

APPENDIX A

Preferred Alternative Schematics

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

CALIFORNIA DEPARTMENT OF GENERAL SERVICES
AND
CALIFORNIA TAHOE CONSERVANCY
UPPER TRUCKEE RIVER AND MARSH
RESTORATION PROJECT
PREFERRED ALTERNATIVE



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

E.I.P. # 560



City Hall Tower, 16th Floor One East First St.
Reno, NV 89501
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TITLE SHEET

i

REVISIONS

#	description	date

scale: AS SHOWN

job no.: 00110066.04

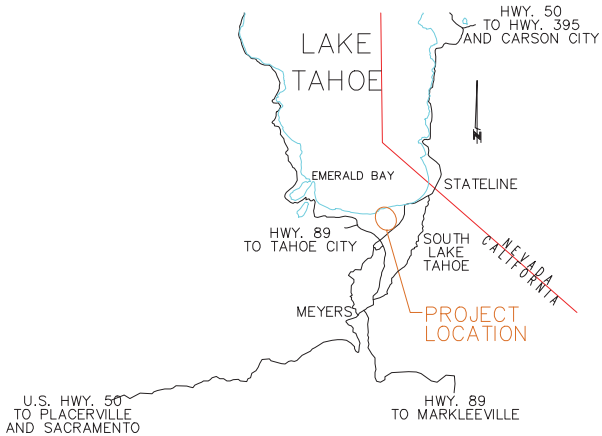
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sheet 1 of 25

date: 11/2015



VICINITY MAP

N.T.S.



LOCATION MAP

SOUTH LAKE TAHOE, EL DORADO COUNTY, CA
SCALE 1" = 1000'



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GENERAL NOTES

1. ALL IMPROVEMENTS SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE CALIFORNIA DEPARTMENT OF GENERAL SERVICES (DGS). IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THESE PLANS AND THE 2010 CALTRANS STANDARD PLANS FOR CONSTRUCTION OF LOCAL STREETS AND ROADS, UNLESS NOTED OTHERWISE. ALL REFERENCES TO THE "STANDARD SPECIFICATIONS" SHALL MEAN THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION OF LOCAL STREETS AND ROADS, 2010, INCLUDING THE AMENDMENTS TO THE 2010 STANDARD SPECIFICATIONS. CONSTRUCTION NOT SPECIFIED ON THESE PLANS OR IN SPECIFIC CITY OF SOUTH LAKE TAHOE (CSLT) ORDINANCES SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS OBLIGATED TO BE FAMILIAR WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS NOT DISCUSSED IN THE GENERAL NOTES. THE CONTRACT SPECIAL PROVISIONS SHALL SUPERSEDE THOSE OF THE STANDARD SPECIFICATIONS WHERE DISCREPANCIES OCCUR.
2. CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 8:00 A.M. AND 6:30 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM THE DGS.
3. THE LOCATIONS AND EXTENT OF EXISTING UNDERGROUND UTILITIES IN THE WORK AREA AS SHOWN ARE APPROXIMATE AND ARE NOT NECESSARILY COMPLETE. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE EXISTING UTILITIES BASED UPON AVAILABLE RECORDS. THE CONTRACTOR SHALL DETERMINE THE TYPE, LOCATION, SIZE, AND/OR DEPTH OF THE EXISTING UTILITIES WITHIN THE WORK AREA BEFORE COMMENCING WORK. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT AT (800) 227-2600 AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. SEE SPECIAL PROVISIONS FOR CONTRACTOR NOTIFICATION REQUIREMENTS. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR DAMAGED UTILITIES.
4. UNLESS NOTED OTHERWISE ON THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL PROVIDE, PLACE, AND MAINTAIN ALL LIGHTS, SIGNS, BARRICADES, FLAG PERSONS, PILOT CAR, OR OTHER DEVICES NECESSARY TO CONTROL TRAFFIC THROUGH THE CONSTRUCTION AREA AND FOR PUBLIC SAFETY IN ACCORDANCE WITH THESE PLANS, THE STANDARD SPECIFICATIONS, FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION AND MUTCD 2012 CALIFORNIA SUPPLEMENT.
6. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS IN ACCORDANCE WITH THE PROVISIONS OUTLINED BY THE PROJECT CONTRACT AND STANDARD SPECIFICATIONS.
7. THERE SHALL BE NO GRADING OR LAND DISTURBANCE PERFORMED WITH RESPECT TO THE PROJECT BETWEEN OCTOBER 15 AND MAY 1 UNLESS A GRADING EXEMPTION IS OBTAINED FROM THE TAHOE REGIONAL PLANNING AGENCY (TRPA). APPROVALS FOR GRADING BETWEEN OCTOBER 15 AND MAY 1 MUST ALSO BE OBTAINED FROM THE REGIONAL WATER QUALITY CONTROL BOARD, LAHONTAN. IF REQUIRED, THE COUNTY SHALL OBTAIN THESE APPROVALS.
8. THE CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON THE JOB SHOWING "AS-CONSTRUCTED" CHANGES MADE TO DATE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUPPLY TO THE AGENCIES A SET OF PLANS, MARKED UP TO THE SATISFACTION OF THE AGENCIES, REFLECTING THE AS-CONSTRUCTED MODIFICATIONS.
9. ALL CONTROL STATIONING AND DATA DIMENSIONING ARE REFERENCED TO THE CENTERLINE OF THE FACILITY SHOWN UNLESS OTHERWISE NOTED.
10. AT NO TIME SHALL THE CONTRACTOR UNDERTAKE TO CLOSE OFF ANY EXISTING UTILITY LINES OR OPEN VALVES OR TAKE ANY OTHER ACTION WHICH WOULD AFFECT THE OPERATION OF EXISTING WATER OR SEWER SYSTEMS WITHOUT PRIOR APPROVAL FROM THE SOUTH TAHOE PUBLIC UTILITY DISTRICT (STPUD). APPROVAL SHALL BE REQUESTED AT LEAST 48 HOURS IN ADVANCE OF THE TIME THAT THE INTERRUPTION OF THE EXISTING SYSTEM IS REQUIRED. ANY INTERRUPTION OF SERVICE TO ACTIVE WATER OR SEWER SERVICES, INCLUDING FIRE HYDRANTS, WHETHER INTENTIONAL OR NOT, MUST BE KEPT TO A MINIMUM TIME PERIOD. IF SERVICE TO BUILDINGS IS TO BE OFF FOR MORE THAN FOUR HOURS, THE CONTRACTOR MUST ADVISE STPUD.
11. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM PREVENTIVE DUST CONTROL MEASURES TO ENSURE THAT DUST RESULTING FROM THE CONTRACTOR'S PERFORMANCE OF THE WORK IS CONTROLLED IN CONFORMANCE WITH THE SPECIAL PROVISIONS, THE PROVISIONS THE STANDARD SPECIFICATIONS, COUNTY, AND LOCAL ORDINANCES. SEE SPECIAL PROVISIONS REGARDING SWEEPING, DUST CONTROL AND TRACKING REQUIREMENTS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL TEMPORARY EROSION CONTROL MEASURES. THE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE TRPA "HANDBOOK OF BEST MANAGEMENT PRACTICES" AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE DOT SHALL CONTACT TRPA PRIOR TO THE COMMENCEMENT OF WORK FOR A PRE-GRADING INSPECTION OF THE INSTALLED TEMPORARY EROSION CONTROL FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PERFORMANCE OF THE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. SEE SPECIAL PROVISIONS REGARDING TEMPORARY EROSION CONTROL FACILITY REMOVAL.
13. CONSTRUCTION LIMITS SHOWN ON THE PLANS DELINEATE BOUNDARIES FOR THE CONTRACTOR'S OPERATIONS OUTSIDE THE COUNTY STREET RIGHT-OF-WAY. CONSTRUCTION LIMIT FENCING SHALL BE ERECTED ALONG THESE BOUNDARIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. WITHIN THE CONSTRUCTION LIMITS, EXISTING VEGETATION SHALL BE PROTECTED TO THE EXTENT FEASIBLE. ALL EXISTING TREES SHALL BE PROTECTED UNLESS SHOWN ON THE PLANS TO BE REMOVED. SEE SPECIAL PROVISIONS REGARDING PAYMENT FOR TREE REMOVAL.
14. ALL REVEGETATION SHOWN ON THE PLANS IS TO BE COMPLETED BY OTHERS, UNLESS NOTED OTHERWISE.
15. THE CONTRACTOR SHALL USE ONLY DESIGNATED SPECIFIC SITES FOR STORAGE OF EQUIPMENT AND MATERIALS AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS.
16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND HIS SUBCONTRACTOR(S) TO EXAMINE THE PROJECT SITE PRIOR TO THE OPENING OF BID PROPOSALS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, SUCH AS THE NATURE AND LOCATION OF THE WORK AND THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE AFFECTING THE AVAILABILITY OF TRANSPORTATION, THE DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRICITY, ROADS, THE UNCERTAINTIES OF WEATHER, THE CONDITIONS OF THE GROUND, SURFACE AND SUBSURFACE MATERIALS, THE EQUIPMENT AND FACILITIES NEEDED PRIMARILY FOR AND DURING THE PERFORMANCE OF THE WORK, AND THE COSTS THEREOF. ANY FAILURE BY THE CONTRACTOR AND SUBCONTRACTOR(S) TO ACQUAINT HIMSELF WITH ALL THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.

17. ELEVATIONS SHOWN ON THE PLANS FOR PIPE INVERTS, TOPS OF GRATES, RIMS, CURBS, ETC., ARE BASED UPON THE TOPOGRAPHIC INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL NECESSARY SURFACE ELEVATIONS IN THE FIELD AND NOTIFY THE DGS OF ANY DISCREPANCIES, WHICH MIGHT AFFECT PROPER OPERATION OF THE NEW FACILITIES BEFORE BREAKING GROUND AND PRIOR TO FACILITY INSTALLATION. THE DOT SHALL BE CONTACTED IN THE EVENT ELEVATIONS ARE INCORRECT SO THAT THE PROPER ADJUSTMENTS CAN BE MADE PRIOR TO THE INSTALLATION OF THE FACILITIES, AS SET FORTH IN THE SPECIAL PROVISIONS.
18. THE CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ALL PERMITS, LICENSES, INSURANCE POLICIES, ETC., NOT ALREADY OBTAINED BY DGS, AS MAY BE NECESSARY TO COMPLY WITH STATE AND LOCAL LAWS ASSOCIATED WITH THE PERFORMANCE OF THE WORK. SEE SPECIAL PROVISIONS.
19. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE CONTRACT DOCUMENTS FOR ALL SUBMITTALS REQUIRED FOR DGS REVIEW AND ACCEPTANCE.
20. THE DGS WILL FURNISH THE CONSTRUCTION STAKING TO THE CONTRACTOR AS SET FORTH IN THE SPECIAL PROVISIONS.
21. CONTRACTOR SHALL NOTE THAT THE PLANS SHOW BOTH HORIZONTAL AND SLOPE (ACTUAL) LENGTHS FOR PIPE. SEE SPECIAL PROVISIONS FOR THE MAXIMUM ALLOWABLE DEFLECTION ANGLE AT EACH PIPE JOINT.
22. THE CONSULTANT TEAM AND OVERSEEING ENGINEER RESPONSIBLE FOR PREPARATION OF THESE PLANS AND SPECIFICATIONS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE CONSULTANT TEAM AND OVERSEEING ENGINEER RESPONSIBLE FOR PREPARATION OF THESE PLANS.
23. NO TREES OR WETLAND VEGETATION SHALL BE REMOVED UNLESS THEY ARE SHOWN AND NOTED TO BE REMOVED ON THE PLANS, OR AS DIRECTLY SPECIFIED ON-SITE BY THE PROJECT MANAGEMENT STAFF. ALL TREES CONFLICTING WITH GRADING SHALL BE TRIMMED. NO GRADING SHALL TAKE PLACE WITHIN THE DRIP LINE OF TREES NOT TO BE REMOVED UNLESS OTHERWISE APPROVED.
24. IF, DURING CONSTRUCTION, ARCHAEOLOGICAL REMAINS ARE ENCOUNTERED, CONSTRUCTION IN THE VICINITY SHALL BE HALTED, AND THE STATE OFFICE OF HISTORIC PRESERVATION AND A QUALIFIED ARCHEOLOGIST SHALL BE NOTIFIED IMMEDIATELY.
25. PERMIT CONDITIONS MAY CONTAIN SPECIFIC REQUIREMENTS FOR THE CONTROL OF OFF-SITE TURBIDITY FROM PROJECT OPERATIONS. TURBIDITY WILL BE MONITORED ON A FREQUENT BASIS BY THE PROJECT MANAGEMENT AND INSPECTION STAFF ON-SITE. TURBIDITY AMOUNTS IN EXCESS OF THE PERMITTED AMOUNT AND/OR DURATIONS WILL CAUSE WORK TO BE STOPPED UNTIL IMPROVED PRACTICES ARE IN EFFECT AND THE PROBLEMS CONTROLLED. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR ANY PROJECT DELAYS THAT OCCUR BY NATURE OF THIS FAILURE TO ADEQUATELY CONTAIN SEDIMENT ON-SITE.
26. THE NEW CHANNEL ALIGNMENTS FOR THE PREFERRED ALTERNATIVE ARE DEPICTED ON THESE PLANS ARE APPROXIMATE AND ARE NOT INTENDED TO REPRESENT THE CONSTRUCTED ALIGNMENT.

ABBREVIATIONS

A	ASPEN	FL	FLOWLINE
ABAND	ABANDONED	FS	FINISH SURFACE
AC	ASPHALT CONCRETE	G	GAS
APN	ASSESSOR'S PARCEL NUMBER	IE	INVERT ELEVATION
BLVD	BOULEVARD	INST	INSTALL
CA	CALIFORNIA	IB	ISOLATION BARRIER
CALC'S	CALCULATIONS	LF	LINEAR FEET
CF	CUBIC FEET OR CURB FACE	LT	LEFT
CIR	CIRCLE	LT BLVD	LAKE TAHOE BLVD
CL	CENTERLINE	MISC	MISCELLANEOUS
CLF	CONSTRUCTION LIMIT FENCE	N	NORTH
CLR	CLEAR	NTS	NOT TO SCALE
CO	COUNTY	OH	OVERHEAD
CONC	CONCRETE	P	PINE
CONST	CONSTRUCT	PL	PROPERTY LINE
CMP	CORRUGATED METAL PIPE	PP	POWER/UTILITY POLE
CT	CALTRANS OR COURT	PROP	PROPOSED
CTC	CALIFORNIA TAHOE CONSERVANCY	PUE	PUBLIC UTILITY EASEMENT
CY	CUBIC YARD	RD	ROAD
DET	DETAIL	REF	REFERENCE
DGS	DEPARTMENT OF GENERAL SERVICES	ROW	RIGHT-OF-WAY
DI	DRAINAGE INLET	RSP	ROCK SLOPE PROTECTION
DIA OR Ø	DIAMETER	RT	RIGHT
DISS	DISSIPATER	S	SOUTH OR SANITARY SEWER
DR	DRIVE	SD	STORM DRAIN
D/W	DRIVEWAY	SDMH	STORM DRAIN MANHOLE
E	EAST	SF	SQUARE FEET
EA	EACH	SHT	SHEET
EG	EXISTING GRADE	SS	SANITARY SEWER
ELEV	ELEVATION	ST	SEDIMENT TRAP OR STREET
ELEC	ELECTRIC	STA	STATION
EP	EDGE OF PAVEMENT	STPUD	SOUTH TAHOE PUBLIC UTILITY DISTRICT
EX	EXISTING	TRPA	TAHOE REGIONAL PLANNING AGENCY
F	FIR	TYP	TYPICAL
FES	FLARED END SECTION	USFS	UNITED STATES FOREST SERVICE
FF	FILTER FENCE	W	WEST OR WATER
FG	FINISHED GRADE	W/	WITH
FH	FIRE HYDRANT	W/O	WITHOUT

UTILITIES

CABLE TELEVISION	CHARTER COMMUNICATIONS, (775) 850-1290
NATURAL GAS	SOUTHWEST GAS CO., (775) 887-2872
ELECTRIC	LIBERTY ENERGY, (530) 541-2040
SEWER & WATER	SOUTH TAHOE PUD, (530) 543-5247
TELEPHONE	AT&T, (916) 453-6136
STORM DRAIN	CITY OF SOUTH LAKE TAHOE, DPW (530) 542-6030

LEGEND

*NOTE: LEGEND PROVIDED ON SHEET SUPERCEDES THIS LEGEND			
EXISTING		PROPOSED	
	MAJOR CONTOUR		FOOT TRAIL
	MINOR CONTOUR		PIPE (MATERIAL AS NOTED)
	WATERS EDGE		FILL
	STRUCTURE BOUNDARY		CUT
	PROPERTY LINE		BOULDER TOE PROTECTION
	FENCE LINE		NEW FLOODPLAIN
	FOOT TRAIL		SCOUR POOL
	WATER LINE		POINT BAR
	SEWER LINE		ROCK DISSIPATER
	GAS LINE		RESTORED DUNES
	STORM DRAIN		STORMWATER TREATMENT AREA
	ELECTRIC LINE		LILY LAGOON RESTORATION AREA
	ORDINARY HIGH WATER LINE 6229' EXTENDING DOWN TO AN ELEVATION OF 6223' (BASED ON THE LAKE TAHOE DATUM)		MAJOR CONTOUR
	AC PAVEMENT		MINOR CONTOUR
	WOODEN FOOT BRIDGE		TAHOE YELLOW CRESS PROTECTED AREA
	UTILITY EASEMENT		BOARDWALK
	POWER/UTILITY POLE		BRIDGE
	UTILITY POLE & GUY ANCHOR		GRADE CONTROL STRUCTURE
	FIRE HYDRANT		NEW CHANNEL ALIGNMENT
	DRAINAGE INLET		RE-VEGETATION
	LIGHT POLE		FISHING ACCESS
	MANHOLE		ADA ACCESSIBLE
	UTILITY BOX		OBSERVATION AREA
	SIGN		SELF-SERVICE VISITORS CENTER
	TREE, DIAMETER AND TYPE		VIEWPOINT
	EXISTING CHANNEL ALIGNMENT STATION NUMBER AND MARKER		DETAIL REFERENCE NUMBER SHEET NUMBER

HORIZONTAL AND VERTICAL CONTROL/PROJECTION

VERTICAL CONTROL IS NAVD 88;
HORIZONTAL CONTROL IS CALIFORNIA STATE PLANE, ZONE 2, NAD 83 (FEET):

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



UPPER TRUCKEE RIVER
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INDEX SHEET

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#	description	date

scale:	AS SHOWN
job no.:	00110066.04
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checked by:	CM

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CONSTRUCTION PHASING PLAN

PREFERRED ALTERNATIVE CONSTRUCTION ACTIVITIES AND SCHEDULE

THE DRAFT EIR/EIS/EIS PRESENTS INFORMATION ABOUT THE LOCATION AND DURATION OF CONSTRUCTION ACTIVITIES THAT WOULD OCCUR YEARLY FOR EACH ACTION ALTERNATIVES IN TABLE 2-5AND ILLUSTRATES THE PROPOSED ACCESS LOCATIONS, PROPOSED HAUL ROUTES, AND POTENTIAL STORAGE/STAGING AREAS IN EXHIBITS 2-5 TO 2-8. FOR THE PREFERRED ALTERNATIVE, THE ANTICIPATED CONSTRUCTION ACTIVITIES THAT WOULD OCCUR EACH YEAR ARE DESCRIBED BELOW AND THE ACCESS LOCATIONS, PROPOSED HAUL ROUTES, AND POTENTIAL STORAGE/STAGING AREAS ARE SHOWN IN EXHIBIT 2-7. CONSTRUCTION ACTIVITIES WOULD OCCUR FROM 8:00 A.M. TO 6:30 P.M. PURSUANT TO SECTION 68.9 OF THE TRPA CODE OF ORDINANCES.

YEAR 1

YEAR 1 CONSTRUCTION ACTIVITIES WOULD COMMENCE WITH MOBILIZATION ACTIVITIES THAT WOULD TAKE UP TO 1 MONTH TO COMPLETE. THESE MOBILIZATION ACTIVITIES WOULD INCLUDE CONSTRUCTING STAGING AREAS AND HAUL ROADS, INSTALLING BMPS, AND PLACING SIGNAGE. EXPECTED ACTIVITIES WOULD INCLUDE DELIVERY AND STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS AND ESTABLISHING WORKER PARKING. PUBLIC ROADS WOULD BE USED TO ACCESS THE STAGING AREAS. ALL CONSTRUCTION EQUIPMENT AND HAUL TRUCKS WOULD OPERATE ON INTERNAL HAUL ROADS.

SUBSEQUENT ACTIVITIES WOULD INCLUDE MUCH OF THE EARTHWORK REQUIRED FOR THE RIVER AND FLOODPLAIN GRADING: LOWERING THE TERRACE SECTIONS AND RE-CONTOURING EXISTING SECONDARY CHANNELS (ON PRIVATE LANDS), AND CONSTRUCTING THE PILOT CHANNEL AND ITS VERTICAL GRADE CONTROL.. THESE ACTIVITIES WOULD REQUIRE 1-3 MONTHS TO COMPLETE.

SIGNIFICANT EXCAVATION AND SOIL MOVEMENT ACTIVITIES WOULD OCCUR ON-SITE IN YEAR 1. THE EXCAVATED MATERIAL THAT IS NOT REQUIRED FOR REUSE IN THE SAME YEAR WOULD BE EITHER STOCKPILED TEMPORARILY ON SITE AT ONE OF THE STORAGE AREAS PRIORITIZING THOSE OUTSIDE OF THE 100-YEAR FLOODPLAIN. THE EXCAVATED MATERIALS WOULD BE TRANSPORTED TO THE STAGING AREAS ON INTERNAL HAUL ROADS. THE MATERIALS WOULD BE TEMPORARILY STORED IN STOCKPILES WITH HEIGHTS RANGING BETWEEN 3 AND 8 FEET . AFTER EXCAVATION, PERMANENT REVEGETATION AND TEMPORARY IRRIGATION WOULD BE INSTALLED IN WORK AREAS AT FINAL GRADE, AS SOON AS POSSIBLE.

DURING CONSTRUCTION OF CHANNELS, IT IS POSSIBLE THAT DEWATERING OF EXCAVATIONS (I.E., REMOVAL OF COLLECTED WATER) MAY BE REQUIRED. TO MINIMIZE THE POTENTIAL FOR DEWATERING, CONSTRUCTION ACTIVITIES WITHIN THE LIVE CHANNEL WOULD BE AVOIDED WHENEVER POSSIBLE. WHEN CONSTRUCTION WITHIN THE LIVE CHANNEL IS REQUIRED, BARRIERS WOULD BE USED TO ISOLATE THE WORK AREAS FROM ANY FLOWING WATER. SEEPAGE INTO THE ISOLATED WORK AREAS WOULD BE PUMPED AND USED FOR IRRIGATION AND DUST CONTROL. IF THE QUANTITIES OF WATER WERE TO EXCEED THE DEMANDS FOR DUST CONTROL OR COULD RESULT IN IRRIGATION RUNOFF, TEMPORARY AND PORTABLE DETENTION BASINS WOULD BE CONSTRUCTED. THE BASINS WOULD BE CREATED USING PORTABLE CONTAINMENT BERMS AND USED TO STORE AND TREAT THE GROUNDWATER EFFLUENT. THE STORED WATER WOULD BE USED FOR IRRIGATION OR DUST CONTROL OR TREATED TO MEET SURFACE-WATER DISCHARGE REQUIREMENTS AND DISCHARGED BACK INTO THE LIVE CHANNEL.

YEAR 2

DURING YEAR 2, REVEGETATION AND IRRIGATION WORK WOULD CONTINUE ON THE PILOT CHANNEL, SECONDARY CHANNELS,AND LOWERED FLOODPLAIN MODIFICATIONS. PORTIONS OF BANK PROTECTION WOULD BE CONSTRUCTED. THE STREAMBED AND BANK STABILIZATION ON LOWER TROUT CREEK WOULD BE COMPLETED. VERTICAL GRADE CONTROLS WOULD BE CONSTRUCTED AT THE DOWNSTREAM END OF THE SITE (BY THE TROUT CREEK CONFLUENCE AND AT THE RIVER MOUTH). OVERFLOW CULVERTS WOULD BE INSTALLED UNDER U.S. 50 THROUGH THE EMBANKMENT FILL.

THROUGHOUT THE CONSTRUCTION SEASON, THE REVEGETATION TREATMENTS CONDUCTED DURING YEAR 1 WOULD BE IRRIGATED AND INSPECTED.

WORK RELATED TO THE MODIFICATION OF THE SAILING LAGOON AND DUNE RESTORATION WOULD OCCUR DURING YEAR 2. THE LAGOON WOULD BE ISOLATED FROM THE TAHOE KEYS MARINA BY INSTALLING THE BULKHEAD AND LEVEE ALONG AND EAST OF THE TAHOE KEYS MARINA CHANNEL AND PERFORMING SOME OF THE WATER QUALITY PROTECTIONS AND INVASIVE ORGANISM CONTROLS. THE ISOLATED LAGOON WOULD BE DRAINED, RECONTOURED, AND REVEGETATED. RECONTOURING OF THE SAILING LAGOON WOULD ENTAIL EXCAVATING SEDIMENT, SOME OF WHICH MAY BE HAULED OFF-SITE TO AN OUT-OF-BASIN STORAGE IF NOT SUITABLE FOR REUSE IN THE DUNE RECONSTRUCTION AND/OR CHANNEL BACKFILL. THE GENERAL HAUL ROUTE FOR THE OFF-SITE SEDIMENT TRANSPORT WOULD LIKELY BE FROM VENICE DRIVE TO TAHOE KEYS BOULEVARD AND THEN TO U.S. 50. THE SAILING LAGOON MODIFICATION ACTIVITIES COULD TAKE AS LONG AS 4 MONTHS TO COMPLETE.

YEAR 3

CONSTRUCTION OF PROJECT FEATURES WOULD BE COMPLETED DURING YEAR 3, ALONG WITH CONTINUED INSPECTION AND IRRIGATION OF REVEGETATION TREATMENTS INSTALLED IN YEARS 1 AND 2.

LAGOON AND DUNE RESTORATION WOULD BE COMPLETED IN YEAR 3. THE EASTERN END OF THE SAILING LAGOON WOULD BE RECONTOURED, AND THE LAGOON WOULD BE CONNECTED TO THE RIVER. FILL WOULD BE REMOVED BEHIND EAST BARTON BEACH TO RESTORE AND REVEGETATE LAGOON HABITAT.

CONSTRUCTION OF THE PILOT CHANNEL CONNECTION AND CONFLUENCE, INSTALLATION OF THE VERTICAL AND LATERAL GRADE CONTROLS IN THE MAIN CHANNEL, AND. WATER WOULD BE PUMPED INTO FINISHED CHANNEL SEGMENTS AND DIRECTED ONTO THE EXISTING VEGETATED MARSH SURFACES. FILL WOULD BE PLACED IN THE ABANDONED CHANNEL SECTIONS AND BE RECONTOURED; THE MODIFIED STORMWATER TREATMENT AREAS WOULD BE CONSTRUCTED. PERMANENT REVEGETATION AND TEMPORARY IRRIGATION WOULD BE INSTALLED IN ALL WORK AREAS AT FINAL GRADE.

PUBLIC-ACCESS AND RECREATION INFRASTRUCTURE WOULD BE CONSTRUCTED DURING YEAR 3, INCLUDING CONSTRUCTION OF TRAILS, THE OBSERVATION AREA, VIEWPOINT, KIOSK, AND THE ADA-ACCESSIBLE FISHING PLATFORM.

YEAR 4

CONSTRUCTION ACTIVITIES IN YEAR 4 WOULD BE LIMITED TO REVEGETATION AND IRRIGATION INSPECTION AND MAINTENANCE, AND PROJECT SHUTDOWN. ALTHOUGH SOME GROUND DISTURBANCE WOULD BE ASSOCIATED WITH THESE ACTIVITIES, CUT AND FILL OF MATERIALS WOULD NOT BE SUBSTANTIAL. ALL WORK IN YEAR 4 WOULD UTILIZE EITHER THE VENICE DRIVE OR STAGING AREAS.

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CONSTRUCTION
PHASING

iii

REVISIONS		
#	description	date

scale:	AS SHOWN
job no.:	00110066.04
drawn by:	MC
checked by:	CM

sheet no.: iii

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date: 11/2015

Legend

Project Boundary

Existing 1000 ft. River Station

Existing 100 ft. River Station - Upper Truckee

Existing 100 ft. River Station - Trout Creek

Existing Regional Bike Trail

Proposed Habitat Features

Restored Lagoon

Restored Meadow

Tahoe Yellow Cross Restricted Use Area

Reveg and Streambank Enhancement

Restored Dune

Proposed River and Floodplain Features

Low and Bankful Flow Channel

Potential Low Flow Path

Active Floodplain

Removal of Reserve Fill

Partial Fill of Existing Channel

Channel Backfill

Floodplain Areas of Excavation

Proposed Engineered Features

Lateral Grade Control

Vertical Grade Control

Bulkhead/Levee

Bank Protection

Storm Water Treatment Area

Overbank Conveyance Bridge Modification

Channel Grade Control and Bank Protection

Proposed Public Access Features

Viewpoint (See Sheet L-2)

Trail (See Sheet L-1)

Fishing Platform (See Sheet L-4)

ADA Accessible

Observation Area (See Sheet L-3)

Kiosk (See Sheet L-5)

DGS

CALIFORNIA TAHOE CONSERVANCY

UPPER TRUCKEE RIVER AND MARSH RESTORATION PROJECT

E.I.P. #560

AECOM

City Hall Tower, 16th Floor One East First St.
Reno, NV 89501
Tel: 775-337-9565

Cardno

Shaping the Future

295 Highway 50, Suite 1, P.O. Box 1533
Zephyr Cove, NV 89448
Phone (775) 588-9069 Fax (775) 588-9219

PREFERRED ALTERNATIVE

MIDDLE MARSH CORRIDOR
MODERATE RECREATION
INFRASTRUCTURE

S-1

REVISIONS

#	description	date

scale : As Noted

job no. : 00110066.04

drawn by : EL

checked by : CM

sheet no. : S-1

sheet 4 of 26

date : 11/03/15

North Arrow

0 400 800 Feet

UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

E.I.P. # 560

AECOM

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Cardno
Shaping the Future

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Zephyr Cove, NV 89448
Tel: 775.588.9069

UPSTREAM REACH
PLAN

C-10

REVISIONS

#	description	date
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scale: AS SHOWN

job no.: 00110066.04

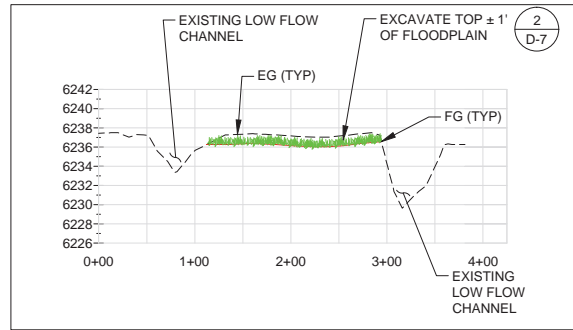
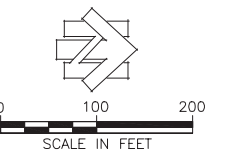
drawn by: CK

checked by: CM

sheet no.: C-10

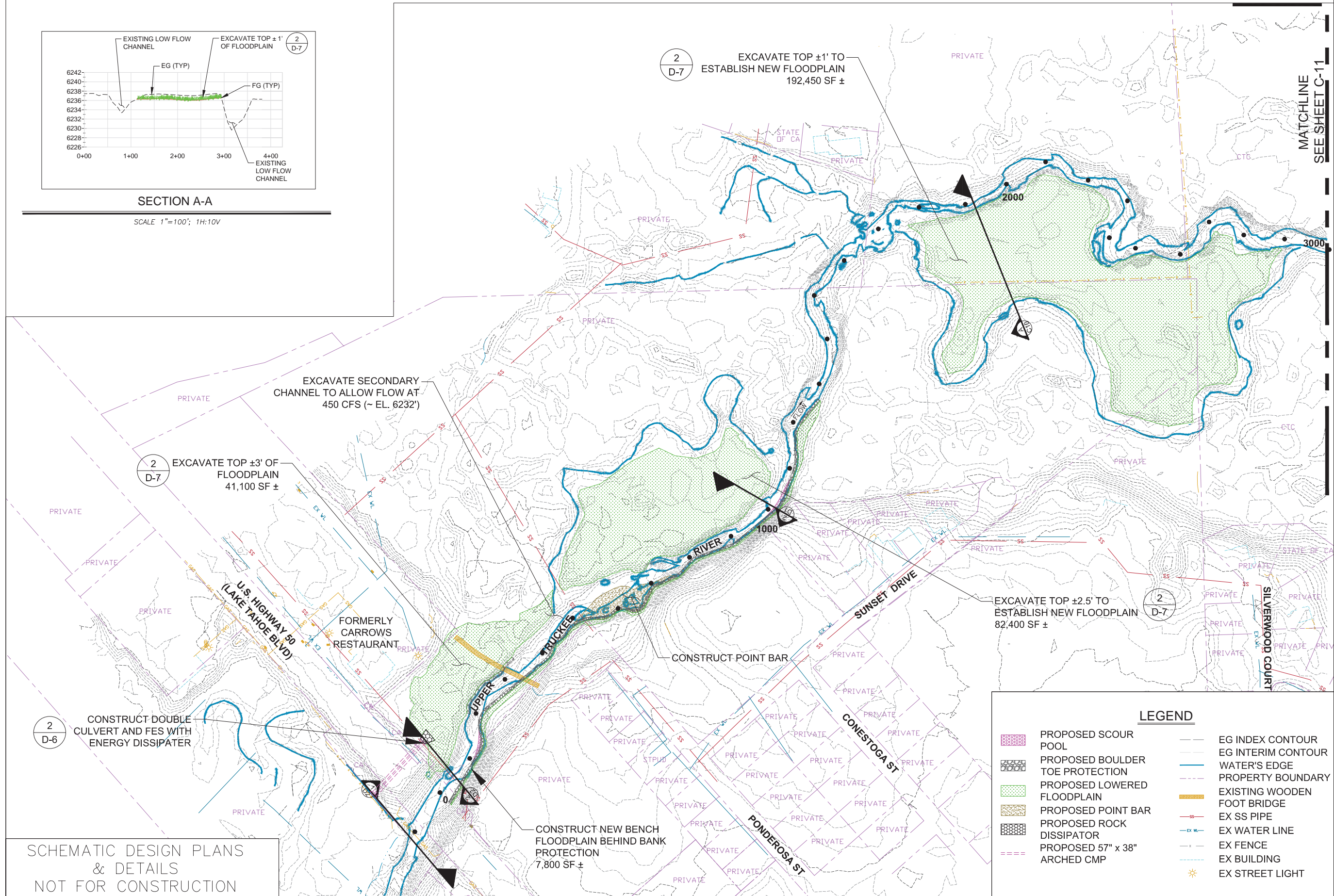
sheet 5 of 25

date: 11/2015



SECTION A-A

SCALE 1"=100'; 1H:10V



SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

E.I.P. # 560



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MID-MARSH
PLAN
SHEET A

C-11

REVISIONS

#	description	date

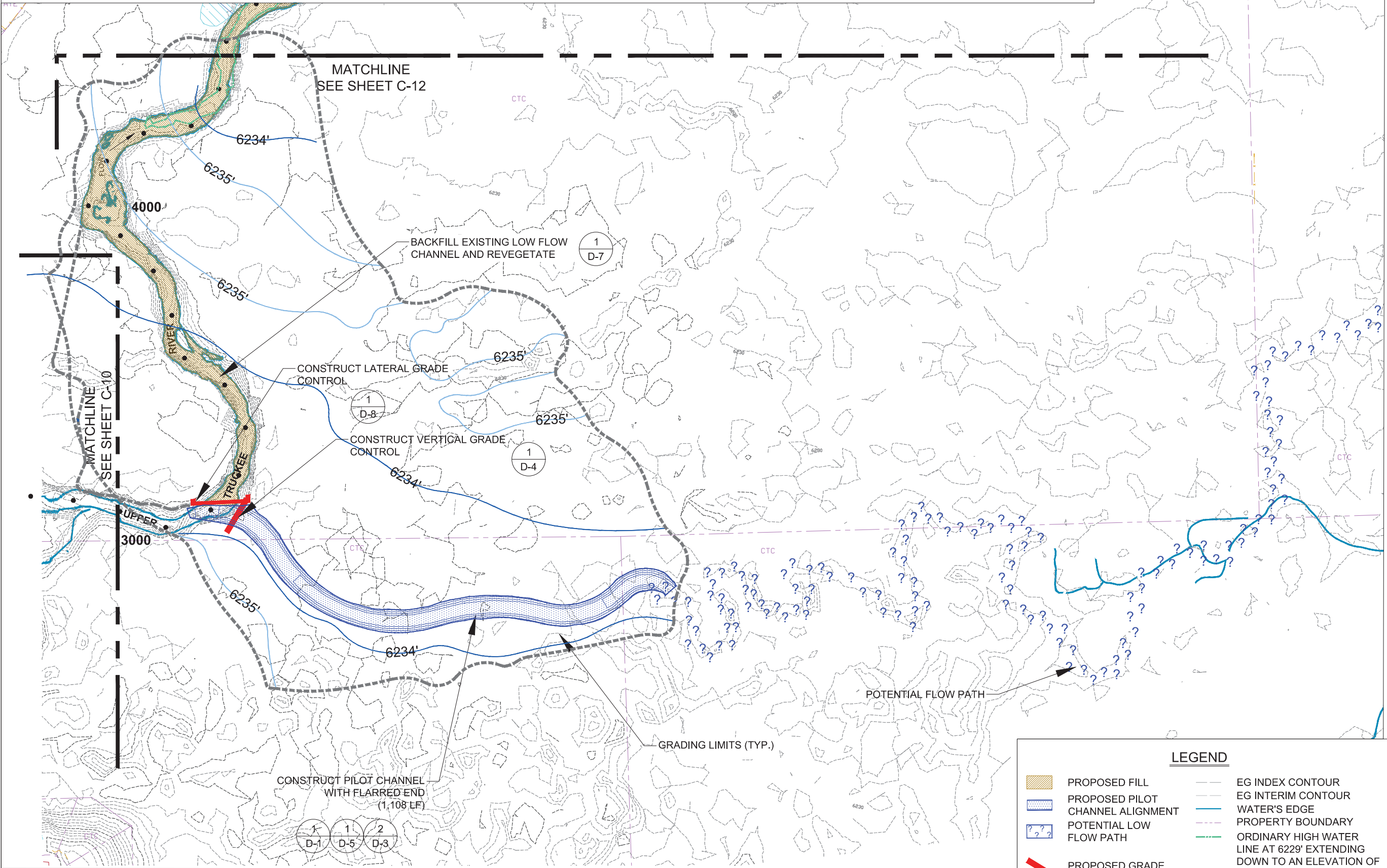
scale:	AS SHOWN
job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-11

sheet 6 of 25
date: 11/2015



0 100 200
SCALE IN FEET



PROPOSED FILL

PROPOSED PILOT CHANNEL ALIGNMENT

POTENTIAL LOW FLOW PATH

PROPOSED GRADE CONTROL STRUCTURE

PROPOSED GRADING LIMITS

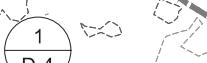
EG INDEX CONTOUR

EG INTERIM CONTOUR

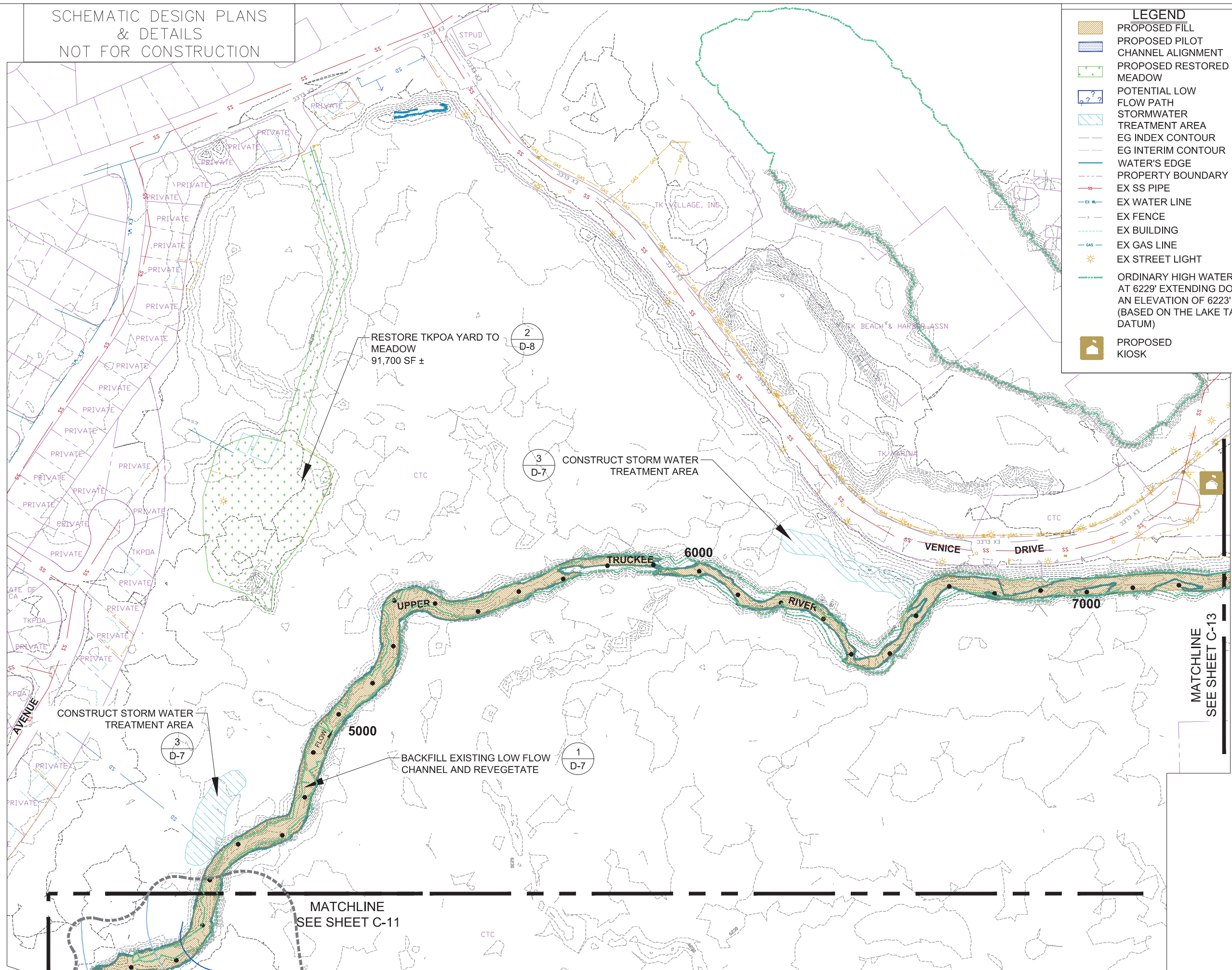
WATER'S EDGE

PROPERTY BOUNDARY

ORDINARY HIGH WATER LINE AT 6229' EXTENDING DOWN TO AN ELEVATION OF 6223' (BASED ON THE LAKE TAHOE DATUM)



SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



LEGEND

- PROPOSED FILL
- PROPOSED PILOT CHANNEL ALIGNMENT
- PROPOSED RESTORED MEADOW
- POTENTIAL LOW FLOW PATH
- STORMWATER TREATMENT AREA
- EG INDEX CONTOUR
- EG INTERIM CONTOUR
- WATER'S EDGE
- PROPERTY BOUNDARY
- EX SS PIPE
- EX WATER LINE
- EX FENCE
- EX BUILDING
- EX GAS LINE
- EX STREET LIGHT
- ORDINARY HIGH WATER LINE AT 6229' EXTENDING DOWN TO AN ELEVATION OF 6223' (BASED ON THE LAKE TAHOE DATUM)
- PROPOSED KIOSK



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

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MID-MARSH
PLAN
SHEET B

C-12

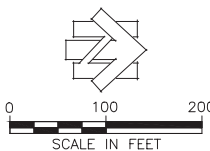
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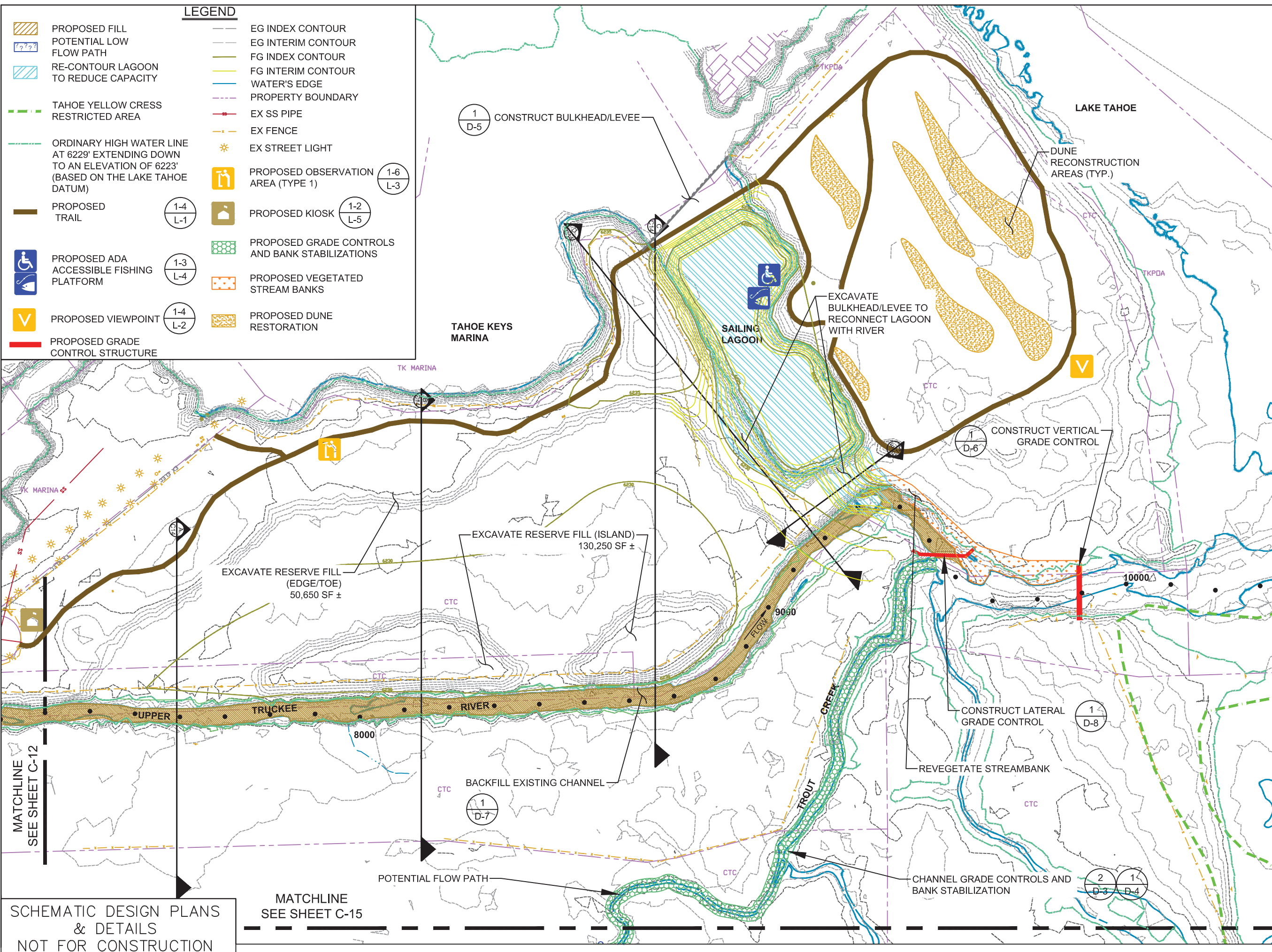
#	description	date

scale:	AS SHOWN
job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-12

sheet 7 of 25
date: 11/2015





SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

MATCHLINE
SEE SHEET C-15



UPPER TRUCKEE RIVER AND MARSH RESTORATION PROJECT

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DOWNSTREAM REACH PLAN

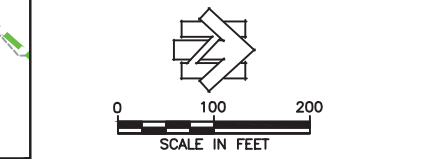
C-13

REVISIONS		
#	description	date

scale:	AS SHOWN
job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-13

sheet 8 of 25
date: 11/2015





UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

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DOWNSTREAM REACH
CROSS-SECTIONS

C-14

REVISIONS

#	description	date

scale: AS SHOWN

job no.: 00110066.04

drawn by: CK

checked by: CM

sheet no.: C-14

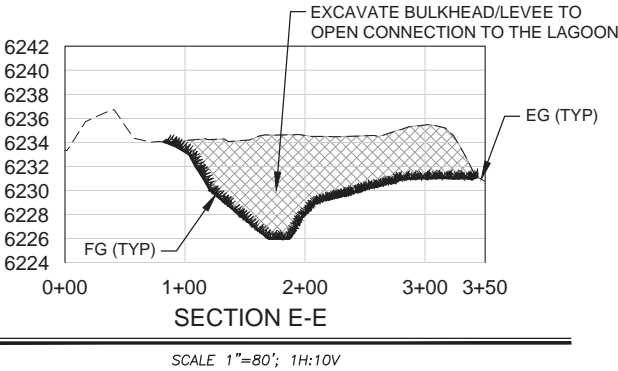
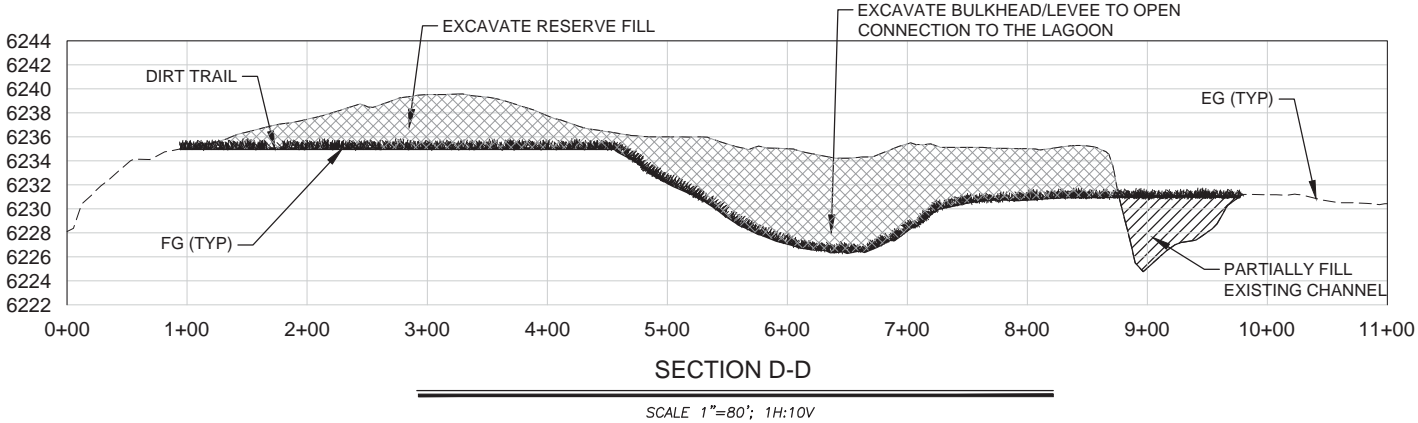
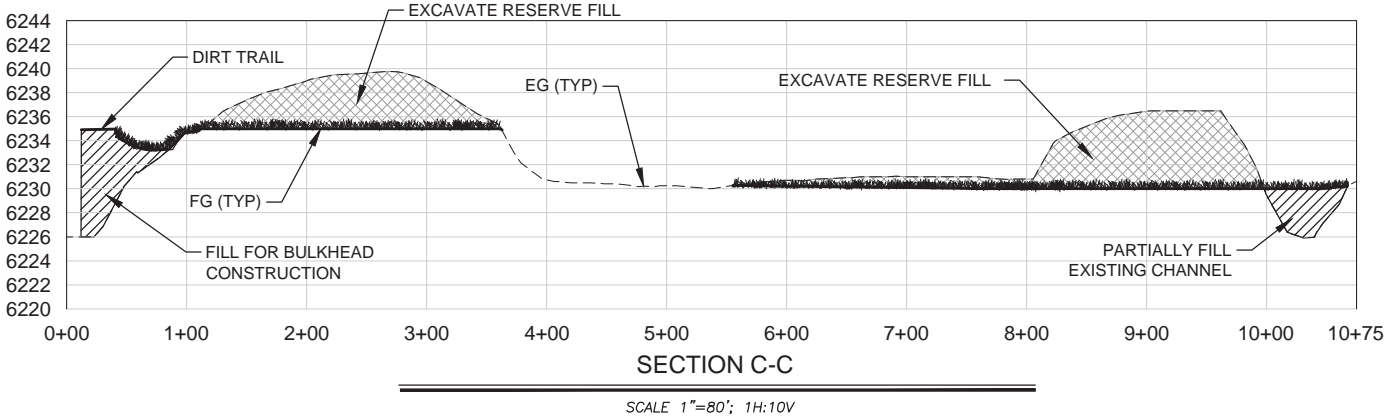
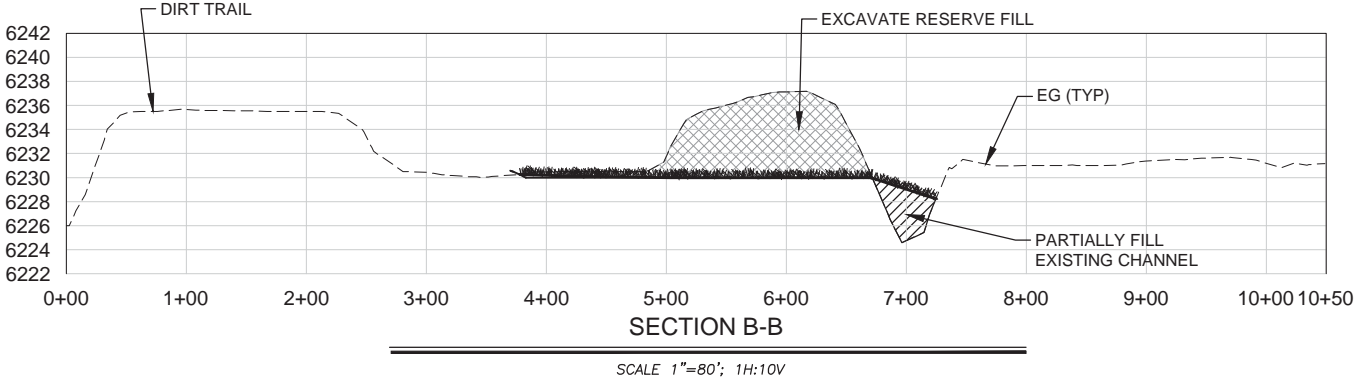
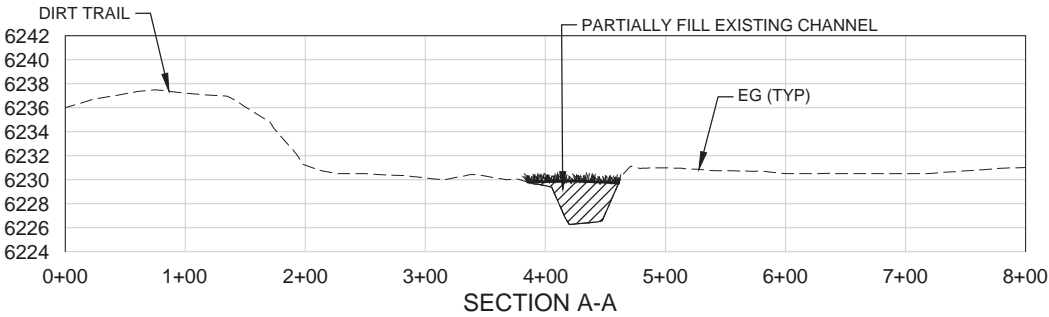
sheet 9 of 26

date: 04/2015

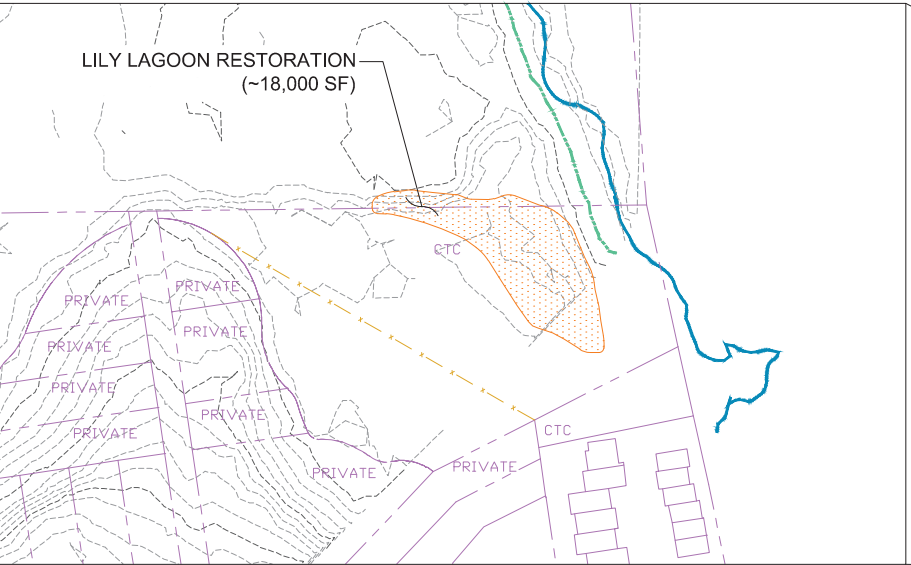
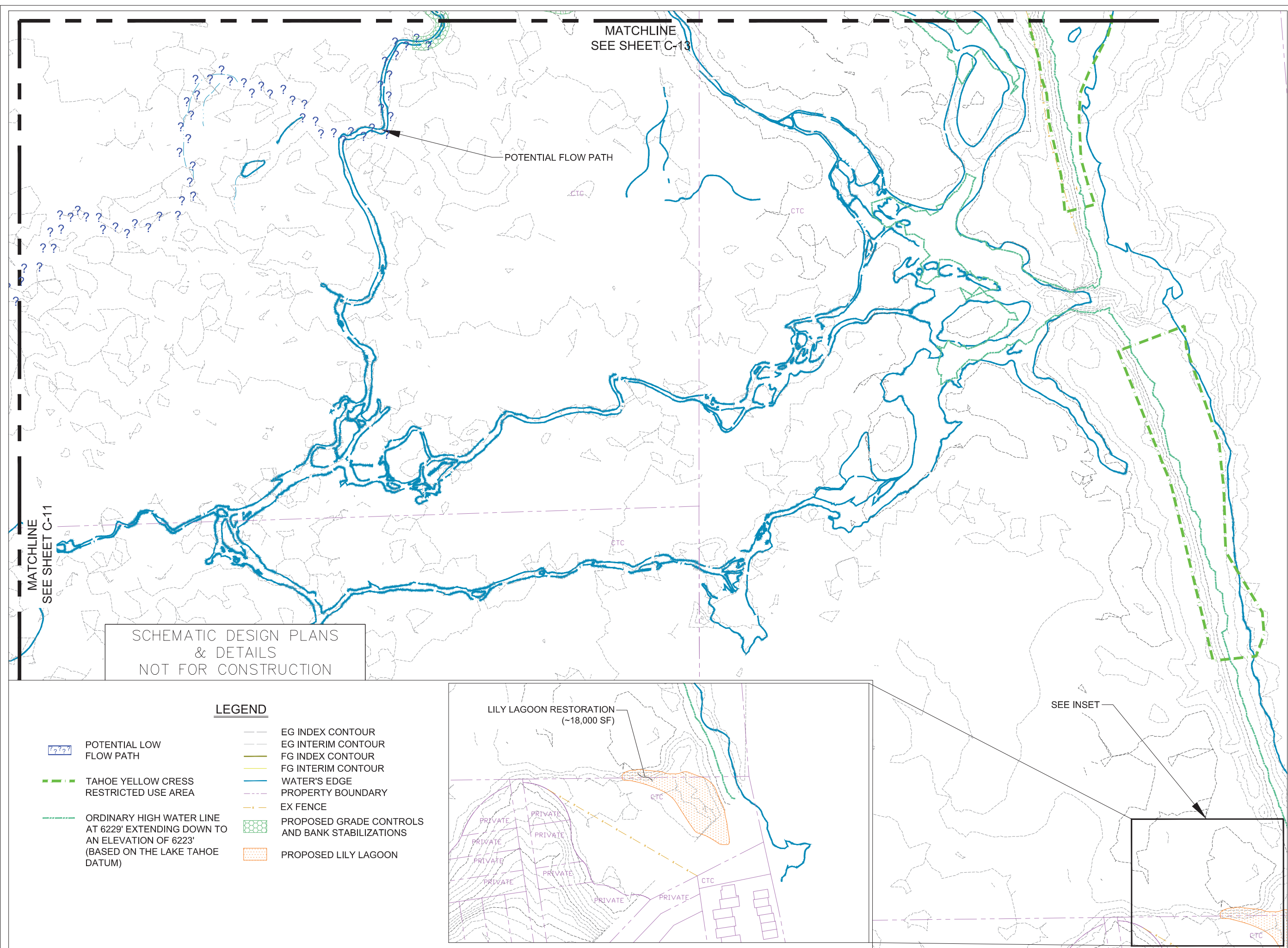


LEGEND

- PROPOSED CUT
- PROPOSED FILL
- PROPOSED REVEGETATION





SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION




LEGEND

- POTENTIAL LOW FLOW PATH
- TAHOE YELLOW CRESS RESTRICTED USE AREA
- ORDINARY HIGH WATER LINE AT 6229' EXTENDING DOWN TO AN ELEVATION OF 6223' (BASED ON THE LAKE TAHOE DATUM)
- EG INDEX CONTOUR
- EG INTERIM CONTOUR
- FG INDEX CONTOUR
- FG INTERIM CONTOUR
- WATER'S EDGE
- PROPERTY BOUNDARY
- EX FENCE
- PROPOSED GRADE CONTROLS AND BANK STABILIZATIONS
- PROPOSED LILY LAGOON




UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

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DOWNSTREAM BARTON
BEACH



C-15

REVISIONS		
#	description	date

scale:	AS SHOWN
job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-15

sheet	10	of	25
date:	11/2015		



SCALE IN FEET