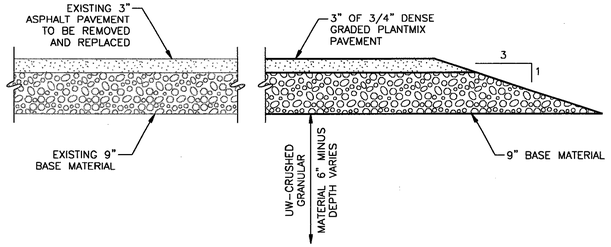
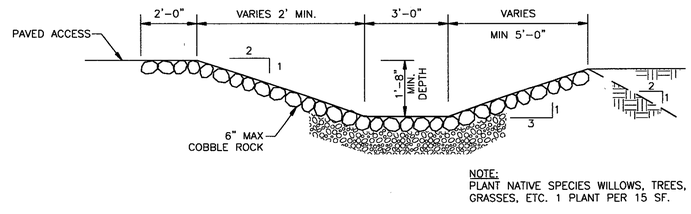


ASPHALT PAVING (1 -- TYP)

0 1 2 4 FT

SCALE: 3/4"=1'-0"

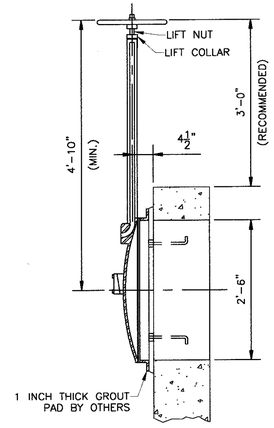


NOTE:
PLANT NATIVE SPECIES WILLOWS, TREES, GRASSES, ETC. 1 PLANT PER 15 SF.

DRAINAGE SWALE (2 -- TYP)

0 2 4 8 FT

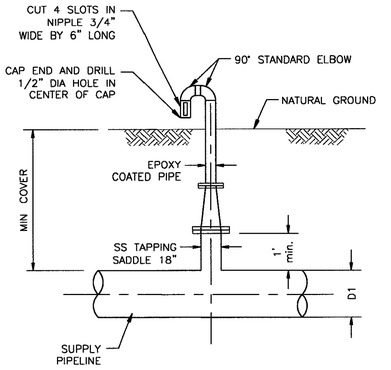
SCALE: 3/8"=1'-0"



WATERMAN C-10 CANAL GATE DETAIL (3 -- TYP)

0 1 2 4 FT

SCALE: 3/4"=1'-0"

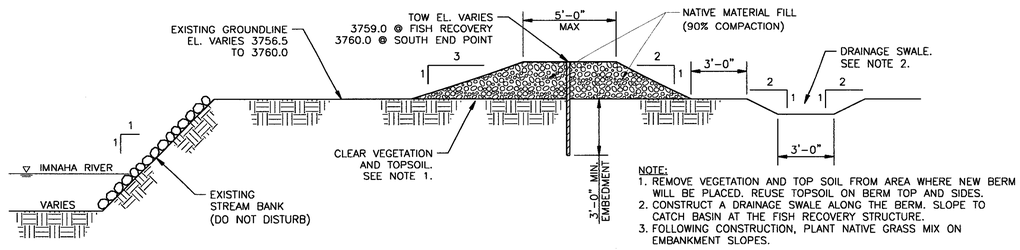


NOTE:
1. COVER SLOTS AND HOLES WITH 10 MESH BRASS OR STAINLESS SCREEN.

PIPE VENT (8 -- TYP)

0 1 2 4 6 FT

SCALE: 1/2"=1'-0"

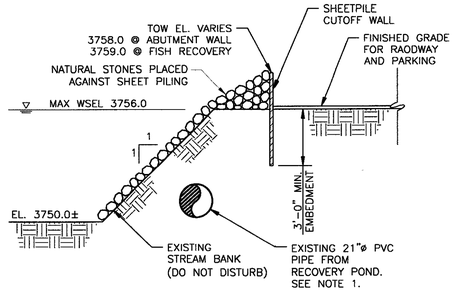


NOTE:
1. REMOVE VEGETATION AND TOP SOIL FROM AREA WHERE NEW BERM WILL BE PLACED. REUSE TOPSOIL ON BERM TOP AND SIDES.
2. CONSTRUCT A DRAINAGE SWALE ALONG THE BERM. SLOPE TO CATCH BASIN AT THE FISH RECOVERY STRUCTURE.
3. FOLLOWING CONSTRUCTION, PLANT NATIVE GRASS MIX ON EMBANKMENT SLOPES.

EMBANKMENT UPSTREAM OF FISH RECOVERY CHANNEL (4 -- TYP)

0 4 8 12 FT

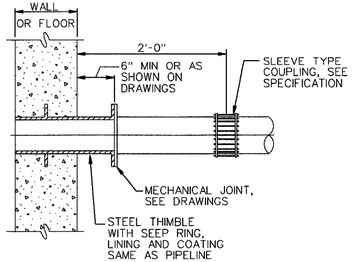
SCALE: 1/4"=1'-0"



EMBANKMENT DOWNSTREAM OF FISH RECOVERY CHANNEL (5 -- TYP)

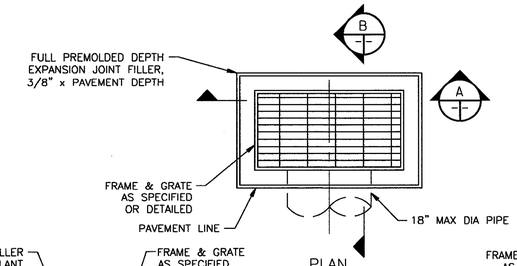
0 4 8 12 FT

SCALE: 1/4"=1'-0"

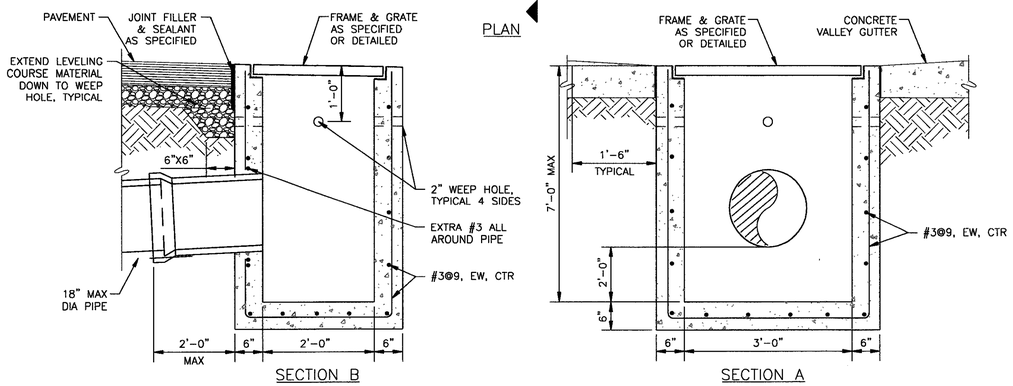


THIMBLE (6 -- TYP)

NO SCALE



PLAN



SECTION B

SECTION A

CATCH BASIN (7 -- TYP)

0 1 2 4 FT

SCALE: 3/4"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1992 MORTON D. McMILLEN
EXP. 12-31-06
Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

Design S. SPICKELMIER
Drawn R. GUERRERO
Chkd M. McMILLEN
Sub
Rec
Rec
Appr
Date

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY

STANDARD CIVIL DETAILS 1

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IMNAHA RIVER

EXISTING RIVER BANK (TYP)

REMOVE AND RESTORE EXISTING HYDRAULIC POWER SUPPLY AND CABLEWAY TOWER (13)

REMOVE AND REINSTALL GRATING ON FISH RELEASE CHANNEL FOLLOWING COMPLETION OF CHANNEL MODIFICATIONS (14)

REMOVE EXISTING FISHWAY WALL FOR DIFFUSER BOX (9)

RECOVERY SHELTER

21" PVC PIPE

12" PVC PIPE

REMOVE EXISTING FISH BARRIER (5)

REMOVE STORAGE STRUCTURE ON SOUTH SIDE OF SPAWNING SHELTER (11)

RELOCATE EXISTING 4" PVC DRAIN (7)

SAWCUT AND REMOVE EXISTING CONCRETE WALLS (3)

LOADING AREA

FLOW

RELOCATE EXISTING FISH LADDER WALLS FOR AUXILIARY WATER CHAMBER (6)

EXISTING FISH LADDER

EXISTING ACCLIMATION AND HOLDING POND

DEMOLISH EXISTING POND WALL FOR HOLDING EXTENSION (4)

RELOCATE EXISTING ELECTRICAL CONDUITS (12)

APPROXIMATE PERIMITER FENCE LOCATION

ELECTRICAL TOWER

15' TYP

CLEAR AND GRUB FOR NEW STRUCTURE. SEE NOTE 2.

APPROXIMATE PERIMITER FENCE LOCATION

100' POWER LINE EASEMENT

EXISTING RIVER BANK (TYP)

CATHODIC PROTECTION LINE

REMOVE EXISTING PERIMETER FENCE (8)

EXISTING PERIMETER FENCE

INSTALL SILT FENCE AROUND PERIMETER OF WORK AREA. SEE NOTE 5.

BUNKHOUSE

EXISTING SANITARY DRAINFIELD DO NOT DISTURB SEE NOTE 3

CULVERT

TO IMNAHA

APPROXIMATE PERIMITER FENCE LOCATION

CLEAR AND GRUB FOR NEW STRUCTURE. SEE NOTE 2.

STORAGE BUILDING

PROPANE FUEL TANKS

EXISTING FENCE

DEMOLITION OF EXISTING PIPE ENDS HERE

REMOVE WELL PUMP AND SEAL EXISTING WELL (10)

FLOW

REMOVE EXISTING 21" WATER SUPPLY PIPELINE (2)

REMOVE THE EXISTING INTAKE STRUCTURE (1)

APPROX. 1.2 MILES TO GUMBOOT CREEK ROAD

TO JOSEPH

0 15 30 60 90 FT

SCALE: 1"=30'

NOTES:

1. CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES DURING DEMOLITION AND CONSTRUCTION WORK ACTIVITIES. THE CONTRACTOR SHALL PROVIDE THE NECESSARY TEMPORARY SHORING AND SUPPORT REQUIRED TO PROTECT THE EXISTING STRUCTURES DURING CONSTRUCTION
2. CONTRACTOR SHALL REMOVE ROAD SURFACING, VEGETATION, AND DEBRIS TO THE EXTENT NECESSARY FOR CONSTRUCTION OF NEW FACILITIES AND MODIFICATIONS TO EXISTING FACILITIES. ALL DEMOLISHED MATERIALS INCLUDING CONCRETE, STEEL REINFORCEMENT, PIPING, AC PAVEMENT AND ASSOCIATED MATERIALS SHALL BE DISPOSED OF AT AN OFFSITE LOCATION AT THE CONTRACTOR'S EXPENSE.
3. THE EXISTING SANITARY DRAINFIELD IS LOCATED ON THE WEST SIDE OF THE EXISTING ACCLIMATION POND. CONTRACTOR SHALL PROTECT THE EXISTING FACILITIES DURING CONSTRUCTION TO PREVENT DAMAGE.
4. CONTRACTOR SHALL NOT DISTURB THE EXISTING TRANSMISSION TOWERS AND LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE WORKING CONDITIONS AT CONSTRUCTION AREAS NEAR THE TRANSMISSION LINES.
5. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL FACILITIES PRIOR TO INITIATION OF WORK ACTIVITIES. CONTRACTOR SHALL PREPARE AND SUBMIT A SITE EROSION AND SEDIMENT CONTROL PLAN TO THE ENGINEER FOR APPROVAL.

DEMOLITION WORK ELEMENTS:

(1) REMOVE THE EXISTING INTAKE STRUCTURE INCLUDING CONCRETE, STEEL, FISH SCREEN, PIPING AND GRATING. THE NEW INTAKE STRUCTURE WILL BE CONSTRUCTED AT THE SAME LOCATION AS EXISTING INTAKE. REMOVE AND SALVAGE EXISTING JIB CRANE. REMOVE EXISTING LIGHTPOLE AND REINSTALL FOLLOWING CONSTRUCTION OF NEW INTAKE.

(2) REMOVE THE EXISTING 21" DIA. PVC PIPELINE STRUCTURE FROM THE INTAKE TO THE EXISTING ACCESS GATE. THE NEW 30" DIA. HDPE PIPELINE WILL BE CONSTRUCTED IN THE SAME ALIGNMENT AS THE DEMOLISHED PIPELINE.

(3) SAWCUT AND REMOVE EXISTING ACCLIMATION POND WALLS FOR NEW HEADBOX CHANNEL AND JUVENILE FISH RELEASE FOR NEW ACCLIMATION POND.

(4) SAWCUT AND REMOVE THE EXISTING CONCRETE WALL IN THE NORTHWEST CORNER OF ACCLIMATION POND. DEMOLISHED WALL IS APPROXIMATELY 10' WIDE. REMOVE EXISTING CROWDER TRACK AND SUPPORTS FOR LATER INSTALLATION ON THE EAST END OF THE NEW CONCRETE HOLDING AREA EXTENSION.

(5) REMOVE THE EXISTING PICKETT FISH BARRIER INCLUDING TRIPODS, CROSS-SUPPORTS, AND ANCHOR RAILS EMBEDDED IN THE EXISTING CONCRETE APRON. CONTRACTOR SHALL MODIFY THE EXISTING CONCRETE APRON AND ABUTMENT WALLS TO THE LIMITS AND DIMENSIONS SHOWN ON SHEETS S11 AND S12 TO ALLOW INSTALLATION OF NEW FISH BARRIER.

(6) SAWCUT AND REMOVE THE EXISTING FISH LADDER WALLS TO ALLOW CONSTRUCTION OF A NEW AUXILIARY WATER SUPPLY CHAMBER AND DIFFUSER SCREEN. THE EXTENT OF THE WALL REMOVAL SHALL BE SHOWN ON SHEET S15.

(7) CUT AND REMOVE EXISTING 4" PVC PERFORATED DRAIN PIPE. INSTALL A TEMPORARY CAP ON THE EXISTING PVC DRAIN AT THE PENETRATION FROM THE SPAWNING SHELTER TO ALLOW INSTALLATION OF THE DRAIN LINE UPON COMPLETION OF THE NEW ACCLIMATION POND.

(8) REMOVE EXISTING PERIMETER FENCE TO ALLOW CONSTRUCTION OF THE NEW SEDIMENTATION BASIN. FOLLOWING CONSTRUCTION, THE PERIMETER FENCE SHALL BE REPLACED IN PLACE AND KIND. NEW FENCE SHALL MATCH VINYL COLOR OF EXISTING FENCE.

(9) REMOVE EXISTING FISHWAY WALL TO ALLOW CONSTRUCTION OF A NEW DIFFUSER BOX AT THE LADDER ENTRANCE.

(10) REMOVE THE EXISTING WELL PUMP, ELECTRICAL POWER CONDUIT AND WIRE, AND ASSOCIATED EQUIPMENT FROM THE EXISTING WELL. ONCE THE NEW WELL IS ON-LINE, FULLY TESTED, AND ACCEPTED, CONTRACTOR SHALL SEAL THE EXISTING WELL IN ACCORDANCE WITH THE STATE OF OREGON DEPARTMENT OF WATER RESOURCES REQUIREMENTS.

DEMOLITION WORK ELEMENTS (CONT.):

(11) REMOVE THE EXISTING STORAGE SHELTER FROM THE SOUTH SIDE OF THE SPAWNING SHELTER TO ALLOW CONSTRUCTION OF NEW ACCLIMATION POND. SALVAGE WOOD AND MATERIALS AND STOCKPILE IN A LOCATION DETERMINED BY THE OWNER.

(12) RELOCATE EXISTING ELECTRICAL CONDUITS, CABLES, LIGHTS AND SIDES OF THE EXISTING ACCLIMATION POND TO ALLOW CONSTRUCTION OF THE NEW POND AND PIPELINES. CONDUITS AND CABLES SHALL BE FIELD ROUTED OUTSIDE OF THE CONSTRUCTION AREA AND RECONNECTED TO HR3

(13) REMOVE AND/OR PROTECT THE EXISTING HYDRAULIC POWER SUPPLY AND CABLEWAY TOWER DURING CONSTRUCTION. FOLLOWING CONSTRUCTION OF THE NEW AUXILIARY WATER SUPPLY BOX, RE-INSTALL THE EQUIPMENT TO ITS ORIGINAL LOCATION AND GRADE.

REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1992 MORTON D. McMILLEN

EXP. 12-31-06

Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

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Design M. McMILLEN
Drawn R. GUERRERO
Chkd S. SPICKELMIER
Sub
Rec
Rec
Appr
Date

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
DEMOLITION AND CLEARING/GRUBBING PLAN

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NOTES:

1. CONSTRUCT A NEW 4' CONCRETE SIDEWALK AROUND THE PERIMETER OF THE ADULT HOLDING AREA EXTENSION. TIE THE NEW SIDEWALK TO THE EXISTING SIDEWALK ON THE NORTH AND SOUTH SIDES OF THE ADULT HOLDING AREA.
2. GRADE NEW ASPHALT PAVEMENT TO DRAIN FROM INSIDE CORNER AND AROUND CORNER OF NEW ACCLIMATION POND.
3. REMOVE ALL EXISTING ASPHALT PAVING ADD OR REMOVE BASE MATERIAL AS NECESSARY TO MATCH NEW GRADES.
4. PLACE NEW 3" OF 3/4" DENSE GRADED PLANTMIX PAVEMENT SECTION ON ALL AREAS TO BE PAVED, ACCESS ROAD AND MAIN HATCHERY AREAS.
5. INSTALL A SHEETPILE CUTOFF WALL FROM THE EXISTING WINGWALL TO THE FISH RECOVERY STRUCTURE. WALL SHALL SLOPE FROM EL. 3757.0 AT THE WINGWALL TO EL. 3759.0 AT THE FISH RECOVERY STRUCTURE. PROVIDE CONCRETE SEAL AT CONNECTION TO BOTH STRUCTURES.
6. INSTALL A SHEETPILE CUTOFF WALL FROM THE EXISTING FISH RECOVERY STRUCTURE TO THE EXISTING 3760.0 CONTOUR LOCATED APPROXIMATELY 200 FEET SOUTH OF THE FISH RECOVERY STRUCTURE.
7. INSTALL A NEW CATCH BASIN IN THE NEW DRAINAGE DITCH. INSTALL A NEW 12" STORM DRAIN FROM THE CATCH BASIN TO DAYLIGHT THROUGH THE EXISTING CONCRETE WALL. PIPE OUTFALL SHALL BE LOCATED ON THE DOWNSTREAM SIDE OF THE NEW OBERMEYER GATE. FIELD LOCATE CATCH BASIN AND STORM DRAIN AS REQUIRED TO FIT WITHIN THE NEW PROJECT FACILITIES.
8. CONTRACTOR SHALL PROTECT THE EXISTING 21" FISH RECOVERY DRAIN PIPE DURING CONSTRUCTION OF THE NEW SHEETPILE CUTOFF WALL.
9. CONTRACTOR SHALL REPAIR THE EXISTING ACCESS ROAD FOLLOWING CONSTRUCTION. ALL POTHOLES, DAMAGED SUBGRADE, AND DAMAGE TO THE EXISTING ROAD SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
S1	99504.71	99749.89	3765.0	SOUTHEAST CORNER INTAKE STRUCTURE, TOP OF WALL
S2	99525.96	99763.07	3765.0	NORTHEAST CORNER INTAKE STRUCTURE, TOP OF WALL
S3	99888.13	99978.58	3764.0	SOUTHEAST CORNER SEDIMENTATION BASIN, TOP OF WALL
S4	99988.05	99972.11	3762.0	NORTHEAST CORNER SEDIMENTATION BASIN, TOP OF WALL
S5	100117.32	99995.02	3758.0	SOUTHEAST CORNER NEW ACCLIMATION POND, TOP OF WALL
S6	100229.61	99993.36	3758.0	NORTHEAST CORNER NEW ACCLIMATION POND. TOP OF WALL
S7	99957.78	99908.18	3763.5	SOUTHEAST CORNER VEHICLE BUILDING, FINISHED FLOOR
S8	99997.73	99907.64	3763.5	NORTHEAST CORNER VEHICLE BUILDING, FINISHED FLOOR

0 10 20 40 60 FT
SCALE: 1"=20'

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REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1992 MORTON D. McMILLEN
EXP. 12-31-06
Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

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Drawn R. GUERRERO
Chkd S. SPICKELMIER
Sub
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HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
SITE PLAN
AND GRADING PLAN
NORTH

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ELECTRICAL TOWER

DRAINAGE SWALE

FG EL 3760.7

APPROXIMATE LOCATION OF PERIMTER FENCE

100' POWER LINE EASEMENT

FG EL 3761.3

GRADE BREAK

S4

FG EL 3761.6

FG EL 3762.2

S3

VEHICLE ACCESS RAMP

NEW SEDIMENTATION BASIN

FG EL 3762.9

REPLACE EXISTING PERIMTER FENCE. SEE NOTE 2

3762.5

.0

FG EL 3763.5

S8

S7

EXISTING FENCE. SEE NOTE 2

FG EL 3763.9

FG EL 3764.1

FG EL 3763.7

CONSTRUCT NEW VEHICLE PARKING BUILDING

STORAGE BUILDING

PROPANE FUEL TANKS

APPROXIMATE LOCATION OF PERIMTER FENCE

3765

3760

3770

3775

USDA FOREST SERVICE ROAD #3955

TO JOSEPH

MATCHLINE SHEET C2

CATHODIC PROTECTION LINE

3760

3770

3765

EXISTING RIVER BANK

A C3|C3

3760

EXISTING RIVER BANK

FLOW

3770

3765

EXISTING GRAVEL ACCESS ROAD. SEE NOTE 1.

3765

3760

3770

3765

3765

S2

S1

MODIFY EXISTING INTAKE STRUCTURE. SEE NOTE 3.

1 C3|S1

15'± MATCH EXISTING

2 1 1 3 1 3 1

12" - 3/4" MINUS ROCK

SECTION A C3|C3

NOTES:

1. APPROXIMATE LOCATION OF EXISTING GRAVEL ACCESS ROAD TO SURFACE WATER INTAKE. CONTRACTOR SHALL RE-CONSTRUCT ACCESS ROAD WITHIN THE SAME ALIGNMENT AND FOOTPRINT AS THE EXISTING ACCESS ROAD. SEE TYPICAL THIS SHEET.

2. CONTRACTOR SHALL REPLACE THE EXISTING PERIMETER FENCE ON THE SAME ALIGNMENT AND WITH SAME MATERIAL FOLLOWING CONSTRUCTION.

3. NEW INTAKE STRUCTURE IS LOCATED ON THE SAME FOOTPRINT AS THE EXISTING INTAKE STRUCTURE. THE LOCATION OF THE STRUCTURE CORNERS AND ALIGNMENT SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO INITIATING CONSTRUCTION ACTIVITIES. THE ENGINEER WILL MODIFY THE INTAKE ALIGNMENT WITH THE RIVER BANK IN THE FIELD IF REQUIRED.

0 10 20 40 60 FT

SCALE: 1"=20'

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EXP. 12-31-06

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NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
SITE PLAN
AND GRADING PLAN
SOUTH

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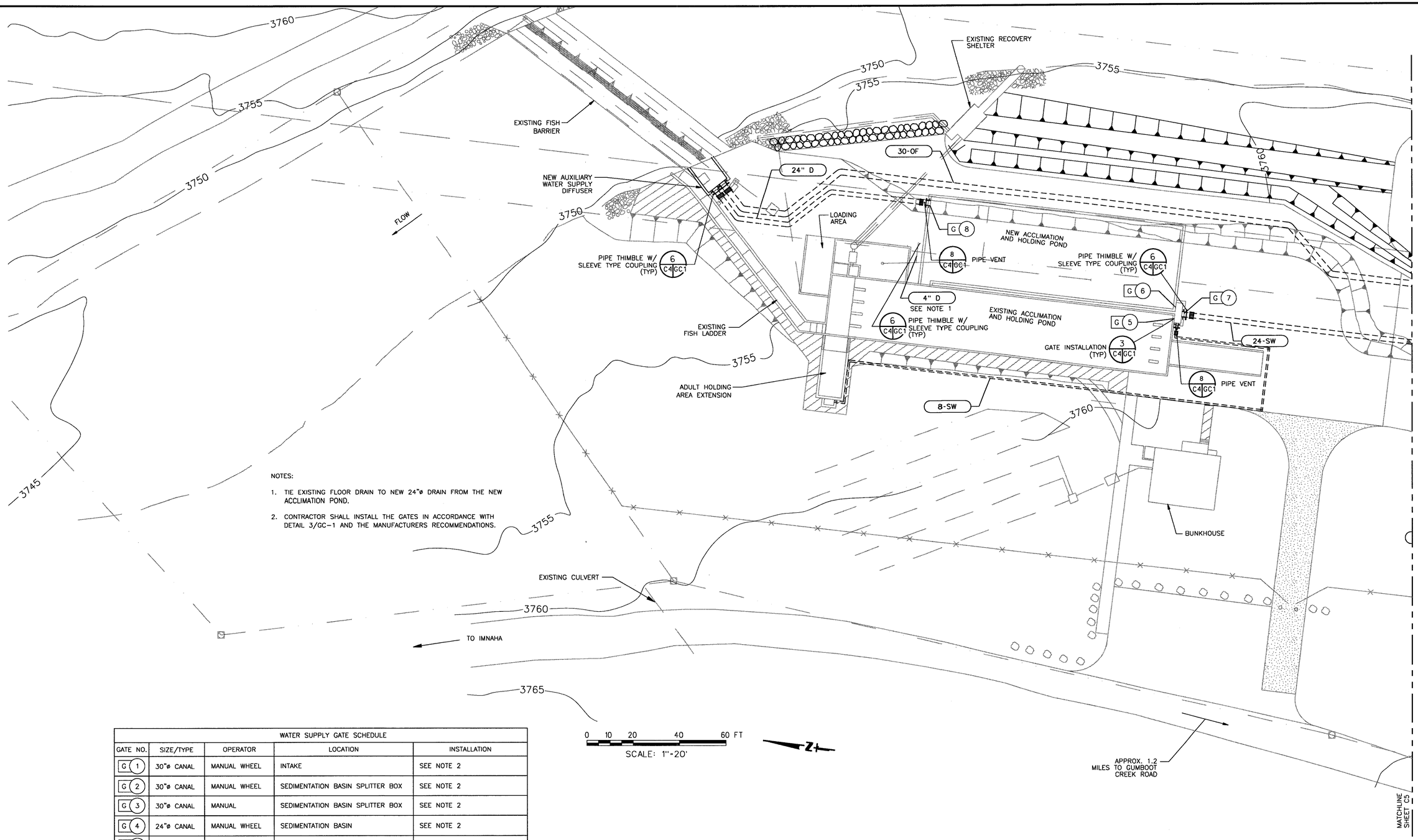

NOTES:

1. TIE EXISTING FLOOR DRAIN TO NEW 24"ø DRAIN FROM THE NEW ACCLIMATION POND.
2. CONTRACTOR SHALL INSTALL THE GATES IN ACCORDANCE WITH DETAIL 3/GC-1 AND THE MANUFACTURERS RECOMMENDATIONS.

WATER SUPPLY GATE SCHEDULE

GATE NO.	SIZE/TYPE	OPERATOR	LOCATION	INSTALLATION
G 1	30"ø CANAL	MANUAL WHEEL	INTAKE	SEE NOTE 2
G 2	30"ø CANAL	MANUAL WHEEL	SEDIMENTATION BASIN SPLITTER BOX	SEE NOTE 2
G 3	30"ø CANAL	MANUAL	SEDIMENTATION BASIN SPLITTER BOX	SEE NOTE 2
G 4	24"ø CANAL	MANUAL WHEEL	SEDIMENTATION BASIN	SEE NOTE 2
G 5	24"ø CANAL	MANUAL WHEEL	ACCLIMATION BASIN SPLITTER BOX	SEE NOTE 2
G 6	24"ø CANAL	MANUAL WHEEL	ACCLIMATION BASIN SPLITTER BOX	SEE NOTE 2
G 7	8"ø CANAL	MANUAL WHEEL	ACCLIMATION BASIN SPLITTER BOX	SEE NOTE 2
G 8	24"ø CANAL	MANUAL WHEEL	NEW ACCLIMATION POND DRAIN	SEE NOTE 2
G 9	12"ø SLIDE	MANUAL HANDLE	SEDIMENTATION BASIN	SEE NOTE 2
G 10	12"ø CANAL	MANUAL WHEEL	SEDIMENTATION BASIN	SEE NOTE 2

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NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY

YARD PIPING PLAN
NORTH

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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ELECTRICAL TOWER

PIPE THIMBLE W/ SLEEVE TYPE COUPLING (TYP) 6 C5 GC1

30-OF

8 C5 GC1 PIPE VENT

G 10

8 C5 GC1

G 2

6 C5 GC1 PIPE THIMBLE W/ SLEEVE TYPE COUPLING (TYP)

PIPE VENT

100' POWER LINE EASEMENT

3760

CATHODIC PROTECTION LINE

30-SW

G 9

NEW SEDIMENTATION BASIN

24-SW

G 3

8 C5 GC1 PIPE VENT

G 4

24-SW

GATE INSTALLATION. SEE DRAWING C4, WATER SUPPLY GATE SCHEDULE 3 C5 GC1

GATE INSTALLATION. SEE DRAWING C4, WATER SUPPLY GATE SCHEDULE 3 C5 GC1

EXISTING PERIMTER FENCE

VEHICLE ACCESS RAMP

1 C5 M3 AIR BACKWASH EQUIPMENT SKID

1 1/2 GW

1 C5 M15 AIR PIPING CONNECTIONS

EXISTING FENCE

1 1/2 GW

WELL INSTALLATION DETAIL 1 C5 M13

1-CA

1 1/2-LPA

STORAGE BUILDING

NEW VEHICLE PARKING BUILDING

PROPANE FUEL TANKS

APPROXIMATE LOCATION OF EXISTING DOMESTIC WELL SEE NOTE 2

TIE NEW DOMESTIC WATER LINE TO EXISTING LINE LOCATED ON THE EAST SIDE OF THE STORAGE BUILDING

1-CA

1 1/2-LPA

APPROXIMATE LOCATION OF NEW INTAKE WELL SEE NOTE 3

3-GW

1 1/2-LPA

3-GW

30-SW

FLOW

EXISTING GRAVEL ACCESS ROAD. SEE NOTE 1.

1-CA

BLOW OFF/DRAIN 3 C5 M15

3760

3765

3770

3775

MATCHLINE SHEET C4

TO JOSEPH

140' TOTAL LENGTH 12-CA

1 1/2-LPA

3-GW

PIPE VENT 8 C5 GC1

GATE INSTALLATION. SEE DRAWING C4, WATER SUPPLY GATE SCHEDULE 3 C5 GC1

G 1

6 C5 GC1 PIPE THIMBLE W/ SLEEVE TYPE COUPLING (TYP)

NOTES:

1. APPROXIMATE LOCATION OF EXISTING GRAVEL ACCESS ROAD TO SURFACE WATER INTAKE. CONTRACTOR SHALL RE-CONSTRUCT ACCESS ROAD WITHIN THE SAME ALIGNMENT AND FOOTPRINT AS THE EXISTING ACCESS ROAD.
2. FOLLOWING TESTING AND ACCEPTANCE OF THE NEW WELL, THE CONTRACTOR SHALL DECOMMISION THE EXISTING WELL IN ACCORDANCE WITH STATE OF OREGON STANDARDS.
3. INSTALL NEW WELL PUMP AND DOMESTIC WATER LINE FROM THE WELL TO THE EXISTING STORAGE BUILDING. THE NEW WELL WAS DRILLED TO A DEPTH OF 224 FEET WITH AN 8-INCH I.D. STEEL CASING INSTALLED TO A DEPTH OF 145 FEET.

0 10 20 40 60 FT

SCALE: 1"=20'

NO.		W/O -----	COMPUTER REVISION ONLY	BY	DATE	APPROVED
C-CONTRACT CONSTR., FA-FORCE ACCOUNT CONSTR., R-RECORD FILE NAME: ISF_C-4_5.dwg						

REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1992 MORTON D. McMILLEN

EXP. 12-31-06

Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

Design M. McMILLEN
Drawn R. GUERRERO
Chkd S. SPICKELMIER
Sub
Rec
Rec
Appr
Date

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY

YARD PIPING PLAN SOUTH

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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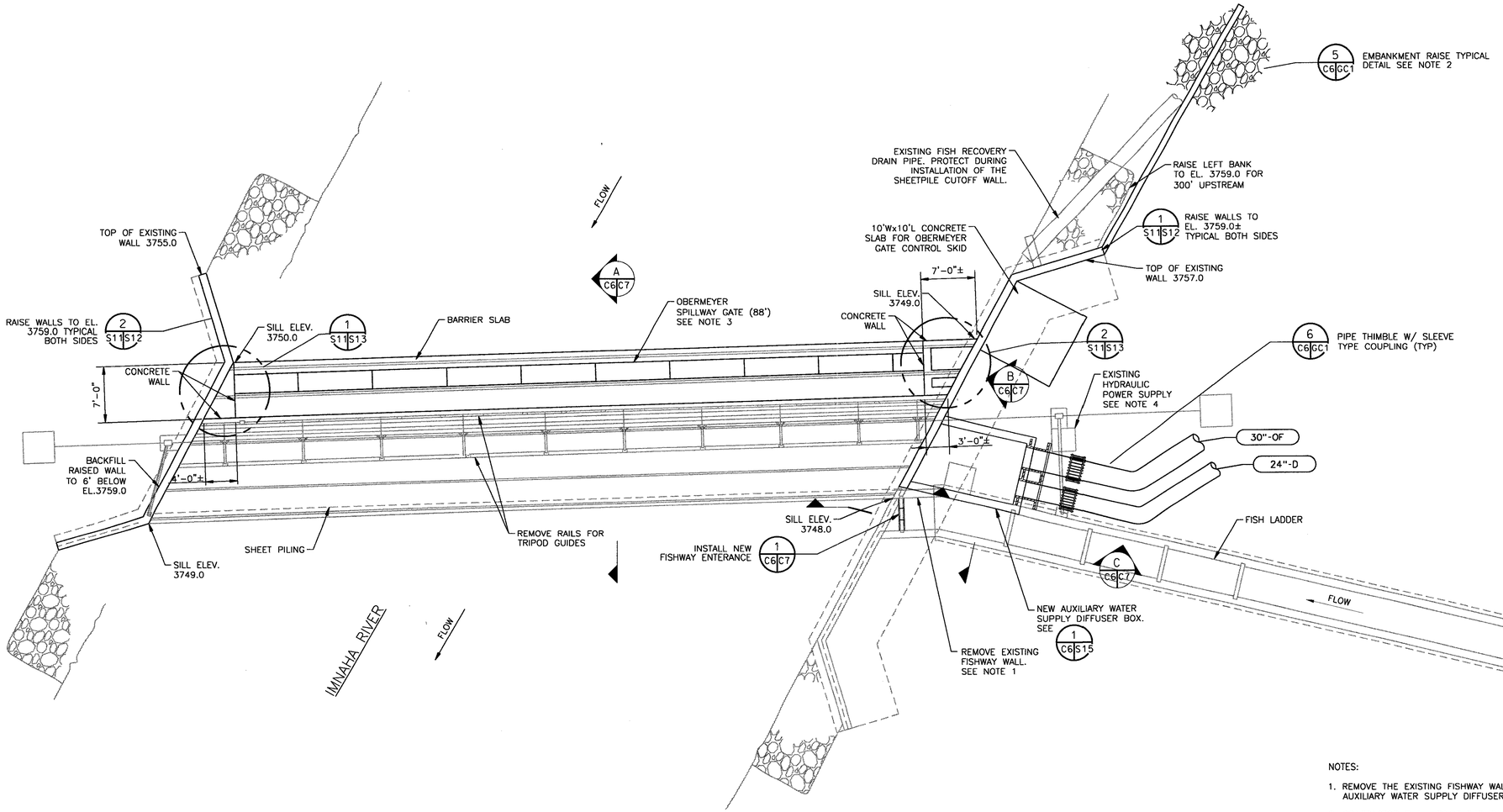

PLAN

0 4 8 12 16 20 24 FT

SCALE: 1/8"=1'-0"

NOTES:

1. REMOVE THE EXISTING FISHWAY WALL TO ALLOW INSTALLATION OF A NEW AUXILIARY WATER SUPPLY DIFFUSER BOX AND DIFFUSER SCREEN.
2. CONTRACTOR SHALL RAISE THE EXISTING LEFT ABUTMENT FROM THE EXISTING CONCRETE ABUTMENT TO A POINT APPROXIMATELY 300 FEET UPSTREAM. TIE THE NEW EMBANKMENT TO THE EXISTING HIGHER GROUND AT THIS LOCATION.
3. INSTALL A NEW OBERMEYER SPILLWAY GATE. SEE SHEET S12.
4. REMOVE EXISTING HYDRAULIC POWER SUPPLY AND ELECTRICAL FOR CONSTRUCTION ON NEW AUXILIARY WATER SUPPLY DIFFUSER. REINSTALL FOLLOWING COMPLETION OF THE NEW CONSTRUCTION.

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REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1992 MORTON D. McMILLEN

EXP. 12-31-06

Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

Design M. McMILLEN
Drawn R. GUERRERO
Chkd S. SPICKELMIER
Sub ---
Rec ---
Rec ---
Appr ---
Date ---

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
FISH LADDER AND BARRIER MODIFICATIONS
PLAN

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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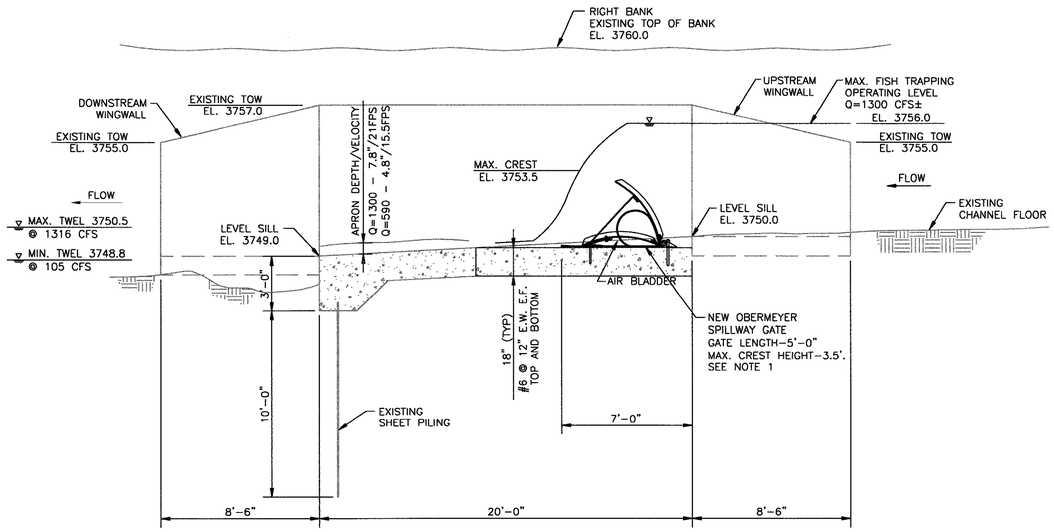
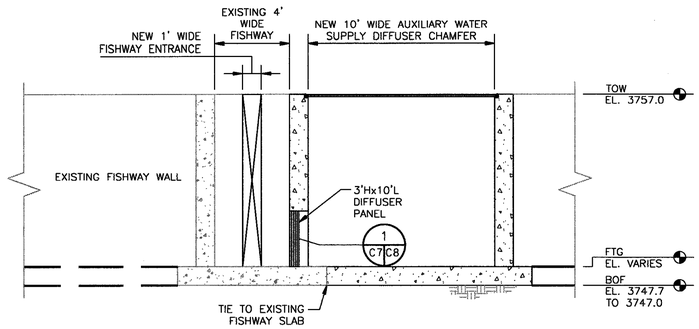


SECTION A C6|C7

0 4 8 12 FT

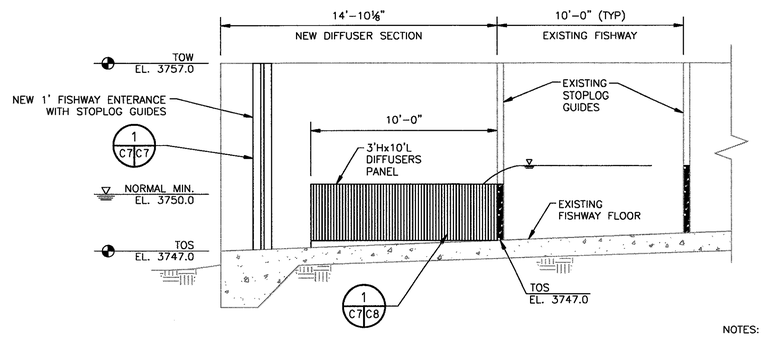
SCALE: 1/4"=1'-0"



SECTION B C6|C7

0 4 8 12 FT

SCALE: 1/4"=1'-0"



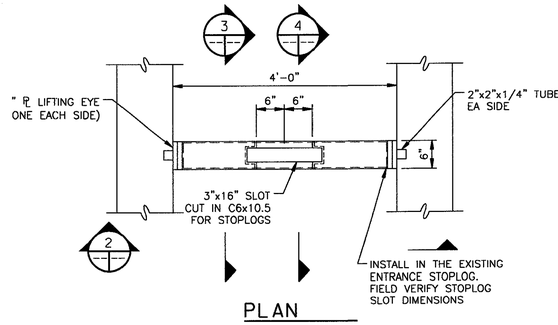
SECTION C C6|C7

0 4 8 12 FT

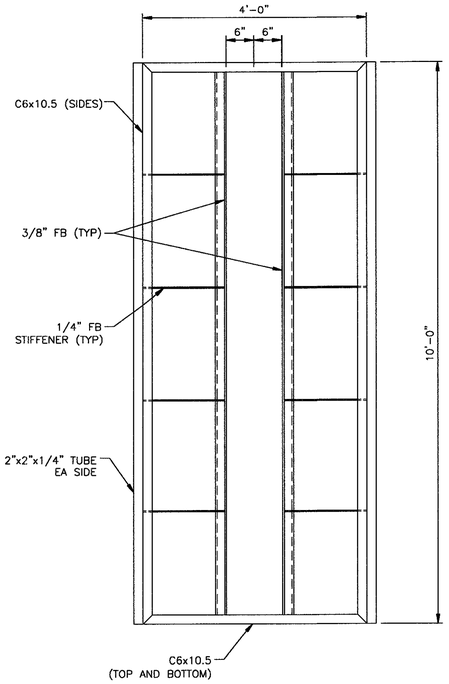
SCALE: 1/4"=1'-0"

NOTES:

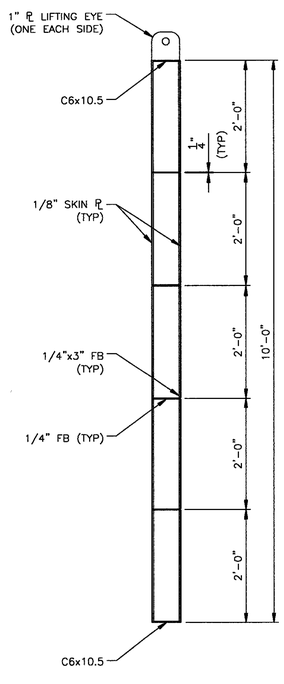
1. INSTALL A NEW OBERMEYER SPILLWAY GATE.



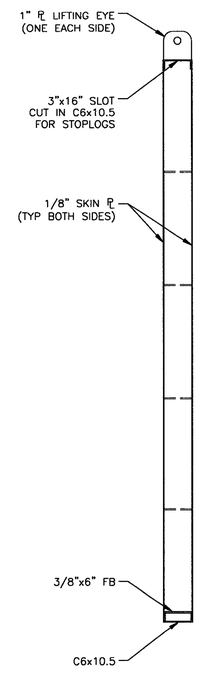
PLAN



SECTION 2



SECTION 3



SECTION 4

FISHWAY ENTRANCE 1 C6|C7

0 1 2 4 FT

SCALE: 3/4"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1997 MORTON D. McMILLEN

EXP. 12-31-06

Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

Design	M. McMILLEN
Drawn	R. GUERRERO
Chkd	S. SPICKELMIER
Sub	---
Rec	---
Rec	---
Appr	---
Date	---

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
FISH LADDER AND BARRIER MODIFICATIONS SECTIONS

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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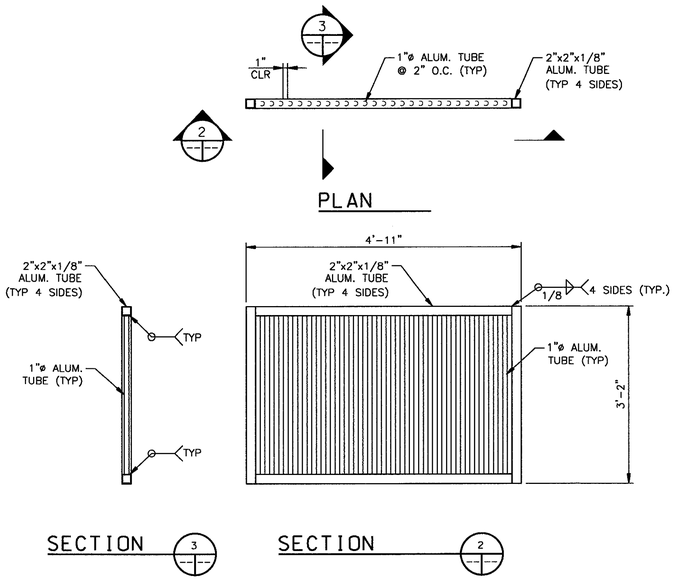
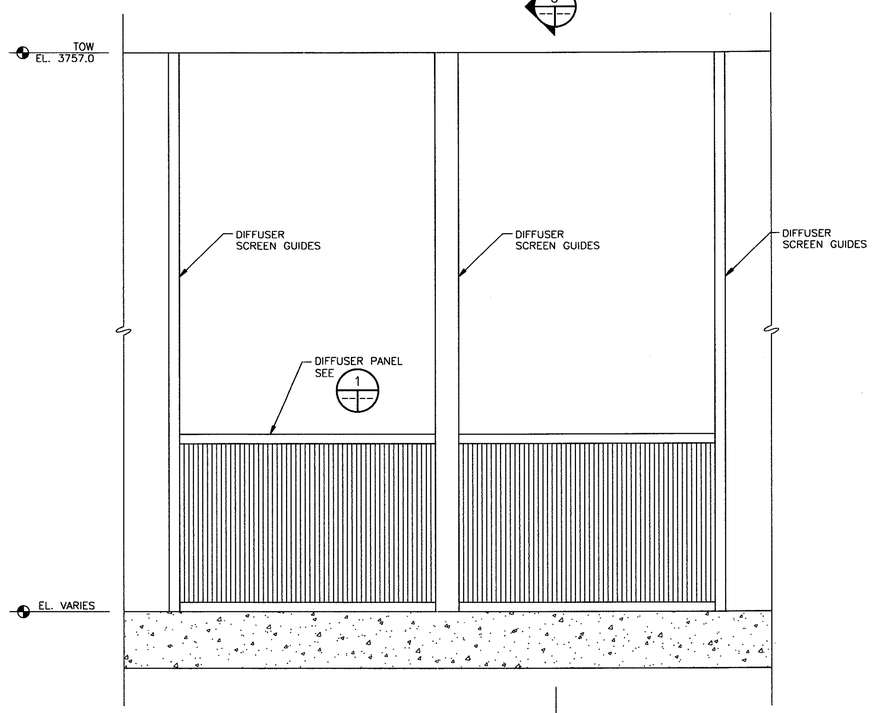


FISHWAY ENTRANCE DIFFUSER PANEL

1 TYP

0 1 2 4 FT

SCALE: 3/4"=1'-0"

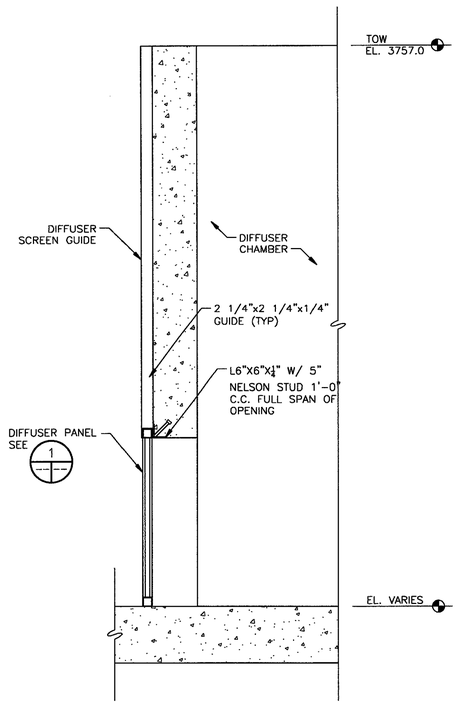


FISHWAY ENTRANCE DIFFUSER PANEL

5 TYP

0 1 2 4 FT

SCALE: 3/4"=1'-0"

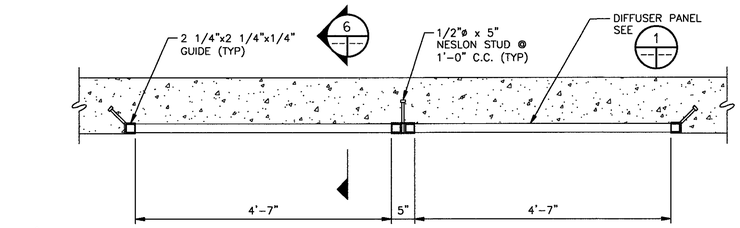


FISHWAY ENTRANCE DIFFUSER PANEL

6 TYP

0 1 2 4 FT

SCALE: 3/4"=1'-0"



FISHWAY ENTRANCE AUXILIARY WATER SUPPLY DIFFUSER PANEL

4 TYP

0 1 2 4 FT

SCALE: 3/4"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER 16047 OREGON JULY 21, 1995 MORTON D. McMILLEN

EXP. 12-31-06

Engineer Seal

HDR | FISHPRO

McMILLEN ENGINEERING BOISE, IDAHO

Design	M. McMILLEN
Drawn	R. GUERRERO
Chkd	S. SPICKELMIER
Sub	---
Rec	---
Rec	---
Appr	---
Date	---

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY
FISH LADDER AND
BARRIER MODIFICATIONS
DETAILS

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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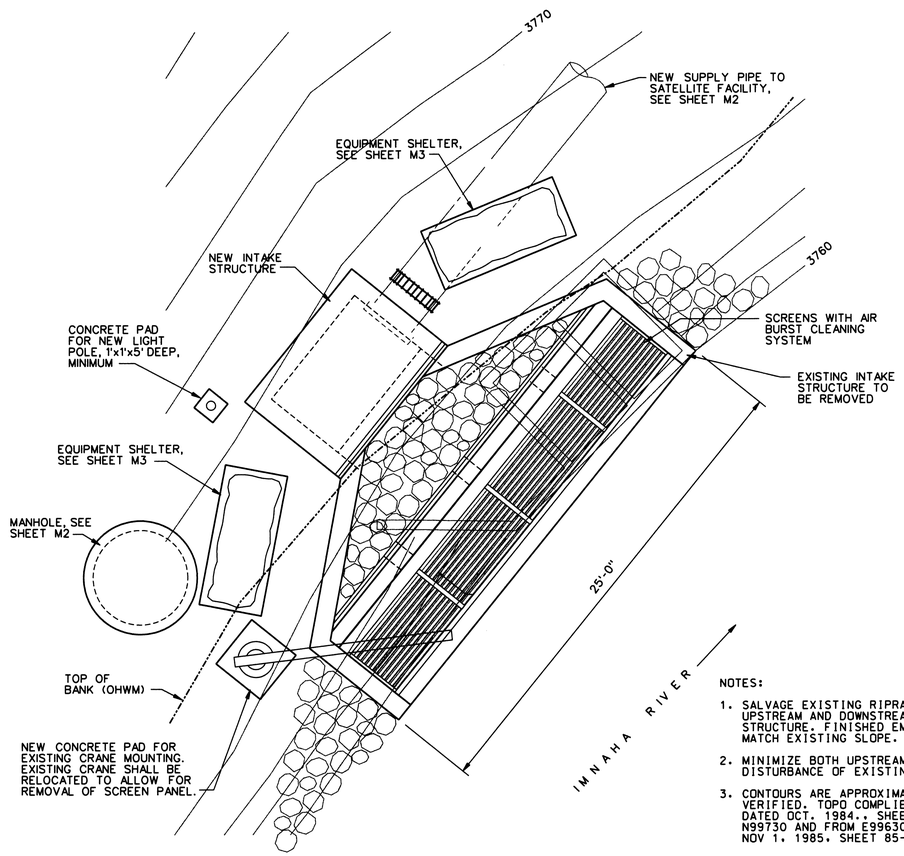

NOTES:

1. SALVAGE EXISTING RIPRAP TO BE USED BOTH UPSTREAM AND DOWNSTREAM OF NEW INTAKE STRUCTURE. FINISHED EMBANKMENT SHALL MATCH EXISTING SLOPE.
2. MINIMIZE BOTH UPSTREAM AND DOWNSTREAM DISTURBANCE OF EXISTING BANK.
3. CONTOURS ARE APPROXIMATE AND NEED TO BE VERIFIED. TOPO COMPLIED FROM USACE SURVEY DATED OCT. 1984., SHEET 84-59. FROM N99400 TO N99730 AND FROM E99630 TO E1000000. DATED NOV 1, 1985, SHEET 85-55.

INTAKE PLAN

1 / C9

0 4 8 12 FT

SCALE: 1/4"=1'-0"

N

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C-CONTRACT CONSTR., FA-FORCE ACCOUNT CONSTR., R-RECORD FILE NAME: ISF_C9_NEOH.dgn

REGISTERED PROFESSIONAL ENGINEER 13,797 OREGON SEPT 17, 1987 EDWARD E. DONAHUE Expires 12/31/07

Engineer Seal

HDR | FISHPRO

Design JDN
Drawn ACB
Chkd EED
Sub
Rec
Rec
Appr
Date 04/10/06

UNITED STATES DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
HEADQUARTERS, PORTLAND, OREGON

NORTHEAST OREGON HATCHERY PROGRAM
IMNAHA SATELLITE FACILITY

SURFACE WATER INTAKE SITE PLAN

SERIAL	SOURCE	SHEET NO.	SHEET	REVISION
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