## **RECLAMATION DISTRICT NO. 900** SOUTH AREA DRAINAGE BASIN

### **PROJECT PLANS FOR CONSTRUCTION ON**

# **BLACKER DRAINAGE CANAL** SLOPE REHABILITATION PROJECT YOLO COUNTY, CALIFORNIA

## **ISSUED FOR BID**

#### OWNER:

**RECLAMATION DISTRICT NO. 900** 889 DREVER STREET WEST SACRAMENTO, CALIFORNIA 95691 PHONE: (916) 371-1483

#### PROJECT CONSULTANTS:

1. CIVIL ENGINEER: MHM INCORPORATED (ATTN SEAN MINARD) 1204 E STREET, P.O. BOX B MARYSVILLE, CALIFORNIA 95901 PHONE: (530) 742-6485 FAX: (530) 742-5639

#### 2. LAND SURVEYORS: MHM INCORPORATED (ATTN JOHN MALLEN) 1204 E STREET, P.O. BOX B MARYSVILLE, CALIFORNIA 95901 PHONE (530) 742-6485 FAX: (530) 742-5639

4. ENVIRONMENTAL ECORP (ATTN PETER BALFOUR) 2525 WARREN DRIVE ROCKLIN, CALIFORNIA 95677 PHONE: (916) 782-9100 FAX: (916) 782-5323

CALL BEFORE YOU DIG 48 HOURS CALL "USA" TOLL FREE 1-800-227-2600



UNDERGROUND SERVICE ALERT THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING

UTILITY REPRESENTATIVES				
UTILITY	AGENCY	CONTACT	PHONE NUMBER	
FIRE PROTECTION	CITY OF WEST SAC. FIRE DEPT.	STEVE BINNS	(916) 617-4600	
GAS	PACIFIC GAS & ELECTRIC	DWAYNE LEMMOND	(916) 386-5068	
ELECTRICITY	PACIFIC GAS & ELECTRIC	BRIAN SWEENEY	(916) 386-5117	
WATER	CITY OF WEST SACRAMENTO	WILLIAM ROBERTS	(916) 617-4850	
SEWER	CITY OF WEST SACRAMENTO	WILLIAM ROBERTS	(916) 617-4850	
STORM DRAINAGE	RD 900	BLAKE JOHNSON	(916) 204-6869	
	UNDERGROUND SERVICE ALERT		(800) 227-2600	

#### HORIZONTAL CONTROL INFORMATION

THE BEARINGS SHOWN HEREON ARE BASED UPON CALIFORNIA COORDINATES ZONE 2, NAD 83 DATUM (EPOCH 2011) AND ORIGINATE FROM NGS SURVEY CONTROL POINTS AC9220 "HPGN D CA 03 CH" (N 1970975.88, E 6681965.29) A CALTRANS BM DISC LOCATED WITHIN THE LANDSCAPE AREA BOUNDED BY EAST BOUND INTERSTATE 80 AND THE ON/OFF RAMPS TO ENTERPRISE BLVD AND CONTROL POINT DH6510 "PALA" (N 1966300.53, E 6693555.88) A CALTRANS BM DISK LOCATED IN THE CONCRETE SIDEWALK ON THE EAST SIDE OF LAKE WASHINGTON BLVD AT THE SOUTHERN END OF THE PALAMIDESSI BRIDGE OVER THE YOLO BARGE CANAL.

#### VERTICAL CONTROL INFORMATION

ELEVATIONS ORIGINATE FROM NGS SURVEY CONTROL POINT DH6510 "PALA" (N 1966300.53, E 6693555.88) A CALTRANS BM DISK, WITH AN NGS PUBLISH NAVD(1988) ELEVATION OF 42.5.

RECLAMATION DISTRICT NO. 900 BLAKE JOHNSON GENERAL MANAGER

SUBMITTED BY: PREPARED UNDER THE SUPERVISION OF

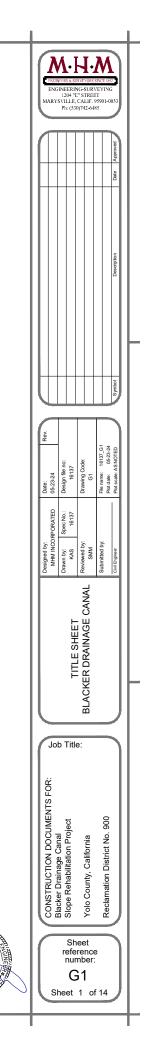
MHM INCORPORATED SEAN MINARD, P.E. R.C.E.# 52593 EXP. 12-31-24

NOTE: THE CONTRACTOR SHALL POSSESS THE FOLLOWING CONTRACTOR LICENSE(S) AT THE TIME THIS CONTRACT IS AWARDED:

A. GENERAL ENGINEERING

**PWGR 16-00XX** 

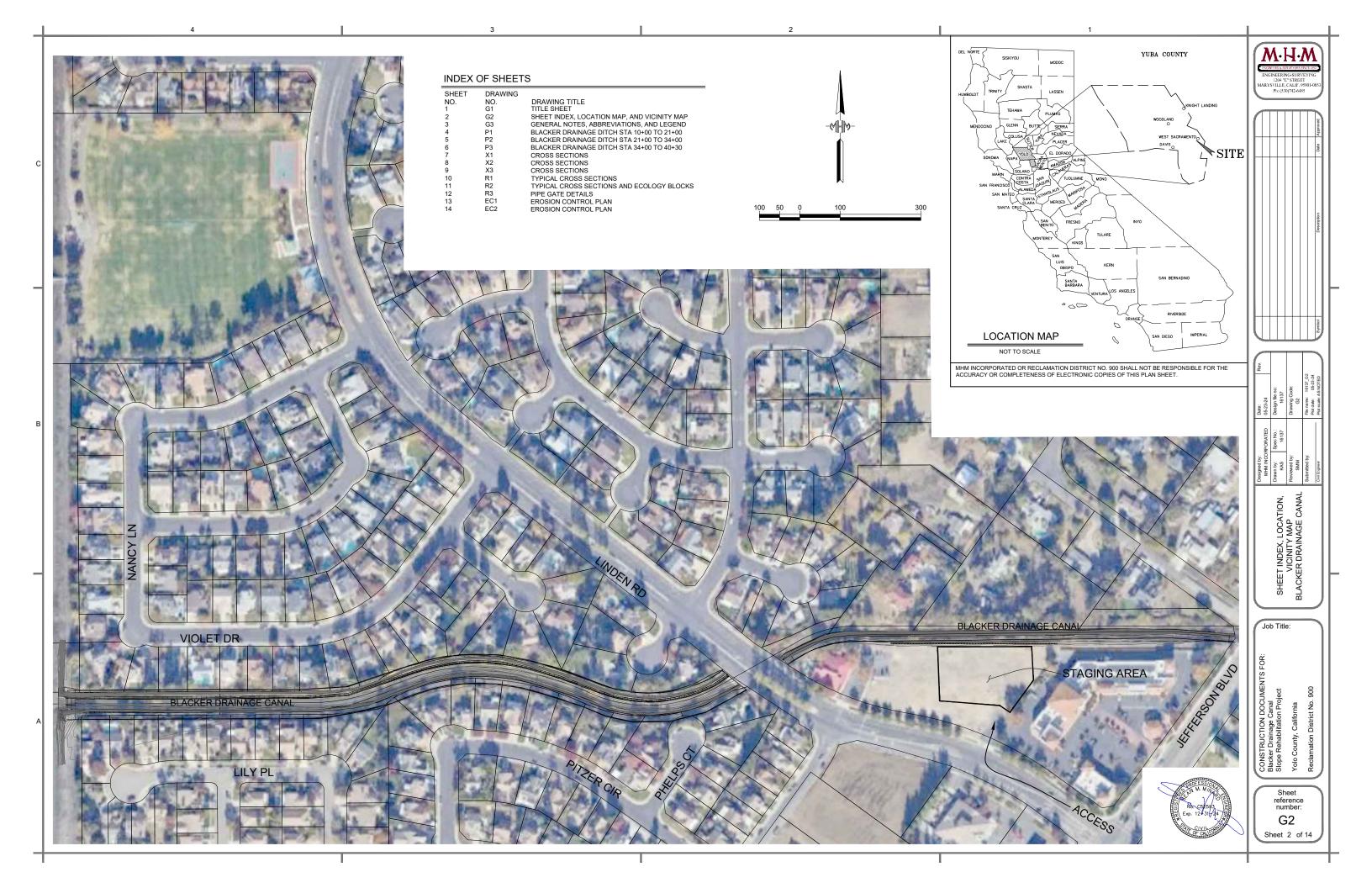
DATE OF TOPOGRAPHIC SURVEY: 06-22-16 DATE OF PLANS: 05-23-24 DATE OF SPECIAL PROVISIONS: 05-23-24



DATE

DATE





### DISTRICT STANDARD NOTES

THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT WILL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION OF URTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CONSULTING ENGINEER AND 800 HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CONSULTING ENGINEER.

MATERIALS, METHODS, AND WORKMANSHIP SHALL CONFORM WITH THE APPROPRIATE PROVISIONS OF ALL MATERIALS, METHODS, AND WORKMANSHIP SHALL CONFORM WITH THE APPROPRIATE PROVISIONS THE SPECIFICATIONS ENTITLED STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATIONS, STANDARD SPECIFICATIONS, DATED MAY 2015, INSOFAR AS THE SAME MAY APPT AND IN ACCOMDANCE WITH THE OR HIS AUTHORIZED REPRESENTATIVE CERTIFICATION FOR CONFORMANCE WITH DISTRICT MOINTER SPECIFICATIONS WILL BE REQUIRED FOR ALL MATERIALS USED ON THE PROJECT UNLESS SPECIFICALLY WAIVED BY THE DISTRICT ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING RD 900 FOR A PRE-CONSTRUCTION CONFERENCE 72-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITES. ALSO, CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFINIS THE DISTRICT OPERATIONS MANAGER 48-HOURS PRIOR TO COMMENCING WORK AND 24-HOURS PRIOR TO RESUMPTION AFTER INTERRUPTION. REQUESTS FOR INSPECTION OF SHALL BE GUYN 48-HOURS IN ADVANCE. AND BE FERFORMED BY THE DISTRICT OR THER AUTHOR/2ED REPRESENTATIVE A0CONSTRUCTION WORK SHALL COMMENCE UNIT A BEEL THE PREONSTRUCTION CONFERENCE IS HED AND THE DISTRICT OR AUTHORIZED REPRESENTATIVE APPROVES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTEMANCE OF EXISTING PUBLIC AND PRIVATE IMPROVEMENTS WITHIN THE WORK AREA AND SHALL ADECUATELY BARRICADE PROJECT TO KETE THE GENERAL PUBLIC FROM THE SITE. ANY DAMAGE TO CITY OR PRIVATE IMPROVEMENTS SHALL BE REPLACED BY THE CONTRACTOR.

THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATING WILL REVEAL THE TYPES, SIZE, LOCATION, AND DEPTH OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE ALL UNDERGOUND WORKS, HOWEVER, THE CONSULTING ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND WORKS NOR FOR THE EXISTENCE OF OTHER DURING DUBLECTS WINCH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE FLANS. IF O OTHER DURING DALED ALL AND MENT AND THE CONTRACTOR SHALL ASSUME THE ELEVATION TO BE UNKNOWN.

THE CONTRACTOR IS TO EXPOSE THE END OF EXISTING UTILITY LINES FOR THE SURVEYOR TO VERIFY LOCATION AND DEPTH OF WORKS PRIOR TO CONNECTION OF PROPOSED UTILITY. ALL COSTS FOR SUCH EXCAVATION SHALL BE INCLUBED IN PRICES FOR VARIOUS ITEMS OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO THE CONSULTING ENGINEER IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR DISTRICT OPERATIONS MANGER, THE CONTRACTOR SHALL STOP WORK ITUL MITIGATION CAN BE MADE, ANY COSTS INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL AT ALL TIMES COORDINATE HIS WORK WITH THAT OF OTHERS ON THE SITE. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY, WHO SHALL HAVE THE AUTHORITY TO PERFESSION AND ACT FOR THE CONTRACTOR, ON THE JORS INTE DURING ALL WORKING HOURS. CONTRACTOR SHALL ASO HAVE A CONTACT PERSON FOR NON-WORKING HOURS UNTIL ACCEPTANCE OF IMPROVEMENTS BY THE CITY.

THE CONTRACTOR SHALL HAVE A CURRENT BUSINESS LICENSE AND SHALL BE HELD RESPONSIBLE TO SEE THAT ALL SUBCONTRACTORS AND SUPPLIERS HAVE CURRENT BUSINESS LICENSES. THE WORK WILL NOT BE ACCEPTED FOR THE COMPLETION UNTIL SUBMITTAL OF A COMPLETE LIST WITH LICENSE NUMBERS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. FOR INFORMATION, PLEASE CONTACT THE STATE INDUSTRIAL SAFETY DEPARTMENT (964–95548).

#### FARTHWORK

A) THE CONTRACTOR SHALL PROVIDE OBSERVATION AND TESTING FOR COMPACTION AND MATERIALS. A SOILS ENGINEER SHALL CERTIFY THAT THE VARIOUS ITEMS OF COMPACTION AND MATERIALS HAVE

- SOILS ENGINEER STALL CERTIFY THAT THE REFERENCE BY THE SOILS ENGINEER IN ACCORDANCE WITH THE BEEN ACCOMPLISHED. B) ALL COMPACTION TESTING SHALL BE PERIPORED BY THE SOILS ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY SPECIFICATIONS AND SHALL BE PAID FOR BY ALL SHALL BY SPECIFICATIONS AND SHALL BE PERIPORED BY SPECIFICATIONS AND SHALL BE PERIPORED BY SPECIFICATIONS AND SHALL BE PERIPORED BY SPECIFICATIONS AND SHALL BY SPECIFICATIONS AND SPECIFICATIONS AND SPECIFICATIONS AND SPECIFICATIONS AND SPECIFICATIONS AND SPECIFIC
- SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR. ALL TESTING SHALL BE CERTIFIED BY
  THE SOLS BROINEER FOR THE PROJECT
  () ALL UNSUITABLE AND SURPLUS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND
  SHALL BE REMOVED FROM THE STE UNLESS SPECIFIED OTHERWISE BY THE OWNER.
  1) SUFFICIENT EQUIPMENT SHALL BE AVAILABLE TO PROVIDE MUD AND DUST CONTROL AT ALLTIMES
  DURING CONSTRUCTION DURING NON-WORKING HOURS A WATER TRUCK SHALL BE LESS. WHEN
  REQUIRED, TO MAINTAIN ADEQUATE DUST CONTROL AREAS SURROUNDING THE WORK SHALL BE KEPT
  LEAN AND RETURNED TO ORIGINAL CONDITION UPON COMPLETION OF CONTRACT.
  E) ROUTES TO ORIGINAL CONDITION UPON COMPLETION OF CONTRACT.
  E) ROUTES TO DERIVANE OTHER PROJECT, IF REQUIRED, FOR HEAVY EQUIPMENT AND MATERIALS SHALL BE
  APPROVED BY THE CONTRY AS IT REALTS TO EXISTING COUNTY ROUND. THE COUNTY PROVID
  ONSTRUCTION APPROVAL BY THE DISTRUCT.
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#### UTILITIES:

SEWER: WATER: STORM DRAIN: STREETS: \*ELECTRIC: \*GAS:

FOR TELEPHONE NUMBERS OF UTILITY AGENCIES, SEE COVER SHEET

A ALL ABOVE UTILITIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ONE-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS PROJECT WILL BE REQUIRED TO NOTIFY (U.S.A.) 48-HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227.2600. EXCAVATION FOR THE PURPOSE OF THE REQUIREMENT, IS DEFINED AS BEING 18' OR NORE IN DEPTH BELOW THE EXISTING SURFACE. B) FOR ALL TRENCH EXCAVATIONS IS FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DIVISION OF SAFETY (242 ARDEN WAY, SUITE 55, SACRAMENTO, CA 916-920-6123) PRIOR TO BEGINNING OF CONSTRUCTION SITE AT ALL TIMES.

CONSTRUCTION STAKING:

- A) THE SURVEYOR FOR THIS PROJECT SHALL PROVIDE ONE (1) SET OF CONSTRUCTION STAKES FOR LINE AND GRADE UNLESS OTHERWISE REQUESTED BY OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED A UTHE CONTRACTOR'S EXPENSE.
- B) IN THE EVENT OF A DISAGREEMENT OR DESTROYED STAKE OR MONUMENT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SURVEYOR PRIOR TO ANY FURTHER CONSTRUCTION.
- C) THE CONTRACTOR SHALL GIVE THE SURVEYOR 48-HOURS WRITTEN NOTICE PRIOR TO EACH PHASE OF CONSTRUCTION STAKING OR IN THE EVENT OF NEEDED RESTAKING.
- D) PRIOR TO REQUESTING ACCEPTANCE OF IMPROVEMENTS, THE SURVEYOR FOR THIS PROJECT SHALL SET SURVEY MONUMENTS AS SPECIFIED IN THE IMPROVEMENT STANDARDS.
- E) (1) THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. ANU UITHER SURVEY MARKERS. (2) NO FINAL ACCEPTANCE OF THE CONSTRUCTION SHALL BE ISSUED UNTIL THE SURVEY MONUMENTS ARE IN PLACE AND THE CENTERLINE MONUMENT TIES ARE FURNISHED TO THE CITY ENGINEERS OFFICE.
- F) PRIOR TO COMMENCING WORK, DISTRICT INSPECTOR SHALL RECEIVE TWO COPIES OF CUT SHFFTS

#### EROSION CONTROL AND WINTERIZATION:

- A) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT DISCHARGE OF SEDIMENT FROM THE SITE TO ANY WATERCOURSE, DRAINAGE SYSTEM, OR ONTO ADJACENT PROPERTIES AND TO PREVENT DAMAGE BY EROSION OR DEPOSITION OF SEDIMENT WHICH MAY RESULT FROM THE WORK.
- B) THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL GOVERNMENT LAWS AND REGULATIONS RELATING TO THE DISCHARGE OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHETHER OR NOT THE REQUIRED WORKS OR METHODS ARE STATED ON THESE PLANS.
- C) THE CONTRACTOR SHALL CONDUCT INSPECTIONS OF THE SITE BEFORE AND AFTER STORM EVENTS AND ONCE EACH 24-HOUR PERIOD DURING EXTENDED STORM EVENTS TO IDENTIFY BMP EFFECTIVENESS AND IMPLEMENT REPAIRS OR DESIGN CHANGES AS FEASIBLE DEPENDING UPON FIELD CONDITIONS.
- D) THE CONTRACTOR SHALL HAVE ON SITE AT ALL TIMES THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE PROJECT. A COPY SHALL BE PROVIDED TO THE DISTRICT PRIOR TO START OF CONSTRUCTION.

### **GENERAL NOTES**

- A) CONSTRUCTION SHALL STOP IF CULTURAL RESOURCES ARE SUSPECTED. IT IS POSSIBLE THAT PREVIOUS ACTIVITIES HAVE OBSCURED SURFACE EVIDENCE OF CULTURAL RESOURCES. IF SIGNS OF AN ARCHEOLOGICAL SITE, SUCH AS ANY UNUSUAL AMOUNT OF STOME, BONE, OR SHELL ARE UNCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN 100 FEET OF THE FIND AND THE CONTRACTOR SHALL NOTIFY THE OWNER, A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITGATION MAY REQUIRE THE ARCHEOLOGIST.
- B) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/MATERIALS LIST AND CONSTRUCTION METHODS TO DISTRICT FOR REVIEW IN ADVANCE OF CONSTRUCTION. THESE SHOP DRAWINGS SHALL INCLUDE ALL APPURTENANCES, HORIZONTAL AND VERTICAL ALIGNMENT CHANGES AND PIPE ENDS.
- C) THE COUNTY REQUIRES ENCROACHMENT PERMITS FOR ALL CONSTRUCTION DONE IN EXISTING RIGHT OF WAY INCLUDING, BUT NOT LIMITED TO, THE CONSTRUCTION OF WATER, SEWER, STORM DRIAN, STREET IMPROVEMENTS, AND DRY UTILITY CROSSINGS. THE ENCROACHMENT PERMITS SHALL BE ON FILE WITH THE COUNTY PRIOR TO CONSTRUCTION.

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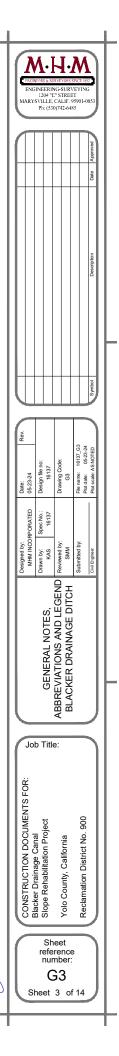
- D) THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULRA RAND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.
- E) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL WORK THROUGHOUT THE COURSE OF CONSTRUCTION, SUCH DRAWINGS SHALL RECORD THE LOCATION AND GRADE OF ALL IMPROVEMENTS AND FILLS THAT ARE CONSTRUCTED AND COHES SHALL BE DELIVERED TO RD BOO AND THE DESIGN ENGINEER PRIOR TO THE ACCEPTANCE OF THE WORK.
- F) PRIOR TO START OF WORK THE CONTRACTOR SHALL HAVE APPROVED PLANS IN HIS POSSESSION AND SHALL GIVE THE DISTRICT 48 HOURS NOTICE. THE CONTRACTOR SHALL DESIGNATE A PERSON, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURING ALL WORKING HOURS.
- G) THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS TO THE LINES AND GRADE SHOWN ON THESE PLANS. ANY DEVIATION FROM THE PLANS SHALL REQUIRE THE APPROVAL OF THE DESIGN ENGINEER.
- E) ALL GRADING SHALL CONFORM TO YOLO COUNTY STANDARDS AND THE REQUIRMENTS OF GRADING PERMIT PWGR 16-

### LEGEND

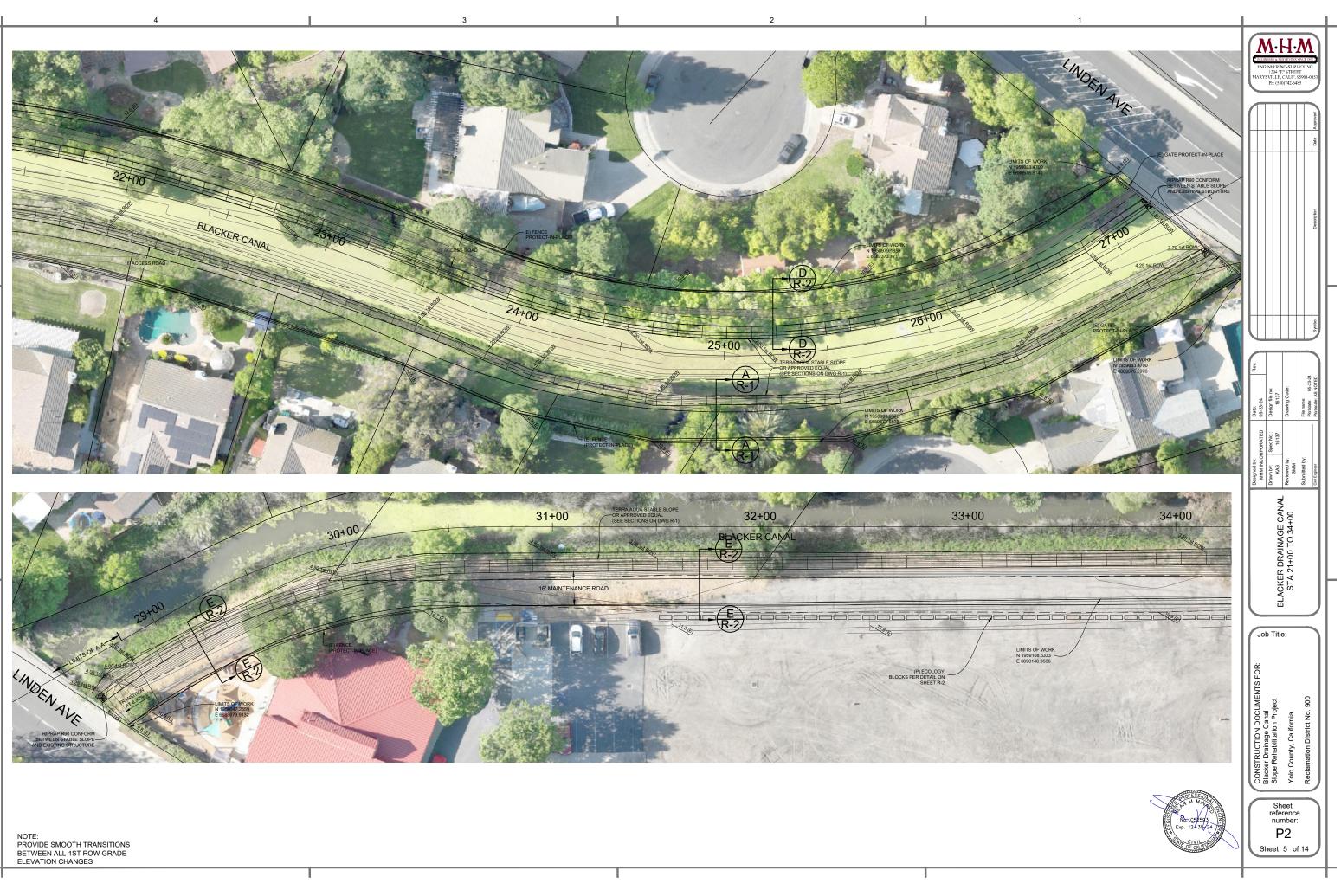
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UTILITY POLE	P.	Ð
STREET LIGHT	о—ф-	<u>о</u> ф-
GUY WIRE AND ANCHOR	$\not \! o \longrightarrow$	
CONSTRUCTION CENTERLINE		25
TOP OF CANAL EMBANKMENT	<u> </u>	<b>•</b> • •
TOE OF CANAL		
STORM DRAIN	12"SD	12"SD>
SANITARY SEWER	<u>12"SS</u>	12'SS
WATER MAIN		
SEWER FORCE MAIN	20"FM	20"FM
GAS MAIN	UG	
UNDERGROUND TELEPHONE	UT	
OVERHEAD ELECTRIC	OE	
FENCE	_xxx-	- <u>x x x</u>
SPOT ELEVATION	X (E) 25.0	× 25,0
CONTOUR LINE	25	X
ASSESSOR'S PARCEL NO.	25-025-254	
PROPERTY LINE		
TREE	Ę	
BUILDING		
TEST PIT LOCATION	=	
IRRIGATION CONTROLLER	•	•
TRANSMISSION LINE TOWER	$\boxtimes$	
DITCH FLOWLINE		
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FIRE HYDRANT		
WATER MAIN BLOW-OFF	€	€
STORM DRAIN MANHOLE	۲	۲
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CURB TRANSITION		
TRAFFIC CALMING DEVICE	$\square$	
MASONRY BLOCK WALL		

### ABBREV/IATIONS

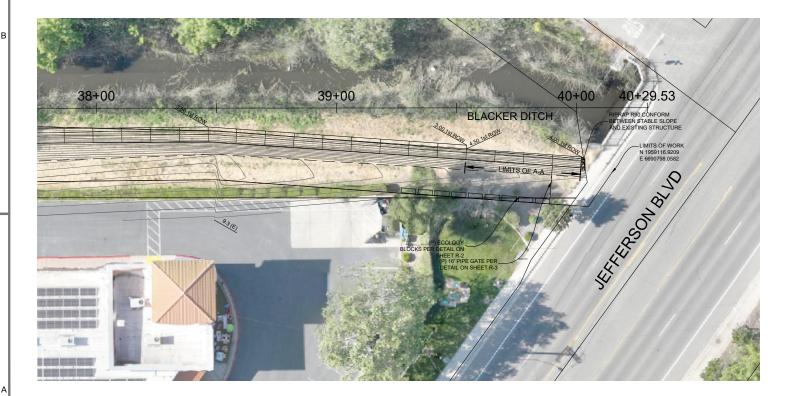
AB AC	AGGREGATE BASE ASPHALT CONCRETE
AC	ASPHALT CONCRETE AMERICANS WITH DISABILITIES ACT
ADA	AVERAGE DAILY TRAFFIC COUNT
apn	ASSESSOR'S PARCEL NO.
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATT	AT&T COMMUNICATION
BC	BEGINNING OF CURVE
BCR	BEGIN CURB RETURN
BM BW	BENCHMARK
CALTRANS	BARBED WIRE FENCE CALIFORNIA DEPARTMENT OF TRANSPORTATION C
CALINANS	CURB AND GUTTER
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT
CL	CENTERLINE
CO	CITY ENGINEER
cmp	CORRUGATED METAL PIPE
CVFPB	CENTRAL VALLEY FLOOD PROTECTION BOARD
CY	CUBIC YARD DEPTH IN FEET
D	DRAINAGE INLET
DIA	DIAMETER DIA
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DWR	DEPARTMENT OF WATER RESOURCES
(E)	EXISTING
EC	END OF CURVE
ECR	END CURB RETURN
EF	EACH FACE
EL EP	ELEVATION ELEVATION EDGE OF PAVEMENT
ETW	EDGE OF TRAVELED WAY
ES	EDGE OF SHOULDER
EW	EACH WAY
FES	FLARED END SECTION
FG	FINISH GRADE
FL	FLOWLINE
FM	FORCE MAIN
G	GAS GRADE BREAK
GB HDPE	GRADE BREAK HIGH DENSITY POLYETHYLENE
HGL	HIGH DENSITY POLITETITLENE HYDRAULIC GRADE LINE
HP	HINGE POINT
ID	INSIDE DIAMETER
IN	INCH
INV	INVERT INV
IRR	IRRIGATION
L	LENGTH OF CURVE
LF	LINEAR FEET
LIP	LIP OF CURB AND GUTTER MEASURED
(M) MH	MAINTENANCE HOLE
NIC	NOT IN CONTRACT
00	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND
ОН	OVERHEAD
PG	PROFILE GRADE
PRC	POINT OF REVERSE CURVE
PCC	PORTLAND CEMENT CONCRETE
PG&E PI	PACIFIC GAS & ELECTRIC
PL PP	PROPERTY LINE POWER POLE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLY VINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE RCP
RCB	REINFORCED CONCRETE BOX
RD 784	RECLAMATION DISTRICT NO. 784
R/W	RIGHT-OF-WAY R/W
S	SLOPE PROFILE S
SD SD MH	STORM DRAIN STORM DRAIN MAINTENANCE HOLE
SD MH SD JB	STORM DRAIN MAINTENANCE HOLE STORM DRAIN JUNCTION BOX
SD JB SG	STORM DRAIN JUNCTION BOX SUBGRADE SG
SHT	SHEET
SMUD	SACRAMENTO MUNICIPAL UTILITY DISTRICT
ss	SANITARY SEWER
SSMH	SANITARY SEWER MAINTENANCE HOLE
STA	STATION
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
t	PIPE WALL THICKNESS
TBDI	TOP BACK OF DRAINAGE INLET
TBC TCE	TOP BACK OF CURB
TOB	TEMPORARY CONSTRUCTION EASEMENT TURNOU TOP OF BANK
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UPRR	UNION PACIFIC RAILROAD UPRR
VCP	VITRIFIED CLAY PIPE
	WATER MAIN
WM	WATER MAIN BLOW OFF
WM BO	WATER SURFACE
WM WM BO WSEL WDID	WATER SURFACE WASTE DISCHARGE IDENTIFICATION NUMBER
WM BO WSEL	



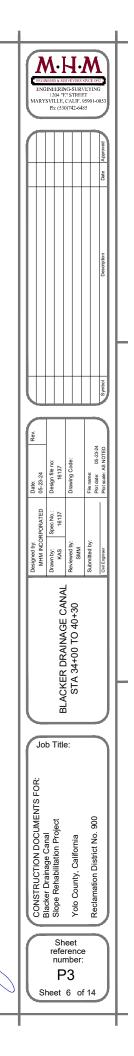


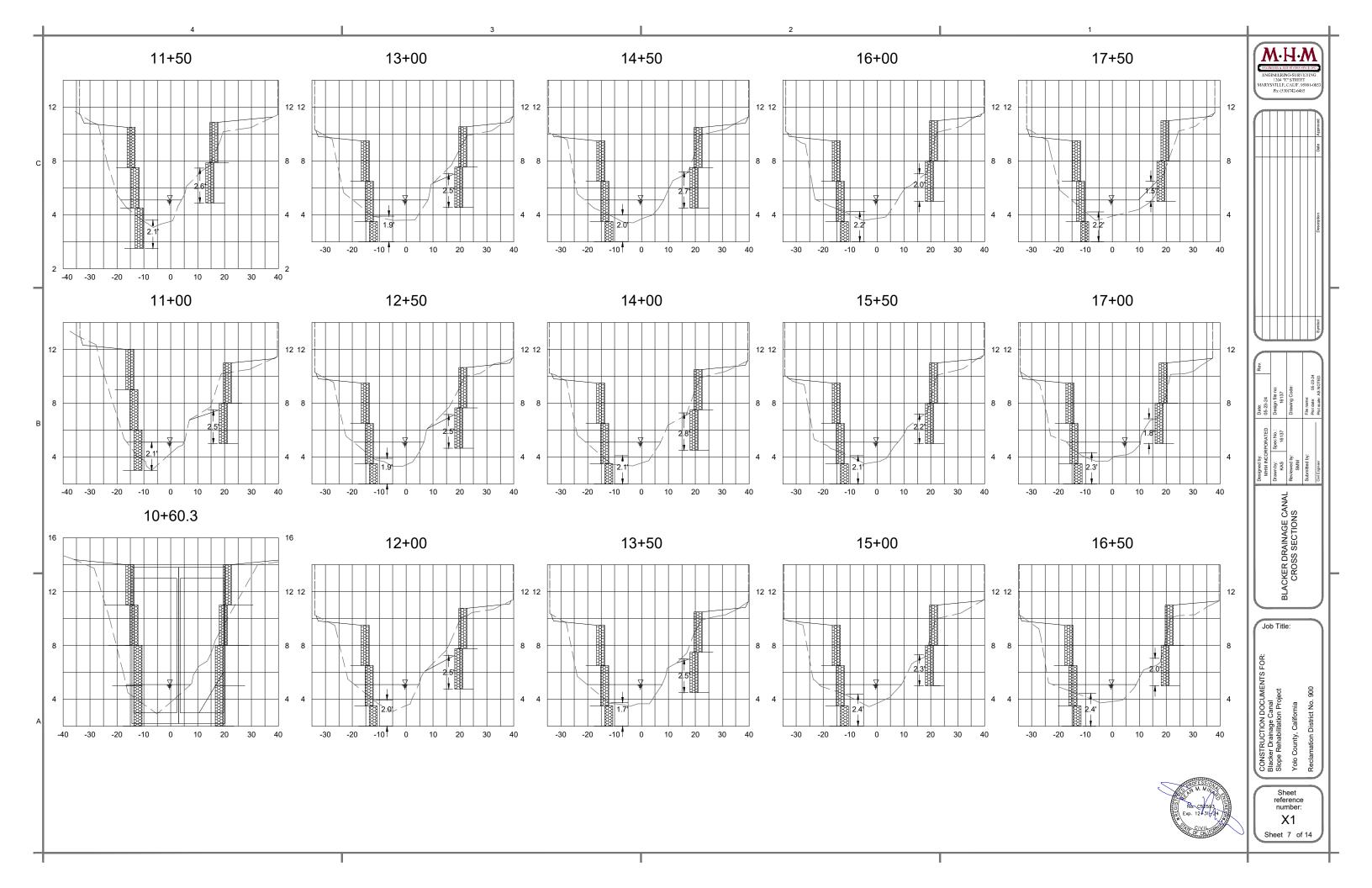


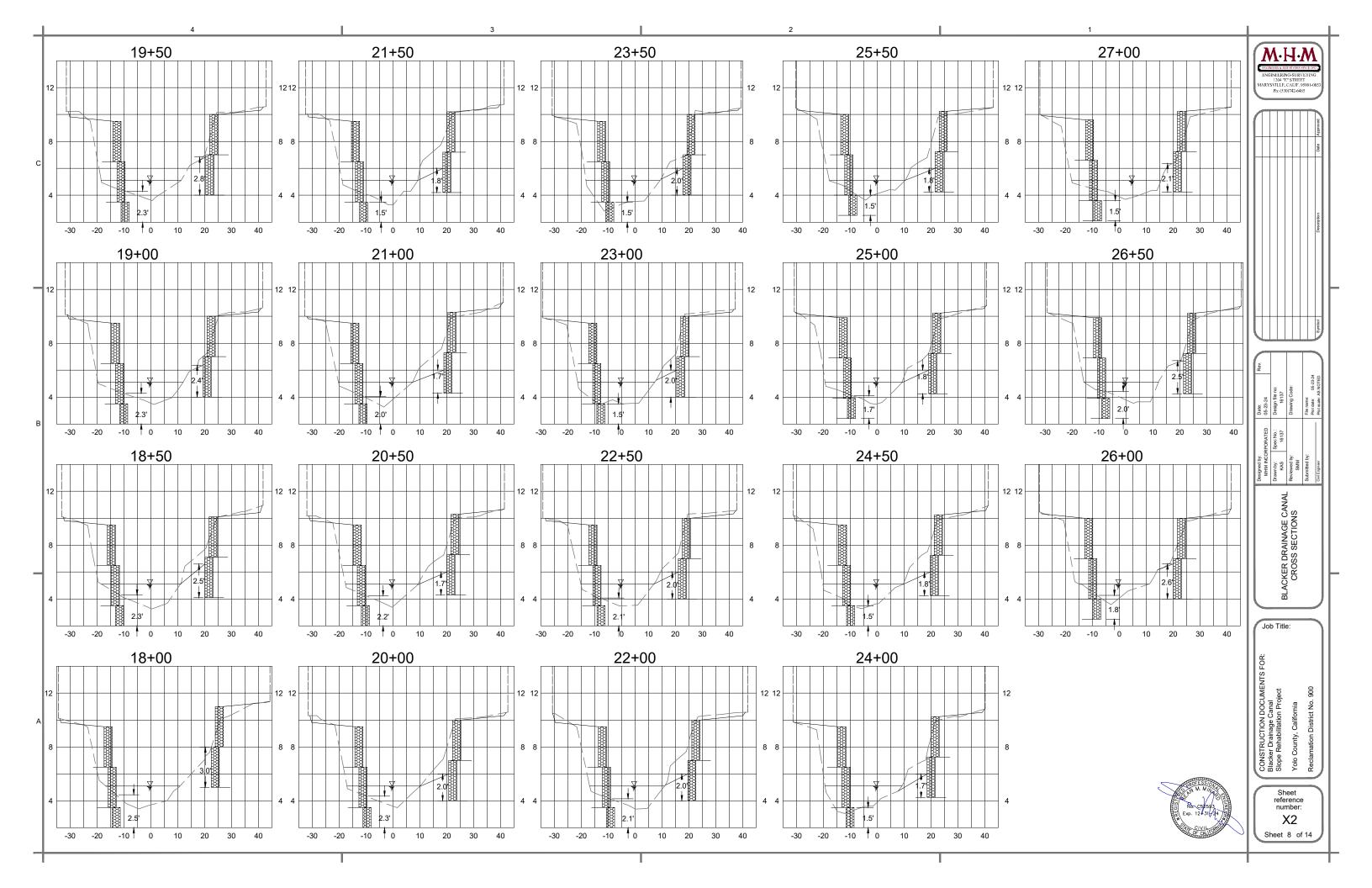


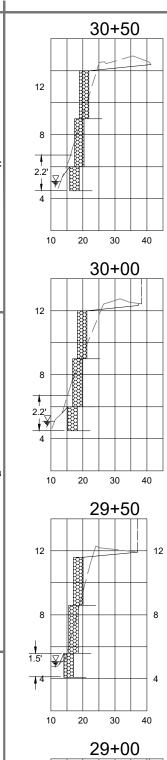


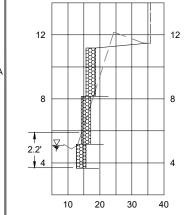
NOTE: PROVIDE SMOOTH TRANSITIONS BETWEEN ALL 1ST ROW GRADE ELEVATION CHANGES

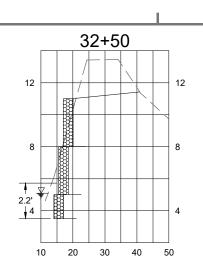


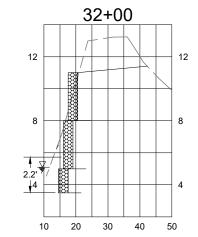


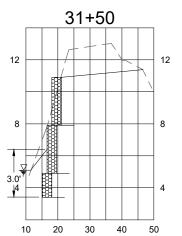


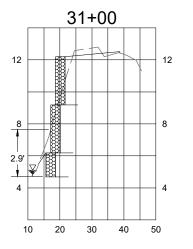


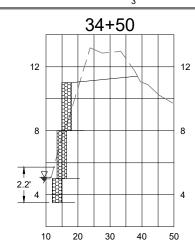


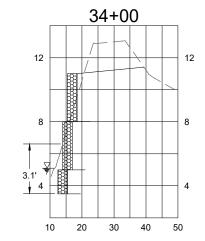


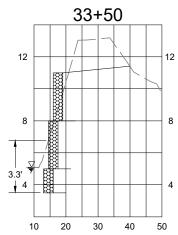


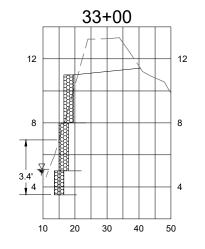


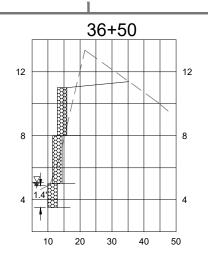


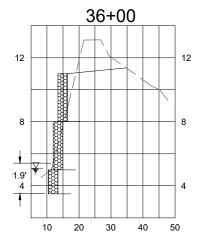


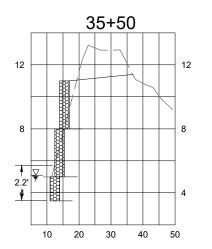


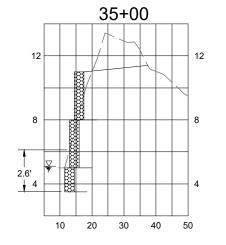


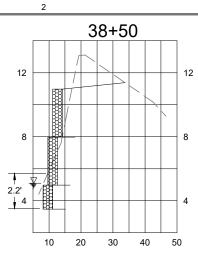


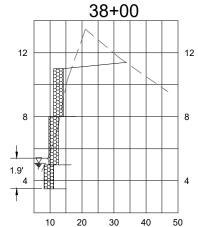


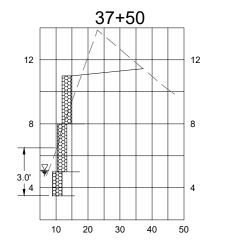








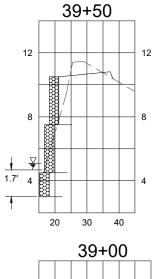


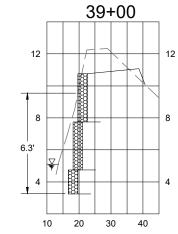


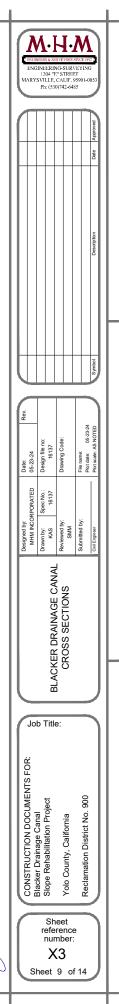
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#### GENERAL NOTES:

. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BEFORE PROCEEDING WITH THE WORK

2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SITE CONDITIONS NOT REFLECTED ON THE DRAWINGS: OF DISCREPANCIES IN MIN. DIMENSIONS INDICATE, SUCH AS GREATER RETAINED EARTH HEIGHTS, CONFLICT IN GRADES, EXTENTS OF BAD SOIL, HEIGHT OF GROUND WATER, DEPTHS OF FOUNDATIONS, ETC., AND ESPECIALLY OF UNCOVERED AND UNEXPECTED UTILITY LINES.

3. ALL WORK NOT DETAILED OR NOTED SHALL BE CONSTRUCTED IN ACCORDANCE WITH OTHER SIMILAR WORK SHOWN ON THE DRAWINGS AND ON TYPICAL DETAILS.

4. NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER

5. DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING SHORING, FORMING, AND TEMPORARY BRACING.

6. UNLESS OTHERWISE SHOWN, LOCATION OF ALL CONSTRUCTION JOINTS SHALL HAVE THE APPROVAL OF THE ENGINEER. IN FLUID RETAINING STRUCTURES. PVC WATERSTOPS SHALL BE PROVIDED IN ALL CONSTRUCTION JOINTS.

TERRA AQUA STABLE SLOPE

- . GABION BASKET FILLING
- THE GABION BASKET FACING SHALL BE FILLED WITH HARD, DURABLE STONE FILL VARYING IN DIMENSIONS FROM 4-8 IN NOT EXCEED 12% WEIGHTED LOSS AFTER FIVE CYCLES OF THE SODIUM SULFATE SOUNDESS OF AGGREGATE TEST AASHTO DESIGNATION: T104
- 2. ASSEMBLING
- UNITS SHALL BE ASSEMBLED AND ERECTED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND PROJECT SPECIFICATIONS. UNITS ARE SUPPLIED ACCORDING TO MANDACINER INFORMATION AND PROJECT SPECIFICATIONS. UNITS ARE SUPPLIED FOLDED FOLDED FLAT AND PRACKED IN BUNDLES. SINGLE UNITS SHALL BE REMOVED FROM THE BUNDLE, UNFOLDED ON A HARD FLAT SURFACE, AND HAVE ALL KINKS AND BENDS WORKED OUT BEFORE ASSEMBLY. THE REINFORCEMENT PANELS MAY BE LEFT FOLDED UP UNTIL THE BASKETS ARE PLACED IN POSITION. THE UNIT SHALL THEN BE ASSEMBLED INDIVIDUALLY BY ERECTING THE FRONT AND BACK, ENDS AND DIAPHRAGMS, ENSURING THAT ALL CREASES ARE IN THE CORRECT POSITION AND THE TOPS OF ALL SIDES SATISFACTORILY.
- 2. THE FOUR CORNERS OF THE UNIT SHALL BE CONNECTED FIRST FOLLOWED BY THE EDGE WIRES OF INTERNAL DIAPHRAGMS TO THE SIDES. THE EDGE SEAM CONNECTION AND THE DIAPHRAGMS TO SIDE CONNECTION SHOULD BE
- ACCOMPLISHED BY USING LACING WIRE OR APPROVED INTERLOCKING FASTENERS. 3. ACCEPTABLE LACING WIRE IS DESCRIBED IN MANUFACTURER MATERIAL. RECOMMENDED PROCEDURE TO APPLY LACING WIRE CONSISTS OF CUTTING A SUFFICIENT LENGTH OF LACING WIRE, APPROXIMATELY 4.5' - 5' LONG, SECURE ONE END OF THE WIRE BY LOOPING AND TWISTING, THEN PROCEED TO LACE WITH ALTERNATING SINGLE AND DOUBLE LOOPS AT APPROXIMATELY 5" INTERVALS. THEN SECURELY FASTEN THE OTHER END OF THE LACING WIRE. THIS PROCEDURE SHALL DEVELOP A JOINT STRENGTH OF 1200 LBS / FT FOR PVC AND 1400 LBS / FT FOR GALVANIZED GABIONS
- THE INSTALLATION OF RECOMMENDED FASTENERS SHOULD BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. ACCEPTABLE FASTENERS FOR JOINING PVC COATED UNITS SHALL BE FORMED FROM 0.120 INCH MINIMUM DIAMETER STAINLESS STEEL WIRE HAVING HIGH TENSILE STRENGTH AND SHALL CONFORM TO ASTM A313. TYPE 302, CLASS 1. FASTENERS SHALL PRODUCE A FOUR-WIRE SELVEDGE JOINT OF 1200 LBS / FT FOR PVC AND 1400 LBS / FT FOR QALVANIZED GABIONS, WHILE REMAINING LOCKED OR OVERLAPPED A MINIMUM OF 1 INCH.
- 3. INSTALLATION AND PLACEMENT
- THE ASSEMBLED UNITS ARE CARRIED TO THE JOB SITE AND PLACED IN THEIR PROPER LOCATION. FOR STRUCTURAL INTEGRITY, THE ADJOINTG EMPTY UNITS MUST BE SECURELY JOINED TOGETHER USING THE SAME CONNECTING PROCEDURES DESCRIBED IN SECTION 1, PARAGRAPHS 3 AND 4 ALONG WITH THE VERTICAL EDGES AND THE TOP EDGE OF THEIR CONTRACT SURFACES IN ORDER TO OBTAIN A MONOLITHIC STRUCTURE. AN APPROVED CORNER CLOSURE TOOLS SHALL BE USED TO ADJOIN ADJACENT GABIONS TO INSURE A TIGHT NEAT SEAM AND MINIMIZE GABION WIRE JOINT DEFORMATION
- THE REINFORCEMENT PANELS ARE THEN UNFOLDED ONTO THE COMPACTED BACKFILL. IT IS NOT NECESSARY TO ATTACH THE REINFORCEMENT PANELS TO EACH OTHER WITH LACING WIRE OR FASTENERS EXCEPT AT ONE POINT
- APPROXIMATELY 3 BEHIND THE BACK PANEL FOR ALIGNMENT PURPOSES. 3. AFTER THE LOWER TIER OF UNITS IS FILLED, CLOSED AND THE BACKFILL COMPACTED, THE NEXT TIER OF UNITS IS PLACED ON TOP AND SHALL BE CONNECTED TO THE LOWER TIER ALONG THE FRONT EDGE OF THE CONTACT SURFACE, USING THE SAME CONNECTING PROCEDURE DESCRIBED IN SECTION 2. PARAGRAPHS 3 AND 4.

4. FILLING

- . UNITS SHALL BE FILLED WITH STONE AS DESCRIBED IN BASKET FILL SECTION 1. 2. UNITS MAY BE FILLED BY ALMOST ANY TYPE OF EARTH HANDLING EQUIPMENT. SOME MANUAL STONE ADJUSTMENT DURING THE FILLING OPERATION IS REQUIRED TO MINIMIZE VOIDS. IT IS ALSO RECOMMENDED THAT THE STONE AGAINST THE EXPOSED FACES OF THE UNITS BE HAND-STACKED TO GIVE A NEAT, COMPACT AND ATTRACTIVE APPEARANCE. CARE SHALL BE TAKEN WHEN PLACING FILL MATERIAL TO ASSURE THAT THE SHEATHING OF THE PVC COATED UNITS WILL NOT BE BROKEN OR DAMAGED. THE STONE SHOULD NOT BE DUMPED FROM A HEIGHT GREATER THAN 2' - 3' ABOVE THE TOP OF THE GABION UNITS
- THE INDIVIDUAL CELLS OF THE UNITS IN ANY ROW SHALL BE FILLED IN STAGES SO THAT LOCAL DEFORMATION MAY BE AVOIDED. THAT IS, AT NO TIME SHALL ANY CELL BE FILLED TO A DEPTH EXCEEDING 1 MORE THAN AN ADJOINING CELL. IT IS ALSO RECOMMENDED TO SLIGHTLY OVERFILL THE GABION ON APPROXIMATELY 2" - 4" ABOVE THE TOP OF THE GABION UNIT TO ALLOW FOR SETTI EMENT
- WELL-PACKED FILLING OF UNITS WITHOUT UNDUE BULGING, AND SECURE LACING AND/OR FASTENING, IS ESSENTIAL IN ALL STRUCTURES.
- 5. FILTER FABRIC PLACEMENT
- 1. FILTER FABRIC SHALL BE PLACED SO AS TO COMPLETELY COVER THE BACK OF THE UNIT WITH 1' OF EXCESS MATERIAL TO BE FOLDED TOWARD THE BACKFILL AT BOTH THE TOP AND BOTTOM ALONG THE REINFORCEMENT PANELS. THE FABRIC SHALL BE ATTACHED TO THE TOP OF THE BACK PANEL WITH EITHER LACING WIRE OR APPROVED FASTENERS EVERY 18 INCHES. THE TYPE OF FABRIC WILL BE DEPENDENT UPON THE FILL MATERIAL FURNISHED. THE FABRIC SHALL BE SELECTED BASED UPON GRADATION SAMPLES AND APPROVED BY THE DESIGN ENGINEER.
- 6. INTERNAL CONNECTING WIRES
- INTERNAL CONNECTING WIRES ARE USED TO PREVENT THE FRONT FACE OF THE UNITS FROM BULGING AS ADDITIONAL ROWS OR LAYERS ARE PLACED ON TOP OF THE EXISTING LAYERS.
  3' HIGH UNITS SHALL BE FILLED IN THREE LAYERS 1' AT A TIME. AFTER THE PLACEMENT OF EACH LAYER, TWO
- CONNECTING WIRES SHALL BE PLACED TO CONNECT THE EXPOSED FACE OF A CELL TO THE OPPOSITE SIDE OF THE CELL. THE WIRE SHALL BE LOOPED AROUND TWO MESH OPENINGS AND THE ENDS OF THE WIRES SHALL BE SECURELY TWISTED TO PREVENT ITS LOOSENING. AN EXPOSED FRONT FACE IS ANY SIDE OF A CELL THAT WILL BE EXPOSED OR UNSUPPORTED AFTER THE STRUCTURE IS COMPLETED.
- 1.5' HIGH UNITS SHALL BE FILLED IN TWO LAYERS 9" AT A TIME. AFTER THE PLACEMENT OF EACH LAYER TWO CONNECTING WIRES SHALL BE PLACED TO CONNECT THE EXPOSED FACE OF A CELL TO THE OPPOSITE SIDE OF THE CELL. L THE WIRE SHALL E LOOPED AROUND TWO MESH OPENINGS AND THE ENDS OF THE WIRE SHALL BE TWISTED TO EVENT ITS LOOSENIN
- 7. LID CLOSING
- . THE LID SHALL BE STRETCHED TIGHT OVER THE FILLING OF THE STONE UNTIL THE LID MEETS THE PERIMETER EDGES OF THE UNIT. THIS OPERATION SHALL BE ACCOMPLISHED BY USING AN APPROVED LID CLOSING TOOL. THE LID SHALL THEN BE TIGHTLY FASTENED ALONG ALL EDGES, ENDS AND TOPS OF THE DIAPHRAGMS IN THE SAME MANNER AS
- DESCRIBED IN SECTION 2, PARAGRAPHS 3 AND 4. . UPON COMPLETION, THE STRUCTURE SHALL BE CHECKED AND ALL ENDS OF WIRE SHALL BE FOLDED INTO THE STRUCTURE, WELL-PACKED FILLING WITHOUT UNDUE BULGING AND SECURE LACING AND/OR FASTENING IS ESSENTIAL IN ALL STRUCTURES, ALL TERRA AQUA GABION MATERIAL IS MANUFACTURED ACCORDING TO ASTM A975-97 GUIDELINES FOR DOUBLE TWISTED HEXAGONAL MESH GABIONS.

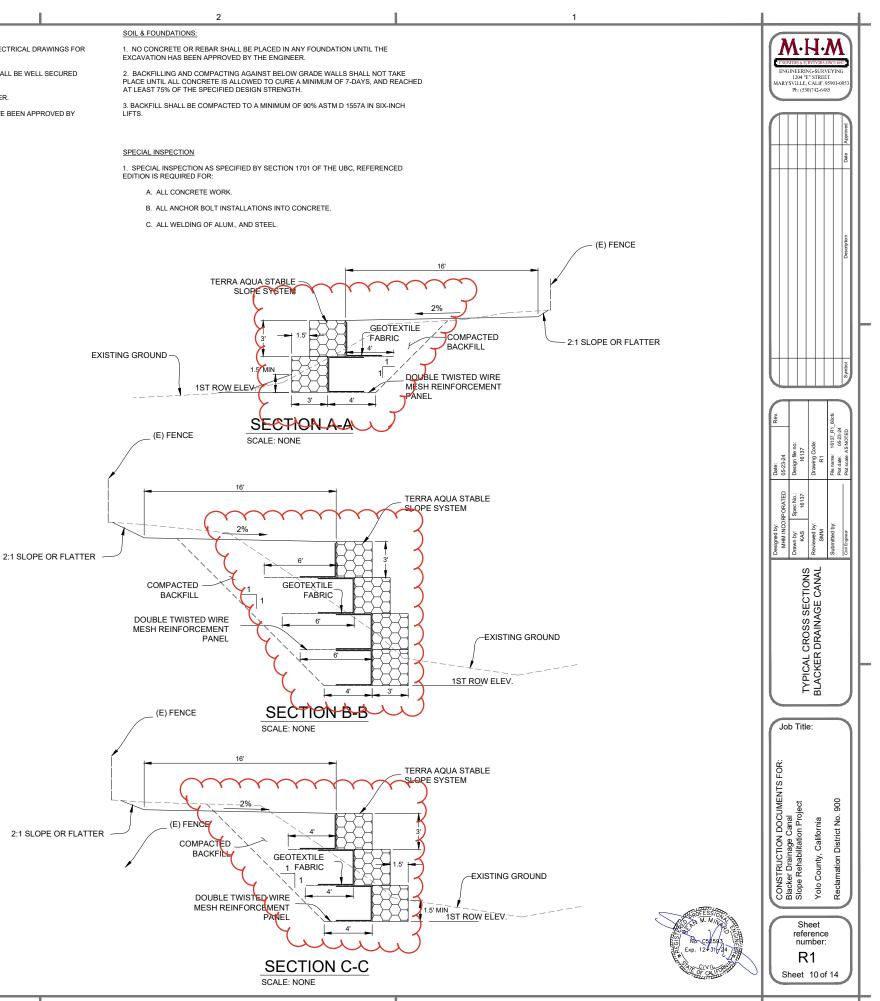
CONCRETE

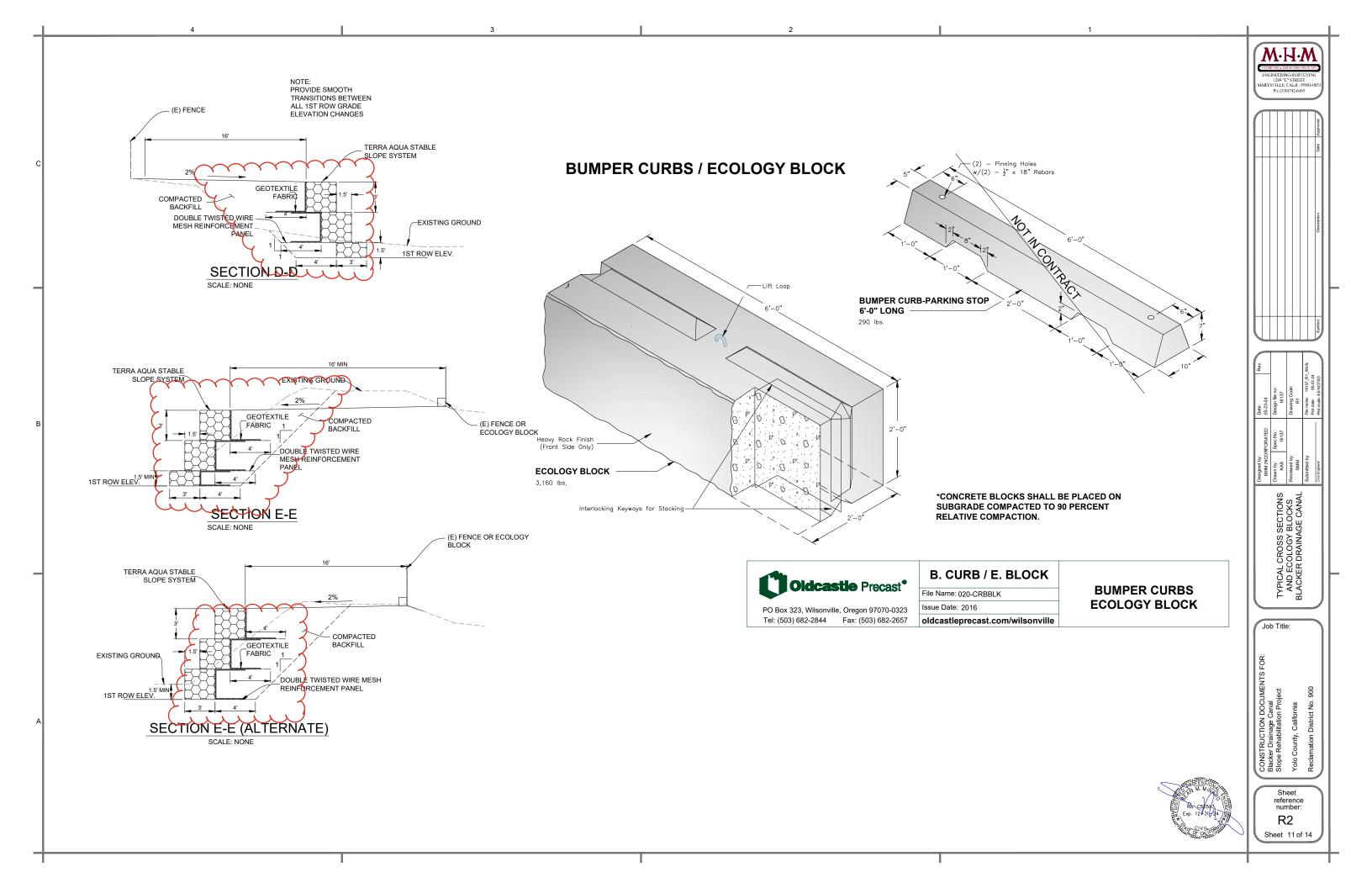
1. REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ALL MOLDS, GROOVES, ETC., TO BE CAST IN CONCRETE.

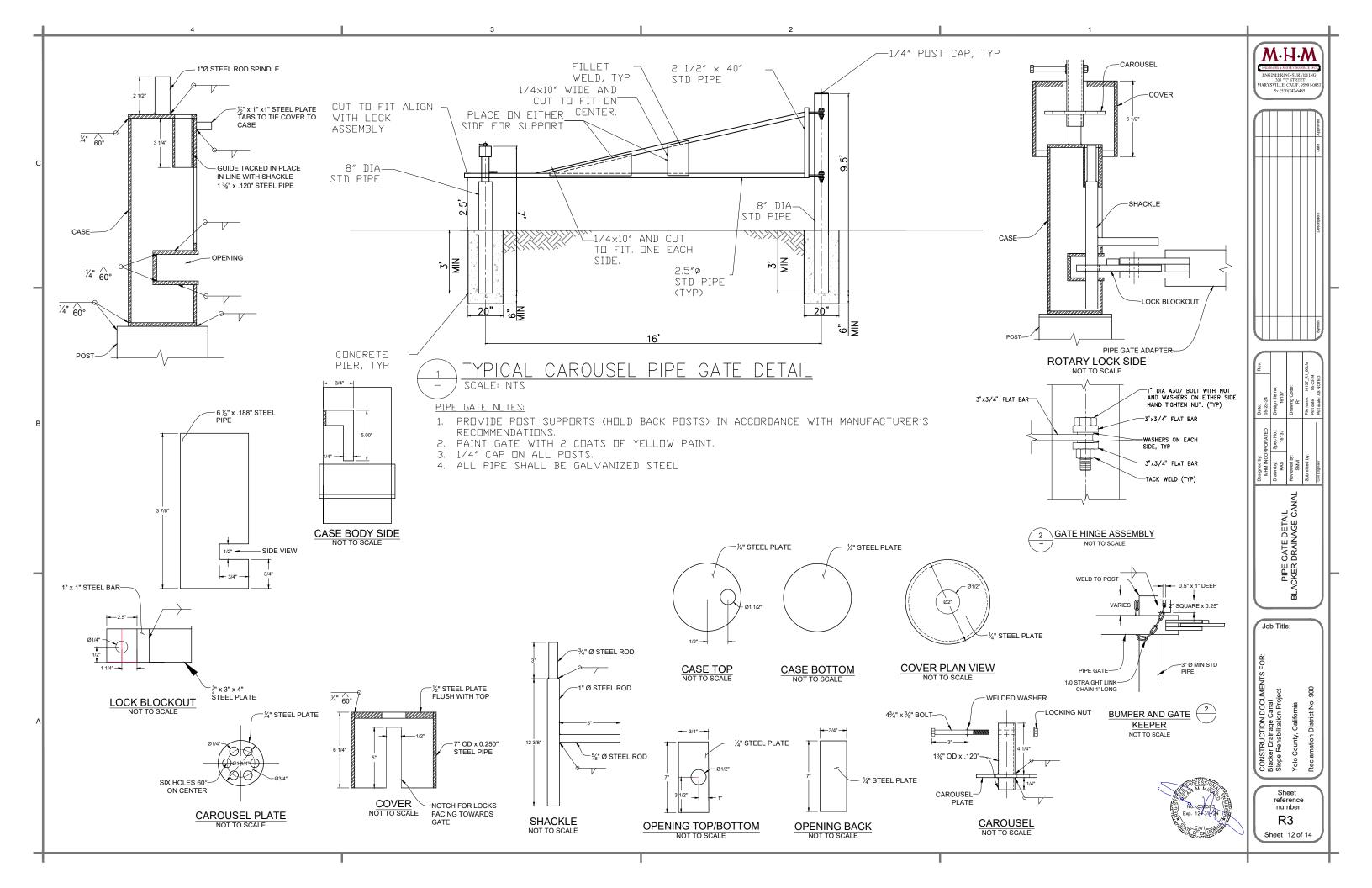
2. ALL REINFORCING BARS, ANCHOR BOLTS AND INSERTS SHALL BE WELL SECURED PRIOR TO POURING CONCRETE

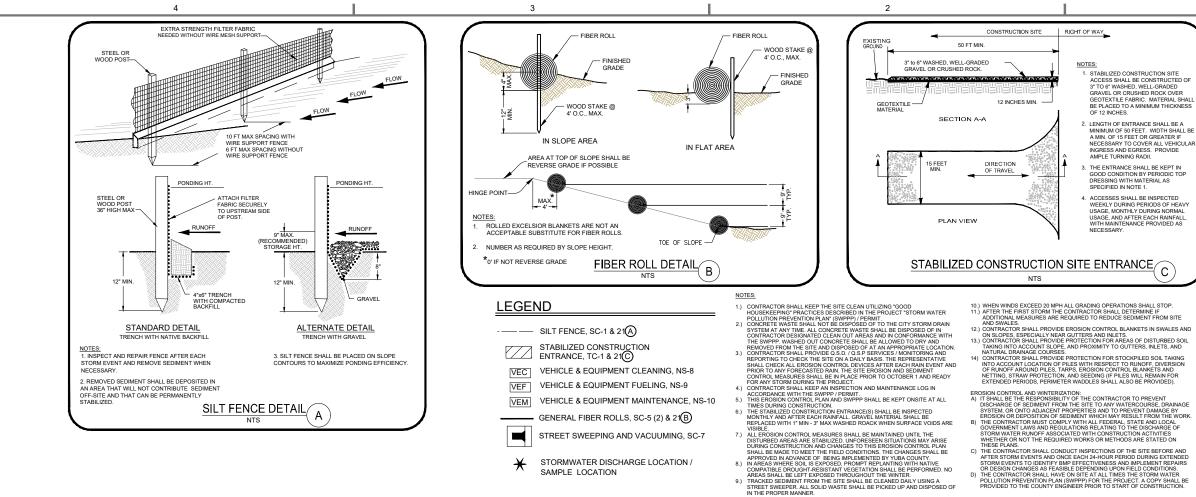
3. ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.

4. NO PLACEMENT OF CONCRETE UNTIL STEEL & FORMS HAVE BEEN APPROVED BY ENGINEER











### SLOPE SEEDING:

BASIN SLOPES SHALL HAVE EROSION CONTROL PLACED (WITH LIMITS TO EXTEND 3 FEET MINIMUM BEYOND THE HINGE POINT AT TOP OF SLOPE AND 5 FEET BEYOND TOE OF SLOPE AT BOTTOM) IN CONFORMANCE WITH SECTION OF THE STANDARD SPECIFICATIONS AND THESE SPECIAL PROVISIONS:

1. HYDRO-SEEDING SHALL CONSIST OF THE FOLLOWING SEED MIXTURE OF EQUAL PARTS OF:

A. ZORRO ANNUAL FESCUE @ 20 Ib/ACRE B. BLANDO BROME @ 20 Ib/ACRE C. COMMON OTA @ 15 Ib/ACRE D. FERTILIZER, (16-20-0 AND 15% SULFER) @ 350 Ib/ACRE

E. WOOD FIBER @ 1500 lb/ACRE

2. FOR IMMEDIATE EROSION CONTROL, STRAW SHOULD BE DISTRIBUTED AT A RATE OF APPROXIMATELY 100 lbs PER 1000 sq. ft.

3. SEEDING SHALL BE PLACED IMMEDIATELY AFTER AN AREA IS FINISHED, IF WORK STOPS, OR AS DIRECTED BY THE DISTRICT OR COUNTY.

DETAILS CAN BE FOUND IN THE PROJECT SWPPP OR THE CALTRANS STORM WATER QUALITY HANDBOOK "CURRENT EDITION"

-MHM-

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