

## SUBGRADE PREPARATION NOTES

- STRUCTURAL AREAS SHOULD BE STRIPPED OF THE SURFACE VEGETATION, OLD FILLS, DEBRIS, UNDERGROUND UTILITIES. ETC. THESE MATERIALS SHOULD BE MOVED OFF SITE: SOME OF THEM, IF SUITABLE COULD BE STOCKPILED FOR LATER USE IN LANDSCAPE AREAS
- FOLLOWING SITE STRIPPING, AREAS TO RECEIVE FILL SHOULD BE PREPARED BY REMOVING ANY ARTIFICIAL FILL AND WEAK SOILS AND EXPOSING BEDROCK AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION. THE EXPOSED SURFACE SHOULD THEN BE SCARIFIED TO A MINIMUM DEPTH OF EIGHT INCHES, MOISTURE CONDITIONED TO NEAR OPTIMUM MOISTURE CONTENT, AND RECOMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY.
- WHERE FILL IS REQUIRED ON SLOPES STEEPER THAN 5H:1V, THE SOIL MANTLE AND ANY WEAK MATERIAL SHOULD BE REMOVED AND THESE AREAS SHOULD BE POSITIVELY BENCHED HORIZONTALLY INTO BEDROCK AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION IN CONJUNCTION WITH FILL PLACEMENT.
- 4. THE MAXIMUM HEIGHT OF BENCHES SHOULD BE REVIEWED BY THE GEOTECHNICAL ENGINEER. A KEY WILL BE REQUIRED AT THE TOE OF ALL FILL EMBANKMENTS. OBSERVATION SHOULD BE PROVIDED BY THE GEOTECHNICAL ENGINEER TO DETERMINE WHERE THESE KEYS SHOULD
- SUBDRAINS SHOULD BE INSTALLED IN ALL THE KEYS AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION.
- 6. THE BARN BUILDING PAD SHOULD BE PREPARED BY REMOVING THE WEAK AND COMPRESSIBLE SOILS TO THEIR FULL DEPTH AND EXPOSING BEDROCK. THE ACTUAL DEPTH OF SUBEXCAVATION SHOULD BE DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION. BASED ON OUR SUBSURFACE EXPLORATION, THE SUBEXCAVATION FOR THE PROPOSED BARN WILL PROBABLY EXTEND TO AN APPROXIMATE DEPTH OF 30 INCHES BELOW THE EXISTING GROUND SURFACE. HOWEVER, IT MAY BE NECESSARY TO SUBEXCAVATE DEEPER TO PROVIDE AT LEAST ONE FOOT OF COMPACTED ENGINEERED FILL BELOW THE BOTTOM OF ALL FOOTINGS. THE LATERAL EXTENT OF THE SUBEXCAVATION SHOULD BE A MINIMUM OF FIVE FEET BEYOND THE FOUNDATIONS AND THREE FEET BEYOND EXTERIOR FLATWORK.
- GENERAL ENGINEERED FILL (IMPORT) SHALL BE COMPACTED IN LIFTS, A MAXIMUM OF EIGHT INCHES LOOSE THICKNESS, COMPACT TO A MINIMUM OF 90PERCENT RELATIVE COMPACTION AT OR NEAR OPTIMUM MOISTURE CONTENT.
- GENERAL ENGINEERED FILL (NATIVE) SHALL BE COMPACTED IN LIFTS, A MAXIMUM OF EIGHT INCHES LOOSE THICKNESS. COMPACT TO 90 PERCENT RELATIVE COMPACTION AT LEAST TWO PERCENT OVER OPTIMUM MOISTURE CONTENT.
- 9. A REPRESENTATIVE OF PJC SHOULD OBSERVE ALL SITE PREPARATION AND FILL PLACEMENT. IT IS IMPORTANT THAT DURING THE STRIPPING, GRADING AND SCARIFICATION PROCESSES. A REPRESENTATIVE OF OUR FIRM BE PRESENT TO OBSERVE WHETHER ANY UNDESIRABLE MATERIAL IS ENCOUNTERED IN THE CONSTRUCTION AREA.
- 10. CUT AND FILL SLOPES SHOULD BE NO STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2H:1V). HOWEVER, CUT SLOPES IN COMPETENT BEDROCK MAY BE STEEPENED AS APPROVED /B\ BY THE GEOTECHNICAL ENGINEER IN THE FIELD DURING CONSTRUCTION.
- 11. CONVENTIONAL SLABS-ON-GRADE SHOULD BE SUPPORTED ENTIRELY ON COMPACTED ENGINEERED FILL. HOWEVER, PROVIDED THE EXCAVATION FOR THE GARAGE REMOVES THE WEAK SURFACE AND NEAR SURFACE SOILS AND EXPOSES BEDROCK, THE GARAGE SLAB MAY BE SUPPORTED ON THE UNDERLYING BEDROCK.
- 12. WE RECOMMEND THAT THE ROOFS BE PROVIDED WITH GUTTERS AND THAT THE DOWNSPOUTS BE CONNECTED TO CLOSED CONDUITS DISCHARGING TO A DESIGNATED AREA AWAY FROM FOUNDATIONS AND SLOPES. SURFACE WATER SHOULD BE CHANNELED AWAY FROM SLOPES AND FOUNDATIONS.
- 13. WE RECOMMEND THAT FOUNDATION SUBDRAINS BE PLACED ADJACENT TO ALL FOUNDATIONS, EXCEPT THE DOWNHILL FOUNDATION.
- 14. REFER TO PROJECT GEOTECHNICAL REPORT PREPARED BY PJC & ASSOCIATES, INC. DATED APRIL 24, 2019 FOR COMPLETE REQUIREMENTS

## FIRE PROTECTION NOTES

- 1. THE NUMERICAL ADDRESS SHALL BE POSTED AT THE PUBLIC ROADWAY AND ANY OTHER INTERSECTIONS OR RESIDENTIAL ROADWAY. HEIGHT AND NUMBERS SHALL BE A MIN. OF 4 INCHES REFLECTIVE, OR ON A CONTRASTING BACK GROUND, AND/OR ILLUMINATED. SEE DETAIL #14 OF THE NAPA COUNTY FIRE STANDARDS.
- 2. DEFENSIBLE SPACE FOR WILDFIRE SHALL BE A MIN. OF 100 FEET AROUND AL STRUCTURES OR TO THE PROPERTY LINES. GREATER CLEARANCE MAYBE REQUIRED UPON INSPECTION AS DETERMINED DUE TO
- 3. OVERHEAD CLEARANCE OF TREE LIMBS AND BRUSH ALONG THE ENTIRE LENGTH OF THE DRIVEWAY SHALL BE A MINIMUM OF 13 FEET 6 INCH VERTICAL CLEARANCE. SEE DETAIL #8 OF NAPA CO. FIRE
- 4. HORIZONTAL DEFENSIBLE SPACE CLEARANCE SHALL BE A MINIMUM OF 10 FEET ON EACH SIDE OF THE DRIVEWAY. SEE DETAIL #8 OF THE NAPA COUNTY FIRE STANDARDS.
- 5. THE WATER STORAGE REQUIRED FOR DOMESTIC USE SHALL BE IN ADDITION TO THE REQUIRED STORAGE FOR FIRE PROTECTION AND ALL PIPES OR VALVES REQUIRED FOR DOMESTIC USE SHALL BE INSTALLED TO THE TANK ABOVE THE LEVEL DESIGNATED FOR FIRE PROTECTION PURPOSES ONLY. SWIMMING POOLS ARE AN ACCEPTABLE USE FOR FIRE PROTECTION. SEE DETAILS #3 OR #5 OF THE NAPA COUNTY FIRE STANDARDS.
- 6. THE FIRE HYDRANT SHALL BE LOCATED NO CLOSER THAT 30 FEET AND NO FURTHER THAN 150 FEET FROM THE RESIDENCE OR BUILDING. THE FIRE HYDRANT SHALL BE LOCATED CENTERED IN A TURNOUT AREA AND SHALL BE WITHIN 5 FEET TO THE EDGE OF CURB OR DRIVEWAY. THE HYDRANT OUTLET MUST BE WITHIN 24 INCHES TO 36 INCHES ABOVE THE FINISHED GRADE OF THE TURNOUT AREA. SEE DETAILS #2 & #3 OF THE NAPA COUNTY FIRE STANDARDS.
- NOTE: THE FIRE HYDRANT TURNOUT LOCATION SHALL BE ESTABLISHED IN AN AREA SEPARATE FROM THE FIE APPARATUS TURNAROUND AREA. THE FIRE HYDRANT TURNOUT AREA IS FOR FIRE APPARATUS TO BE PARKED DURING DRAFTING OPERATIONS AND SHALL NOT INTERFERE WITH THE FIRE APPARATUS ACCESS TO AND FROM THE STRUCTURE.
- 7. WET DRAFT HYDRANTS SHALL BE PAINTED 'RED AND SHALL HAVE 1 INCH "WHITE" LETTERS POSTED ON
- 8. A "BLUE DOT REFLECTOR" SHALL BE ADJACENT TO ALL HYDRANTS. SEE DETAILS #2 & #3 OF THE STANDARDS.

IT TO READ: "WET DRAFT" SEE DETAIL #2 & #3 OF THE NAPA COUNTY FIRE STANDARDS.

- 9. BOLLARD PROTECTION IS REQUIRED AT ALL HYDRANTS. SEE DETAILS #2 & #3 OF THE STANDARDS. 10. NEW OR EXISTING BRIDGES ON THE PROPERTY THAT WILL BE UTILIZED FOR FIRE APPARATUS TO ACCESS ANY STRUCTURE SHALL COMPLY WITH THE NAPA COUNTY FIRE SAFE STANDARDS. SEE DETAIL #15 OF THE NAPA COUNTY FIRE STANDARDS.
- 11. FIRE SPRINKLER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA FIRE CODE AND NFPA 13D ONE OR TWO FAMILY DWELLING — 2002 EDITION AND SHALL BE SUBMITTED UNDER SEPARATE
- 12. DEFENSIBLE SPACE FOR WILDFIRE SHALL BE A MINIMUM OF 100 FEET FROM ALL STRUCTURES OR TO THE PROPERTY LINES. GREATER CLEARANCE MAYBE REQUIRED UPON INSPECTION AS DETERMINED DUE TO
- 13. HORIZONTAL DEFENSIBLE SPACE SHALL BE PROVIDED 10 FEET ON EACH SIDE OF THE DRIVEWAY.
- 14. OVERHEAD CLEARANCE OF TREE LIMBS AND BRUSH ALONG THE ENTIRE LENGTH OF THE DRIVEWAY SHALL BE A MINIMUM OF 13 FOOT 6 INCH VERTICAL CLEARANCE. SEE DETAIL #8 OF THE NAPA COUNTY FIRE

#### TREE PROTECTION NOTES

- ĂNY TREES WITHIN THE DISTURBED AREA LIMITS WILL NEED TREE PROTECTION FENCING AT THE DRIP LINE FOR ANY TREES TO REMAIN. ANY WORK WITHIN THE DRIP LINE SHOULD BE UNDER OWNER APPROVALS AND/OR UNDER SUPERVISION OF PROJECT ARBORIST.
- 2. PLASTIC TREE PROTECTION FENCING SHOULD BE INSTALLED AT THE DRIP LINES OF TREES TO REMAIN IN CONSTRUCTION ZONE (OR THE OUTER EDGE OF THE DRIP LINE OF GROUPS OF TREES) IF ACCESS WITHIN DRIP LINE WILL BE REQUIRED, FENCE TO BE PLACED AT EXPECTED LIMIT OF GRADING IT SHOULD BE INSTALLED PRIOR TO THE START OF CLEARING OR GRADING OPERATIONS, AND KEPT IN PLACE THROUGHOUT CONSTRUCTION ACTIVITIES.
- 3. WHEN PRUNING FOR CLEARANCE IS REQUIRED ON ANY TREES TO REMAIN, IT SHOULD BE DONE BY TRAINED, QUALIFIED TREE WORKERS ACCORDING TO ISA PRUNING GUIDELINES PRIOR TO CONSTRUCTION. PRUNING SHOULD BE THE MINIMUM NECESSARY FOR HAZARD REDUCTION. (I.E. THE REMOVAL OF DEADWOOD 2" AND LARGER, ECT.) AND CLEARANCE.
- 4. IF ANY ROOTS LARGER THAN 1" ARE ENCOUNTERED, FOR TREES TO BE SAVED, THEY SHOULD BE CUT CLEANLY ACROSS THE FACE OF THE ROOT WITH A SHARP SAW. ROOTS SHALL BE KEPT MOIST WHILE EXPOSED.
- 5. WOOD CHIP MULCH GENERATED FROM PRUNING AND REMOVALS SHOULD BE SPREAD UNDER REMAINING TREES ONSITE TO SERVE AS PERMANENT TOP DRESSING AND MULCH.
- 6. NO PARKING, OPERATION OF EQUIPMENT, STORAGE OF MATERIALS, DISPOSAL OF WASTE OR OTHER CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN DRIP LINES OF PROTECTED TREES.
- 7. OWNERS SHALL BE RESPONSIBLE FOR CONSULTING WITH ARBORIST REGARDING CONSTRUCTION IMPACTS ON EXISTING TREES.

# **BIOLOGICAL MITIGATION MEASURES**

- 1. NESTING BIRDS: TO THE EXTENT PRACTICAL, ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED OUTSIDE THE NESTING SEASON BETWEEN SEPTEMBER 1 AND JANUARY 31. IF WORK MUST BE PERFORMED DURING THE NESTING SEASON, A PRE-CONSTRUCTION NESTING BIRD SURVEY SHALL BE PERFORMED IN ALL AREAS WITHIN 250 FEET OF PROPOSED ACTIVITIES. IF NESTS ARE FOUND, AN APPROPRIATELY SIZED NO-DISTURBANCE BUFFER SHALL BE PLACED AROUND THE NEST AT THE DIRECTION OF THE QUALIFIED BIOLOGIST CONDUCTING THE SURVEY. BUFFERS SHALL REMAIN IN PLACE UNTIL ALL YOUNG HAVE FLEDGED, OR THE BIOLOGIST HAS CONFIRMED THAT THE NEST HAS BEEN NATURALLY PREDATED.
- 2. MATERNITY ROOSTING BATS (PALLID AND OTHER COMMON BATS): PRIOR TO ACTIVITIES IN AREAS WHERE BAT ROOSTS MAY BE PRESENT, A QUALIFIED BAT BIOLOGIST SHALL PERFORM A PRE-CONSTRUCTION ROOST SURVEY (DUSK EMERGENCE SURVEY) NO MORE THAN 10 DAYS PRIOR TO THE START OF ACTIVITIES WITH POTENTIAL TO DISTURB BATS OR THEIR HABITAT DURING THE MATERNITY SEASON BETWEEN APRIL AND SEPTEMBER TO AVOID POTENTIAL IMPACTS TO ACTIVE MATERNITY SITES AND/OR PREGNANT FEMALES. THE SURVEY SHALL ENCOMPASS ANY POTENTIAL ROOST SITE WITHIN 100 FEET OF PROJECT ACTIVITIES. IF A MATERNITY ROOST IS LOCATED WHETHER SOLITARY OR COLONIAL. THAT ROOST WILL REMAIN UNDISTURBED UNTIL SEPTEMBER 1 OR UNTIL A QUALIFIED BIOLOGIST HAS DETERMINED THAT THE ROOST IS NO LONGER ACTIVE. A NO-DISTURBANCE BUFFER MAY BE ESTABLISHED AROUND THE ROOST AT THE DIRECTION OF THE
- (ROOSTING BATS): TREE REMOVAL MAY HAVE POTENTIAL TO IMPACT NON-MATERNITY ROOSTING PALLID BAT AS WELL AS OTHER COMMON BAT SPECIES THAT MAY BE PRESENT. IF TREE REMOVAL IS REQUIRED, FELLED TREES SHALL BE LEFT OVERNIGHT PRIOR TO REMOVAL FROM THE SITE OR ON-SITE CHIPPING TO ALLOW ANY NON-MATERNITY BATS TO EXIT THE ROOST.
- 4. (WESTERN POND TURTLE): A PRE -CONSTRUCTION SURVEY IS RECOMMENDED WITHIN 48 HOURS OF GROUND DISTURBING ACTIVITIES IF WITHIN 100 METERS OF ANY AQUATIC OR RIPARIAN HABITAT FOR THE POTENTIAL PRESENCE OF POND TURTLE NEST SITES. ALTERNATIVELY, WILDLIFE EXCLUSION FENCING MAY BE PLACED BETWEEN THE WORK AREA AND NEARBY AQUATIC HABITATS WITHIN 100 METERS TO PREVENT POND TURTLE FROM NESTING WITHIN AREAS PROPOSED FOR GROUND DISTURBANCE. FENCING SHALL BE PLACED PRIOR TO MAY 1 FOR WORK PROPOSED TO OCCUR IN THE SUMMER/EARLY FALL PERIOD. FENCING SHALL BE A MINIMUM OF 36 INCHES HIGH, WITH A MINIMUM OF 4 INCHES TRENCHED INTO THE GROUND.
- (AMERICAN BADGER): PRIOR TO ANY GRADING ACTIVITIES, A PRE—CONSTRUCTION SURVEY SHALL BE PERFORMED BY A QUALIFIED BIOLOGIST TO MAP THE LOCATION OF ANY POTENTIAL DENS WITHIN 300 FEET OF PROPOSED CONSTRUCTION ACTIVITIES. IF POTENTIAL NATAL DENS ARE OBSERVED, A MINIMUM 300-F00T NO DISTURBANCE SETBACK/BUFFER WILL BE ESTABLISHED AROUND THE POTENTIAL DEN DURING THE BREEDING/PUPPING/REARING SEASON (DECEMBER 1 TO MAY 31). DURING THE NON-BREEDING SEASON OR FOR NON-NATAL DENS (JUNE 1 TO NOVEMBER 31), A MINIMUM 100-FOOT NO DISTURBANCE SETBACK/BUFFER WILL BE ESTABLISHED. IF A POTENTIAL DEN CANNOT BE AVOIDED, A RELOCATION PLAN SHALL BE PREPARED BY THE BIOLOGIST IN CONSULTATION WITH THE CDFW PRIOR TO WORK IN THAT AREA.
- 6. REFER TO BIOLOGICAL RESOURCES REPORT PREPARED BY SOL ECOLOGY DATED JULY 16 2020 FOR COMPLETE REQUIREMENTS

^^^^^

# **GENERAL NOTES:**

- 1. NO WORK SHALL COMMENCE UNTIL ANY NECESSARY PERMITS ARE OBTAINED FROM NAPA COUNTY PUBLIC WORKS DEPARTMENT.
- 2. THE OFFICE OF **HOGAN LAND SERVICES** SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO REQUIRING ANY STAKING - TELEPHONE 544-2104.
- 3. ALL WORK SHALL COMPLY WITH BEST MANAGEMENT PRACTICES TO PREVENT STORM WATER
- 4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF GAS, ELECTRIC, TV CABLE, TELEPHONE, SEWER AND WATER FACILITIES, IF INSTALLED BY OTHERS AND NOT SHOWN ON
- 5. UNLESS OTHERWISE SHOWN ON THE PLANS, STORM DRAINS SHALL BE PLASTIC SEWER PIPES WITH MANUFACTURED FITTINGS, GLUED AND CONNECTED PER MANUFACTURER'S RECOMMENDATIONS. STORM DRAIN SHALL COMPLY WITH ANSI/ASTM D 3034-78, SDR 35 REQUIREMENTS OR CORRUGATED POLYETHYLENE PIPE SUCH AS ADVANCED DRAINAGE SYSTEMS (A.D.S.) N-12 OR AS SHOWN ON PLAN.
- 6. DRIVEWAY PAVEMENT SECTIONS ARE FOR BIDDING PURPOSES ONLY, ACTUAL SECTION WILL BE DETERMINED IN THE FIELD AND AS PER RECOMMENDATIONS OF PROJECT GEOTECHNICAL ENGINEER.
- 7. CONSTRUCTION REVIEW BY HOGAN LAND SERVICES, HOGAN LAND SERVICES REQUIRES THAT CONSTRUCTION OBSERVATION BE PERFORMED IN ORDER TO CHECK FOR GENERAL PLAN CONFORMANCE AND MITIGATE THE RISK OF PROBLEMS DURING THE COURSE OF CONSTRUCTION. IN THE EVENT THAT OUR FIRM IS NOT RETAINED TO PROVIDE STRUCTURAL CONSTRUCTION OBSERVATION SERVICES, IT IS UNDERSTOOD AND AGREED THAT THE WORK PERFORMED BY HOGAN LAND SERVICES IS LIMITED TO THE PREPARATION OF BASIC DESIGN CONCEPTS AND THAT HOGAN LAND SERVICES HAS NO CONTROL WHATSOEVER WITH REGARD TO PROPER AND COMPLETE CONSTRUCTION OF THE PROJECT IN CONFORMANCE WITH THE APPROVED DRAWINGS. THE OWNER AND CONTRACTOR, THEIR HEIRS AND ASSIGNS, SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND HOGAN LAND SERVICES FROM ANY AND ALL CLAIMS OF ANY PERSON OR ENTITY ARISING OUT OF THE WORK PERFORMED WITHOUT CONSTRUCTION OBSERVATION UNLESS ANY SUCH CLAIM WAS CAUSED BY THE SOLE NEGLIGENCE OF HOGAN LAND SERVICES. PLEASE CONTACT OUR OFFICE IN WRITING IF CONSTRUCTION OBSERVATION IS DESIRED.
- 8. HOGAN LAND SERVICES HAS EXERCISED A REASONABLE AND ACCEPTABLE STANDARD OF CARE IN THE PREPARATION OF THESE PLANS, HOWEVER, THE DESIGN PROCESS INCLUDES ACTIVITIES OCCURRING AFTER PLAN SIGNATURE. THESE ACTIVITIES INCLUDE CALCULATIONS, PLAN CHECK AND VERIFICATIONS DURING CONSTRUCTION. SHOULD PERSONS OTHER THAN HOGAN LAND SERVICES PERFORM THE CONSTRUCTION STAKING OPERATION, THEY SHALL INDEMNIFY HOGAN LAND SERVICES FROM ANY DAMAGES RESULTING FROM FAILURE TO PERFORM THESE TASKS OR ANY EXPENSES OR DAMAGE RESULTING FROM OMISSION OR ERROR CONTAINED IN THE PLANS WHICH WOULD REASONABLY HAVE BEEN DISCOVERED AND CORRECTED BY HOGAN LAND SERVICES.
- 9. PRIOR TO ANY CORRECTIVE ACTION BY THE CONTRACTOR WHICH IS NECESSARY DUE TO ANY ALLEGED STAKING ERROR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR RESTAKING AND VERIFICATION OF PREVIOUS STAKING. SHOULD ANY CORRECTIVE WORK BE DONE PRIOR TO NOTIFICATION. OR IF THE ORIGINAL STAKING IS DONE BY OTHERS. HOGAN LAND SERVICES ASSUMES NO LIABILITIES FOR THE COSTS INCURRED FOR THIS WORK. WHERE IT HAS BEEN DETERMINED THAT ANY CORRECTIVE ACTION WILL REQUIRE FINANCIAL PARTICIPATION BY THE ENGINEER, THAT AMOUNT SHALL BE AGREED TO BY THE ENGINEER IN WRITING PRIOR TO TAKING CORRECTIVE ACTION. FAILURE TO OBTAIN WRITTEN ACCEPTANCE BY THE ENGINEER WILL NEGATE ALL REQUIREMENTS OF HIS FINANCIAL ASSISTANCE.

# **GRADING NOTES:**

- 1. PERFORM GRADING IN PERFORMANCE WITH THE LATEST EDITION OF APPENDIX J OF THE CALIFORNIA BUILDING CODE. APPLICABLE NAPA COUNTY REGULATIONS.
- 2. EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE AND LOCATED THROUGHOUT THIS SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IF EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE ARE IN THE COUNTY RIGHT-OF-WAY AND NEED MAINTENANCE, CONTACT THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS FOR FURTHER ASSISTANCE. IN ANY EVENT, THE OWNER AND/OR CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
- 3. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER UPON DISCOVERING DISCREPANCIES, ERRORS OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING, THE OWNER SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS OR OMISSIONS. THE REVISED PLANS SHALL BE SUBJECT TO REVIEW BY THE CHIEF BUILDING OFFICIAL
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UNDERGROUND SERVICE ALERT (U.S.A.). TOLL FREE AT 1-800-642-2444. AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL UNCOVER RELEVANT UTILITIES TO VERIFY THEIR LOCATION AND ELEVATION. IF UNEXPECTED OR CONFLICTING UTILITIES ARE ENCOUNTERED DURING EXCAVATION, NOTIFY U.S.A., THE UTILITIES OWNER AND/OR THE PROJECT ENGINEER IMMEDIATELY. UTILITIES INCLUDE BUT ARE NOT LIMITED TO WATER, SEWER, ELECTRICAL, GAS, TELEPHONE AND CABLE/TV.
- 5. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN A 100 FOOT RADIUS OF THE FIND. THE NORTHWEST INFORMATION CENTER SHALL BE NOTIFIED AT (707)664-0880. A QUALIFIED ARCHAEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE COUNTY PER THE ARCHAEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED. THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER.
- 6. SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS. OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IN THE AFFECTED AREA IMMEDIATELY AND CONTACT 911 OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.
- 7. THE GRADING PERMIT AND AN APPROVED COPY OF THE GRADING PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- 8. DRAINAGE FACILITIES AND GRADING SHALL BE INSPECTED BEFORE RECEIVING FINAL APPROVAL. THE CONTRACTOR SHALL CONSULT THE PROJECT JOB CARD FOR COORDINATION OF INSPECTION REQUESTS. 9. EQUIPMENT SHALL NOT CROSS OR DISTURB CHANNELS OF ACTIVELY FLOWING STREAMS WITHOUT A SEPARATE APPROVED PERMIT AND BEST MANAGEMENT PRACTICES (NAPA COUNTY)
- 10. EXCESS SOIL SHALL BE REMOVED FROM THE SITE UNLESS DEPICTED TO REMAIN ON SITE PER THE APPROVED PLAN. THE SITE RECEIVING SOIL MAY REQUIRE A GRADING PERMIT UNLESS EXEMPTED BY NAPA COUNTY.
- 11. CONTOURS, ELEVATIONS, AND SHAPES OF FINISHED SURFACES SHALL BE BLENDED WITH ADJACENT NATURAL TERRAIN TO ACHIEVE A CONSISTENT GRADE AND NATURAL APPEARANCE. THE TOP OF CUT SLOPES SHALL BE ROUNDED OFF TO BLEND WITH THE NATURAL TERRAIN. BORDERS OF CUT SLOPES AND FILLS SHALL BE ROUNDED OFF TO A MINIMUM RADIUS OF 5 FEET TO BLEND WITH THE NATURAL
- 12. FILL MATERIAL SHALL NOT INCLUDE ORGANIC, FROZEN, OR OTHER HAZARDOUS MATERIALS. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL GREATER THAN 6 INCHES IN ANY DIMENSION SHALL BE INCLUDED IN FILLS EXCEPT WHERE APPROVED BY THE SOILS ENGINEER. FILLS SHALL BE CONSTRUCTED IN LIFTS NOT EXCEEDING 8 INCHES IN DEPTH. COMPLETED FILLS SHALL BE STABLE, WELL-INTEGRATED, AND BONDED TO ADJACENT MATERIALS AND THE MATERIALS ON WHICH THEY REST. FILLS SHALL BE COMPETENT TO SUPPORT ANTICIPATED LOADS AND BE STABLE AT THE DESIGN SLOPES SHOWN ON THE APPROVED PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE SOILS ENGINEER.
- 13. GROUND SURFACES SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIALS, AND SCARIFYING GROUND APPROXIMATELY 4" TO 6" TO PROVIDE A BOND WITH THE FILL MATERIAL.
- 14. FILL SHALL NOT BE PLACED ON NATURAL SLOPES STEEPER THAN 2H:1V (50%) UNLESS SPECIFICALLY ALLOWED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER AND APPROVED BY NAPA COUNTY.
- 15. FILLS INTENDED TO SUPPORT STRUCTURES OR SURCHARGES SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D 1557, MODIFIED PROCTOR. A HIGHER COMPACTION PERCENTAGE MAY BE REQUIRED BY THE SOILS ENGINEER.
- 16. THE DRIVEWAY SOIL SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF EIGHT INCHES, MOISTURE CONDITIONED TO JUST ABOVE THE OPTIMUM AND COMPACTED TO A AT LEAST 95% OF RELATIVE COMPACTION., ROLLED TO A SMOOTH NON-YIELDING SURFACE.
- 17. THE CLASS II AGGREGATE BASE SHALL HAVE A RELATIVE COMPACTION OF AT LEAST 95%, SHALL BE FREE OF LOOSE OR EXTRANEOUS MATERIAL, AND BE A TIGHT NON-YIELDING SURFACE WITH NO VISIBLE DISPLACEMENT. PRELIMINARY FOR USE PERMI

### STORM MITIGATION NOTES:

QUALITY ASSOCIATION.

- 1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX J OF THE CALIFORNIA BUILDING CODE, APPLICABLE NAPA COUNTY REGULATIONS AND SECTION 20 OF THE CALTRANS STANDARD SPECIFICATIONS.
- 2. THE APPROVED PLANS SHALL CONFORM WITH THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES CONTAINED IN THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS OR AN
- EQUIVALENT BEST MANAGEMENT PRACTICE. \* <u>EROSION\_AND\_SEDIMENT\_CONTROL\_FIELD\_MANUAL</u> BY THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD.

**(1)** 

O

Z

Ш

Z

Ш

- \* <u>MANUAL OF STANDARDS FOR EROSION & SEDIMENT CONTROL MEASURES</u> BY THE ASSOCIATION OF \* <u>CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK</u> BY THE CALIFORNIA STORM WATER
- 3. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES. MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.
- 4. THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CA000002 WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY DISTURBING LAND EQUAL TO OR GREATER THAN ONE ACRE. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.
- 5. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
- 6. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (SEPTEMBER 1 — APRIL 1).
- 7. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. STORM EVENTS PRODUCE AT LEAST 1 INCH OF PRECIPITATION IN A 24 HOUR PERIOD. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
- 8. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS. CHANGES SHALL BE NOTED ON THE PLAN WHEN MADE.
- 9. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT, TRASH, NUTRIENTS, PATHOGENS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASH WATER AND CHLORINATED WATER.
- 10. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY RIGHT-OF-WAY SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY.
- 11. EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING 70% VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS.
- 12. WHENEVER IT IS NOT POSSIBLE TO UTILIZE EROSION PREVENTION MEASURES, EXPOSED SLOPES SHALL EMPLOY SEDIMENT CONTROL DEVICES, SUCH AS FIBER ROLLS AND SILT FENCES. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM THE TOE OF SLOPE.
- 13. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS. FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SLOPE. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE.
- APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZERS SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

<u>MATERIALS</u>	APPLICATION RATE
SEED MIX Bromus mollis (BLANDO BROME) Trifolium hirtium (HYKON ROSE CLOVER)	40 20
FERTILIZER 16-20-0 & SULPHUR MULCH	500
MOLCH STRAW HYDRAULIC STABILIZING*	4000
M_RINDER OR SENTINEI	75_100

\*NON-ASPHALTIC, DERIVED FROM PLANTS

EQUIVALENT MATERIAL

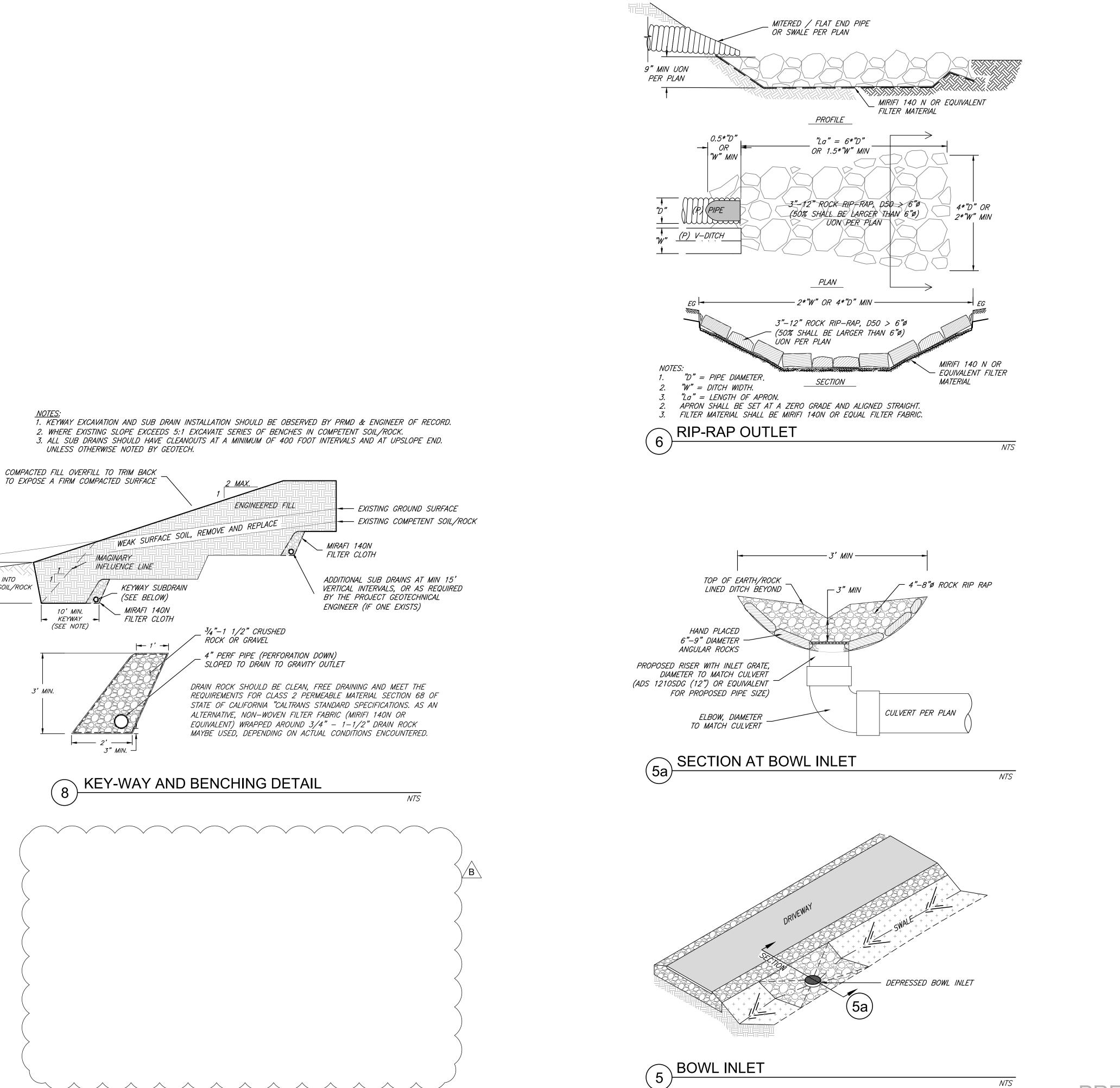
- 14. THE OWNER SHALL PROTECT STORM DRAIN INLETS FROM POTENTIAL POLLUTANT UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.
- 15. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY STORM WATER FLOW LEADING TO SOIL EROSION.

PER MANUFACTURER

- 16. SOIL AND MATERIAL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.
- 17. SOLID WASTE SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY, OR AS NECESSARY, AND REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE ARRANGED
- 18. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS.
- 19. PROPER APPLICATION, CLEANING AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.
- 20. WHEN UTILIZED, TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED TO PREVENT THE DISCHARGE OF POLLUTANTS.
- 21. ALL PROPOSED BMPS (BEST MANAGEMENT PRACTICE) USED TO STABILIZED DENUDED AREAS SHALL BE MAINTAINED IN ACCORDANCE WITH THESE NOTES. THE PROJECT EROSION CONTROL PLAN DETAILS. THE PROJECT SWPPP, TO PREVENT SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE.

**REVISION BLOCK** 

PLAN CHECK #1 01/27/2 PLAN CHECK #2 04/19/2 09/28/21 PLAN CHECK #3

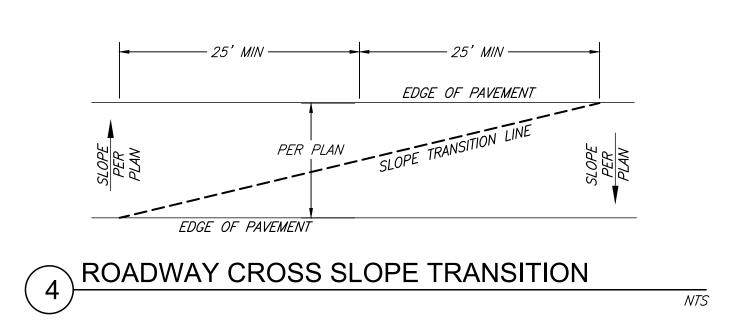


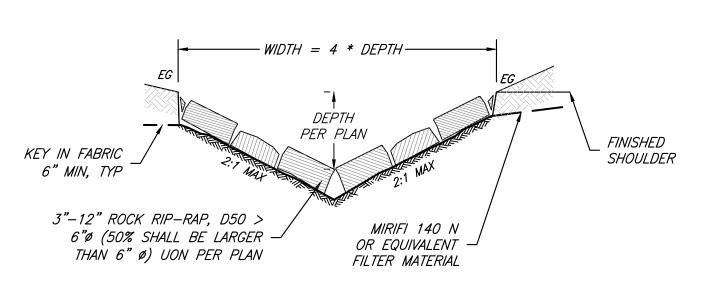
3' MIN. INTO

COMPETENT SOIL/ROCK

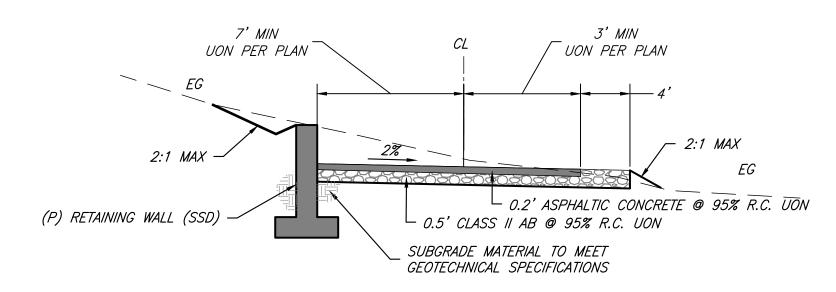
10' MIN. KEYWAY

(SEE NOTE)

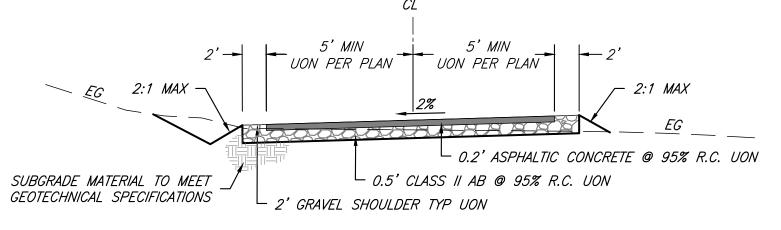












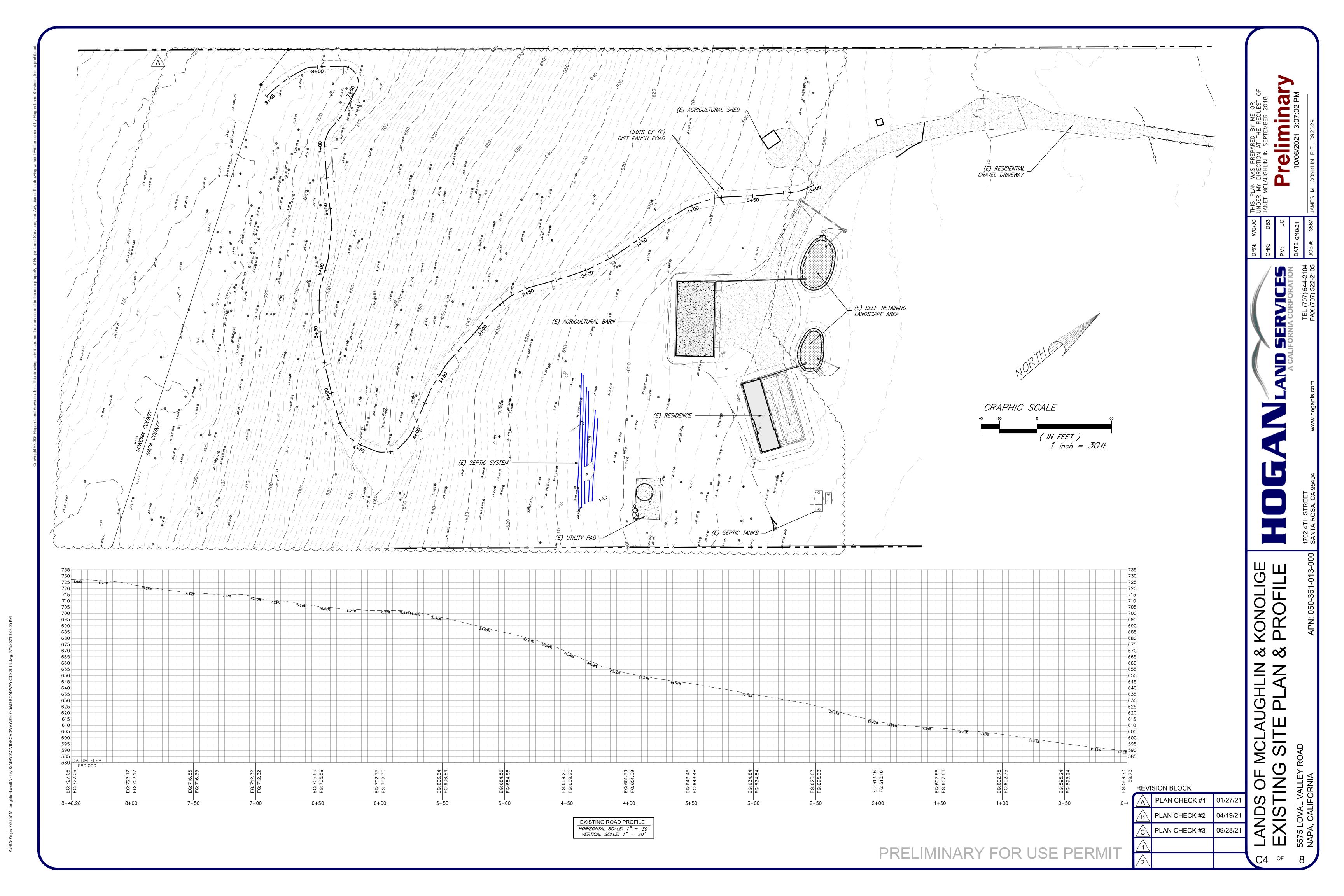


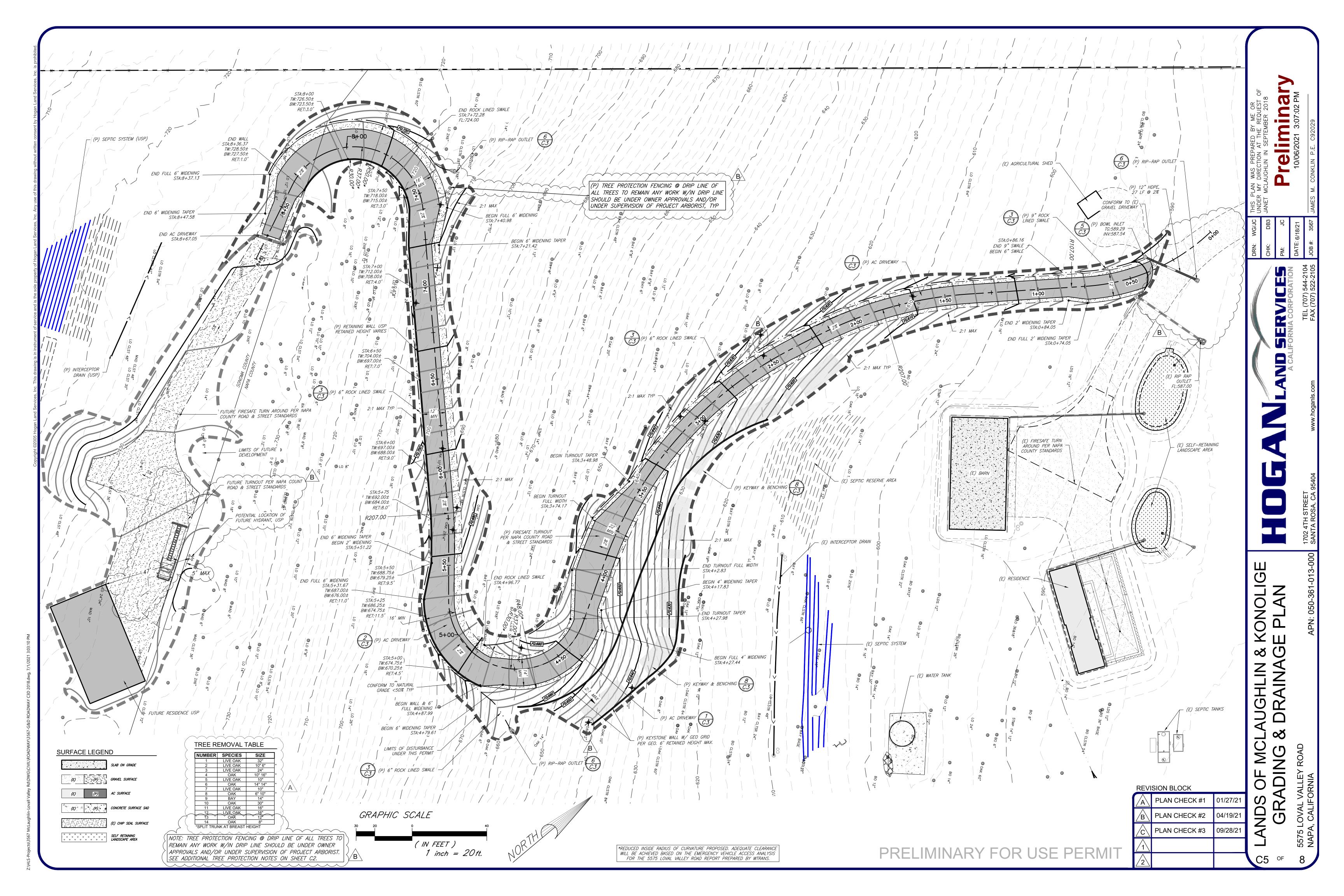
REVISION BLOCK				
	A	PLAN CHECK #1	01/27/21	
	B	PLAN CHECK #2	04/19/21	
	⟨C \	PLAN CHECK #3	09/28/21	
ΙΤ	1			
	2			

PRELIMINARY FOR USE PERMI

N & KONOLIGE AGE DETAILS - MCLAUGHLIN ANDS OF GRADIN(

reliminal 10/06/2021 3:07:02 PM



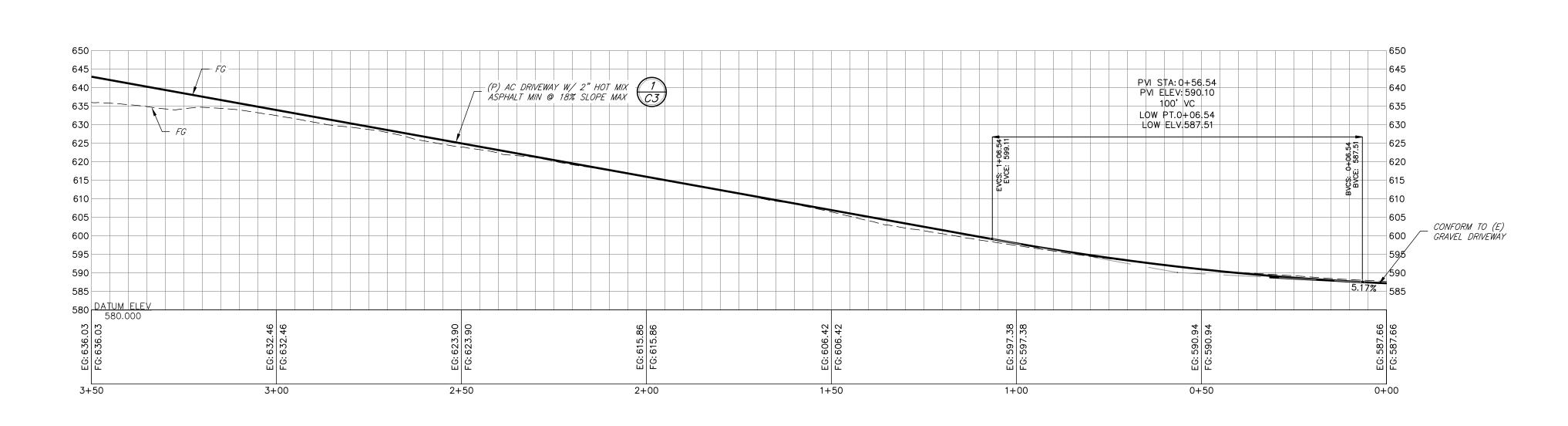


END AC ROAD, CONFORM TO
(E) GRADE 735 730 725 (P) AC DRIVEWAY W/ 2" HOT MIX 2 ASPHALT MIN @ 18% SLOPE MAX C3 720 715 PVI STA: 8+17.39 PVI ELEV: 727.16 100' VC HP. 8+67.39 HP. 729.66 705 700 695 690 690 685 680 675 675 670 670 665 660 655 650 645 640 635 630 DATUM ELEV 630.000 8+50 6+00 9+00 8+00 7+50 7+00 6+50 5+50 5+00 4+50 4+00

DRIVEWAY CENTERLINE PROFILE

HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1" = 20'



DRIVEWAY CENTERLINE PROFILE

HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1" = 20'

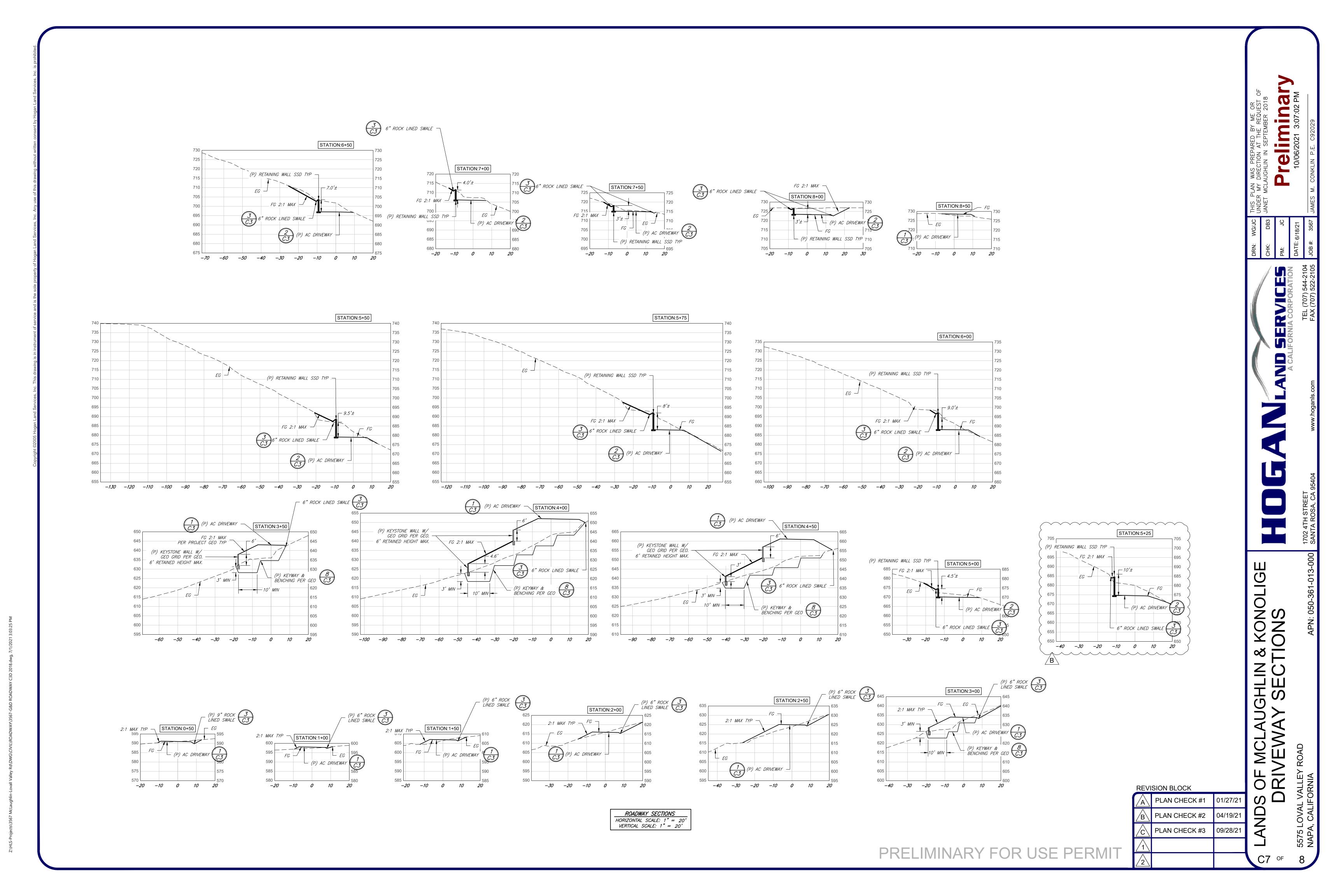
PLAN CHECK #1 B PLAN CHECK #2 C PLAN CHECK #3 09/28/21 PRELIMINARY FOR USE PERMIT

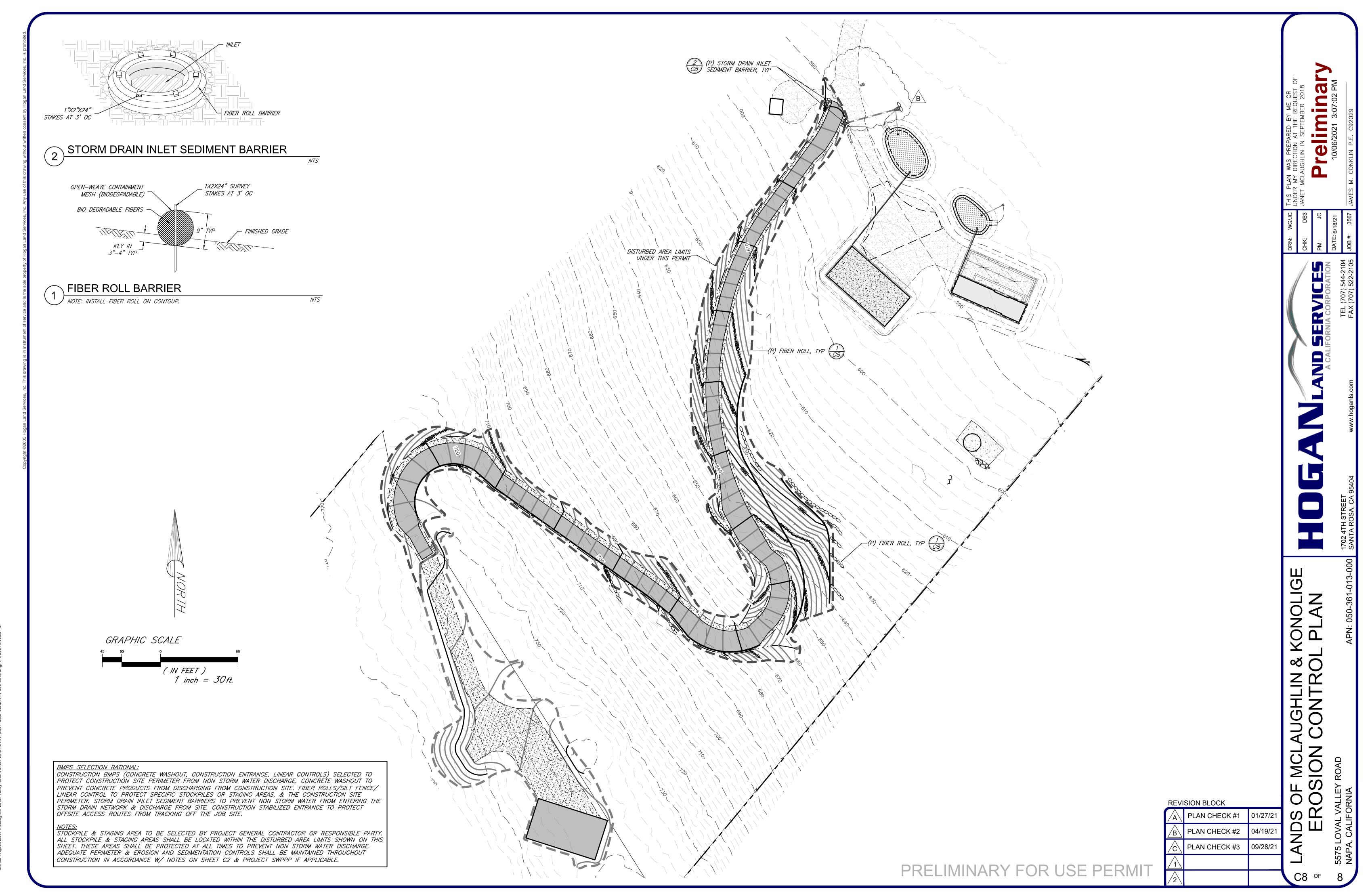
**REVISION BLOCK** 

MCLAUGHLIN & KONOLIGE Y CENTERLINE PROFILE

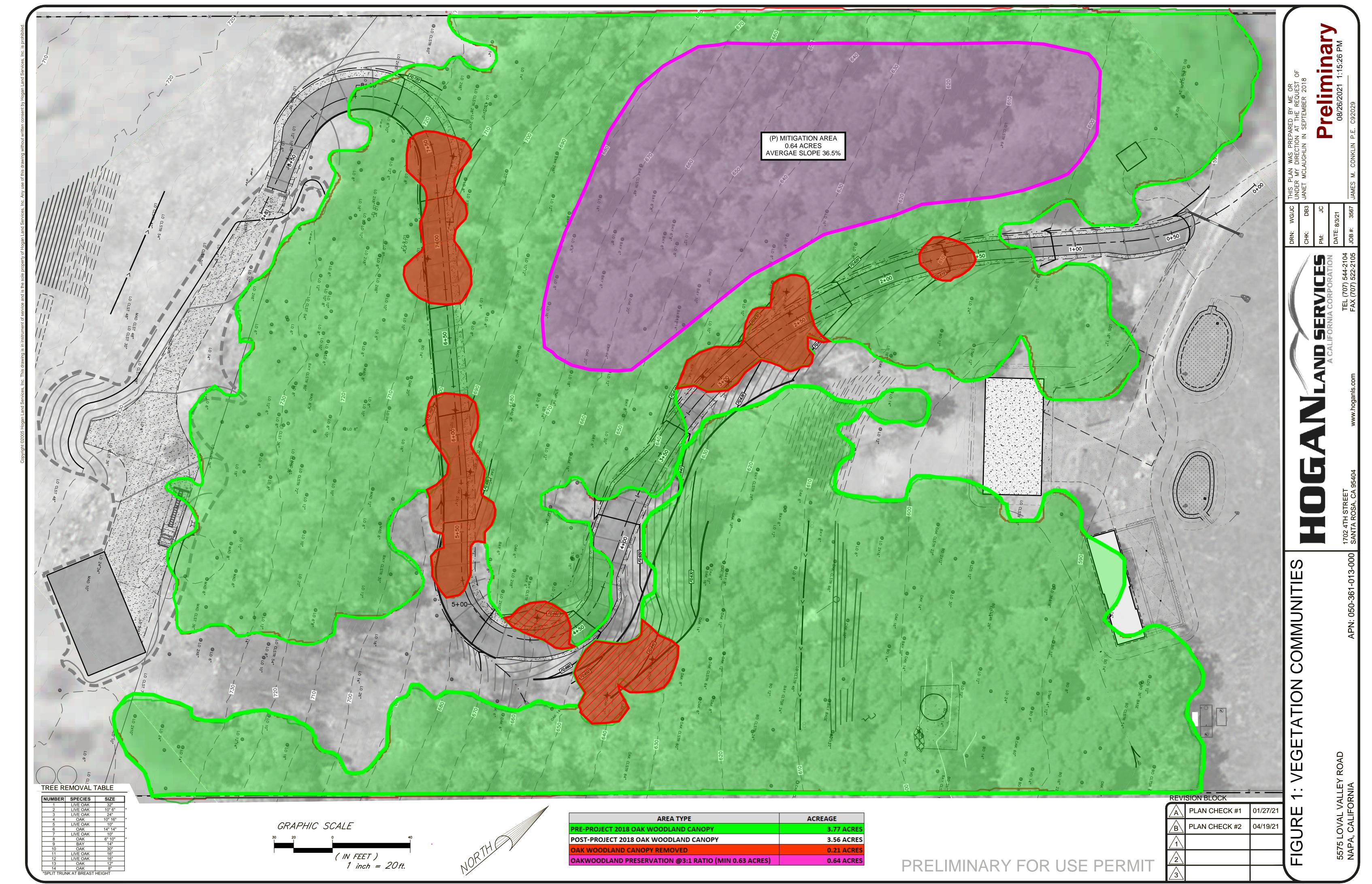
10/06/2

LANDS OF DRIVEWAY





roierts/3567 Mrl annahlin-I ovall Valley RANDWGVCIVII) ROADWAX/3567-G&D ROADWAY C3D 2018 dwin 7/1/2021 3:03:30 D



ojects\3567 McLaughlin-Lovall Valley Rd\DWG\CIVIL\ROADWAY\3567-G&D ROADWAY C3D 2018.dwg, TREE SHEET FOR BIOLOGIST, 8/3/2021 9:30:52 AM, AutoCAD PDF (Smallest