

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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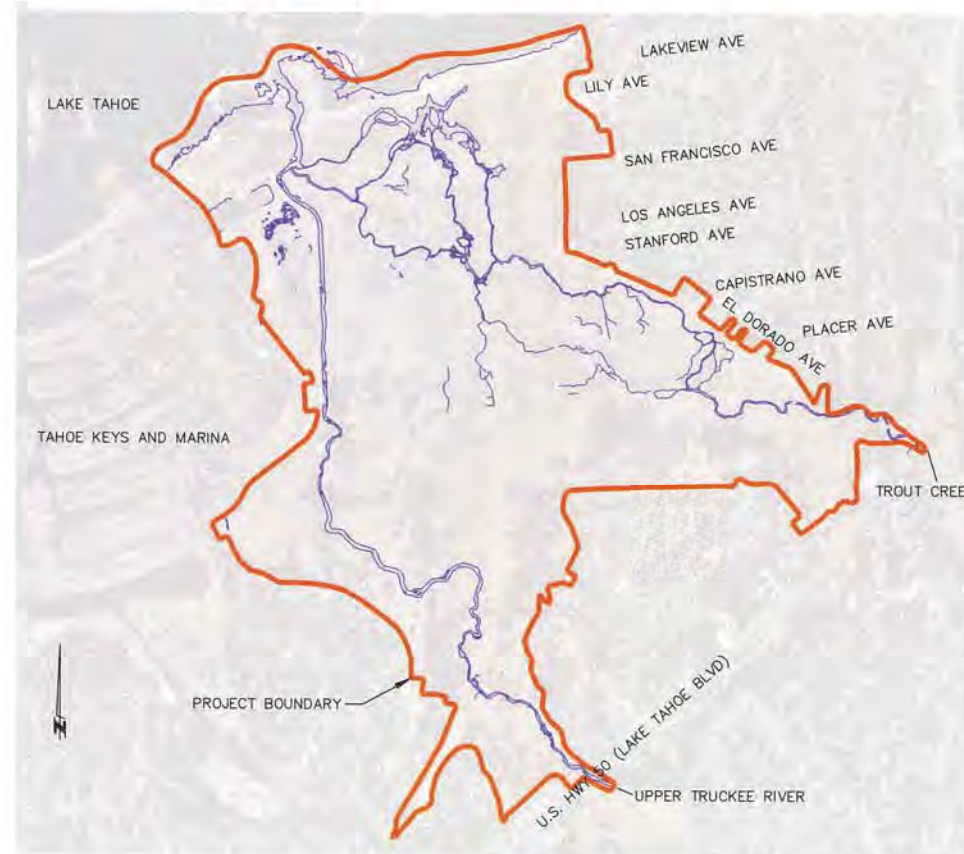


295 Highway 50, Suite 1
Zephyr Cove, NV 89448
Tel: 775.588.9069



VICINITY MAP

N.T.S.



LOCATION MAP

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

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TITLE SHEET

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REVISIONS		
#	description	date

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

sheet no.: i

sheet 1 of 25
date: 11/2015



GENERAL NOTES

- 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.
- CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 8:00 A.M. AND 6:30 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM THE DGS.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL CONTROL STATIONING AND DATA DIMENSIONING ARE REFERENCED TO THE CENTERLINE OF THE FACILITY SHOWN UNLESS OTHERWISE NOTED.
- 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.
- 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.
- 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.
- 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 ERRECTED 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.
- ALL REVEGETATION SHOWN ON THE PLANS IS TO BE COMPLETED BY OTHERS, UNLESS NOTED OTHERWISE.
- 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.
- 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.

- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE CONTRACT DOCUMENTS FOR ALL SUBMITTALS REQUIRED FOR DGS REVIEW AND ACCEPTANCE.
- THE DGS WILL FURNISH THE CONSTRUCTION STAKING TO THE CONTRACTOR AS SET FORTH IN THE SPECIAL PROVISIONS.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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
C	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
DW	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

HORIZONTAL AND VERTICAL CONTROL/PROJECTION

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

LEGEND

*NOTE: LEGEND PROVIDED ON SHEET SUPERCEDES THIS LEGEND

EXISTING	PROPOSED	
		FOOT TRAIL
		PIPE (MATERIAL AS NOTED)
		FILL
		CUT
		BOULDER TOE PROTECTION
		NEW FLOODPLAIN
		SCOUR POOL
		POINT BAR
		ROCK DISSIPATER
		RESTORED DUNES
		STORMWATER TREATMENT AREA
		LILY LAGOON RESTORATION AREA
		MAJOR CONTOUR
		MINOR CONTOUR
		TAHOE YELLOW CRESS PROTECTED AREA
		BOARDWALK
		BRIDGE
		GRADE CONTROL STRUCTURE
		NEW CHANNEL ALIGNMENT
		RE-VEGETATION
		FISHING ACCESS
		ADA ACCESSIBLE
		OBSERVATION AREA
		SELF-SERVICE VISITORS CENTER
		VIEWPOINT
		DETAIL REFERENCE NUMBER SHEET NUMBER



UPPER TRUCKEE RIVER AND MARSH RESTORATION PROJECT



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Reno, NV 89501
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INDEX SHEET

ii

#	description	date

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

sheet no. ii

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date: 11/2015

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

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 2-5 AND 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

sheet 3 of 25
date: 11/2015

SCHMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

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

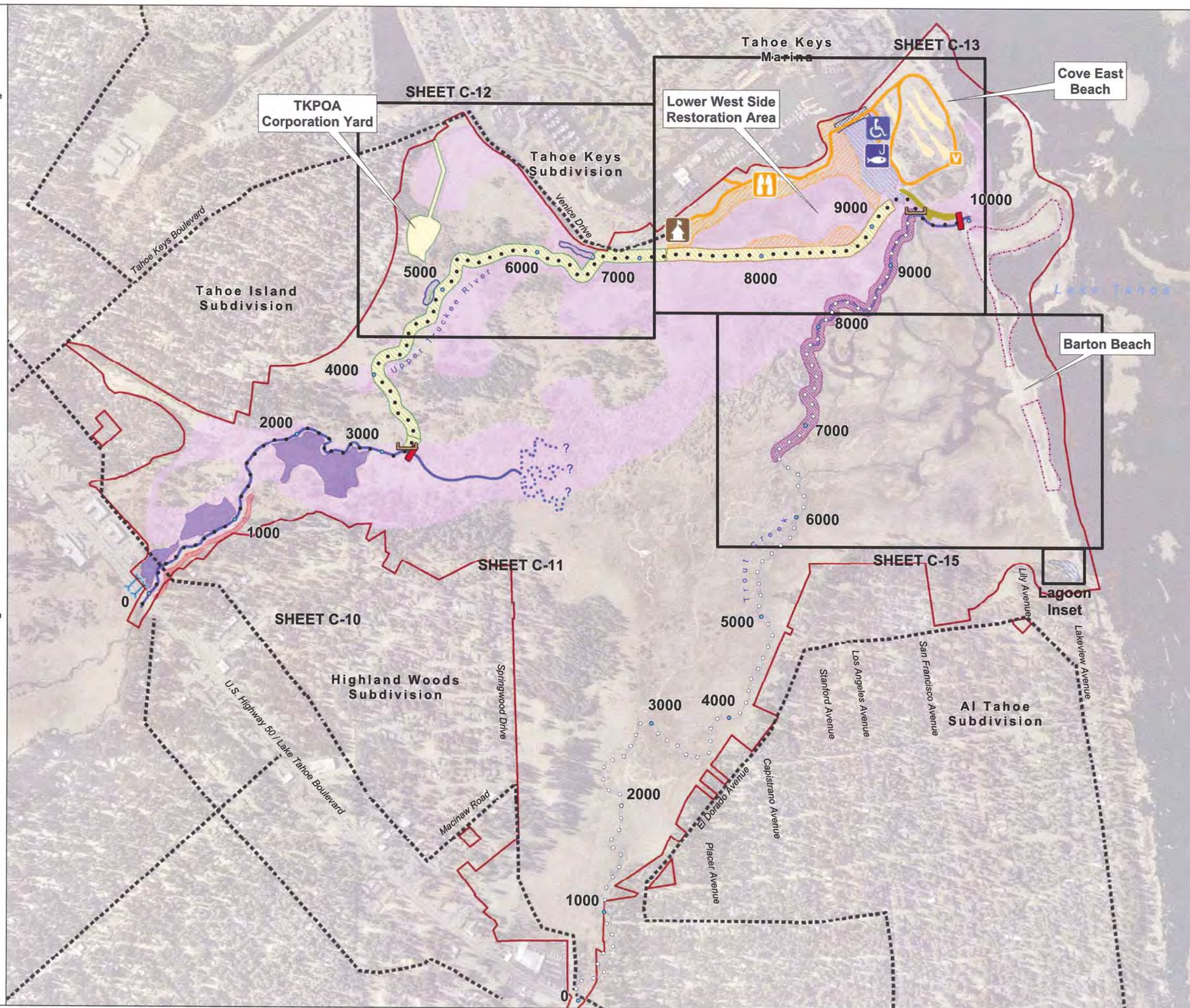
- Low and Bankful Flow Channel
- Potential Low Flow Path
- Active Floodplain
- Removal of Reserve Fill
- Partial Fill of Existing Channel
- Channel Backfill
- Floodplain Areas of Excavation

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)



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Phone (775) 588-9069 Fax (775) 588-9219

PREFERRED ALTERNATIVE MIDDLE MARSH CORRIDOR MODERATE RECREATION INFRASTRUCTURE

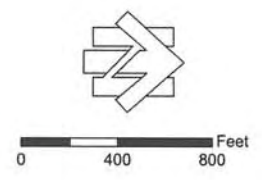
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REVISIONS	#	Description	date

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



UPSTREAM REACH PLAN

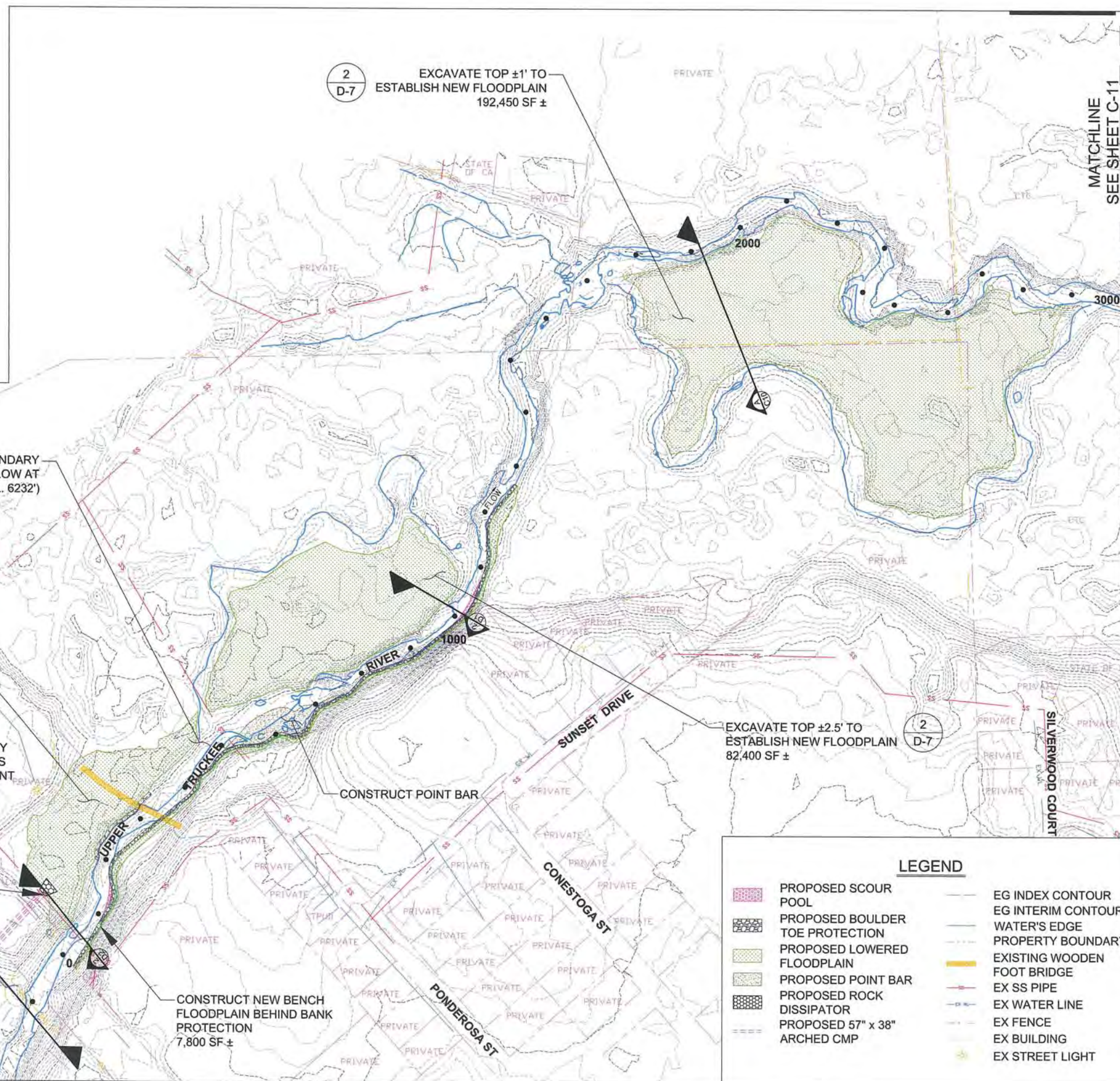
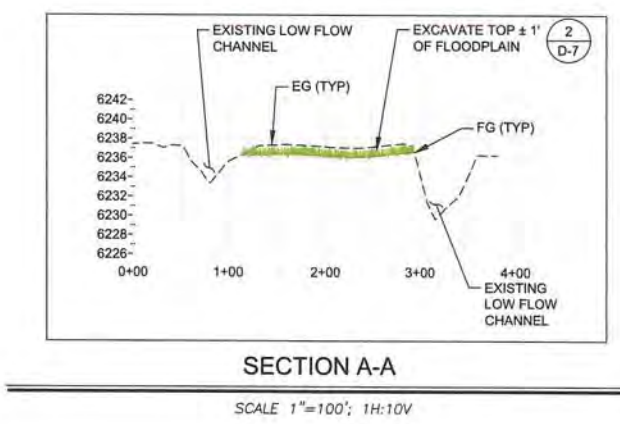
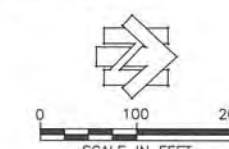
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#	description	date

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job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-10

sheet 5 of 25
date: 11/2015



LEGEND

	PROPOSED SCOUR POOL		EG INDEX CONTOUR
	PROPOSED BOULDER TOE PROTECTION		EG INTERIM CONTOUR
	PROPOSED LOWERED FLOODPLAIN		WATER'S EDGE
	PROPOSED POINT BAR		PROPERTY BOUNDARY
	PROPOSED ROCK DISSIPATOR		EXISTING WOODEN FOOT BRIDGE
	PROPOSED 57" x 38" ARCHED CMP		EX SS PIPE
			EX WATER LINE
			EX FENCE
			EX BUILDING
			EX STREET LIGHT

SCHEMATIC DESIGN PLANS & DETAILS NOT FOR CONSTRUCTION



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

E.I.P. # 560



City Hall Tower, 16th Floor One East First St.
Reno, NV 89501
Tel: 775-227-9565



295 Highway 50, Suite 1
Zephyr Cove, NV 89448
Tel: 775.588.9069

MID-MARSH
PLAN
SHEET A

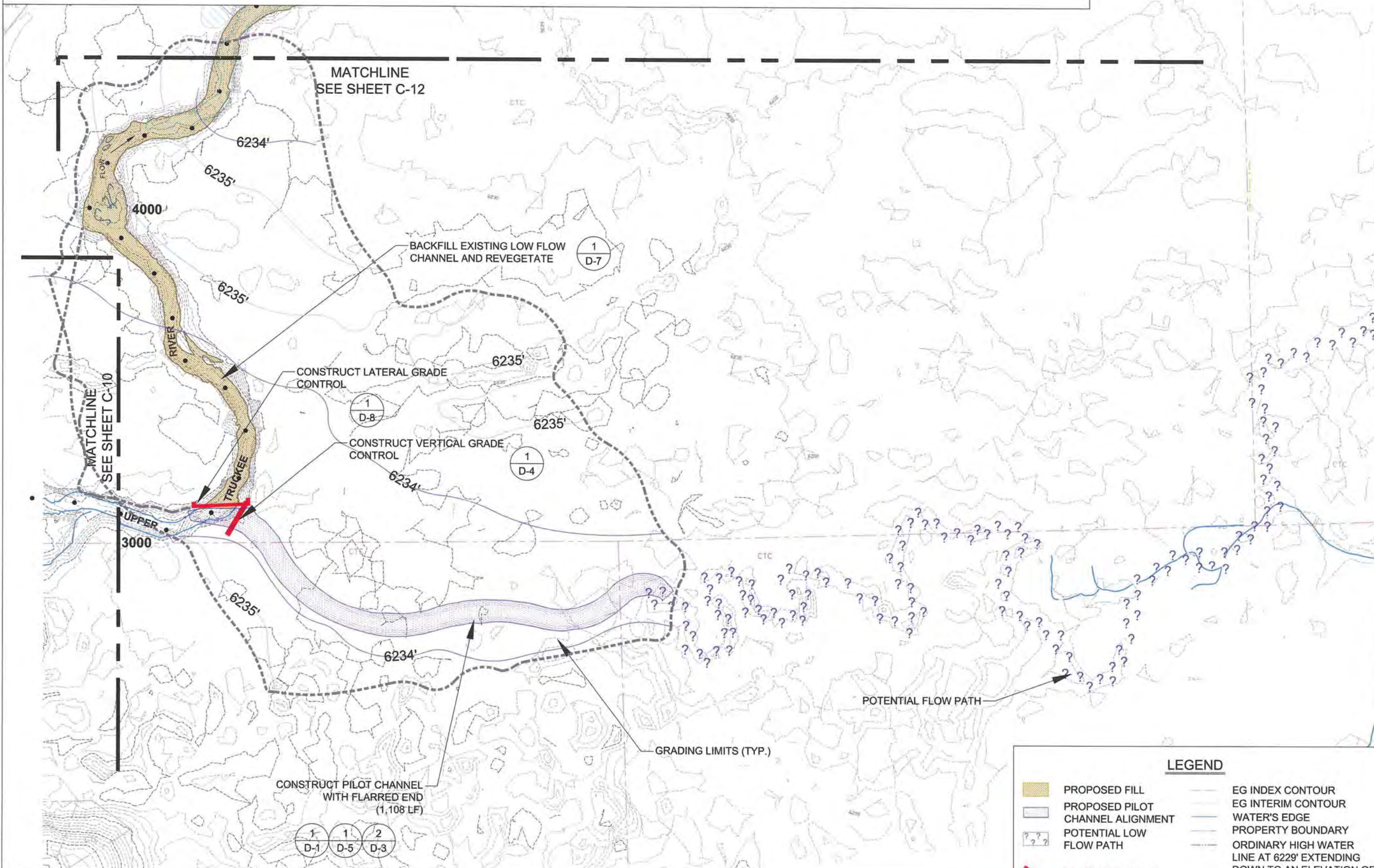
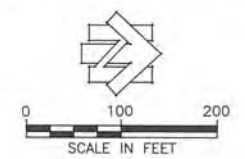
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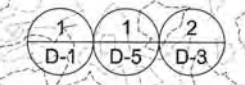
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sheet 6 of 25
date: 11/2015

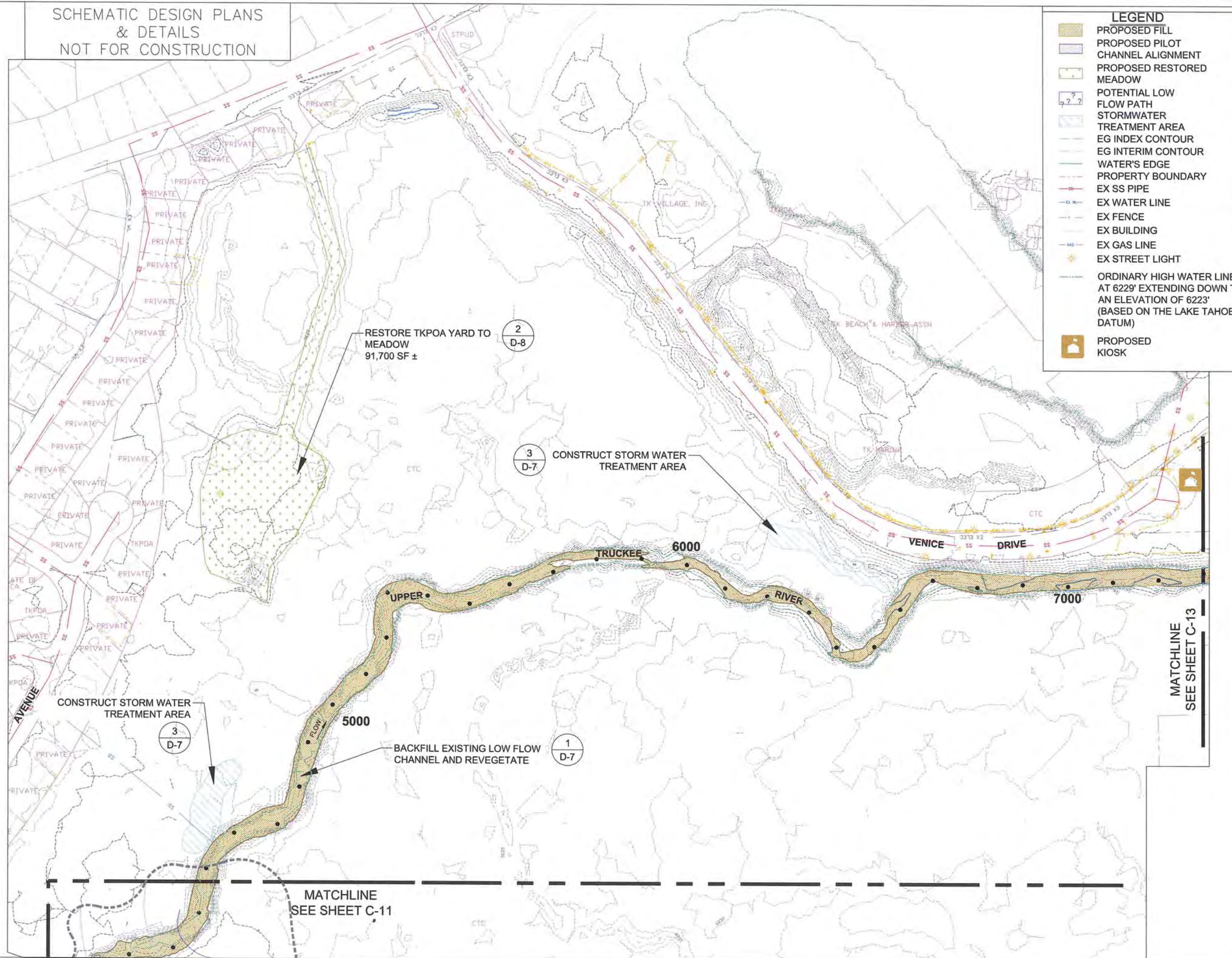


LEGEND

	PROPOSED FILL		EG INDEX CONTOUR
	PROPOSED PILOT CHANNEL ALIGNMENT		EG INTERIM CONTOUR
	POTENTIAL LOW FLOW PATH		WATER'S EDGE
	PROPOSED GRADE CONTROL STRUCTURE		PROPERTY BOUNDARY
	PROPOSED GRADING LIMITS		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



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MID-MARSH PLAN SHEET B

C-12

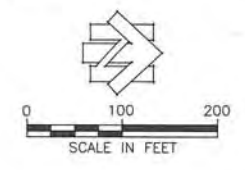
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sheet 7 of 25
date: 11/2015

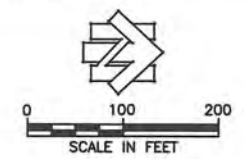


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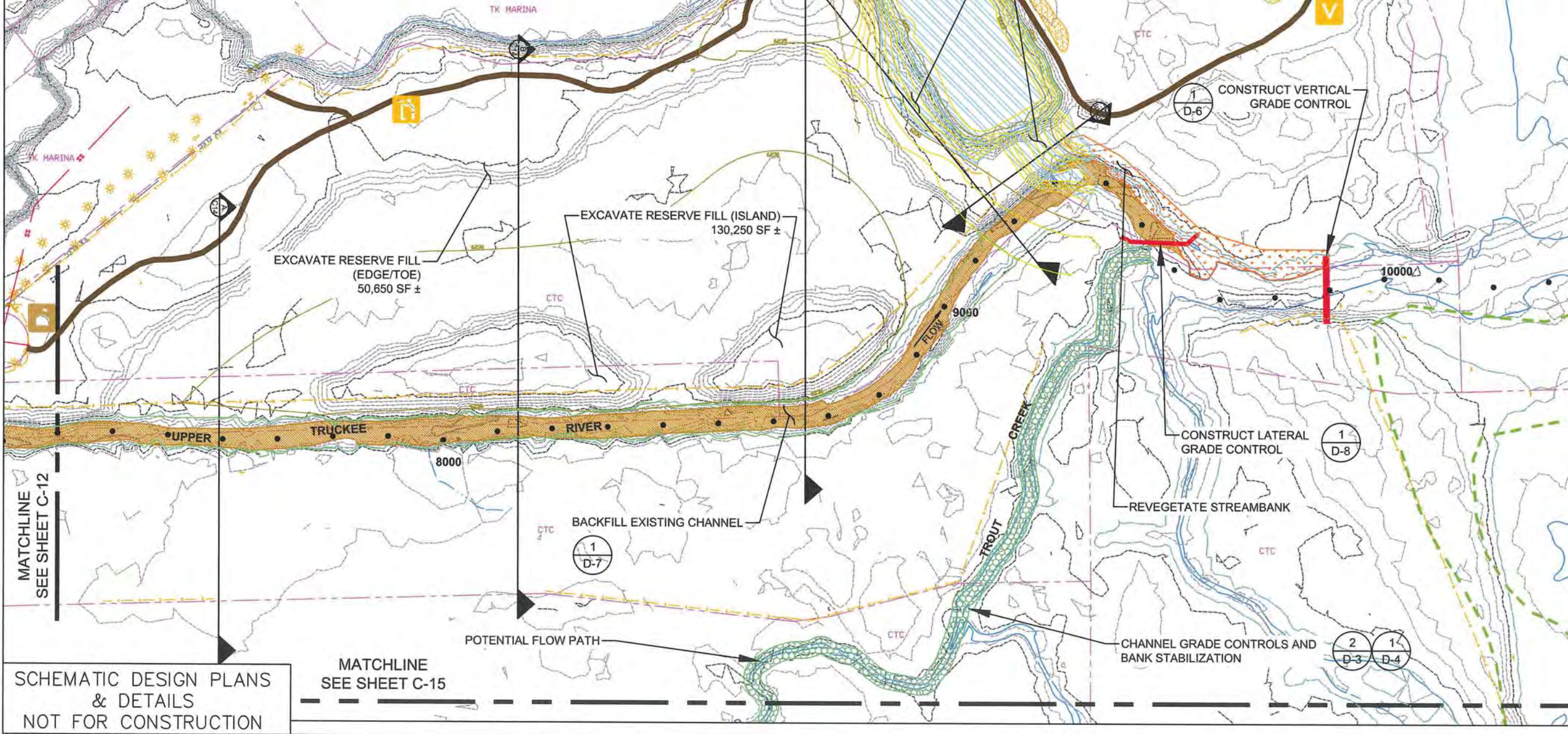
sheet 8 of 25
date: 11/2015



LEGEND

- PROPOSED FILL
- POTENTIAL LOW FLOW PATH
- RE-CONTOUR LAGOON TO REDUCE CAPACITY
- TAHOE YELLOW CRESS RESTRICTED AREA
- ORDINARY HIGH WATER LINE AT 6229' EXTENDING DOWN TO AN ELEVATION OF 6223' (BASED ON THE LAKE TAHOE DATUM)
- PROPOSED TRAIL
- PROPOSED ADA ACCESSIBLE FISHING PLATFORM
- PROPOSED VIEWPOINT
- PROPOSED GRADE CONTROL STRUCTURE
- EG INDEX CONTOUR
- EG INTERIM CONTOUR
- FG INDEX CONTOUR
- FG INTERIM CONTOUR
- WATER'S EDGE
- PROPERTY BOUNDARY
- EX SS PIPE
- EX FENCE
- EX STREET LIGHT
- PROPOSED OBSERVATION AREA (TYPE 1)
- PROPOSED KIOSK
- PROPOSED GRADE CONTROLS AND BANK STABILIZATIONS
- PROPOSED VEGETATED STREAM BANKS
- PROPOSED DUNE RESTORATION

1-4 L-1, 1-4 L-2, 1-3 L-4, 1-6 L-3, 1-2 L-5



SCHMATIC DESIGN PLANS & DETAILS NOT FOR CONSTRUCTION

MATCHLINE SEE SHEET C-15

MATCHLINE SEE SHEET C-12

DOWNSTREAM REACH
CROSS-SECTIONS

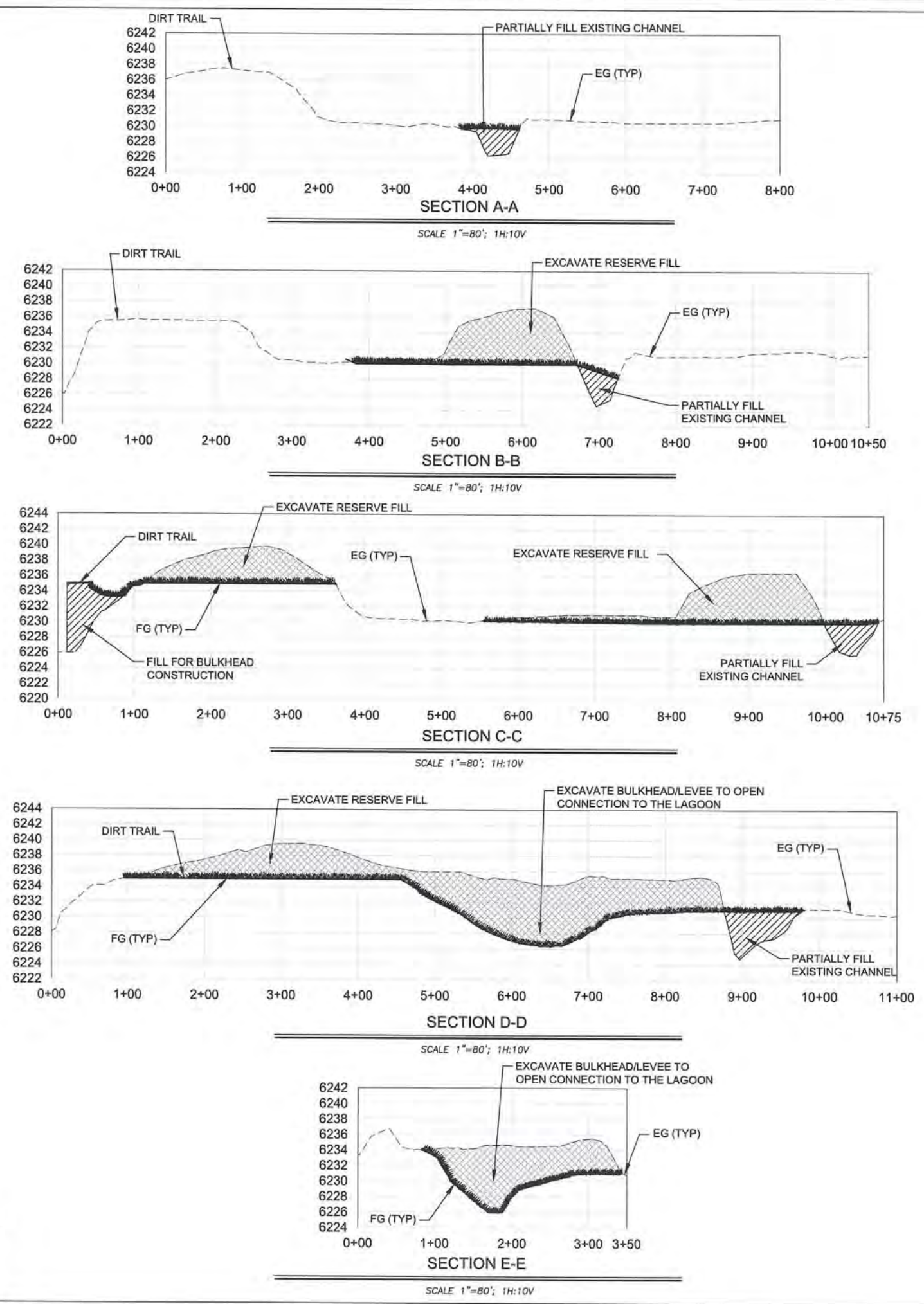
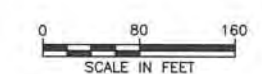
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job no.:	00110066.04
drawn by:	CK
checked by:	CM

sheet no.: C-14

sheet 9 of 26
date: 04/2015



LEGEND

- PROPOSED CUT
- PROPOSED FILL
- PROPOSED REVEGETATION

SCHMATIC DESIGN PLANS
& DETAILS
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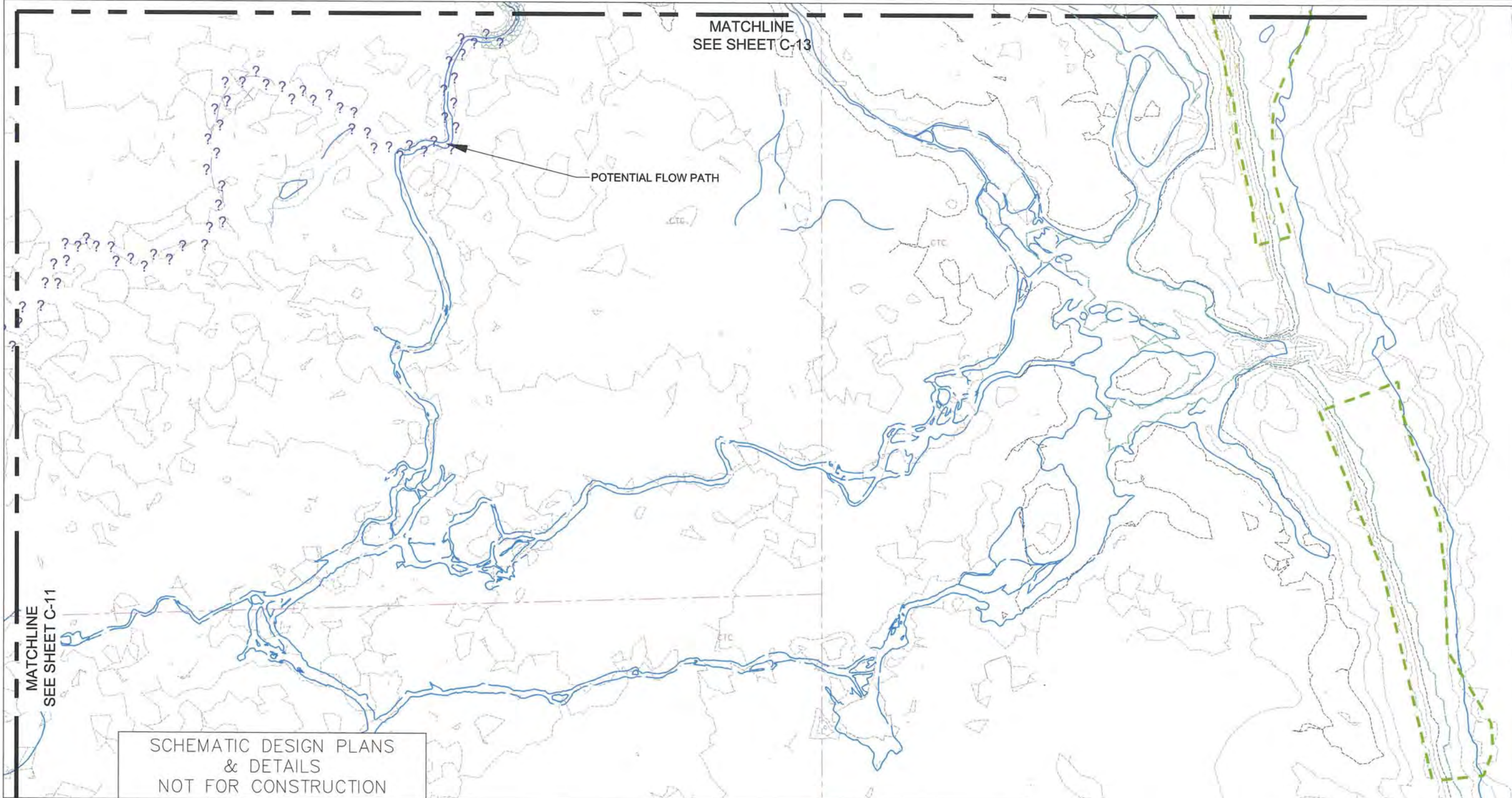
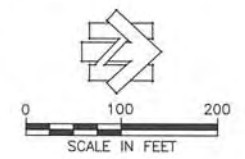
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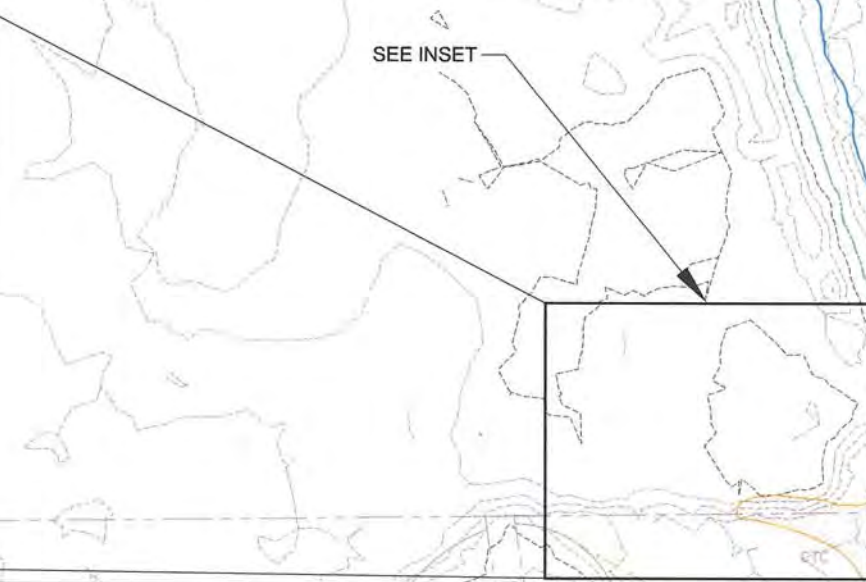
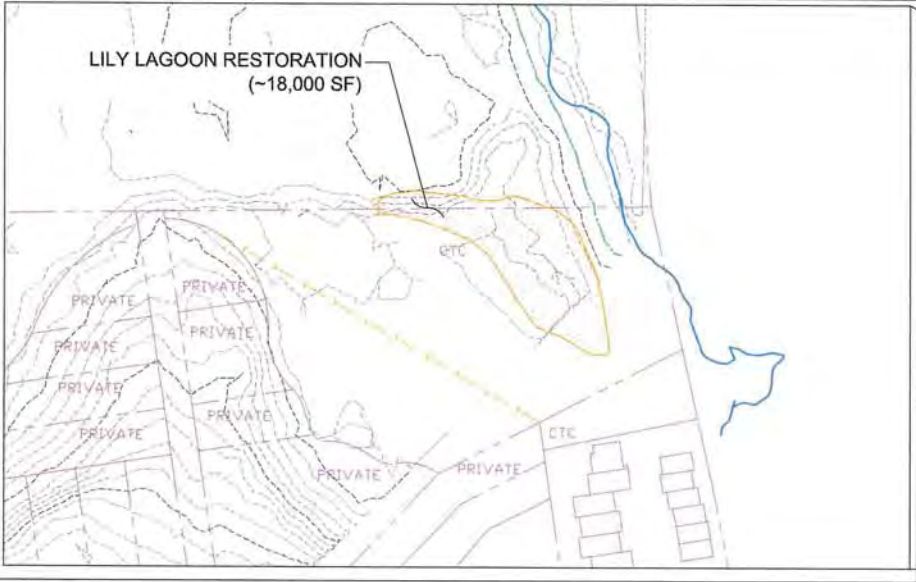
sheet no.: C-15

sheet 10 of 25
date: 11/2015



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



DETAILS

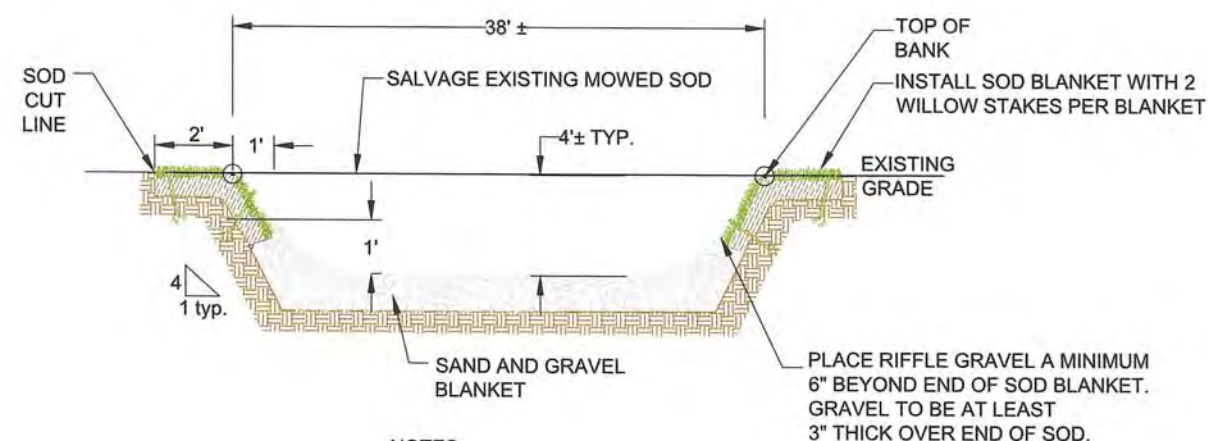
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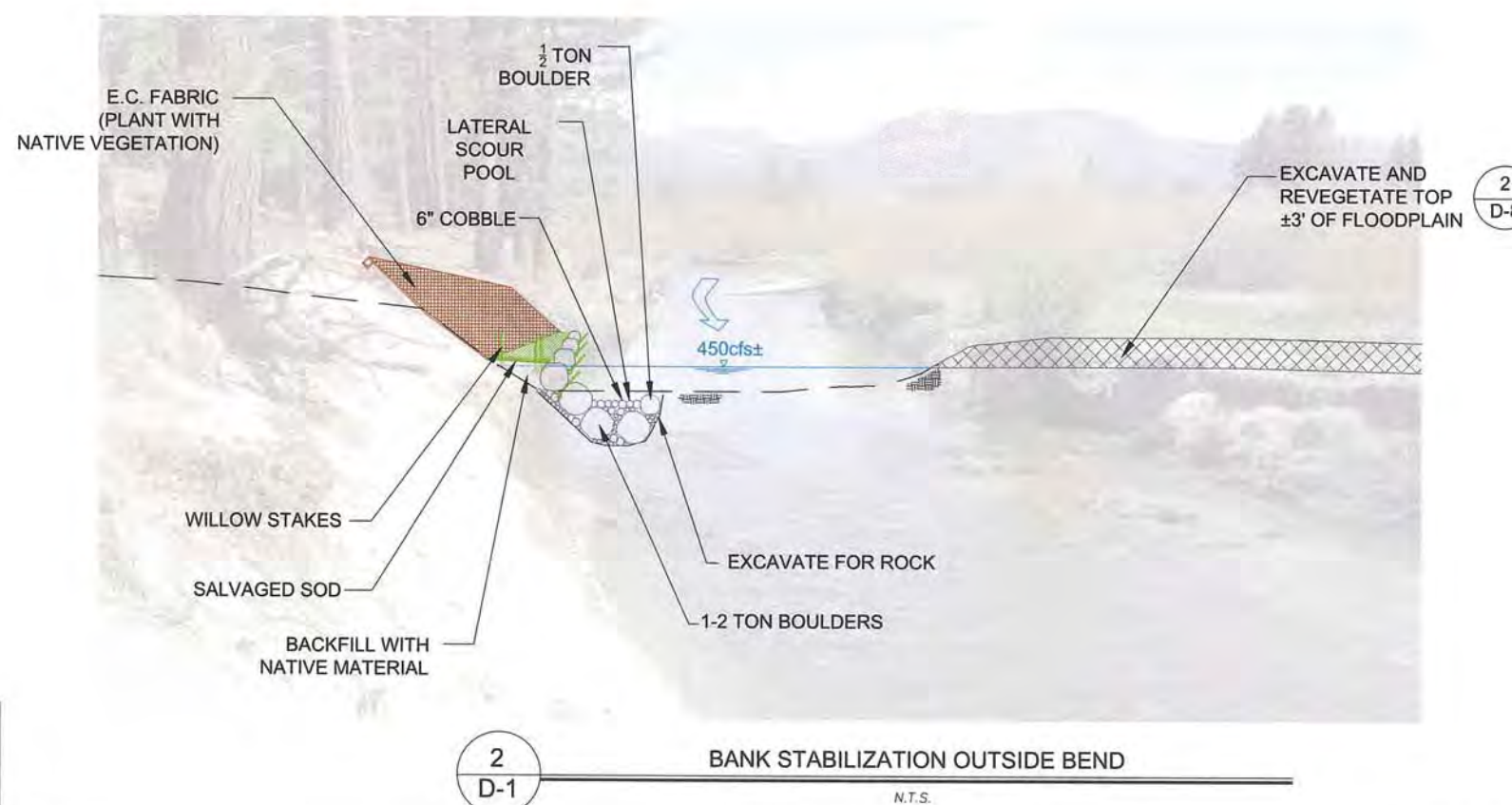
sheet 11 of 25
date: 11/2015



NOTES:

1. TOP OF BANK LINE SHALL BE PAINTED PRIOR TO GRADING, BY THE ENGINEER.

1
D-1
PILOT CHANNEL TYP. CROSS-SECTION
NTS



2
D-1
BANK STABILIZATION OUTSIDE BEND
N.T.S.

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

DETAILS

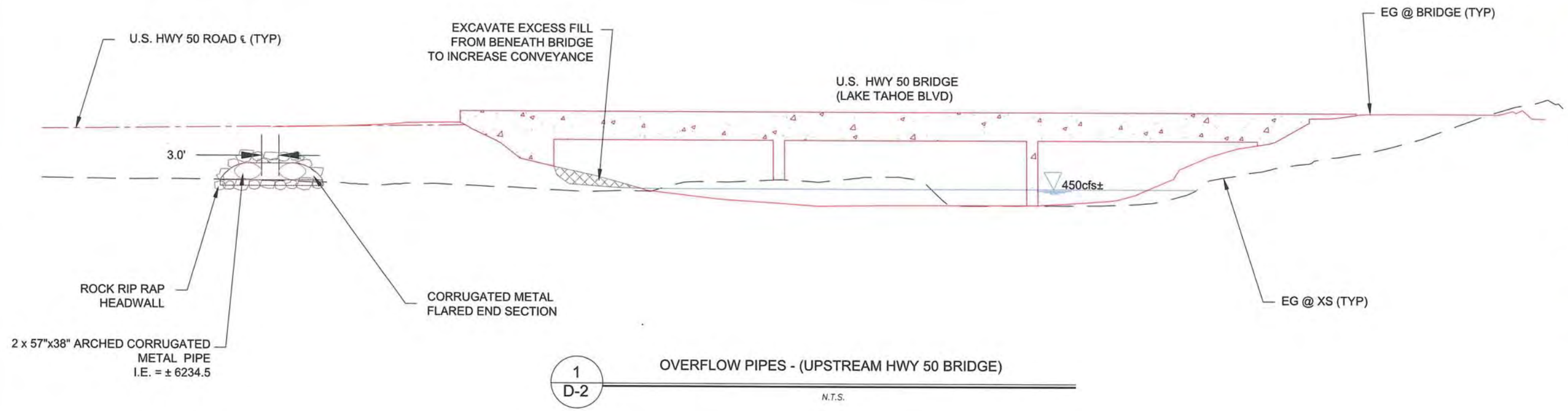
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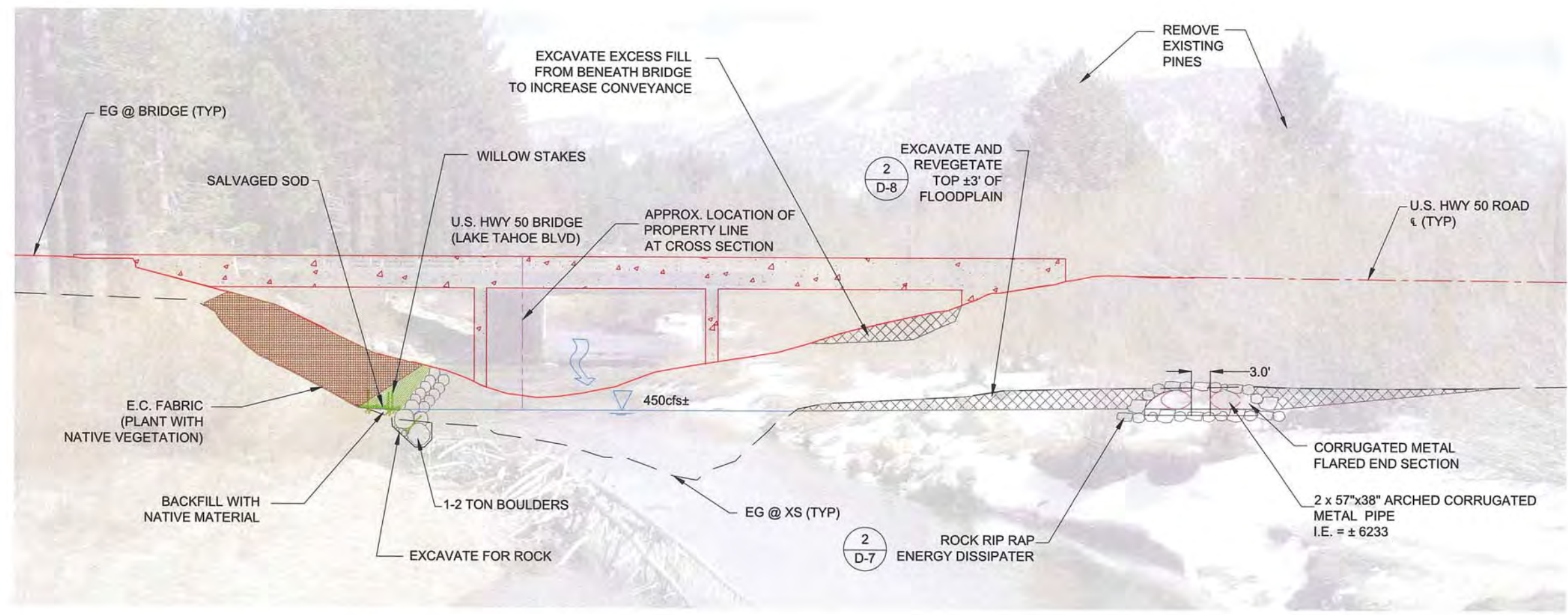
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sheet no. **D-2**

sheet 12 of 25
date: 11/2015



1
D-2
OVERFLOW PIPES - (UPSTREAM HWY 50 BRIDGE)
N.T.S.



2
D-2
OVERFLOW PIPES AND BANK PROTECTION
(DOWNSTREAM HWY. 50 BRIDGE)
N.T.S.

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

DETAILS

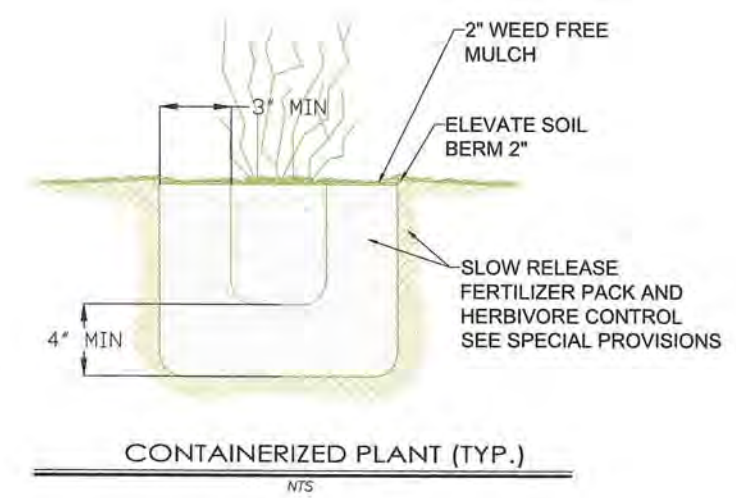
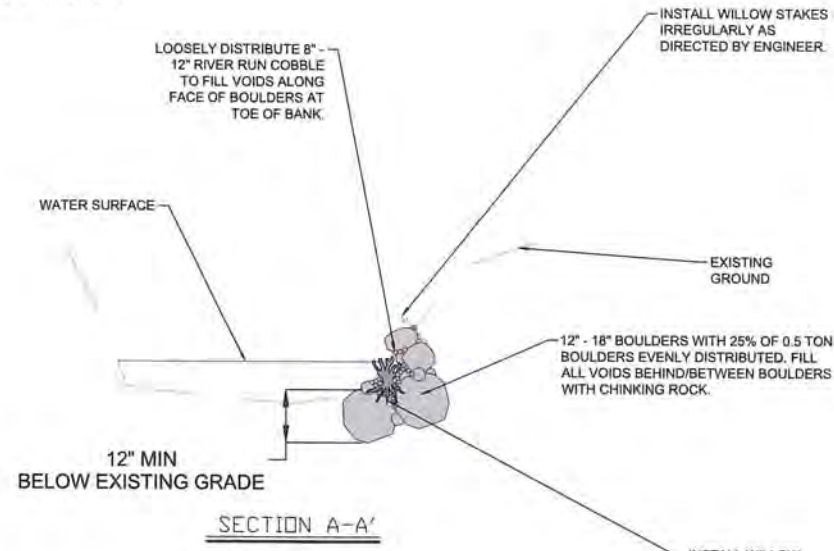
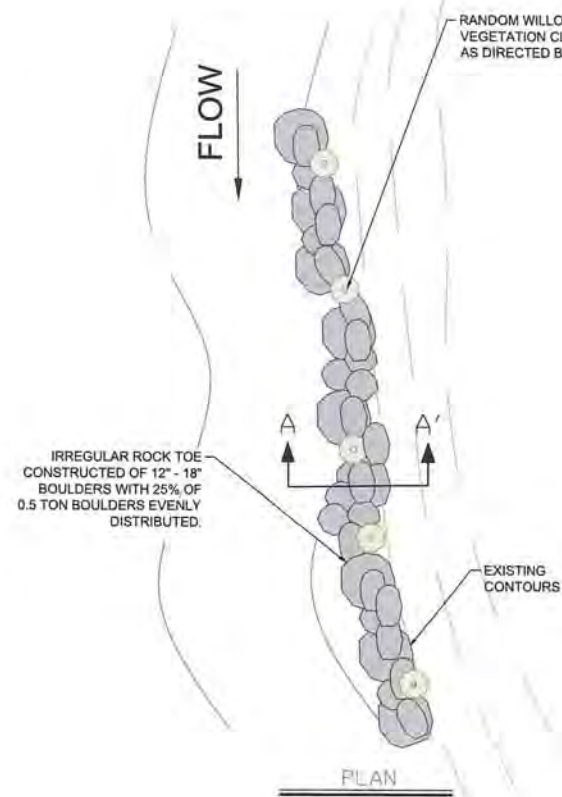
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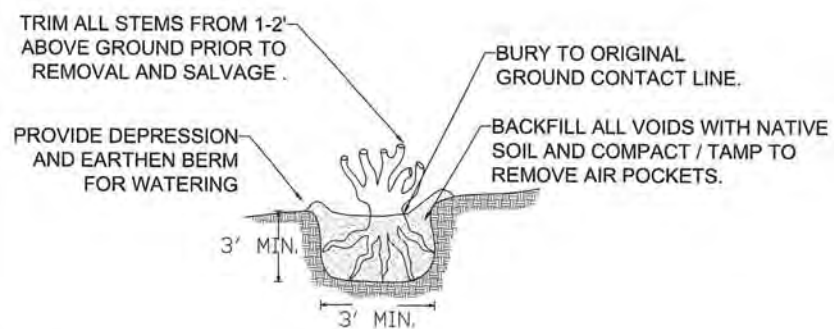
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sheet no.: **D-3**

sheet 13 of 25
date: 11/2015

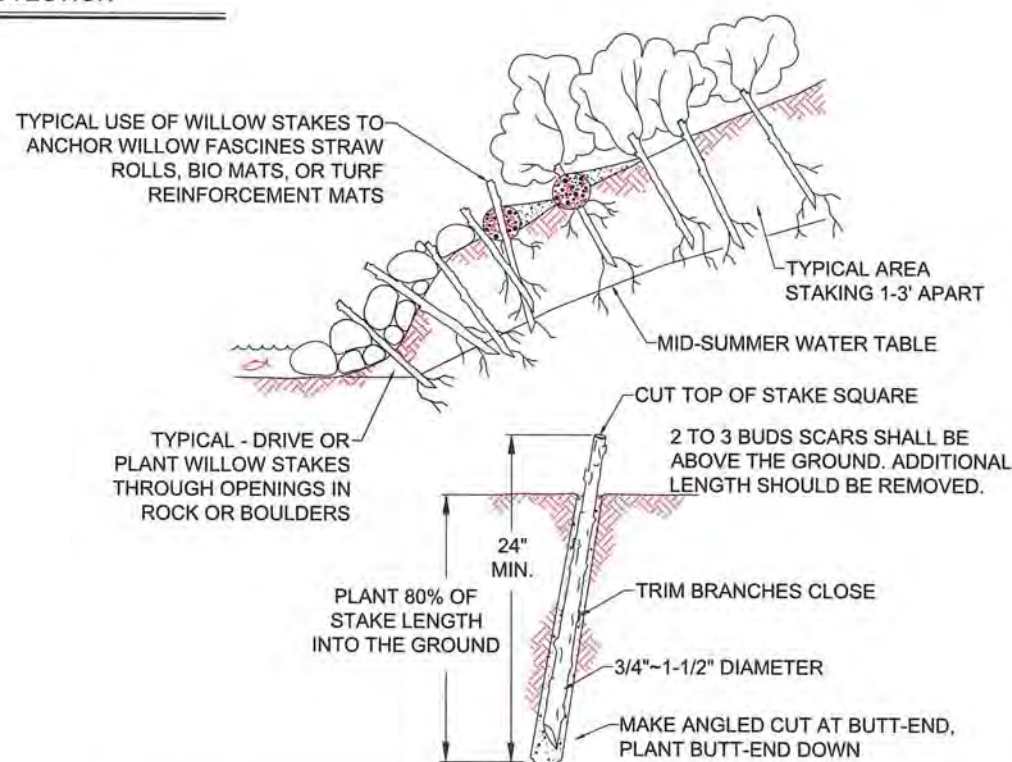


1
D-3 LATERAL GRADE CONTROL / BANK PROTECTION
N.T.S.



- NOTES:
1. DURING REMOVAL AND SALVAGE OPERATION RETAIN SOIL SURROUNDING ROOT BALL TRIM ROOTS AS NEEDED.
 2. WHEN INSTALLED IN CHANNEL BANK, ROOTWAD SHALL BE SUBSTANTIALLY INUNDATED AT BASEFLOW AND SHALL BE INSTALLED TO FORM POOLS ADJACENT TO IT.

SALVAGE AND RELOCATE
WILLOW/ALDER (TYP.)
N.T.S.



- NOTES:
1. HARVEST AND PLANT STAKES DURING THE DORMANT SEASON.
 2. USE HEALTHY, STRAIGHT AND LIVE WOOD AT LEAST 1 YEAR OLD.
 3. MAKE CLEAN CUTS AND DO NOT DAMAGE STAKES OR SPLIT ENDS DURING INSTALLATION, USE A PILOT BAR IN FIRM SOILS.
 4. SOAK CUTTINGS FOR 24 HOURS (MIN.) PRIOR TO INSTALLATION.
 5. COMPACT / TAMP THE SOIL AROUND THE STAKE TO REMOVE ALL AIR POCKETS.

WILLOW STAKES (TYP.)
N.T.S.

1
D-3 BANK PROTECTION (OPTIONS) TYP.
N.T.S.

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

DETAILS

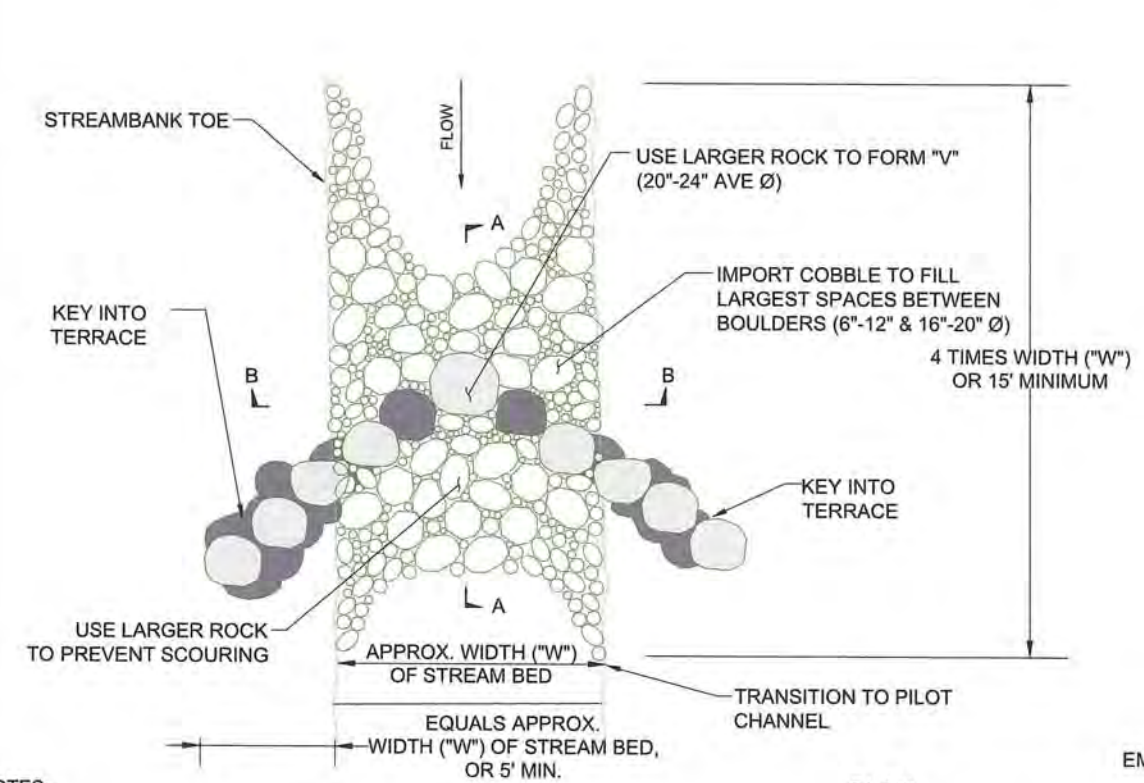
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sheet 14 of 25
date: 11/2015

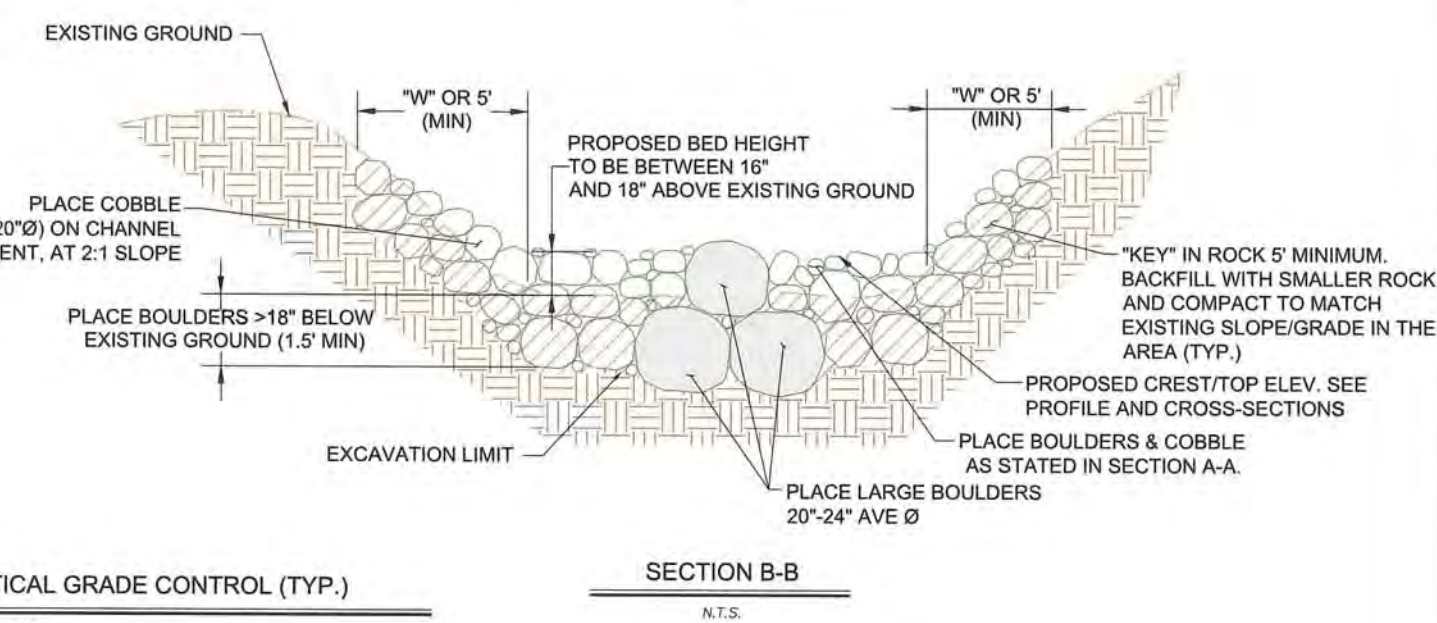
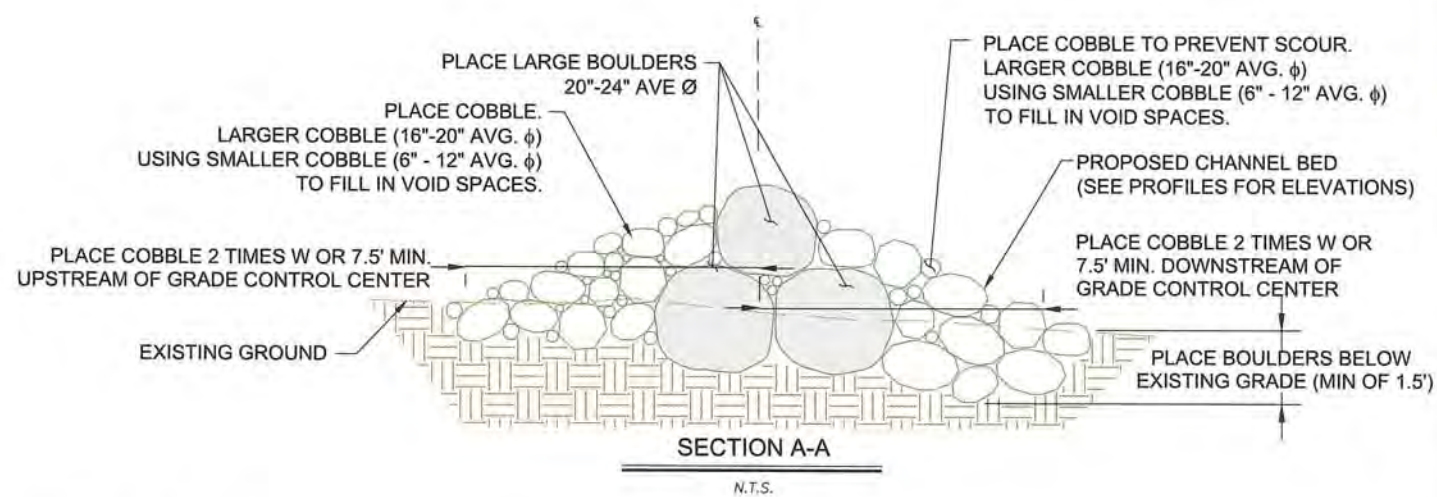


PLAN

N.T.S.

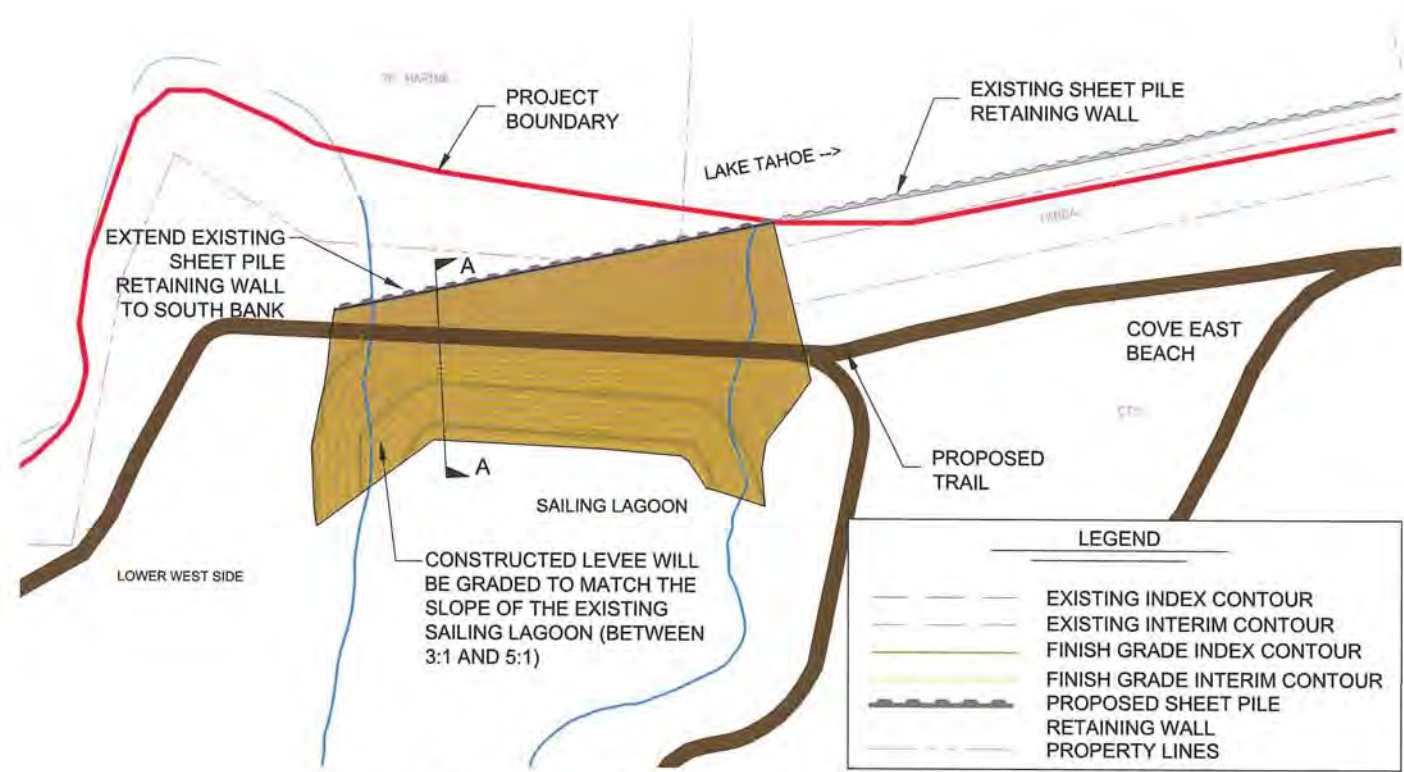
NOTES:

1. TOTAL VOLUME 90± CY OF ROCK AT EACH GRADE CONTROL STRUCTURE
2. LARGE BOULDERS (20"-24" AVE Ø) PLACED TO FORM "V" IN GRADE CONTROL STRUCTURE SHALL BE PLACED (VERTICAL/ELEVATION) STARTING AT ϵ OF CHANNEL 16"-18" BELOW EXISTING GROUND.
3. THE ELEVATION OF THE LARGE BOULDERS (20"-24" AVE Ø) SHALL INCREASE AT 2% ± GOING AWAY FROM THE CHANNEL ϵ AND INTO THE EMBANKMENT. THE BOTTOM OF THE ROCK IN THE CHANNEL ϵ SHALL BE APPROXIMATELY 0.25' LOWER THAN THE LAST ROCK PLACED (FURTHEST INTO EMBANKMENT).



1 BURIED BOULDER VERTICAL GRADE CONTROL (TYP.)
D-4 N.T.S.

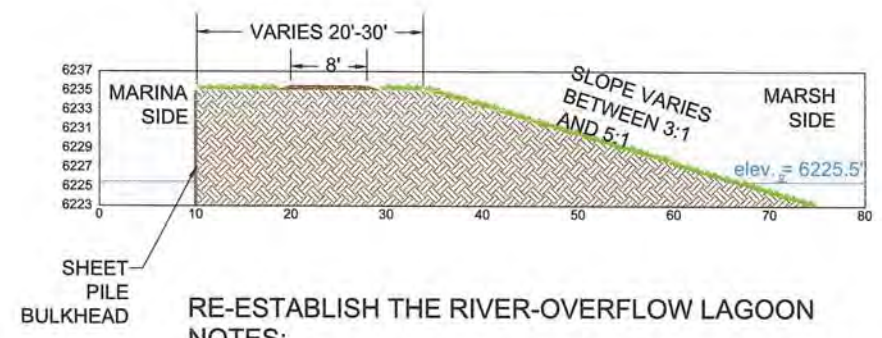
SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



PLAN
SCALE: 1"=60'

1
D-5

SAILING LAGOON BULKHEAD - PREFERRED ALTERNATIVE



SECTION A-A
SCALE: 1"=10', 1H:1V

RE-ESTABLISH THE RIVER-OVERFLOW LAGOON
NOTES:

1. THE SURFACE WATER OF THE SAILING LAGOON IS PART OF THE TAHOE KEYS MARINA AND IS HYDRAULICALLY CONNECTED TO LAKE TAHOE, A RESULT OF PRIOR DREDGING AND FILL ACTIVITIES TO PROVIDE VARIOUS NAVIGATION ROUTES SINCE THE 1950'S.
2. THE PREFERRED ALTERNATIVE WILL RESTORE A LAGOON FEATURE ON THE UPPER TRUCKEE BY: 1) CONSTRUCTING A BULKHEAD AT THE EXISTING SAILING LAGOON TO BLOCK ITS OPEN CONNECTION WITH THE MARINA; AND 2) RE-EXCAVATING THE FILL BETWEEN THE SAILING LAGOON AND THE UPPER TRUCKEE SO THAT THE RIVER IS A SURFACE WATER SOURCE TO THE LAGOON.
3. THE LOWER WEST SIDE PLAN SHEETS SHOW THE PROPOSED ALTERNATIVES FOR RECONNECTING THE SAILING LAGOON TO THE UPPER TRUCKEE RIVER.

DETAILS

D-5

REVISIONS		
#	description	date

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job no.:	00110066.04
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sheet 15 of 25
date: 11/2015

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

DETAILS

D-6

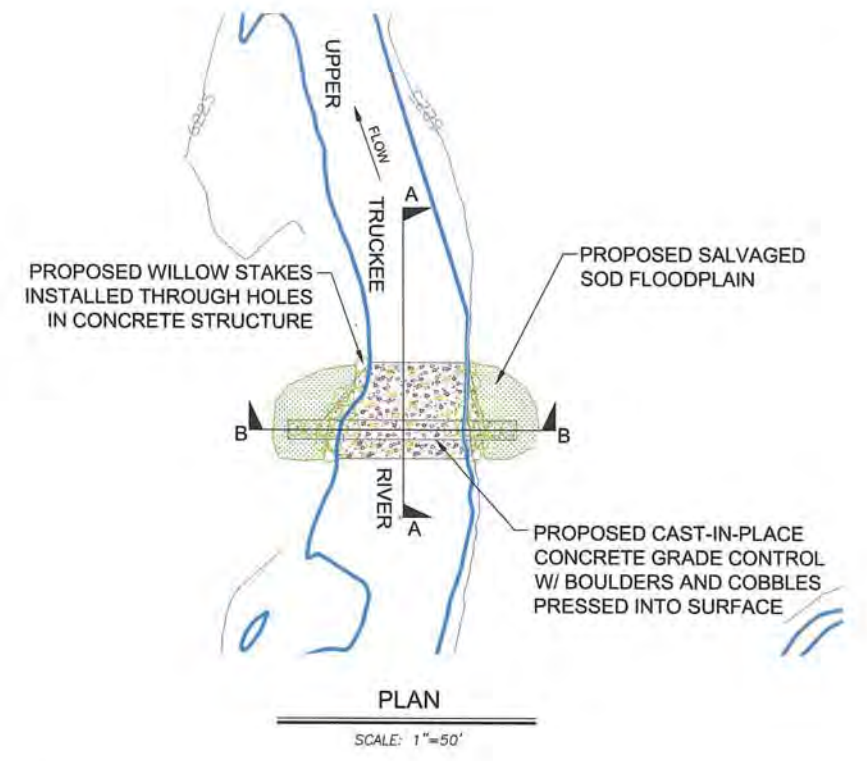
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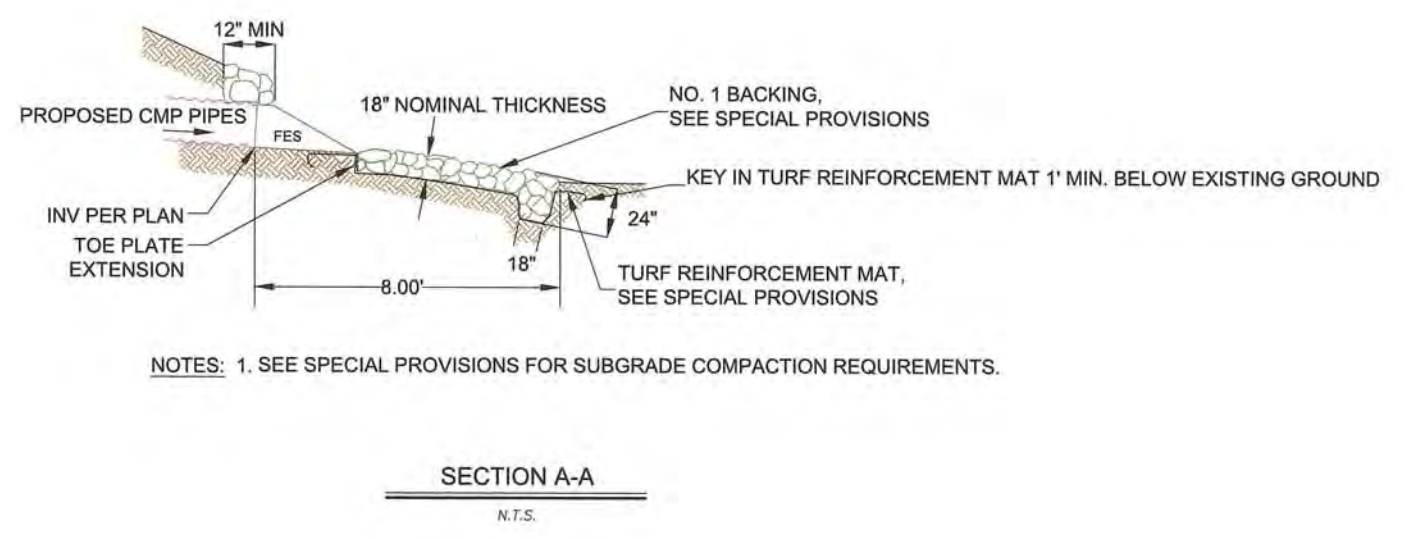
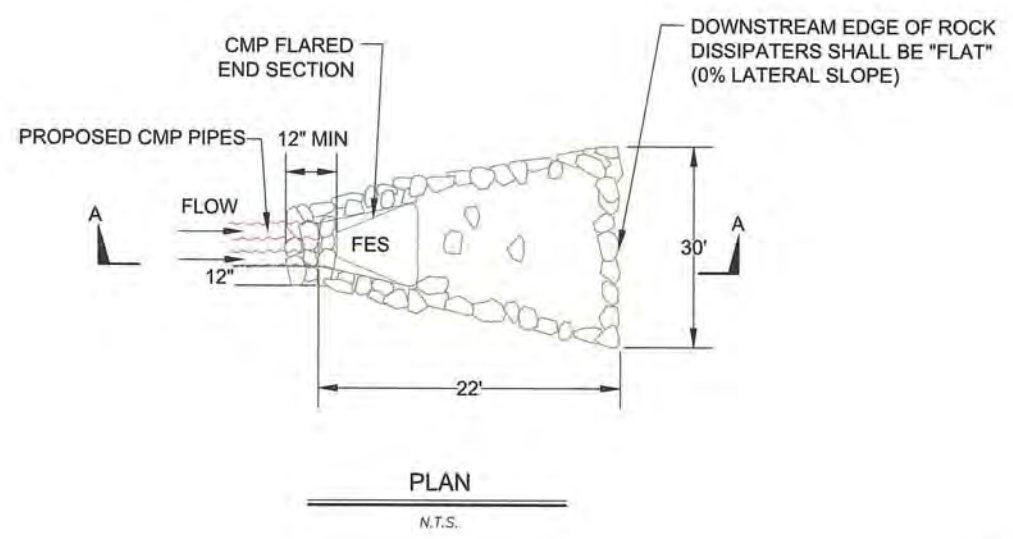
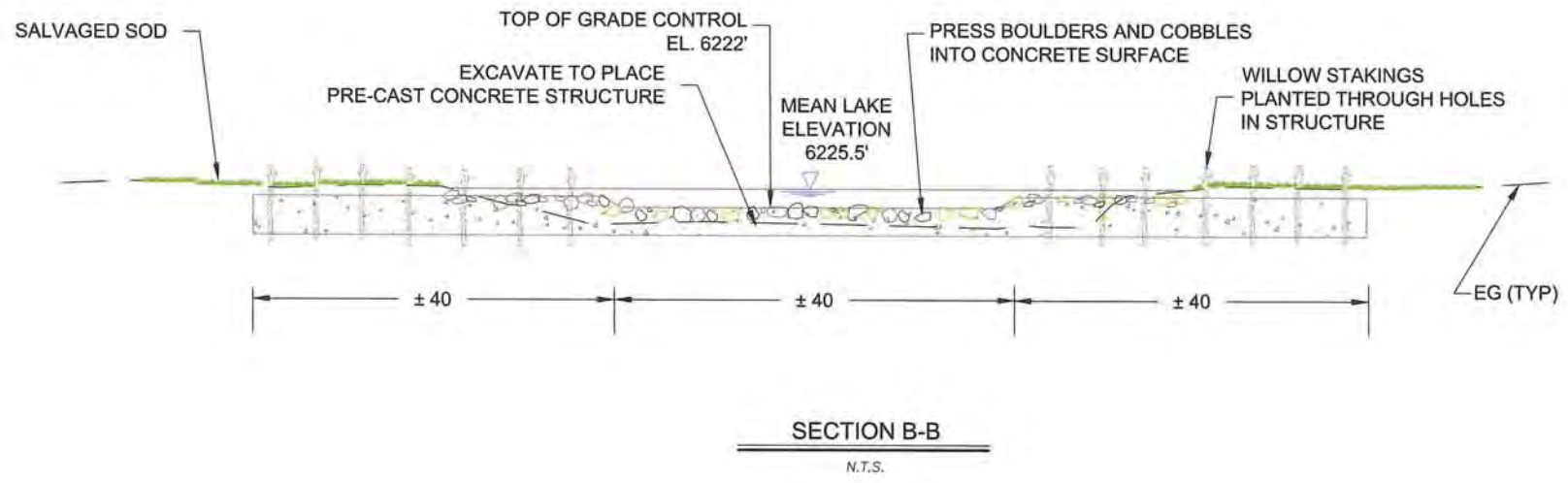
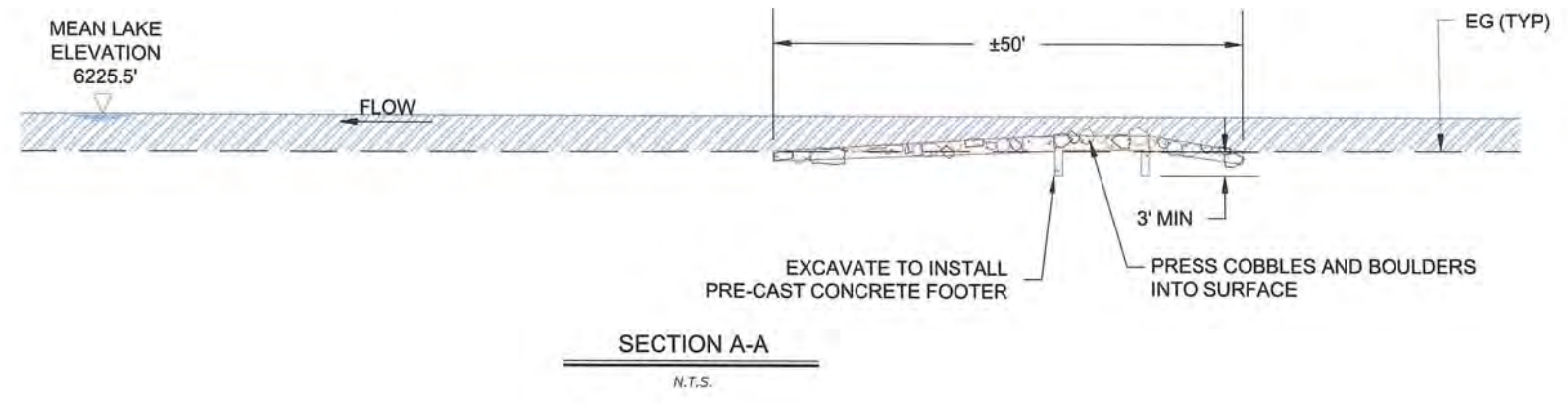
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sheet no.: **D-6**

sheet 16 of 25
date: 11/2015



1
D-6 BIOENGINEERED GRADE CONTROL AT RIVER MOUTH



NOTES: 1. SEE SPECIAL PROVISIONS FOR SUBGRADE COMPACTION REQUIREMENTS.

2
D-6 ROCK RIP-RAP ENERGY DISSIPATOR
N.T.S.

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION

DETAILS

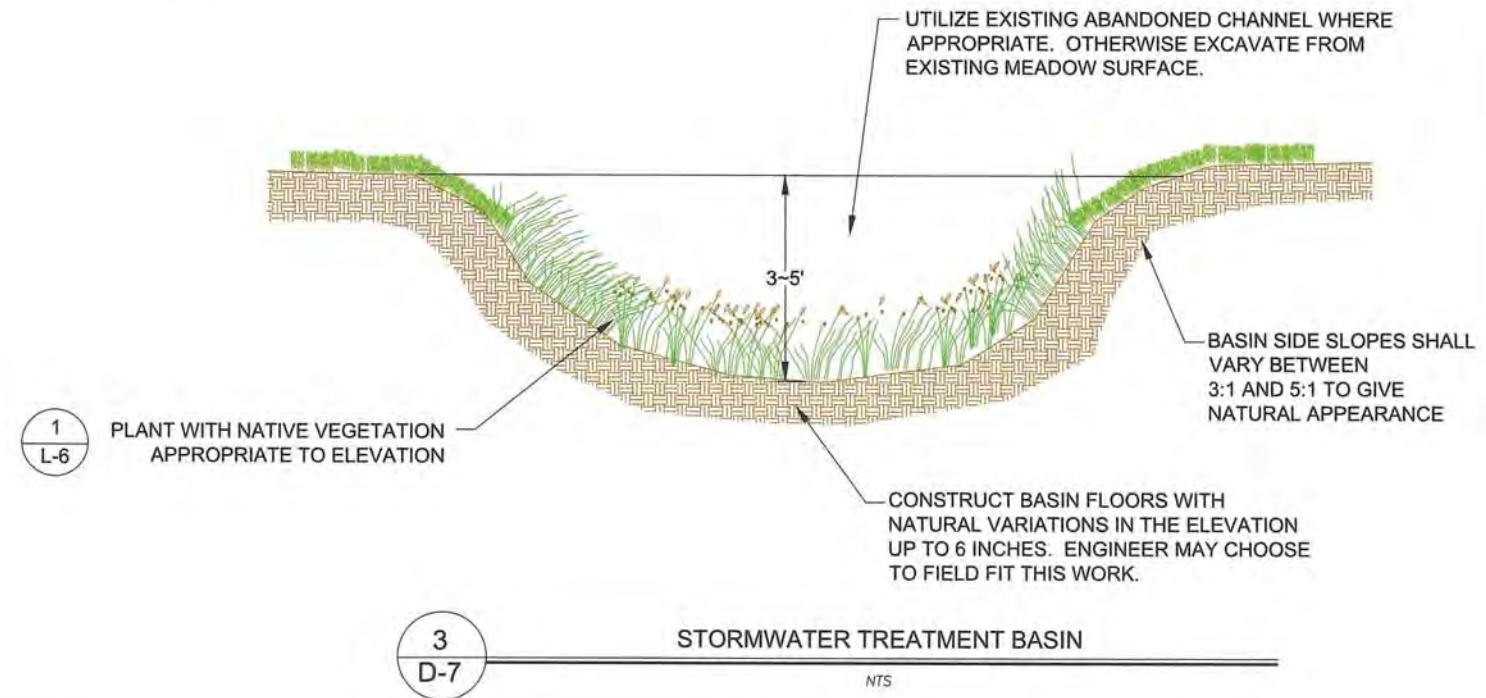
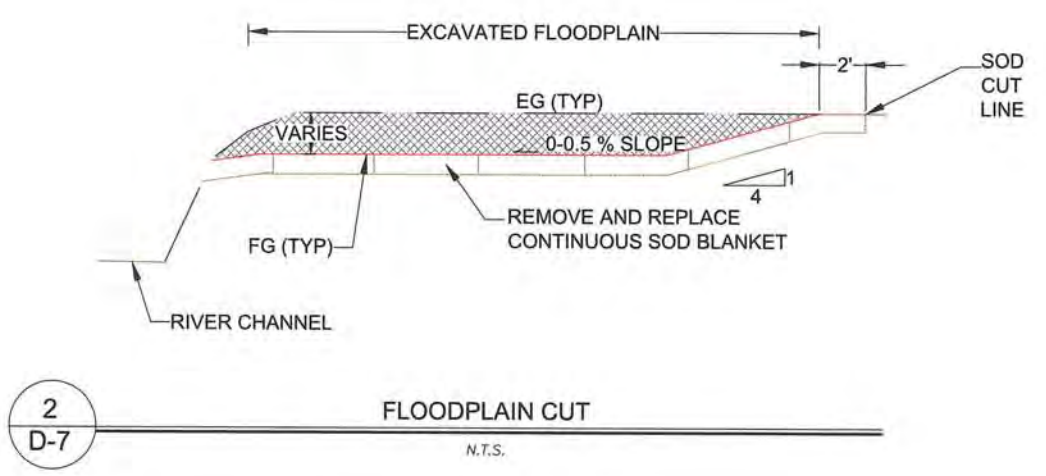
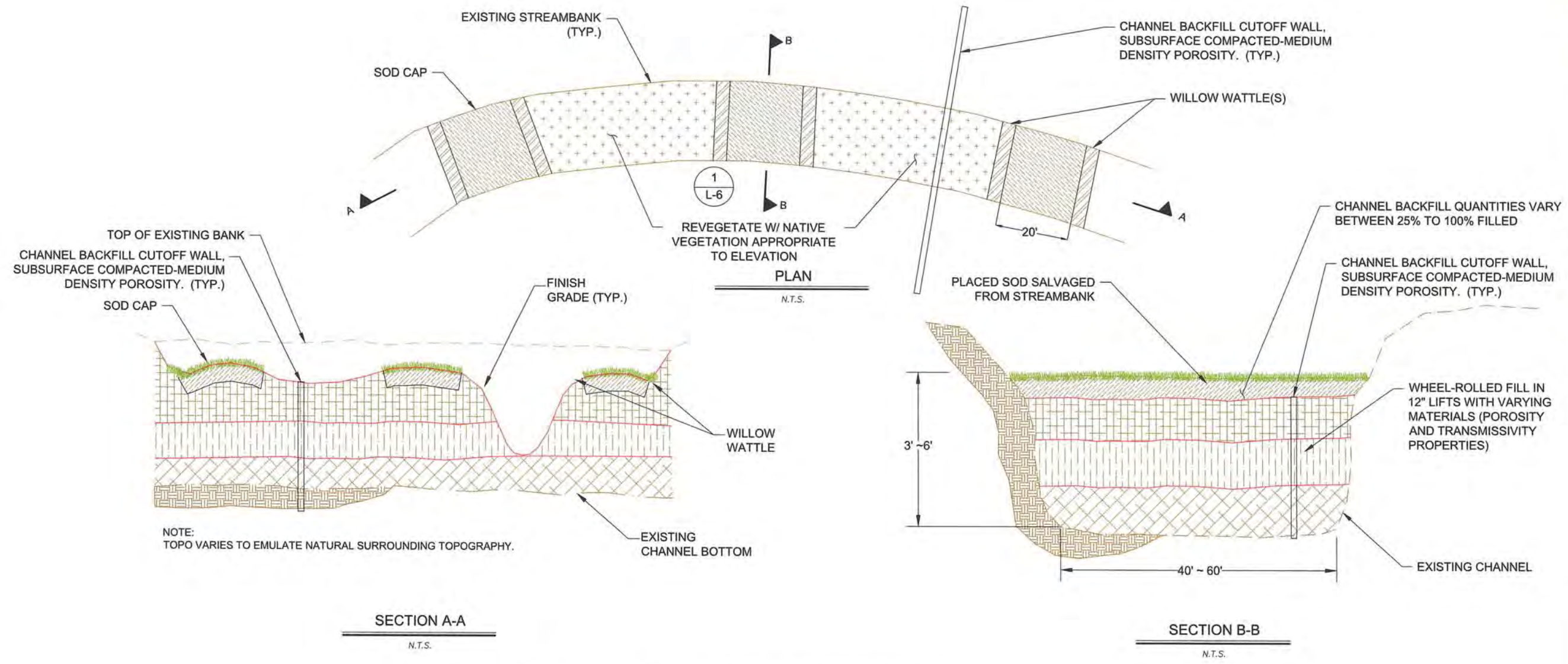
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sheet 17 of 25
date: 11/2015



SCHEMATIC DESIGN PLANS & DETAILS
NOT FOR CONSTRUCTION

DETAILS

D-8

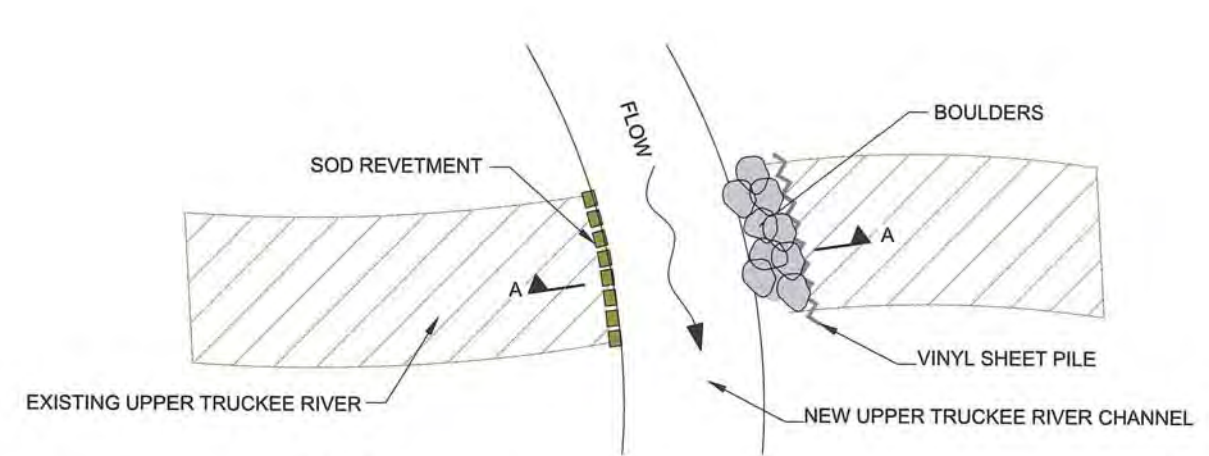
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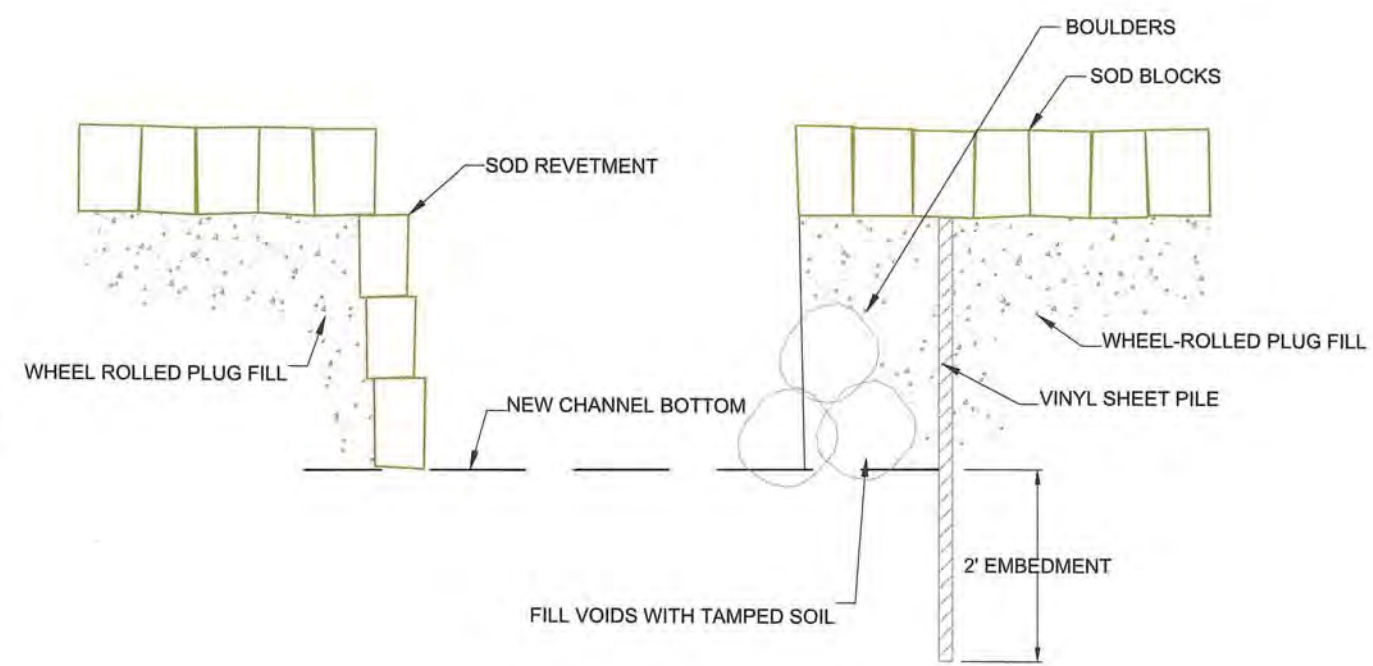
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sheet 18 of 25
date: 11/2015



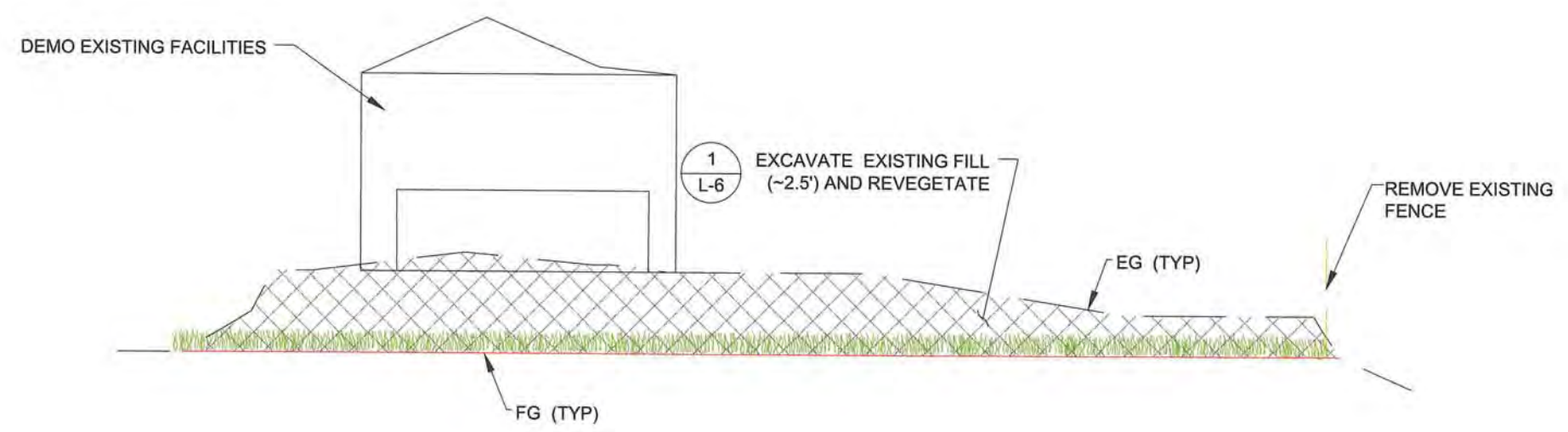
NOTES:
1. BOULDERS SHALL BE ¼ TO ½ TONS EACH.



PLAN
N.T.S.

SECTION A-A
N.T.S.

1
D-8 LATERAL GRADE CONTROL
N.T.S.



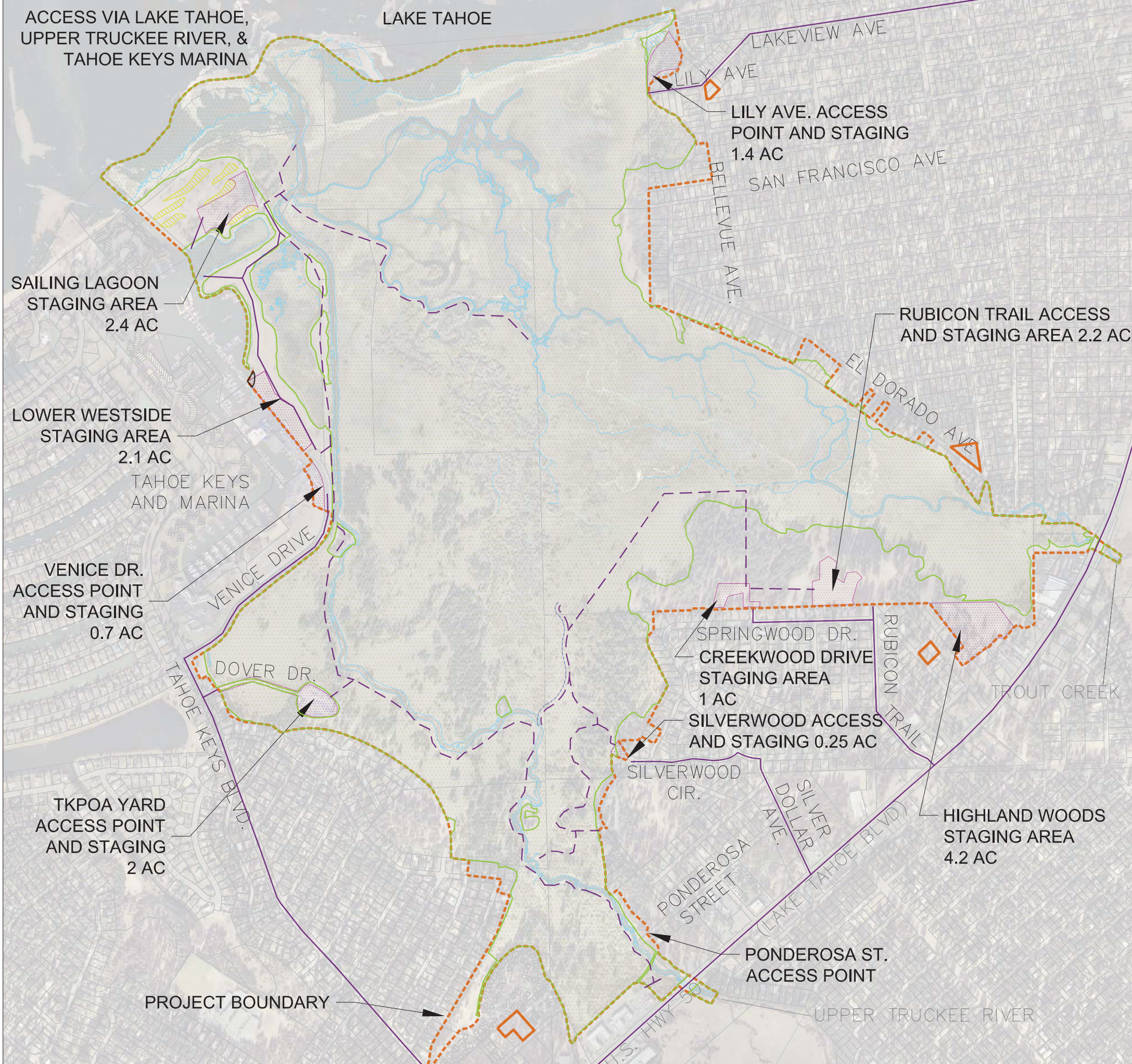
2
D-8 TKPOA YARD RESTORATION
N.T.S.

SCHEMATIC DESIGN PLANS & DETAILS
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SCHEMATIC DESIGN PLANS
& DETAILS
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ACCESS VIA LAKE TAHOE,
UPPER TRUCKEE RIVER, &
TAHOE KEYS MARINA

LAKE TAHOE



LEGEND

- WATER'S EDGE
- PROPERTY BOUNDARY
- - - PROJECT BOUNDARY
- - - PROPOSED CHANNEL ALIGNMENT
- - - PROPOSED INTERNAL HAUL ROUTES
- PROPOSED EXTERNAL HAUL ROUTES
- POTENTIAL STORAGE/STAGING ROUTE
- WETLAND DELINEATION
- DUNE RESTORATION AREAS
- LILY LAGOON AREA



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

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Tel: 775.588.9069

STORAGE STAGING AND
ACCESS PLAN

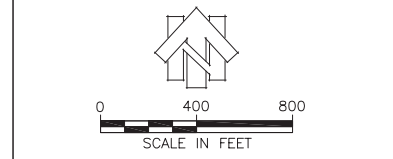
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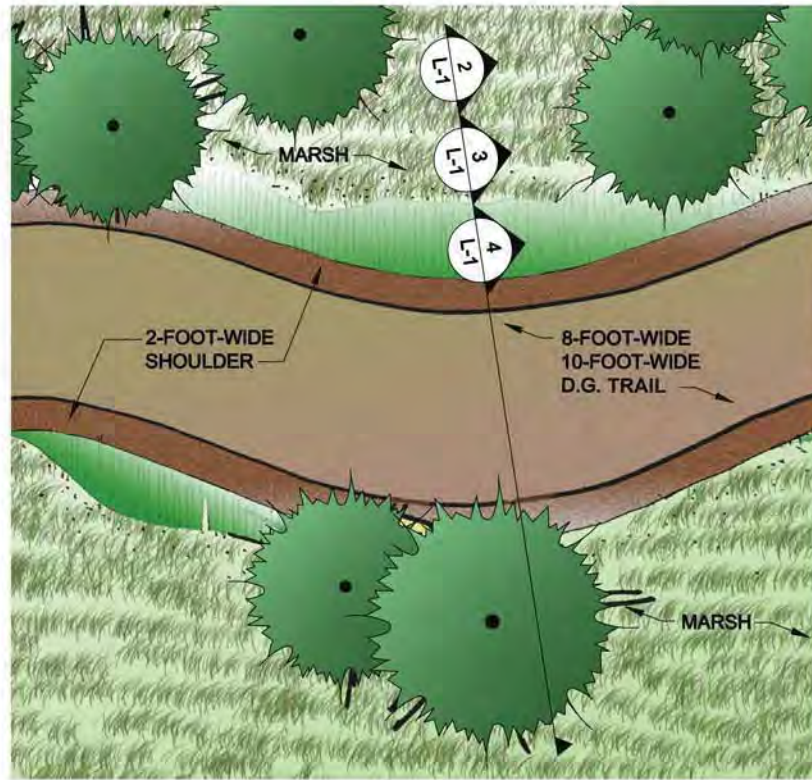
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sheet no.: SS-1

sheet 19 of 25
date: 11/2015



SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



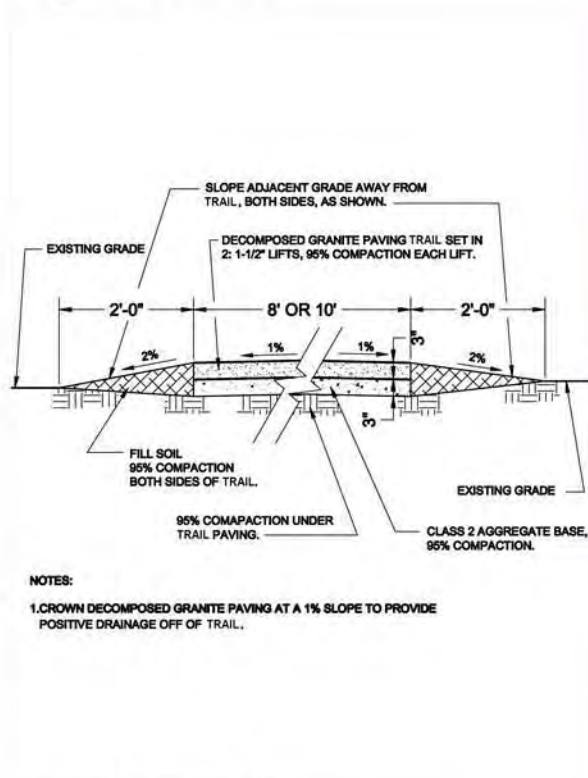
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L-1 SCALE: NTS

PLAN VIEW



2 D.G./A.C. TRAIL
L-1 SCALE: NTS

ELEVATION



3 D.G. TRAIL
L-1 SCALE: NTS

SECTION



4 D.G. TRAIL
L-1 SCALE: NTS

REPRESENTATIVE EXAMPLE



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

E.I.P. # 560



City Hall Tower, 16th Floor
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Tel: 775.337.9565



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Zephyr Cove, NV 89448
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TRAIL

L-1

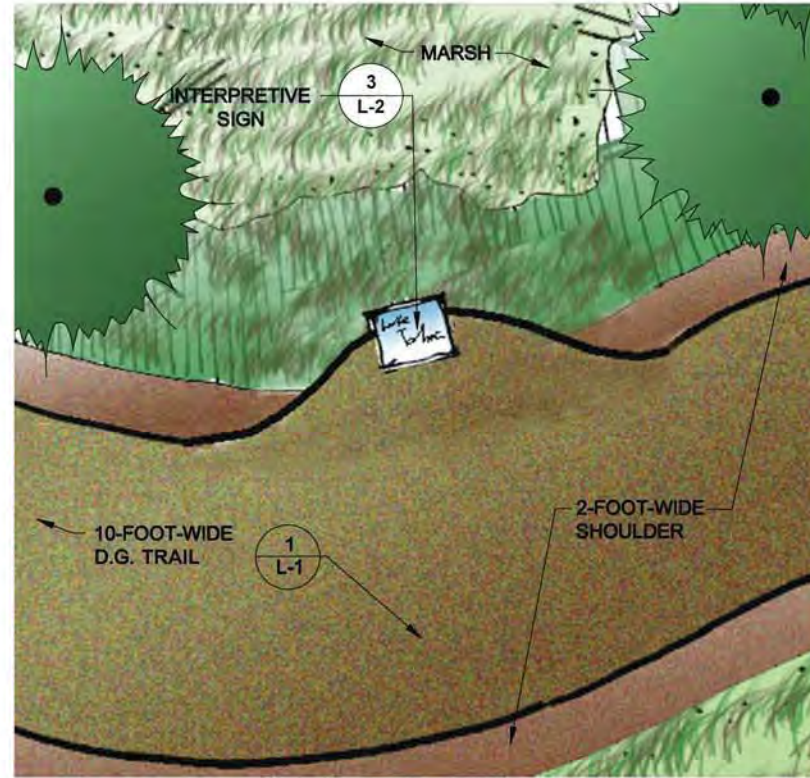
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#	description	date

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drawn by: ML
checked by: JZ

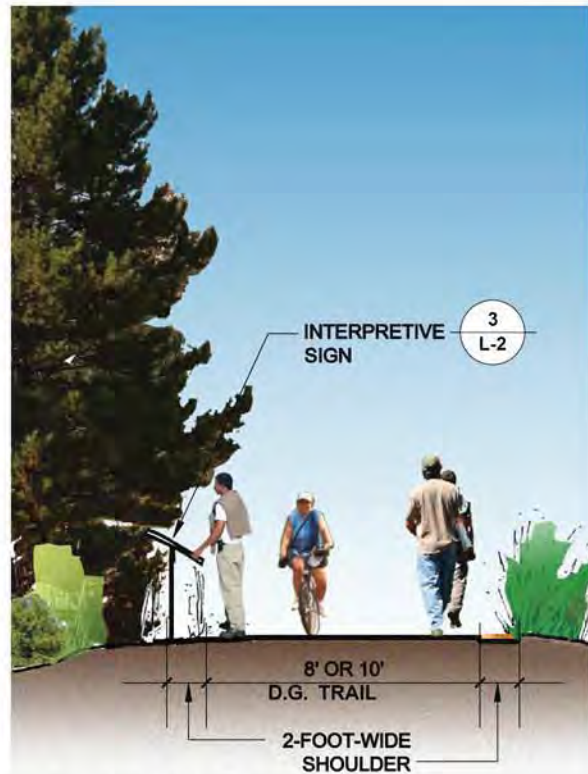
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date: 11/2015

SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



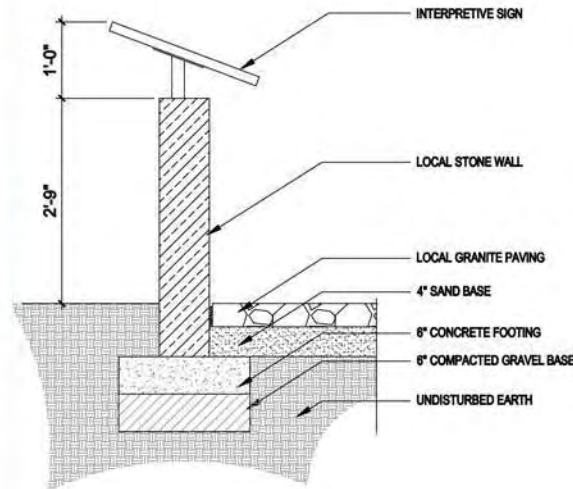
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L-2 SCALE: NTS PLAN VIEW



2 VIEW POINT
L-2 SCALE: NTS ELEVATION



3 VIEW POINT
L-2 SCALE: NTS REPRESENTATIVE EXAMPLE



4 VIEW POINT
L-2 SCALE: NTS SECTION



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VIEW POINT

L-2

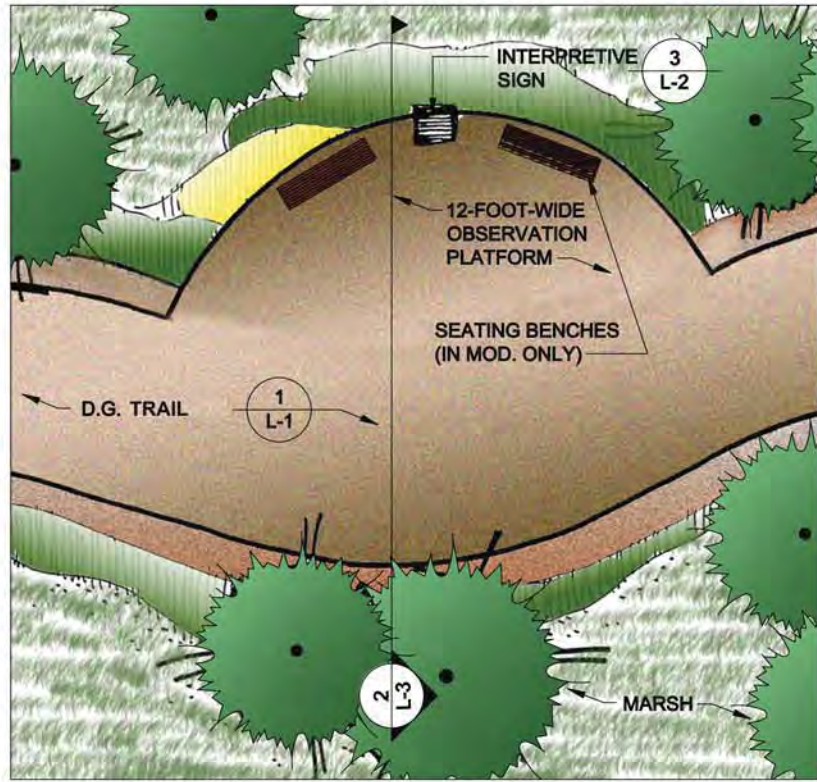
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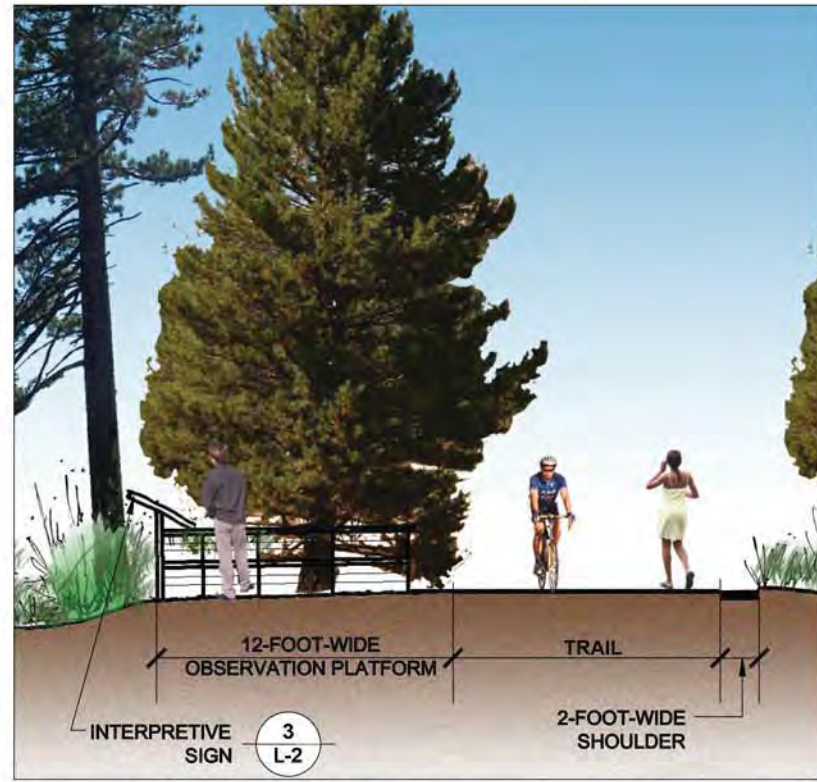
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date: 11/2015

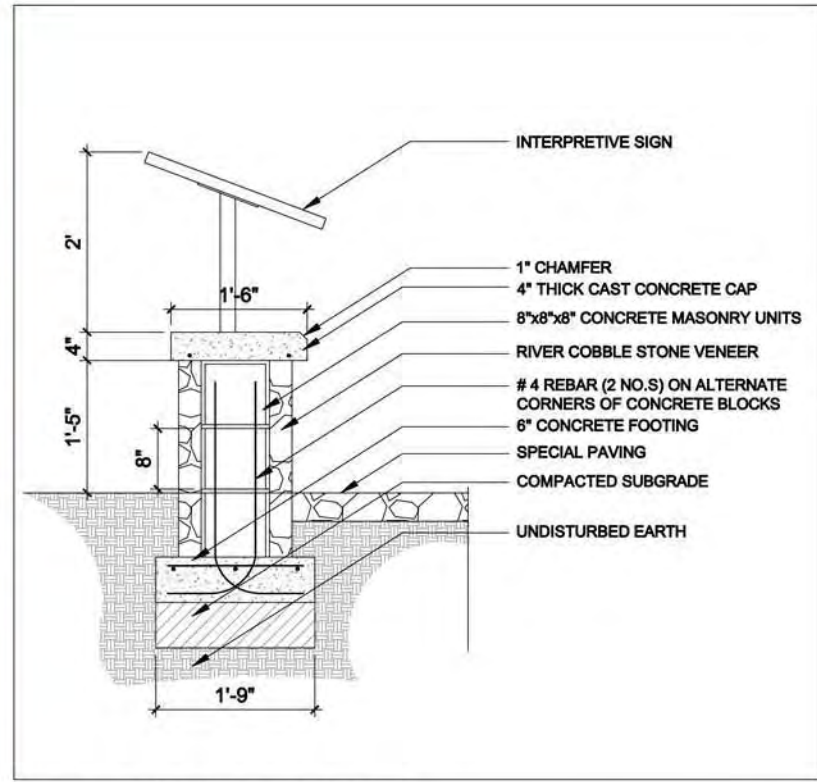
SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



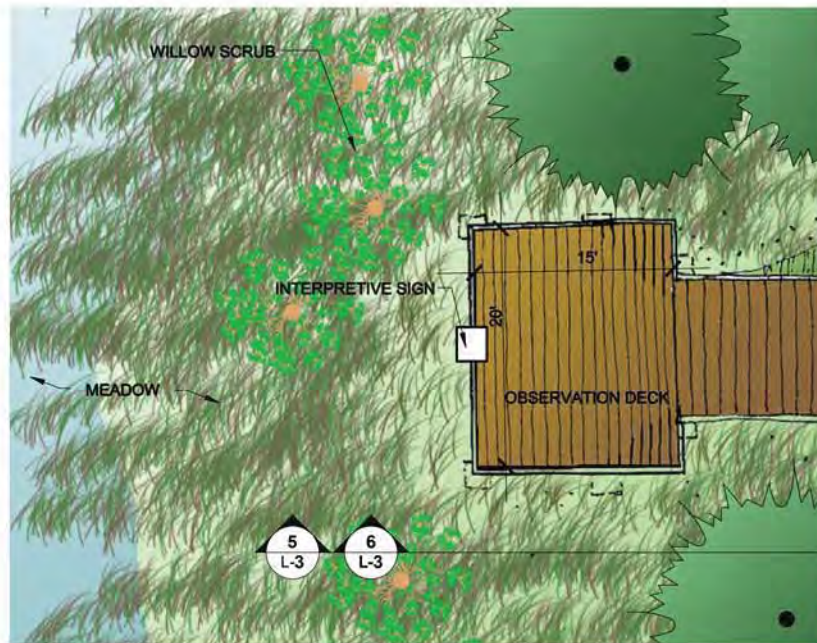
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L-3
OBSERVATION AREA
SCALE: NTS
PLAN VIEW



2
L-3
OBSERVATION AREA
SCALE: NTS
PLAN VIEW



3
L-3
OBSERVATION AREA
SCALE: NTS
ELEVATION



4
L-3
OBSERVATION AREA
SCALE: NTS
ELEVATION



5
L-3
OBSERVATION AREA
SCALE: NTS
SECTION



6
L-3
OBSERVATION AREA
SCALE: NTS
REPRESENTATIVE EXAMPLE



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OBSERVATION AREA
TYPE 1

L-3

REVISIONS

#	description	date

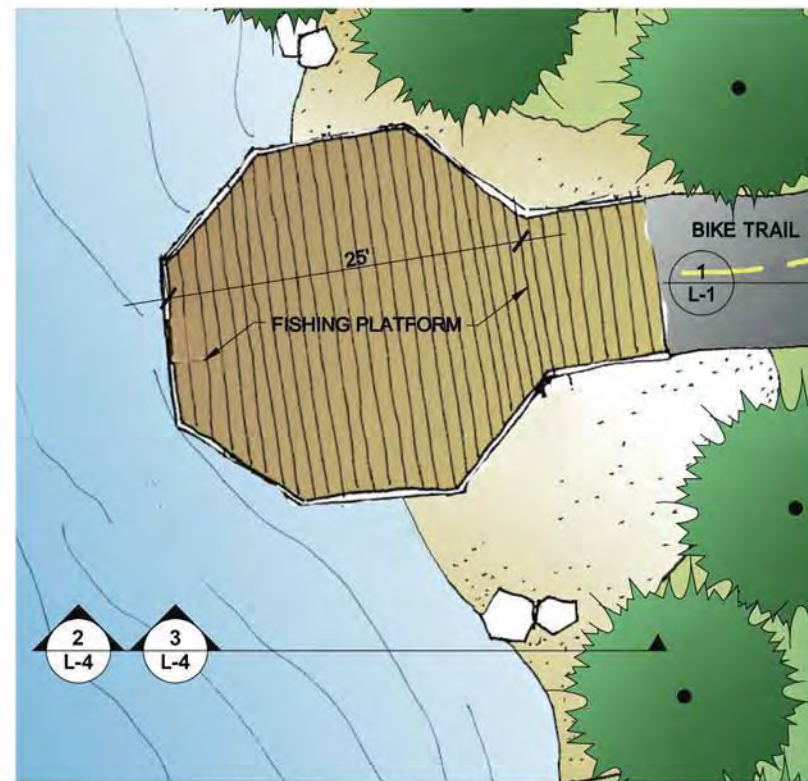
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checked by:	JZ

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sheet 22 of 25
date: 11/2015

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SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



1 FISHING PLATFORM
SCALE: NTS



2 FISHING PLATFORM
SCALE: NTS

ELEVATION



3 FISHING PLATFORM
SCALE: NTS

REPRESENTATIVE EXAMPLE



UPPER TRUCKEE RIVER
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FISHING PLATFORM

L-4

REVISIONS		
#	description	date

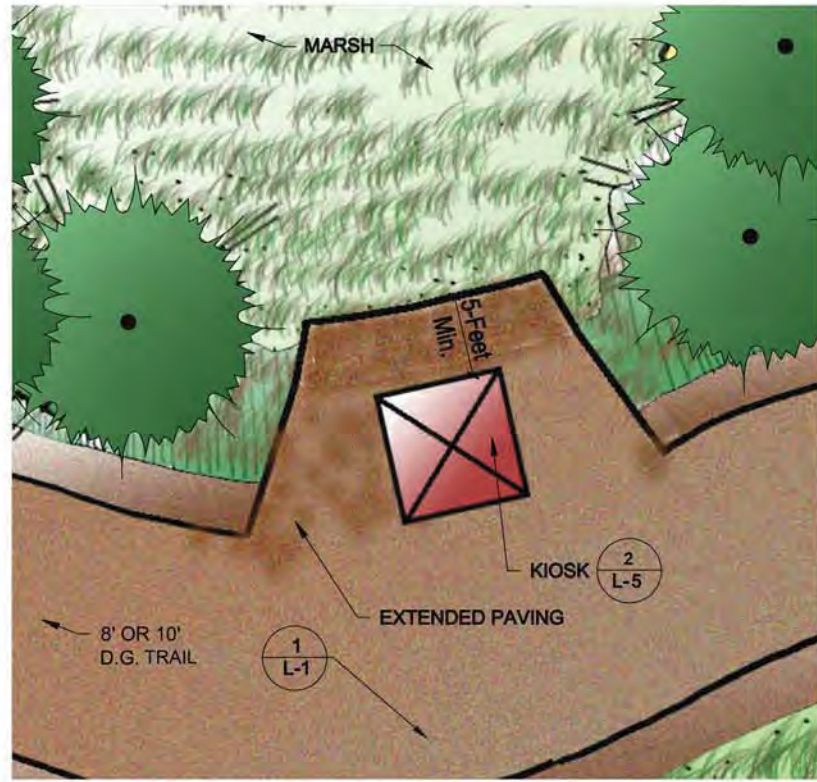
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sheet 23 of 25
date: 11/2015

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SCHEMATIC DESIGN PLANS
& DETAILS
NOT FOR CONSTRUCTION



1
L-5 **KIOSK**
SCALE: NTS PLAN VIEW



2
L-5 **KIOSK**
SCALE: NTS REPRESENTATIVE EXAMPLE



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KIOSK

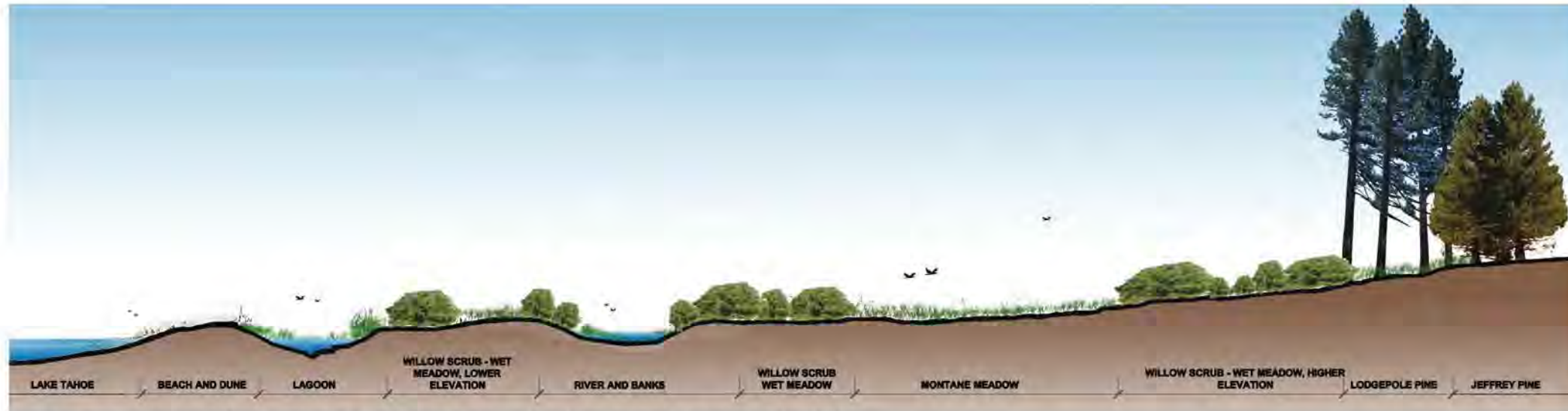
L-5

REVISIONS		
#	description	date

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job no.: 00110066.04
drawn by: ML
checked by: JZ

sheet no.: L-5

sheet 24 of 25
date: 11/2015



1
L-6
REVEGETATION AND HABITAT RELATIONSHIPS
SCALE: NTS
SECTION

PLANT LIST

Scientific Name	Common Name	Growth Form	Beach and Dune	Lagoon	Willow Scrub-Wet Meadow, Lower Elevation	Riverbanks	Willow Scrub-Wet Meadow, Higher Elevation	Montane Meadow	Lodgepole Pine	Jeffrey Pine
<i>Scirpus acutus</i>	Tule	P		X						
<i>Sparganium emersum ssp. emersum</i>	Emerald bur-reed	P		X						
<i>Typha angustifolium</i>	Cattail	P		X						
<i>Achnatherum occidentale</i>	Western needlegrass	G							X	X
<i>Agrostis exarata</i>	Spike bentgrass	G				X				
<i>Alopecurus aequalis</i>	Short-awn foxtail	G		X	X					
<i>Bromus carinatus</i>	California brome	G								X
<i>Carex aquatilis</i>	Water Sedge	G	X	X	X		X			
<i>Carex athrostachya</i>	Blister sedge	G					X	X		
<i>Carex nebraskensis</i>	Nebraska sedge	G	X		X	X	X	X	X	X
<i>Carex utriculata</i>	Beaked sedge	G		X	X		X	X		
<i>Deschampsia cespitosa var. cespitosa</i>	Tufted hairgrass	G					X	X		
<i>Deschampsia danthonoides</i>	Annual hairgrass	G	X							
<i>Eleocharis macrostachya</i>	Common spikerush	G		X	X	X				
<i>Elymus glaucus</i>	Blue wildrye	G					X		X	
<i>Elymus trachycaulus var. intermedia</i>	Intermediate Wheatgrass	G						X		
<i>Festuca rubra</i>	Red fescue	G						X		
<i>Glyceria elata</i>	Fowl mannagrass	G		X	X	X				
<i>Hordeum brachyantherum</i>	Meadow barley	G	X					X		
<i>Hordeum jubatum</i>	Foxtail barley	G	X							
<i>Juncus balticus</i>	Wiregrass, Baltic rush	G	X	X	X	X	X			
<i>Juncus effusus</i>	Common rush	G		X	X	X	X			
<i>Juncus ensifolius</i>	Sword-leaved rush	G				X	X			
<i>Juncus nevadensis</i>	Nevada rush	G	X					X		
<i>Juncus orthophyllus</i>	Straight-leaved rush	G						X		
<i>Leymus triticoides</i>	Creeping wildrye	G	X						X	X
<i>Poa secunda var. nevadensis</i>	Bluegrass	G						X	X	X
<i>Scirpus micropus</i>	Small Fruited Bulrush	G				X				
<i>Achillea millefolium</i>	Yarrow	P	X					X	X	X
<i>Arnica chamissonis var. foliosa</i>	Arnica	P	X					X	X	
<i>Aster occidentalis</i>	Western mountain aster	P	X					X	X	X
<i>Fragaria virginiana</i>	Mountain strawberry	P	X					X	X	
<i>Linum lewisii</i>	Flax	P						X		
<i>Lupinus breweri</i>	Brewer's lupine	P								X
<i>Lupinus lepidus var. confertus</i>	Clustered tidy lupine	P	X							X
<i>Lupinus polyphyllus</i>	Big lupine	P					X	X	X	
<i>Oenothera elata var. hookeri</i>	Evening primrose	P	X							

PLANT LIST CONTINUED

Scientific Name	Common Name	Growth Form	Beach and Dune	Lagoon	Willow Scrub-Wet Meadow, Lower Elevation	Riverbanks	Willow Scrub-Wet Meadow, Higher Elevation	Montane Meadow	Lodgepole Pine	Jeffrey Pine
<i>Penstemon rydbergii var. oreocharis</i>	Meadow beardtongue	P						X	X	X
<i>Phacelia hastata</i>	Silverleaf phacelia	P								X
<i>Polygonum bistortoides</i>	Western bistort	P					X	X		
<i>Potentilla glandulosa</i>	Cinquefoil	P					X	X	X	
<i>Potentilla gracilis</i>	Cinquefoil	P	X				X	X	X	
<i>Sidalcea oregana ssp. spicata</i>	Checker mallow	P				X	X	X	X	
<i>Smilacina stellata</i>	False Solomon's seal	P							X	
<i>Stachys ajugoides var. rigida</i>	Hedge nettle	P					X		X	X
<i>Trifolium longipes</i>	Long-stalked clover	P					X	X	X	
<i>Nuphar luteum var. polysepalum</i>	Yellow pond-lily	P		X						
<i>Polygonum amphibium</i>	Water smartweed	P		X	X					
<i>Polygonum hydropiperoides</i>	Waterpepper	P		X	X					
<i>Rumex salicifolius</i>	Willow-leaved dock	P		X	X	X				
<i>Amelanchier alnifolia</i>	Serviceberry	S							X	
<i>Arctostaphylos patula</i>	Greenleaf Manzanita	S								X
<i>Artemisia tridentata var. vaseyana</i>	Mountain sagebrush	S							X	X
<i>Berberis aquifolium var. repens</i>	Oregon grape	S								X
<i>Ceanothus prostratus</i>	Squaw carpet	S								X
<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	S								X
<i>Lonicera conjugalis</i>	Double honeysuckle	S								X
<i>Ribes cereum</i>	Wax currant	S								X
<i>Ribes lacustre</i>	Swamp currant	S					X		X	X
<i>Ribes roezlii var. roezlii</i>	Sierra currant	S								X
<i>Rosa woodsii var. ultramontana</i>	Interior rose	S							X	X
<i>Salix exigua</i>	Narrow-leaved willow	S	X			X				
<i>Pinus contorta var. murayana</i>	Lodgepole pine	T							X	X
<i>Pinus jeffreyi</i>	Jeffrey pine	T								X
<i>Salix geyeriana</i>	Geyer's willow	T		X	X					
<i>Salix lemmonii</i>	Lemmon's willow	T	X	X	X	X	X		X	
<i>Salix lucida var. lasiandra</i>	Shining willow	T		X	X	X				
<i>Salix scouleriana</i>	Scouler's willow	T					X		X	
Total Number of Species			17.0	15.0	14.0	13.0	19.0	22.0	24.0	24.0

KEY
G - GRASS P - PERENNIAL S - SHRUB T - TREE



UPPER TRUCKEE RIVER
AND MARSH RESTORATION
PROJECT

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REVEGETATION
SECTION AND
PLANT LIST

L-6

REVISIONS
description date

scale: NOT TO SCALE
job no.: 00110066.04
drawn by: ML
checked by: JZ

sheet no.: L-6

sheet 25 of 25
date: 11/2015