

PROJECT INFORMATION

PROJECT ADDRESS: 1838 HAPPY VALLEY ROAD, SANTA ROSA, CA

OWNER/DEVELOPER: SEAN HARRIS
1838 HAPPY VALLEY ROAD
SANTA ROSA, CA 95409
707 529-4877

CIVIL ENGINEER: ANDREW WILLIS, P.E.
BC ENGINEERING GROUP, INC.
418 B STREET, THIRD FLOOR
SANTA ROSA, CA 95401
(707) 542-4321

SURVEYOR: CINQUINI & PASSARINO, INC.
LAND SURVEYING
1360 N. DUTTON AVE #150
SANTA ROSA, CA 95401

AREA: 0.25 ACRES

EARTHWORK SUMMARY

CUT = 30 CY
FILL = 10 CY
NET = 20 CY (FILL)

DISTURBED AREA = 0.01 ACRES WDDID # NA

EXACT SHRINKAGE, CONSOLIDATION AND SUBSIDENCE FACTORS AND LOSSES DUE TO CLEARING OPERATIONS ARE NOT INCLUDED. ESTIMATED EARTHWORK QUANTITIES AREA BASED ON THE DIFFERENCE BETWEEN EXISTING GROUND AND PROPOSED FINISH GROUND AND COULD VARY ACCORDING TO THESE FACTORS. CONTRACTOR SHALL CONFIRM EXISTING TOPOGRAPHY, SHALL REVIEW THE SITE AND THE GEOTECHNICAL REPORT(S), AND SHALL PERFORM AN INDEPENDENT QUANTITY TAKEOFF AND BID ACCORDINGLY.

SHEET INDEX

C1.0 CIVIL PLOT PLAN
C2.0 DETAILS & SITE SECTIONS

PURPOSE STATEMENT

THE PURPOSE OF THIS PROJECT IS TO PROVIDE GRADING AND DRAINAGE IMPROVEMENTS FOR A NEW POOL AND POOL DECK FOR A RESIDENCE THAT BURNED DOWN IN THE WILDFIRES.

SURVEY NOTE

BENCHMARK: MANHOLE RIM ALONG HAPPY VALLEY ROAD AS SHOWN HEREON. ELEVATION = 506.2' (ASSUMED)

BASIS OF BEARINGS: NORTH 64°28'13" WEST ALONG THE NORTHEAST BOUNDARY OF LOT 42 AS SHOWN ON MAP OF ALTA VISTA HEIGHTS FILED IN BOOK 424 OF MAPS AT PAGES 34 THROUGH 41, SONOMA COUNTY RECORDS

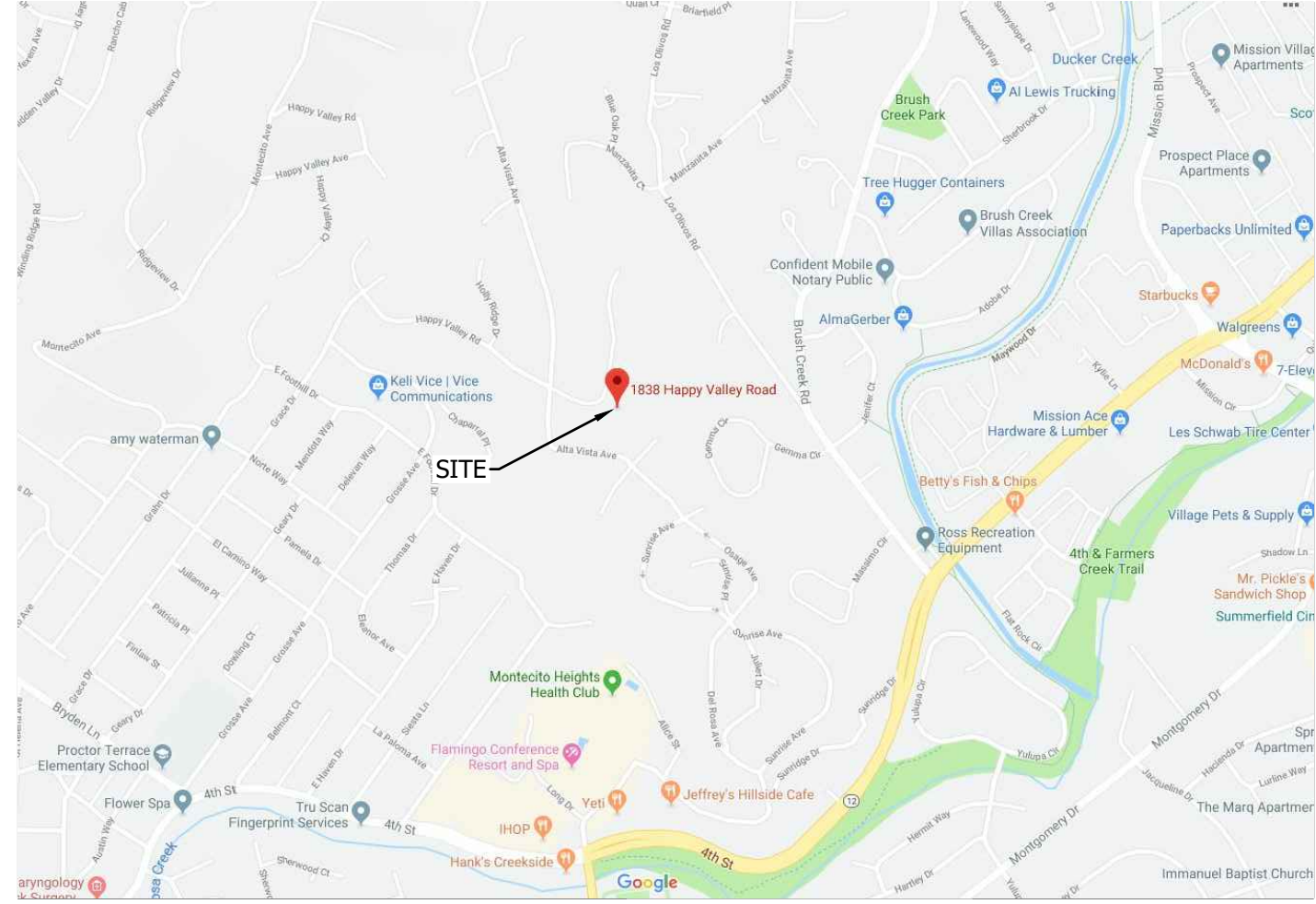
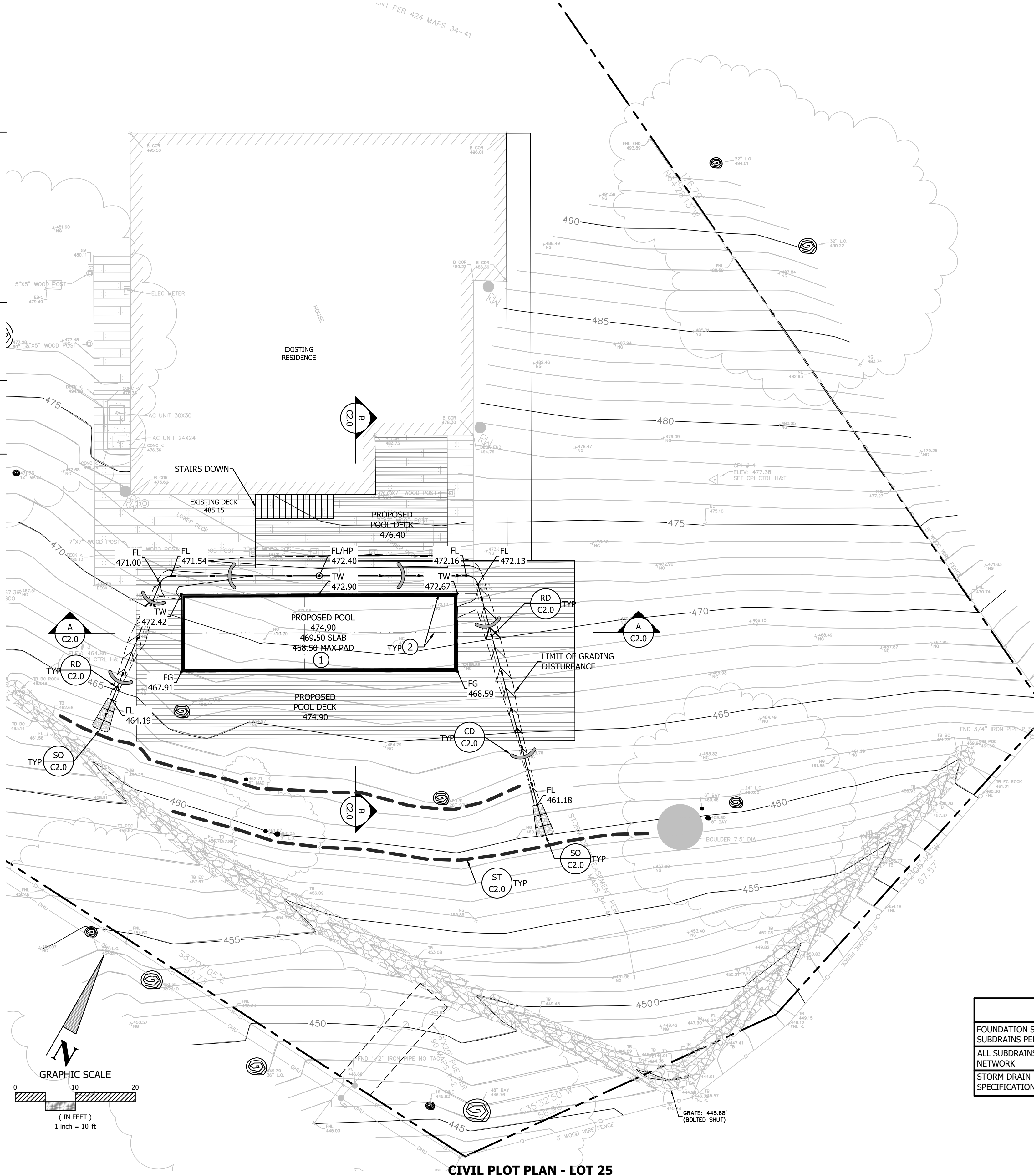
LEGEND

AD	AREA DRAIN
APN	ASSESSOR'S PARCEL NUMBER
BSL	BUILDING SETBACK LINE
BW	BOTTOM OF WALL AT GRADE
DI	DROP INLET
DS	DOWNSPOUT
EG	EXISTING GROUND
EP	EDGE OF PAVEMENT
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LING
FS	FINISHED SURFACE
GB	GRADE BREAK
GR	GRATE
GSL	GARAGE SETBACK LINE
HP	HIGH POINT
IG	INVERT GRADE
LF	LINEAR FEET
ME	MATCH EXISTING
PUE	PUBLIC UTILITY EASEMENT
TW	TOP OF WALL
TYP	TYPICAL
SAD	SEE ARCHITECTURAL DRAWINGS
SD	STORM DRAIN
SO	SIDE OPENING
SWE	SIDEWALK EASEMENT

---	ADJOINING PROPERTY LINE
---	COMMUNICATIONS
---	FLOW LINE EXISTING
---	FLOW LINE PROPOSED
---	GRADE BREAK
---	PG&E UTILITY SERVICE
---	PROPERTY LINE
---	RAIN LEADERS
---	SANITARY SEWER
---	STRAW WATTLE
---	SUBDRAIN PIPE
---	WATER PIPE

---	HARDSCAPING (SAD)
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CIVIL PLOT PLAN DRAWINGS FOR
LANDS OF HARRIS
1838 HAPPY VALLEY ROAD, SANTA ROSA CA
APN: 181-100-042



PLOT PLAN NOTES

- CONSTRUCTION TO COMPLY WITH ANY NOTES OR RESTRICTIONS SHOWN ON THE FINAL MAP, SUBDIVISION IMPROVEMENT PLANS, ZONING ORDINANCES, SOILS REPORT, OR OTHER APPLICABLE ITEMS.
- SEE ARCHITECT'S FLOOR PLAN FOR ALL BUILDING DIMENSIONS.
- LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. VERIFY ALL UTILITY CONNECTION POINTS WITH PLUMBING PLANS. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES WITH APPROPRIATE AGENCIES PRIOR TO STARTING WORK. THE ENGINEER OF RECORD SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- ALL WORK WITHIN THE PUBLIC RIGHT OF WAY INCLUDING PUBLIC EASEMENTS, REQUIRES AN ENCROACHMENT PERMIT FROM THE ENGINEERING DEPARTMENT.
- NO STRUCTURE MAY ENCROACH ON ANY PUBLIC WATER OR SEWER EASEMENT ABOVE OR BELOW THE SURFACE OF THE GROUND. THIS INCLUDES FOOTINGS OF FOUNDATIONS OR EAVES FROM THE ROOF OF ANY ADJACENT STRUCTURES.
- SLOPE GRADE 5% PER FOOT FOR 10'-0" MINIMUM AWAY FROM BUILDING.
- EXCESS EARTH TO BE REMOVED TO A SITE APPROVED BY THE CITY OF SANTA ROSA FIRE DEPARTMENT AND BUILDING DIVISION.
- CONTRACTOR SHALL PROVIDE EROSION PREVENTION AND SEDIMENT CONTROL DURING CONSTRUCTION PER CITY APPROVED BEST MANAGEMENT PRACTICES. AT A MINIMUM, ALL DISTURBED AREAS SHALL BE HYDROSEEDING WITH LEGALISTER'S QUICK COVER CROP SEED MIX AT A RATE OF 80 LBS/AC PRIOR TO OCTOBER 15. DISTURBED AREAS TO BE LANDSCAPED MAY BE STABILIZED BY APPLYING STRAW MULCH AT A RATE OF 2 TONS/AC.
- PUBLIC UTILITY EASEMENTS MAY CONTAIN ELECTRICAL TRANSFORMERS, OTHER UTILITY VAULTS, MAIL BOXES. LIGHT POLES, STREET SIGNS, FIRE HYDRANTS, AND/OR OTHER ITEMS REQUIRED BY THE GOVERNING AGENCIES. THE BUYER(S) SHOULD INSPECT THE SPECIFIC LOT THE BUYER(S) WISH TO PURCHASE TO DETERMINE WHAT IS CONTAINED WITHIN THE PUBLIC EASEMENT.
- ALL ONSITE SWALES SHALL BE PERMANENTLY MAINTAINED BY THE HOMEOWNER SUCH THAT THEY FUNCTION PROPERLY AND NO LOT TO LOT DRAINAGE OCCURS.
- IT IS TO BE UNDERSTOOD THAT THE DRAINAGE AREAS, SLOPES AND GRADES SHALL NOT BE ALTERED, CHANGED, BLOCKED, MODIFIED OR IN ANY WAY RECONSTRUCTED BY OWNER CONTRARY TO WHAT IS DEPICTED ON THIS PLOT PLAN, UNLESS DESIGNATED BY AN ENGINEER AND APPROVED BY THE CITY OF SANTA ROSA.
- A GRADING AND DRAINAGE VERIFICATION LETTER SHALL BE PROVIDED TO THE BUILDING DIVISION INSPECTOR BY THE LICENSED ENGINEER OF RECORD FOR THIS LOT. THIS LETTER SHALL VERIFY THAT GRADING AND DRAINAGE HAS BEEN COMPLETED PER APPROVED PLOT PLAN, WITH THE EXCEPTIONS NOTED IN "AS-BUILT" CONFIGURATION, AND IN AGREEMENT WITH THE CALIFORNIA BUILDING CODE.
- PROVIDE POSITIVE DRAINAGE FROM THE UNDER FLOOR AREA TO PREVENT THE PONDING OF WATER. FOUNDATION DRAIN LINES TO BE PROVIDED WHERE NECESSARY TO DRAIN WATER AWAY FROM FOUNDATION AND UNDER FLOOR AREAS.
- RAINWATER LEADERS SHALL BE CONNECTED, USING 4" RIGID PVC STORM DRAIN PIPING.

GENERAL NOTES

- EXISTING ROADWAYS, CULVERTS, GAS LINES, FENCE LINES, AND POWER POLE LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
- THE DESIGN PROFESSIONAL WHO PREPARED THIS DRAWING IS NOT RESPONSIBLE FOR THE MISUSE OF, OR UNAUTHORIZED CHANGES MADE TO THIS DRAWING. OBTAIN WRITTEN PERMISSION FROM THE DESIGN PROFESSIONAL WHO PREPARED THIS DRAWING AND THE CITY OF SANTA ROSA PRIOR TO INSTALLING IMPROVEMENTS IN A MANNER WHICH DEViate FROM THIS DRAWING.
- OBTAIN ALL CONSTRUCTION PERMITS REQUIRED BY THE CITY OF SANTA ROSA PRIOR TO COMMENCEMENT OF WORK. PERFORM WORK IN ACCORDANCE WITH THE CITY OF SANTA ROSA DESIGN AND CONSTRUCTION STANDARDS, AND LOCAL MUNICIPAL POLICIES UNLESS INDICATED OTHERWISE.
- THE PROFESSIONAL PREPARING THIS DRAWING AND THE OWNER ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THESE FACILITIES OR FOR THE INADVERTENT OMISSION OF INFORMATION. EXPOSE EXISTING UTILITIES PRIOR TO TRENCHING TO VERIFY THEIR RESPECTIVE ALIGNMENT AND ELEVATION. IF THE EXPOSED UTILITY IS DETERMINED TO BE IN A LOCATION WHICH IS NOT REFLECTED BY THIS DRAWING, NOTIFY THE ENGINEER IN WRITING SO THAT APPROPRIATE ADJUSTMENTS CAN BE MADE. THE PROPOSED UTILITIES MAY REQUIRE RE-ALIGNMENT TO ACCOMMODATE THE FIELD CONDITION.
- VERIFY STRUCTURAL SECTIONS WITH STRUCTURAL ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION. SLOPE GARAGE SLAB PER ARCHITECTURAL PLANS. VERIFY GARAGE SETBACKS WITH ARCHITECT AND/OR CITY, WHICH MAY BE MORE RESTRICTIVE THAN BUILDING SETBACK LINES.
- PROVIDE FOUNDATION DRAINS, BACK OF WALL DRAINS, UNDER SLAB DRAINS, AND ALL OTHER SUBSURFACE DRAINAGE ENTITIES PER GEOTECHNICAL ENGINEERS RECOMMENDATIONS. ALL SUBDRAINS SHALL DISCHARGE SEPARATELY FROM SURFACE STORM DRAIN PIPE NETWORKS. STORM DRAIN PIPE SHALL BE PVC OR HDPE. (MEETING CALTRANS SEC. 64 SPECIFICATIONS)

STORM DRAIN SCHEDULE

FOUNDATION SUBDRAINS, UNDERSLAB SUBDRAINS, AND BACK OF WALL SUBDRAINS PER GEOTECH'S RECOMMENDATION

ALL SUBDRAINS TO OUTLET SEPARATE FROM SURFACE STORM DRAIN NETWORK

STORM DRAIN PIPE SHALL BE PVC OR HDPE. (MEETING CALTRANS SEC. 64 SPECIFICATIONS).

KEYNOTES:

- VERIFY STRUCTURAL SECTION WITH STRUCTURAL ENGINEER AND SOILS ENGINEER PRIOR TO CONSTRUCTION.
- FOUNDATION, BACK OF WALL, AND UNDERSLAB SUBDRAINS PER GEOTECH'S RECOMMENDATIONS TO DISCHARGE SEPARATE FROM SURFACE STORM DRAIN FEATURES

REV.	DATE	BY	DESCRIPTION

BC ENGINEERING GROUP, INC.
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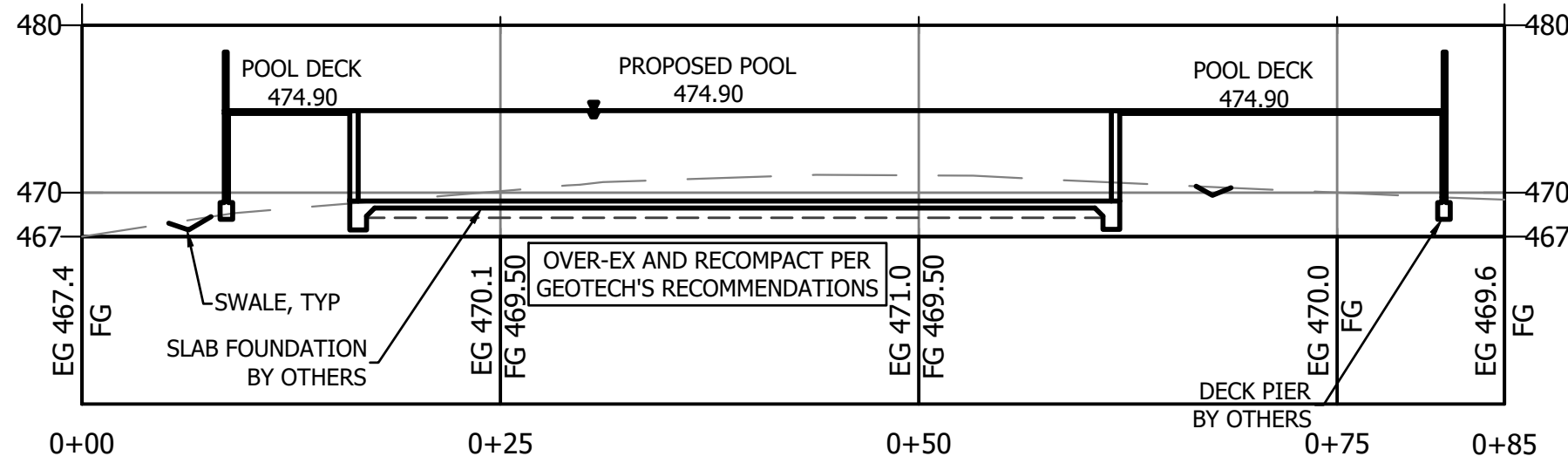
LANDS OF HARRIS
CIVIL PLOT PLAN
1838 HAPPY VALLEY RD
SANTA ROSA, CA 95409

REGISTRED PROFESSIONAL ENGINEER
ANDREW S. WILLIS
089640
STATE OF CALIFORNIA

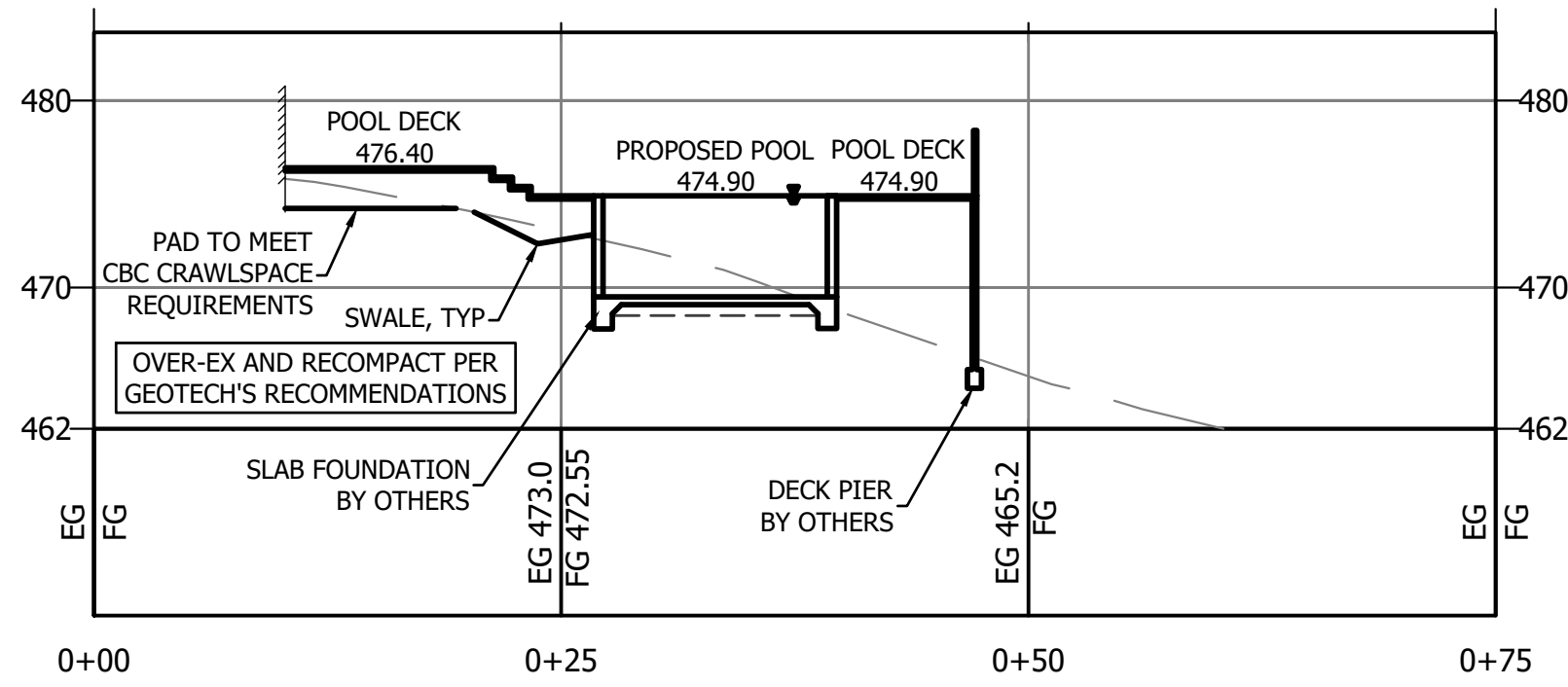
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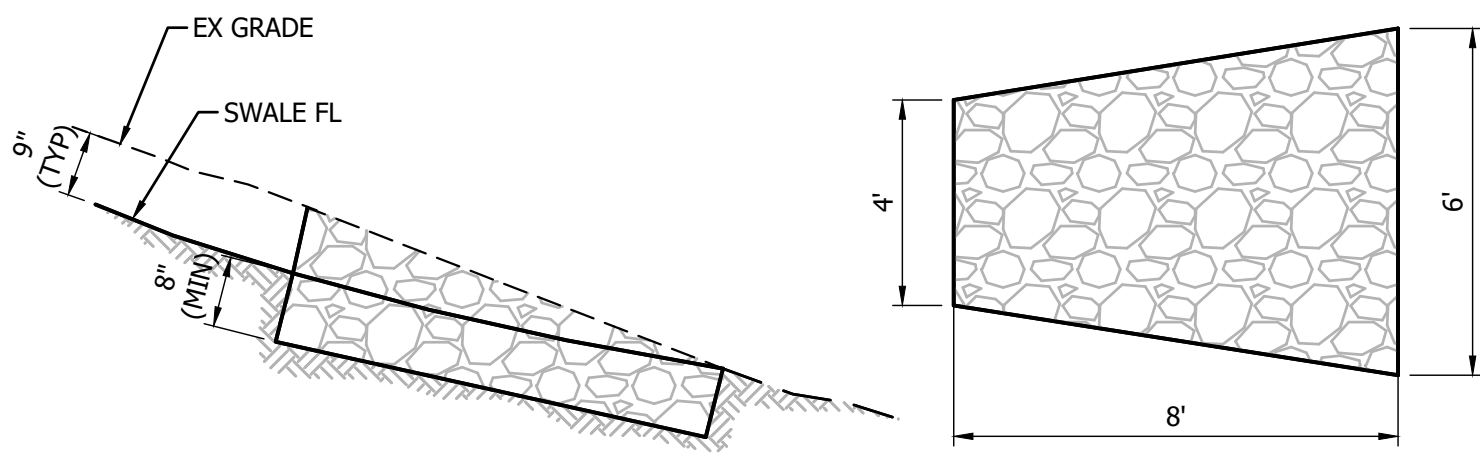
SECTION KEY MAP
SCALE: 1"=20'



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



SECTION B-B
SCALE: 1"=10' H/V

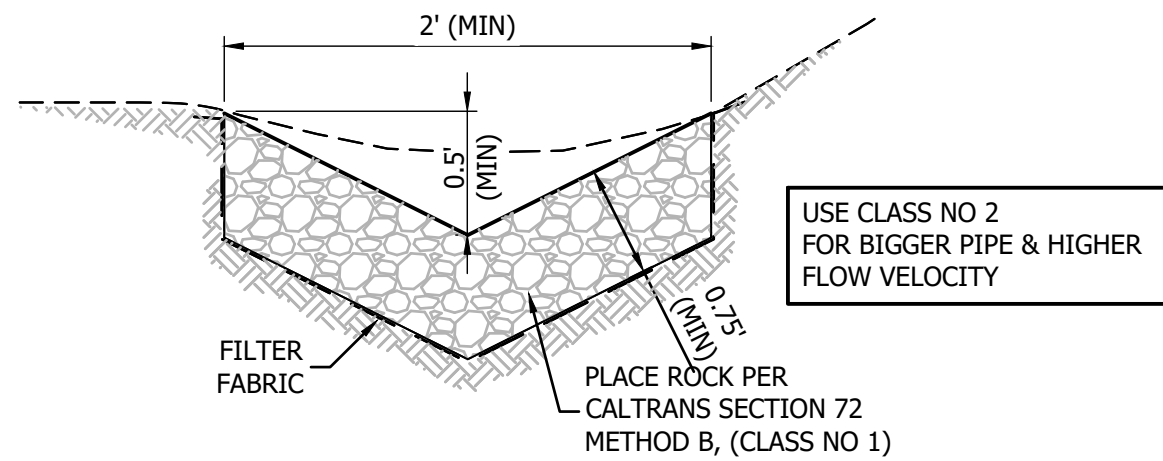


NOTE:

PLACE ROCK PER CALTRANS SECTION 72 METHOD B, (CLASS NO 1)

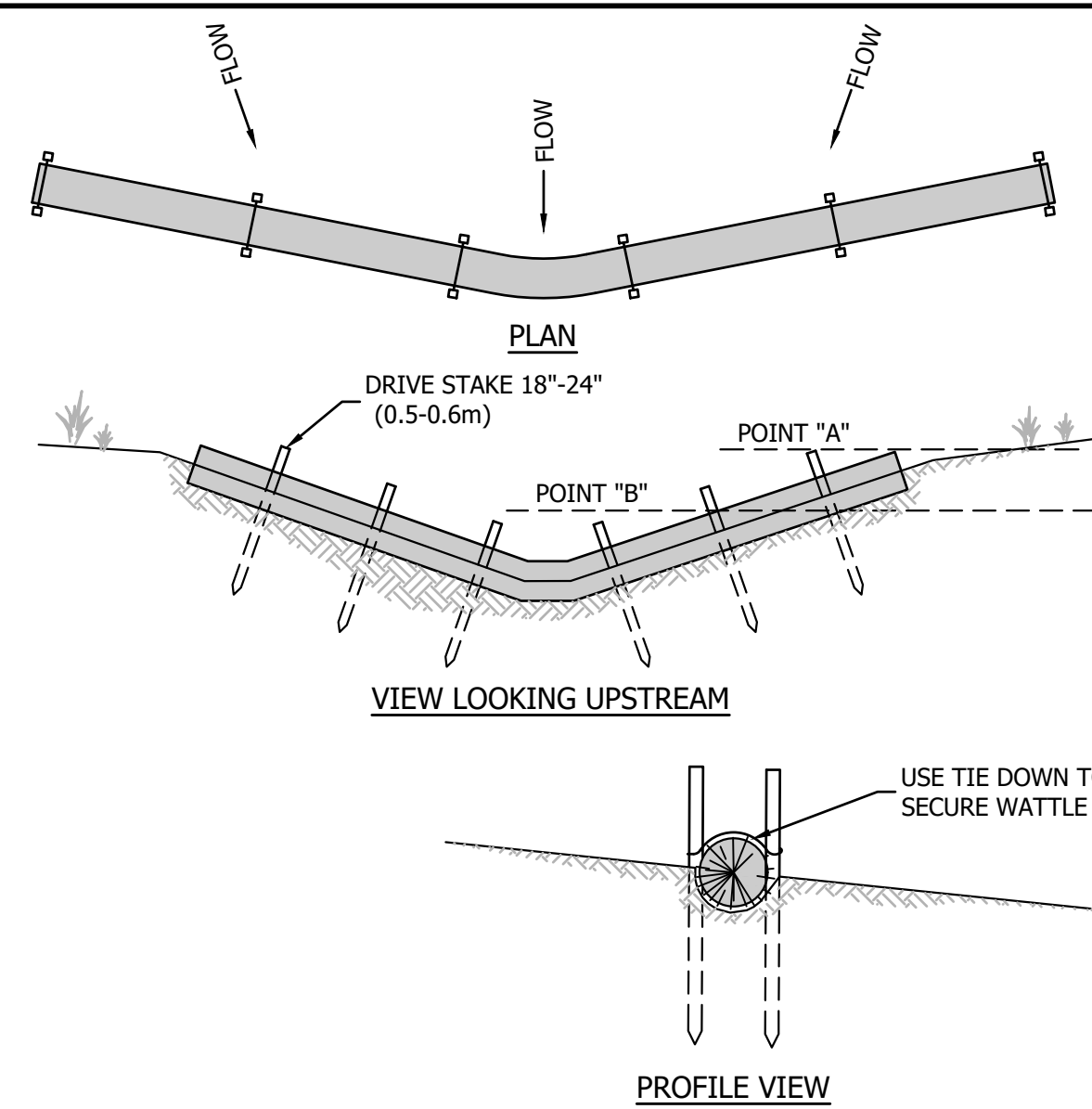
USE CLASS NO 2 FOR BIGGER PIPE & HIGHER FLOW VELOCITY

SO ROCK RIP-RAP SWALE OUTFALL PROTECTION DETAIL
NO SCALE



USE CLASS NO 2 FOR BIGGER PIPE & HIGHER FLOW VELOCITY

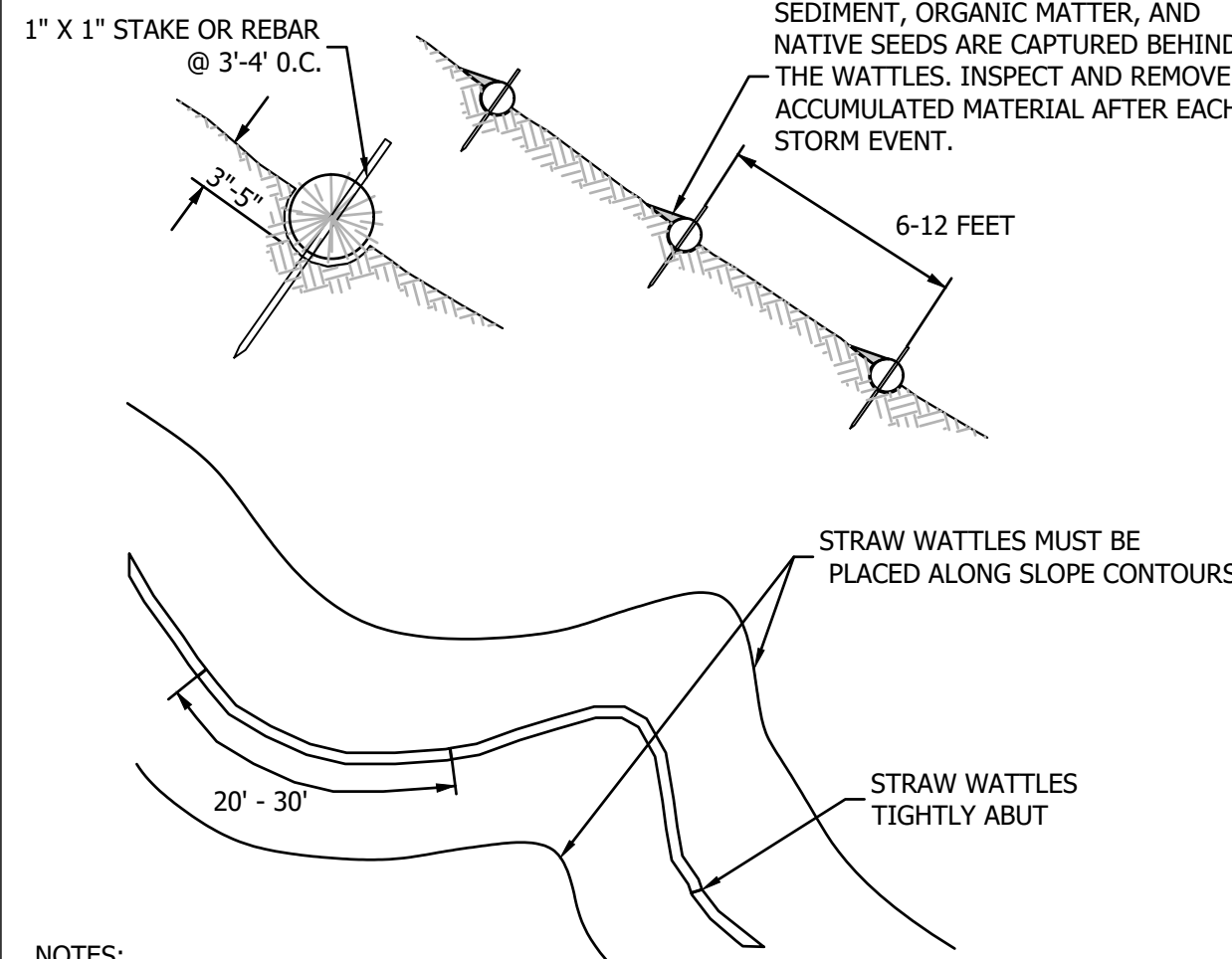
RD 0.5-FT ROCK-LINED DITCH DETAIL
NO SCALE



NOTES:

1. EMBED WATTLES 4" (100mm) INTO THE SOIL AND 'KEY' WATTLES INTO THE SWALE BANKS.
2. POINT "A" MUST BE HIGHER THAN POINT "B". (SPILLWAY HEIGHT)
3. PLACE WATTLES PERPENDICULAR TO THE FLOW WITH ENDS TIGHTLY ABUTTING.
4. INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

CD STRAW WATTLE CHECK DAM
NO SCALE



NOTES:

1. STRAW WATTLES ARE TUBES MADE FROM STRAW AND BOUND W/ BIO-DEGRADABLE WRAPPED NETTING. THEY ARE APPROXIMATELY 8" DIA AND 20 - 30 FT LONG.
2. STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET & RILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.
3. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH, 3" - 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

STRAW WATTLES
(CONSTRUCTION SPECIFICATIONS)

PREPARE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.

DIG SMALL TRENCHES ACROSS SLOPE ON CONTOUR, TO PLACE WATTLES IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE WATTLE. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE WATTLE 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE. IT IS CRITICAL THAT WATTLES ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.

START BUILDING TRENCHES AND INSTALL WATTLES FROM THE BOTTOM OF THE SLOPE AND WORK UP.

CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF THREE TO EIGHT FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.

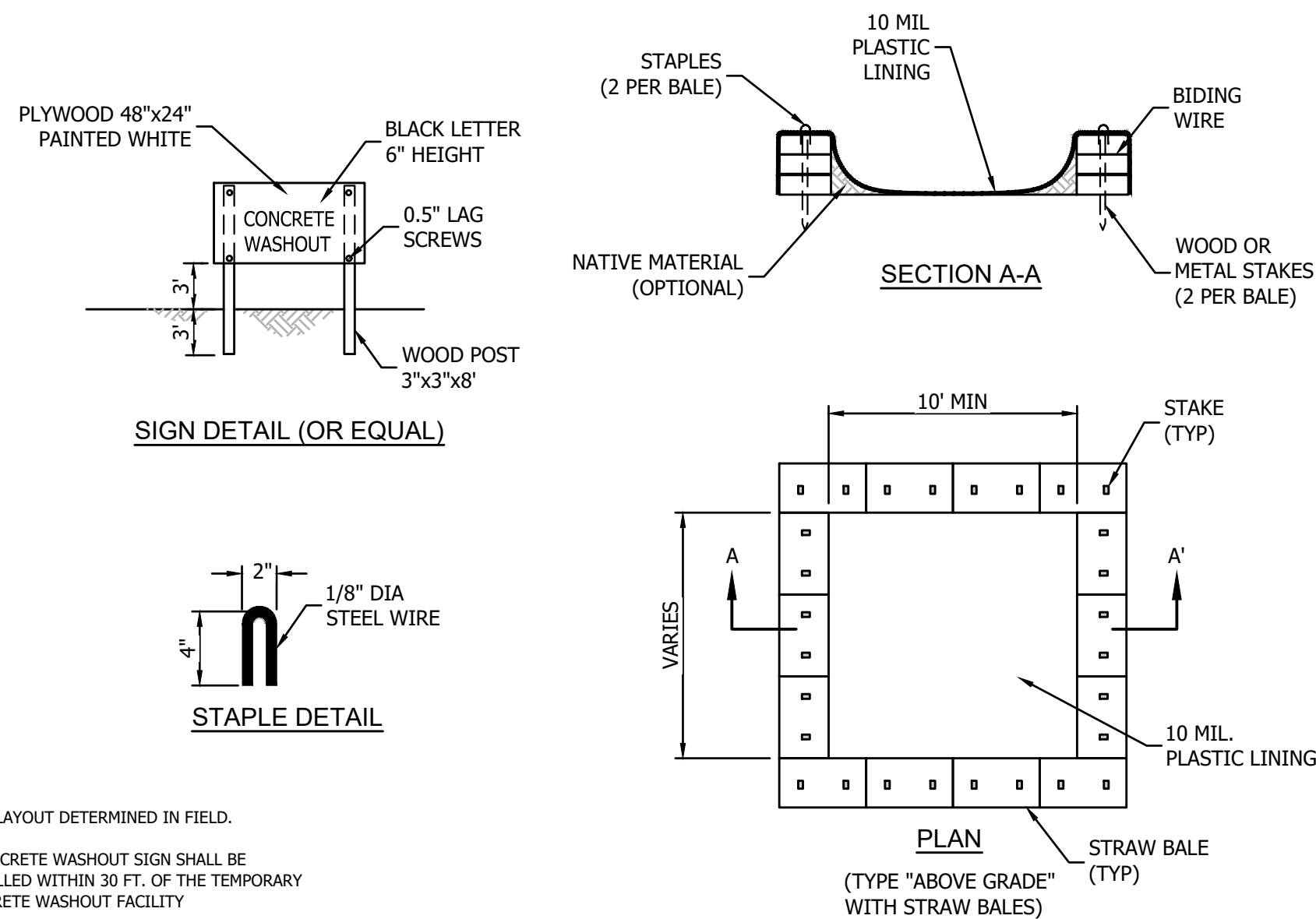
LAY THE WATTLE ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.

USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WOODEN STAKES.

DRIVE THE STAKE THROUGH THE PREPARED HOLE INTO THE SOIL. LEAVE ONLY ONE OR TWO INCHES OF STAKE EXPOSED ABOVE WATTLE.

INSTALL STAKES AT LEAST EVERY FOUR FEET APART THROUGH WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSION OR VERY STEEP SLOPES.

ST STRAW WATTLE
NO SCALE



NOTE:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY

CW CONCRETE WASHOUT (WM8)
NO SCALE