.00	72.28
Vel Total (m/s)	2.20	Avg. Vel. (m/s)	1.25	2.74	1.22
Max Chl Dpth (m)	2.07	Hydr. Depth (m)	0.37	1.18	0.35
Conv. Total (m3/s)	2181.5	Conv. (m3/s)	19.6	1749.4	412.5
Length Wtd. (m)		Wetted Per. (m)	3.20	40.22	72.32
Min Ch El (m)	660.59	Shear (N/m2)	19.38	62.78	18.55
Alpha	1.31	Stream Power (N/m s)	24.24	171.97	22.55
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

APÉNDICE 4 TABLAS RESUMEN DE PARÁMETROS HIDRÁULICOS DE LAS  
SECCIONES ESTUDIADAS. SITUACIÓN POSTOPERACIONAL

## ESCENARIO SUELO SECO

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=2

E.G. Elev (m)	744.81	Element	Left OB	Channel	Right OB
Vel Head (m)	0.17	Wt. n-Val.		0.030	
W.S. Elev (m)	744.64	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.64	Flow Area (m2)		3.56	
E.G. Slope (m/m)	0.012996	Area (m2)		3.56	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	10.53	Top Width (m)		10.53	
Vel Total (m/s)	1.83	Avg. Vel. (m/s)		1.83	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	57.0	Conv. (m3/s)		57.0	
Length Wtd. (m)	89.99	Wetted Per. (m)		10.70	
Min Ch El (m)	743.84	Shear (N/m2)		42.43	
Alpha	1.00	Stream Power (N/m s)		77.44	
Frctn Loss (m)	2.53	Cum Volume (1000 m3)		7.51	0.00
C & E Loss (m)	0.05	Cum SA (1000 m2)		22.46	0.02

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=5

E.G. Elev (m)	745.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	744.82	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.82	Flow Area (m2)		5.79	
E.G. Slope (m/m)	0.012360	Area (m2)		5.79	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	14.18	Top Width (m)		14.18	
Vel Total (m/s)	2.02	Avg. Vel. (m/s)		2.02	
Max Chl Dpth (m)	0.98	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	105.2	Conv. (m3/s)		105.2	
Length Wtd. (m)	90.02	Wetted Per. (m)		14.37	
Min Ch El (m)	743.84	Shear (N/m2)		48.83	
Alpha	1.00	Stream Power (N/m s)		98.72	
Frctn Loss (m)	2.36	Cum Volume (1000 m3)		11.61	0.00
C & E Loss (m)	0.08	Cum SA (1000 m2)		26.86	0.04

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=10

E.G. Elev (m)	745.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	744.97	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	744.97	Flow Area (m2)		8.13	
E.G. Slope (m/m)	0.011956	Area (m2)		8.13	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	17.98	Top Width (m)		17.98	
Vel Total (m/s)	2.13	Avg. Vel. (m/s)		2.13	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	158.4	Conv. (m3/s)		158.4	
Length Wtd. (m)	90.04	Wetted Per. (m)		18.17	
Min Ch El (m)	743.84	Shear (N/m2)		52.43	
Alpha	1.00	Stream Power (N/m s)		111.73	
Frctn Loss (m)	2.23	Cum Volume (1000 m3)		15.53	0.01
C & E Loss (m)	0.09	Cum SA (1000 m2)		30.25	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25

E.G. Elev (m)	745.40	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.14	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.14	Flow Area (m2)	0.08	11.59	0.03
E.G. Slope (m/m)	0.010628	Area (m2)	0.08	11.59	0.03
Q Total (m3/s)	26.12	Flow (m3/s)	0.05	26.07	0.00

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25 (Continued)

Top Width (m)	25.52	Top Width (m)	1.01	21.67	2.85
Vel Total (m/s)	2.23	Avg. Vel. (m/s)	0.61	2.25	0.16
Max Chl Dpth (m)	1.30	Hydr. Depth (m)	0.08	0.53	0.01
Conv. Total (m3/s)	253.4	Conv. (m3/s)	0.5	252.9	0.0
Length Wtd. (m)	90.07	Wetted Per. (m)	1.02	21.87	2.85
Min Ch El (m)	743.84	Shear (N/m2)	7.80	55.22	1.02
Alpha	1.01	Stream Power (N/m s)	4.76	124.25	0.16
Frctn Loss (m)	2.01	Cum Volume (1000 m3)	0.00	20.94	0.02
C & E Loss (m)	0.12	Cum SA (1000 m2)	0.04	33.81	0.23

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=50

E.G. Elev (m)	745.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.26	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.26	Flow Area (m2)	0.25	14.28	0.91
E.G. Slope (m/m)	0.008769	Area (m2)	0.25	14.28	0.91
Q Total (m3/s)	34.06	Flow (m3/s)	0.21	33.22	0.63
Top Width (m)	32.64	Top Width (m)	1.83	22.00	8.81
Vel Total (m/s)	2.20	Avg. Vel. (m/s)	0.82	2.33	0.69
Max Chl Dpth (m)	1.42	Hydr. Depth (m)	0.14	0.65	0.10
Conv. Total (m3/s)	363.7	Conv. (m3/s)	2.2	354.8	6.7
Length Wtd. (m)	90.18	Wetted Per. (m)	1.85	22.20	8.82
Min Ch El (m)	743.84	Shear (N/m2)	11.66	55.32	8.92
Alpha	1.09	Stream Power (N/m s)	9.60	128.69	6.15
Frctn Loss (m)	1.75	Cum Volume (1000 m3)	0.01	25.44	0.07
C & E Loss (m)	0.14	Cum SA (1000 m2)	0.07	36.58	0.55

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=100

E.G. Elev (m)	745.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.39	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.39	Flow Area (m2)	0.53	16.97	2.07
E.G. Slope (m/m)	0.007759	Area (m2)	0.53	16.97	2.07
Q Total (m3/s)	44.29	Flow (m3/s)	0.51	41.66	2.12
Top Width (m)	34.77	Top Width (m)	2.74	22.00	10.03
Vel Total (m/s)	2.26	Avg. Vel. (m/s)	0.97	2.45	1.02
Max Chl Dpth (m)	1.55	Hydr. Depth (m)	0.19	0.77	0.21
Conv. Total (m3/s)	502.8	Conv. (m3/s)	5.8	472.9	24.0
Length Wtd. (m)	90.36	Wetted Per. (m)	2.77	22.20	10.04
Min Ch El (m)	743.84	Shear (N/m2)	14.52	58.17	15.67
Alpha	1.12	Stream Power (N/m s)	14.13	142.78	16.05
Frctn Loss (m)	1.57	Cum Volume (1000 m3)	0.02	31.05	0.15
C & E Loss (m)	0.16	Cum SA (1000 m2)	0.11	40.17	0.64

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500

E.G. Elev (m)	746.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.65	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.65	Flow Area (m2)	1.52	22.71	4.82
E.G. Slope (m/m)	0.007307	Area (m2)	1.52	22.71	4.82
Q Total (m3/s)	75.46	Flow (m3/s)	1.93	65.67	7.86
Top Width (m)	38.19	Top Width (m)	5.08	22.00	11.11
Vel Total (m/s)	2.60	Avg. Vel. (m/s)	1.27	2.89	1.63
Max Chl Dpth (m)	1.81	Hydr. Depth (m)	0.30	1.03	0.43
Conv. Total (m3/s)	882.7	Conv. (m3/s)	22.6	768.3	91.9
Length Wtd. (m)	90.71	Wetted Per. (m)	5.12	22.20	11.16
Min Ch El (m)	743.84	Shear (N/m2)	21.28	73.29	30.98

Plan: Plan 07 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500 (Continued)

Alpha	1.13	Stream Power (N/m s)	26.98	211.98	50.48
Frctn Loss (m)	1.38	Cum Volume (1000 m3)	0.06	45.61	0.36
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.29	46.58	0.93

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=2

E.G. Elev (m)	742.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.51	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	741.70	Flow Area (m2)		1.73	0.01
E.G. Slope (m/m)	0.100542	Area (m2)		1.73	0.01
Q Total (m3/s)	6.50	Flow (m3/s)		6.49	0.01
Top Width (m)	8.34	Top Width (m)		8.18	0.16
Vel Total (m/s)	3.74	Avg. Vel. (m/s)		3.75	1.31
Max Chl Dpth (m)	0.34	Hydr. Depth (m)		0.21	0.05
Conv. Total (m3/s)	20.5	Conv. (m3/s)		20.5	0.0
Length Wtd. (m)	116.52	Wetted Per. (m)		8.20	0.19
Min Ch El (m)	741.17	Shear (N/m2)		208.11	42.86
Alpha	1.00	Stream Power (N/m s)		779.80	56.01
Frctn Loss (m)	3.34	Cum Volume (1000 m3)		7.27	0.00
C & E Loss (m)	0.17	Cum SA (1000 m2)		21.62	0.01

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=5

E.G. Elev (m)	742.60	Element	Left OB	Channel	Right OB
Vel Head (m)	0.98	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.62	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	741.88	Flow Area (m2)		2.65	0.03
E.G. Slope (m/m)	0.089647	Area (m2)		2.65	0.03
Q Total (m3/s)	11.70	Flow (m3/s)		11.63	0.07
Top Width (m)	9.35	Top Width (m)		9.03	0.33
Vel Total (m/s)	4.36	Avg. Vel. (m/s)		4.39	1.98
Max Chl Dpth (m)	0.45	Hydr. Depth (m)		0.29	0.10
Conv. Total (m3/s)	39.1	Conv. (m3/s)		38.9	0.2
Length Wtd. (m)	116.83	Wetted Per. (m)		9.06	0.39
Min Ch El (m)	741.17	Shear (N/m2)		256.81	77.53
Alpha	1.01	Stream Power (N/m s)		1128.44	153.31
Frctn Loss (m)	1.36	Cum Volume (1000 m3)		11.23	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		25.81	0.03

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=10

E.G. Elev (m)	742.88	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.72	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.04	Flow Area (m2)		3.58	0.07
E.G. Slope (m/m)	0.078662	Area (m2)		3.58	0.07
Q Total (m3/s)	17.32	Flow (m3/s)		17.14	0.18
Top Width (m)	10.22	Top Width (m)		9.74	0.48
Vel Total (m/s)	4.74	Avg. Vel. (m/s)		4.79	2.40
Max Chl Dpth (m)	0.55	Hydr. Depth (m)		0.37	0.15
Conv. Total (m3/s)	61.8	Conv. (m3/s)		61.1	0.6
Length Wtd. (m)	116.69	Wetted Per. (m)		9.78	0.57
Min Ch El (m)	741.17	Shear (N/m2)		282.56	100.24
Alpha	1.01	Stream Power (N/m s)		1352.35	240.42
Frctn Loss (m)	2.84	Cum Volume (1000 m3)		15.00	0.01
C & E Loss (m)	0.26	Cum SA (1000 m2)		29.01	0.04

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=25

E.G. Elev (m)	743.28	Element	Left OB	Channel	Right OB
Vel Head (m)	1.44	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.84	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.23	Flow Area (m2)		4.82	0.14
E.G. Slope (m/m)	0.072885	Area (m2)		4.82	0.14
Q Total (m3/s)	26.12	Flow (m3/s)		25.70	0.42
Top Width (m)	11.17	Top Width (m)		10.50	0.67
Vel Total (m/s)	5.26	Avg. Vel. (m/s)		5.34	2.88
Max Chl Dpth (m)	0.67	Hydr. Depth (m)		0.46	0.22
Conv. Total (m3/s)	96.8	Conv. (m3/s)		95.2	1.5
Length Wtd. (m)	116.79	Wetted Per. (m)		10.55	0.80
Min Ch El (m)	741.17	Shear (N/m2)		326.32	129.56
Alpha	1.02	Stream Power (N/m s)		1741.13	373.42
Frctn Loss (m)	2.94	Cum Volume (1000 m3)		20.20	0.01
C & E Loss (m)	0.32	Cum SA (1000 m2)		32.36	0.05

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=50

E.G. Elev (m)	743.64	Element	Left OB	Channel	Right OB
Vel Head (m)	1.71	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.93	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.41	Flow Area (m2)		5.72	0.21
E.G. Slope (m/m)	0.074060	Area (m2)		5.72	0.21
Q Total (m3/s)	34.06	Flow (m3/s)		33.39	0.67
Top Width (m)	11.83	Top Width (m)		11.03	0.80
Vel Total (m/s)	5.75	Avg. Vel. (m/s)		5.84	3.27
Max Chl Dpth (m)	0.76	Hydr. Depth (m)		0.52	0.26
Conv. Total (m3/s)	125.2	Conv. (m3/s)		122.7	2.5
Length Wtd. (m)	116.87	Wetted Per. (m)		11.08	0.95
Min Ch El (m)	741.17	Shear (N/m2)		374.84	157.24
Alpha	1.02	Stream Power (N/m s)		2187.85	514.32
Frctn Loss (m)	3.05	Cum Volume (1000 m3)		24.54	0.02
C & E Loss (m)	0.38	Cum SA (1000 m2)		35.09	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=100

E.G. Elev (m)	743.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.91	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.04	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.57	Flow Area (m2)		7.00	0.31
E.G. Slope (m/m)	0.068338	Area (m2)		7.00	0.31
Q Total (m3/s)	44.29	Flow (m3/s)		43.19	1.10
Top Width (m)	12.65	Top Width (m)		11.68	0.97
Vel Total (m/s)	6.06	Avg. Vel. (m/s)		6.17	3.58
Max Chl Dpth (m)	0.87	Hydr. Depth (m)		0.60	0.31
Conv. Total (m3/s)	169.4	Conv. (m3/s)		165.2	4.2
Length Wtd. (m)	116.96	Wetted Per. (m)		11.74	1.16
Min Ch El (m)	741.17	Shear (N/m2)		399.44	176.79
Alpha	1.02	Stream Power (N/m s)		2465.20	633.63
Frctn Loss (m)	3.12	Cum Volume (1000 m3)		29.97	0.02
C & E Loss (m)	0.42	Cum SA (1000 m2)		38.66	0.08

Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500

E.G. Elev (m)	744.48	Element	Left OB	Channel	Right OB
Vel Head (m)	2.11	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.37	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.97	Flow Area (m2)		11.14	0.71
E.G. Slope (m/m)	0.049176	Area (m2)		11.14	0.71
Q Total (m3/s)	75.46	Flow (m3/s)		72.59	2.87



Plan: Plan 07 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500 (Continued)

Top Width (m)	14.86	Top Width (m)		13.37	1.49
Vel Total (m/s)	6.36	Avg. Vel. (m/s)		6.51	4.03
Max Chl Dpth (m)	1.20	Hydr. Depth (m)		0.83	0.48
Conv. Total (m3/s)	340.3	Conv. (m3/s)		327.3	13.0
Length Wtd. (m)	117.24	Wetted Per. (m)		13.47	1.77
Min Ch El (m)	741.17	Shear (N/m2)		398.92	194.28
Alpha	1.02	Stream Power (N/m s)		2598.45	783.37
Frctn Loss (m)	3.15	Cum Volume (1000 m3)	0.00	44.08	0.07
C & E Loss (m)	0.40	Cum SA (1000 m2)	0.09	44.99	0.29

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=2

E.G. Elev (m)	739.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.16	Wt. n-Val.		0.030	
W.S. Elev (m)	739.20	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.20	Flow Area (m2)		3.63	
E.G. Slope (m/m)	0.013342	Area (m2)		3.63	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	11.33	Top Width (m)		11.33	
Vel Total (m/s)	1.79	Avg. Vel. (m/s)		1.79	
Max Chl Dpth (m)	0.50	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	56.3	Conv. (m3/s)		56.3	
Length Wtd. (m)	138.24	Wetted Per. (m)		11.42	
Min Ch El (m)	738.70	Shear (N/m2)		41.55	
Alpha	1.00	Stream Power (N/m s)		74.46	
Frctn Loss (m)	2.17	Cum Volume (1000 m3)		6.96	
C & E Loss (m)	0.01	Cum SA (1000 m2)		20.48	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=5

E.G. Elev (m)	739.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	739.36	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.36	Flow Area (m2)		5.59	
E.G. Slope (m/m)	0.012044	Area (m2)		5.59	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	12.80	Top Width (m)		12.80	
Vel Total (m/s)	2.09	Avg. Vel. (m/s)		2.09	
Max Chl Dpth (m)	0.66	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	106.6	Conv. (m3/s)		106.6	
Length Wtd. (m)	138.24	Wetted Per. (m)		12.93	
Min Ch El (m)	738.70	Shear (N/m2)		51.08	
Alpha	1.00	Stream Power (N/m s)		106.88	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		10.75	
C & E Loss (m)	0.01	Cum SA (1000 m2)		24.54	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10

E.G. Elev (m)	739.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	739.50	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.50	Flow Area (m2)		7.43	
E.G. Slope (m/m)	0.011695	Area (m2)		7.43	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	14.13	Top Width (m)		14.13	
Vel Total (m/s)	2.33	Avg. Vel. (m/s)		2.33	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.53	
Conv. Total (m3/s)	160.2	Conv. (m3/s)		160.2	
Length Wtd. (m)	138.24	Wetted Per. (m)		14.30	
Min Ch El (m)	738.70	Shear (N/m2)		59.61	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		138.90	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		14.36	
C & E Loss (m)	0.01	Cum SA (1000 m2)		27.61	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=25

E.G. Elev (m)	740.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	739.65	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.69	Flow Area (m2)		9.69	
E.G. Slope (m/m)	0.012620	Area (m2)		9.69	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	15.68	Top Width (m)		15.68	
Vel Total (m/s)	2.69	Avg. Vel. (m/s)		2.69	
Max Chl Dpth (m)	0.95	Hydr. Depth (m)		0.62	
Conv. Total (m3/s)	232.5	Conv. (m3/s)		232.5	
Length Wtd. (m)	138.24	Wetted Per. (m)		15.88	
Min Ch EI (m)	738.70	Shear (N/m2)		75.54	
Alpha	1.00	Stream Power (N/m s)		203.54	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		19.36	
C & E Loss (m)	0.01	Cum SA (1000 m2)		30.84	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=50

E.G. Elev (m)	740.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	739.77	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.84	Flow Area (m2)		11.70	
E.G. Slope (m/m)	0.013213	Area (m2)		11.70	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	17.43	Top Width (m)		17.43	
Vel Total (m/s)	2.91	Avg. Vel. (m/s)		2.91	
Max Chl Dpth (m)	1.07	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	296.3	Conv. (m3/s)		296.3	
Length Wtd. (m)	138.24	Wetted Per. (m)		17.66	
Min Ch EI (m)	738.70	Shear (N/m2)		85.84	
Alpha	1.00	Stream Power (N/m s)		249.97	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		23.52	
C & E Loss (m)	0.01	Cum SA (1000 m2)		33.43	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=100

E.G. Elev (m)	740.40	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	739.90	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.00	Flow Area (m2)		14.03	
E.G. Slope (m/m)	0.014110	Area (m2)		14.03	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	19.45	Top Width (m)		19.45	
Vel Total (m/s)	3.16	Avg. Vel. (m/s)		3.16	
Max Chl Dpth (m)	1.20	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	372.9	Conv. (m3/s)		372.9	
Length Wtd. (m)	138.24	Wetted Per. (m)		19.69	
Min Ch EI (m)	738.70	Shear (N/m2)		98.55	
Alpha	1.00	Stream Power (N/m s)		311.21	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		28.75	
C & E Loss (m)	0.01	Cum SA (1000 m2)		36.84	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2744.093 Profile: T=500

E.G. Elev (m)	740.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.79	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.14	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.34	Flow Area (m2)	0.02	19.18	0.09
E.G. Slope (m/m)	0.016939	Area (m2)	0.02	19.18	0.09
Q Total (m3/s)	75.46	Flow (m3/s)	0.01	75.36	0.09
Top Width (m)	23.14	Top Width (m)	0.38	22.00	0.76
Vel Total (m/s)	3.91	Avg. Vel. (m/s)	0.51	3.93	1.03
Max Chl Dpth (m)	1.44	Hydr. Depth (m)	0.04	0.87	0.12
Conv. Total (m3/s)	579.8	Conv. (m3/s)	0.1	579.0	0.7
Length Wtd. (m)	138.25	Wetted Per. (m)	0.39	22.25	0.79
Min Ch El (m)	738.70	Shear (N/m2)	6.63	143.18	19.13
Alpha	1.01	Stream Power (N/m s)	3.36	562.62	19.64
Frctn Loss (m)	2.17	Cum Volume (1000 m3)	0.00	42.32	0.01
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.07	42.93	0.11

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=2

E.G. Elev (m)	737.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	736.95	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	736.99	Flow Area (m2)		3.06	
E.G. Slope (m/m)	0.018790	Area (m2)		3.06	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	9.56	Top Width (m)		9.56	
Vel Total (m/s)	2.12	Avg. Vel. (m/s)		2.12	
Max Chl Dpth (m)	0.48	Hydr. Depth (m)		0.32	
Conv. Total (m3/s)	47.4	Conv. (m3/s)		47.4	
Length Wtd. (m)	124.79	Wetted Per. (m)		9.65	
Min Ch El (m)	736.47	Shear (N/m2)		58.41	
Alpha	1.00	Stream Power (N/m s)		124.09	
Frctn Loss (m)	1.59	Cum Volume (1000 m3)		6.50	
C & E Loss (m)	0.00	Cum SA (1000 m2)		19.04	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=5

E.G. Elev (m)	737.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	737.09	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.18	Flow Area (m2)		4.53	
E.G. Slope (m/m)	0.020820	Area (m2)		4.53	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	11.40	Top Width (m)		11.40	
Vel Total (m/s)	2.58	Avg. Vel. (m/s)		2.58	
Max Chl Dpth (m)	0.62	Hydr. Depth (m)		0.40	
Conv. Total (m3/s)	81.1	Conv. (m3/s)		81.1	
Length Wtd. (m)		Wetted Per. (m)		11.53	
Min Ch El (m)	736.47	Shear (N/m2)		80.25	
Alpha	1.00	Stream Power (N/m s)		207.11	
Frctn Loss (m)		Cum Volume (1000 m3)		10.05	
C & E Loss (m)		Cum SA (1000 m2)		22.87	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10

E.G. Elev (m)	737.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	737.21	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.32	Flow Area (m2)		6.04	
E.G. Slope (m/m)	0.021146	Area (m2)		6.04	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10 (Continued)

Top Width (m)	13.12	Top Width (m)		13.12	
Vel Total (m/s)	2.87	Avg. Vel. (m/s)		2.87	
Max Chl Dpth (m)	0.74	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	119.1	Conv. (m3/s)		119.1	
Length Wtd. (m)	124.79	Wetted Per. (m)		13.29	
Min Ch El (m)	736.47	Shear (N/m2)		94.30	
Alpha	1.00	Stream Power (N/m s)		270.30	
Frctn Loss (m)	1.44	Cum Volume (1000 m3)		13.43	
C & E Loss (m)	0.01	Cum SA (1000 m2)		25.73	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=25

E.G. Elev (m)	737.87	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	737.38	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.51	Flow Area (m2)		8.40	
E.G. Slope (m/m)	0.019290	Area (m2)		8.40	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	15.07	Top Width (m)		15.07	
Vel Total (m/s)	3.11	Avg. Vel. (m/s)		3.11	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	188.1	Conv. (m3/s)		188.1	
Length Wtd. (m)		Wetted Per. (m)		15.28	
Min Ch El (m)	736.47	Shear (N/m2)		104.06	
Alpha	1.00	Stream Power (N/m s)		323.43	
Frctn Loss (m)		Cum Volume (1000 m3)		18.11	
C & E Loss (m)		Cum SA (1000 m2)		28.71	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=50

E.G. Elev (m)	738.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	
W.S. Elev (m)	737.50	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.65	Flow Area (m2)		10.36	
E.G. Slope (m/m)	0.018284	Area (m2)		10.36	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	16.41	Top Width (m)		16.41	
Vel Total (m/s)	3.29	Avg. Vel. (m/s)		3.29	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	251.9	Conv. (m3/s)		251.9	
Length Wtd. (m)	124.79	Wetted Per. (m)		16.65	
Min Ch El (m)	736.47	Shear (N/m2)		111.62	
Alpha	1.00	Stream Power (N/m s)		366.82	
Frctn Loss (m)	1.72	Cum Volume (1000 m3)		22.00	
C & E Loss (m)	0.08	Cum SA (1000 m2)		31.10	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100

E.G. Elev (m)	738.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	737.65	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.80	Flow Area (m2)		12.82	
E.G. Slope (m/m)	0.016990	Area (m2)		12.82	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	17.79	Top Width (m)		17.79	
Vel Total (m/s)	3.46	Avg. Vel. (m/s)		3.46	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	339.8	Conv. (m3/s)		339.8	
Length Wtd. (m)	124.79	Wetted Per. (m)		18.07	
Min Ch El (m)	736.47	Shear (N/m2)		118.17	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		408.32	
Frctn Loss (m)	1.75	Cum Volume (1000 m3)		26.89	
C & E Loss (m)	0.08	Cum SA (1000 m2)		34.27	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2606.178 Profile: T=500

E.G. Elev (m)	738.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.030	
W.S. Elev (m)	738.01	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.19	Flow Area (m2)		19.88	
E.G. Slope (m/m)	0.014584	Area (m2)		19.88	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	21.31	Top Width (m)		21.31	
Vel Total (m/s)	3.80	Avg. Vel. (m/s)		3.80	
Max Chl Dpth (m)	1.54	Hydr. Depth (m)		0.93	
Conv. Total (m3/s)	624.9	Conv. (m3/s)		624.9	
Length Wtd. (m)	124.79	Wetted Per. (m)		21.71	
Min Ch EI (m)	736.47	Shear (N/m2)		130.96	
Alpha	1.00	Stream Power (N/m s)		497.11	
Frctn Loss (m)	1.84	Cum Volume (1000 m3)	0.00	39.62	0.00
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.04	39.93	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=2

E.G. Elev (m)	735.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.15	Wt. n-Val.		0.030	
W.S. Elev (m)	735.43	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.43	Flow Area (m2)		3.84	
E.G. Slope (m/m)	0.013894	Area (m2)		3.84	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	13.49	Top Width (m)		13.49	
Vel Total (m/s)	1.69	Avg. Vel. (m/s)		1.69	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.28	
Conv. Total (m3/s)	55.1	Conv. (m3/s)		55.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		13.55	
Min Ch EI (m)	734.94	Shear (N/m2)		38.57	
Alpha	1.00	Stream Power (N/m s)		65.34	
Frctn Loss (m)	3.88	Cum Volume (1000 m3)		6.07	
C & E Loss (m)	0.05	Cum SA (1000 m2)		17.60	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=5

E.G. Elev (m)	735.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	735.58	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.58	Flow Area (m2)		6.02	
E.G. Slope (m/m)	0.012543	Area (m2)		6.02	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	15.93	Top Width (m)		15.93	
Vel Total (m/s)	1.94	Avg. Vel. (m/s)		1.94	
Max Chl Dpth (m)	0.64	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	104.5	Conv. (m3/s)		104.5	
Length Wtd. (m)	156.83	Wetted Per. (m)		16.01	
Min Ch EI (m)	734.94	Shear (N/m2)		46.23	
Alpha	1.00	Stream Power (N/m s)		89.87	
Frctn Loss (m)	3.66	Cum Volume (1000 m3)		9.39	
C & E Loss (m)	0.07	Cum SA (1000 m2)		21.17	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=10

E.G. Elev (m)	735.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	735.70	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.70	Flow Area (m2)		8.16	
E.G. Slope (m/m)	0.011828	Area (m2)		8.16	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	18.10	Top Width (m)		18.10	
Vel Total (m/s)	2.12	Avg. Vel. (m/s)		2.12	
Max Chl Dpth (m)	0.76	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	159.3	Conv. (m3/s)		159.3	
Length Wtd. (m)	156.83	Wetted Per. (m)		18.20	
Min Ch El (m)	734.94	Shear (N/m2)		51.99	
Alpha	1.00	Stream Power (N/m s)		110.38	
Frctn Loss (m)	3.49	Cum Volume (1000 m3)		12.54	
C & E Loss (m)	0.08	Cum SA (1000 m2)		23.78	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=25

E.G. Elev (m)	736.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	
W.S. Elev (m)	735.87	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.87	Flow Area (m2)		11.58	
E.G. Slope (m/m)	0.011355	Area (m2)		11.58	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	22.75	Top Width (m)		22.75	
Vel Total (m/s)	2.26	Avg. Vel. (m/s)		2.26	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.51	
Conv. Total (m3/s)	245.1	Conv. (m3/s)		245.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		22.87	
Min Ch El (m)	734.94	Shear (N/m2)		56.37	
Alpha	1.00	Stream Power (N/m s)		127.18	
Frctn Loss (m)	3.30	Cum Volume (1000 m3)		16.86	
C & E Loss (m)	0.10	Cum SA (1000 m2)		26.35	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=50

E.G. Elev (m)	736.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	735.97	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.99	Flow Area (m2)		13.91	
E.G. Slope (m/m)	0.011874	Area (m2)		13.91	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	25.02	Top Width (m)		25.02	
Vel Total (m/s)	2.45	Avg. Vel. (m/s)		2.45	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	312.6	Conv. (m3/s)		312.6	
Length Wtd. (m)	156.83	Wetted Per. (m)		25.15	
Min Ch El (m)	734.94	Shear (N/m2)		64.42	
Alpha	1.00	Stream Power (N/m s)		157.68	
Frctn Loss (m)	3.23	Cum Volume (1000 m3)		20.48	
C & E Loss (m)	0.10	Cum SA (1000 m2)		28.51	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100

E.G. Elev (m)	736.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.35	Wt. n-Val.		0.030	
W.S. Elev (m)	736.08	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.11	Flow Area (m2)		16.79	
E.G. Slope (m/m)	0.011720	Area (m2)		16.79	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100 (Continued)

Top Width (m)	26.74	Top Width (m)		26.74	
Vel Total (m/s)	2.64	Avg. Vel. (m/s)		2.64	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	409.1	Conv. (m3/s)		409.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		26.88	
Min Ch El (m)	734.94	Shear (N/m2)		71.81	
Alpha	1.00	Stream Power (N/m s)		189.38	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		25.05	
C & E Loss (m)	0.11	Cum SA (1000 m2)		31.49	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2481.292 Profile: T=500

E.G. Elev (m)	736.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.56	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.29	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.41	Flow Area (m2)	0.01	22.81	
E.G. Slope (m/m)	0.014911	Area (m2)	0.01	22.81	
Q Total (m3/s)	75.46	Flow (m3/s)	0.00	75.46	
Top Width (m)	31.24	Top Width (m)	0.28	30.96	
Vel Total (m/s)	3.31	Avg. Vel. (m/s)	0.36	3.31	
Max Chl Dpth (m)	1.35	Hydr. Depth (m)	0.03	0.74	
Conv. Total (m3/s)	618.0	Conv. (m3/s)	0.0	617.9	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.29	31.14	
Min Ch El (m)	734.94	Shear (N/m2)	3.84	107.12	
Alpha	1.00	Stream Power (N/m s)	1.38	354.34	
Frctn Loss (m)	3.26	Cum Volume (1000 m3)	0.00	36.95	0.00
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.02	36.67	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=2

E.G. Elev (m)	731.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	731.04	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.22	Flow Area (m2)		1.88	
E.G. Slope (m/m)	0.057210	Area (m2)		1.88	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.52	Top Width (m)		6.52	
Vel Total (m/s)	3.45	Avg. Vel. (m/s)		3.45	
Max Chl Dpth (m)	0.45	Hydr. Depth (m)		0.29	
Conv. Total (m3/s)	27.2	Conv. (m3/s)		27.2	
Length Wtd. (m)	132.83	Wetted Per. (m)		6.60	
Min Ch El (m)	730.59	Shear (N/m2)		159.94	
Alpha	1.00	Stream Power (N/m s)		552.34	
Frctn Loss (m)	1.43	Cum Volume (1000 m3)		5.62	
C & E Loss (m)	0.00	Cum SA (1000 m2)		16.03	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5

E.G. Elev (m)	732.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.87	Wt. n-Val.		0.030	
W.S. Elev (m)	731.17	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.43	Flow Area (m2)		2.83	
E.G. Slope (m/m)	0.057842	Area (m2)		2.83	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	7.54	Top Width (m)		7.54	
Vel Total (m/s)	4.13	Avg. Vel. (m/s)		4.13	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	48.6	Conv. (m3/s)		48.6	
Length Wtd. (m)	132.83	Wetted Per. (m)		7.66	
Min Ch El (m)	730.59	Shear (N/m2)		209.82	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		866.78	
Frctn Loss (m)	3.14	Cum Volume (1000 m3)		8.70	
C & E Loss (m)	0.20	Cum SA (1000 m2)		19.32	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=10

E.G. Elev (m)	732.36	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	731.29	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.61	Flow Area (m2)		3.77	
E.G. Slope (m/m)	0.056215	Area (m2)		3.77	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	8.38	Top Width (m)		8.38	
Vel Total (m/s)	4.59	Avg. Vel. (m/s)		4.59	
Max Chl Dpth (m)	0.70	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	73.1	Conv. (m3/s)		73.1	
Length Wtd. (m)	132.83	Wetted Per. (m)		8.53	
Min Ch EI (m)	730.59	Shear (N/m2)		243.90	
Alpha	1.00	Stream Power (N/m s)		1119.22	
Frctn Loss (m)	3.01	Cum Volume (1000 m3)		11.60	
C & E Loss (m)	0.25	Cum SA (1000 m2)		21.71	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=25

E.G. Elev (m)	732.73	Element	Left OB	Channel	Right OB
Vel Head (m)	1.28	Wt. n-Val.		0.030	
W.S. Elev (m)	731.45	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.86	Flow Area (m2)		5.21	
E.G. Slope (m/m)	0.051502	Area (m2)		5.21	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	9.43	Top Width (m)		9.43	
Vel Total (m/s)	5.02	Avg. Vel. (m/s)		5.02	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	115.1	Conv. (m3/s)		115.1	
Length Wtd. (m)		Wetted Per. (m)		9.63	
Min Ch EI (m)	730.59	Shear (N/m2)		272.87	
Alpha	1.00	Stream Power (N/m s)		1369.30	
Frctn Loss (m)		Cum Volume (1000 m3)		15.54	
C & E Loss (m)		Cum SA (1000 m2)		23.83	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=50

E.G. Elev (m)	732.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.35	Wt. n-Val.		0.030	
W.S. Elev (m)	731.59	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.03	Flow Area (m2)		6.61	
E.G. Slope (m/m)	0.044029	Area (m2)		6.61	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	10.20	Top Width (m)		10.20	
Vel Total (m/s)	5.15	Avg. Vel. (m/s)		5.15	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	162.3	Conv. (m3/s)		162.3	
Length Wtd. (m)		Wetted Per. (m)		10.46	
Min Ch EI (m)	730.59	Shear (N/m2)		272.92	
Alpha	1.00	Stream Power (N/m s)		1406.00	
Frctn Loss (m)		Cum Volume (1000 m3)		18.87	
C & E Loss (m)		Cum SA (1000 m2)		25.75	



Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=100

E.G. Elev (m)	733.17	Element	Left OB	Channel	Right OB
Vel Head (m)	1.41	Wt. n-Val.		0.030	
W.S. Elev (m)	731.75	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.20	Flow Area (m2)		8.41	
E.G. Slope (m/m)	0.042582	Area (m2)		8.41	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	12.23	Top Width (m)		12.23	
Vel Total (m/s)	5.27	Avg. Vel. (m/s)		5.27	
Max Chl Dpth (m)	1.16	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	214.6	Conv. (m3/s)		214.6	
Length Wtd. (m)		Wetted Per. (m)		12.55	
Min Ch El (m)	730.59	Shear (N/m2)		279.85	
Alpha	1.00	Stream Power (N/m s)		1474.11	
Frctn Loss (m)		Cum Volume (1000 m3)		23.07	
C & E Loss (m)		Cum SA (1000 m2)		28.44	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2326.265 Profile: T=500

E.G. Elev (m)	733.52	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	
W.S. Elev (m)	732.17	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.61	Flow Area (m2)		14.70	
E.G. Slope (m/m)	0.030902	Area (m2)		14.70	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	17.46	Top Width (m)		17.46	
Vel Total (m/s)	5.13	Avg. Vel. (m/s)		5.13	
Max Chl Dpth (m)	1.58	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	429.3	Conv. (m3/s)		429.3	
Length Wtd. (m)	132.83	Wetted Per. (m)		17.92	
Min Ch El (m)	730.59	Shear (N/m2)		248.52	
Alpha	1.00	Stream Power (N/m s)		1275.86	
Frctn Loss (m)	1.20	Cum Volume (1000 m3)		34.01	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		32.87	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=2

E.G. Elev (m)	730.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.15	Wt. n-Val.		0.030	
W.S. Elev (m)	729.85	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	729.85	Flow Area (m2)		3.73	
E.G. Slope (m/m)	0.013555	Area (m2)		3.73	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	12.29	Top Width (m)		12.29	
Vel Total (m/s)	1.74	Avg. Vel. (m/s)		1.74	
Max Chl Dpth (m)	0.61	Hydr. Depth (m)		0.30	
Conv. Total (m3/s)	55.8	Conv. (m3/s)		55.8	
Length Wtd. (m)	143.99	Wetted Per. (m)		12.38	
Min Ch El (m)	729.24	Shear (N/m2)		40.02	
Alpha	1.00	Stream Power (N/m s)		69.77	
Frctn Loss (m)	3.75	Cum Volume (1000 m3)		5.24	
C & E Loss (m)	0.06	Cum SA (1000 m2)		14.78	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5

E.G. Elev (m)	730.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	730.01	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.01	Flow Area (m2)		6.04	
E.G. Slope (m/m)	0.012740	Area (m2)		6.04	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5 (Continued)

Top Width (m)	16.21	Top Width (m)		16.21	
Vel Total (m/s)	1.94	Avg. Vel. (m/s)		1.94	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	103.7	Conv. (m3/s)		103.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		16.36	
Min Ch El (m)	729.24	Shear (N/m2)		46.14	
Alpha	1.00	Stream Power (N/m s)		89.35	
Frctn Loss (m)	3.54	Cum Volume (1000 m3)		8.11	
C & E Loss (m)	0.08	Cum SA (1000 m2)		17.75	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=10

E.G. Elev (m)	730.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	730.13	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.13	Flow Area (m2)		8.27	
E.G. Slope (m/m)	0.012137	Area (m2)		8.27	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	18.98	Top Width (m)		18.98	
Vel Total (m/s)	2.09	Avg. Vel. (m/s)		2.09	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	157.2	Conv. (m3/s)		157.2	
Length Wtd. (m)	143.99	Wetted Per. (m)		19.19	
Min Ch El (m)	729.24	Shear (N/m2)		51.29	
Alpha	1.00	Stream Power (N/m s)		107.44	
Frctn Loss (m)	3.34	Cum Volume (1000 m3)		10.80	
C & E Loss (m)	0.10	Cum SA (1000 m2)		19.89	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=25

E.G. Elev (m)	730.56	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	730.28	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.28	Flow Area (m2)		11.20	
E.G. Slope (m/m)	0.010959	Area (m2)		11.20	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	20.24	Top Width (m)		20.24	
Vel Total (m/s)	2.33	Avg. Vel. (m/s)		2.33	
Max Chl Dpth (m)	1.04	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	249.5	Conv. (m3/s)		249.5	
Length Wtd. (m)	143.99	Wetted Per. (m)		20.49	
Min Ch El (m)	729.24	Shear (N/m2)		58.73	
Alpha	1.00	Stream Power (N/m s)		136.99	
Frctn Loss (m)	3.07	Cum Volume (1000 m3)		14.45	
C & E Loss (m)	0.12	Cum SA (1000 m2)		21.86	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50

E.G. Elev (m)	730.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	730.40	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.40	Flow Area (m2)		13.56	
E.G. Slope (m/m)	0.010421	Area (m2)		13.56	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	21.10	Top Width (m)		21.10	
Vel Total (m/s)	2.51	Avg. Vel. (m/s)		2.51	
Max Chl Dpth (m)	1.16	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	333.7	Conv. (m3/s)		333.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		21.38	
Min Ch El (m)	729.24	Shear (N/m2)		64.82	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		162.82	
Frctn Loss (m)	3.06	Cum Volume (1000 m3)		17.53	
C & E Loss (m)	0.12	Cum SA (1000 m2)		23.67	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=100

E.G. Elev (m)	730.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	730.53	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.53	Flow Area (m2)		16.45	
E.G. Slope (m/m)	0.009959	Area (m2)		16.45	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	22.27	Top Width (m)		22.27	
Vel Total (m/s)	2.69	Avg. Vel. (m/s)		2.69	
Max Chl Dpth (m)	1.29	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	443.8	Conv. (m3/s)		443.8	
Length Wtd. (m)	143.99	Wetted Per. (m)		22.58	
Min Ch EI (m)	729.24	Shear (N/m2)		71.14	
Alpha	1.00	Stream Power (N/m s)		191.60	
Frctn Loss (m)	2.94	Cum Volume (1000 m3)		21.42	
C & E Loss (m)	0.13	Cum SA (1000 m2)		26.15	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2193.396 Profile: T=500

E.G. Elev (m)	731.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	730.86	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.86	Flow Area (m2)		24.37	
E.G. Slope (m/m)	0.009098	Area (m2)		24.37	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	24.98	Top Width (m)		24.98	
Vel Total (m/s)	3.10	Avg. Vel. (m/s)		3.10	
Max Chl Dpth (m)	1.62	Hydr. Depth (m)		0.98	
Conv. Total (m3/s)	791.1	Conv. (m3/s)		791.1	
Length Wtd. (m)	143.99	Wetted Per. (m)		25.37	
Min Ch EI (m)	729.24	Shear (N/m2)		85.72	
Alpha	1.00	Stream Power (N/m s)		265.38	
Frctn Loss (m)	2.64	Cum Volume (1000 m3)		31.42	0.00
C & E Loss (m)	0.16	Cum SA (1000 m2)		30.06	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=2

E.G. Elev (m)	726.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.030	
W.S. Elev (m)	725.48	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	725.68	Flow Area (m2)		1.74	
E.G. Slope (m/m)	0.070199	Area (m2)		1.74	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.23	Top Width (m)		6.23	
Vel Total (m/s)	3.74	Avg. Vel. (m/s)		3.74	
Max Chl Dpth (m)	0.45	Hydr. Depth (m)		0.28	
Conv. Total (m3/s)	24.5	Conv. (m3/s)		24.5	
Length Wtd. (m)	118.81	Wetted Per. (m)		6.32	
Min Ch EI (m)	725.03	Shear (N/m2)		189.42	
Alpha	1.00	Stream Power (N/m s)		707.70	
Frctn Loss (m)	3.02	Cum Volume (1000 m3)		4.85	
C & E Loss (m)	0.15	Cum SA (1000 m2)		13.45	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=5

E.G. Elev (m)	726.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.96	Wt. n-Val.		0.030	
W.S. Elev (m)	725.62	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	725.94	Flow Area (m2)		2.69	
E.G. Slope (m/m)	0.065878	Area (m2)		2.69	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	7.28	Top Width (m)		7.28	
Vel Total (m/s)	4.35	Avg. Vel. (m/s)		4.35	
Max Chl Dpth (m)	0.59	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	45.6	Conv. (m3/s)		45.6	
Length Wtd. (m)	118.81	Wetted Per. (m)		7.42	
Min Ch El (m)	725.03	Shear (N/m2)		234.19	
Alpha	1.00	Stream Power (N/m s)		1018.62	
Frctn Loss (m)	3.09	Cum Volume (1000 m3)		7.48	
C & E Loss (m)	0.19	Cum SA (1000 m2)		16.06	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=10

E.G. Elev (m)	726.92	Element	Left OB	Channel	Right OB
Vel Head (m)	1.18	Wt. n-Val.		0.030	
W.S. Elev (m)	725.74	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.11	Flow Area (m2)		3.60	
E.G. Slope (m/m)	0.060837	Area (m2)		3.60	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	7.84	Top Width (m)		7.84	
Vel Total (m/s)	4.82	Avg. Vel. (m/s)		4.82	
Max Chl Dpth (m)	0.71	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	70.2	Conv. (m3/s)		70.2	
Length Wtd. (m)	118.81	Wetted Per. (m)		8.02	
Min Ch El (m)	725.03	Shear (N/m2)		267.42	
Alpha	1.00	Stream Power (N/m s)		1287.72	
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		9.95	
C & E Loss (m)	0.23	Cum SA (1000 m2)		17.96	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=25

E.G. Elev (m)	727.37	Element	Left OB	Channel	Right OB
Vel Head (m)	1.48	Wt. n-Val.		0.030	
W.S. Elev (m)	725.89	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.30	Flow Area (m2)		4.84	
E.G. Slope (m/m)	0.057927	Area (m2)		4.84	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	8.54	Top Width (m)		8.54	
Vel Total (m/s)	5.39	Avg. Vel. (m/s)		5.39	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	108.5	Conv. (m3/s)		108.5	
Length Wtd. (m)	118.81	Wetted Per. (m)		8.79	
Min Ch El (m)	725.03	Shear (N/m2)		313.01	
Alpha	1.00	Stream Power (N/m s)		1687.80	
Frctn Loss (m)	3.22	Cum Volume (1000 m3)		13.30	
C & E Loss (m)	0.27	Cum SA (1000 m2)		19.78	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50

E.G. Elev (m)	727.54	Element	Left OB	Channel	Right OB
Vel Head (m)	1.52	Wt. n-Val.		0.030	
W.S. Elev (m)	726.02	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.45	Flow Area (m2)		6.25	
E.G. Slope (m/m)	0.064886	Area (m2)		6.25	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50 (Continued)

Top Width (m)	11.85	Top Width (m)		11.85	
Vel Total (m/s)	5.45	Avg. Vel. (m/s)		5.45	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.53	
Conv. Total (m3/s)	133.7	Conv. (m3/s)		133.7	
Length Wtd. (m)	118.81	Wetted Per. (m)		12.15	
Min Ch El (m)	725.03	Shear (N/m2)		327.32	
Alpha	1.00	Stream Power (N/m s)		1784.31	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		16.11	
C & E Loss (m)	0.27	Cum SA (1000 m2)		21.30	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=100

E.G. Elev (m)	727.83	Element	Left OB	Channel	Right OB
Vel Head (m)	1.69	Wt. n-Val.		0.030	
W.S. Elev (m)	726.14	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.64	Flow Area (m2)		7.69	
E.G. Slope (m/m)	0.063064	Area (m2)		7.69	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	13.14	Top Width (m)		13.14	
Vel Total (m/s)	5.76	Avg. Vel. (m/s)		5.76	
Max Chl Dpth (m)	1.11	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	176.4	Conv. (m3/s)		176.4	
Length Wtd. (m)	118.81	Wetted Per. (m)		13.46	
Min Ch El (m)	725.03	Shear (N/m2)		353.10	
Alpha	1.00	Stream Power (N/m s)		2034.28	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		19.68	
C & E Loss (m)	0.29	Cum SA (1000 m2)		23.60	

Plan: Plan 07 ArroyoPilarejo 1 RS: 2050.529 Profile: T=500

E.G. Elev (m)	728.55	Element	Left OB	Channel	Right OB
Vel Head (m)	2.13	Wt. n-Val.		0.030	
W.S. Elev (m)	726.42	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.06	Flow Area (m2)		11.67	
E.G. Slope (m/m)	0.054234	Area (m2)		11.67	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	14.93	Top Width (m)		14.93	
Vel Total (m/s)	6.46	Avg. Vel. (m/s)		6.46	
Max Chl Dpth (m)	1.39	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	324.0	Conv. (m3/s)		324.0	
Length Wtd. (m)	118.81	Wetted Per. (m)		15.36	
Min Ch El (m)	725.03	Shear (N/m2)		404.15	
Alpha	1.00	Stream Power (N/m s)		2612.55	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		28.82	0.00
C & E Loss (m)	0.33	Cum SA (1000 m2)		27.18	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2

E.G. Elev (m)	723.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	722.82	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	722.82	Flow Area (m2)		3.24	
E.G. Slope (m/m)	0.012982	Area (m2)		3.24	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	8.24	Top Width (m)		8.24	
Vel Total (m/s)	2.01	Avg. Vel. (m/s)		2.01	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	57.0	Conv. (m3/s)		57.0	
Length Wtd. (m)	104.48	Wetted Per. (m)		8.43	
Min Ch El (m)	722.22	Shear (N/m2)		48.90	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		98.13	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		4.55	
C & E Loss (m)	0.03	Cum SA (1000 m2)		12.59	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=5

E.G. Elev (m)	723.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	722.99	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.02	Flow Area (m2)		4.71	
E.G. Slope (m/m)	0.013801	Area (m2)		4.71	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	9.04	Top Width (m)		9.04	
Vel Total (m/s)	2.49	Avg. Vel. (m/s)		2.49	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	99.6	Conv. (m3/s)		99.6	
Length Wtd. (m)	104.48	Wetted Per. (m)		9.31	
Min Ch EI (m)	722.22	Shear (N/m2)		68.43	
Alpha	1.00	Stream Power (N/m s)		170.09	
Frctn Loss (m)	2.10	Cum Volume (1000 m3)		7.04	
C & E Loss (m)	0.03	Cum SA (1000 m2)		15.09	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=10

E.G. Elev (m)	723.55	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	723.13	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.20	Flow Area (m2)		6.00	
E.G. Slope (m/m)	0.014734	Area (m2)		6.00	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	9.64	Top Width (m)		9.64	
Vel Total (m/s)	2.89	Avg. Vel. (m/s)		2.89	
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.62	
Conv. Total (m3/s)	142.7	Conv. (m3/s)		142.7	
Length Wtd. (m)	104.48	Wetted Per. (m)		9.96	
Min Ch EI (m)	722.22	Shear (N/m2)		87.03	
Alpha	1.00	Stream Power (N/m s)		251.16	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		9.38	
C & E Loss (m)	0.03	Cum SA (1000 m2)		16.92	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=25

E.G. Elev (m)	723.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.57	Wt. n-Val.		0.030	
W.S. Elev (m)	723.30	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.43	Flow Area (m2)		7.78	
E.G. Slope (m/m)	0.015671	Area (m2)		7.78	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	10.38	Top Width (m)		10.38	
Vel Total (m/s)	3.36	Avg. Vel. (m/s)		3.36	
Max Chl Dpth (m)	1.08	Hydr. Depth (m)		0.75	
Conv. Total (m3/s)	208.7	Conv. (m3/s)		208.7	
Length Wtd. (m)	104.48	Wetted Per. (m)		10.79	
Min Ch EI (m)	722.22	Shear (N/m2)		110.85	
Alpha	1.00	Stream Power (N/m s)		372.04	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		12.55	
C & E Loss (m)	0.03	Cum SA (1000 m2)		18.66	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=50

E.G. Elev (m)	724.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	723.48	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.61	Flow Area (m2)		9.70	
E.G. Slope (m/m)	0.014407	Area (m2)		9.70	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	11.33	Top Width (m)		11.33	
Vel Total (m/s)	3.51	Avg. Vel. (m/s)		3.51	
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	283.8	Conv. (m3/s)		283.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		11.81	
Min Ch El (m)	722.22	Shear (N/m2)		116.11	
Alpha	1.00	Stream Power (N/m s)		407.61	
Frctn Loss (m)	2.01	Cum Volume (1000 m3)		15.16	
C & E Loss (m)	0.04	Cum SA (1000 m2)		19.92	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=100

E.G. Elev (m)	724.38	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.		0.030	
W.S. Elev (m)	723.65	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.82	Flow Area (m2)		11.75	
E.G. Slope (m/m)	0.014592	Area (m2)		11.75	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	12.43	Top Width (m)		12.43	
Vel Total (m/s)	3.77	Avg. Vel. (m/s)		3.77	
Max Chl Dpth (m)	1.43	Hydr. Depth (m)		0.95	
Conv. Total (m3/s)	366.6	Conv. (m3/s)		366.6	
Length Wtd. (m)	104.48	Wetted Per. (m)		12.97	
Min Ch El (m)	722.22	Shear (N/m2)		129.63	
Alpha	1.00	Stream Power (N/m s)		488.68	
Frctn Loss (m)	1.99	Cum Volume (1000 m3)		18.53	
C & E Loss (m)	0.04	Cum SA (1000 m2)		22.08	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1930.629 Profile: T=500

E.G. Elev (m)	725.05	Element	Left OB	Channel	Right OB
Vel Head (m)	1.02	Wt. n-Val.		0.030	
W.S. Elev (m)	724.03	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.29	Flow Area (m2)		16.85	
E.G. Slope (m/m)	0.015808	Area (m2)		16.85	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	14.57	Top Width (m)		14.57	
Vel Total (m/s)	4.48	Avg. Vel. (m/s)		4.48	
Max Chl Dpth (m)	1.81	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	600.2	Conv. (m3/s)		600.2	
Length Wtd. (m)	104.48	Wetted Per. (m)		15.25	
Min Ch El (m)	722.22	Shear (N/m2)		171.25	
Alpha	1.00	Stream Power (N/m s)		767.00	
Frctn Loss (m)	2.05	Cum Volume (1000 m3)		27.13	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		25.43	0.06

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2

E.G. Elev (m)	720.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.030	
W.S. Elev (m)	720.34	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.50	Flow Area (m2)		2.05	
E.G. Slope (m/m)	0.037058	Area (m2)		2.05	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2 (Continued)

Top Width (m)	5.78	Top Width (m)		5.78	
Vel Total (m/s)	3.16	Avg. Vel. (m/s)		3.16	
Max Chl Dpth (m)	0.64	Hydr. Depth (m)		0.36	
Conv. Total (m3/s)	33.8	Conv. (m3/s)		33.8	
Length Wtd. (m)	148.89	Wetted Per. (m)		5.93	
Min Ch El (m)	719.70	Shear (N/m2)		125.83	
Alpha	1.00	Stream Power (N/m s)		398.15	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		4.28	
C & E Loss (m)	0.06	Cum SA (1000 m2)		11.86	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=5

E.G. Elev (m)	721.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	720.54	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.73	Flow Area (m2)		3.33	
E.G. Slope (m/m)	0.032046	Area (m2)		3.33	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	7.14	Top Width (m)		7.14	
Vel Total (m/s)	3.52	Avg. Vel. (m/s)		3.52	
Max Chl Dpth (m)	0.84	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	65.4	Conv. (m3/s)		65.4	
Length Wtd. (m)	148.89	Wetted Per. (m)		7.35	
Min Ch El (m)	719.70	Shear (N/m2)		142.26	
Alpha	1.00	Stream Power (N/m s)		500.47	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		6.62	
C & E Loss (m)	0.05	Cum SA (1000 m2)		14.24	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=10

E.G. Elev (m)	721.43	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.030	
W.S. Elev (m)	720.70	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.93	Flow Area (m2)		4.57	
E.G. Slope (m/m)	0.028529	Area (m2)		4.57	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	8.01	Top Width (m)		8.01	
Vel Total (m/s)	3.79	Avg. Vel. (m/s)		3.79	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	102.5	Conv. (m3/s)		102.5	
Length Wtd. (m)	148.89	Wetted Per. (m)		8.28	
Min Ch El (m)	719.70	Shear (N/m2)		154.48	
Alpha	1.00	Stream Power (N/m s)		585.37	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		8.83	
C & E Loss (m)	0.03	Cum SA (1000 m2)		16.00	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25

E.G. Elev (m)	721.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.86	Wt. n-Val.		0.030	
W.S. Elev (m)	720.91	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.18	Flow Area (m2)		6.36	
E.G. Slope (m/m)	0.026065	Area (m2)		6.36	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	9.18	Top Width (m)		9.18	
Vel Total (m/s)	4.11	Avg. Vel. (m/s)		4.11	
Max Chl Dpth (m)	1.21	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	161.8	Conv. (m3/s)		161.8	
Length Wtd. (m)	148.89	Wetted Per. (m)		9.53	
Min Ch El (m)	719.70	Shear (N/m2)		170.53	



Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		700.67	
Frctn Loss (m)	3.89	Cum Volume (1000 m3)		11.81	
C & E Loss (m)	0.00	Cum SA (1000 m2)		17.64	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=50

E.G. Elev (m)	722.06	Element	Left OB	Channel	Right OB
Vel Head (m)	1.02	Wt. n-Val.		0.030	
W.S. Elev (m)	721.04	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.37	Flow Area (m2)		7.63	
E.G. Slope (m/m)	0.026966	Area (m2)		7.63	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	9.97	Top Width (m)		9.97	
Vel Total (m/s)	4.46	Avg. Vel. (m/s)		4.46	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	207.4	Conv. (m3/s)		207.4	
Length Wtd. (m)	148.89	Wetted Per. (m)		10.37	
Min Ch EI (m)	719.70	Shear (N/m2)		194.66	
Alpha	1.00	Stream Power (N/m s)		868.68	
Frctn Loss (m)	3.90	Cum Volume (1000 m3)		14.25	
C & E Loss (m)	0.01	Cum SA (1000 m2)		18.81	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=100

E.G. Elev (m)	722.34	Element	Left OB	Channel	Right OB
Vel Head (m)	1.13	Wt. n-Val.		0.030	
W.S. Elev (m)	721.21	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.61	Flow Area (m2)		9.40	
E.G. Slope (m/m)	0.025960	Area (m2)		9.40	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	10.97	Top Width (m)		10.97	
Vel Total (m/s)	4.71	Avg. Vel. (m/s)		4.71	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	274.9	Conv. (m3/s)		274.9	
Length Wtd. (m)	148.89	Wetted Per. (m)		11.43	
Min Ch EI (m)	719.70	Shear (N/m2)		209.28	
Alpha	1.00	Stream Power (N/m s)		986.33	
Frctn Loss (m)	3.87	Cum Volume (1000 m3)		17.42	
C & E Loss (m)	0.00	Cum SA (1000 m2)		20.86	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1826.699 Profile: T=500

E.G. Elev (m)	722.97	Element	Left OB	Channel	Right OB
Vel Head (m)	1.32	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.65	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.05	Flow Area (m2)		14.82	0.01
E.G. Slope (m/m)	0.025112	Area (m2)		14.82	0.01
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	0.00
Top Width (m)	15.24	Top Width (m)		15.06	0.17
Vel Total (m/s)	5.09	Avg. Vel. (m/s)		5.09	0.60
Max Chl Dpth (m)	1.95	Hydr. Depth (m)		0.98	0.04
Conv. Total (m3/s)	476.2	Conv. (m3/s)		476.2	0.0
Length Wtd. (m)	148.89	Wetted Per. (m)		15.67	0.19
Min Ch EI (m)	719.70	Shear (N/m2)		232.93	9.44
Alpha	1.00	Stream Power (N/m s)		1185.57	5.67
Frctn Loss (m)	3.73	Cum Volume (1000 m3)		25.47	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		23.88	0.05

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=2

E.G. Elev (m)	716.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.030	
W.S. Elev (m)	716.58	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	716.65	Flow Area (m2)		2.68	
E.G. Slope (m/m)	0.019538	Area (m2)		2.68	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	7.01	Top Width (m)		7.01	
Vel Total (m/s)	2.42	Avg. Vel. (m/s)		2.42	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	46.5	Conv. (m3/s)		46.5	
Length Wtd. (m)	126.54	Wetted Per. (m)		7.15	
Min Ch El (m)	715.98	Shear (N/m2)		71.90	
Alpha	1.00	Stream Power (N/m s)		174.28	
Frctn Loss (m)	2.07	Cum Volume (1000 m3)		3.93	
C & E Loss (m)	0.03	Cum SA (1000 m2)		10.90	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=5

E.G. Elev (m)	717.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	716.75	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	716.87	Flow Area (m2)		3.91	
E.G. Slope (m/m)	0.021941	Area (m2)		3.91	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	8.11	Top Width (m)		8.11	
Vel Total (m/s)	2.99	Avg. Vel. (m/s)		2.99	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	79.0	Conv. (m3/s)		79.0	
Length Wtd. (m)	126.54	Wetted Per. (m)		8.29	
Min Ch El (m)	715.98	Shear (N/m2)		101.51	
Alpha	1.00	Stream Power (N/m s)		303.72	
Frctn Loss (m)	2.10	Cum Volume (1000 m3)		6.08	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.11	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=10

E.G. Elev (m)	717.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	716.87	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.05	Flow Area (m2)		4.95	
E.G. Slope (m/m)	0.024215	Area (m2)		4.95	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	8.69	Top Width (m)		8.69	
Vel Total (m/s)	3.50	Avg. Vel. (m/s)		3.50	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	111.3	Conv. (m3/s)		111.3	
Length Wtd. (m)	126.54	Wetted Per. (m)		8.92	
Min Ch El (m)	715.98	Shear (N/m2)		131.68	
Alpha	1.00	Stream Power (N/m s)		461.03	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		8.12	
C & E Loss (m)	0.09	Cum SA (1000 m2)		14.76	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25

E.G. Elev (m)	717.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	717.03	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.29	Flow Area (m2)		6.40	
E.G. Slope (m/m)	0.026182	Area (m2)		6.40	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25 (Continued)

Top Width (m)	9.44	Top Width (m)		9.44	
Vel Total (m/s)	4.08	Avg. Vel. (m/s)		4.08	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	161.4	Conv. (m3/s)		161.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		9.74	
Min Ch El (m)	715.98	Shear (N/m2)		168.81	
Alpha	1.00	Stream Power (N/m s)		688.43	
Frctn Loss (m)	2.20	Cum Volume (1000 m3)		10.86	
C & E Loss (m)	0.13	Cum SA (1000 m2)		16.25	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=50

E.G. Elev (m)	718.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.97	Wt. n-Val.		0.030	
W.S. Elev (m)	717.17	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.47	Flow Area (m2)		7.79	
E.G. Slope (m/m)	0.025468	Area (m2)		7.79	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	10.11	Top Width (m)		10.11	
Vel Total (m/s)	4.37	Avg. Vel. (m/s)		4.37	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	213.4	Conv. (m3/s)		213.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		10.47	
Min Ch El (m)	715.98	Shear (N/m2)		185.98	
Alpha	1.00	Stream Power (N/m s)		812.78	
Frctn Loss (m)	2.24	Cum Volume (1000 m3)		13.10	
C & E Loss (m)	0.13	Cum SA (1000 m2)		17.31	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=100

E.G. Elev (m)	718.47	Element	Left OB	Channel	Right OB
Vel Head (m)	1.15	Wt. n-Val.		0.030	
W.S. Elev (m)	717.32	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.68	Flow Area (m2)		9.32	
E.G. Slope (m/m)	0.026031	Area (m2)		9.32	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	10.79	Top Width (m)		10.79	
Vel Total (m/s)	4.75	Avg. Vel. (m/s)		4.75	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	274.5	Conv. (m3/s)		274.5	
Length Wtd. (m)	126.54	Wetted Per. (m)		11.21	
Min Ch El (m)	715.98	Shear (N/m2)		212.16	
Alpha	1.00	Stream Power (N/m s)		1008.63	
Frctn Loss (m)	2.29	Cum Volume (1000 m3)		16.03	
C & E Loss (m)	0.16	Cum SA (1000 m2)		19.24	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500

E.G. Elev (m)	719.22	Element	Left OB	Channel	Right OB
Vel Head (m)	1.51	Wt. n-Val.		0.030	
W.S. Elev (m)	717.71	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.19	Flow Area (m2)		13.86	
E.G. Slope (m/m)	0.024979	Area (m2)		13.86	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	12.62	Top Width (m)		12.62	
Vel Total (m/s)	5.44	Avg. Vel. (m/s)		5.44	
Max Chl Dpth (m)	1.73	Hydr. Depth (m)		1.10	
Conv. Total (m3/s)	477.4	Conv. (m3/s)		477.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		13.20	
Min Ch El (m)	715.98	Shear (N/m2)		257.29	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		1400.60	
Frctn Loss (m)	2.38	Cum Volume (1000 m3)		23.34	0.00
C & E Loss (m)	0.17	Cum SA (1000 m2)		21.82	0.03

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=2

E.G. Elev (m)	714.79	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	714.57	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.59	Flow Area (m2)		3.17	
E.G. Slope (m/m)	0.013927	Area (m2)		3.17	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	8.31	Top Width (m)		8.31	
Vel Total (m/s)	2.05	Avg. Vel. (m/s)		2.05	
Max Chl Dpth (m)	0.55	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	55.1	Conv. (m3/s)		55.1	
Length Wtd. (m)	168.56	Wetted Per. (m)		8.42	
Min Ch EI (m)	714.02	Shear (N/m2)		51.41	
Alpha	1.00	Stream Power (N/m s)		105.42	
Frctn Loss (m)	3.41	Cum Volume (1000 m3)		3.56	
C & E Loss (m)	0.03	Cum SA (1000 m2)		9.93	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=5

E.G. Elev (m)	715.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	714.77	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.79	Flow Area (m2)		4.95	
E.G. Slope (m/m)	0.012956	Area (m2)		4.95	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	9.90	Top Width (m)		9.90	
Vel Total (m/s)	2.36	Avg. Vel. (m/s)		2.36	
Max Chl Dpth (m)	0.75	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	102.8	Conv. (m3/s)		102.8	
Length Wtd. (m)	168.56	Wetted Per. (m)		10.06	
Min Ch EI (m)	714.02	Shear (N/m2)		62.48	
Alpha	1.00	Stream Power (N/m s)		147.70	
Frctn Loss (m)	3.28	Cum Volume (1000 m3)		5.52	
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.97	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=10

E.G. Elev (m)	715.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	714.94	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	714.97	Flow Area (m2)		6.71	
E.G. Slope (m/m)	0.012423	Area (m2)		6.71	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	11.39	Top Width (m)		11.39	
Vel Total (m/s)	2.58	Avg. Vel. (m/s)		2.58	
Max Chl Dpth (m)	0.92	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	155.4	Conv. (m3/s)		155.4	
Length Wtd. (m)	168.56	Wetted Per. (m)		11.60	
Min Ch EI (m)	714.02	Shear (N/m2)		70.52	
Alpha	1.00	Stream Power (N/m s)		181.97	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		7.38	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.48	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=25

E.G. Elev (m)	715.55	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	715.12	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.18	Flow Area (m2)		8.99	
E.G. Slope (m/m)	0.012379	Area (m2)		8.99	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	12.69	Top Width (m)		12.69	
Vel Total (m/s)	2.91	Avg. Vel. (m/s)		2.91	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.71	
Conv. Total (m3/s)	234.8	Conv. (m3/s)		234.8	
Length Wtd. (m)	168.56	Wetted Per. (m)		12.95	
Min Ch El (m)	714.02	Shear (N/m2)		84.23	
Alpha	1.00	Stream Power (N/m s)		244.82	
Frctn Loss (m)	3.07	Cum Volume (1000 m3)		9.89	
C & E Loss (m)	0.06	Cum SA (1000 m2)		14.85	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=50

E.G. Elev (m)	715.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	715.25	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.33	Flow Area (m2)		10.60	
E.G. Slope (m/m)	0.013031	Area (m2)		10.60	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	13.36	Top Width (m)		13.36	
Vel Total (m/s)	3.21	Avg. Vel. (m/s)		3.21	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.79	
Conv. Total (m3/s)	298.4	Conv. (m3/s)		298.4	
Length Wtd. (m)	168.56	Wetted Per. (m)		13.68	
Min Ch El (m)	714.02	Shear (N/m2)		99.09	
Alpha	1.00	Stream Power (N/m s)		318.27	
Frctn Loss (m)	3.05	Cum Volume (1000 m3)		11.94	
C & E Loss (m)	0.05	Cum SA (1000 m2)		15.83	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=100

E.G. Elev (m)	716.02	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	715.40	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.51	Flow Area (m2)		12.64	
E.G. Slope (m/m)	0.013326	Area (m2)		12.64	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	14.17	Top Width (m)		14.17	
Vel Total (m/s)	3.51	Avg. Vel. (m/s)		3.51	
Max Chl Dpth (m)	1.38	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	383.7	Conv. (m3/s)		383.7	
Length Wtd. (m)	168.56	Wetted Per. (m)		14.54	
Min Ch El (m)	714.02	Shear (N/m2)		113.61	
Alpha	1.00	Stream Power (N/m s)		398.20	
Frctn Loss (m)	3.10	Cum Volume (1000 m3)		14.64	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.66	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500

E.G. Elev (m)	716.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.94	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.72	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.94	Flow Area (m2)		17.53	0.02
E.G. Slope (m/m)	0.014674	Area (m2)		17.53	0.02
Q Total (m3/s)	75.46	Flow (m3/s)		75.45	0.01

Plan: Plan 07 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500 (Continued)

Top Width (m)	15.75	Top Width (m)		15.47	0.28
Vel Total (m/s)	4.30	Avg. Vel. (m/s)		4.30	0.64
Max Chl Dpth (m)	1.70	Hydr. Depth (m)		1.13	0.07
Conv. Total (m3/s)	622.9	Conv. (m3/s)		622.8	0.1
Length Wtd. (m)	168.56	Wetted Per. (m)		15.94	0.31
Min Ch El (m)	714.02	Shear (N/m2)		158.30	9.15
Alpha	1.00	Stream Power (N/m s)		681.16	5.89
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		21.35	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		20.04	0.02

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=2

E.G. Elev (m)	711.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.030	
W.S. Elev (m)	710.86	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.01	Flow Area (m2)		2.10	
E.G. Slope (m/m)	0.032008	Area (m2)		2.10	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	5.39	Top Width (m)		5.39	
Vel Total (m/s)	3.09	Avg. Vel. (m/s)		3.09	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	36.3	Conv. (m3/s)		36.3	
Length Wtd. (m)	244.74	Wetted Per. (m)		5.62	
Min Ch El (m)	710.28	Shear (N/m2)		117.35	
Alpha	1.00	Stream Power (N/m s)		363.18	
Frctn Loss (m)	4.80	Cum Volume (1000 m3)		3.11	
C & E Loss (m)	0.07	Cum SA (1000 m2)		8.78	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=5

E.G. Elev (m)	711.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	711.05	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.27	Flow Area (m2)		3.18	
E.G. Slope (m/m)	0.032396	Area (m2)		3.18	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	6.32	Top Width (m)		6.32	
Vel Total (m/s)	3.68	Avg. Vel. (m/s)		3.68	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	65.0	Conv. (m3/s)		65.0	
Length Wtd. (m)	244.74	Wetted Per. (m)		6.63	
Min Ch El (m)	710.28	Shear (N/m2)		152.41	
Alpha	1.00	Stream Power (N/m s)		560.39	
Frctn Loss (m)	4.84	Cum Volume (1000 m3)		4.84	
C & E Loss (m)	0.10	Cum SA (1000 m2)		10.60	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10

E.G. Elev (m)	712.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	711.21	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.48	Flow Area (m2)		4.25	
E.G. Slope (m/m)	0.031783	Area (m2)		4.25	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	7.09	Top Width (m)		7.09	
Vel Total (m/s)	4.08	Avg. Vel. (m/s)		4.08	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	97.2	Conv. (m3/s)		97.2	
Length Wtd. (m)	244.74	Wetted Per. (m)		7.48	
Min Ch El (m)	710.28	Shear (N/m2)		176.99	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		721.27	
Frctn Loss (m)	4.85	Cum Volume (1000 m3)		6.46	
C & E Loss (m)	0.11	Cum SA (1000 m2)		11.93	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=25

E.G. Elev (m)	712.42	Element	Left OB	Channel	Right OB
Vel Head (m)	1.00	Wt. n-Val.		0.030	
W.S. Elev (m)	711.42	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.80	Flow Area (m2)		5.90	
E.G. Slope (m/m)	0.029521	Area (m2)		5.90	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	8.19	Top Width (m)		8.19	
Vel Total (m/s)	4.43	Avg. Vel. (m/s)		4.43	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	152.0	Conv. (m3/s)		152.0	
Length Wtd. (m)	244.74	Wetted Per. (m)		8.69	
Min Ch EI (m)	710.28	Shear (N/m2)		196.67	
Alpha	1.00	Stream Power (N/m s)		870.49	
Frctn Loss (m)	4.85	Cum Volume (1000 m3)		8.63	
C & E Loss (m)	0.12	Cum SA (1000 m2)		13.09	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=50

E.G. Elev (m)	712.67	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	711.60	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.97	Flow Area (m2)		7.44	
E.G. Slope (m/m)	0.026790	Area (m2)		7.44	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	9.10	Top Width (m)		9.10	
Vel Total (m/s)	4.58	Avg. Vel. (m/s)		4.58	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	208.1	Conv. (m3/s)		208.1	
Length Wtd. (m)	244.74	Wetted Per. (m)		9.68	
Min Ch EI (m)	710.28	Shear (N/m2)		201.94	
Alpha	1.00	Stream Power (N/m s)		924.52	
Frctn Loss (m)	4.84	Cum Volume (1000 m3)		10.42	
C & E Loss (m)	0.10	Cum SA (1000 m2)		13.94	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=100

E.G. Elev (m)	712.88	Element	Left OB	Channel	Right OB
Vel Head (m)	1.05	Wt. n-Val.		0.030	
W.S. Elev (m)	711.82	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.17	Flow Area (m2)		9.74	
E.G. Slope (m/m)	0.027024	Area (m2)		9.74	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	12.22	Top Width (m)		12.22	
Vel Total (m/s)	4.55	Avg. Vel. (m/s)		4.55	
Max Chl Dpth (m)	1.54	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	269.4	Conv. (m3/s)		269.4	
Length Wtd. (m)	244.74	Wetted Per. (m)		12.90	
Min Ch EI (m)	710.28	Shear (N/m2)		200.20	
Alpha	1.00	Stream Power (N/m s)		909.93	
Frctn Loss (m)	4.77	Cum Volume (1000 m3)		12.76	
C & E Loss (m)	0.06	Cum SA (1000 m2)		15.43	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1384.467 Profile: T=500

E.G. Elev (m)	713.49	Element	Left OB	Channel	Right OB
Vel Head (m)	1.27	Wt. n-Val.		0.030	
W.S. Elev (m)	712.21	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.60	Flow Area (m2)		15.11	
E.G. Slope (m/m)	0.024556	Area (m2)		15.11	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	15.37	Top Width (m)		15.37	
Vel Total (m/s)	5.00	Avg. Vel. (m/s)		5.00	
Max Chl Dpth (m)	1.93	Hydr. Depth (m)		0.98	
Conv. Total (m3/s)	481.5	Conv. (m3/s)		481.5	
Length Wtd. (m)	244.74	Wetted Per. (m)		16.15	
Min Ch El (m)	710.28	Shear (N/m2)		225.19	
Alpha	1.00	Stream Power (N/m s)		1124.86	
Frctn Loss (m)	4.65	Cum Volume (1000 m3)		18.60	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.44	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=2

E.G. Elev (m)	706.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.		0.030	
W.S. Elev (m)	706.22	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.24	Flow Area (m2)		2.90	
E.G. Slope (m/m)	0.013259	Area (m2)		2.90	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.29	Top Width (m)		6.29	
Vel Total (m/s)	2.24	Avg. Vel. (m/s)		2.24	
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	56.4	Conv. (m3/s)		56.4	
Length Wtd. (m)	158.72	Wetted Per. (m)		6.51	
Min Ch El (m)	705.50	Shear (N/m2)		57.98	
Alpha	1.00	Stream Power (N/m s)		129.89	
Frctn Loss (m)	3.34	Cum Volume (1000 m3)		2.50	
C & E Loss (m)	0.01	Cum SA (1000 m2)		7.35	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=5

E.G. Elev (m)	706.81	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	706.44	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.48	Flow Area (m2)		4.36	
E.G. Slope (m/m)	0.013296	Area (m2)		4.36	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	7.14	Top Width (m)		7.14	
Vel Total (m/s)	2.68	Avg. Vel. (m/s)		2.68	
Max Chl Dpth (m)	0.94	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	101.5	Conv. (m3/s)		101.5	
Length Wtd. (m)	158.72	Wetted Per. (m)		7.46	
Min Ch El (m)	705.50	Shear (N/m2)		76.13	
Alpha	1.00	Stream Power (N/m s)		204.40	
Frctn Loss (m)	3.36	Cum Volume (1000 m3)		3.91	
C & E Loss (m)	0.02	Cum SA (1000 m2)		8.95	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10

E.G. Elev (m)	707.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	706.62	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.69	Flow Area (m2)		5.71	
E.G. Slope (m/m)	0.013547	Area (m2)		5.71	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	



Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10 (Continued)

Top Width (m)	7.85	Top Width (m)		7.85	
Vel Total (m/s)	3.03	Avg. Vel. (m/s)		3.03	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.73	
Conv. Total (m3/s)	148.8	Conv. (m3/s)		148.8	
Length Wtd. (m)	158.72	Wetted Per. (m)		8.26	
Min Ch El (m)	705.50	Shear (N/m2)		91.84	
Alpha	1.00	Stream Power (N/m s)		278.58	
Frctn Loss (m)	3.38	Cum Volume (1000 m3)		5.24	
C & E Loss (m)	0.02	Cum SA (1000 m2)		10.10	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=25

E.G. Elev (m)	707.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.61	Wt. n-Val.		0.030	
W.S. Elev (m)	706.84	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.96	Flow Area (m2)		7.52	
E.G. Slope (m/m)	0.014237	Area (m2)		7.52	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	8.71	Top Width (m)		8.71	
Vel Total (m/s)	3.47	Avg. Vel. (m/s)		3.47	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	218.9	Conv. (m3/s)		218.9	
Length Wtd. (m)	158.72	Wetted Per. (m)		9.23	
Min Ch El (m)	705.50	Shear (N/m2)		113.86	
Alpha	1.00	Stream Power (N/m s)		395.27	
Frctn Loss (m)	3.42	Cum Volume (1000 m3)		6.99	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.02	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=50

E.G. Elev (m)	707.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.75	Wt. n-Val.		0.030	
W.S. Elev (m)	706.99	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.16	Flow Area (m2)		8.90	
E.G. Slope (m/m)	0.015174	Area (m2)		8.90	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	9.31	Top Width (m)		9.31	
Vel Total (m/s)	3.83	Avg. Vel. (m/s)		3.83	
Max Chl Dpth (m)	1.49	Hydr. Depth (m)		0.96	
Conv. Total (m3/s)	276.5	Conv. (m3/s)		276.5	
Length Wtd. (m)	158.72	Wetted Per. (m)		9.90	
Min Ch El (m)	705.50	Shear (N/m2)		133.80	
Alpha	1.00	Stream Power (N/m s)		511.85	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		8.42	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.68	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100

E.G. Elev (m)	708.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.85	Wt. n-Val.		0.030	
W.S. Elev (m)	707.19	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.39	Flow Area (m2)		10.87	
E.G. Slope (m/m)	0.014738	Area (m2)		10.87	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	10.06	Top Width (m)		10.06	
Vel Total (m/s)	4.08	Avg. Vel. (m/s)		4.08	
Max Chl Dpth (m)	1.69	Hydr. Depth (m)		1.08	
Conv. Total (m3/s)	364.8	Conv. (m3/s)		364.8	
Length Wtd. (m)	158.72	Wetted Per. (m)		10.75	
Min Ch El (m)	705.50	Shear (N/m2)		146.09	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		595.44	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		10.23	
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.71	

Plan: Plan 07 ArroyoPilarejo 1 RS: 1141.143 Profile: T=500

E.G. Elev (m)	708.80	Element	Left OB	Channel	Right OB
Vel Head (m)	1.15	Wt. n-Val.		0.030	
W.S. Elev (m)	707.65	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.95	Flow Area (m2)		15.91	
E.G. Slope (m/m)	0.015118	Area (m2)		15.91	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	11.85	Top Width (m)		11.85	
Vel Total (m/s)	4.74	Avg. Vel. (m/s)		4.74	
Max Chl Dpth (m)	2.15	Hydr. Depth (m)		1.34	
Conv. Total (m3/s)	613.7	Conv. (m3/s)		613.7	
Length Wtd. (m)	158.72	Wetted Per. (m)		12.77	
Min Ch El (m)	705.50	Shear (N/m2)		184.62	
Alpha	1.00	Stream Power (N/m s)		875.84	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		14.80	
C & E Loss (m)	0.05	Cum SA (1000 m2)		14.11	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=2

E.G. Elev (m)	703.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	702.75	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	702.87	Flow Area (m2)		2.39	
E.G. Slope (m/m)	0.038364	Area (m2)		2.39	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	8.87	Top Width (m)		8.87	
Vel Total (m/s)	2.72	Avg. Vel. (m/s)		2.72	
Max Chl Dpth (m)	0.37	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	33.2	Conv. (m3/s)		33.2	
Length Wtd. (m)	187.19	Wetted Per. (m)		8.93	
Min Ch El (m)	702.38	Shear (N/m2)		100.89	
Alpha	1.00	Stream Power (N/m s)		273.91	
Frctn Loss (m)	2.38	Cum Volume (1000 m3)		2.08	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.15	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=5

E.G. Elev (m)	703.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	
W.S. Elev (m)	702.87	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.04	Flow Area (m2)		3.57	
E.G. Slope (m/m)	0.039000	Area (m2)		3.57	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	10.07	Top Width (m)		10.07	
Vel Total (m/s)	3.28	Avg. Vel. (m/s)		3.28	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.35	
Conv. Total (m3/s)	59.2	Conv. (m3/s)		59.2	
Length Wtd. (m)	187.19	Wetted Per. (m)		10.15	
Min Ch El (m)	702.38	Shear (N/m2)		134.46	
Alpha	1.00	Stream Power (N/m s)		440.90	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		3.28	
C & E Loss (m)	0.09	Cum SA (1000 m2)		7.59	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=10

E.G. Elev (m)	703.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.70	Wt. n-Val.		0.030	
W.S. Elev (m)	702.98	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.19	Flow Area (m2)		4.67	
E.G. Slope (m/m)	0.038296	Area (m2)		4.67	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	10.78	Top Width (m)		10.78	
Vel Total (m/s)	3.71	Avg. Vel. (m/s)		3.71	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	88.5	Conv. (m3/s)		88.5	
Length Wtd. (m)	187.19	Wetted Per. (m)		10.90	
Min Ch El (m)	702.38	Shear (N/m2)		160.97	
Alpha	1.00	Stream Power (N/m s)		596.94	
Frctn Loss (m)	3.75	Cum Volume (1000 m3)		4.41	
C & E Loss (m)	0.12	Cum SA (1000 m2)		8.62	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=25

E.G. Elev (m)	704.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.89	Wt. n-Val.		0.030	
W.S. Elev (m)	703.12	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.40	Flow Area (m2)		6.26	
E.G. Slope (m/m)	0.036263	Area (m2)		6.26	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	11.59	Top Width (m)		11.59	
Vel Total (m/s)	4.17	Avg. Vel. (m/s)		4.17	
Max Chl Dpth (m)	0.74	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	137.2	Conv. (m3/s)		137.2	
Length Wtd. (m)	187.19	Wetted Per. (m)		11.76	
Min Ch El (m)	702.38	Shear (N/m2)		189.43	
Alpha	1.00	Stream Power (N/m s)		790.12	
Frctn Loss (m)	3.78	Cum Volume (1000 m3)		5.90	
C & E Loss (m)	0.14	Cum SA (1000 m2)		9.41	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=50

E.G. Elev (m)	704.25	Element	Left OB	Channel	Right OB
Vel Head (m)	1.01	Wt. n-Val.		0.030	
W.S. Elev (m)	703.24	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.55	Flow Area (m2)		7.66	
E.G. Slope (m/m)	0.034038	Area (m2)		7.66	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	12.26	Top Width (m)		12.26	
Vel Total (m/s)	4.45	Avg. Vel. (m/s)		4.45	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	184.6	Conv. (m3/s)		184.6	
Length Wtd. (m)	187.19	Wetted Per. (m)		12.46	
Min Ch El (m)	702.38	Shear (N/m2)		205.16	
Alpha	1.00	Stream Power (N/m s)		912.08	
Frctn Loss (m)	3.79	Cum Volume (1000 m3)		7.11	
C & E Loss (m)	0.15	Cum SA (1000 m2)		9.97	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100

E.G. Elev (m)	704.56	Element	Left OB	Channel	Right OB
Vel Head (m)	1.21	Wt. n-Val.		0.030	
W.S. Elev (m)	703.35	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.73	Flow Area (m2)		9.09	
E.G. Slope (m/m)	0.034984	Area (m2)		9.09	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100 (Continued)

Top Width (m)	12.90	Top Width (m)		12.90	
Vel Total (m/s)	4.87	Avg. Vel. (m/s)		4.87	
Max Chl Dpth (m)	0.97	Hydr. Depth (m)		0.70	
Conv. Total (m3/s)	236.8	Conv. (m3/s)		236.8	
Length Wtd. (m)	187.19	Wetted Per. (m)		13.15	
Min Ch El (m)	702.38	Shear (N/m2)		237.09	
Alpha	1.00	Stream Power (N/m s)		1155.47	
Frctn Loss (m)	3.84	Cum Volume (1000 m3)		8.65	
C & E Loss (m)	0.20	Cum SA (1000 m2)		10.88	

Plan: Plan 07 ArroyoPilarejo 1 RS: 982.4216 Profile: T=500

E.G. Elev (m)	705.31	Element	Left OB	Channel	Right OB
Vel Head (m)	1.66	Wt. n-Val.		0.030	
W.S. Elev (m)	703.66	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.18	Flow Area (m2)		13.24	
E.G. Slope (m/m)	0.033599	Area (m2)		13.24	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	14.31	Top Width (m)		14.31	
Vel Total (m/s)	5.70	Avg. Vel. (m/s)		5.70	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.93	
Conv. Total (m3/s)	411.7	Conv. (m3/s)		411.7	
Length Wtd. (m)	187.19	Wetted Per. (m)		14.68	
Min Ch El (m)	702.38	Shear (N/m2)		296.99	
Alpha	1.00	Stream Power (N/m s)		1693.21	
Frctn Loss (m)	3.96	Cum Volume (1000 m3)		12.49	
C & E Loss (m)	0.25	Cum SA (1000 m2)		12.04	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=2

E.G. Elev (m)	699.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.		0.030	
W.S. Elev (m)	699.13	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.13	Flow Area (m2)		3.20	
E.G. Slope (m/m)	0.012503	Area (m2)		3.20	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	7.76	Top Width (m)		7.76	
Vel Total (m/s)	2.03	Avg. Vel. (m/s)		2.03	
Max Chl Dpth (m)	0.62	Hydr. Depth (m)		0.41	
Conv. Total (m3/s)	58.1	Conv. (m3/s)		58.1	
Length Wtd. (m)	138.61	Wetted Per. (m)		7.93	
Min Ch El (m)	698.51	Shear (N/m2)		49.43	
Alpha	1.00	Stream Power (N/m s)		100.53	
Frctn Loss (m)	4.53	Cum Volume (1000 m3)		1.56	
C & E Loss (m)	0.11	Cum SA (1000 m2)		4.59	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5

E.G. Elev (m)	699.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	699.36	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.37	Flow Area (m2)		5.29	
E.G. Slope (m/m)	0.012026	Area (m2)		5.29	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	10.92	Top Width (m)		10.92	
Vel Total (m/s)	2.21	Avg. Vel. (m/s)		2.21	
Max Chl Dpth (m)	0.85	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	106.7	Conv. (m3/s)		106.7	
Length Wtd. (m)	138.61	Wetted Per. (m)		11.22	
Min Ch El (m)	698.51	Shear (N/m2)		55.57	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		123.00	
Frctn Loss (m)	4.22	Cum Volume (1000 m3)		2.46	
C & E Loss (m)	0.15	Cum SA (1000 m2)		5.62	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=10

E.G. Elev (m)	699.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	699.50	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.53	Flow Area (m2)		6.98	
E.G. Slope (m/m)	0.012281	Area (m2)		6.98	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	12.31	Top Width (m)		12.31	
Vel Total (m/s)	2.48	Avg. Vel. (m/s)		2.48	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	156.3	Conv. (m3/s)		156.3	
Length Wtd. (m)	138.61	Wetted Per. (m)		12.67	
Min Ch EI (m)	698.51	Shear (N/m2)		66.33	
Alpha	1.00	Stream Power (N/m s)		164.63	
Frctn Loss (m)	4.09	Cum Volume (1000 m3)		3.32	
C & E Loss (m)	0.16	Cum SA (1000 m2)		6.46	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=25

E.G. Elev (m)	700.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	699.67	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.72	Flow Area (m2)		9.08	
E.G. Slope (m/m)	0.012838	Area (m2)		9.08	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	13.24	Top Width (m)		13.24	
Vel Total (m/s)	2.88	Avg. Vel. (m/s)		2.88	
Max Chl Dpth (m)	1.16	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	230.5	Conv. (m3/s)		230.5	
Length Wtd. (m)	138.61	Wetted Per. (m)		13.65	
Min Ch EI (m)	698.51	Shear (N/m2)		83.71	
Alpha	1.00	Stream Power (N/m s)		240.87	
Frctn Loss (m)	3.98	Cum Volume (1000 m3)		4.46	
C & E Loss (m)	0.17	Cum SA (1000 m2)		7.09	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=50

E.G. Elev (m)	700.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	699.79	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.90	Flow Area (m2)		10.71	
E.G. Slope (m/m)	0.013439	Area (m2)		10.71	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	13.90	Top Width (m)		13.90	
Vel Total (m/s)	3.18	Avg. Vel. (m/s)		3.18	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	293.8	Conv. (m3/s)		293.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		14.36	
Min Ch EI (m)	698.51	Shear (N/m2)		98.34	
Alpha	1.00	Stream Power (N/m s)		312.61	
Frctn Loss (m)	3.94	Cum Volume (1000 m3)		5.39	
C & E Loss (m)	0.18	Cum SA (1000 m2)		7.52	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=100

E.G. Elev (m)	700.52	Element	Left OB	Channel	Right OB
Vel Head (m)	0.56	Wt. n-Val.		0.030	
W.S. Elev (m)	699.97	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.06	Flow Area (m2)		13.41	
E.G. Slope (m/m)	0.013483	Area (m2)		13.41	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	16.49	Top Width (m)		16.49	
Vel Total (m/s)	3.30	Avg. Vel. (m/s)		3.30	
Max Chl Dpth (m)	1.46	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	381.4	Conv. (m3/s)		381.4	
Length Wtd. (m)	138.61	Wetted Per. (m)		17.00	
Min Ch El (m)	698.51	Shear (N/m2)		104.26	
Alpha	1.00	Stream Power (N/m s)		344.42	
Frctn Loss (m)	3.82	Cum Volume (1000 m3)		6.54	
C & E Loss (m)	0.19	Cum SA (1000 m2)		8.13	

Plan: Plan 07 ArroyoPilarejo 1 RS: 795.2336 Profile: T=500

E.G. Elev (m)	701.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.83	Wt. n-Val.		0.030	
W.S. Elev (m)	700.27	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.46	Flow Area (m2)		18.67	
E.G. Slope (m/m)	0.014544	Area (m2)		18.67	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	17.87	Top Width (m)		17.87	
Vel Total (m/s)	4.04	Avg. Vel. (m/s)		4.04	
Max Chl Dpth (m)	1.76	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	625.7	Conv. (m3/s)		625.7	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.52	
Min Ch El (m)	698.51	Shear (N/m2)		143.77	
Alpha	1.00	Stream Power (N/m s)		581.06	
Frctn Loss (m)	3.69	Cum Volume (1000 m3)		9.51	
C & E Loss (m)	0.20	Cum SA (1000 m2)		9.02	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=2

E.G. Elev (m)	694.71	Element	Left OB	Channel	Right OB
Vel Head (m)	1.28	Wt. n-Val.		0.030	
W.S. Elev (m)	693.43	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	693.69	Flow Area (m2)		1.30	
E.G. Slope (m/m)	0.221451	Area (m2)		1.30	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	7.14	Top Width (m)		7.14	
Vel Total (m/s)	5.00	Avg. Vel. (m/s)		5.00	
Max Chl Dpth (m)	0.26	Hydr. Depth (m)		0.18	
Conv. Total (m3/s)	13.8	Conv. (m3/s)		13.8	
Length Wtd. (m)	244.93	Wetted Per. (m)		7.21	
Min Ch El (m)	693.17	Shear (N/m2)		391.25	
Alpha	1.00	Stream Power (N/m s)		1957.68	
Frctn Loss (m)	3.04	Cum Volume (1000 m3)		1.24	
C & E Loss (m)	0.00	Cum SA (1000 m2)		3.56	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5

E.G. Elev (m)	695.24	Element	Left OB	Channel	Right OB
Vel Head (m)	1.71	Wt. n-Val.		0.030	
W.S. Elev (m)	693.53	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	693.88	Flow Area (m2)		2.02	
E.G. Slope (m/m)	0.182396	Area (m2)		2.02	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5 (Continued)

Top Width (m)	7.65	Top Width (m)		7.65	
Vel Total (m/s)	5.80	Avg. Vel. (m/s)		5.80	
Max Chl Dpth (m)	0.36	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	27.4	Conv. (m3/s)		27.4	
Length Wtd. (m)	244.93	Wetted Per. (m)		7.76	
Min Ch El (m)	693.17	Shear (N/m2)		464.97	
Alpha	1.00	Stream Power (N/m s)		2696.18	
Frctn Loss (m)	7.79	Cum Volume (1000 m3)		1.95	
C & E Loss (m)	0.43	Cum SA (1000 m2)		4.34	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=10

E.G. Elev (m)	695.57	Element	Left OB	Channel	Right OB
Vel Head (m)	1.94	Wt. n-Val.		0.030	
W.S. Elev (m)	693.63	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.06	Flow Area (m2)		2.81	
E.G. Slope (m/m)	0.145722	Area (m2)		2.81	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	8.17	Top Width (m)		8.17	
Vel Total (m/s)	6.17	Avg. Vel. (m/s)		6.17	
Max Chl Dpth (m)	0.46	Hydr. Depth (m)		0.34	
Conv. Total (m3/s)	45.4	Conv. (m3/s)		45.4	
Length Wtd. (m)	244.93	Wetted Per. (m)		8.33	
Min Ch El (m)	693.17	Shear (N/m2)		481.95	
Alpha	1.00	Stream Power (N/m s)		2971.37	
Frctn Loss (m)	7.84	Cum Volume (1000 m3)		2.65	
C & E Loss (m)	0.48	Cum SA (1000 m2)		5.04	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=25

E.G. Elev (m)	695.93	Element	Left OB	Channel	Right OB
Vel Head (m)	2.16	Wt. n-Val.		0.030	
W.S. Elev (m)	693.77	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.28	Flow Area (m2)		4.01	
E.G. Slope (m/m)	0.113297	Area (m2)		4.01	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	8.84	Top Width (m)		8.84	
Vel Total (m/s)	6.51	Avg. Vel. (m/s)		6.51	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.45	
Conv. Total (m3/s)	77.6	Conv. (m3/s)		77.6	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.07	
Min Ch El (m)	693.17	Shear (N/m2)		491.31	
Alpha	1.00	Stream Power (N/m s)		3199.63	
Frctn Loss (m)	7.89	Cum Volume (1000 m3)		3.55	
C & E Loss (m)	0.51	Cum SA (1000 m2)		5.56	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50

E.G. Elev (m)	696.18	Element	Left OB	Channel	Right OB
Vel Head (m)	2.30	Wt. n-Val.		0.030	
W.S. Elev (m)	693.89	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.46	Flow Area (m2)		5.07	
E.G. Slope (m/m)	0.095629	Area (m2)		5.07	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	9.37	Top Width (m)		9.37	
Vel Total (m/s)	6.71	Avg. Vel. (m/s)		6.71	
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	110.1	Conv. (m3/s)		110.1	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.65	
Min Ch El (m)	693.17	Shear (N/m2)		492.85	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		3308.50	
Frctn Loss (m)	7.91	Cum Volume (1000 m3)		4.29	
C & E Loss (m)	0.52	Cum SA (1000 m2)		5.91	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=100

E.G. Elev (m)	696.51	Element	Left OB	Channel	Right OB
Vel Head (m)	2.50	Wt. n-Val.		0.030	
W.S. Elev (m)	694.02	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.66	Flow Area (m2)		6.33	
E.G. Slope (m/m)	0.084452	Area (m2)		6.33	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	9.95	Top Width (m)		9.95	
Vel Total (m/s)	7.00	Avg. Vel. (m/s)		7.00	
Max Chl Dpth (m)	0.85	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	152.4	Conv. (m3/s)		152.4	
Length Wtd. (m)	244.93	Wetted Per. (m)		10.30	
Min Ch EI (m)	693.17	Shear (N/m2)		508.62	
Alpha	1.00	Stream Power (N/m s)		3559.84	
Frctn Loss (m)	7.97	Cum Volume (1000 m3)		5.18	
C & E Loss (m)	0.54	Cum SA (1000 m2)		6.30	

Plan: Plan 07 ArroyoPilarejo 1 RS: 656.6266 Profile: T=500

E.G. Elev (m)	697.21	Element	Left OB	Channel	Right OB
Vel Head (m)	2.85	Wt. n-Val.		0.030	
W.S. Elev (m)	694.37	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.14	Flow Area (m2)		10.10	
E.G. Slope (m/m)	0.063686	Area (m2)		10.10	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	11.54	Top Width (m)		11.54	
Vel Total (m/s)	7.47	Avg. Vel. (m/s)		7.47	
Max Chl Dpth (m)	1.20	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	299.0	Conv. (m3/s)		299.0	
Length Wtd. (m)	244.93	Wetted Per. (m)		12.07	
Min Ch EI (m)	693.17	Shear (N/m2)		522.73	
Alpha	1.00	Stream Power (N/m s)		3905.33	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		7.51	
C & E Loss (m)	0.52	Cum SA (1000 m2)		6.98	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=2

E.G. Elev (m)	686.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	686.51	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.51	Flow Area (m2)		3.10	
E.G. Slope (m/m)	0.012208	Area (m2)		3.10	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.99	Top Width (m)		6.99	
Vel Total (m/s)	2.10	Avg. Vel. (m/s)		2.10	
Max Chl Dpth (m)	0.57	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	58.8	Conv. (m3/s)		58.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		7.20	
Min Ch EI (m)	685.94	Shear (N/m2)		51.52	
Alpha	1.00	Stream Power (N/m s)		108.14	
Frctn Loss (m)	3.86	Cum Volume (1000 m3)		0.71	
C & E Loss (m)	0.09	Cum SA (1000 m2)		1.83	



Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=5

E.G. Elev (m)	687.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	686.74	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.76	Flow Area (m2)		4.88	
E.G. Slope (m/m)	0.012693	Area (m2)		4.88	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	9.30	Top Width (m)		9.30	
Vel Total (m/s)	2.40	Avg. Vel. (m/s)		2.40	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	103.8	Conv. (m3/s)		103.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		9.58	
Min Ch El (m)	685.94	Shear (N/m2)		63.44	
Alpha	1.00	Stream Power (N/m s)		152.01	
Frctn Loss (m)	3.76	Cum Volume (1000 m3)		1.10	
C & E Loss (m)	0.11	Cum SA (1000 m2)		2.26	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=10

E.G. Elev (m)	687.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.35	Wt. n-Val.		0.030	
W.S. Elev (m)	686.90	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.95	Flow Area (m2)		6.61	
E.G. Slope (m/m)	0.013648	Area (m2)		6.61	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	11.63	Top Width (m)		11.63	
Vel Total (m/s)	2.62	Avg. Vel. (m/s)		2.62	
Max Chl Dpth (m)	0.96	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	148.3	Conv. (m3/s)		148.3	
Length Wtd. (m)	141.09	Wetted Per. (m)		11.97	
Min Ch El (m)	685.94	Shear (N/m2)		73.91	
Alpha	1.00	Stream Power (N/m s)		193.73	
Frctn Loss (m)	3.71	Cum Volume (1000 m3)		1.49	
C & E Loss (m)	0.11	Cum SA (1000 m2)		2.61	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=25

E.G. Elev (m)	687.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	687.06	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.15	Flow Area (m2)		8.60	
E.G. Slope (m/m)	0.014976	Area (m2)		8.60	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	12.97	Top Width (m)		12.97	
Vel Total (m/s)	3.04	Avg. Vel. (m/s)		3.04	
Max Chl Dpth (m)	1.12	Hydr. Depth (m)		0.66	
Conv. Total (m3/s)	213.4	Conv. (m3/s)		213.4	
Length Wtd. (m)	141.09	Wetted Per. (m)		13.38	
Min Ch El (m)	685.94	Shear (N/m2)		94.38	
Alpha	1.00	Stream Power (N/m s)		286.69	
Frctn Loss (m)	3.65	Cum Volume (1000 m3)		2.01	
C & E Loss (m)	0.12	Cum SA (1000 m2)		2.89	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50

E.G. Elev (m)	687.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	687.18	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.31	Flow Area (m2)		10.11	
E.G. Slope (m/m)	0.016053	Area (m2)		10.11	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50 (Continued)

Top Width (m)	13.73	Top Width (m)		13.73	
Vel Total (m/s)	3.37	Avg. Vel. (m/s)		3.37	
Max Chl Dpth (m)	1.24	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	268.8	Conv. (m3/s)		268.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		14.19	
Min Ch El (m)	685.94	Shear (N/m2)		112.14	
Alpha	1.00	Stream Power (N/m s)		377.76	
Frctn Loss (m)	3.61	Cum Volume (1000 m3)		2.43	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.08	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=100

E.G. Elev (m)	688.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.030	
W.S. Elev (m)	687.30	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.47	Flow Area (m2)		11.90	
E.G. Slope (m/m)	0.017104	Area (m2)		11.90	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	14.58	Top Width (m)		14.58	
Vel Total (m/s)	3.72	Avg. Vel. (m/s)		3.72	
Max Chl Dpth (m)	1.36	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	338.7	Conv. (m3/s)		338.7	
Length Wtd. (m)	141.09	Wetted Per. (m)		15.10	
Min Ch El (m)	685.94	Shear (N/m2)		132.26	
Alpha	1.00	Stream Power (N/m s)		492.13	
Frctn Loss (m)	3.57	Cum Volume (1000 m3)		2.94	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.30	

Plan: Plan 07 ArroyoPilarejo 1 RS: 411.7011 Profile: T=500

E.G. Elev (m)	688.70	Element	Left OB	Channel	Right OB
Vel Head (m)	1.11	Wt. n-Val.		0.030	
W.S. Elev (m)	687.58	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.90	Flow Area (m2)		16.16	
E.G. Slope (m/m)	0.019802	Area (m2)		16.16	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	15.59	Top Width (m)		15.59	
Vel Total (m/s)	4.67	Avg. Vel. (m/s)		4.67	
Max Chl Dpth (m)	1.64	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	536.2	Conv. (m3/s)		536.2	
Length Wtd. (m)	141.09	Wetted Per. (m)		16.27	
Min Ch El (m)	685.94	Shear (N/m2)		192.86	
Alpha	1.00	Stream Power (N/m s)		900.54	
Frctn Loss (m)	3.50	Cum Volume (1000 m3)		4.30	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.66	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2

E.G. Elev (m)	682.78	Element	Left OB	Channel	Right OB
Vel Head (m)	1.17	Wt. n-Val.		0.030	
W.S. Elev (m)	681.61	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	681.90	Flow Area (m2)		1.36	
E.G. Slope (m/m)	0.110099	Area (m2)		1.36	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	4.62	Top Width (m)		4.62	
Vel Total (m/s)	4.79	Avg. Vel. (m/s)		4.79	
Max Chl Dpth (m)	0.43	Hydr. Depth (m)		0.29	
Conv. Total (m3/s)	19.6	Conv. (m3/s)		19.6	
Length Wtd. (m)	200.54	Wetted Per. (m)		4.75	
Min Ch El (m)	681.18	Shear (N/m2)		308.14	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		1477.33	
Frctn Loss (m)	7.07	Cum Volume (1000 m3)		0.39	
C & E Loss (m)	0.25	Cum SA (1000 m2)		1.01	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=5

E.G. Elev (m)	683.16	Element	Left OB	Channel	Right OB
Vel Head (m)	1.38	Wt. n-Val.		0.030	
W.S. Elev (m)	681.78	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.14	Flow Area (m2)		2.25	
E.G. Slope (m/m)	0.087919	Area (m2)		2.25	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	5.69	Top Width (m)		5.69	
Vel Total (m/s)	5.21	Avg. Vel. (m/s)		5.21	
Max Chl Dpth (m)	0.60	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	39.5	Conv. (m3/s)		39.5	
Length Wtd. (m)	200.54	Wetted Per. (m)		5.88	
Min Ch EI (m)	681.18	Shear (N/m2)		329.70	
Alpha	1.00	Stream Power (N/m s)		1716.82	
Frctn Loss (m)	7.07	Cum Volume (1000 m3)		0.60	
C & E Loss (m)	0.27	Cum SA (1000 m2)		1.20	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=10

E.G. Elev (m)	683.43	Element	Left OB	Channel	Right OB
Vel Head (m)	1.49	Wt. n-Val.		0.030	
W.S. Elev (m)	681.93	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.35	Flow Area (m2)		3.20	
E.G. Slope (m/m)	0.070422	Area (m2)		3.20	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	6.45	Top Width (m)		6.45	
Vel Total (m/s)	5.41	Avg. Vel. (m/s)		5.41	
Max Chl Dpth (m)	0.75	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	65.3	Conv. (m3/s)		65.3	
Length Wtd. (m)	200.54	Wetted Per. (m)		6.70	
Min Ch EI (m)	681.18	Shear (N/m2)		330.04	
Alpha	1.00	Stream Power (N/m s)		1784.57	
Frctn Loss (m)	7.02	Cum Volume (1000 m3)		0.80	
C & E Loss (m)	0.25	Cum SA (1000 m2)		1.34	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=25

E.G. Elev (m)	683.77	Element	Left OB	Channel	Right OB
Vel Head (m)	1.63	Wt. n-Val.		0.030	
W.S. Elev (m)	682.14	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.62	Flow Area (m2)		4.63	
E.G. Slope (m/m)	0.054943	Area (m2)		4.63	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	7.15	Top Width (m)		7.15	
Vel Total (m/s)	5.65	Avg. Vel. (m/s)		5.65	
Max Chl Dpth (m)	0.96	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	111.4	Conv. (m3/s)		111.4	
Length Wtd. (m)	200.54	Wetted Per. (m)		7.53	
Min Ch EI (m)	681.18	Shear (N/m2)		331.07	
Alpha	1.00	Stream Power (N/m s)		1869.58	
Frctn Loss (m)	6.96	Cum Volume (1000 m3)		1.08	
C & E Loss (m)	0.21	Cum SA (1000 m2)		1.47	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=50

E.G. Elev (m)	684.03	Element	Left OB	Channel	Right OB
Vel Head (m)	1.72	Wt. n-Val.		0.030	
W.S. Elev (m)	682.31	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.83	Flow Area (m2)		5.87	
E.G. Slope (m/m)	0.047217	Area (m2)		5.87	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	7.71	Top Width (m)		7.71	
Vel Total (m/s)	5.80	Avg. Vel. (m/s)		5.80	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	156.7	Conv. (m3/s)		156.7	
Length Wtd. (m)	200.54	Wetted Per. (m)		8.19	
Min Ch El (m)	681.18	Shear (N/m2)		331.94	
Alpha	1.00	Stream Power (N/m s)		1925.83	
Frctn Loss (m)	6.89	Cum Volume (1000 m3)		1.30	
C & E Loss (m)	0.17	Cum SA (1000 m2)		1.57	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=100

E.G. Elev (m)	684.32	Element	Left OB	Channel	Right OB
Vel Head (m)	1.82	Wt. n-Val.		0.030	
W.S. Elev (m)	682.50	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.06	Flow Area (m2)		7.41	
E.G. Slope (m/m)	0.041271	Area (m2)		7.41	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	8.35	Top Width (m)		8.35	
Vel Total (m/s)	5.97	Avg. Vel. (m/s)		5.97	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	218.0	Conv. (m3/s)		218.0	
Length Wtd. (m)	200.54	Wetted Per. (m)		8.95	
Min Ch El (m)	681.18	Shear (N/m2)		335.34	
Alpha	1.00	Stream Power (N/m s)		2003.28	
Frctn Loss (m)	6.82	Cum Volume (1000 m3)		1.58	
C & E Loss (m)	0.12	Cum SA (1000 m2)		1.68	

Plan: Plan 07 ArroyoPilarejo 1 RS: 270.6081 Profile: T=500

E.G. Elev (m)	685.10	Element	Left OB	Channel	Right OB
Vel Head (m)	2.11	Wt. n-Val.		0.030	
W.S. Elev (m)	682.98	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.65	Flow Area (m2)		11.73	
E.G. Slope (m/m)	0.031984	Area (m2)		11.73	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	9.49	Top Width (m)		9.49	
Vel Total (m/s)	6.44	Avg. Vel. (m/s)		6.44	
Max Chl Dpth (m)	1.80	Hydr. Depth (m)		1.24	
Conv. Total (m3/s)	421.9	Conv. (m3/s)		421.9	
Length Wtd. (m)	200.54	Wetted Per. (m)		10.46	
Min Ch El (m)	681.18	Shear (N/m2)		351.78	
Alpha	1.00	Stream Power (N/m s)		2263.76	
Frctn Loss (m)	6.58	Cum Volume (1000 m3)		2.33	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.89	

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2

E.G. Elev (m)	675.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	675.13	Reach Len. (m)			
Crit W.S. (m)	675.19	Flow Area (m2)		2.55	
E.G. Slope (m/m)	0.017125	Area (m2)		2.55	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2 (Continued)

Top Width (m)	5.47	Top Width (m)		5.47	
Vel Total (m/s)	2.54	Avg. Vel. (m/s)		2.54	
Max Chl Dpth (m)	0.69	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	49.7	Conv. (m3/s)		49.7	
Length Wtd. (m)		Wetted Per. (m)		5.73	
Min Ch El (m)	674.44	Shear (N/m2)		74.81	
Alpha	1.00	Stream Power (N/m s)		190.35	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=5

E.G. Elev (m)	675.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.		0.030	
W.S. Elev (m)	675.33	Reach Len. (m)			
Crit W.S. (m)	675.45	Flow Area (m2)		3.75	
E.G. Slope (m/m)	0.018859	Area (m2)		3.75	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	6.31	Top Width (m)		6.31	
Vel Total (m/s)	3.12	Avg. Vel. (m/s)		3.12	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	85.2	Conv. (m3/s)		85.2	
Length Wtd. (m)		Wetted Per. (m)		6.67	
Min Ch El (m)	674.44	Shear (N/m2)		103.96	
Alpha	1.00	Stream Power (N/m s)		324.16	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=10

E.G. Elev (m)	676.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	675.49	Reach Len. (m)			
Crit W.S. (m)	675.67	Flow Area (m2)		4.78	
E.G. Slope (m/m)	0.020885	Area (m2)		4.78	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	6.90	Top Width (m)		6.90	
Vel Total (m/s)	3.62	Avg. Vel. (m/s)		3.62	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	119.8	Conv. (m3/s)		119.8	
Length Wtd. (m)		Wetted Per. (m)		7.34	
Min Ch El (m)	674.44	Shear (N/m2)		133.43	
Alpha	1.00	Stream Power (N/m s)		483.06	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25

E.G. Elev (m)	676.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.93	Wt. n-Val.		0.030	
W.S. Elev (m)	675.67	Reach Len. (m)			
Crit W.S. (m)	675.96	Flow Area (m2)		6.10	
E.G. Slope (m/m)	0.023876	Area (m2)		6.10	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	7.50	Top Width (m)		7.50	
Vel Total (m/s)	4.28	Avg. Vel. (m/s)		4.28	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	169.0	Conv. (m3/s)		169.0	
Length Wtd. (m)		Wetted Per. (m)		8.05	
Min Ch El (m)	674.44	Shear (N/m2)		177.47	

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		759.90	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=50

E.G. Elev (m)	676.97	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	
W.S. Elev (m)	675.80	Reach Len. (m)			
Crit W.S. (m)	676.17	Flow Area (m2)		7.14	
E.G. Slope (m/m)	0.026147	Area (m2)		7.14	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	7.93	Top Width (m)		7.93	
Vel Total (m/s)	4.77	Avg. Vel. (m/s)		4.77	
Max Chl Dpth (m)	1.36	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	210.6	Conv. (m3/s)		210.6	
Length Wtd. (m)		Wetted Per. (m)		8.57	
Min Ch El (m)	674.44	Shear (N/m2)		213.63	
Alpha	1.00	Stream Power (N/m s)		1019.52	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=100

E.G. Elev (m)	677.39	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	
W.S. Elev (m)	675.95	Reach Len. (m)			
Crit W.S. (m)	676.40	Flow Area (m2)		8.35	
E.G. Slope (m/m)	0.028514	Area (m2)		8.35	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	8.42	Top Width (m)		8.42	
Vel Total (m/s)	5.30	Avg. Vel. (m/s)		5.30	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	262.3	Conv. (m3/s)		262.3	
Length Wtd. (m)		Wetted Per. (m)		9.14	
Min Ch El (m)	674.44	Shear (N/m2)		255.58	
Alpha	1.00	Stream Power (N/m s)		1354.90	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 07 ArroyoPilarejo 1 RS: 70.07248 Profile: T=500

E.G. Elev (m)	678.50	Element	Left OB	Channel	Right OB
Vel Head (m)	2.20	Wt. n-Val.		0.030	
W.S. Elev (m)	676.31	Reach Len. (m)			
Crit W.S. (m)	677.00	Flow Area (m2)		11.49	
E.G. Slope (m/m)	0.033714	Area (m2)		11.49	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	9.39	Top Width (m)		9.39	
Vel Total (m/s)	6.57	Avg. Vel. (m/s)		6.57	
Max Chl Dpth (m)	1.87	Hydr. Depth (m)		1.22	
Conv. Total (m3/s)	411.0	Conv. (m3/s)		411.0	
Length Wtd. (m)		Wetted Per. (m)		10.34	
Min Ch El (m)	674.44	Shear (N/m2)		367.34	
Alpha	1.00	Stream Power (N/m s)		2411.85	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=2

E.G. Elev (m)	727.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	727.05	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.05	Flow Area (m2)		3.39	
E.G. Slope (m/m)	0.012934	Area (m2)		3.39	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	9.33	Top Width (m)		9.33	
Vel Total (m/s)	1.92	Avg. Vel. (m/s)		1.92	
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.36	
Conv. Total (m3/s)	57.2	Conv. (m3/s)		57.2	
Length Wtd. (m)	224.66	Wetted Per. (m)		9.44	
Min Ch El (m)	726.47	Shear (N/m2)		45.59	
Alpha	1.00	Stream Power (N/m s)		87.37	
Frctn Loss (m)	2.82	Cum Volume (1000 m3)		3.24	
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.76	

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=5

E.G. Elev (m)	727.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.		0.030	
W.S. Elev (m)	727.24	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.24	Flow Area (m2)		5.86	
E.G. Slope (m/m)	0.012668	Area (m2)		5.86	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	14.91	Top Width (m)		14.91	
Vel Total (m/s)	2.00	Avg. Vel. (m/s)		2.00	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.39	
Conv. Total (m3/s)	104.0	Conv. (m3/s)		104.0	
Length Wtd. (m)	224.66	Wetted Per. (m)		15.07	
Min Ch El (m)	726.47	Shear (N/m2)		48.28	
Alpha	1.00	Stream Power (N/m s)		96.45	
Frctn Loss (m)	2.70	Cum Volume (1000 m3)		5.17	
C & E Loss (m)	0.01	Cum SA (1000 m2)		10.82	

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=10

E.G. Elev (m)	727.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	
W.S. Elev (m)	727.37	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.37	Flow Area (m2)		7.84	
E.G. Slope (m/m)	0.011356	Area (m2)		7.84	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	15.81	Top Width (m)		15.81	
Vel Total (m/s)	2.21	Avg. Vel. (m/s)		2.21	
Max Chl Dpth (m)	0.90	Hydr. Depth (m)		0.50	
Conv. Total (m3/s)	162.5	Conv. (m3/s)		162.5	
Length Wtd. (m)	224.66	Wetted Per. (m)		16.01	
Min Ch El (m)	726.47	Shear (N/m2)		54.57	
Alpha	1.00	Stream Power (N/m s)		120.50	
Frctn Loss (m)	2.48	Cum Volume (1000 m3)		7.00	
C & E Loss (m)	0.01	Cum SA (1000 m2)		12.10	

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=25

E.G. Elev (m)	727.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	727.54	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.54	Flow Area (m2)		10.56	
E.G. Slope (m/m)	0.010547	Area (m2)		10.56	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=25 (Continued)

Top Width (m)	16.95	Top Width (m)		16.95	
Vel Total (m/s)	2.47	Avg. Vel. (m/s)		2.47	
Max Chl Dpth (m)	1.07	Hydr. Depth (m)		0.62	
Conv. Total (m3/s)	254.3	Conv. (m3/s)		254.3	
Length Wtd. (m)	224.66	Wetted Per. (m)		17.19	
Min Ch El (m)	726.47	Shear (N/m2)		63.53	
Alpha	1.00	Stream Power (N/m s)		157.17	
Frctn Loss (m)	2.33	Cum Volume (1000 m3)		9.86	
C & E Loss (m)	0.01	Cum SA (1000 m2)		15.54	

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=50

E.G. Elev (m)	728.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	727.66	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.66	Flow Area (m2)		12.70	
E.G. Slope (m/m)	0.010228	Area (m2)		12.70	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	17.62	Top Width (m)		17.62	
Vel Total (m/s)	2.68	Avg. Vel. (m/s)		2.68	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	336.8	Conv. (m3/s)		336.8	
Length Wtd. (m)	224.66	Wetted Per. (m)		17.91	
Min Ch El (m)	726.47	Shear (N/m2)		71.15	
Alpha	1.00	Stream Power (N/m s)		190.77	
Frctn Loss (m)	2.25	Cum Volume (1000 m3)		12.14	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		16.89	0.04

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=100

E.G. Elev (m)	728.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.42	Wt. n-Val.		0.030	
W.S. Elev (m)	727.81	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.81	Flow Area (m2)		15.41	
E.G. Slope (m/m)	0.009599	Area (m2)		15.41	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	18.31	Top Width (m)		18.31	
Vel Total (m/s)	2.87	Avg. Vel. (m/s)		2.87	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	452.1	Conv. (m3/s)		452.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		18.67	
Min Ch El (m)	726.47	Shear (N/m2)		77.71	
Alpha	1.00	Stream Power (N/m s)		223.32	
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		14.77	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		17.83	0.09

Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=500

E.G. Elev (m)	728.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.56	Wt. n-Val.		0.030	
W.S. Elev (m)	728.19	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.19	Flow Area (m2)		22.78	
E.G. Slope (m/m)	0.008807	Area (m2)		22.78	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	20.40	Top Width (m)		20.40	
Vel Total (m/s)	3.31	Avg. Vel. (m/s)		3.31	
Max Chl Dpth (m)	1.72	Hydr. Depth (m)		1.12	
Conv. Total (m3/s)	804.1	Conv. (m3/s)		804.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		20.92	
Min Ch El (m)	726.47	Shear (N/m2)		94.08	



Plan: Plan 03 ArroyoValtierra 1 RS: 1034.385 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		311.59	
Frctn Loss (m)	1.95	Cum Volume (1000 m3)	0.01	22.40	0.15
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.12	20.80	2.35

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=2

E.G. Elev (m)	711.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	710.81	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	710.81	Flow Area (m2)		3.00	
E.G. Slope (m/m)	0.012179	Area (m2)		3.00	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.37	Top Width (m)		6.37	
Vel Total (m/s)	2.17	Avg. Vel. (m/s)		2.17	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	58.9	Conv. (m3/s)		58.9	
Length Wtd. (m)	158.70	Wetted Per. (m)		6.62	
Min Ch EI (m)	709.98	Shear (N/m2)		54.08	
Alpha	1.00	Stream Power (N/m s)		117.29	
Frctn Loss (m)	1.93	Cum Volume (1000 m3)		2.52	
C & E Loss (m)	0.00	Cum SA (1000 m2)		6.99	

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=5

E.G. Elev (m)	711.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	711.06	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.06	Flow Area (m2)		4.93	
E.G. Slope (m/m)	0.011422	Area (m2)		4.93	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	8.77	Top Width (m)		8.77	
Vel Total (m/s)	2.37	Avg. Vel. (m/s)		2.37	
Max Chl Dpth (m)	1.08	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	109.5	Conv. (m3/s)		109.5	
Length Wtd. (m)	158.70	Wetted Per. (m)		9.07	
Min Ch EI (m)	709.98	Shear (N/m2)		60.87	
Alpha	1.00	Stream Power (N/m s)		144.41	
Frctn Loss (m)	1.80	Cum Volume (1000 m3)		3.96	
C & E Loss (m)	0.00	Cum SA (1000 m2)		8.16	

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=10

E.G. Elev (m)	711.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.33	Wt. n-Val.		0.030	
W.S. Elev (m)	711.26	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.26	Flow Area (m2)		6.79	
E.G. Slope (m/m)	0.010723	Area (m2)		6.79	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	10.33	Top Width (m)		10.33	
Vel Total (m/s)	2.55	Avg. Vel. (m/s)		2.55	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.66	
Conv. Total (m3/s)	167.3	Conv. (m3/s)		167.3	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.68	
Min Ch EI (m)	709.98	Shear (N/m2)		66.83	
Alpha	1.00	Stream Power (N/m s)		170.50	
Frctn Loss (m)	1.69	Cum Volume (1000 m3)		5.36	
C & E Loss (m)	0.00	Cum SA (1000 m2)		9.17	

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=25

E.G. Elev (m)	711.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	711.48	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.48	Flow Area (m2)		9.22	
E.G. Slope (m/m)	0.010229	Area (m2)		9.22	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	11.53	Top Width (m)		11.53	
Vel Total (m/s)	2.83	Avg. Vel. (m/s)		2.83	
Max Chl Dpth (m)	1.50	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	258.3	Conv. (m3/s)		258.3	
Length Wtd. (m)	158.70	Wetted Per. (m)		11.96	
Min Ch El (m)	709.98	Shear (N/m2)		77.29	
Alpha	1.00	Stream Power (N/m s)		219.02	
Frctn Loss (m)	1.61	Cum Volume (1000 m3)		7.64	
C & E Loss (m)	0.00	Cum SA (1000 m2)		12.34	

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=50

E.G. Elev (m)	712.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	711.65	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.65	Flow Area (m2)		11.32	
E.G. Slope (m/m)	0.009772	Area (m2)		11.32	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	12.48	Top Width (m)		12.48	
Vel Total (m/s)	3.01	Avg. Vel. (m/s)		3.01	
Max Chl Dpth (m)	1.67	Hydr. Depth (m)		0.91	
Conv. Total (m3/s)	344.6	Conv. (m3/s)		344.6	
Length Wtd. (m)	158.70	Wetted Per. (m)		12.97	
Min Ch El (m)	709.98	Shear (N/m2)		83.62	
Alpha	1.00	Stream Power (N/m s)		251.60	
Frctn Loss (m)	1.54	Cum Volume (1000 m3)		9.44	0.00
C & E Loss (m)	0.00	Cum SA (1000 m2)		13.51	0.04

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=100

E.G. Elev (m)	712.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	711.85	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.85	Flow Area (m2)		13.85	
E.G. Slope (m/m)	0.009416	Area (m2)		13.85	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	13.53	Top Width (m)		13.53	
Vel Total (m/s)	3.20	Avg. Vel. (m/s)		3.20	
Max Chl Dpth (m)	1.87	Hydr. Depth (m)		1.02	
Conv. Total (m3/s)	456.4	Conv. (m3/s)		456.4	
Length Wtd. (m)	158.70	Wetted Per. (m)		14.10	
Min Ch El (m)	709.98	Shear (N/m2)		90.74	
Alpha	1.00	Stream Power (N/m s)		290.12	
Frctn Loss (m)	1.49	Cum Volume (1000 m3)		11.48	0.01
C & E Loss (m)	0.00	Cum SA (1000 m2)		14.26	0.09

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=500

E.G. Elev (m)	713.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.68	Wt. n-Val.		0.030	
W.S. Elev (m)	712.32	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.32	Flow Area (m2)		20.72	
E.G. Slope (m/m)	0.008581	Area (m2)		20.72	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	

Plan: Plan 03 ArroyoValtierra 1 RS: 809.7249 Profile: T=500 (Continued)

Top Width (m)	15.37	Top Width (m)		15.37	
Vel Total (m/s)	3.64	Avg. Vel. (m/s)		3.64	
Max Chl Dpth (m)	2.34	Hydr. Depth (m)		1.35	
Conv. Total (m3/s)	814.6	Conv. (m3/s)		814.6	
Length Wtd. (m)	158.70	Wetted Per. (m)		16.18	
Min Ch El (m)	709.98	Shear (N/m2)		107.76	
Alpha	1.00	Stream Power (N/m s)		392.36	
Frctn Loss (m)	1.37	Cum Volume (1000 m3)	0.01	17.51	0.15
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.12	16.78	2.35

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=2

E.G. Elev (m)	696.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	695.90	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	695.90	Flow Area (m2)		3.09	
E.G. Slope (m/m)	0.012201	Area (m2)		3.09	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	6.98	Top Width (m)		6.98	
Vel Total (m/s)	2.10	Avg. Vel. (m/s)		2.10	
Max Chl Dpth (m)	0.67	Hydr. Depth (m)		0.44	
Conv. Total (m3/s)	58.8	Conv. (m3/s)		58.8	
Length Wtd. (m)	167.86	Wetted Per. (m)		7.17	
Min Ch El (m)	695.23	Shear (N/m2)		51.62	
Alpha	1.00	Stream Power (N/m s)		108.53	
Frctn Loss (m)	2.22	Cum Volume (1000 m3)		2.04	
C & E Loss (m)	0.03	Cum SA (1000 m2)		5.93	

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=5

E.G. Elev (m)	696.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	696.13	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.13	Flow Area (m2)		4.87	
E.G. Slope (m/m)	0.011232	Area (m2)		4.87	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	8.44	Top Width (m)		8.44	
Vel Total (m/s)	2.40	Avg. Vel. (m/s)		2.40	
Max Chl Dpth (m)	0.90	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	110.4	Conv. (m3/s)		110.4	
Length Wtd. (m)	167.86	Wetted Per. (m)		8.70	
Min Ch El (m)	695.23	Shear (N/m2)		61.70	
Alpha	1.00	Stream Power (N/m s)		148.12	
Frctn Loss (m)	1.98	Cum Volume (1000 m3)		3.18	
C & E Loss (m)	0.03	Cum SA (1000 m2)		6.79	

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=10

E.G. Elev (m)	696.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.35	Wt. n-Val.		0.030	
W.S. Elev (m)	696.33	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.33	Flow Area (m2)		6.66	
E.G. Slope (m/m)	0.010586	Area (m2)		6.66	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	9.75	Top Width (m)		9.75	
Vel Total (m/s)	2.60	Avg. Vel. (m/s)		2.60	
Max Chl Dpth (m)	1.10	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	168.3	Conv. (m3/s)		168.3	
Length Wtd. (m)	167.86	Wetted Per. (m)		10.07	
Min Ch El (m)	695.23	Shear (N/m2)		68.60	

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		178.50	
Frctn Loss (m)	1.85	Cum Volume (1000 m3)		4.29	
C & E Loss (m)	0.03	Cum SA (1000 m2)		7.57	

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=25

E.G. Elev (m)	696.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	696.57	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.57	Flow Area (m2)		9.19	
E.G. Slope (m/m)	0.010046	Area (m2)		9.19	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	11.31	Top Width (m)		11.31	
Vel Total (m/s)	2.84	Avg. Vel. (m/s)		2.84	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	260.6	Conv. (m3/s)		260.6	
Length Wtd. (m)	167.86	Wetted Per. (m)		11.71	
Min Ch EI (m)	695.23	Shear (N/m2)		77.31	
Alpha	1.00	Stream Power (N/m s)		219.76	
Frctn Loss (m)	1.75	Cum Volume (1000 m3)		6.18	
C & E Loss (m)	0.03	Cum SA (1000 m2)		10.53	

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=50

E.G. Elev (m)	697.21	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	696.75	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.75	Flow Area (m2)		11.35	
E.G. Slope (m/m)	0.009588	Area (m2)		11.35	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	12.41	Top Width (m)		12.41	
Vel Total (m/s)	3.00	Avg. Vel. (m/s)		3.00	
Max Chl Dpth (m)	1.52	Hydr. Depth (m)		0.91	
Conv. Total (m3/s)	347.8	Conv. (m3/s)		347.8	
Length Wtd. (m)	167.86	Wetted Per. (m)		12.88	
Min Ch EI (m)	695.23	Shear (N/m2)		82.89	
Alpha	1.00	Stream Power (N/m s)		248.72	
Frctn Loss (m)	1.67	Cum Volume (1000 m3)		7.64	0.00
C & E Loss (m)	0.04	Cum SA (1000 m2)		11.53	0.04

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=100

E.G. Elev (m)	697.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	696.94	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.94	Flow Area (m2)		13.88	
E.G. Slope (m/m)	0.009379	Area (m2)		13.88	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	13.59	Top Width (m)		13.59	
Vel Total (m/s)	3.19	Avg. Vel. (m/s)		3.19	
Max Chl Dpth (m)	1.71	Hydr. Depth (m)		1.02	
Conv. Total (m3/s)	457.3	Conv. (m3/s)		457.3	
Length Wtd. (m)	167.86	Wetted Per. (m)		14.12	
Min Ch EI (m)	695.23	Shear (N/m2)		90.40	
Alpha	1.00	Stream Power (N/m s)		288.47	
Frctn Loss (m)	1.61	Cum Volume (1000 m3)		9.28	0.01
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.10	0.09

Plan: Plan 03 ArroyoValtierra 1 RS: 651.0296 Profile: T=500

E.G. Elev (m)	698.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	697.43	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.43	Flow Area (m2)		21.70	
E.G. Slope (m/m)	0.008706	Area (m2)		21.70	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	17.65	Top Width (m)		17.65	
Vel Total (m/s)	3.48	Avg. Vel. (m/s)		3.48	
Max Chl Dpth (m)	2.20	Hydr. Depth (m)		1.23	
Conv. Total (m3/s)	808.7	Conv. (m3/s)		808.7	
Length Wtd. (m)	167.86	Wetted Per. (m)		18.37	
Min Ch El (m)	695.23	Shear (N/m2)		100.90	
Alpha	1.00	Stream Power (N/m s)		350.80	
Frctn Loss (m)	1.51	Cum Volume (1000 m3)	0.01	14.15	0.15
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.12	14.16	2.35

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=2

E.G. Elev (m)	687.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.		0.030	
W.S. Elev (m)	687.72	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.72	Flow Area (m2)		3.92	
E.G. Slope (m/m)	0.014386	Area (m2)		3.92	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	14.53	Top Width (m)		14.53	
Vel Total (m/s)	1.66	Avg. Vel. (m/s)		1.66	
Max Chl Dpth (m)	0.63	Hydr. Depth (m)		0.27	
Conv. Total (m3/s)	54.2	Conv. (m3/s)		54.2	
Length Wtd. (m)	236.65	Wetted Per. (m)		14.64	
Min Ch El (m)	687.09	Shear (N/m2)		37.74	
Alpha	1.00	Stream Power (N/m s)		62.64	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		1.45	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.13	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=5

E.G. Elev (m)	688.05	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	687.86	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.86	Flow Area (m2)		6.04	
E.G. Slope (m/m)	0.012371	Area (m2)		6.04	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	15.86	Top Width (m)		15.86	
Vel Total (m/s)	1.94	Avg. Vel. (m/s)		1.94	
Max Chl Dpth (m)	0.77	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	105.2	Conv. (m3/s)		105.2	
Length Wtd. (m)	236.65	Wetted Per. (m)		16.00	
Min Ch El (m)	687.09	Shear (N/m2)		45.80	
Alpha	1.00	Stream Power (N/m s)		88.70	
Frctn Loss (m)	2.81	Cum Volume (1000 m3)		2.26	
C & E Loss (m)	0.01	Cum SA (1000 m2)		4.75	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=10

E.G. Elev (m)	688.22	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	687.98	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	687.98	Flow Area (m2)		8.01	
E.G. Slope (m/m)	0.011492	Area (m2)		8.01	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=10 (Continued)

Top Width (m)	16.86	Top Width (m)		16.86	
Vel Total (m/s)	2.16	Avg. Vel. (m/s)		2.16	
Max Chl Dpth (m)	0.89	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	161.6	Conv. (m3/s)		161.6	
Length Wtd. (m)	236.65	Wetted Per. (m)		17.03	
Min Ch El (m)	687.09	Shear (N/m2)		53.03	
Alpha	1.00	Stream Power (N/m s)		114.63	
Frctn Loss (m)	2.64	Cum Volume (1000 m3)		3.06	
C & E Loss (m)	0.01	Cum SA (1000 m2)		5.34	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=25

E.G. Elev (m)	688.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.030	
W.S. Elev (m)	688.14	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.14	Flow Area (m2)		10.76	
E.G. Slope (m/m)	0.010858	Area (m2)		10.76	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	18.19	Top Width (m)		18.19	
Vel Total (m/s)	2.43	Avg. Vel. (m/s)		2.43	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	250.7	Conv. (m3/s)		250.7	
Length Wtd. (m)	236.65	Wetted Per. (m)		18.40	
Min Ch El (m)	687.09	Shear (N/m2)		62.24	
Alpha	1.00	Stream Power (N/m s)		151.13	
Frctn Loss (m)	2.50	Cum Volume (1000 m3)		4.51	
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.05	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=50

E.G. Elev (m)	688.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	688.27	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.27	Flow Area (m2)		13.15	
E.G. Slope (m/m)	0.010272	Area (m2)		13.15	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	19.33	Top Width (m)		19.33	
Vel Total (m/s)	2.59	Avg. Vel. (m/s)		2.59	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	336.1	Conv. (m3/s)		336.1	
Length Wtd. (m)	236.65	Wetted Per. (m)		19.57	
Min Ch El (m)	687.09	Shear (N/m2)		67.66	
Alpha	1.00	Stream Power (N/m s)		175.31	
Frctn Loss (m)	2.41	Cum Volume (1000 m3)		5.59	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		8.87	0.04

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=100

E.G. Elev (m)	688.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	688.41	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.41	Flow Area (m2)		16.02	
E.G. Slope (m/m)	0.009812	Area (m2)		16.02	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	
Top Width (m)	20.64	Top Width (m)		20.64	
Vel Total (m/s)	2.76	Avg. Vel. (m/s)		2.76	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.78	
Conv. Total (m3/s)	447.1	Conv. (m3/s)		447.1	
Length Wtd. (m)	236.65	Wetted Per. (m)		20.91	
Min Ch El (m)	687.09	Shear (N/m2)		73.71	

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		203.76	
Frctn Loss (m)	2.28	Cum Volume (1000 m3)		6.77	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		9.23	0.09

Plan: Plan 03 ArroyoValtierra 1 RS: 483.1662 Profile: T=500

E.G. Elev (m)	689.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	688.79	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.79	Flow Area (m2)		25.03	
E.G. Slope (m/m)	0.009331	Area (m2)		25.03	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	27.28	Top Width (m)		27.28	
Vel Total (m/s)	3.02	Avg. Vel. (m/s)		3.02	
Max Chl Dpth (m)	1.70	Hydr. Depth (m)		0.92	
Conv. Total (m3/s)	781.2	Conv. (m3/s)		781.2	
Length Wtd. (m)	236.65	Wetted Per. (m)		27.62	
Min Ch El (m)	687.09	Shear (N/m2)		82.92	
Alpha	1.00	Stream Power (N/m s)		250.02	
Frctn Loss (m)	2.16	Cum Volume (1000 m3)	0.01	10.23	0.15
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.12	10.39	2.35

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=2

E.G. Elev (m)	673.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	
W.S. Elev (m)	673.06	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.06	Flow Area (m2)		3.13	
E.G. Slope (m/m)	0.012510	Area (m2)		3.13	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	7.30	Top Width (m)		7.30	
Vel Total (m/s)	2.08	Avg. Vel. (m/s)		2.08	
Max Chl Dpth (m)	0.66	Hydr. Depth (m)		0.43	
Conv. Total (m3/s)	58.1	Conv. (m3/s)		58.1	
Length Wtd. (m)	189.07	Wetted Per. (m)		7.54	
Min Ch El (m)	672.40	Shear (N/m2)		50.98	
Alpha	1.00	Stream Power (N/m s)		105.83	
Frctn Loss (m)	2.39	Cum Volume (1000 m3)		0.61	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.54	

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=5

E.G. Elev (m)	673.57	Element	Left OB	Channel	Right OB
Vel Head (m)	0.29	Wt. n-Val.		0.030	
W.S. Elev (m)	673.28	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.28	Flow Area (m2)		4.90	
E.G. Slope (m/m)	0.011406	Area (m2)		4.90	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	8.57	Top Width (m)		8.57	
Vel Total (m/s)	2.39	Avg. Vel. (m/s)		2.39	
Max Chl Dpth (m)	0.88	Hydr. Depth (m)		0.57	
Conv. Total (m3/s)	109.6	Conv. (m3/s)		109.6	
Length Wtd. (m)	189.07	Wetted Per. (m)		8.92	
Min Ch El (m)	672.40	Shear (N/m2)		61.44	
Alpha	1.00	Stream Power (N/m s)		146.70	
Frctn Loss (m)	2.18	Cum Volume (1000 m3)		0.97	
C & E Loss (m)	0.01	Cum SA (1000 m2)		1.86	

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=10

E.G. Elev (m)	673.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.35	Wt. n-Val.		0.030	
W.S. Elev (m)	673.47	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.47	Flow Area (m2)		6.64	
E.G. Slope (m/m)	0.010854	Area (m2)		6.64	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	9.76	Top Width (m)		9.76	
Vel Total (m/s)	2.61	Avg. Vel. (m/s)		2.61	
Max Chl Dpth (m)	1.07	Hydr. Depth (m)		0.68	
Conv. Total (m3/s)	166.2	Conv. (m3/s)		166.2	
Length Wtd. (m)	189.07	Wetted Per. (m)		10.20	
Min Ch El (m)	672.40	Shear (N/m2)		69.29	
Alpha	1.00	Stream Power (N/m s)		180.74	
Frctn Loss (m)	2.07	Cum Volume (1000 m3)		1.33	
C & E Loss (m)	0.02	Cum SA (1000 m2)		2.19	

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=25

E.G. Elev (m)	674.13	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.030	
W.S. Elev (m)	673.72	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.72	Flow Area (m2)		9.23	
E.G. Slope (m/m)	0.010254	Area (m2)		9.23	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	11.45	Top Width (m)		11.45	
Vel Total (m/s)	2.83	Avg. Vel. (m/s)		2.83	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	257.9	Conv. (m3/s)		257.9	
Length Wtd. (m)	189.07	Wetted Per. (m)		12.01	
Min Ch El (m)	672.40	Shear (N/m2)		77.25	
Alpha	1.00	Stream Power (N/m s)		218.74	
Frctn Loss (m)	2.17	Cum Volume (1000 m3)		2.14	
C & E Loss (m)	0.07	Cum SA (1000 m2)		4.54	

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=50

E.G. Elev (m)	674.35	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.030	
W.S. Elev (m)	673.91	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.91	Flow Area (m2)		11.58	
E.G. Slope (m/m)	0.010081	Area (m2)		11.58	
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	
Top Width (m)	13.40	Top Width (m)		13.40	
Vel Total (m/s)	2.94	Avg. Vel. (m/s)		2.94	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	339.2	Conv. (m3/s)		339.2	
Length Wtd. (m)	189.07	Wetted Per. (m)		14.05	
Min Ch El (m)	672.40	Shear (N/m2)		81.46	
Alpha	1.00	Stream Power (N/m s)		239.61	
Frctn Loss (m)	2.09	Cum Volume (1000 m3)		2.66	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		4.99	0.04

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=100

E.G. Elev (m)	674.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.		0.030	
W.S. Elev (m)	674.09	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.09	Flow Area (m2)		14.13	
E.G. Slope (m/m)	0.009485	Area (m2)		14.13	
Q Total (m3/s)	44.29	Flow (m3/s)		44.29	



Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=100 (Continued)

Top Width (m)	14.13	Top Width (m)		14.13	
Vel Total (m/s)	3.14	Avg. Vel. (m/s)		3.14	
Max Chl Dpth (m)	1.69	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	454.8	Conv. (m3/s)		454.8	
Length Wtd. (m)	189.08	Wetted Per. (m)		14.88	
Min Ch El (m)	672.40	Shear (N/m2)		88.29	
Alpha	1.00	Stream Power (N/m s)		276.83	
Frctn Loss (m)	1.97	Cum Volume (1000 m3)		3.21	0.01
C & E Loss (m)	0.07	Cum SA (1000 m2)		5.12	0.09

Plan: Plan 03 ArroyoValtierra 1 RS: 246.5114 Profile: T=500

E.G. Elev (m)	675.21	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	674.54	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.54	Flow Area (m2)		20.86	
E.G. Slope (m/m)	0.008893	Area (m2)		20.86	
Q Total (m3/s)	75.46	Flow (m3/s)		75.46	
Top Width (m)	15.89	Top Width (m)		15.89	
Vel Total (m/s)	3.62	Avg. Vel. (m/s)		3.62	
Max Chl Dpth (m)	2.14	Hydr. Depth (m)		1.31	
Conv. Total (m3/s)	800.2	Conv. (m3/s)		800.2	
Length Wtd. (m)	189.13	Wetted Per. (m)		16.90	
Min Ch El (m)	672.40	Shear (N/m2)		107.67	
Alpha	1.00	Stream Power (N/m s)		389.50	
Frctn Loss (m)	1.63	Cum Volume (1000 m3)	0.01	4.80	0.15
C & E Loss (m)	0.11	Cum SA (1000 m2)	0.12	5.28	2.35

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=2

E.G. Elev (m)	661.41	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	661.22	Reach Len. (m)			
Crit W.S. (m)	661.22	Flow Area (m2)		3.36	
E.G. Slope (m/m)	0.012740	Area (m2)		3.36	
Q Total (m3/s)	6.50	Flow (m3/s)		6.50	
Top Width (m)	9.04	Top Width (m)		9.04	
Vel Total (m/s)	1.93	Avg. Vel. (m/s)		1.93	
Max Chl Dpth (m)	0.63	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	57.6	Conv. (m3/s)		57.6	
Length Wtd. (m)		Wetted Per. (m)		9.14	
Min Ch El (m)	660.59	Shear (N/m2)		45.98	
Alpha	1.00	Stream Power (N/m s)		88.83	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=5

E.G. Elev (m)	661.66	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	661.42	Reach Len. (m)			
Crit W.S. (m)	661.42	Flow Area (m2)		5.34	
E.G. Slope (m/m)	0.011675	Area (m2)		5.34	
Q Total (m3/s)	11.70	Flow (m3/s)		11.70	
Top Width (m)	11.12	Top Width (m)		11.12	
Vel Total (m/s)	2.19	Avg. Vel. (m/s)		2.19	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	108.3	Conv. (m3/s)		108.3	
Length Wtd. (m)		Wetted Per. (m)		11.26	
Min Ch El (m)	660.59	Shear (N/m2)		54.32	

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		119.00	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=10

E.G. Elev (m)	661.86	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.		0.030	
W.S. Elev (m)	661.58	Reach Len. (m)			
Crit W.S. (m)	661.58	Flow Area (m2)		7.40	
E.G. Slope (m/m)	0.011092	Area (m2)		7.40	
Q Total (m3/s)	17.32	Flow (m3/s)		17.32	
Top Width (m)	13.41	Top Width (m)		13.41	
Vel Total (m/s)	2.34	Avg. Vel. (m/s)		2.34	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	164.5	Conv. (m3/s)		164.5	
Length Wtd. (m)		Wetted Per. (m)		13.58	
Min Ch El (m)	660.59	Shear (N/m2)		59.24	
Alpha	1.00	Stream Power (N/m s)		138.71	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=25

E.G. Elev (m)	662.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.		0.030	
W.S. Elev (m)	661.82	Reach Len. (m)			
Crit W.S. (m)	661.82	Flow Area (m2)		13.46	
E.G. Slope (m/m)	0.012964	Area (m2)		13.46	
Q Total (m3/s)	26.12	Flow (m3/s)		26.12	
Top Width (m)	36.60	Top Width (m)		36.60	
Vel Total (m/s)	1.94	Avg. Vel. (m/s)		1.94	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	229.4	Conv. (m3/s)		229.4	
Length Wtd. (m)		Wetted Per. (m)		36.80	
Min Ch El (m)	660.59	Shear (N/m2)		46.49	
Alpha	1.00	Stream Power (N/m s)		90.23	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=50

E.G. Elev (m)	662.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.90	Reach Len. (m)			
Crit W.S. (m)	661.90	Flow Area (m2)		16.55	0.01
E.G. Slope (m/m)	0.012205	Area (m2)		16.55	0.01
Q Total (m3/s)	34.06	Flow (m3/s)		34.06	0.00
Top Width (m)	39.82	Top Width (m)		39.43	0.39
Vel Total (m/s)	2.06	Avg. Vel. (m/s)		2.06	0.34
Max Chl Dpth (m)	1.31	Hydr. Depth (m)		0.42	0.03
Conv. Total (m3/s)	308.3	Conv. (m3/s)		308.3	0.0
Length Wtd. (m)		Wetted Per. (m)		39.64	0.39
Min Ch El (m)	660.59	Shear (N/m2)		49.98	3.42
Alpha	1.00	Stream Power (N/m s)		102.82	1.18
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=100

E.G. Elev (m)	662.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.25	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.98	Reach Len. (m)			
Crit W.S. (m)	661.98	Flow Area (m2)		19.80	0.06
E.G. Slope (m/m)	0.011558	Area (m2)		19.80	0.06
Q Total (m3/s)	44.29	Flow (m3/s)		44.25	0.04
Top Width (m)	40.93	Top Width (m)		40.00	0.93
Vel Total (m/s)	2.23	Avg. Vel. (m/s)		2.23	0.60
Max Chl Dpth (m)	1.39	Hydr. Depth (m)		0.50	0.07
Conv. Total (m3/s)	412.0	Conv. (m3/s)		411.6	0.4
Length Wtd. (m)		Wetted Per. (m)		40.21	0.94
Min Ch El (m)	660.59	Shear (N/m2)		55.81	7.82
Alpha	1.00	Stream Power (N/m s)		124.73	4.72
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 ArroyoValtierra 1 RS: 57.44248 Profile: T=500

E.G. Elev (m)	662.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.23	Reach Len. (m)			
Crit W.S. (m)	662.23	Flow Area (m2)	0.17	29.87	1.53
E.G. Slope (m/m)	0.008311	Area (m2)	0.17	29.87	1.53
Q Total (m3/s)	75.46	Flow (m3/s)	0.13	74.45	0.88
Top Width (m)	64.73	Top Width (m)	1.32	40.00	23.41
Vel Total (m/s)	2.39	Avg. Vel. (m/s)	0.75	2.49	0.58
Max Chl Dpth (m)	1.64	Hydr. Depth (m)	0.13	0.75	0.07
Conv. Total (m3/s)	827.7	Conv. (m3/s)	1.4	816.7	9.7
Length Wtd. (m)		Wetted Per. (m)	1.35	40.22	23.44
Min Ch El (m)	660.59	Shear (N/m2)	10.07	60.54	5.31
Alpha	1.07	Stream Power (N/m s)	7.59	150.89	3.07
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

## ESCENARIO SUELO NORMAL

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=2

E.G. Elev (m)	745.24	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	745.01	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.01	Flow Area (m2)	0.00	8.82	
E.G. Slope (m/m)	0.011877	Area (m2)	0.00	8.82	
Q Total (m3/s)	19.09	Flow (m3/s)	0.00	19.09	
Top Width (m)	19.11	Top Width (m)	0.11	19.00	
Vel Total (m/s)	2.16	Avg. Vel. (m/s)	0.14	2.16	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)	0.01	0.46	
Conv. Total (m3/s)	175.2	Conv. (m3/s)	0.0	175.2	
Length Wtd. (m)	90.05	Wetted Per. (m)	0.11	19.20	
Min Ch El (m)	743.84	Shear (N/m2)	0.93	53.53	
Alpha	1.00	Stream Power (N/m s)	0.13	115.79	
Frctn Loss (m)	2.20	Cum Volume (1000 m3)	0.00	16.67	0.01
C & E Loss (m)	0.10	Cum SA (1000 m2)	0.00	31.07	0.07

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=5

E.G. Elev (m)	745.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.27	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.27	Flow Area (m2)	0.25	14.30	0.92
E.G. Slope (m/m)	0.008742	Area (m2)	0.25	14.30	0.92
Q Total (m3/s)	34.10	Flow (m3/s)	0.21	33.25	0.64
Top Width (m)	32.66	Top Width (m)	1.83	22.00	8.82
Vel Total (m/s)	2.20	Avg. Vel. (m/s)	0.82	2.32	0.69
Max Chl Dpth (m)	1.43	Hydr. Depth (m)	0.14	0.65	0.10
Conv. Total (m3/s)	364.7	Conv. (m3/s)	2.2	355.7	6.8
Length Wtd. (m)	90.18	Wetted Per. (m)	1.86	22.20	8.83
Min Ch El (m)	743.84	Shear (N/m2)	11.66	55.23	8.96
Alpha	1.09	Stream Power (N/m s)	9.61	128.40	6.20
Frctn Loss (m)	1.75	Cum Volume (1000 m3)	0.01	25.46	0.07
C & E Loss (m)	0.14	Cum SA (1000 m2)	0.07	36.59	0.55

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=10

E.G. Elev (m)	745.73	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.43	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.43	Flow Area (m2)	0.65	17.89	2.49
E.G. Slope (m/m)	0.007595	Area (m2)	0.65	17.89	2.49
Q Total (m3/s)	48.48	Flow (m3/s)	0.67	44.99	2.82
Top Width (m)	35.26	Top Width (m)	3.06	22.00	10.20
Vel Total (m/s)	2.31	Avg. Vel. (m/s)	1.03	2.52	1.13
Max Chl Dpth (m)	1.59	Hydr. Depth (m)	0.21	0.81	0.24
Conv. Total (m3/s)	556.3	Conv. (m3/s)	7.6	516.3	32.4
Length Wtd. (m)	90.43	Wetted Per. (m)	3.09	22.20	10.22
Min Ch El (m)	743.84	Shear (N/m2)	15.64	60.01	18.15
Alpha	1.12	Stream Power (N/m s)	16.04	150.95	20.56
Frctn Loss (m)	1.53	Cum Volume (1000 m3)	0.03	33.12	0.17
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.12	41.12	0.67

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25

E.G. Elev (m)	745.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.59	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.59	Flow Area (m2)	1.27	21.54	4.24
E.G. Slope (m/m)	0.007497	Area (m2)	1.27	21.54	4.24
Q Total (m3/s)	69.03	Flow (m3/s)	1.57	60.95	6.52

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=25 (Continued)

Top Width (m)	37.39	Top Width (m)	4.49	22.00	10.89
Vel Total (m/s)	2.55	Avg. Vel. (m/s)	1.23	2.83	1.54
Max Chl Dpth (m)	1.75	Hydr. Depth (m)	0.28	0.98	0.39
Conv. Total (m3/s)	797.3	Conv. (m3/s)	18.1	703.9	75.3
Length Wtd. (m)	90.65	Wetted Per. (m)	4.53	22.20	10.93
Min Ch El (m)	743.84	Shear (N/m2)	20.57	71.34	28.54
Alpha	1.12	Stream Power (N/m s)	25.39	201.83	43.83
Frctn Loss (m)	1.42	Cum Volume (1000 m3)	0.05	42.83	0.31
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.22	45.66	0.86

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=50

E.G. Elev (m)	746.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.74	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.74	Flow Area (m2)	2.01	24.65	5.82
E.G. Slope (m/m)	0.006978	Area (m2)	2.01	24.65	5.82
Q Total (m3/s)	86.53	Flow (m3/s)	2.69	73.57	10.27
Top Width (m)	39.49	Top Width (m)	6.01	22.00	11.48
Vel Total (m/s)	2.66	Avg. Vel. (m/s)	1.34	2.99	1.76
Max Chl Dpth (m)	1.90	Hydr. Depth (m)	0.33	1.12	0.51
Conv. Total (m3/s)	1035.8	Conv. (m3/s)	32.1	880.8	122.9
Length Wtd. (m)	90.81	Wetted Per. (m)	6.06	22.20	11.53
Min Ch El (m)	743.84	Shear (N/m2)	22.72	75.97	34.53
Alpha	1.13	Stream Power (N/m s)	30.33	226.79	60.94
Frctn Loss (m)	1.35	Cum Volume (1000 m3)	0.09	50.25	0.45
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.41	48.13	1.06

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=100

E.G. Elev (m)	746.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	745.87	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	745.87	Flow Area (m2)	2.82	27.53	7.36
E.G. Slope (m/m)	0.007034	Area (m2)	2.82	27.53	7.36
Q Total (m3/s)	108.18	Flow (m3/s)	4.58	88.82	14.78
Top Width (m)	40.29	Top Width (m)	6.27	22.00	12.02
Vel Total (m/s)	2.87	Avg. Vel. (m/s)	1.63	3.23	2.01
Max Chl Dpth (m)	2.03	Hydr. Depth (m)	0.45	1.25	0.61
Conv. Total (m3/s)	1289.9	Conv. (m3/s)	54.6	1059.1	176.2
Length Wtd. (m)	90.87	Wetted Per. (m)	6.35	22.20	12.09
Min Ch El (m)	743.84	Shear (N/m2)	30.58	85.53	41.99
Alpha	1.12	Stream Power (N/m s)	49.71	275.98	84.32
Frctn Loss (m)	1.28	Cum Volume (1000 m3)	0.15	58.81	0.61
C & E Loss (m)	0.18	Cum SA (1000 m2)	0.64	50.81	1.26

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500

E.G. Elev (m)	746.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	746.16	Reach Len. (m)	78.69	89.98	102.32
Crit W.S. (m)	746.16	Flow Area (m2)	4.76	34.05	11.07
E.G. Slope (m/m)	0.006778	Area (m2)	4.76	34.05	11.07
Q Total (m3/s)	161.50	Flow (m3/s)	10.10	124.28	27.12
Top Width (m)	41.87	Top Width (m)	6.87	22.00	13.01
Vel Total (m/s)	3.24	Avg. Vel. (m/s)	2.12	3.65	2.45
Max Chl Dpth (m)	2.32	Hydr. Depth (m)	0.69	1.55	0.85
Conv. Total (m3/s)	1961.6	Conv. (m3/s)	122.7	1509.5	329.5
Length Wtd. (m)	90.93	Wetted Per. (m)	7.01	22.20	13.12
Min Ch El (m)	743.84	Shear (N/m2)	45.14	101.95	56.08

Plan: Plan 08 ArroyoPilarejo 1 RS: 2951.017 Profile: T=500 (Continued)

Alpha	1.10	Stream Power (N/m s)	95.70	372.08	137.40
Frctn Loss (m)	1.12	Cum Volume (1000 m3)	0.49	77.93	1.71
C & E Loss (m)	0.18	Cum SA (1000 m2)	1.84	56.17	5.41

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=2

E.G. Elev (m)	742.95	Element	Left OB	Channel	Right OB
Vel Head (m)	1.20	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.75	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.08	Flow Area (m2)		3.87	0.09
E.G. Slope (m/m)	0.075765	Area (m2)		3.87	0.09
Q Total (m3/s)	19.09	Flow (m3/s)		18.87	0.22
Top Width (m)	10.44	Top Width (m)		9.92	0.52
Vel Total (m/s)	4.83	Avg. Vel. (m/s)		4.88	2.50
Max Chl Dpth (m)	0.58	Hydr. Depth (m)		0.39	0.17
Conv. Total (m3/s)	69.4	Conv. (m3/s)		68.5	0.8
Length Wtd. (m)	116.71	Wetted Per. (m)		9.96	0.62
Min Ch El (m)	741.17	Shear (N/m2)		288.32	105.56
Alpha	1.01	Stream Power (N/m s)		1407.40	263.72
Frctn Loss (m)	2.86	Cum Volume (1000 m3)		16.10	0.01
C & E Loss (m)	0.27	Cum SA (1000 m2)		29.77	0.04

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=5

E.G. Elev (m)	743.64	Element	Left OB	Channel	Right OB
Vel Head (m)	1.72	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	741.93	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.41	Flow Area (m2)		5.72	0.21
E.G. Slope (m/m)	0.074202	Area (m2)		5.72	0.21
Q Total (m3/s)	34.10	Flow (m3/s)		33.43	0.67
Top Width (m)	11.83	Top Width (m)		11.03	0.80
Vel Total (m/s)	5.75	Avg. Vel. (m/s)		5.84	3.27
Max Chl Dpth (m)	0.76	Hydr. Depth (m)		0.52	0.26
Conv. Total (m3/s)	125.2	Conv. (m3/s)		122.7	2.5
Length Wtd. (m)	116.87	Wetted Per. (m)		11.08	0.95
Min Ch El (m)	741.17	Shear (N/m2)		375.60	157.57
Alpha	1.02	Stream Power (N/m s)		2194.52	515.92
Frctn Loss (m)	3.05	Cum Volume (1000 m3)		24.55	0.02
C & E Loss (m)	0.39	Cum SA (1000 m2)		35.10	0.06

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=10

E.G. Elev (m)	744.04	Element	Left OB	Channel	Right OB
Vel Head (m)	1.96	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.08	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.63	Flow Area (m2)		7.55	0.35
E.G. Slope (m/m)	0.065078	Area (m2)		7.55	0.35
Q Total (m3/s)	48.48	Flow (m3/s)		47.18	1.30
Top Width (m)	12.96	Top Width (m)		11.92	1.05
Vel Total (m/s)	6.13	Avg. Vel. (m/s)		6.25	3.67
Max Chl Dpth (m)	0.91	Hydr. Depth (m)		0.63	0.34
Conv. Total (m3/s)	190.0	Conv. (m3/s)		185.0	5.1
Length Wtd. (m)	117.00	Wetted Per. (m)		11.99	1.25
Min Ch El (m)	741.17	Shear (N/m2)		402.02	180.90
Alpha	1.02	Stream Power (N/m s)		2512.13	663.81
Frctn Loss (m)	3.14	Cum Volume (1000 m3)		31.98	0.03
C & E Loss (m)	0.42	Cum SA (1000 m2)		39.60	0.10

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=25

E.G. Elev (m)	744.37	Element	Left OB	Channel	Right OB
Vel Head (m)	2.07	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.31	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	742.89	Flow Area (m2)		10.34	0.62
E.G. Slope (m/m)	0.051451	Area (m2)		10.34	0.62
Q Total (m3/s)	69.03	Flow (m3/s)		66.56	2.47
Top Width (m)	14.45	Top Width (m)		13.06	1.39
Vel Total (m/s)	6.30	Avg. Vel. (m/s)		6.44	3.95
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.79	0.45
Conv. Total (m3/s)	304.3	Conv. (m3/s)		293.4	10.9
Length Wtd. (m)	117.19	Wetted Per. (m)		13.15	1.66
Min Ch El (m)	741.17	Shear (N/m2)		396.55	190.33
Alpha	1.02	Stream Power (N/m s)		2553.53	751.32
Frctn Loss (m)	3.15	Cum Volume (1000 m3)	0.00	41.40	0.06
C & E Loss (m)	0.40	Cum SA (1000 m2)	0.04	44.08	0.23

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=50

E.G. Elev (m)	744.62	Element	Left OB	Channel	Right OB
Vel Head (m)	2.15	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	742.47	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.10	Flow Area (m2)		12.57	0.87
E.G. Slope (m/m)	0.050684	Area (m2)		12.57	0.87
Q Total (m3/s)	86.53	Flow (m3/s)		82.72	3.81
Top Width (m)	16.86	Top Width (m)		15.22	1.64
Vel Total (m/s)	6.44	Avg. Vel. (m/s)		6.58	4.38
Max Chl Dpth (m)	1.30	Hydr. Depth (m)		0.83	0.53
Conv. Total (m3/s)	384.4	Conv. (m3/s)		367.4	16.9
Length Wtd. (m)	117.36	Wetted Per. (m)		15.32	1.96
Min Ch El (m)	741.17	Shear (N/m2)		407.97	221.25
Alpha	1.02	Stream Power (N/m s)		2683.94	968.01
Frctn Loss (m)	3.15	Cum Volume (1000 m3)	0.01	48.57	0.10
C & E Loss (m)	0.39	Cum SA (1000 m2)	0.18	46.45	0.39

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=100

E.G. Elev (m)	744.88	Element	Left OB	Channel	Right OB
Vel Head (m)	2.23	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	742.65	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.34	Flow Area (m2)	0.09	15.33	1.19
E.G. Slope (m/m)	0.041267	Area (m2)	0.09	15.33	1.19
Q Total (m3/s)	108.18	Flow (m3/s)	0.11	102.86	5.20
Top Width (m)	18.40	Top Width (m)	1.05	15.43	1.92
Vel Total (m/s)	6.52	Avg. Vel. (m/s)	1.29	6.71	4.38
Max Chl Dpth (m)	1.48	Hydr. Depth (m)	0.08	0.99	0.62
Conv. Total (m3/s)	532.5	Conv. (m3/s)	0.6	506.4	25.6
Length Wtd. (m)	117.44	Wetted Per. (m)	1.06	15.53	2.28
Min Ch El (m)	741.17	Shear (N/m2)	33.53	399.32	210.49
Alpha	1.03	Stream Power (N/m s)	43.14	2680.02	921.87
Frctn Loss (m)	3.12	Cum Volume (1000 m3)	0.04	56.88	0.17
C & E Loss (m)	0.34	Cum SA (1000 m2)	0.36	49.13	0.55

Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500

E.G. Elev (m)	745.44	Element	Left OB	Channel	Right OB
Vel Head (m)	2.41	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	743.04	Reach Len. (m)	89.73	116.49	154.54
Crit W.S. (m)	743.84	Flow Area (m2)	0.98	21.32	2.05
E.G. Slope (m/m)	0.029240	Area (m2)	0.98	21.32	2.05
Q Total (m3/s)	161.50	Flow (m3/s)	2.33	150.09	9.07



Plan: Plan 08 ArroyoPilarejo 1 RS: 2860.692 Profile: T=500 (Continued)

Top Width (m)	21.58	Top Width (m)	3.63	15.43	2.52
Vel Total (m/s)	6.63	Avg. Vel. (m/s)	2.37	7.04	4.42
Max Chl Dpth (m)	1.87	Hydr. Depth (m)	0.27	1.38	0.81
Conv. Total (m3/s)	944.5	Conv. (m3/s)	13.7	877.7	53.0
Length Wtd. (m)	117.45	Wetted Per. (m)	3.67	15.53	3.00
Min Ch El (m)	741.17	Shear (N/m2)	76.91	393.60	195.96
Alpha	1.07	Stream Power (N/m s)	182.31	2770.96	866.61
Frctn Loss (m)	3.02	Cum Volume (1000 m3)	0.26	75.44	1.04
C & E Loss (m)	0.22	Cum SA (1000 m2)	1.42	54.49	4.62

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=2

E.G. Elev (m)	739.83	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.		0.030	
W.S. Elev (m)	739.53	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.54	Flow Area (m2)		7.91	
E.G. Slope (m/m)	0.011940	Area (m2)		7.91	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	14.48	Top Width (m)		14.48	
Vel Total (m/s)	2.41	Avg. Vel. (m/s)		2.41	
Max Chl Dpth (m)	0.83	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	174.7	Conv. (m3/s)		174.7	
Length Wtd. (m)	138.24	Wetted Per. (m)		14.65	
Min Ch El (m)	738.70	Shear (N/m2)		63.18	
Alpha	1.00	Stream Power (N/m s)		152.53	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		15.42	
C & E Loss (m)	0.01	Cum SA (1000 m2)		28.35	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=5

E.G. Elev (m)	740.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	739.77	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	739.84	Flow Area (m2)		11.71	
E.G. Slope (m/m)	0.013214	Area (m2)		11.71	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	17.44	Top Width (m)		17.44	
Vel Total (m/s)	2.91	Avg. Vel. (m/s)		2.91	
Max Chl Dpth (m)	1.07	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	296.6	Conv. (m3/s)		296.6	
Length Wtd. (m)	138.24	Wetted Per. (m)		17.66	
Min Ch El (m)	738.70	Shear (N/m2)		85.88	
Alpha	1.00	Stream Power (N/m s)		250.15	
Frctn Loss (m)	2.13	Cum Volume (1000 m3)		23.54	
C & E Loss (m)	0.01	Cum SA (1000 m2)		33.44	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10

E.G. Elev (m)	740.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	739.93	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.06	Flow Area (m2)		14.77	0.00
E.G. Slope (m/m)	0.014525	Area (m2)		14.77	0.00
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	0.00
Top Width (m)	19.85	Top Width (m)		19.75	0.11
Vel Total (m/s)	3.28	Avg. Vel. (m/s)		3.28	0.26
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.75	0.02
Conv. Total (m3/s)	402.3	Conv. (m3/s)		402.3	0.0
Length Wtd. (m)	138.24	Wetted Per. (m)		19.99	0.11
Min Ch El (m)	738.70	Shear (N/m2)		105.21	2.29

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		345.37	0.58
Frctn Loss (m)	2.14	Cum Volume (1000 m3)		30.68	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		37.75	0.01

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=25

E.G. Elev (m)	740.82	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.10	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.28	Flow Area (m2)	0.00	18.35	0.06
E.G. Slope (m/m)	0.016453	Area (m2)	0.00	18.35	0.06
Q Total (m3/s)	69.03	Flow (m3/s)	0.00	68.97	0.06
Top Width (m)	22.84	Top Width (m)	0.20	22.00	0.64
Vel Total (m/s)	3.75	Avg. Vel. (m/s)	0.33	3.76	0.90
Max Chl Dpth (m)	1.40	Hydr. Depth (m)	0.02	0.83	0.10
Conv. Total (m3/s)	538.2	Conv. (m3/s)	0.0	537.7	0.5
Length Wtd. (m)	138.25	Wetted Per. (m)	0.21	22.25	0.67
Min Ch El (m)	738.70	Shear (N/m2)	3.46	133.04	15.67
Alpha	1.01	Stream Power (N/m s)	1.14	500.16	14.15
Frctn Loss (m)	2.17	Cum Volume (1000 m3)	0.00	39.73	0.01
C & E Loss (m)	0.00	Cum SA (1000 m2)	0.03	42.04	0.07

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=50

E.G. Elev (m)	741.09	Element	Left OB	Channel	Right OB
Vel Head (m)	0.86	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.22	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.45	Flow Area (m2)	0.06	20.94	0.16
E.G. Slope (m/m)	0.016568	Area (m2)	0.06	20.94	0.16
Q Total (m3/s)	86.53	Flow (m3/s)	0.05	86.28	0.20
Top Width (m)	23.76	Top Width (m)	0.75	22.00	1.01
Vel Total (m/s)	4.09	Avg. Vel. (m/s)	0.79	4.12	1.23
Max Chl Dpth (m)	1.52	Hydr. Depth (m)	0.08	0.95	0.16
Conv. Total (m3/s)	672.3	Conv. (m3/s)	0.4	670.3	1.5
Length Wtd. (m)	138.26	Wetted Per. (m)	0.77	22.25	1.06
Min Ch El (m)	738.70	Shear (N/m2)	12.85	152.91	24.90
Alpha	1.01	Stream Power (N/m s)	10.16	630.07	30.60
Frctn Loss (m)	2.17	Cum Volume (1000 m3)	0.01	46.62	0.02
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.14	44.28	0.18

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=100

E.G. Elev (m)	741.42	Element	Left OB	Channel	Right OB
Vel Head (m)	1.10	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.32	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	740.64	Flow Area (m2)	0.16	23.11	0.28
E.G. Slope (m/m)	0.018527	Area (m2)	0.16	23.11	0.28
Q Total (m3/s)	108.18	Flow (m3/s)	0.18	107.57	0.43
Top Width (m)	24.53	Top Width (m)	1.21	22.00	1.31
Vel Total (m/s)	4.59	Avg. Vel. (m/s)	1.15	4.65	1.55
Max Chl Dpth (m)	1.62	Hydr. Depth (m)	0.13	1.05	0.21
Conv. Total (m3/s)	794.8	Conv. (m3/s)	1.3	790.3	3.2
Length Wtd. (m)	138.27	Wetted Per. (m)	1.24	22.25	1.38
Min Ch El (m)	738.70	Shear (N/m2)	23.14	188.74	36.39
Alpha	1.02	Stream Power (N/m s)	26.58	878.37	56.53
Frctn Loss (m)	2.20	Cum Volume (1000 m3)	0.03	54.64	0.06
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.25	46.95	0.30

Plan: Plan 08 ArroyoPilarejo 1 RS: 2744.093 Profile: T=500

E.G. Elev (m)	742.21	Element	Left OB	Channel	Right OB
Vel Head (m)	1.69	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	740.52	Reach Len. (m)	129.70	138.24	157.37
Crit W.S. (m)	741.06	Flow Area (m2)	0.49	27.50	0.60
E.G. Slope (m/m)	0.022759	Area (m2)	0.49	27.50	0.60
Q Total (m3/s)	161.50	Flow (m3/s)	0.91	159.25	1.34
Top Width (m)	26.09	Top Width (m)	2.15	22.00	1.94
Vel Total (m/s)	5.65	Avg. Vel. (m/s)	1.85	5.79	2.23
Max Chl Dpth (m)	1.82	Hydr. Depth (m)	0.23	1.25	0.31
Conv. Total (m3/s)	1070.5	Conv. (m3/s)	6.0	1055.6	8.9
Length Wtd. (m)	138.29	Wetted Per. (m)	2.20	22.25	2.03
Min Ch El (m)	738.70	Shear (N/m2)	49.87	275.83	65.89
Alpha	1.04	Stream Power (N/m s)	92.35	1597.44	146.90
Frctn Loss (m)	2.36	Cum Volume (1000 m3)	0.19	72.60	0.83
C & E Loss (m)	0.23	Cum SA (1000 m2)	1.16	52.31	4.27

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=2

E.G. Elev (m)	737.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.43	Wt. n-Val.		0.030	
W.S. Elev (m)	737.25	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.36	Flow Area (m2)		6.55	
E.G. Slope (m/m)	0.020612	Area (m2)		6.55	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	13.60	Top Width (m)		13.60	
Vel Total (m/s)	2.92	Avg. Vel. (m/s)		2.92	
Max Chl Dpth (m)	0.78	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	133.0	Conv. (m3/s)		133.0	
Length Wtd. (m)		Wetted Per. (m)		13.77	
Min Ch El (m)	736.47	Shear (N/m2)		96.11	
Alpha	1.00	Stream Power (N/m s)		280.21	
Frctn Loss (m)		Cum Volume (1000 m3)		14.42	
C & E Loss (m)		Cum SA (1000 m2)		26.41	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=5

E.G. Elev (m)	738.06	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.030	
W.S. Elev (m)	737.51	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.64	Flow Area (m2)		10.37	
E.G. Slope (m/m)	0.018278	Area (m2)		10.37	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	16.41	Top Width (m)		16.41	
Vel Total (m/s)	3.29	Avg. Vel. (m/s)		3.29	
Max Chl Dpth (m)	1.04	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	252.2	Conv. (m3/s)		252.2	
Length Wtd. (m)	124.79	Wetted Per. (m)		16.65	
Min Ch El (m)	736.47	Shear (N/m2)		111.65	
Alpha	1.00	Stream Power (N/m s)		367.00	
Frctn Loss (m)	1.72	Cum Volume (1000 m3)		22.01	
C & E Loss (m)	0.08	Cum SA (1000 m2)		31.10	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10

E.G. Elev (m)	738.33	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	737.70	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	737.86	Flow Area (m2)		13.78	
E.G. Slope (m/m)	0.016603	Area (m2)		13.78	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=10 (Continued)

Top Width (m)	18.30	Top Width (m)		18.30	
Vel Total (m/s)	3.52	Avg. Vel. (m/s)		3.52	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.75	
Conv. Total (m3/s)	376.2	Conv. (m3/s)		376.2	
Length Wtd. (m)	124.79	Wetted Per. (m)		18.60	
Min Ch El (m)	736.47	Shear (N/m2)		120.65	
Alpha	1.00	Stream Power (N/m s)		424.32	
Frctn Loss (m)	1.76	Cum Volume (1000 m3)		28.71	
C & E Loss (m)	0.07	Cum SA (1000 m2)		35.12	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=25

E.G. Elev (m)	738.66	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.		0.030	
W.S. Elev (m)	737.94	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.12	Flow Area (m2)		18.43	
E.G. Slope (m/m)	0.014937	Area (m2)		18.43	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	20.53	Top Width (m)		20.53	
Vel Total (m/s)	3.75	Avg. Vel. (m/s)		3.75	
Max Chl Dpth (m)	1.47	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	564.8	Conv. (m3/s)		564.8	
Length Wtd. (m)	124.79	Wetted Per. (m)		20.91	
Min Ch El (m)	736.47	Shear (N/m2)		129.12	
Alpha	1.00	Stream Power (N/m s)		483.60	
Frctn Loss (m)	1.82	Cum Volume (1000 m3)	0.00	37.19	0.00
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.02	39.10	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=50

E.G. Elev (m)	738.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.79	Wt. n-Val.		0.030	
W.S. Elev (m)	738.11	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.31	Flow Area (m2)		21.97	
E.G. Slope (m/m)	0.014880	Area (m2)		21.97	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	22.62	Top Width (m)		22.62	
Vel Total (m/s)	3.94	Avg. Vel. (m/s)		3.94	
Max Chl Dpth (m)	1.64	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	709.4	Conv. (m3/s)		709.4	
Length Wtd. (m)	124.79	Wetted Per. (m)		23.04	
Min Ch El (m)	736.47	Shear (N/m2)		139.11	
Alpha	1.00	Stream Power (N/m s)		547.90	
Frctn Loss (m)	1.87	Cum Volume (1000 m3)	0.01	43.65	0.01
C & E Loss (m)	0.05	Cum SA (1000 m2)	0.10	41.20	0.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100

E.G. Elev (m)	739.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.82	Wt. n-Val.		0.030	
W.S. Elev (m)	738.31	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.50	Flow Area (m2)		26.90	
E.G. Slope (m/m)	0.013839	Area (m2)		26.90	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	25.41	Top Width (m)		25.41	
Vel Total (m/s)	4.02	Avg. Vel. (m/s)		4.02	
Max Chl Dpth (m)	1.84	Hydr. Depth (m)		1.06	
Conv. Total (m3/s)	919.6	Conv. (m3/s)		919.6	
Length Wtd. (m)	124.80	Wetted Per. (m)		25.90	
Min Ch El (m)	736.47	Shear (N/m2)		140.95	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		566.84	
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.02	51.19	0.04
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.18	43.67	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 2606.178 Profile: T=500

E.G. Elev (m)	739.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.92	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	738.70	Reach Len. (m)	144.34	124.79	71.95
Crit W.S. (m)	738.90	Flow Area (m2)	0.04	38.00	0.01
E.G. Slope (m/m)	0.013226	Area (m2)	0.04	38.00	0.01
Q Total (m3/s)	161.50	Flow (m3/s)	0.02	161.48	0.01
Top Width (m)	32.83	Top Width (m)	0.68	32.00	0.14
Vel Total (m/s)	4.24	Avg. Vel. (m/s)	0.53	4.25	0.52
Max Chl Dpth (m)	2.23	Hydr. Depth (m)	0.05	1.19	0.07
Conv. Total (m3/s)	1404.3	Conv. (m3/s)	0.2	1404.1	0.0
Length Wtd. (m)	124.82	Wetted Per. (m)	0.69	32.56	0.20
Min Ch El (m)	736.47	Shear (N/m2)	6.58	151.36	6.53
Alpha	1.00	Stream Power (N/m s)	3.45	643.15	3.42
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.16	68.07	0.79
C & E Loss (m)	0.01	Cum SA (1000 m2)	0.98	48.58	4.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=2

E.G. Elev (m)	735.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.		0.030	
W.S. Elev (m)	735.74	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.74	Flow Area (m2)		8.78	
E.G. Slope (m/m)	0.011725	Area (m2)		8.78	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	18.68	Top Width (m)		18.68	
Vel Total (m/s)	2.17	Avg. Vel. (m/s)		2.17	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	176.3	Conv. (m3/s)		176.3	
Length Wtd. (m)	156.83	Wetted Per. (m)		18.78	
Min Ch El (m)	734.94	Shear (N/m2)		53.75	
Alpha	1.00	Stream Power (N/m s)		116.87	
Frctn Loss (m)	3.45	Cum Volume (1000 m3)		13.46	
C & E Loss (m)	0.09	Cum SA (1000 m2)		24.40	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=5

E.G. Elev (m)	736.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.31	Wt. n-Val.		0.030	
W.S. Elev (m)	735.97	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	735.99	Flow Area (m2)		13.90	
E.G. Slope (m/m)	0.011929	Area (m2)		13.90	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	25.02	Top Width (m)		25.02	
Vel Total (m/s)	2.45	Avg. Vel. (m/s)		2.45	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	312.2	Conv. (m3/s)		312.2	
Length Wtd. (m)	156.83	Wetted Per. (m)		25.14	
Min Ch El (m)	734.94	Shear (N/m2)		64.68	
Alpha	1.00	Stream Power (N/m s)		158.65	
Frctn Loss (m)	3.23	Cum Volume (1000 m3)		20.50	
C & E Loss (m)	0.10	Cum SA (1000 m2)		28.52	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=10

E.G. Elev (m)	736.50	Element	Left OB	Channel	Right OB
Vel Head (m)	0.38	Wt. n-Val.		0.030	
W.S. Elev (m)	736.12	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.15	Flow Area (m2)		17.68	
E.G. Slope (m/m)	0.012132	Area (m2)		17.68	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	27.24	Top Width (m)		27.24	
Vel Total (m/s)	2.74	Avg. Vel. (m/s)		2.74	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	440.1	Conv. (m3/s)		440.1	
Length Wtd. (m)	156.83	Wetted Per. (m)		27.39	
Min Ch El (m)	734.94	Shear (N/m2)		76.79	
Alpha	1.00	Stream Power (N/m s)		210.59	
Frctn Loss (m)	3.18	Cum Volume (1000 m3)		26.74	
C & E Loss (m)	0.10	Cum SA (1000 m2)		32.28	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=25

E.G. Elev (m)	736.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.26	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.36	Flow Area (m2)	0.00	21.85	
E.G. Slope (m/m)	0.014283	Area (m2)	0.00	21.85	
Q Total (m3/s)	69.03	Flow (m3/s)	0.00	69.03	
Top Width (m)	30.90	Top Width (m)	0.12	30.78	
Vel Total (m/s)	3.16	Avg. Vel. (m/s)	0.20	3.16	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)	0.01	0.71	
Conv. Total (m3/s)	577.6	Conv. (m3/s)	0.0	577.6	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.12	30.95	
Min Ch El (m)	734.94	Shear (N/m2)	1.55	98.89	
Alpha	1.00	Stream Power (N/m s)	0.31	312.37	
Frctn Loss (m)	3.25	Cum Volume (1000 m3)	0.00	34.67	0.00
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.01	35.90	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=50

E.G. Elev (m)	736.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.36	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.51	Flow Area (m2)	0.04	24.80	
E.G. Slope (m/m)	0.015070	Area (m2)	0.04	24.80	
Q Total (m3/s)	86.53	Flow (m3/s)	0.02	86.51	
Top Width (m)	31.96	Top Width (m)	0.62	31.34	
Vel Total (m/s)	3.48	Avg. Vel. (m/s)	0.61	3.49	
Max Chl Dpth (m)	1.42	Hydr. Depth (m)	0.06	0.79	
Conv. Total (m3/s)	704.9	Conv. (m3/s)	0.2	704.7	
Length Wtd. (m)	156.83	Wetted Per. (m)	0.63	31.52	
Min Ch El (m)	734.94	Shear (N/m2)	8.52	116.29	
Alpha	1.00	Stream Power (N/m s)	5.21	405.60	
Frctn Loss (m)	3.22	Cum Volume (1000 m3)	0.00	40.74	0.01
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.05	37.83	0.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100

E.G. Elev (m)	737.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.78	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	736.45	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.65	Flow Area (m2)	0.11	27.66	
E.G. Slope (m/m)	0.016723	Area (m2)	0.11	27.66	
Q Total (m3/s)	108.18	Flow (m3/s)	0.11	108.07	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=100 (Continued)

Top Width (m)	32.97	Top Width (m)	1.10	31.87	
Vel Total (m/s)	3.89	Avg. Vel. (m/s)	0.94	3.91	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)	0.10	0.87	
Conv. Total (m3/s)	836.6	Conv. (m3/s)	0.8	835.7	
Length Wtd. (m)	156.83	Wetted Per. (m)	1.11	32.06	
Min Ch El (m)	734.94	Shear (N/m2)	16.75	141.50	
Alpha	1.01	Stream Power (N/m s)	15.77	552.79	
Frctn Loss (m)	3.25	Cum Volume (1000 m3)	0.01	47.78	0.04
C & E Loss (m)	0.07	Cum SA (1000 m2)	0.10	40.10	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 2481.292 Profile: T=500

E.G. Elev (m)	737.72	Element	Left OB	Channel	Right OB
Vel Head (m)	1.04	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	736.68	Reach Len. (m)	164.91	156.83	118.13
Crit W.S. (m)	736.97	Flow Area (m2)	0.51	35.47	0.14
E.G. Slope (m/m)	0.017564	Area (m2)	0.51	35.47	0.14
Q Total (m3/s)	161.50	Flow (m3/s)	0.80	160.57	0.13
Top Width (m)	37.78	Top Width (m)	2.36	34.00	1.42
Vel Total (m/s)	4.47	Avg. Vel. (m/s)	1.57	4.53	0.94
Max Chl Dpth (m)	1.74	Hydr. Depth (m)	0.22	1.04	0.10
Conv. Total (m3/s)	1218.6	Conv. (m3/s)	6.0	1211.6	1.0
Length Wtd. (m)	156.83	Wetted Per. (m)	2.40	34.19	1.44
Min Ch El (m)	734.94	Shear (N/m2)	36.54	178.67	17.00
Alpha	1.02	Stream Power (N/m s)	57.41	808.85	16.03
Frctn Loss (m)	3.19	Cum Volume (1000 m3)	0.12	63.49	0.78
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.76	44.46	4.05

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=2

E.G. Elev (m)	732.44	Element	Left OB	Channel	Right OB
Vel Head (m)	1.12	Wt. n-Val.		0.030	
W.S. Elev (m)	731.32	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	731.67	Flow Area (m2)		4.07	
E.G. Slope (m/m)	0.055212	Area (m2)		4.07	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	8.63	Top Width (m)		8.63	
Vel Total (m/s)	4.69	Avg. Vel. (m/s)		4.69	
Max Chl Dpth (m)	0.73	Hydr. Depth (m)		0.47	
Conv. Total (m3/s)	81.2	Conv. (m3/s)		81.2	
Length Wtd. (m)	132.83	Wetted Per. (m)		8.79	
Min Ch El (m)	730.59	Shear (N/m2)		250.81	
Alpha	1.00	Stream Power (N/m s)		1176.07	
Frctn Loss (m)	1.47	Cum Volume (1000 m3)		12.45	
C & E Loss (m)	0.03	Cum SA (1000 m2)		22.25	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5

E.G. Elev (m)	732.94	Element	Left OB	Channel	Right OB
Vel Head (m)	1.35	Wt. n-Val.		0.030	
W.S. Elev (m)	731.59	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.03	Flow Area (m2)		6.63	
E.G. Slope (m/m)	0.043772	Area (m2)		6.63	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	10.21	Top Width (m)		10.21	
Vel Total (m/s)	5.14	Avg. Vel. (m/s)		5.14	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	163.0	Conv. (m3/s)		163.0	
Length Wtd. (m)	132.83	Wetted Per. (m)		10.47	
Min Ch El (m)	730.59	Shear (N/m2)		271.84	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		1398.02	
Frctn Loss (m)	1.35	Cum Volume (1000 m3)		18.89	
C & E Loss (m)	0.02	Cum SA (1000 m2)		25.76	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=10

E.G. Elev (m)	733.21	Element	Left OB	Channel	Right OB
Vel Head (m)	1.39	Wt. n-Val.		0.030	
W.S. Elev (m)	731.82	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.26	Flow Area (m2)		9.29	
E.G. Slope (m/m)	0.040675	Area (m2)		9.29	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	13.23	Top Width (m)		13.23	
Vel Total (m/s)	5.22	Avg. Vel. (m/s)		5.22	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.70	
Conv. Total (m3/s)	240.4	Conv. (m3/s)		240.4	
Length Wtd. (m)		Wetted Per. (m)		13.58	
Min Ch El (m)	730.59	Shear (N/m2)		272.87	
Alpha	1.00	Stream Power (N/m s)		1424.18	
Frctn Loss (m)		Cum Volume (1000 m3)		24.63	
C & E Loss (m)		Cum SA (1000 m2)		29.11	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=25

E.G. Elev (m)	733.44	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	
W.S. Elev (m)	732.10	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.53	Flow Area (m2)		13.46	
E.G. Slope (m/m)	0.032685	Area (m2)		13.46	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	16.71	Top Width (m)		16.71	
Vel Total (m/s)	5.13	Avg. Vel. (m/s)		5.13	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	381.8	Conv. (m3/s)		381.8	
Length Wtd. (m)	132.83	Wetted Per. (m)		17.14	
Min Ch El (m)	730.59	Shear (N/m2)		251.65	
Alpha	1.00	Stream Power (N/m s)		1290.68	
Frctn Loss (m)	1.22	Cum Volume (1000 m3)		31.90	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		32.18	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=50

E.G. Elev (m)	733.67	Element	Left OB	Channel	Right OB
Vel Head (m)	1.40	Wt. n-Val.		0.030	
W.S. Elev (m)	732.27	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.72	Flow Area (m2)		16.50	
E.G. Slope (m/m)	0.029715	Area (m2)		16.50	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	18.42	Top Width (m)		18.42	
Vel Total (m/s)	5.24	Avg. Vel. (m/s)		5.24	
Max Chl Dpth (m)	1.68	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	502.0	Conv. (m3/s)		502.0	
Length Wtd. (m)	132.83	Wetted Per. (m)		18.92	
Min Ch El (m)	730.59	Shear (N/m2)		254.12	
Alpha	1.00	Stream Power (N/m s)		1332.82	
Frctn Loss (m)	1.17	Cum Volume (1000 m3)		37.50	0.01
C & E Loss (m)	0.01	Cum SA (1000 m2)		33.93	0.11



Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=100

E.G. Elev (m)	733.91	Element	Left OB	Channel	Right OB
Vel Head (m)	1.44	Wt. n-Val.		0.030	
W.S. Elev (m)	732.47	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	732.93	Flow Area (m2)		20.36	
E.G. Slope (m/m)	0.026331	Area (m2)		20.36	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	20.35	Top Width (m)		20.35	
Vel Total (m/s)	5.31	Avg. Vel. (m/s)		5.31	
Max Chl Dpth (m)	1.88	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	666.7	Conv. (m3/s)		666.7	
Length Wtd. (m)	132.83	Wetted Per. (m)		20.92	
Min Ch El (m)	730.59	Shear (N/m2)		251.32	
Alpha	1.00	Stream Power (N/m s)		1335.06	
Frctn Loss (m)	1.92	Cum Volume (1000 m3)	0.00	44.02	0.04
C & E Loss (m)	0.25	Cum SA (1000 m2)	0.01	36.00	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 2326.265 Profile: T=500

E.G. Elev (m)	734.48	Element	Left OB	Channel	Right OB
Vel Head (m)	1.64	Wt. n-Val.		0.030	
W.S. Elev (m)	732.84	Reach Len. (m)	135.97	132.83	124.34
Crit W.S. (m)	733.35	Flow Area (m2)		28.50	
E.G. Slope (m/m)	0.023766	Area (m2)		28.50	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	23.93	Top Width (m)		23.93	
Vel Total (m/s)	5.67	Avg. Vel. (m/s)		5.67	
Max Chl Dpth (m)	2.25	Hydr. Depth (m)		1.19	
Conv. Total (m3/s)	1047.6	Conv. (m3/s)		1047.6	
Length Wtd. (m)	132.83	Wetted Per. (m)		24.62	
Min Ch El (m)	730.59	Shear (N/m2)		269.83	
Alpha	1.00	Stream Power (N/m s)		1528.88	
Frctn Loss (m)	1.96	Cum Volume (1000 m3)	0.08	58.47	0.77
C & E Loss (m)	0.23	Cum SA (1000 m2)	0.57	39.92	3.97

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=2

E.G. Elev (m)	730.40	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.		0.030	
W.S. Elev (m)	730.17	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.17	Flow Area (m2)		8.95	
E.G. Slope (m/m)	0.011670	Area (m2)		8.95	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	19.44	Top Width (m)		19.44	
Vel Total (m/s)	2.13	Avg. Vel. (m/s)		2.13	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	176.7	Conv. (m3/s)		176.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		19.66	
Min Ch El (m)	729.24	Shear (N/m2)		52.14	
Alpha	1.00	Stream Power (N/m s)		111.15	
Frctn Loss (m)	3.26	Cum Volume (1000 m3)		11.59	
C & E Loss (m)	0.10	Cum SA (1000 m2)		20.39	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5

E.G. Elev (m)	730.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.		0.030	
W.S. Elev (m)	730.40	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.40	Flow Area (m2)		13.57	
E.G. Slope (m/m)	0.010424	Area (m2)		13.57	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=5 (Continued)

Top Width (m)	21.10	Top Width (m)		21.10	
Vel Total (m/s)	2.51	Avg. Vel. (m/s)		2.51	
Max Chl Dpth (m)	1.16	Hydr. Depth (m)		0.64	
Conv. Total (m3/s)	334.0	Conv. (m3/s)		334.0	
Length Wtd. (m)	143.99	Wetted Per. (m)		21.38	
Min Ch El (m)	729.24	Shear (N/m2)		64.87	
Alpha	1.00	Stream Power (N/m s)		163.03	
Frctn Loss (m)	3.06	Cum Volume (1000 m3)		17.55	
C & E Loss (m)	0.12	Cum SA (1000 m2)		23.68	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=10

E.G. Elev (m)	730.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.39	Wt. n-Val.		0.030	
W.S. Elev (m)	730.58	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.58	Flow Area (m2)		17.58	
E.G. Slope (m/m)	0.009807	Area (m2)		17.58	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	22.71	Top Width (m)		22.71	
Vel Total (m/s)	2.76	Avg. Vel. (m/s)		2.76	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	489.5	Conv. (m3/s)		489.5	
Length Wtd. (m)	143.99	Wetted Per. (m)		23.03	
Min Ch El (m)	729.24	Shear (N/m2)		73.42	
Alpha	1.00	Stream Power (N/m s)		202.46	
Frctn Loss (m)	2.89	Cum Volume (1000 m3)		22.84	
C & E Loss (m)	0.14	Cum SA (1000 m2)		26.72	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=25

E.G. Elev (m)	731.27	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.030	
W.S. Elev (m)	730.80	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.80	Flow Area (m2)		22.83	
E.G. Slope (m/m)	0.009234	Area (m2)		22.83	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	24.52	Top Width (m)		24.52	
Vel Total (m/s)	3.02	Avg. Vel. (m/s)		3.02	
Max Chl Dpth (m)	1.56	Hydr. Depth (m)		0.93	
Conv. Total (m3/s)	718.4	Conv. (m3/s)		718.4	
Length Wtd. (m)	143.99	Wetted Per. (m)		24.89	
Min Ch El (m)	729.24	Shear (N/m2)		83.05	
Alpha	1.00	Stream Power (N/m s)		251.12	
Frctn Loss (m)	2.69	Cum Volume (1000 m3)		29.49	0.00
C & E Loss (m)	0.16	Cum SA (1000 m2)		29.44	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50

E.G. Elev (m)	731.49	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	730.97	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	730.97	Flow Area (m2)		26.97	
E.G. Slope (m/m)	0.008891	Area (m2)		26.97	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	25.73	Top Width (m)		25.73	
Vel Total (m/s)	3.21	Avg. Vel. (m/s)		3.21	
Max Chl Dpth (m)	1.73	Hydr. Depth (m)		1.05	
Conv. Total (m3/s)	917.7	Conv. (m3/s)		917.7	
Length Wtd. (m)	143.99	Wetted Per. (m)		26.15	
Min Ch El (m)	729.24	Shear (N/m2)		89.92	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		288.48	
Frctn Loss (m)	2.56	Cum Volume (1000 m3)		34.61	0.01
C & E Loss (m)	0.17	Cum SA (1000 m2)		31.00	0.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=100

E.G. Elev (m)	731.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.62	Wt. n-Val.		0.030	
W.S. Elev (m)	731.13	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	731.15	Flow Area (m2)		31.14	
E.G. Slope (m/m)	0.009141	Area (m2)		31.14	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	26.90	Top Width (m)		26.90	
Vel Total (m/s)	3.47	Avg. Vel. (m/s)		3.47	
Max Chl Dpth (m)	1.89	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	1131.5	Conv. (m3/s)		1131.5	
Length Wtd. (m)	143.99	Wetted Per. (m)		27.36	
Min Ch EI (m)	729.24	Shear (N/m2)		102.01	
Alpha	1.00	Stream Power (N/m s)		354.38	
Frctn Loss (m)	2.58	Cum Volume (1000 m3)	0.00	40.60	0.04
C & E Loss (m)	0.17	Cum SA (1000 m2)	0.01	32.86	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 2193.396 Profile: T=500

E.G. Elev (m)	732.28	Element	Left OB	Channel	Right OB
Vel Head (m)	0.86	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	731.42	Reach Len. (m)	107.79	143.99	180.15
Crit W.S. (m)	731.53	Flow Area (m2)	0.00	39.35	0.03
E.G. Slope (m/m)	0.010079	Area (m2)	0.00	39.35	0.03
Q Total (m3/s)	161.50	Flow (m3/s)	0.00	161.49	0.01
Top Width (m)	29.04	Top Width (m)	0.14	28.44	0.46
Vel Total (m/s)	4.10	Avg. Vel. (m/s)	0.24	4.10	0.47
Max Chl Dpth (m)	2.18	Hydr. Depth (m)	0.02	1.38	0.05
Conv. Total (m3/s)	1608.7	Conv. (m3/s)	0.0	1608.5	0.1
Length Wtd. (m)	143.99	Wetted Per. (m)	0.14	28.97	0.47
Min Ch EI (m)	729.24	Shear (N/m2)	1.88	134.23	5.27
Alpha	1.00	Stream Power (N/m s)	0.45	550.90	2.50
Frctn Loss (m)	2.61	Cum Volume (1000 m3)	0.08	53.96	0.77
C & E Loss (m)	0.16	Cum SA (1000 m2)	0.56	36.44	3.94

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=2

E.G. Elev (m)	727.04	Element	Left OB	Channel	Right OB
Vel Head (m)	1.27	Wt. n-Val.		0.030	
W.S. Elev (m)	725.77	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.15	Flow Area (m2)		3.82	
E.G. Slope (m/m)	0.061663	Area (m2)		3.82	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	7.97	Top Width (m)		7.97	
Vel Total (m/s)	4.99	Avg. Vel. (m/s)		4.99	
Max Chl Dpth (m)	0.74	Hydr. Depth (m)		0.48	
Conv. Total (m3/s)	76.9	Conv. (m3/s)		76.9	
Length Wtd. (m)	118.81	Wetted Per. (m)		8.17	
Min Ch EI (m)	725.03	Shear (N/m2)		283.12	
Alpha	1.00	Stream Power (N/m s)		1413.01	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		10.67	
C & E Loss (m)	0.24	Cum SA (1000 m2)		18.42	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=5

E.G. Elev (m)	727.54	Element	Left OB	Channel	Right OB
Vel Head (m)	1.52	Wt. n-Val.		0.030	
W.S. Elev (m)	726.02	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.45	Flow Area (m2)		6.25	
E.G. Slope (m/m)	0.064893	Area (m2)		6.25	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	11.86	Top Width (m)		11.86	
Vel Total (m/s)	5.45	Avg. Vel. (m/s)		5.45	
Max Chl Dpth (m)	0.99	Hydr. Depth (m)		0.53	
Conv. Total (m3/s)	133.9	Conv. (m3/s)		133.9	
Length Wtd. (m)	118.81	Wetted Per. (m)		12.15	
Min Ch El (m)	725.03	Shear (N/m2)		327.49	
Alpha	1.00	Stream Power (N/m s)		1785.81	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		16.12	
C & E Loss (m)	0.27	Cum SA (1000 m2)		21.30	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=10

E.G. Elev (m)	727.94	Element	Left OB	Channel	Right OB
Vel Head (m)	1.77	Wt. n-Val.		0.030	
W.S. Elev (m)	726.18	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.71	Flow Area (m2)		8.24	
E.G. Slope (m/m)	0.061646	Area (m2)		8.24	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	13.40	Top Width (m)		13.40	
Vel Total (m/s)	5.88	Avg. Vel. (m/s)		5.88	
Max Chl Dpth (m)	1.15	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	195.3	Conv. (m3/s)		195.3	
Length Wtd. (m)	118.81	Wetted Per. (m)		13.74	
Min Ch El (m)	725.03	Shear (N/m2)		362.43	
Alpha	1.00	Stream Power (N/m s)		2132.73	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		20.98	
C & E Loss (m)	0.30	Cum SA (1000 m2)		24.12	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=25

E.G. Elev (m)	728.42	Element	Left OB	Channel	Right OB
Vel Head (m)	2.06	Wt. n-Val.		0.030	
W.S. Elev (m)	726.37	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	726.97	Flow Area (m2)		10.87	
E.G. Slope (m/m)	0.055731	Area (m2)		10.87	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	14.59	Top Width (m)		14.59	
Vel Total (m/s)	6.35	Avg. Vel. (m/s)		6.35	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.75	
Conv. Total (m3/s)	292.4	Conv. (m3/s)		292.4	
Length Wtd. (m)	118.81	Wetted Per. (m)		15.00	
Min Ch El (m)	725.03	Shear (N/m2)		396.14	
Alpha	1.00	Stream Power (N/m s)		2515.34	
Frctn Loss (m)	3.17	Cum Volume (1000 m3)		27.07	0.00
C & E Loss (m)	0.33	Cum SA (1000 m2)		26.62	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50

E.G. Elev (m)	728.76	Element	Left OB	Channel	Right OB
Vel Head (m)	2.25	Wt. n-Val.		0.030	
W.S. Elev (m)	726.51	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.19	Flow Area (m2)		13.03	
E.G. Slope (m/m)	0.051979	Area (m2)		13.03	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=50 (Continued)

Top Width (m)	15.50	Top Width (m)		15.50	
Vel Total (m/s)	6.64	Avg. Vel. (m/s)		6.64	
Max Chl Dpth (m)	1.48	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	379.5	Conv. (m3/s)		379.5	
Length Wtd. (m)	118.81	Wetted Per. (m)		15.96	
Min Ch El (m)	725.03	Shear (N/m2)		416.27	
Alpha	1.00	Stream Power (N/m s)		2763.92	
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		31.73	0.01
C & E Loss (m)	0.34	Cum SA (1000 m2)		28.03	0.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=100

E.G. Elev (m)	728.99	Element	Left OB	Channel	Right OB
Vel Head (m)	2.29	Wt. n-Val.		0.030	
W.S. Elev (m)	726.70	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.41	Flow Area (m2)		16.13	
E.G. Slope (m/m)	0.049849	Area (m2)		16.13	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	18.34	Top Width (m)		18.34	
Vel Total (m/s)	6.71	Avg. Vel. (m/s)		6.71	
Max Chl Dpth (m)	1.67	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	484.5	Conv. (m3/s)		484.5	
Length Wtd. (m)	118.81	Wetted Per. (m)		18.85	
Min Ch El (m)	725.03	Shear (N/m2)		418.20	
Alpha	1.00	Stream Power (N/m s)		2804.84	
Frctn Loss (m)	3.07	Cum Volume (1000 m3)	0.00	37.19	0.04
C & E Loss (m)	0.31	Cum SA (1000 m2)	0.01	29.61	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 2050.529 Profile: T=500

E.G. Elev (m)	729.51	Element	Left OB	Channel	Right OB
Vel Head (m)	2.45	Wt. n-Val.		0.030	
W.S. Elev (m)	727.06	Reach Len. (m)	93.57	118.81	151.10
Crit W.S. (m)	727.82	Flow Area (m2)		23.29	
E.G. Slope (m/m)	0.041803	Area (m2)		23.29	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	22.07	Top Width (m)		22.07	
Vel Total (m/s)	6.94	Avg. Vel. (m/s)		6.94	
Max Chl Dpth (m)	2.03	Hydr. Depth (m)		1.06	
Conv. Total (m3/s)	789.9	Conv. (m3/s)		789.9	
Length Wtd. (m)	118.81	Wetted Per. (m)		22.68	
Min Ch El (m)	725.03	Shear (N/m2)		420.84	
Alpha	1.00	Stream Power (N/m s)		2918.74	
Frctn Loss (m)	2.95	Cum Volume (1000 m3)	0.08	49.45	0.77
C & E Loss (m)	0.30	Cum SA (1000 m2)	0.55	32.80	3.90

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2

E.G. Elev (m)	723.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.030	
W.S. Elev (m)	723.17	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.24	Flow Area (m2)		6.40	
E.G. Slope (m/m)	0.014829	Area (m2)		6.40	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	9.81	Top Width (m)		9.81	
Vel Total (m/s)	2.98	Avg. Vel. (m/s)		2.98	
Max Chl Dpth (m)	0.95	Hydr. Depth (m)		0.65	
Conv. Total (m3/s)	156.8	Conv. (m3/s)		156.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		10.15	
Min Ch El (m)	722.22	Shear (N/m2)		91.64	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		273.43	
Frctn Loss (m)	2.08	Cum Volume (1000 m3)		10.06	
C & E Loss (m)	0.03	Cum SA (1000 m2)		17.36	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=5

E.G. Elev (m)	724.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.030	
W.S. Elev (m)	723.48	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.61	Flow Area (m2)		9.71	
E.G. Slope (m/m)	0.014407	Area (m2)		9.71	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	11.33	Top Width (m)		11.33	
Vel Total (m/s)	3.51	Avg. Vel. (m/s)		3.51	
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.86	
Conv. Total (m3/s)	284.1	Conv. (m3/s)		284.1	
Length Wtd. (m)	104.48	Wetted Per. (m)		11.81	
Min Ch EI (m)	722.22	Shear (N/m2)		116.17	
Alpha	1.00	Stream Power (N/m s)		407.92	
Frctn Loss (m)	2.01	Cum Volume (1000 m3)		15.17	
C & E Loss (m)	0.04	Cum SA (1000 m2)		19.93	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=10

E.G. Elev (m)	724.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.77	Wt. n-Val.		0.030	
W.S. Elev (m)	723.71	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	723.90	Flow Area (m2)		12.51	
E.G. Slope (m/m)	0.014778	Area (m2)		12.51	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	12.82	Top Width (m)		12.82	
Vel Total (m/s)	3.88	Avg. Vel. (m/s)		3.88	
Max Chl Dpth (m)	1.49	Hydr. Depth (m)		0.98	
Conv. Total (m3/s)	398.8	Conv. (m3/s)		398.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		13.38	
Min Ch EI (m)	722.22	Shear (N/m2)		135.53	
Alpha	1.00	Stream Power (N/m s)		525.21	
Frctn Loss (m)	1.99	Cum Volume (1000 m3)		19.75	
C & E Loss (m)	0.04	Cum SA (1000 m2)		22.57	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=25

E.G. Elev (m)	724.92	Element	Left OB	Channel	Right OB
Vel Head (m)	0.96	Wt. n-Val.		0.030	
W.S. Elev (m)	723.96	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.21	Flow Area (m2)		15.88	
E.G. Slope (m/m)	0.015595	Area (m2)		15.88	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	14.24	Top Width (m)		14.24	
Vel Total (m/s)	4.35	Avg. Vel. (m/s)		4.35	
Max Chl Dpth (m)	1.74	Hydr. Depth (m)		1.12	
Conv. Total (m3/s)	552.8	Conv. (m3/s)		552.8	
Length Wtd. (m)	104.48	Wetted Per. (m)		14.89	
Min Ch EI (m)	722.22	Shear (N/m2)		163.14	
Alpha	1.00	Stream Power (N/m s)		708.98	
Frctn Loss (m)	2.05	Cum Volume (1000 m3)		25.48	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		24.91	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=50

E.G. Elev (m)	725.26	Element	Left OB	Channel	Right OB
Vel Head (m)	1.13	Wt. n-Val.		0.030	
W.S. Elev (m)	724.14	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.44	Flow Area (m2)		18.42	
E.G. Slope (m/m)	0.016134	Area (m2)		18.42	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	15.03	Top Width (m)		15.03	
Vel Total (m/s)	4.70	Avg. Vel. (m/s)		4.70	
Max Chl Dpth (m)	1.92	Hydr. Depth (m)		1.23	
Conv. Total (m3/s)	681.2	Conv. (m3/s)		681.2	
Length Wtd. (m)	104.47	Wetted Per. (m)		15.76	
Min Ch El (m)	722.22	Shear (N/m2)		184.90	
Alpha	1.00	Stream Power (N/m s)		868.60	
Frctn Loss (m)	2.06	Cum Volume (1000 m3)		29.86	0.01
C & E Loss (m)	0.03	Cum SA (1000 m2)		26.22	0.11

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=100

E.G. Elev (m)	725.61	Element	Left OB	Channel	Right OB
Vel Head (m)	1.26	Wt. n-Val.		0.030	
W.S. Elev (m)	724.35	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	724.74	Flow Area (m2)		21.75	
E.G. Slope (m/m)	0.015764	Area (m2)		21.75	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	15.95	Top Width (m)		15.95	
Vel Total (m/s)	4.97	Avg. Vel. (m/s)		4.97	
Max Chl Dpth (m)	2.13	Hydr. Depth (m)		1.36	
Conv. Total (m3/s)	861.6	Conv. (m3/s)		861.6	
Length Wtd. (m)	104.45	Wetted Per. (m)		16.79	
Min Ch El (m)	722.22	Shear (N/m2)		200.24	
Alpha	1.00	Stream Power (N/m s)		995.82	
Frctn Loss (m)	2.01	Cum Volume (1000 m3)	0.00	34.94	0.04
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.01	27.57	0.19

Plan: Plan 08 ArroyoPilarejo 1 RS: 1930.629 Profile: T=500

E.G. Elev (m)	726.26	Element	Left OB	Channel	Right OB
Vel Head (m)	1.44	Wt. n-Val.		0.030	
W.S. Elev (m)	724.82	Reach Len. (m)	123.72	104.48	75.39
Crit W.S. (m)	725.25	Flow Area (m2)		30.42	
E.G. Slope (m/m)	0.016386	Area (m2)		30.42	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	20.87	Top Width (m)		20.87	
Vel Total (m/s)	5.31	Avg. Vel. (m/s)		5.31	
Max Chl Dpth (m)	2.60	Hydr. Depth (m)		1.46	
Conv. Total (m3/s)	1261.7	Conv. (m3/s)		1261.7	
Length Wtd. (m)	104.37	Wetted Per. (m)		21.92	
Min Ch El (m)	722.22	Shear (N/m2)		222.97	
Alpha	1.00	Stream Power (N/m s)		1183.64	
Frctn Loss (m)	1.89	Cum Volume (1000 m3)	0.08	46.26	0.77
C & E Loss (m)	0.06	Cum SA (1000 m2)	0.55	30.25	3.90

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2

E.G. Elev (m)	721.51	Element	Left OB	Channel	Right OB
Vel Head (m)	0.76	Wt. n-Val.		0.030	
W.S. Elev (m)	720.75	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	720.99	Flow Area (m2)		4.93	
E.G. Slope (m/m)	0.028047	Area (m2)		4.93	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=2 (Continued)

Top Width (m)	8.24	Top Width (m)		8.24	
Vel Total (m/s)	3.87	Avg. Vel. (m/s)		3.87	
Max Chl Dpth (m)	1.05	Hydr. Depth (m)		0.60	
Conv. Total (m3/s)	114.0	Conv. (m3/s)		114.0	
Length Wtd. (m)	148.89	Wetted Per. (m)		8.53	
Min Ch El (m)	719.70	Shear (N/m2)		158.96	
Alpha	1.00	Stream Power (N/m s)		615.71	
Frctn Loss (m)	3.91	Cum Volume (1000 m3)		9.47	
C & E Loss (m)	0.03	Cum SA (1000 m2)		16.42	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=5

E.G. Elev (m)	722.06	Element	Left OB	Channel	Right OB
Vel Head (m)	1.02	Wt. n-Val.		0.030	
W.S. Elev (m)	721.04	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.37	Flow Area (m2)		7.64	
E.G. Slope (m/m)	0.026966	Area (m2)		7.64	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	9.97	Top Width (m)		9.97	
Vel Total (m/s)	4.46	Avg. Vel. (m/s)		4.46	
Max Chl Dpth (m)	1.34	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	207.7	Conv. (m3/s)		207.7	
Length Wtd. (m)	148.89	Wetted Per. (m)		10.37	
Min Ch El (m)	719.70	Shear (N/m2)		194.75	
Alpha	1.00	Stream Power (N/m s)		869.32	
Frctn Loss (m)	3.90	Cum Volume (1000 m3)		14.26	
C & E Loss (m)	0.01	Cum SA (1000 m2)		18.81	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=10

E.G. Elev (m)	722.45	Element	Left OB	Channel	Right OB
Vel Head (m)	1.17	Wt. n-Val.		0.030	
W.S. Elev (m)	721.28	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.68	Flow Area (m2)		10.12	
E.G. Slope (m/m)	0.025495	Area (m2)		10.12	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	11.35	Top Width (m)		11.35	
Vel Total (m/s)	4.79	Avg. Vel. (m/s)		4.79	
Max Chl Dpth (m)	1.58	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	303.6	Conv. (m3/s)		303.6	
Length Wtd. (m)	148.89	Wetted Per. (m)		11.84	
Min Ch El (m)	719.70	Shear (N/m2)		213.65	
Alpha	1.00	Stream Power (N/m s)		1023.99	
Frctn Loss (m)	3.85	Cum Volume (1000 m3)		18.57	
C & E Loss (m)	0.00	Cum SA (1000 m2)		21.30	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25

E.G. Elev (m)	722.84	Element	Left OB	Channel	Right OB
Vel Head (m)	1.26	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.58	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	721.96	Flow Area (m2)		13.91	0.00
E.G. Slope (m/m)	0.025558	Area (m2)		13.91	0.00
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	0.00
Top Width (m)	14.92	Top Width (m)		14.88	0.05
Vel Total (m/s)	4.96	Avg. Vel. (m/s)		4.96	0.26
Max Chl Dpth (m)	1.88	Hydr. Depth (m)		0.94	0.01
Conv. Total (m3/s)	431.8	Conv. (m3/s)		431.8	0.0
Length Wtd. (m)	148.89	Wetted Per. (m)		15.48	0.05
Min Ch El (m)	719.70	Shear (N/m2)		225.26	2.75



Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		1117.95	0.72
Frctn Loss (m)	3.75	Cum Volume (1000 m3)		23.92	0.00
C & E Loss (m)	0.02	Cum SA (1000 m2)		23.39	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=50

E.G. Elev (m)	723.17	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.75	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.18	Flow Area (m2)		16.34	0.03
E.G. Slope (m/m)	0.024524	Area (m2)		16.34	0.03
Q Total (m3/s)	86.53	Flow (m3/s)		86.50	0.03
Top Width (m)	15.74	Top Width (m)		15.37	0.37
Vel Total (m/s)	5.29	Avg. Vel. (m/s)		5.29	0.99
Max Chl Dpth (m)	2.05	Hydr. Depth (m)		1.06	0.09
Conv. Total (m3/s)	552.5	Conv. (m3/s)		552.3	0.2
Length Wtd. (m)	148.90	Wetted Per. (m)		16.00	0.41
Min Ch El (m)	719.70	Shear (N/m2)		245.64	19.91
Alpha	1.00	Stream Power (N/m s)		1300.51	19.75
Frctn Loss (m)	3.70	Cum Volume (1000 m3)		28.05	0.01
C & E Loss (m)	0.02	Cum SA (1000 m2)		24.63	0.09

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=100

E.G. Elev (m)	723.56	Element	Left OB	Channel	Right OB
Vel Head (m)	1.64	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	721.92	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.41	Flow Area (m2)		19.01	0.13
E.G. Slope (m/m)	0.024122	Area (m2)		19.01	0.13
Q Total (m3/s)	108.18	Flow (m3/s)		107.99	0.19
Top Width (m)	16.61	Top Width (m)		15.90	0.71
Vel Total (m/s)	5.65	Avg. Vel. (m/s)		5.68	1.52
Max Chl Dpth (m)	2.22	Hydr. Depth (m)		1.20	0.18
Conv. Total (m3/s)	696.5	Conv. (m3/s)		695.3	1.2
Length Wtd. (m)	148.96	Wetted Per. (m)		16.55	0.80
Min Ch El (m)	719.70	Shear (N/m2)		271.79	37.70
Alpha	1.01	Stream Power (N/m s)		1543.52	57.37
Frctn Loss (m)	3.67	Cum Volume (1000 m3)	0.00	32.81	0.03
C & E Loss (m)	0.02	Cum SA (1000 m2)	0.01	25.91	0.17

Plan: Plan 08 ArroyoPilarejo 1 RS: 1826.699 Profile: T=500

E.G. Elev (m)	724.31	Element	Left OB	Channel	Right OB
Vel Head (m)	1.99	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	722.32	Reach Len. (m)	84.07	148.89	224.69
Crit W.S. (m)	722.95	Flow Area (m2)	0.16	25.47	0.58
E.G. Slope (m/m)	0.020142	Area (m2)	0.16	25.47	0.58
Q Total (m3/s)	161.50	Flow (m3/s)	0.23	159.94	1.33
Top Width (m)	18.37	Top Width (m)	0.85	16.00	1.52
Vel Total (m/s)	6.16	Avg. Vel. (m/s)	1.45	6.28	2.30
Max Chl Dpth (m)	2.62	Hydr. Depth (m)	0.19	1.59	0.38
Conv. Total (m3/s)	1137.9	Conv. (m3/s)	1.6	1127.0	9.4
Length Wtd. (m)	149.16	Wetted Per. (m)	0.93	16.66	1.70
Min Ch El (m)	719.70	Shear (N/m2)	33.53	302.04	67.14
Alpha	1.03	Stream Power (N/m s)	48.62	1896.54	154.69
Frctn Loss (m)	3.46	Cum Volume (1000 m3)	0.07	43.34	0.75
C & E Loss (m)	0.04	Cum SA (1000 m2)	0.50	28.33	3.84

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=2

E.G. Elev (m)	717.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	716.91	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.11	Flow Area (m2)		5.26	
E.G. Slope (m/m)	0.024591	Area (m2)		5.26	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	8.86	Top Width (m)		8.86	
Vel Total (m/s)	3.63	Avg. Vel. (m/s)		3.63	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	121.7	Conv. (m3/s)		121.7	
Length Wtd. (m)	126.54	Wetted Per. (m)		9.10	
Min Ch El (m)	715.98	Shear (N/m2)		139.40	
Alpha	1.00	Stream Power (N/m s)		505.62	
Frctn Loss (m)	2.15	Cum Volume (1000 m3)		8.71	
C & E Loss (m)	0.09	Cum SA (1000 m2)		15.15	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=5

E.G. Elev (m)	718.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.97	Wt. n-Val.		0.030	
W.S. Elev (m)	717.17	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.47	Flow Area (m2)		7.80	
E.G. Slope (m/m)	0.025465	Area (m2)		7.80	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	10.11	Top Width (m)		10.11	
Vel Total (m/s)	4.37	Avg. Vel. (m/s)		4.37	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	213.7	Conv. (m3/s)		213.7	
Length Wtd. (m)	126.54	Wetted Per. (m)		10.47	
Min Ch El (m)	715.98	Shear (N/m2)		186.06	
Alpha	1.00	Stream Power (N/m s)		813.38	
Frctn Loss (m)	2.24	Cum Volume (1000 m3)		13.12	
C & E Loss (m)	0.13	Cum SA (1000 m2)		17.32	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=10

E.G. Elev (m)	718.59	Element	Left OB	Channel	Right OB
Vel Head (m)	1.22	Wt. n-Val.		0.030	
W.S. Elev (m)	717.37	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	717.75	Flow Area (m2)		9.91	
E.G. Slope (m/m)	0.026217	Area (m2)		9.91	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	11.05	Top Width (m)		11.05	
Vel Total (m/s)	4.89	Avg. Vel. (m/s)		4.89	
Max Chl Dpth (m)	1.39	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	299.4	Conv. (m3/s)		299.4	
Length Wtd. (m)	126.54	Wetted Per. (m)		11.49	
Min Ch El (m)	715.98	Shear (N/m2)		221.82	
Alpha	1.00	Stream Power (N/m s)		1085.04	
Frctn Loss (m)	2.31	Cum Volume (1000 m3)		17.08	
C & E Loss (m)	0.17	Cum SA (1000 m2)		19.63	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25

E.G. Elev (m)	719.07	Element	Left OB	Channel	Right OB
Vel Head (m)	1.43	Wt. n-Val.		0.030	
W.S. Elev (m)	717.64	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.10	Flow Area (m2)		13.03	
E.G. Slope (m/m)	0.024837	Area (m2)		13.03	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=25 (Continued)

Top Width (m)	12.32	Top Width (m)		12.32	
Vel Total (m/s)	5.30	Avg. Vel. (m/s)		5.30	
Max Chl Dpth (m)	1.66	Hydr. Depth (m)		1.06	
Conv. Total (m3/s)	438.0	Conv. (m3/s)		438.0	
Length Wtd. (m)	126.54	Wetted Per. (m)		12.87	
Min Ch El (m)	715.98	Shear (N/m2)		246.63	
Alpha	1.00	Stream Power (N/m s)		1306.46	
Frctn Loss (m)	2.36	Cum Volume (1000 m3)		21.92	0.00
C & E Loss (m)	0.17	Cum SA (1000 m2)		21.37	0.02

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=50

E.G. Elev (m)	719.46	Element	Left OB	Channel	Right OB
Vel Head (m)	1.64	Wt. n-Val.		0.030	
W.S. Elev (m)	717.82	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.34	Flow Area (m2)		15.26	
E.G. Slope (m/m)	0.025136	Area (m2)		15.26	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	13.10	Top Width (m)		13.10	
Vel Total (m/s)	5.67	Avg. Vel. (m/s)		5.67	
Max Chl Dpth (m)	1.84	Hydr. Depth (m)		1.16	
Conv. Total (m3/s)	545.8	Conv. (m3/s)		545.8	
Length Wtd. (m)	126.53	Wetted Per. (m)		13.73	
Min Ch El (m)	715.98	Shear (N/m2)		274.00	
Alpha	1.00	Stream Power (N/m s)		1553.84	
Frctn Loss (m)	2.41	Cum Volume (1000 m3)		25.69	0.01
C & E Loss (m)	0.18	Cum SA (1000 m2)		22.51	0.05

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=100

E.G. Elev (m)	719.87	Element	Left OB	Channel	Right OB
Vel Head (m)	1.86	Wt. n-Val.		0.030	
W.S. Elev (m)	718.01	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	718.62	Flow Area (m2)		17.93	
E.G. Slope (m/m)	0.025128	Area (m2)		17.93	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	13.98	Top Width (m)		13.98	
Vel Total (m/s)	6.03	Avg. Vel. (m/s)		6.03	
Max Chl Dpth (m)	2.03	Hydr. Depth (m)		1.28	
Conv. Total (m3/s)	682.4	Conv. (m3/s)		682.4	
Length Wtd. (m)	126.49	Wetted Per. (m)		14.69	
Min Ch El (m)	715.98	Shear (N/m2)		300.75	
Alpha	1.00	Stream Power (N/m s)		1814.95	
Frctn Loss (m)	2.44	Cum Volume (1000 m3)	0.00	30.06	0.02
C & E Loss (m)	0.18	Cum SA (1000 m2)	0.01	23.68	0.08

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500

E.G. Elev (m)	720.81	Element	Left OB	Channel	Right OB
Vel Head (m)	2.42	Wt. n-Val.		0.030	
W.S. Elev (m)	718.38	Reach Len. (m)	142.42	126.54	79.64
Crit W.S. (m)	719.26	Flow Area (m2)		23.42	
E.G. Slope (m/m)	0.027069	Area (m2)		23.42	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	15.74	Top Width (m)		15.74	
Vel Total (m/s)	6.90	Avg. Vel. (m/s)		6.90	
Max Chl Dpth (m)	2.40	Hydr. Depth (m)		1.49	
Conv. Total (m3/s)	981.6	Conv. (m3/s)		981.6	
Length Wtd. (m)	126.38	Wetted Per. (m)		16.61	
Min Ch El (m)	715.98	Shear (N/m2)		374.26	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1676.876 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		2580.74	
Frctn Loss (m)	2.53	Cum Volume (1000 m3)	0.06	39.70	0.68
C & E Loss (m)	0.21	Cum SA (1000 m2)	0.46	25.96	3.67

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=2

E.G. Elev (m)	715.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.36	Wt. n-Val.		0.030	
W.S. Elev (m)	714.98	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.01	Flow Area (m2)		7.21	
E.G. Slope (m/m)	0.012422	Area (m2)		7.21	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	11.78	Top Width (m)		11.78	
Vel Total (m/s)	2.65	Avg. Vel. (m/s)		2.65	
Max Chl Dpth (m)	0.96	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	171.3	Conv. (m3/s)		171.3	
Length Wtd. (m)	168.56	Wetted Per. (m)		11.99	
Min Ch EI (m)	714.02	Shear (N/m2)		73.25	
Alpha	1.00	Stream Power (N/m s)		193.86	
Frctn Loss (m)	3.15	Cum Volume (1000 m3)		7.92	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.84	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=5

E.G. Elev (m)	715.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	715.25	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.33	Flow Area (m2)		10.61	
E.G. Slope (m/m)	0.013030	Area (m2)		10.61	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	13.37	Top Width (m)		13.37	
Vel Total (m/s)	3.21	Avg. Vel. (m/s)		3.21	
Max Chl Dpth (m)	1.23	Hydr. Depth (m)		0.79	
Conv. Total (m3/s)	298.7	Conv. (m3/s)		298.7	
Length Wtd. (m)	168.56	Wetted Per. (m)		13.68	
Min Ch EI (m)	714.02	Shear (N/m2)		99.14	
Alpha	1.00	Stream Power (N/m s)		318.52	
Frctn Loss (m)	3.05	Cum Volume (1000 m3)		11.95	
C & E Loss (m)	0.05	Cum SA (1000 m2)		15.83	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=10

E.G. Elev (m)	716.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.030	
W.S. Elev (m)	715.45	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.58	Flow Area (m2)		13.42	
E.G. Slope (m/m)	0.013454	Area (m2)		13.42	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	14.47	Top Width (m)		14.47	
Vel Total (m/s)	3.61	Avg. Vel. (m/s)		3.61	
Max Chl Dpth (m)	1.43	Hydr. Depth (m)		0.93	
Conv. Total (m3/s)	418.0	Conv. (m3/s)		418.0	
Length Wtd. (m)	168.56	Wetted Per. (m)		14.85	
Min Ch EI (m)	714.02	Shear (N/m2)		119.18	
Alpha	1.00	Stream Power (N/m s)		430.61	
Frctn Loss (m)	3.10	Cum Volume (1000 m3)		15.60	
C & E Loss (m)	0.04	Cum SA (1000 m2)		18.02	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=25

E.G. Elev (m)	716.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.88	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.66	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	715.86	Flow Area (m2)		16.61	0.01
E.G. Slope (m/m)	0.014543	Area (m2)		16.61	0.01
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	0.00
Top Width (m)	15.51	Top Width (m)		15.35	0.16
Vel Total (m/s)	4.15	Avg. Vel. (m/s)		4.16	0.45
Max Chl Dpth (m)	1.64	Hydr. Depth (m)		1.08	0.04
Conv. Total (m3/s)	572.4	Conv. (m3/s)		572.4	0.0
Length Wtd. (m)	168.56	Wetted Per. (m)		15.80	0.18
Min Ch El (m)	714.02	Shear (N/m2)		149.92	5.26
Alpha	1.00	Stream Power (N/m s)		623.02	2.34
Frctn Loss (m)	3.14	Cum Volume (1000 m3)		20.04	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		19.61	0.01

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=50

E.G. Elev (m)	716.87	Element	Left OB	Channel	Right OB
Vel Head (m)	1.05	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	715.82	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.08	Flow Area (m2)		19.04	0.06
E.G. Slope (m/m)	0.014912	Area (m2)		19.04	0.06
Q Total (m3/s)	86.53	Flow (m3/s)		86.48	0.05
Top Width (m)	16.14	Top Width (m)		15.67	0.47
Vel Total (m/s)	4.53	Avg. Vel. (m/s)		4.54	0.92
Max Chl Dpth (m)	1.80	Hydr. Depth (m)		1.22	0.12
Conv. Total (m3/s)	708.6	Conv. (m3/s)		708.2	0.4
Length Wtd. (m)	168.55	Wetted Per. (m)		16.16	0.53
Min Ch El (m)	714.02	Shear (N/m2)		172.31	15.62
Alpha	1.00	Stream Power (N/m s)		782.50	14.31
Frctn Loss (m)	3.16	Cum Volume (1000 m3)		23.52	0.00
C & E Loss (m)	0.03	Cum SA (1000 m2)		20.69	0.03

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=100

E.G. Elev (m)	717.24	Element	Left OB	Channel	Right OB
Vel Head (m)	1.25	Wt. n-Val.	0.000	0.030	0.030
W.S. Elev (m)	715.99	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.32	Flow Area (m2)	0.00	21.77	0.17
E.G. Slope (m/m)	0.015325	Area (m2)	0.00	21.77	0.17
Q Total (m3/s)	108.18	Flow (m3/s)	0.00	107.96	0.22
Top Width (m)	16.84	Top Width (m)	0.03	16.00	0.81
Vel Total (m/s)	4.93	Avg. Vel. (m/s)	0.13	4.96	1.33
Max Chl Dpth (m)	1.97	Hydr. Depth (m)	0.01	1.36	0.21
Conv. Total (m3/s)	873.9	Conv. (m3/s)	0.0	872.1	1.8
Length Wtd. (m)	168.52	Wetted Per. (m)	0.04	16.53	0.91
Min Ch El (m)	714.02	Shear (N/m2)		197.96	27.58
Alpha	1.01	Stream Power (N/m s)		981.62	36.74
Frctn Loss (m)	3.17	Cum Volume (1000 m3)	0.00	27.55	0.01
C & E Loss (m)	0.03	Cum SA (1000 m2)	0.00	21.79	0.05

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500

E.G. Elev (m)	718.06	Element	Left OB	Channel	Right OB
Vel Head (m)	1.71	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	716.35	Reach Len. (m)	188.01	168.56	130.85
Crit W.S. (m)	716.93	Flow Area (m2)	0.20	27.52	0.58
E.G. Slope (m/m)	0.015423	Area (m2)	0.20	27.52	0.58
Q Total (m3/s)	161.50	Flow (m3/s)	0.26	160.05	1.18

Plan: Plan 08 ArroyoPilarejo 1 RS: 1552.941 Profile: T=500 (Continued)

Top Width (m)	18.60	Top Width (m)	1.09	16.00	1.51
Vel Total (m/s)	5.71	Avg. Vel. (m/s)	1.30	5.82	2.03
Max Chl Dpth (m)	2.33	Hydr. Depth (m)	0.19	1.72	0.39
Conv. Total (m3/s)	1300.4	Conv. (m3/s)	2.1	1288.8	9.5
Length Wtd. (m)	168.44	Wetted Per. (m)	1.15	16.53	1.70
Min Ch El (m)	714.02	Shear (N/m2)	26.57	251.84	51.96
Alpha	1.03	Stream Power (N/m s)	34.49	1464.61	105.51
Frctn Loss (m)	3.19	Cum Volume (1000 m3)	0.05	36.48	0.66
C & E Loss (m)	0.03	Cum SA (1000 m2)	0.38	23.95	3.61

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=2

E.G. Elev (m)	712.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.88	Wt. n-Val.		0.030	
W.S. Elev (m)	711.25	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.54	Flow Area (m2)		4.59	
E.G. Slope (m/m)	0.031213	Area (m2)		4.59	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	7.33	Top Width (m)		7.33	
Vel Total (m/s)	4.16	Avg. Vel. (m/s)		4.16	
Max Chl Dpth (m)	0.97	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	108.1	Conv. (m3/s)		108.1	
Length Wtd. (m)	244.74	Wetted Per. (m)		7.75	
Min Ch El (m)	710.28	Shear (N/m2)		181.48	
Alpha	1.00	Stream Power (N/m s)		754.30	
Frctn Loss (m)	4.85	Cum Volume (1000 m3)		6.93	
C & E Loss (m)	0.11	Cum SA (1000 m2)		12.23	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=5

E.G. Elev (m)	712.67	Element	Left OB	Channel	Right OB
Vel Head (m)	1.07	Wt. n-Val.		0.030	
W.S. Elev (m)	711.60	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	711.97	Flow Area (m2)		7.45	
E.G. Slope (m/m)	0.026787	Area (m2)		7.45	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	9.11	Top Width (m)		9.11	
Vel Total (m/s)	4.58	Avg. Vel. (m/s)		4.58	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.82	
Conv. Total (m3/s)	208.4	Conv. (m3/s)		208.4	
Length Wtd. (m)	244.74	Wetted Per. (m)		9.68	
Min Ch El (m)	710.28	Shear (N/m2)		202.01	
Alpha	1.00	Stream Power (N/m s)		925.10	
Frctn Loss (m)	4.84	Cum Volume (1000 m3)		10.43	
C & E Loss (m)	0.10	Cum SA (1000 m2)		13.94	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10

E.G. Elev (m)	712.98	Element	Left OB	Channel	Right OB
Vel Head (m)	1.09	Wt. n-Val.		0.030	
W.S. Elev (m)	711.88	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.24	Flow Area (m2)		10.47	
E.G. Slope (m/m)	0.026604	Area (m2)		10.47	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	12.61	Top Width (m)		12.61	
Vel Total (m/s)	4.63	Avg. Vel. (m/s)		4.63	
Max Chl Dpth (m)	1.60	Hydr. Depth (m)		0.83	
Conv. Total (m3/s)	297.2	Conv. (m3/s)		297.2	
Length Wtd. (m)	244.74	Wetted Per. (m)		13.31	
Min Ch El (m)	710.28	Shear (N/m2)		205.13	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		950.05	
Frctn Loss (m)	4.76	Cum Volume (1000 m3)		13.59	
C & E Loss (m)	0.06	Cum SA (1000 m2)		15.74	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=25

E.G. Elev (m)	713.37	Element	Left OB	Channel	Right OB
Vel Head (m)	1.22	Wt. n-Val.		0.030	
W.S. Elev (m)	712.15	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.52	Flow Area (m2)		14.10	
E.G. Slope (m/m)	0.024662	Area (m2)		14.10	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	14.82	Top Width (m)		14.82	
Vel Total (m/s)	4.90	Avg. Vel. (m/s)		4.90	
Max Chl Dpth (m)	1.87	Hydr. Depth (m)		0.95	
Conv. Total (m3/s)	439.6	Conv. (m3/s)		439.6	
Length Wtd. (m)	244.74	Wetted Per. (m)		15.58	
Min Ch EI (m)	710.28	Shear (N/m2)		218.82	
Alpha	1.00	Stream Power (N/m s)		1071.51	
Frctn Loss (m)	4.67	Cum Volume (1000 m3)		17.45	
C & E Loss (m)	0.04	Cum SA (1000 m2)		17.07	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=50

E.G. Elev (m)	713.68	Element	Left OB	Channel	Right OB
Vel Head (m)	1.36	Wt. n-Val.		0.030	
W.S. Elev (m)	712.32	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.73	Flow Area (m2)		16.74	
E.G. Slope (m/m)	0.024275	Area (m2)		16.74	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	16.05	Top Width (m)		16.05	
Vel Total (m/s)	5.17	Avg. Vel. (m/s)		5.17	
Max Chl Dpth (m)	2.04	Hydr. Depth (m)		1.04	
Conv. Total (m3/s)	555.4	Conv. (m3/s)		555.4	
Length Wtd. (m)	244.74	Wetted Per. (m)		16.86	
Min Ch EI (m)	710.28	Shear (N/m2)		236.33	
Alpha	1.00	Stream Power (N/m s)		1221.45	
Frctn Loss (m)	4.61	Cum Volume (1000 m3)		20.51	
C & E Loss (m)	0.04	Cum SA (1000 m2)		18.02	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=100

E.G. Elev (m)	714.04	Element	Left OB	Channel	Right OB
Vel Head (m)	1.55	Wt. n-Val.		0.030	
W.S. Elev (m)	712.49	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	712.97	Flow Area (m2)		19.64	
E.G. Slope (m/m)	0.023657	Area (m2)		19.64	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	16.72	Top Width (m)		16.72	
Vel Total (m/s)	5.51	Avg. Vel. (m/s)		5.51	
Max Chl Dpth (m)	2.21	Hydr. Depth (m)		1.17	
Conv. Total (m3/s)	703.3	Conv. (m3/s)		703.3	
Length Wtd. (m)	244.74	Wetted Per. (m)		17.63	
Min Ch EI (m)	710.28	Shear (N/m2)		258.43	
Alpha	1.00	Stream Power (N/m s)		1423.79	
Frctn Loss (m)	4.57	Cum Volume (1000 m3)		24.06	
C & E Loss (m)	0.05	Cum SA (1000 m2)		19.03	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1384.467 Profile: T=500

E.G. Elev (m)	714.85	Element	Left OB	Channel	Right OB
Vel Head (m)	2.00	Wt. n-Val.		0.030	
W.S. Elev (m)	712.85	Reach Len. (m)	258.24	244.74	207.85
Crit W.S. (m)	713.47	Flow Area (m2)		25.78	
E.G. Slope (m/m)	0.023726	Area (m2)		25.78	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	18.04	Top Width (m)		18.04	
Vel Total (m/s)	6.27	Avg. Vel. (m/s)		6.27	
Max Chl Dpth (m)	2.57	Hydr. Depth (m)		1.43	
Conv. Total (m3/s)	1048.5	Conv. (m3/s)		1048.5	
Length Wtd. (m)	244.22	Wetted Per. (m)		19.12	
Min Ch El (m)	710.28	Shear (N/m2)		313.62	
Alpha	1.00	Stream Power (N/m s)		1964.86	
Frctn Loss (m)	4.61	Cum Volume (1000 m3)	0.03	31.99	0.62
C & E Loss (m)	0.11	Cum SA (1000 m2)	0.28	21.09	3.51

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=2

E.G. Elev (m)	707.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.50	Wt. n-Val.		0.030	
W.S. Elev (m)	706.67	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	706.75	Flow Area (m2)		6.09	
E.G. Slope (m/m)	0.013704	Area (m2)		6.09	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	8.04	Top Width (m)		8.04	
Vel Total (m/s)	3.13	Avg. Vel. (m/s)		3.13	
Max Chl Dpth (m)	1.17	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	163.1	Conv. (m3/s)		163.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		8.47	
Min Ch El (m)	705.50	Shear (N/m2)		96.66	
Alpha	1.00	Stream Power (N/m s)		302.78	
Frctn Loss (m)	3.39	Cum Volume (1000 m3)		5.62	
C & E Loss (m)	0.02	Cum SA (1000 m2)		10.35	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=5

E.G. Elev (m)	707.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.75	Wt. n-Val.		0.030	
W.S. Elev (m)	706.99	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.16	Flow Area (m2)		8.91	
E.G. Slope (m/m)	0.015173	Area (m2)		8.91	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	9.32	Top Width (m)		9.32	
Vel Total (m/s)	3.83	Avg. Vel. (m/s)		3.83	
Max Chl Dpth (m)	1.49	Hydr. Depth (m)		0.96	
Conv. Total (m3/s)	276.8	Conv. (m3/s)		276.8	
Length Wtd. (m)	158.72	Wetted Per. (m)		9.91	
Min Ch El (m)	705.50	Shear (N/m2)		133.87	
Alpha	1.00	Stream Power (N/m s)		512.25	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		8.43	
C & E Loss (m)	0.03	Cum SA (1000 m2)		11.68	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10

E.G. Elev (m)	708.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.89	Wt. n-Val.		0.030	
W.S. Elev (m)	707.26	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.47	Flow Area (m2)		11.57	
E.G. Slope (m/m)	0.014824	Area (m2)		11.57	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	



Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=10 (Continued)

Top Width (m)	10.30	Top Width (m)		10.30	
Vel Total (m/s)	4.19	Avg. Vel. (m/s)		4.19	
Max Chl Dpth (m)	1.76	Hydr. Depth (m)		1.12	
Conv. Total (m3/s)	398.2	Conv. (m3/s)		398.2	
Length Wtd. (m)	158.72	Wetted Per. (m)		11.03	
Min Ch El (m)	705.50	Shear (N/m2)		152.47	
Alpha	1.00	Stream Power (N/m s)		638.77	
Frctn Loss (m)	3.44	Cum Volume (1000 m3)		10.89	
C & E Loss (m)	0.04	Cum SA (1000 m2)		12.93	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=25

E.G. Elev (m)	708.66	Element	Left OB	Channel	Right OB
Vel Head (m)	1.10	Wt. n-Val.		0.030	
W.S. Elev (m)	707.57	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	707.85	Flow Area (m2)		14.87	
E.G. Slope (m/m)	0.015195	Area (m2)		14.87	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	11.50	Top Width (m)		11.50	
Vel Total (m/s)	4.64	Avg. Vel. (m/s)		4.64	
Max Chl Dpth (m)	2.07	Hydr. Depth (m)		1.29	
Conv. Total (m3/s)	560.0	Conv. (m3/s)		560.0	
Length Wtd. (m)	158.72	Wetted Per. (m)		12.38	
Min Ch El (m)	705.50	Shear (N/m2)		178.99	
Alpha	1.00	Stream Power (N/m s)		831.04	
Frctn Loss (m)	3.45	Cum Volume (1000 m3)		13.91	
C & E Loss (m)	0.05	Cum SA (1000 m2)		13.85	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=50

E.G. Elev (m)	709.03	Element	Left OB	Channel	Right OB
Vel Head (m)	1.23	Wt. n-Val.		0.030	
W.S. Elev (m)	707.80	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	708.12	Flow Area (m2)		17.62	
E.G. Slope (m/m)	0.015066	Area (m2)		17.62	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	12.41	Top Width (m)		12.41	
Vel Total (m/s)	4.91	Avg. Vel. (m/s)		4.91	
Max Chl Dpth (m)	2.30	Hydr. Depth (m)		1.42	
Conv. Total (m3/s)	705.0	Conv. (m3/s)		705.0	
Length Wtd. (m)	158.72	Wetted Per. (m)		13.40	
Min Ch El (m)	705.50	Shear (N/m2)		194.26	
Alpha	1.00	Stream Power (N/m s)		953.88	
Frctn Loss (m)	3.42	Cum Volume (1000 m3)		16.30	
C & E Loss (m)	0.06	Cum SA (1000 m2)		14.53	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100

E.G. Elev (m)	709.42	Element	Left OB	Channel	Right OB
Vel Head (m)	1.38	Wt. n-Val.		0.030	
W.S. Elev (m)	708.04	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	708.68	Flow Area (m2)		20.77	
E.G. Slope (m/m)	0.015108	Area (m2)		20.77	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	13.38	Top Width (m)		13.38	
Vel Total (m/s)	5.21	Avg. Vel. (m/s)		5.21	
Max Chl Dpth (m)	2.54	Hydr. Depth (m)		1.55	
Conv. Total (m3/s)	880.1	Conv. (m3/s)		880.1	
Length Wtd. (m)	158.72	Wetted Per. (m)		14.49	
Min Ch El (m)	705.50	Shear (N/m2)		212.38	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		1106.24	
Frctn Loss (m)	3.42	Cum Volume (1000 m3)		19.12	
C & E Loss (m)	0.06	Cum SA (1000 m2)		15.34	

Plan: Plan 08 ArroyoPilarejo 1 RS: 1141.143 Profile: T=500

E.G. Elev (m)	710.12	Element	Left OB	Channel	Right OB
Vel Head (m)	1.63	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	708.50	Reach Len. (m)	153.60	158.72	148.33
Crit W.S. (m)	709.04	Flow Area (m2)	0.02	27.42	3.48
E.G. Slope (m/m)	0.015390	Area (m2)	0.02	27.42	3.48
Q Total (m3/s)	161.50	Flow (m3/s)	0.01	156.96	4.54
Top Width (m)	35.47	Top Width (m)	0.23	15.57	19.67
Vel Total (m/s)	5.22	Avg. Vel. (m/s)	0.63	5.72	1.30
Max Chl Dpth (m)	3.00	Hydr. Depth (m)	0.07	1.76	0.18
Conv. Total (m3/s)	1301.8	Conv. (m3/s)	0.1	1265.2	36.6
Length Wtd. (m)	158.57	Wetted Per. (m)	0.27	16.84	19.69
Min Ch El (m)	705.50	Shear (N/m2)	8.90	245.79	26.68
Alpha	1.17	Stream Power (N/m s)	5.57	1406.93	34.76
Frctn Loss (m)	3.33	Cum Volume (1000 m3)	0.03	25.48	0.26
C & E Loss (m)	0.08	Cum SA (1000 m2)	0.25	16.97	1.47

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=2

E.G. Elev (m)	703.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.74	Wt. n-Val.		0.030	
W.S. Elev (m)	703.01	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.24	Flow Area (m2)		5.00	
E.G. Slope (m/m)	0.037833	Area (m2)		5.00	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	10.96	Top Width (m)		10.96	
Vel Total (m/s)	3.82	Avg. Vel. (m/s)		3.82	
Max Chl Dpth (m)	0.63	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	98.1	Conv. (m3/s)		98.1	
Length Wtd. (m)	187.19	Wetted Per. (m)		11.08	
Min Ch El (m)	702.38	Shear (N/m2)		167.51	
Alpha	1.00	Stream Power (N/m s)		639.16	
Frctn Loss (m)	3.76	Cum Volume (1000 m3)		4.74	
C & E Loss (m)	0.12	Cum SA (1000 m2)		8.84	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=5

E.G. Elev (m)	704.25	Element	Left OB	Channel	Right OB
Vel Head (m)	1.01	Wt. n-Val.		0.030	
W.S. Elev (m)	703.24	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.55	Flow Area (m2)		7.67	
E.G. Slope (m/m)	0.034046	Area (m2)		7.67	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	12.26	Top Width (m)		12.26	
Vel Total (m/s)	4.45	Avg. Vel. (m/s)		4.45	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.63	
Conv. Total (m3/s)	184.8	Conv. (m3/s)		184.8	
Length Wtd. (m)	187.19	Wetted Per. (m)		12.47	
Min Ch El (m)	702.38	Shear (N/m2)		205.31	
Alpha	1.00	Stream Power (N/m s)		913.18	
Frctn Loss (m)	3.80	Cum Volume (1000 m3)		7.11	
C & E Loss (m)	0.15	Cum SA (1000 m2)		9.97	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=10

E.G. Elev (m)	704.68	Element	Left OB	Channel	Right OB
Vel Head (m)	1.28	Wt. n-Val.		0.030	
W.S. Elev (m)	703.40	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	703.80	Flow Area (m2)		9.68	
E.G. Slope (m/m)	0.034757	Area (m2)		9.68	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	13.13	Top Width (m)		13.13	
Vel Total (m/s)	5.01	Avg. Vel. (m/s)		5.01	
Max Chl Dpth (m)	1.02	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	260.0	Conv. (m3/s)		260.0	
Length Wtd. (m)	187.19	Wetted Per. (m)		13.40	
Min Ch El (m)	702.38	Shear (N/m2)		246.41	
Alpha	1.00	Stream Power (N/m s)		1233.47	
Frctn Loss (m)	3.86	Cum Volume (1000 m3)		9.21	
C & E Loss (m)	0.20	Cum SA (1000 m2)		11.07	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=25

E.G. Elev (m)	705.17	Element	Left OB	Channel	Right OB
Vel Head (m)	1.57	Wt. n-Val.		0.030	
W.S. Elev (m)	703.60	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.10	Flow Area (m2)		12.45	
E.G. Slope (m/m)	0.033599	Area (m2)		12.45	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	14.06	Top Width (m)		14.06	
Vel Total (m/s)	5.54	Avg. Vel. (m/s)		5.54	
Max Chl Dpth (m)	1.22	Hydr. Depth (m)		0.89	
Conv. Total (m3/s)	376.6	Conv. (m3/s)		376.6	
Length Wtd. (m)	187.19	Wetted Per. (m)		14.41	
Min Ch El (m)	702.38	Shear (N/m2)		284.74	
Alpha	1.00	Stream Power (N/m s)		1578.46	
Frctn Loss (m)	3.94	Cum Volume (1000 m3)		11.74	
C & E Loss (m)	0.24	Cum SA (1000 m2)		11.82	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=50

E.G. Elev (m)	705.55	Element	Left OB	Channel	Right OB
Vel Head (m)	1.80	Wt. n-Val.		0.030	
W.S. Elev (m)	703.75	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.32	Flow Area (m2)		14.57	
E.G. Slope (m/m)	0.033393	Area (m2)		14.57	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	14.73	Top Width (m)		14.73	
Vel Total (m/s)	5.94	Avg. Vel. (m/s)		5.94	
Max Chl Dpth (m)	1.37	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	473.5	Conv. (m3/s)		473.5	
Length Wtd. (m)	187.19	Wetted Per. (m)		15.14	
Min Ch El (m)	702.38	Shear (N/m2)		315.16	
Alpha	1.00	Stream Power (N/m s)		1871.32	
Frctn Loss (m)	4.00	Cum Volume (1000 m3)		13.75	
C & E Loss (m)	0.26	Cum SA (1000 m2)		12.38	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100

E.G. Elev (m)	705.94	Element	Left OB	Channel	Right OB
Vel Head (m)	2.02	Wt. n-Val.		0.030	
W.S. Elev (m)	703.92	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	704.56	Flow Area (m2)		17.18	
E.G. Slope (m/m)	0.033130	Area (m2)		17.18	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=100 (Continued)

Top Width (m)	15.78	Top Width (m)		15.78	
Vel Total (m/s)	6.30	Avg. Vel. (m/s)		6.30	
Max Chl Dpth (m)	1.54	Hydr. Depth (m)		1.09	
Conv. Total (m3/s)	594.3	Conv. (m3/s)		594.3	
Length Wtd. (m)	187.19	Wetted Per. (m)		16.26	
Min Ch El (m)	702.38	Shear (N/m2)		343.37	
Alpha	1.00	Stream Power (N/m s)		2161.58	
Frctn Loss (m)	4.04	Cum Volume (1000 m3)		16.11	
C & E Loss (m)	0.28	Cum SA (1000 m2)		13.03	

Plan: Plan 08 ArroyoPilarejo 1 RS: 982.4216 Profile: T=500

E.G. Elev (m)	706.72	Element	Left OB	Channel	Right OB
Vel Head (m)	2.43	Wt. n-Val.	0.030	0.030	
W.S. Elev (m)	704.29	Reach Len. (m)	239.32	187.19	97.63
Crit W.S. (m)	705.07	Flow Area (m2)	0.13	23.37	
E.G. Slope (m/m)	0.030302	Area (m2)	0.13	23.37	
Q Total (m3/s)	161.50	Flow (m3/s)	0.17	161.33	
Top Width (m)	18.63	Top Width (m)	1.19	17.44	
Vel Total (m/s)	6.87	Avg. Vel. (m/s)	1.31	6.90	
Max Chl Dpth (m)	1.91	Hydr. Depth (m)	0.11	1.34	
Conv. Total (m3/s)	927.8	Conv. (m3/s)	1.0	926.8	
Length Wtd. (m)	187.22	Wetted Per. (m)	1.21	18.01	
Min Ch El (m)	702.38	Shear (N/m2)	31.98	385.64	
Alpha	1.01	Stream Power (N/m s)	41.99	2662.31	
Frctn Loss (m)	4.10	Cum Volume (1000 m3)	0.02	21.45	0.00
C & E Loss (m)	0.29	Cum SA (1000 m2)	0.14	14.35	0.01

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=2

E.G. Elev (m)	699.88	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.		0.030	
W.S. Elev (m)	699.54	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.57	Flow Area (m2)		7.43	
E.G. Slope (m/m)	0.012405	Area (m2)		7.43	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	12.51	Top Width (m)		12.51	
Vel Total (m/s)	2.57	Avg. Vel. (m/s)		2.57	
Max Chl Dpth (m)	1.03	Hydr. Depth (m)		0.59	
Conv. Total (m3/s)	171.4	Conv. (m3/s)		171.4	
Length Wtd. (m)	138.61	Wetted Per. (m)		12.89	
Min Ch El (m)	698.51	Shear (N/m2)		70.10	
Alpha	1.00	Stream Power (N/m s)		180.23	
Frctn Loss (m)	4.07	Cum Volume (1000 m3)		3.57	
C & E Loss (m)	0.17	Cum SA (1000 m2)		6.64	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5

E.G. Elev (m)	700.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.030	
W.S. Elev (m)	699.79	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	699.90	Flow Area (m2)		10.72	
E.G. Slope (m/m)	0.013440	Area (m2)		10.72	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	13.90	Top Width (m)		13.90	
Vel Total (m/s)	3.18	Avg. Vel. (m/s)		3.18	
Max Chl Dpth (m)	1.28	Hydr. Depth (m)		0.77	
Conv. Total (m3/s)	294.1	Conv. (m3/s)		294.1	
Length Wtd. (m)	138.61	Wetted Per. (m)		14.36	
Min Ch El (m)	698.51	Shear (N/m2)		98.40	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		312.93	
Frctn Loss (m)	3.94	Cum Volume (1000 m3)		5.39	
C & E Loss (m)	0.18	Cum SA (1000 m2)		7.52	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=10

E.G. Elev (m)	700.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.60	Wt. n-Val.		0.030	
W.S. Elev (m)	700.01	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.12	Flow Area (m2)		14.18	
E.G. Slope (m/m)	0.013645	Area (m2)		14.18	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	16.70	Top Width (m)		16.70	
Vel Total (m/s)	3.42	Avg. Vel. (m/s)		3.42	
Max Chl Dpth (m)	1.50	Hydr. Depth (m)		0.85	
Conv. Total (m3/s)	415.0	Conv. (m3/s)		415.0	
Length Wtd. (m)	138.61	Wetted Per. (m)		17.23	
Min Ch El (m)	698.51	Shear (N/m2)		110.10	
Alpha	1.00	Stream Power (N/m s)		376.43	
Frctn Loss (m)	3.79	Cum Volume (1000 m3)		6.97	
C & E Loss (m)	0.20	Cum SA (1000 m2)		8.28	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=25

E.G. Elev (m)	701.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.78	Wt. n-Val.		0.030	
W.S. Elev (m)	700.22	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.38	Flow Area (m2)		17.64	
E.G. Slope (m/m)	0.014401	Area (m2)		17.64	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	17.61	Top Width (m)		17.61	
Vel Total (m/s)	3.91	Avg. Vel. (m/s)		3.91	
Max Chl Dpth (m)	1.71	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	575.2	Conv. (m3/s)		575.2	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.23	
Min Ch El (m)	698.51	Shear (N/m2)		136.63	
Alpha	1.00	Stream Power (N/m s)		534.63	
Frctn Loss (m)	3.72	Cum Volume (1000 m3)		8.92	
C & E Loss (m)	0.20	Cum SA (1000 m2)		8.86	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=50

E.G. Elev (m)	701.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.92	Wt. n-Val.		0.030	
W.S. Elev (m)	700.37	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.59	Flow Area (m2)		20.36	
E.G. Slope (m/m)	0.014814	Area (m2)		20.36	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	18.30	Top Width (m)		18.30	
Vel Total (m/s)	4.25	Avg. Vel. (m/s)		4.25	
Max Chl Dpth (m)	1.86	Hydr. Depth (m)		1.11	
Conv. Total (m3/s)	710.9	Conv. (m3/s)		710.9	
Length Wtd. (m)	138.61	Wetted Per. (m)		18.98	
Min Ch El (m)	698.51	Shear (N/m2)		155.79	
Alpha	1.00	Stream Power (N/m s)		662.17	
Frctn Loss (m)	3.66	Cum Volume (1000 m3)		10.48	
C & E Loss (m)	0.20	Cum SA (1000 m2)		9.29	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=100

E.G. Elev (m)	701.62	Element	Left OB	Channel	Right OB
Vel Head (m)	1.08	Wt. n-Val.		0.030	
W.S. Elev (m)	700.54	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	700.82	Flow Area (m2)		23.50	
E.G. Slope (m/m)	0.015191	Area (m2)		23.50	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	19.06	Top Width (m)		19.06	
Vel Total (m/s)	4.60	Avg. Vel. (m/s)		4.60	
Max Chl Dpth (m)	2.03	Hydr. Depth (m)		1.23	
Conv. Total (m3/s)	877.7	Conv. (m3/s)		877.7	
Length Wtd. (m)	138.61	Wetted Per. (m)		19.82	
Min Ch El (m)	698.51	Shear (N/m2)		176.66	
Alpha	1.00	Stream Power (N/m s)		813.11	
Frctn Loss (m)	3.60	Cum Volume (1000 m3)		12.30	
C & E Loss (m)	0.21	Cum SA (1000 m2)		9.77	

Plan: Plan 08 ArroyoPilarejo 1 RS: 795.2336 Profile: T=500

E.G. Elev (m)	702.33	Element	Left OB	Channel	Right OB
Vel Head (m)	1.45	Wt. n-Val.		0.030	
W.S. Elev (m)	700.88	Reach Len. (m)	164.30	138.61	85.86
Crit W.S. (m)	701.31	Flow Area (m2)		30.30	
E.G. Slope (m/m)	0.016539	Area (m2)		30.30	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	20.97	Top Width (m)		20.97	
Vel Total (m/s)	5.33	Avg. Vel. (m/s)		5.33	
Max Chl Dpth (m)	2.37	Hydr. Depth (m)		1.45	
Conv. Total (m3/s)	1255.8	Conv. (m3/s)		1255.8	
Length Wtd. (m)	138.61	Wetted Per. (m)		21.86	
Min Ch El (m)	698.51	Shear (N/m2)		224.82	
Alpha	1.00	Stream Power (N/m s)		1198.10	
Frctn Loss (m)	3.56	Cum Volume (1000 m3)		16.42	0.00
C & E Loss (m)	0.20	Cum SA (1000 m2)		10.76	0.01

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=2

E.G. Elev (m)	695.65	Element	Left OB	Channel	Right OB
Vel Head (m)	1.99	Wt. n-Val.		0.030	
W.S. Elev (m)	693.66	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.11	Flow Area (m2)		3.06	
E.G. Slope (m/m)	0.137279	Area (m2)		3.06	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	8.33	Top Width (m)		8.33	
Vel Total (m/s)	6.25	Avg. Vel. (m/s)		6.25	
Max Chl Dpth (m)	0.49	Hydr. Depth (m)		0.37	
Conv. Total (m3/s)	51.5	Conv. (m3/s)		51.5	
Length Wtd. (m)	244.93	Wetted Per. (m)		8.50	
Min Ch El (m)	693.17	Shear (N/m2)		484.11	
Alpha	1.00	Stream Power (N/m s)		3023.53	
Frctn Loss (m)	7.85	Cum Volume (1000 m3)		2.85	
C & E Loss (m)	0.49	Cum SA (1000 m2)		5.20	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5

E.G. Elev (m)	696.19	Element	Left OB	Channel	Right OB
Vel Head (m)	2.30	Wt. n-Val.		0.030	
W.S. Elev (m)	693.89	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.46	Flow Area (m2)		5.08	
E.G. Slope (m/m)	0.095581	Area (m2)		5.08	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=5 (Continued)

Top Width (m)	9.37	Top Width (m)		9.37	
Vel Total (m/s)	6.71	Avg. Vel. (m/s)		6.71	
Max Chl Dpth (m)	0.72	Hydr. Depth (m)		0.54	
Conv. Total (m3/s)	110.3	Conv. (m3/s)		110.3	
Length Wtd. (m)	244.93	Wetted Per. (m)		9.66	
Min Ch El (m)	693.17	Shear (N/m2)		492.95	
Alpha	1.00	Stream Power (N/m s)		3309.84	
Frctn Loss (m)	7.91	Cum Volume (1000 m3)		4.29	
C & E Loss (m)	0.52	Cum SA (1000 m2)		5.91	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=10

E.G. Elev (m)	696.62	Element	Left OB	Channel	Right OB
Vel Head (m)	2.55	Wt. n-Val.		0.030	
W.S. Elev (m)	694.07	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	694.73	Flow Area (m2)		6.85	
E.G. Slope (m/m)	0.080302	Area (m2)		6.85	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	10.19	Top Width (m)		10.19	
Vel Total (m/s)	7.08	Avg. Vel. (m/s)		7.08	
Max Chl Dpth (m)	0.90	Hydr. Depth (m)		0.67	
Conv. Total (m3/s)	171.1	Conv. (m3/s)		171.1	
Length Wtd. (m)	244.93	Wetted Per. (m)		10.56	
Min Ch El (m)	693.17	Shear (N/m2)		510.68	
Alpha	1.00	Stream Power (N/m s)		3614.11	
Frctn Loss (m)	7.98	Cum Volume (1000 m3)		5.51	
C & E Loss (m)	0.54	Cum SA (1000 m2)		6.42	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=25

E.G. Elev (m)	697.08	Element	Left OB	Channel	Right OB
Vel Head (m)	2.78	Wt. n-Val.		0.030	
W.S. Elev (m)	694.30	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.05	Flow Area (m2)		9.35	
E.G. Slope (m/m)	0.066431	Area (m2)		9.35	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	11.24	Top Width (m)		11.24	
Vel Total (m/s)	7.38	Avg. Vel. (m/s)		7.38	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.83	
Conv. Total (m3/s)	267.8	Conv. (m3/s)		267.8	
Length Wtd. (m)	244.93	Wetted Per. (m)		11.73	
Min Ch El (m)	693.17	Shear (N/m2)		519.14	
Alpha	1.00	Stream Power (N/m s)		3833.72	
Frctn Loss (m)	7.99	Cum Volume (1000 m3)		7.05	
C & E Loss (m)	0.52	Cum SA (1000 m2)		6.86	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50

E.G. Elev (m)	697.43	Element	Left OB	Channel	Right OB
Vel Head (m)	2.95	Wt. n-Val.		0.030	
W.S. Elev (m)	694.48	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.29	Flow Area (m2)		11.38	
E.G. Slope (m/m)	0.059807	Area (m2)		11.38	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	12.04	Top Width (m)		12.04	
Vel Total (m/s)	7.61	Avg. Vel. (m/s)		7.61	
Max Chl Dpth (m)	1.31	Hydr. Depth (m)		0.94	
Conv. Total (m3/s)	353.8	Conv. (m3/s)		353.8	
Length Wtd. (m)	244.93	Wetted Per. (m)		12.62	
Min Ch El (m)	693.17	Shear (N/m2)		528.67	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=50 (Continued)

Alpha	1.00	Stream Power (N/m s)		4021.52	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		8.28	
C & E Loss (m)	0.51	Cum SA (1000 m2)		7.19	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=100

E.G. Elev (m)	697.81	Element	Left OB	Channel	Right OB
Vel Head (m)	3.14	Wt. n-Val.		0.030	
W.S. Elev (m)	694.67	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	695.56	Flow Area (m2)		13.79	
E.G. Slope (m/m)	0.054370	Area (m2)		13.79	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	12.93	Top Width (m)		12.93	
Vel Total (m/s)	7.84	Avg. Vel. (m/s)		7.84	
Max Chl Dpth (m)	1.50	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	463.9	Conv. (m3/s)		463.9	
Length Wtd. (m)	244.93	Wetted Per. (m)		13.61	
Min Ch EI (m)	693.17	Shear (N/m2)		540.45	
Alpha	1.00	Stream Power (N/m s)		4238.68	
Frctn Loss (m)	8.00	Cum Volume (1000 m3)		9.71	
C & E Loss (m)	0.49	Cum SA (1000 m2)		7.55	

Plan: Plan 08 ArroyoPilarejo 1 RS: 656.6266 Profile: T=500

E.G. Elev (m)	698.57	Element	Left OB	Channel	Right OB
Vel Head (m)	3.48	Wt. n-Val.		0.030	
W.S. Elev (m)	695.09	Reach Len. (m)	197.15	244.93	280.26
Crit W.S. (m)	696.11	Flow Area (m2)		19.54	
E.G. Slope (m/m)	0.045041	Area (m2)		19.54	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	14.59	Top Width (m)		14.59	
Vel Total (m/s)	8.26	Avg. Vel. (m/s)		8.26	
Max Chl Dpth (m)	1.91	Hydr. Depth (m)		1.34	
Conv. Total (m3/s)	761.0	Conv. (m3/s)		761.0	
Length Wtd. (m)	244.93	Wetted Per. (m)		15.48	
Min Ch EI (m)	693.17	Shear (N/m2)		557.62	
Alpha	1.00	Stream Power (N/m s)		4607.86	
Frctn Loss (m)	7.93	Cum Volume (1000 m3)		12.97	0.00
C & E Loss (m)	0.42	Cum SA (1000 m2)		8.29	0.01

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=2

E.G. Elev (m)	687.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.		0.030	
W.S. Elev (m)	686.94	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	686.99	Flow Area (m2)		7.09	
E.G. Slope (m/m)	0.013932	Area (m2)		7.09	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	12.17	Top Width (m)		12.17	
Vel Total (m/s)	2.69	Avg. Vel. (m/s)		2.69	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.58	
Conv. Total (m3/s)	161.7	Conv. (m3/s)		161.7	
Length Wtd. (m)	141.09	Wetted Per. (m)		12.52	
Min Ch EI (m)	685.94	Shear (N/m2)		77.36	
Alpha	1.00	Stream Power (N/m s)		208.34	
Frctn Loss (m)	3.70	Cum Volume (1000 m3)		1.61	
C & E Loss (m)	0.12	Cum SA (1000 m2)		2.69	



Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=5

E.G. Elev (m)	687.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.58	Wt. n-Val.		0.030	
W.S. Elev (m)	687.18	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.31	Flow Area (m2)		10.12	
E.G. Slope (m/m)	0.016058	Area (m2)		10.12	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	13.74	Top Width (m)		13.74	
Vel Total (m/s)	3.37	Avg. Vel. (m/s)		3.37	
Max Chl Dpth (m)	1.24	Hydr. Depth (m)		0.74	
Conv. Total (m3/s)	269.1	Conv. (m3/s)		269.1	
Length Wtd. (m)	141.09	Wetted Per. (m)		14.20	
Min Ch El (m)	685.94	Shear (N/m2)		112.23	
Alpha	1.00	Stream Power (N/m s)		378.23	
Frctn Loss (m)	3.62	Cum Volume (1000 m3)		2.43	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.08	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=10

E.G. Elev (m)	688.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.76	Wt. n-Val.		0.030	
W.S. Elev (m)	687.35	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.54	Flow Area (m2)		12.53	
E.G. Slope (m/m)	0.017534	Area (m2)		12.53	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	14.73	Top Width (m)		14.73	
Vel Total (m/s)	3.87	Avg. Vel. (m/s)		3.87	
Max Chl Dpth (m)	1.41	Hydr. Depth (m)		0.85	
Conv. Total (m3/s)	366.1	Conv. (m3/s)		366.1	
Length Wtd. (m)	141.09	Wetted Per. (m)		15.27	
Min Ch El (m)	685.94	Shear (N/m2)		141.08	
Alpha	1.00	Stream Power (N/m s)		545.74	
Frctn Loss (m)	3.56	Cum Volume (1000 m3)		3.14	
C & E Loss (m)	0.11	Cum SA (1000 m2)		3.37	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=25

E.G. Elev (m)	688.56	Element	Left OB	Channel	Right OB
Vel Head (m)	1.03	Wt. n-Val.		0.030	
W.S. Elev (m)	687.53	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	687.82	Flow Area (m2)		15.35	
E.G. Slope (m/m)	0.019339	Area (m2)		15.35	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	15.40	Top Width (m)		15.40	
Vel Total (m/s)	4.50	Avg. Vel. (m/s)		4.50	
Max Chl Dpth (m)	1.59	Hydr. Depth (m)		1.00	
Conv. Total (m3/s)	496.4	Conv. (m3/s)		496.4	
Length Wtd. (m)	141.09	Wetted Per. (m)		16.05	
Min Ch El (m)	685.94	Shear (N/m2)		181.30	
Alpha	1.00	Stream Power (N/m s)		815.54	
Frctn Loss (m)	3.51	Cum Volume (1000 m3)		4.03	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.60	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50

E.G. Elev (m)	688.92	Element	Left OB	Channel	Right OB
Vel Head (m)	1.25	Wt. n-Val.		0.030	
W.S. Elev (m)	687.67	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	688.03	Flow Area (m2)		17.50	
E.G. Slope (m/m)	0.020534	Area (m2)		17.50	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=50 (Continued)

Top Width (m)	15.90	Top Width (m)		15.90	
Vel Total (m/s)	4.94	Avg. Vel. (m/s)		4.94	
Max Chl Dpth (m)	1.73	Hydr. Depth (m)		1.10	
Conv. Total (m3/s)	603.8	Conv. (m3/s)		603.8	
Length Wtd. (m)	141.09	Wetted Per. (m)		16.63	
Min Ch El (m)	685.94	Shear (N/m2)		212.00	
Alpha	1.00	Stream Power (N/m s)		1047.94	
Frctn Loss (m)	3.48	Cum Volume (1000 m3)		4.74	
C & E Loss (m)	0.10	Cum SA (1000 m2)		3.77	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=100

E.G. Elev (m)	689.32	Element	Left OB	Channel	Right OB
Vel Head (m)	1.50	Wt. n-Val.		0.030	
W.S. Elev (m)	687.82	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	688.27	Flow Area (m2)		19.97	
E.G. Slope (m/m)	0.021752	Area (m2)		19.97	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	16.45	Top Width (m)		16.45	
Vel Total (m/s)	5.42	Avg. Vel. (m/s)		5.42	
Max Chl Dpth (m)	1.88	Hydr. Depth (m)		1.21	
Conv. Total (m3/s)	733.5	Conv. (m3/s)		733.5	
Length Wtd. (m)	141.09	Wetted Per. (m)		17.26	
Min Ch El (m)	685.94	Shear (N/m2)		246.76	
Alpha	1.00	Stream Power (N/m s)		1336.82	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		5.58	
C & E Loss (m)	0.09	Cum SA (1000 m2)		3.95	

Plan: Plan 08 ArroyoPilarejo 1 RS: 411.7011 Profile: T=500

E.G. Elev (m)	690.22	Element	Left OB	Channel	Right OB
Vel Head (m)	2.09	Wt. n-Val.		0.030	0.000
W.S. Elev (m)	688.13	Reach Len. (m)	111.53	141.09	161.93
Crit W.S. (m)	688.78	Flow Area (m2)		25.25	0.00
E.G. Slope (m/m)	0.024369	Area (m2)		25.25	0.00
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	0.00
Top Width (m)	17.57	Top Width (m)		17.53	0.04
Vel Total (m/s)	6.40	Avg. Vel. (m/s)		6.40	0.17
Max Chl Dpth (m)	2.19	Hydr. Depth (m)		1.44	0.01
Conv. Total (m3/s)	1034.5	Conv. (m3/s)		1034.5	0.0
Length Wtd. (m)	141.09	Wetted Per. (m)		18.52	0.04
Min Ch El (m)	685.94	Shear (N/m2)		325.73	
Alpha	1.00	Stream Power (N/m s)		2083.62	
Frctn Loss (m)	3.46	Cum Volume (1000 m3)		7.48	0.00
C & E Loss (m)	0.06	Cum SA (1000 m2)		4.36	0.00

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2

E.G. Elev (m)	683.50	Element	Left OB	Channel	Right OB
Vel Head (m)	1.52	Wt. n-Val.		0.030	
W.S. Elev (m)	681.98	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.41	Flow Area (m2)		3.49	
E.G. Slope (m/m)	0.066276	Area (m2)		3.49	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	6.60	Top Width (m)		6.60	
Vel Total (m/s)	5.46	Avg. Vel. (m/s)		5.46	
Max Chl Dpth (m)	0.80	Hydr. Depth (m)		0.53	
Conv. Total (m3/s)	74.2	Conv. (m3/s)		74.2	
Length Wtd. (m)	200.54	Wetted Per. (m)		6.88	
Min Ch El (m)	681.18	Shear (N/m2)		330.16	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=2 (Continued)

Alpha	1.00	Stream Power (N/m s)		1803.82	
Frctn Loss (m)	7.01	Cum Volume (1000 m3)		0.86	
C & E Loss (m)	0.24	Cum SA (1000 m2)		1.37	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=5

E.G. Elev (m)	684.03	Element	Left OB	Channel	Right OB
Vel Head (m)	1.72	Wt. n-Val.		0.030	
W.S. Elev (m)	682.31	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	682.83	Flow Area (m2)		5.88	
E.G. Slope (m/m)	0.047196	Area (m2)		5.88	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	7.71	Top Width (m)		7.71	
Vel Total (m/s)	5.80	Avg. Vel. (m/s)		5.80	
Max Chl Dpth (m)	1.13	Hydr. Depth (m)		0.76	
Conv. Total (m3/s)	157.0	Conv. (m3/s)		157.0	
Length Wtd. (m)	200.54	Wetted Per. (m)		8.19	
Min Ch El (m)	681.18	Shear (N/m2)		332.00	
Alpha	1.00	Stream Power (N/m s)		1926.57	
Frctn Loss (m)	6.89	Cum Volume (1000 m3)		1.31	
C & E Loss (m)	0.17	Cum SA (1000 m2)		1.57	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=10

E.G. Elev (m)	684.43	Element	Left OB	Channel	Right OB
Vel Head (m)	1.86	Wt. n-Val.		0.030	
W.S. Elev (m)	682.58	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.15	Flow Area (m2)		8.03	
E.G. Slope (m/m)	0.039524	Area (m2)		8.03	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	8.59	Top Width (m)		8.59	
Vel Total (m/s)	6.04	Avg. Vel. (m/s)		6.04	
Max Chl Dpth (m)	1.40	Hydr. Depth (m)		0.94	
Conv. Total (m3/s)	243.9	Conv. (m3/s)		243.9	
Length Wtd. (m)	200.54	Wetted Per. (m)		9.23	
Min Ch El (m)	681.18	Shear (N/m2)		337.03	
Alpha	1.00	Stream Power (N/m s)		2034.72	
Frctn Loss (m)	6.79	Cum Volume (1000 m3)		1.69	
C & E Loss (m)	0.10	Cum SA (1000 m2)		1.72	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=25

E.G. Elev (m)	684.95	Element	Left OB	Channel	Right OB
Vel Head (m)	2.05	Wt. n-Val.		0.030	
W.S. Elev (m)	682.89	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.54	Flow Area (m2)		10.87	
E.G. Slope (m/m)	0.033260	Area (m2)		10.87	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	9.30	Top Width (m)		9.30	
Vel Total (m/s)	6.35	Avg. Vel. (m/s)		6.35	
Max Chl Dpth (m)	1.71	Hydr. Depth (m)		1.17	
Conv. Total (m3/s)	378.5	Conv. (m3/s)		378.5	
Length Wtd. (m)	200.54	Wetted Per. (m)		10.19	
Min Ch El (m)	681.18	Shear (N/m2)		348.01	
Alpha	1.00	Stream Power (N/m s)		2209.08	
Frctn Loss (m)	6.65	Cum Volume (1000 m3)		2.18	
C & E Loss (m)	0.00	Cum SA (1000 m2)		1.86	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=50

E.G. Elev (m)	685.34	Element	Left OB	Channel	Right OB
Vel Head (m)	2.20	Wt. n-Val.		0.030	
W.S. Elev (m)	683.13	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	683.83	Flow Area (m2)		13.16	
E.G. Slope (m/m)	0.030223	Area (m2)		13.16	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	9.80	Top Width (m)		9.80	
Vel Total (m/s)	6.58	Avg. Vel. (m/s)		6.58	
Max Chl Dpth (m)	1.95	Hydr. Depth (m)		1.34	
Conv. Total (m3/s)	497.7	Conv. (m3/s)		497.7	
Length Wtd. (m)	200.54	Wetted Per. (m)		10.89	
Min Ch El (m)	681.18	Shear (N/m2)		358.24	
Alpha	1.00	Stream Power (N/m s)		2355.60	
Frctn Loss (m)	6.48	Cum Volume (1000 m3)		2.58	
C & E Loss (m)	0.02	Cum SA (1000 m2)		1.95	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=100

E.G. Elev (m)	685.77	Element	Left OB	Channel	Right OB
Vel Head (m)	2.37	Wt. n-Val.		0.030	
W.S. Elev (m)	683.40	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	684.17	Flow Area (m2)		15.86	
E.G. Slope (m/m)	0.027815	Area (m2)		15.86	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	10.37	Top Width (m)		10.37	
Vel Total (m/s)	6.82	Avg. Vel. (m/s)		6.82	
Max Chl Dpth (m)	2.22	Hydr. Depth (m)		1.53	
Conv. Total (m3/s)	648.6	Conv. (m3/s)		648.6	
Length Wtd. (m)	200.54	Wetted Per. (m)		11.67	
Min Ch El (m)	681.18	Shear (N/m2)		370.79	
Alpha	1.00	Stream Power (N/m s)		2529.49	
Frctn Loss (m)	6.30	Cum Volume (1000 m3)		3.05	
C & E Loss (m)	0.04	Cum SA (1000 m2)		2.06	

Plan: Plan 08 ArroyoPilarejo 1 RS: 270.6081 Profile: T=500

E.G. Elev (m)	686.70	Element	Left OB	Channel	Right OB
Vel Head (m)	2.73	Wt. n-Val.		0.030	
W.S. Elev (m)	683.97	Reach Len. (m)	140.11	200.54	233.97
Crit W.S. (m)	684.87	Flow Area (m2)		22.08	
E.G. Slope (m/m)	0.024685	Area (m2)		22.08	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	11.63	Top Width (m)		11.63	
Vel Total (m/s)	7.32	Avg. Vel. (m/s)		7.32	
Max Chl Dpth (m)	2.79	Hydr. Depth (m)		1.90	
Conv. Total (m3/s)	1027.9	Conv. (m3/s)		1027.9	
Length Wtd. (m)	200.54	Wetted Per. (m)		13.37	
Min Ch El (m)	681.18	Shear (N/m2)		399.63	
Alpha	1.00	Stream Power (N/m s)		2923.45	
Frctn Loss (m)	5.98	Cum Volume (1000 m3)		4.15	
C & E Loss (m)	0.09	Cum SA (1000 m2)		2.30	

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2

E.G. Elev (m)	676.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.72	Wt. n-Val.		0.030	
W.S. Elev (m)	675.53	Reach Len. (m)			
Crit W.S. (m)	675.73	Flow Area (m2)		5.07	
E.G. Slope (m/m)	0.021545	Area (m2)		5.07	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=2 (Continued)

Top Width (m)	7.03	Top Width (m)		7.03	
Vel Total (m/s)	3.77	Avg. Vel. (m/s)		3.77	
Max Chl Dpth (m)	1.09	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	130.1	Conv. (m3/s)		130.1	
Length Wtd. (m)		Wetted Per. (m)		7.50	
Min Ch El (m)	674.44	Shear (N/m2)		142.75	
Alpha	1.00	Stream Power (N/m s)		537.80	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=5

E.G. Elev (m)	676.97	Element	Left OB	Channel	Right OB
Vel Head (m)	1.16	Wt. n-Val.		0.030	
W.S. Elev (m)	675.81	Reach Len. (m)			
Crit W.S. (m)	676.17	Flow Area (m2)		7.14	
E.G. Slope (m/m)	0.026154	Area (m2)		7.14	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	7.93	Top Width (m)		7.93	
Vel Total (m/s)	4.77	Avg. Vel. (m/s)		4.77	
Max Chl Dpth (m)	1.37	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	210.9	Conv. (m3/s)		210.9	
Length Wtd. (m)		Wetted Per. (m)		8.57	
Min Ch El (m)	674.44	Shear (N/m2)		213.78	
Alpha	1.00	Stream Power (N/m s)		1020.68	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=10

E.G. Elev (m)	677.55	Element	Left OB	Channel	Right OB
Vel Head (m)	1.54	Wt. n-Val.		0.030	
W.S. Elev (m)	676.01	Reach Len. (m)			
Crit W.S. (m)	676.50	Flow Area (m2)		8.82	
E.G. Slope (m/m)	0.029352	Area (m2)		8.82	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	8.60	Top Width (m)		8.60	
Vel Total (m/s)	5.49	Avg. Vel. (m/s)		5.49	
Max Chl Dpth (m)	1.57	Hydr. Depth (m)		1.03	
Conv. Total (m3/s)	283.0	Conv. (m3/s)		283.0	
Length Wtd. (m)		Wetted Per. (m)		9.35	
Min Ch El (m)	674.44	Shear (N/m2)		271.57	
Alpha	1.00	Stream Power (N/m s)		1491.87	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25

E.G. Elev (m)	678.30	Element	Left OB	Channel	Right OB
Vel Head (m)	2.06	Wt. n-Val.		0.030	
W.S. Elev (m)	676.24	Reach Len. (m)			
Crit W.S. (m)	676.89	Flow Area (m2)		10.86	
E.G. Slope (m/m)	0.033076	Area (m2)		10.86	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	9.21	Top Width (m)		9.21	
Vel Total (m/s)	6.35	Avg. Vel. (m/s)		6.35	
Max Chl Dpth (m)	1.80	Hydr. Depth (m)		1.18	
Conv. Total (m3/s)	379.6	Conv. (m3/s)		379.6	
Length Wtd. (m)		Wetted Per. (m)		10.12	
Min Ch El (m)	674.44	Shear (N/m2)		348.11	

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=25 (Continued)

Alpha	1.00	Stream Power (N/m s)		2212.15	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=50

E.G. Elev (m)	678.84	Element	Left OB	Channel	Right OB
Vel Head (m)	2.42	Wt. n-Val.		0.030	
W.S. Elev (m)	676.42	Reach Len. (m)			
Crit W.S. (m)	677.18	Flow Area (m2)		12.55	
E.G. Slope (m/m)	0.034605	Area (m2)		12.55	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	9.67	Top Width (m)		9.67	
Vel Total (m/s)	6.89	Avg. Vel. (m/s)		6.89	
Max Chl Dpth (m)	1.98	Hydr. Depth (m)		1.30	
Conv. Total (m3/s)	465.2	Conv. (m3/s)		465.2	
Length Wtd. (m)		Wetted Per. (m)		10.71	
Min Ch El (m)	674.44	Shear (N/m2)		397.77	
Alpha	1.00	Stream Power (N/m s)		2742.03	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=100

E.G. Elev (m)	679.43	Element	Left OB	Channel	Right OB
Vel Head (m)	2.81	Wt. n-Val.		0.030	
W.S. Elev (m)	676.62	Reach Len. (m)			
Crit W.S. (m)	677.58	Flow Area (m2)		14.56	
E.G. Slope (m/m)	0.035722	Area (m2)		14.56	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	10.20	Top Width (m)		10.20	
Vel Total (m/s)	7.43	Avg. Vel. (m/s)		7.43	
Max Chl Dpth (m)	2.18	Hydr. Depth (m)		1.43	
Conv. Total (m3/s)	572.4	Conv. (m3/s)		572.4	
Length Wtd. (m)		Wetted Per. (m)		11.37	
Min Ch El (m)	674.44	Shear (N/m2)		448.56	
Alpha	1.00	Stream Power (N/m s)		3332.30	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 08 ArroyoPilarejo 1 RS: 70.07248 Profile: T=500

E.G. Elev (m)	680.64	Element	Left OB	Channel	Right OB
Vel Head (m)	3.58	Wt. n-Val.		0.030	
W.S. Elev (m)	677.06	Reach Len. (m)			
Crit W.S. (m)	678.20	Flow Area (m2)		19.27	
E.G. Slope (m/m)	0.036672	Area (m2)		19.27	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	11.33	Top Width (m)		11.33	
Vel Total (m/s)	8.38	Avg. Vel. (m/s)		8.38	
Max Chl Dpth (m)	2.62	Hydr. Depth (m)		1.70	
Conv. Total (m3/s)	843.3	Conv. (m3/s)		843.3	
Length Wtd. (m)		Wetted Per. (m)		12.81	
Min Ch El (m)	674.44	Shear (N/m2)		541.07	
Alpha	1.00	Stream Power (N/m s)		4534.92	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=2

E.G. Elev (m)	727.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.27	Wt. n-Val.		0.030	
W.S. Elev (m)	727.40	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.40	Flow Area (m2)		8.37	
E.G. Slope (m/m)	0.011346	Area (m2)		8.37	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	16.04	Top Width (m)		16.04	
Vel Total (m/s)	2.28	Avg. Vel. (m/s)		2.28	
Max Chl Dpth (m)	0.93	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	179.2	Conv. (m3/s)		179.2	
Length Wtd. (m)	224.66	Wetted Per. (m)		16.24	
Min Ch El (m)	726.47	Shear (N/m2)		57.31	
Alpha	1.00	Stream Power (N/m s)		130.77	
Frctn Loss (m)		Cum Volume (1000 m3)		4.92	
C & E Loss (m)		Cum SA (1000 m2)		10.45	

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=5

E.G. Elev (m)	728.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.36	Wt. n-Val.		0.030	
W.S. Elev (m)	727.66	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.66	Flow Area (m2)		12.79	
E.G. Slope (m/m)	0.010047	Area (m2)		12.79	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	17.64	Top Width (m)		17.64	
Vel Total (m/s)	2.67	Avg. Vel. (m/s)		2.67	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	340.2	Conv. (m3/s)		340.2	
Length Wtd. (m)	224.66	Wetted Per. (m)		17.93	
Min Ch El (m)	726.47	Shear (N/m2)		70.26	
Alpha	1.00	Stream Power (N/m s)		187.36	
Frctn Loss (m)	2.23	Cum Volume (1000 m3)		8.38	0.00
C & E Loss (m)	0.01	Cum SA (1000 m2)		14.44	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=10

E.G. Elev (m)	728.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.030	
W.S. Elev (m)	727.87	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	727.87	Flow Area (m2)		16.46	
E.G. Slope (m/m)	0.009453	Area (m2)		16.46	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	18.60	Top Width (m)		18.60	
Vel Total (m/s)	2.95	Avg. Vel. (m/s)		2.95	
Max Chl Dpth (m)	1.40	Hydr. Depth (m)		0.88	
Conv. Total (m3/s)	498.6	Conv. (m3/s)		498.6	
Length Wtd. (m)	224.66	Wetted Per. (m)		18.99	
Min Ch El (m)	726.47	Shear (N/m2)		80.34	
Alpha	1.00	Stream Power (N/m s)		236.70	
Frctn Loss (m)	6.52	Cum Volume (1000 m3)		8.40	
C & E Loss (m)	0.95	Cum SA (1000 m2)		14.25	

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=25

E.G. Elev (m)	728.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.53	Wt. n-Val.		0.030	
W.S. Elev (m)	728.12	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.12	Flow Area (m2)		21.33	
E.G. Slope (m/m)	0.008939	Area (m2)		21.33	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=25 (Continued)

Top Width (m)	20.00	Top Width (m)		20.00	
Vel Total (m/s)	3.24	Avg. Vel. (m/s)		3.24	
Max Chl Dpth (m)	1.65	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	730.1	Conv. (m3/s)		730.1	
Length Wtd. (m)	224.66	Wetted Per. (m)		20.49	
Min Ch El (m)	726.47	Shear (N/m2)		91.25	
Alpha	1.00	Stream Power (N/m s)		295.38	
Frctn Loss (m)	6.12	Cum Volume (1000 m3)		10.88	0.00
C & E Loss (m)	1.00	Cum SA (1000 m2)		15.86	0.01

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=50

E.G. Elev (m)	728.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.60	Wt. n-Val.		0.030	
W.S. Elev (m)	728.31	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.31	Flow Area (m2)		25.22	
E.G. Slope (m/m)	0.008620	Area (m2)		25.22	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	21.05	Top Width (m)		21.05	
Vel Total (m/s)	3.43	Avg. Vel. (m/s)		3.43	
Max Chl Dpth (m)	1.84	Hydr. Depth (m)		1.20	
Conv. Total (m3/s)	932.0	Conv. (m3/s)		932.0	
Length Wtd. (m)	224.66	Wetted Per. (m)		21.62	
Min Ch El (m)	726.47	Shear (N/m2)		98.65	
Alpha	1.00	Stream Power (N/m s)		338.40	
Frctn Loss (m)	5.87	Cum Volume (1000 m3)		12.84	0.00
C & E Loss (m)	1.02	Cum SA (1000 m2)		16.90	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=100

E.G. Elev (m)	729.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.030	
W.S. Elev (m)	728.51	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.51	Flow Area (m2)		29.49	
E.G. Slope (m/m)	0.008455	Area (m2)		29.49	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	21.87	Top Width (m)		21.87	
Vel Total (m/s)	3.67	Avg. Vel. (m/s)		3.67	
Max Chl Dpth (m)	2.04	Hydr. Depth (m)		1.35	
Conv. Total (m3/s)	1176.5	Conv. (m3/s)		1176.5	
Length Wtd. (m)	224.66	Wetted Per. (m)		22.53	
Min Ch El (m)	726.47	Shear (N/m2)		108.54	
Alpha	1.00	Stream Power (N/m s)		398.08	
Frctn Loss (m)	5.66	Cum Volume (1000 m3)		15.03	0.00
C & E Loss (m)	1.05	Cum SA (1000 m2)		17.73	0.08

Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=500

E.G. Elev (m)	729.79	Element	Left OB	Channel	Right OB
Vel Head (m)	0.80	Wt. n-Val.		0.030	
W.S. Elev (m)	728.99	Reach Len. (m)	213.53	224.66	236.59
Crit W.S. (m)	728.99	Flow Area (m2)		40.88	
E.G. Slope (m/m)	0.007977	Area (m2)		40.88	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	25.85	Top Width (m)		25.85	
Vel Total (m/s)	3.95	Avg. Vel. (m/s)		3.95	
Max Chl Dpth (m)	2.52	Hydr. Depth (m)		1.58	
Conv. Total (m3/s)	1808.2	Conv. (m3/s)		1808.2	
Length Wtd. (m)	224.66	Wetted Per. (m)		26.74	
Min Ch El (m)	726.47	Shear (N/m2)		119.59	



Plan: Plan 04 ArroyoValtierra 1 RS: 1034.385 Profile: T=500 (Continued)

Alpha	1.00	Stream Power (N/m s)		472.49	
Frctn Loss (m)	5.21	Cum Volume (1000 m3)	0.00	20.47	0.02
C & E Loss (m)	1.11	Cum SA (1000 m2)	0.04	20.36	0.15

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=2

E.G. Elev (m)	711.65	Element	Left OB	Channel	Right OB
Vel Head (m)	0.35	Wt. n-Val.		0.030	
W.S. Elev (m)	711.30	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.31	Flow Area (m2)		7.31	
E.G. Slope (m/m)	0.010548	Area (m2)		7.31	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	10.60	Top Width (m)		10.60	
Vel Total (m/s)	2.61	Avg. Vel. (m/s)		2.61	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	185.9	Conv. (m3/s)		185.9	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.97	
Min Ch EI (m)	709.98	Shear (N/m2)		68.93	
Alpha	1.00	Stream Power (N/m s)		180.02	
Frctn Loss (m)	5.49	Cum Volume (1000 m3)		3.16	
C & E Loss (m)	0.93	Cum SA (1000 m2)		7.46	

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=5

E.G. Elev (m)	712.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	711.65	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.66	Flow Area (m2)		11.33	
E.G. Slope (m/m)	0.009766	Area (m2)		11.33	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	12.48	Top Width (m)		12.48	
Vel Total (m/s)	3.01	Avg. Vel. (m/s)		3.01	
Max Chl Dpth (m)	1.67	Hydr. Depth (m)		0.91	
Conv. Total (m3/s)	345.1	Conv. (m3/s)		345.1	
Length Wtd. (m)	158.70	Wetted Per. (m)		12.98	
Min Ch EI (m)	709.98	Shear (N/m2)		83.62	
Alpha	1.00	Stream Power (N/m s)		251.63	
Frctn Loss (m)	4.91	Cum Volume (1000 m3)		5.67	0.00
C & E Loss (m)	1.00	Cum SA (1000 m2)		11.06	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=10

E.G. Elev (m)	720.84	Element	Left OB	Channel	Right OB
Vel Head (m)	9.96	Wt. n-Val.		0.030	
W.S. Elev (m)	710.88	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	711.92	Flow Area (m2)		3.47	
E.G. Slope (m/m)	0.472899	Area (m2)		3.47	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	7.02	Top Width (m)		7.02	
Vel Total (m/s)	13.98	Avg. Vel. (m/s)		13.98	
Max Chl Dpth (m)	0.90	Hydr. Depth (m)		0.49	
Conv. Total (m3/s)	70.5	Conv. (m3/s)		70.5	
Length Wtd. (m)	158.70	Wetted Per. (m)		7.29	
Min Ch EI (m)	709.98	Shear (N/m2)		2207.83	
Alpha	1.00	Stream Power (N/m s)		30856.88	
Frctn Loss (m)	19.99	Cum Volume (1000 m3)		6.16	
C & E Loss (m)	2.37	Cum SA (1000 m2)		11.38	

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=25

E.G. Elev (m)	721.53	Element	Left OB	Channel	Right OB
Vel Head (m)	10.48	Wt. n-Val.		0.030	
W.S. Elev (m)	711.05	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.23	Flow Area (m2)		4.81	
E.G. Slope (m/m)	0.422741	Area (m2)		4.81	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	8.64	Top Width (m)		8.64	
Vel Total (m/s)	14.34	Avg. Vel. (m/s)		14.34	
Max Chl Dpth (m)	1.07	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	106.2	Conv. (m3/s)		106.2	
Length Wtd. (m)	158.70	Wetted Per. (m)		8.94	
Min Ch El (m)	709.98	Shear (N/m2)		2231.19	
Alpha	1.00	Stream Power (N/m s)		31995.31	
Frctn Loss (m)	19.99	Cum Volume (1000 m3)		7.94	0.00
C & E Loss (m)	2.38	Cum SA (1000 m2)		12.64	0.01

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=50

E.G. Elev (m)	722.02	Element	Left OB	Channel	Right OB
Vel Head (m)	10.85	Wt. n-Val.		0.030	
W.S. Elev (m)	711.17	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.45	Flow Area (m2)		5.93	
E.G. Slope (m/m)	0.389961	Area (m2)		5.93	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	9.79	Top Width (m)		9.79	
Vel Total (m/s)	14.58	Avg. Vel. (m/s)		14.58	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.61	
Conv. Total (m3/s)	138.6	Conv. (m3/s)		138.6	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.12	
Min Ch El (m)	709.98	Shear (N/m2)		2242.79	
Alpha	1.00	Stream Power (N/m s)		32710.08	
Frctn Loss (m)	19.95	Cum Volume (1000 m3)		9.34	0.00
C & E Loss (m)	2.37	Cum SA (1000 m2)		13.44	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=100

E.G. Elev (m)	722.49	Element	Left OB	Channel	Right OB
Vel Head (m)	11.18	Wt. n-Val.		0.030	
W.S. Elev (m)	711.30	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	712.71	Flow Area (m2)		7.31	
E.G. Slope (m/m)	0.339243	Area (m2)		7.31	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	10.59	Top Width (m)		10.59	
Vel Total (m/s)	14.81	Avg. Vel. (m/s)		14.81	
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.69	
Conv. Total (m3/s)	185.7	Conv. (m3/s)		185.7	
Length Wtd. (m)	158.70	Wetted Per. (m)		10.97	
Min Ch El (m)	709.98	Shear (N/m2)		2216.12	
Alpha	1.00	Stream Power (N/m s)		32817.59	
Frctn Loss (m)	19.84	Cum Volume (1000 m3)		10.90	0.00
C & E Loss (m)	2.32	Cum SA (1000 m2)		14.08	0.08

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=500

E.G. Elev (m)	723.47	Element	Left OB	Channel	Right OB
Vel Head (m)	11.88	Wt. n-Val.		0.030	
W.S. Elev (m)	711.59	Reach Len. (m)	180.52	158.70	131.39
Crit W.S. (m)	713.26	Flow Area (m2)		10.58	
E.G. Slope (m/m)	0.265444	Area (m2)		10.58	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	

Plan: Plan 04 ArroyoValtierra 1 RS: 809.7249 Profile: T=500 (Continued)

Top Width (m)	12.15	Top Width (m)		12.15	
Vel Total (m/s)	15.26	Avg. Vel. (m/s)		15.26	
Max Chl Dpth (m)	1.61	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	313.5	Conv. (m3/s)		313.5	
Length Wtd. (m)	158.70	Wetted Per. (m)		12.63	
Min Ch El (m)	709.98	Shear (N/m2)		2181.21	
Alpha	1.00	Stream Power (N/m s)		33294.45	
Frctn Loss (m)	19.75	Cum Volume (1000 m3)	0.00	14.69	0.02
C & E Loss (m)	2.29	Cum SA (1000 m2)	0.04	16.09	0.15

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=2

E.G. Elev (m)	704.95	Element	Left OB	Channel	Right OB
Vel Head (m)	9.33	Wt. n-Val.		0.030	
W.S. Elev (m)	695.63	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.38	Flow Area (m2)		1.41	
E.G. Slope (m/m)	0.996366	Area (m2)		1.41	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	5.35	Top Width (m)		5.35	
Vel Total (m/s)	13.53	Avg. Vel. (m/s)		13.53	
Max Chl Dpth (m)	0.40	Hydr. Depth (m)		0.26	
Conv. Total (m3/s)	19.1	Conv. (m3/s)		19.1	
Length Wtd. (m)	167.86	Wetted Per. (m)		5.45	
Min Ch El (m)	695.23	Shear (N/m2)		2532.33	
Alpha	1.00	Stream Power (N/m s)		34250.60	
Frctn Loss (m)	13.95	Cum Volume (1000 m3)		2.47	
C & E Loss (m)	2.66	Cum SA (1000 m2)		6.20	

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=5

E.G. Elev (m)	706.21	Element	Left OB	Channel	Right OB
Vel Head (m)	10.42	Wt. n-Val.		0.030	
W.S. Elev (m)	695.79	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	696.75	Flow Area (m2)		2.39	
E.G. Slope (m/m)	0.699685	Area (m2)		2.39	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	6.35	Top Width (m)		6.35	
Vel Total (m/s)	14.30	Avg. Vel. (m/s)		14.30	
Max Chl Dpth (m)	0.56	Hydr. Depth (m)		0.38	
Conv. Total (m3/s)	40.8	Conv. (m3/s)		40.8	
Length Wtd. (m)	167.86	Wetted Per. (m)		6.50	
Min Ch El (m)	695.23	Shear (N/m2)		2519.19	
Alpha	1.00	Stream Power (N/m s)		36015.43	
Frctn Loss (m)	14.53	Cum Volume (1000 m3)		4.58	0.00
C & E Loss (m)	2.90	Cum SA (1000 m2)		9.56	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=10

E.G. Elev (m)	698.48	Element	Left OB	Channel	Right OB
Vel Head (m)	2.05	Wt. n-Val.		0.030	
W.S. Elev (m)	696.42	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.03	Flow Area (m2)		7.64	
E.G. Slope (m/m)	0.057195	Area (m2)		7.64	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	10.40	Top Width (m)		10.40	
Vel Total (m/s)	6.35	Avg. Vel. (m/s)		6.35	
Max Chl Dpth (m)	1.19	Hydr. Depth (m)		0.73	
Conv. Total (m3/s)	202.7	Conv. (m3/s)		202.7	
Length Wtd. (m)	167.86	Wetted Per. (m)		10.76	
Min Ch El (m)	695.23	Shear (N/m2)		398.35	

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=10 (Continued)

Alpha	1.00	Stream Power (N/m s)		2527.83	
Frctn Loss (m)	8.90	Cum Volume (1000 m3)		5.28	
C & E Loss (m)	0.24	Cum SA (1000 m2)		9.99	

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=25

E.G. Elev (m)	699.17	Element	Left OB	Channel	Right OB
Vel Head (m)	2.55	Wt. n-Val.		0.030	
W.S. Elev (m)	696.62	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.35	Flow Area (m2)		9.76	
E.G. Slope (m/m)	0.059554	Area (m2)		9.76	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	11.61	Top Width (m)		11.61	
Vel Total (m/s)	7.08	Avg. Vel. (m/s)		7.08	
Max Chl Dpth (m)	1.39	Hydr. Depth (m)		0.84	
Conv. Total (m3/s)	282.9	Conv. (m3/s)		282.9	
Length Wtd. (m)	167.86	Wetted Per. (m)		12.03	
Min Ch El (m)	695.23	Shear (N/m2)		473.77	
Alpha	1.00	Stream Power (N/m s)		3352.17	
Frctn Loss (m)	9.08	Cum Volume (1000 m3)		6.79	0.00
C & E Loss (m)	0.30	Cum SA (1000 m2)		11.03	0.01

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=50

E.G. Elev (m)	699.69	Element	Left OB	Channel	Right OB
Vel Head (m)	2.94	Wt. n-Val.		0.030	
W.S. Elev (m)	696.75	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.56	Flow Area (m2)		11.39	
E.G. Slope (m/m)	0.061283	Area (m2)		11.39	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	12.43	Top Width (m)		12.43	
Vel Total (m/s)	7.60	Avg. Vel. (m/s)		7.60	
Max Chl Dpth (m)	1.52	Hydr. Depth (m)		0.92	
Conv. Total (m3/s)	349.5	Conv. (m3/s)		349.5	
Length Wtd. (m)	167.86	Wetted Per. (m)		12.90	
Min Ch El (m)	695.23	Shear (N/m2)		530.80	
Alpha	1.00	Stream Power (N/m s)		4032.17	
Frctn Loss (m)	9.21	Cum Volume (1000 m3)		7.97	0.00
C & E Loss (m)	0.34	Cum SA (1000 m2)		11.67	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=100

E.G. Elev (m)	700.33	Element	Left OB	Channel	Right OB
Vel Head (m)	3.44	Wt. n-Val.		0.030	
W.S. Elev (m)	696.89	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	697.79	Flow Area (m2)		13.18	
E.G. Slope (m/m)	0.064409	Area (m2)		13.18	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	13.27	Top Width (m)		13.27	
Vel Total (m/s)	8.21	Avg. Vel. (m/s)		8.21	
Max Chl Dpth (m)	1.66	Hydr. Depth (m)		0.99	
Conv. Total (m3/s)	426.3	Conv. (m3/s)		426.3	
Length Wtd. (m)	167.86	Wetted Per. (m)		13.79	
Min Ch El (m)	695.23	Shear (N/m2)		603.75	
Alpha	1.00	Stream Power (N/m s)		4956.14	
Frctn Loss (m)	9.41	Cum Volume (1000 m3)		9.27	0.00
C & E Loss (m)	0.42	Cum SA (1000 m2)		12.19	0.08

Plan: Plan 04 ArroyoValtierra 1 RS: 651.0296 Profile: T=500

E.G. Elev (m)	701.43	Element	Left OB	Channel	Right OB
Vel Head (m)	4.23	Wt. n-Val.		0.030	
W.S. Elev (m)	697.20	Reach Len. (m)	144.84	167.86	192.59
Crit W.S. (m)	698.31	Flow Area (m2)		17.73	
E.G. Slope (m/m)	0.071925	Area (m2)		17.73	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	16.61	Top Width (m)		16.61	
Vel Total (m/s)	9.11	Avg. Vel. (m/s)		9.11	
Max Chl Dpth (m)	1.97	Hydr. Depth (m)		1.07	
Conv. Total (m3/s)	602.2	Conv. (m3/s)		602.2	
Length Wtd. (m)	167.86	Wetted Per. (m)		17.23	
Min Ch El (m)	695.23	Shear (N/m2)		725.68	
Alpha	1.00	Stream Power (N/m s)		6611.51	
Frctn Loss (m)	9.79	Cum Volume (1000 m3)	0.00	12.45	0.02
C & E Loss (m)	0.57	Cum SA (1000 m2)	0.04	13.80	0.15

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=2

E.G. Elev (m)	688.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.030	
W.S. Elev (m)	687.88	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.02	Flow Area (m2)		6.34	
E.G. Slope (m/m)	0.028379	Area (m2)		6.34	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	16.02	Top Width (m)		16.02	
Vel Total (m/s)	3.01	Avg. Vel. (m/s)		3.01	
Max Chl Dpth (m)	0.79	Hydr. Depth (m)		0.40	
Conv. Total (m3/s)	113.3	Conv. (m3/s)		113.3	
Length Wtd. (m)	236.65	Wetted Per. (m)		16.16	
Min Ch El (m)	687.09	Shear (N/m2)		109.21	
Alpha	1.00	Stream Power (N/m s)		328.70	
Frctn Loss (m)	12.84	Cum Volume (1000 m3)		1.82	
C & E Loss (m)	0.18	Cum SA (1000 m2)		4.40	

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=5

E.G. Elev (m)	688.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.74	Wt. n-Val.		0.030	
W.S. Elev (m)	688.04	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.27	Flow Area (m2)		8.96	
E.G. Slope (m/m)	0.031861	Area (m2)		8.96	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	17.31	Top Width (m)		17.31	
Vel Total (m/s)	3.81	Avg. Vel. (m/s)		3.81	
Max Chl Dpth (m)	0.95	Hydr. Depth (m)		0.52	
Conv. Total (m3/s)	191.0	Conv. (m3/s)		191.0	
Length Wtd. (m)	236.65	Wetted Per. (m)		17.50	
Min Ch El (m)	687.09	Shear (N/m2)		159.93	
Alpha	1.00	Stream Power (N/m s)		608.88	
Frctn Loss (m)	12.66	Cum Volume (1000 m3)		3.63	0.00
C & E Loss (m)	0.19	Cum SA (1000 m2)		7.58	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=10

E.G. Elev (m)	689.33	Element	Left OB	Channel	Right OB
Vel Head (m)	1.25	Wt. n-Val.		0.030	
W.S. Elev (m)	688.09	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.47	Flow Area (m2)		9.80	
E.G. Slope (m/m)	0.049276	Area (m2)		9.80	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=10 (Continued)

Top Width (m)	17.72	Top Width (m)		17.72	
Vel Total (m/s)	4.95	Avg. Vel. (m/s)		4.95	
Max Chl Dpth (m)	1.00	Hydr. Depth (m)		0.55	
Conv. Total (m3/s)	218.4	Conv. (m3/s)		218.4	
Length Wtd. (m)	236.65	Wetted Per. (m)		17.92	
Min Ch El (m)	687.09	Shear (N/m2)		264.21	
Alpha	1.00	Stream Power (N/m s)		1307.21	
Frctn Loss (m)	13.43	Cum Volume (1000 m3)		3.82	
C & E Loss (m)	0.10	Cum SA (1000 m2)		7.63	

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=25

E.G. Elev (m)	689.80	Element	Left OB	Channel	Right OB
Vel Head (m)	1.57	Wt. n-Val.		0.030	
W.S. Elev (m)	688.23	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.72	Flow Area (m2)		12.46	
E.G. Slope (m/m)	0.049301	Area (m2)		12.46	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	19.01	Top Width (m)		19.01	
Vel Total (m/s)	5.54	Avg. Vel. (m/s)		5.54	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.66	
Conv. Total (m3/s)	310.9	Conv. (m3/s)		310.9	
Length Wtd. (m)	236.65	Wetted Per. (m)		19.24	
Min Ch El (m)	687.09	Shear (N/m2)		313.14	
Alpha	1.00	Stream Power (N/m s)		1734.96	
Frctn Loss (m)	13.32	Cum Volume (1000 m3)		4.92	0.00
C & E Loss (m)	0.11	Cum SA (1000 m2)		8.47	0.01

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=50

E.G. Elev (m)	690.14	Element	Left OB	Channel	Right OB
Vel Head (m)	1.80	Wt. n-Val.		0.030	
W.S. Elev (m)	688.34	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	688.89	Flow Area (m2)		14.55	
E.G. Slope (m/m)	0.049412	Area (m2)		14.55	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	19.98	Top Width (m)		19.98	
Vel Total (m/s)	5.95	Avg. Vel. (m/s)		5.95	
Max Chl Dpth (m)	1.25	Hydr. Depth (m)		0.73	
Conv. Total (m3/s)	389.3	Conv. (m3/s)		389.3	
Length Wtd. (m)	236.65	Wetted Per. (m)		20.24	
Min Ch El (m)	687.09	Shear (N/m2)		348.39	
Alpha	1.00	Stream Power (N/m s)		2071.76	
Frctn Loss (m)	13.30	Cum Volume (1000 m3)		5.79	0.00
C & E Loss (m)	0.10	Cum SA (1000 m2)		8.95	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=100

E.G. Elev (m)	690.50	Element	Left OB	Channel	Right OB
Vel Head (m)	2.04	Wt. n-Val.		0.030	
W.S. Elev (m)	688.46	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	689.06	Flow Area (m2)		17.12	
E.G. Slope (m/m)	0.049193	Area (m2)		17.12	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	
Top Width (m)	21.39	Top Width (m)		21.39	
Vel Total (m/s)	6.32	Avg. Vel. (m/s)		6.32	
Max Chl Dpth (m)	1.37	Hydr. Depth (m)		0.80	
Conv. Total (m3/s)	487.8	Conv. (m3/s)		487.8	
Length Wtd. (m)	236.65	Wetted Per. (m)		21.67	
Min Ch El (m)	687.09	Shear (N/m2)		381.18	

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=100 (Continued)

Alpha	1.00	Stream Power (N/m s)		2408.63	
Frctn Loss (m)	13.11	Cum Volume (1000 m3)		6.73	0.00
C & E Loss (m)	0.12	Cum SA (1000 m2)		9.28	0.08

Plan: Plan 04 ArroyoValtierra 1 RS: 483.1662 Profile: T=500

E.G. Elev (m)	691.07	Element	Left OB	Channel	Right OB
Vel Head (m)	2.33	Wt. n-Val.		0.030	
W.S. Elev (m)	688.75	Reach Len. (m)	226.79	236.65	242.98
Crit W.S. (m)	689.42	Flow Area (m2)		23.90	
E.G. Slope (m/m)	0.048200	Area (m2)		23.90	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	26.61	Top Width (m)		26.61	
Vel Total (m/s)	6.76	Avg. Vel. (m/s)		6.76	
Max Chl Dpth (m)	1.66	Hydr. Depth (m)		0.90	
Conv. Total (m3/s)	735.6	Conv. (m3/s)		735.6	
Length Wtd. (m)	236.65	Wetted Per. (m)		26.94	
Min Ch El (m)	687.09	Shear (N/m2)		419.35	
Alpha	1.00	Stream Power (N/m s)		2833.53	
Frctn Loss (m)	12.58	Cum Volume (1000 m3)	0.00	8.95	0.02
C & E Loss (m)	0.16	Cum SA (1000 m2)	0.04	10.18	0.15

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=2

E.G. Elev (m)	675.32	Element	Left OB	Channel	Right OB
Vel Head (m)	2.30	Wt. n-Val.		0.030	
W.S. Elev (m)	673.02	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.53	Flow Area (m2)		2.84	
E.G. Slope (m/m)	0.142340	Area (m2)		2.84	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	7.07	Top Width (m)		7.07	
Vel Total (m/s)	6.72	Avg. Vel. (m/s)		6.72	
Max Chl Dpth (m)	0.62	Hydr. Depth (m)		0.40	
Conv. Total (m3/s)	50.6	Conv. (m3/s)		50.6	
Length Wtd. (m)	189.07	Wetted Per. (m)		7.29	
Min Ch El (m)	672.40	Shear (N/m2)		544.64	
Alpha	1.00	Stream Power (N/m s)		3657.34	
Frctn Loss (m)	12.71	Cum Volume (1000 m3)		0.73	
C & E Loss (m)	0.46	Cum SA (1000 m2)		1.67	

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=5

E.G. Elev (m)	675.93	Element	Left OB	Channel	Right OB
Vel Head (m)	2.66	Wt. n-Val.		0.030	
W.S. Elev (m)	673.26	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	673.91	Flow Area (m2)		4.72	
E.G. Slope (m/m)	0.107808	Area (m2)		4.72	
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	
Top Width (m)	8.45	Top Width (m)		8.45	
Vel Total (m/s)	7.23	Avg. Vel. (m/s)		7.23	
Max Chl Dpth (m)	0.86	Hydr. Depth (m)		0.56	
Conv. Total (m3/s)	103.9	Conv. (m3/s)		103.9	
Length Wtd. (m)	189.07	Wetted Per. (m)		8.79	
Min Ch El (m)	672.40	Shear (N/m2)		567.51	
Alpha	1.00	Stream Power (N/m s)		4102.57	
Frctn Loss (m)	2.10	Cum Volume (1000 m3)		2.01	0.00
C & E Loss (m)	0.07	Cum SA (1000 m2)		4.53	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=10

E.G. Elev (m)	675.80	Element	Left OB	Channel	Right OB
Vel Head (m)	2.26	Wt. n-Val.		0.030	
W.S. Elev (m)	673.54	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.16	Flow Area (m2)		7.28	
E.G. Slope (m/m)	0.066114	Area (m2)		7.28	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	10.16	Top Width (m)		10.16	
Vel Total (m/s)	6.66	Avg. Vel. (m/s)		6.66	
Max Chl Dpth (m)	1.14	Hydr. Depth (m)		0.72	
Conv. Total (m3/s)	188.5	Conv. (m3/s)		188.5	
Length Wtd. (m)	189.07	Wetted Per. (m)		10.64	
Min Ch El (m)	672.40	Shear (N/m2)		443.80	
Alpha	1.00	Stream Power (N/m s)		2954.36	
Frctn Loss (m)	12.74	Cum Volume (1000 m3)		1.79	
C & E Loss (m)	0.42	Cum SA (1000 m2)		4.33	

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=25

E.G. Elev (m)	676.37	Element	Left OB	Channel	Right OB
Vel Head (m)	2.62	Wt. n-Val.		0.030	
W.S. Elev (m)	673.75	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.46	Flow Area (m2)		9.63	
E.G. Slope (m/m)	0.064834	Area (m2)		9.63	
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	
Top Width (m)	11.83	Top Width (m)		11.83	
Vel Total (m/s)	7.17	Avg. Vel. (m/s)		7.17	
Max Chl Dpth (m)	1.35	Hydr. Depth (m)		0.81	
Conv. Total (m3/s)	271.1	Conv. (m3/s)		271.1	
Length Wtd. (m)	189.07	Wetted Per. (m)		12.41	
Min Ch El (m)	672.40	Shear (N/m2)		493.44	
Alpha	1.00	Stream Power (N/m s)		3536.90	
Frctn Loss (m)	12.96	Cum Volume (1000 m3)		2.31	0.00
C & E Loss (m)	0.45	Cum SA (1000 m2)		4.82	0.01

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=50

E.G. Elev (m)	676.74	Element	Left OB	Channel	Right OB
Vel Head (m)	2.83	Wt. n-Val.		0.030	
W.S. Elev (m)	673.91	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.69	Flow Area (m2)		11.61	
E.G. Slope (m/m)	0.064485	Area (m2)		11.61	
Q Total (m3/s)	86.53	Flow (m3/s)		86.53	
Top Width (m)	13.41	Top Width (m)		13.41	
Vel Total (m/s)	7.45	Avg. Vel. (m/s)		7.45	
Max Chl Dpth (m)	1.51	Hydr. Depth (m)		0.87	
Conv. Total (m3/s)	340.8	Conv. (m3/s)		340.8	
Length Wtd. (m)	189.07	Wetted Per. (m)		14.06	
Min Ch El (m)	672.40	Shear (N/m2)		522.21	
Alpha	1.00	Stream Power (N/m s)		3890.74	
Frctn Loss (m)	13.05	Cum Volume (1000 m3)		2.69	0.00
C & E Loss (m)	0.45	Cum SA (1000 m2)		5.00	0.04

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=100

E.G. Elev (m)	677.27	Element	Left OB	Channel	Right OB
Vel Head (m)	3.21	Wt. n-Val.		0.030	
W.S. Elev (m)	674.06	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	674.93	Flow Area (m2)		13.63	
E.G. Slope (m/m)	0.062858	Area (m2)		13.63	
Q Total (m3/s)	108.18	Flow (m3/s)		108.18	



Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=100 (Continued)

Top Width (m)	13.99	Top Width (m)		13.99	
Vel Total (m/s)	7.94	Avg. Vel. (m/s)		7.94	
Max Chl Dpth (m)	1.66	Hydr. Depth (m)		0.97	
Conv. Total (m3/s)	431.5	Conv. (m3/s)		431.5	
Length Wtd. (m)	189.07	Wetted Per. (m)		14.72	
Min Ch El (m)	672.40	Shear (N/m2)		570.60	
Alpha	1.00	Stream Power (N/m s)		4529.23	
Frctn Loss (m)	13.20	Cum Volume (1000 m3)		3.09	0.00
C & E Loss (m)	0.47	Cum SA (1000 m2)		5.09	0.08

Plan: Plan 04 ArroyoValtierra 1 RS: 246.5114 Profile: T=500

E.G. Elev (m)	678.33	Element	Left OB	Channel	Right OB
Vel Head (m)	3.95	Wt. n-Val.		0.030	
W.S. Elev (m)	674.38	Reach Len. (m)	175.05	189.07	200.74
Crit W.S. (m)	675.46	Flow Area (m2)		18.35	
E.G. Slope (m/m)	0.058922	Area (m2)		18.35	
Q Total (m3/s)	161.50	Flow (m3/s)		161.50	
Top Width (m)	15.25	Top Width (m)		15.25	
Vel Total (m/s)	8.80	Avg. Vel. (m/s)		8.80	
Max Chl Dpth (m)	1.98	Hydr. Depth (m)		1.20	
Conv. Total (m3/s)	665.3	Conv. (m3/s)		665.3	
Length Wtd. (m)	189.08	Wetted Per. (m)		16.17	
Min Ch El (m)	672.40	Shear (N/m2)		655.63	
Alpha	1.00	Stream Power (N/m s)		5771.13	
Frctn Loss (m)	13.40	Cum Volume (1000 m3)	0.00	3.95	0.02
C & E Loss (m)	0.47	Cum SA (1000 m2)	0.04	5.22	0.15

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=2

E.G. Elev (m)	662.15	Element	Left OB	Channel	Right OB
Vel Head (m)	0.78	Wt. n-Val.		0.030	
W.S. Elev (m)	661.38	Reach Len. (m)			
Crit W.S. (m)	661.74	Flow Area (m2)		4.90	
E.G. Slope (m/m)	0.039006	Area (m2)		4.90	
Q Total (m3/s)	19.09	Flow (m3/s)		19.09	
Top Width (m)	10.61	Top Width (m)		10.61	
Vel Total (m/s)	3.90	Avg. Vel. (m/s)		3.90	
Max Chl Dpth (m)	0.79	Hydr. Depth (m)		0.46	
Conv. Total (m3/s)	96.7	Conv. (m3/s)		96.7	
Length Wtd. (m)		Wetted Per. (m)		10.74	
Min Ch El (m)	660.59	Shear (N/m2)		174.36	
Alpha	1.00	Stream Power (N/m s)		679.89	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=5

E.G. Elev (m)	662.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.90	Reach Len. (m)			
Crit W.S. (m)	661.90	Flow Area (m2)		16.56	0.01
E.G. Slope (m/m)	0.012227	Area (m2)		16.56	0.01
Q Total (m3/s)	34.10	Flow (m3/s)		34.10	0.00
Top Width (m)	39.82	Top Width (m)		39.43	0.39
Vel Total (m/s)	2.06	Avg. Vel. (m/s)		2.06	0.34
Max Chl Dpth (m)	1.31	Hydr. Depth (m)		0.42	0.03
Conv. Total (m3/s)	308.4	Conv. (m3/s)		308.4	0.0
Length Wtd. (m)		Wetted Per. (m)		39.64	0.39
Min Ch El (m)	660.59	Shear (N/m2)		50.07	3.43

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=5 (Continued)

Alpha	1.00	Stream Power (N/m s)		103.12	1.18
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=10

E.G. Elev (m)	662.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.87	Wt. n-Val.		0.030	
W.S. Elev (m)	661.77	Reach Len. (m)			
Crit W.S. (m)	662.01	Flow Area (m2)		11.71	
E.G. Slope (m/m)	0.068686	Area (m2)		11.71	
Q Total (m3/s)	48.48	Flow (m3/s)		48.48	
Top Width (m)	35.66	Top Width (m)		35.66	
Vel Total (m/s)	4.14	Avg. Vel. (m/s)		4.14	
Max Chl Dpth (m)	1.18	Hydr. Depth (m)		0.33	
Conv. Total (m3/s)	185.0	Conv. (m3/s)		185.0	
Length Wtd. (m)		Wetted Per. (m)		35.86	
Min Ch El (m)	660.59	Shear (N/m2)		219.88	
Alpha	1.00	Stream Power (N/m s)		910.71	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=25

E.G. Elev (m)	662.97	Element	Left OB	Channel	Right OB
Vel Head (m)	1.11	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.85	Reach Len. (m)			
Crit W.S. (m)	662.16	Flow Area (m2)		14.77	0.00
E.G. Slope (m/m)	0.072534	Area (m2)		14.77	0.00
Q Total (m3/s)	69.03	Flow (m3/s)		69.03	0.00
Top Width (m)	39.20	Top Width (m)		39.12	0.08
Vel Total (m/s)	4.67	Avg. Vel. (m/s)		4.67	0.30
Max Chl Dpth (m)	1.26	Hydr. Depth (m)		0.38	0.01
Conv. Total (m3/s)	256.3	Conv. (m3/s)		256.3	0.0
Length Wtd. (m)		Wetted Per. (m)		39.33	0.08
Min Ch El (m)	660.59	Shear (N/m2)		267.16	4.37
Alpha	1.00	Stream Power (N/m s)		1248.53	1.32
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=50

E.G. Elev (m)	663.25	Element	Left OB	Channel	Right OB
Vel Head (m)	1.34	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.91	Reach Len. (m)			
Crit W.S. (m)	662.33	Flow Area (m2)		16.87	0.01
E.G. Slope (m/m)	0.074036	Area (m2)		16.87	0.01
Q Total (m3/s)	86.53	Flow (m3/s)		86.52	0.01
Top Width (m)	39.93	Top Width (m)		39.49	0.44
Vel Total (m/s)	5.12	Avg. Vel. (m/s)		5.13	0.93
Max Chl Dpth (m)	1.32	Hydr. Depth (m)		0.43	0.03
Conv. Total (m3/s)	318.0	Conv. (m3/s)		318.0	0.0
Length Wtd. (m)		Wetted Per. (m)		39.70	0.44
Min Ch El (m)	660.59	Shear (N/m2)		308.59	23.67
Alpha	1.00	Stream Power (N/m s)		1582.20	21.91
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=100

E.G. Elev (m)	663.60	Element	Left OB	Channel	Right OB
Vel Head (m)	1.64	Wt. n-Val.		0.030	0.030
W.S. Elev (m)	661.96	Reach Len. (m)			
Crit W.S. (m)	662.47	Flow Area (m2)		19.06	0.05
E.G. Slope (m/m)	0.077954	Area (m2)		19.06	0.05
Q Total (m3/s)	108.18	Flow (m3/s)		108.11	0.07
Top Width (m)	40.68	Top Width (m)		39.87	0.81
Vel Total (m/s)	5.66	Avg. Vel. (m/s)		5.67	1.42
Max Chl Dpth (m)	1.37	Hydr. Depth (m)		0.48	0.06
Conv. Total (m3/s)	387.5	Conv. (m3/s)		387.2	0.2
Length Wtd. (m)		Wetted Per. (m)		40.08	0.82
Min Ch El (m)	660.59	Shear (N/m2)		363.58	45.79
Alpha	1.00	Stream Power (N/m s)		2061.75	65.25
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 04 ArroyoValtierra 1 RS: 57.44248 Profile: T=500

E.G. Elev (m)	664.47	Element	Left OB	Channel	Right OB
Vel Head (m)	2.39	Wt. n-Val.	0.030	0.030	0.030
W.S. Elev (m)	662.07	Reach Len. (m)			
Crit W.S. (m)	662.66	Flow Area (m2)	0.02	23.47	0.18
E.G. Slope (m/m)	0.086841	Area (m2)	0.02	23.47	0.18
Q Total (m3/s)	161.50	Flow (m3/s)	0.03	161.06	0.41
Top Width (m)	42.03	Top Width (m)	0.48	40.00	1.54
Vel Total (m/s)	6.82	Avg. Vel. (m/s)	1.24	6.86	2.32
Max Chl Dpth (m)	1.48	Hydr. Depth (m)	0.05	0.59	0.12
Conv. Total (m3/s)	548.0	Conv. (m3/s)	0.1	546.5	1.4
Length Wtd. (m)		Wetted Per. (m)	0.49	40.22	1.56
Min Ch El (m)	660.59	Shear (N/m2)	38.29	497.10	97.45
Alpha	1.01	Stream Power (N/m s)	47.55	3410.59	225.64
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			