

REVISIONS	BY:

Peter Moeck, P.E.
Civil Engineer
 353 Pine Hill Road
 Mill Valley, CA 94941
 Tel. 415-845-9032 pmoect@yahoo.com

PROJECT:
NEW RESIDENCE AND ADU
22176 UMLAND CIR.
JENNER, CA 95450
 APN. 109-420-034

TITLE PAGE

DATE:
5-4-2024

SCALE:
AS NOTED

DRAWN:
P. MOECK

SHEET:
C-0

GENERAL NOTE(S):

- CODE COMPLIANCE: ALL WORK AND MATERIAL PERFORMED AND INSTALLED IN ACCORDANCE THE THE CURRENT EDITION OF THE 2022 CALIFORNIA BUILDING STANDARDS CODE AS ADOPTED BY THE STATE OF CALIFORNIA AND ENFORCED BY SONOMA COUNTY. ALL WORK SHALL BE IN CONFORMANCE TO THE CODE AND ORDINANCE AND/OR THE MUNICIPAL CODE OF THE SONOMA COUNTY. ALL WORK ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE FOLLOWING AGENCIES, AND EACH SHALL BE NOTIFIED AT LEASH TWO (2) WORKING DAYS IN ADVANCE OF ANY WORK TO BE DONE IN ANY OF THE FACILITIES UNDER ITS JURISDICTION. IMPROVEMENT WORK SHALL NOT BEGIN UNTIL A BUILDING PERMIT IS OBTAINED.
- SONOMA COUNTY STANDARD DRAWINGS AND SPECIFICATIONS.
- WATER DEPARTMENT
- PACIFIC, GAS, AND ELECTRIC.
- AT&T CABLE.
- TRAFFIC CONTROL: SHALL BE PERFORMED PER THE LATEST "MANUAL OF TRAFFIC CONTROLS" PUBLISHED BY THE CALIFORNIA DEPARTMENT OF TRANSPORTATION.
- DAMAGE TO ADJACENT ROADWAYS: CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT ROADS OR PROPERTY CAUSED BY HIS ACTIVITIES AND ALSO SHALL BE RESPONSIBLE FOR ANY OTHER WORK REQUIRED TO PREVENT SUCH DAMAGE.
- TRENCH SAFETY: IF THE EXCAVATION OF ANY TRENCH IS 5 FEET OR MORE IN DEPTH, IT SHALL BE SHORED AND BRACED AS REQUIRED BY CALIFORNIA STATE LAW & OSHA.
- ARCHEOLOGICAL RESOURCES : IN THE EVENT THAT ARCHEOLOGICAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP ALL SITE WORK WITHIN THE IMMEDIATE VICINITY OF THAT DISCOVERY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN CHARGE. NO ADDITIONAL WORK WITHIN THAT VICINITY WILL BE ALLOWED UNTIL APPROVAL TO RECOMMENCE WORK IS GIVEN BY THE PLANNING DIRECTOR.
- CONTRACTOR RESPONSIBILITY: CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING THE SAFETY OF ALL PERSON AND PROPERTY. THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK IN THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, DEVELOPER, OR ENGINEER.
- NOTES: ALL NOTES SHOWN ON THE PLAN SHALL BE CONSIDERED INCIDENTAL WORK AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ITEMS.
- WATER TESTS: GUTTERS SHALL BE TESTED WITH LESS THAN 1% SLOPE. FINISH THE GUTTERS DURING THE TEST SO AS TO PREVENT ANY PONDING OF WATER.
- DUST CONTROL: CONTRACTOR SHALL IMPLEMENT METHODS TO CONTROL DUST SUFFICIENTLY BOTH ON AND OFF SITE DURING SITE PREPARATION AND ACTUAL CONSTRUCTION BASIS SUFFICIENTLY. CONTRACTOR SHALL CLEAN SITE DAILY KEEPING IF FREE OF DUST, GRAVEL, AND OTHER CONSTRUCTION MATERIALS BY DAILY SWEEPING AND WATERING.

GRADING NOTE(S):

- VEGETATION: IN ALL GRADED AREAS GRASS, WEEDS, AND ALL ROOTS SHALL BE REMOVED BY STRIPPING TO A MINIMUM DEPTH OF 12". VEGETATION SHALL BE CLEARED CONTAINING ORGANIC MATTER AND SHALL BE STOCKPILED ON THE SITE FOR USE IN THE LANDSCAPE AREAS, REMOVED TO APPROPRIATE LANDFILL SITE, OR AS DIRECTED BY THE OWNER. ALL EXCESS EXCAVATION FILL MATERIAL SHALL BE STOCKPILED ON THE SITE IN A LOCATION APPROVED BY THE PROJECT ENGINEER. THE EXTENT OF CUT OR FILL CANNOT BE ACCURATELY PROJECTED; ALL EARTH QUANTITY VALUES ARE ESTIMATES ONLY, BASED ON CURRENT INFORMATION.
- EARTHWORK: ALL EARTHWORK AND SITE GRADING OPERATIONS INCLUDING CUTTING, FILLING, DRAINAGE, AND ROADWAY CONSTRUCTION SHALL BE PERFORMED UNDER THE OBSERVATION AND APPROVAL OF A REPRESENTATIVE OF THE PROJECT ENGINEER DURING ACTUAL FIELD OPERATIONS.
- COMPACTION: COMPACT EARTH FILLS AND TRENCH BACKFILL PER ASTM D1557. MECHANICALLY COMPACT FILLS.
- PLANTER BACKFILL: BACKFILL PLANTERS WITH TOPSOIL AS APPROVED BY THE LANDSCAPE ARCHITECT.
- RETAINING WALLS: PRIOR TO THE POURING OF CONCRETE, THE RETAINING WALL CONSTRUCTION BE INSPECTED AND APPROVED BY THE PROJECT ENGINEER. IF THE HEIGHT OF THE RETAINING WALL IS TALLER THAN WHAT IS SHOWN ON THE PLANS, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED AND IF NECESSARY SHALL PROVIDE A PLAN REVISION.
- SURFACE DRAINAGE: SLOPE SURFACE DRAINAGE AWAY FROM THE FOUNDATION: THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A 5.0% SLOPE FOR A MIN. DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL OR AND APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION SHALL BE USED. CONSIDERATION SHALL BE GIVEN TO THE POSSIBLE ADDITIONAL SETTLEMENT OF THE BACKFILL WHEN ESTABLISHING FINAL GROUND LEVEL ADJACENT TO THE FOUNDATION (C.B.C. SEC. 1829.2).
- GRADING: SITE GRADING SHALL NOT COMMENCE UNTIL A GRADING PERMIT HAS BEEN ISSUED BY GOVERNING AGENCY. ALL GRADING SHALL BE PERFORMED PRIOR TO OCTOBER 15 AND THE PROJECT SHALL BE WINTERIZED FOR THE RAINY SEASON, AND NO FURTHER GRADING SHALL BE PERMITTED UNTIL APRIL 1. DURING GRADING OPERATIONS THE GRADING CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES ON BOTH THE SITE AND HAUL ROUTES. ALL GRADED AREAS SHALL BE HYDOSEED TO CONTROL EROSION OR THE APPROVED LANDSCAPE COVER INSTALLED BY OCTOBER 15.
- CONTOURS PROPOSED CONTOURS SHOWN ARE ROUGH FINISH GRADE.
- MAXIMUM CUT AND FILL SLOPES ARE 2:1 UNLESS OTHERWISE SHOWN.
- THE PROJECT ENGINEER SHALL BE NOTIFIED A MIN. OF 2 WORKING DAYS PRIOR TO ANY REQUESTS FOR GRADING INSPECTIONS.

DRAINAGE NOTE(S):

- FOUNDATION SUBDRAINS AND RETAINING WALL BACKDRAINS: SUBDRAINS AND BACKDRAINS SHALL BE SEPARATE FROM THE SURFACE AND ROOF DRAINS. RETAINING WALL DRAINS SHOULD EXTEND TO A DEPTH OF AT LEAST 12 INCHES BELOW THE INTERIOR SLAB OR CRAWL SPACE ELEVATION. ALL OTHER FOUNDATION DRAINS SHALL EXTEND A MINIMUM OF 6 INCHES BELOW THE INTERIOR SLAB OR CRAWL SPACE ELEVATION. FOUNDATION DRAINS SHALL CONSIST OF 4" PERF. PVC SDR-35, HOLES LAID DOWN, SLOPED TO DRAIN TO OUTLET BY GRAVITY WITH A MIN. SLOPE OF 1%. THE CONTRACTOR SHALL VERIFY ALL FLOW LINE ELEVATIONS IN FIELD PRIOR TO INSTALLATION AND SHALL CONTACT CIVIL ENGINEER FOR DIRECTION AS REQUIRED. SEE STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR LOCATION OF SUBDRAINS RELATIVE TO LOCATION BEHIND FOUNDATIONS AND RETAINING WALLS. WATERPROOFING UNDER ALL CONCRETE SLABS, BEHIND THE CONCRETE RETAINING WALL AND FOR ALL CONCRETE FOOTINGS SHALL BE INSTALLED PER THE ARCHITECTURAL AND STRUCTURAL PLANS.
- DRAIN INLETS: D.I. - DRAIN INLETS SHALL BE "NDS" OR CRISTI PRODUCTS OR APPROVED EQUAL. B-9 BOX SHALL BE CHRISTI BOX DRAIN BOX, 4" D.I. MAY BE ROUND 4" DIA. 6" D.I. MAY BE ROUND 6" DIA. 9" D.I. SHALL BE 9"X9" SQUARE DRAIN BOX, 12" D.I. SHALL BE 12"X12" SQUARE DRAIN BOX, AND DRAIN INLET JUNCTION BOX SHALL BE PER THE COUNTY OF MARIN STANDARD DRAWINGS. SITE GRADING DRAINAGE: ALL GRADES SHOWN ARE FINISHED GRADES UON. PONDS OR PUDDLES WILL NOT BE ALLOWED. ALL YARD AREAS AND LANDSCAPE AREA SHALL BE GRADED WITH A MINIMUM OF 1.5% SLOPE TO A DRAINAGE SYSTEM. SEE STRUCTURAL AND ARCHITECTURAL PLANS FOR UNDER FOUNDATION AND ROOF LEADER DOWNSPOUT DRAINAGE REQUIREMENTS.
- ROOF LEADER DOWNSPOUT COLLECTOR SYSTEM: SHALL BE INSTALLED WHERE SHOWN ON THE PLAN OR AS APPROVED BY THE ENGINEER. NOTIFY THE PROJECT ENGINEER IF ANY DISCREPANCIES EXISTING BETWEEN CIVIL AND ARCHITECTURAL PLANS. CONNECT ALL DOWNSPOUTS TO THE UNDERGROUND STORM DRAIN SYSTEM AND SHALL BE CONSIDERED INCIDENTAL TO THE STORM DRAIN SYSTEM. THE CONTRACTOR SHALL REVIEW THE STRUCTURAL FOUNDATION PLANS FOR ANY CONFLICTS WITH THE ROOF LEADER COLLECTORS AND THE GRADE BEAM FOOTINGS BENEATH PATIO AREAS AND RE-ROUTING MAY BE REQUIRED. ROOF LEADER DOWNSPOUTS SHALL BE COLLECTED IN 4" PVC SDR-35 COLLECTOR SYSTEMS OR BETTER AND DISCHARGE TO A PAVED SURFACE OR TO AN ESTABLISHED STORM DRAIN SYSTEM.
- TRENCH EXCAVATION AND BACKFILL: SHALL CONFORM TO THE COUNTY OF MARIN STANDARD DRAWINGS.

LEGEND:

- DISTANCES ARE IN FEET AND DECIMALS, THEREOF/
- 1' CONTOUR INTERVAL SHOWN.
- ELEVATION BASED ON ASSUMED DATUM, UNLESS OTHERWISE SHOWN.
- TREE AND TRUNK AS NOTED.

- O_{DS} (N) 4" DIA. PVC - SDR-35 D.I. FOR DOWNSPOUT
- O_{AD} (N) AREA DRAIN NDS DRAIN COVER TO 4" SDR-35" PVC
- (N) 4" DIA. PVC - SDR-35 PERFORATED PIPE W/ MIN. 16" GRAVEL WRAPPED IN FILTER FABRIC
- (N) 4" PVC SOLID PIPE
- DIRECTION OF SLOPE (2% MIN.)
- 52 (E) CONTOUR LINE
- 52 (N) CONTOUR LINE
- TOW 140.5 CONC. FOOTING/IRW WITH TOW - TOP OF WALL ELEVATION
- X 140.5 (N) SPOT ELEVATION

SHEET NOTES:

- SITE SURVEY AND TOPOGRAPHIC BASE MAP PROVIDED BY JOE CHAMBERS, OWNER.

SITE WORK PROJECT DATA

LOT SIZE = 60984 SF	
IMPERVIOUS SURFACE AREAS	PROPOSED
HOUSE FOOTPRINT	554 SF
ADU FOOTPRINT	554 SF
CARPORIT FOOTPRINT	576 SF
WOOD DECKS	1,782 SF
STAIRS	910 SF
DRIVEWAY	1,782 SF
TOTAL	6,158 SF % = 6,158 SF/60,984 SF X 100
% = 100*(TOTAL/LOT SIZE)	10.1 % < 35% OK

CUT/FILL TABULAR DATA

CUT/FILL	RETAINING WALL
TOTAL FILL*	40 CY
TOTAL CUT*	55 CY
OFFHUAL*	15 CY

* CONTRACTOR IS RESPONSIBLE FOR PERFORMING THEIR OWN EARTHWORK QUANTITIES.

OBSERVATIONS AND INSPECTIONS:

OBSERVATIONS SHALL BE PROVIDED IN ADDITION TO INSPECTIONS BY THE GOVERNING AGENCIES AS REQUIRED BY 2022 C.B.C. SECTION 1710.

OBSERVATIONS AND INSPECTIONS FOR STRUCTURAL CONFORMANCE TO THE APPROVED DRAWINGS SHALL BE PROVIDED BY THE PERSONS NOTED BELOW AND SHALL BE PROCEEDED BY 48 HOUR ADVANCED NOTICE.

PROVIDE FINAL LETTER OF CONFORMANCE TO THE BUILDING DEPARTMENT FOR OBSERVATIONS

CIVIL GRADING AND DRAINAGE BY: PETER MOECK P.E., 415-845-9032

SCOPE OF WORK

- INSTALL NEW GARAGE, HOUSE, ADU, RETAINING WALLS, GRADING AND DRAINAGE.

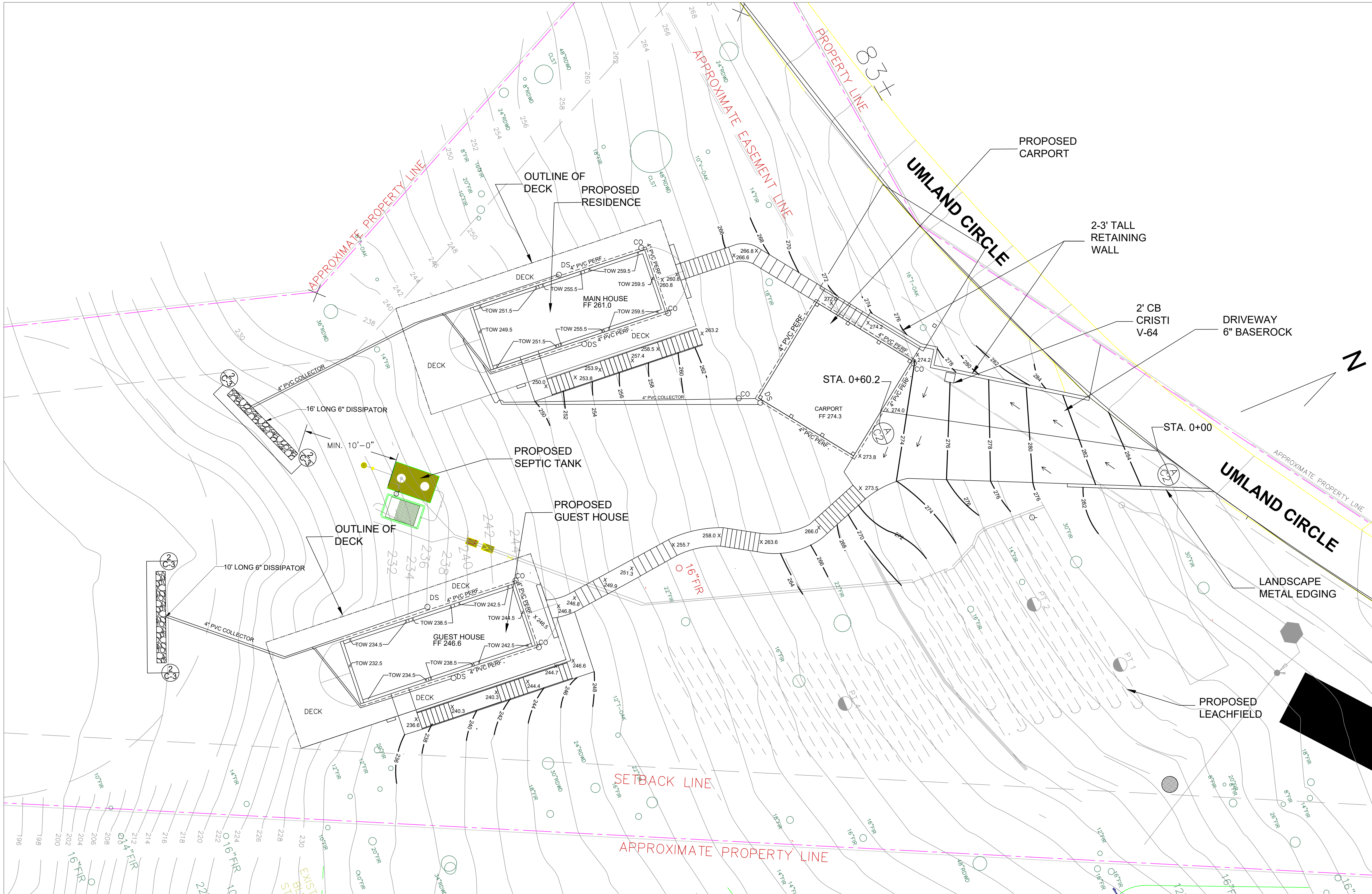
ABBREVIATIONS FOR THIS PLAN:

A.C.	ASPHALT CONCRETE	MON.	MONUMENT
AD	AREA DRAIN	(N)	NEW
BLDG.	BUILDING	PL	PROPERTY LINE
BM	BENCH MARK	PM	PARKING METER
BW	BOTTOM OF WALL	PP	POWER POLE
CB	CATCH BASIN	R	RADIUS
C&G	CURB AND GUTTER	RCP	REINFORCED CONC. PIPE
CIP	CAST IRON PIPE	RR	RAILROAD
CMP	CORRUGATED METAL PIPE	RW	RIGHT OF WAY
CONC.	CONCRETE	RWD	REDWOOD
CP#	CONTROL POINT NUMBER	S	SLOPE
CS	CRAWL SPACE	SS	SANITARY SEWER
DI	DROP INLET	SSCO	SS CLEAN OUT
D/W	DRIVEWAY	STD.	STANDARD
(E)	EXISTING	WE	SIDEWALK
EP	EDGE OF PAVEMENT	TC	TOP OF CURB
HDPE	HIGH DENSITY POLYETHYLENE PIPE	TOS	TOP OF SLAB
FH	FIRE HYDRANT	TS	TURNING STRUCTURE
FL	FLOWLINE	TW	TOP OF WALL
IRR.	IRRIGATION	VCP	VITRIFIED CLAY PIPE
JP	JOINT POLE	WM	WATER METER
LF	LINEAR FEET		
MH	MANHOLE		

DRAWING INDEX

- C-0 TITLE PAGE
- C-1 GRADING AND DRAINAGE PLAN
- C-2 DRIVEWAY SECTION
- C-3 DETAILS, STORMWATER PREVENTION STANDARDS DETAILS

PRELIMINARY NOT FOR CONSTRUCTION



GRADING & DRAINAGE PLAN

SCALE: 1" = 10'

PRELIMINARY NOT FOR CONSTRUCTION

8-19-24	PMM
2-1-25	PMM

Peter Moeck, P.E.
Civil Engineer
353 Pine Hill Road
Mill Valley, CA 94941
Tel. 415-845-9032 pmoeck@yahoo.com

PROJECT:
NEW RESIDENCE AND ADU
22176 UMLAND CIR.
JENNER, CA 95450
APN. 109-420-034

GRADING & DRAINAGE PLAN

DATE:
5-4-2024

SCALE:
AS NOTED

DRAWN:
P. MOECK

SHEET:

C-1

REVISIONS BY:

Peter Moeck, P.E.
 Civil Engineer
 353 Pine Hill Road
 Mill Valley, CA 94941
 Tel. 415-845-9032 pmoeck@yahoo.com

PROJECT:
 NEW RESIDENCE AND ADU
 22176 UMLAND CIR.
 JENNER, CA 95450
 APN. 109-420-034

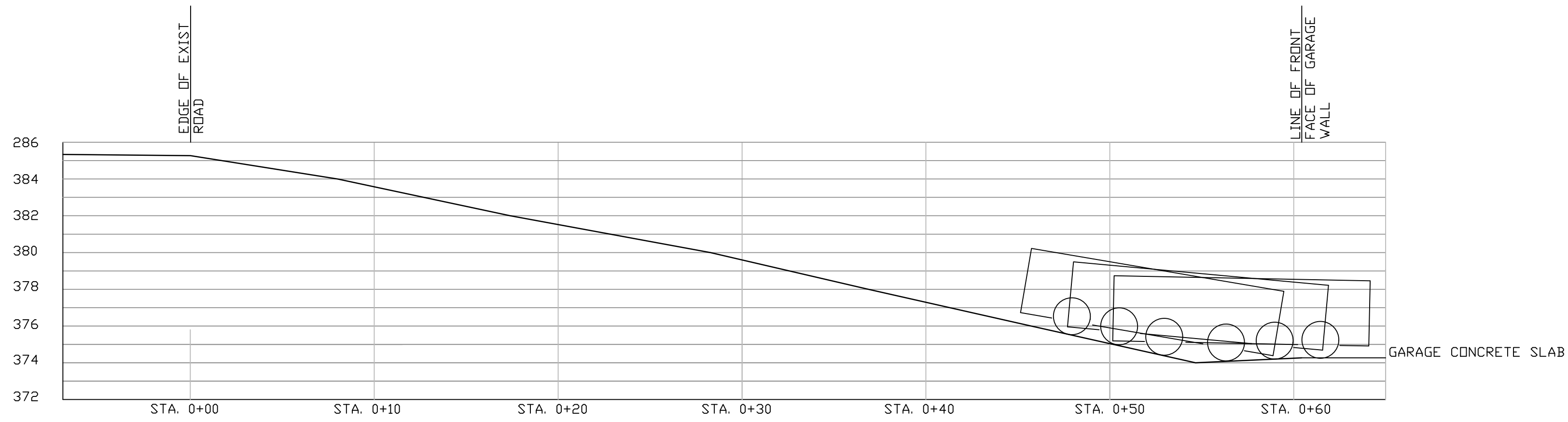
DRIVEWAY SECTION

DATE:
5-4-2024

SCALE:
AS NOTED

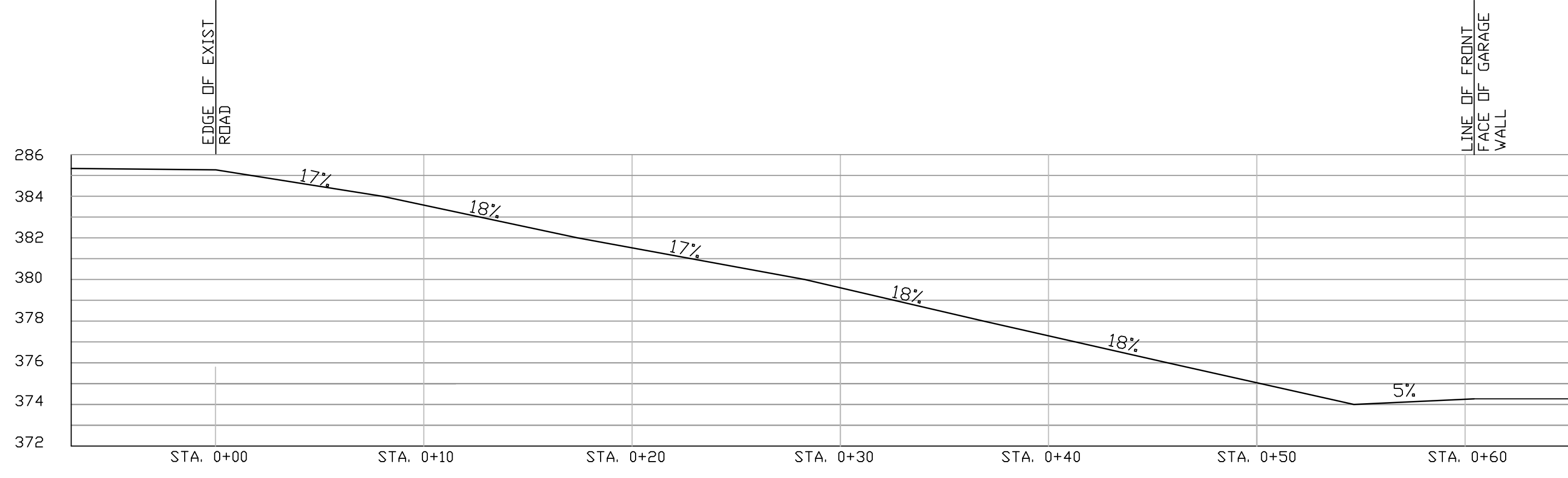
DRAWN:
P. MOECK

SHEET:
C-2



CAR MOVEMENTS TO CHECK BOTTOMING OUT

HOR=VERT. 1"=10'



DRIVEWAY SECTION A-A

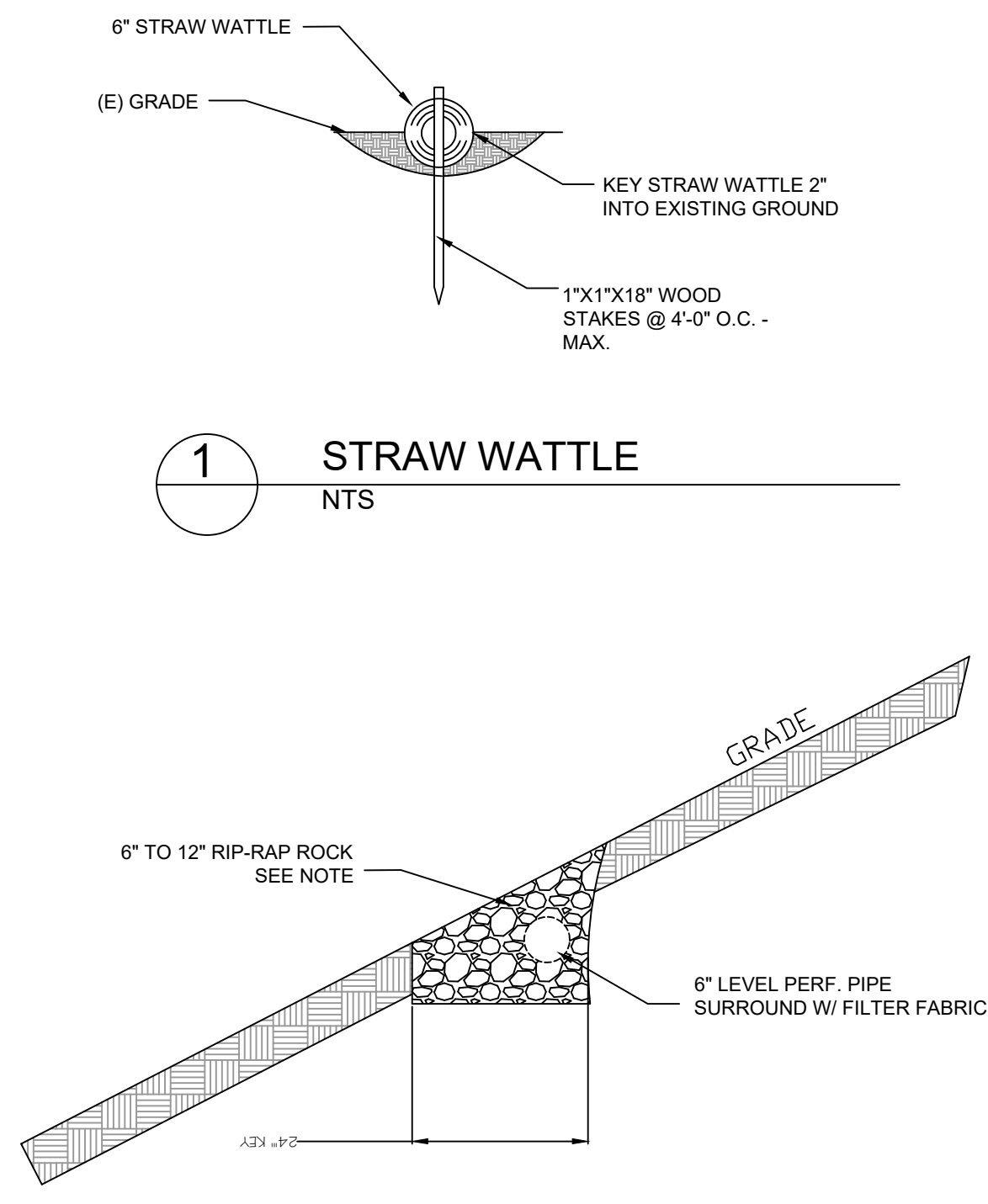
HOR=VERT. 1"=5'

(N) DRIVEWAY GRADE

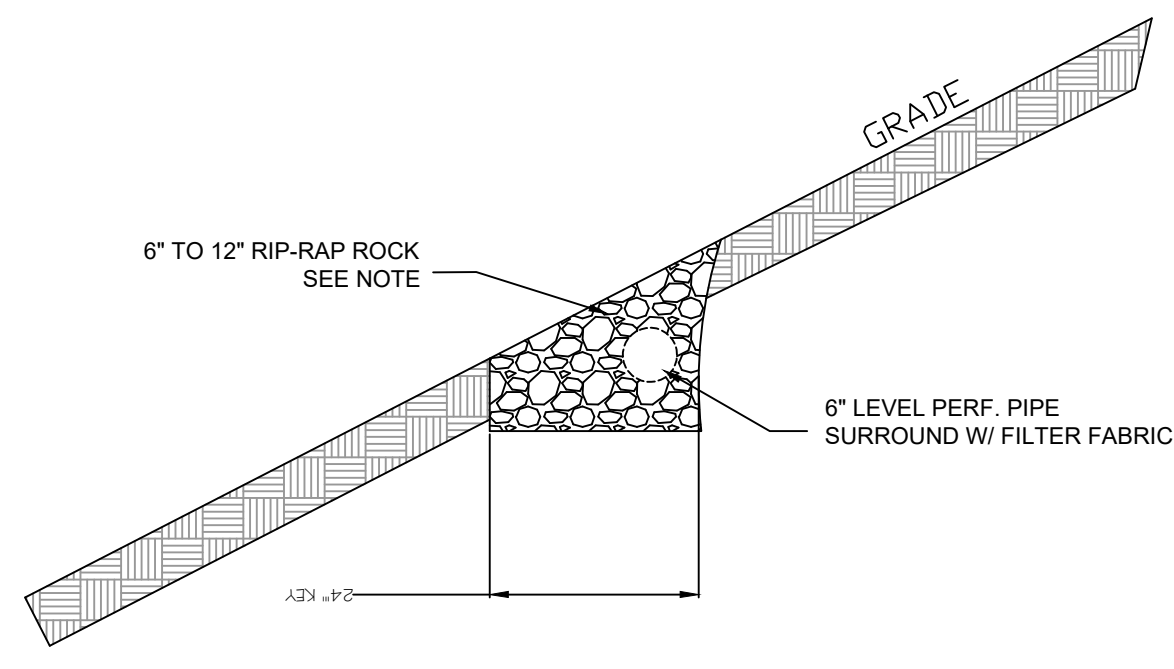
PRELIMINARY NOT FOR CONSTRUCTION

DRIVEWAY SECTION

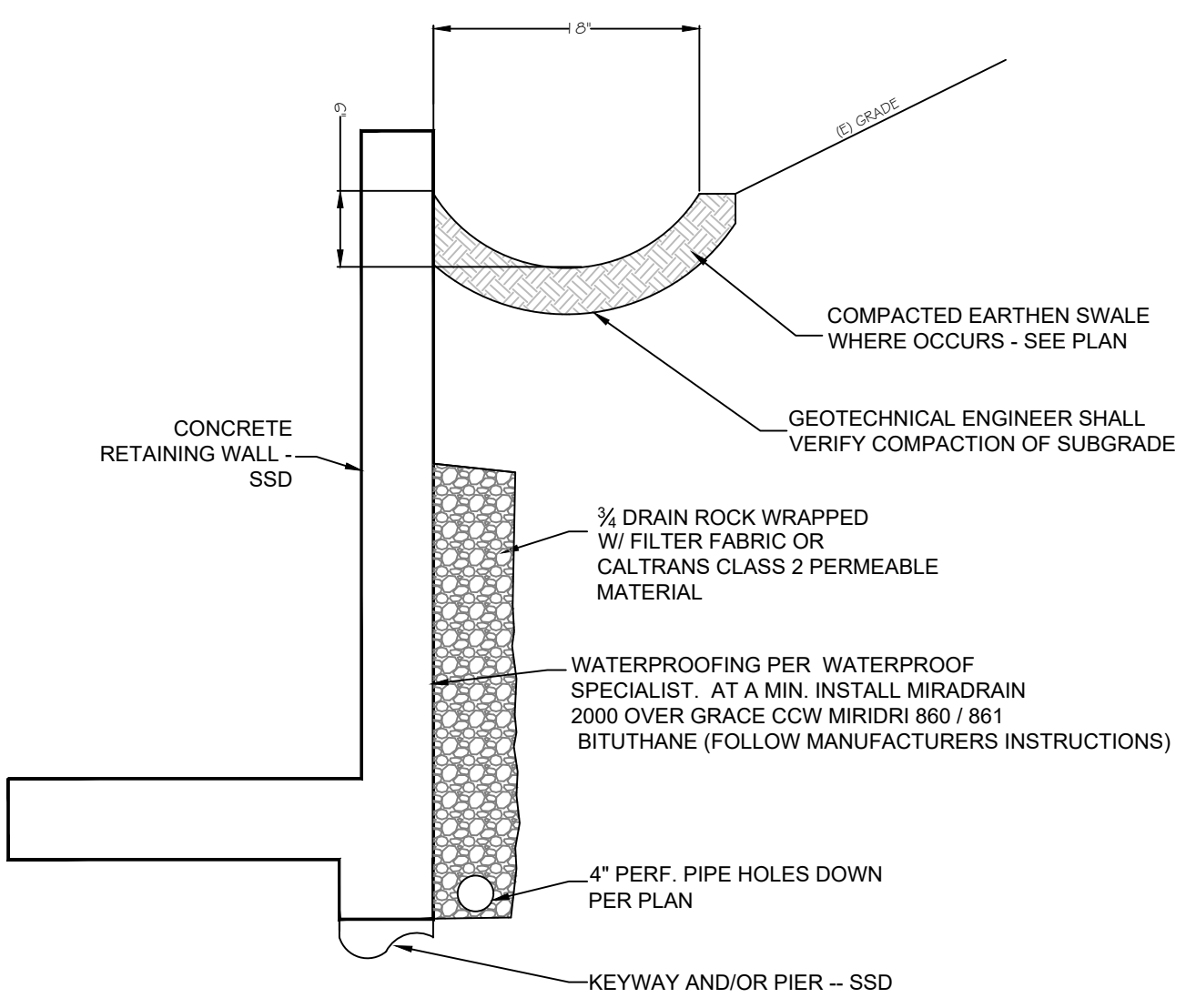
SCALE: 1:10



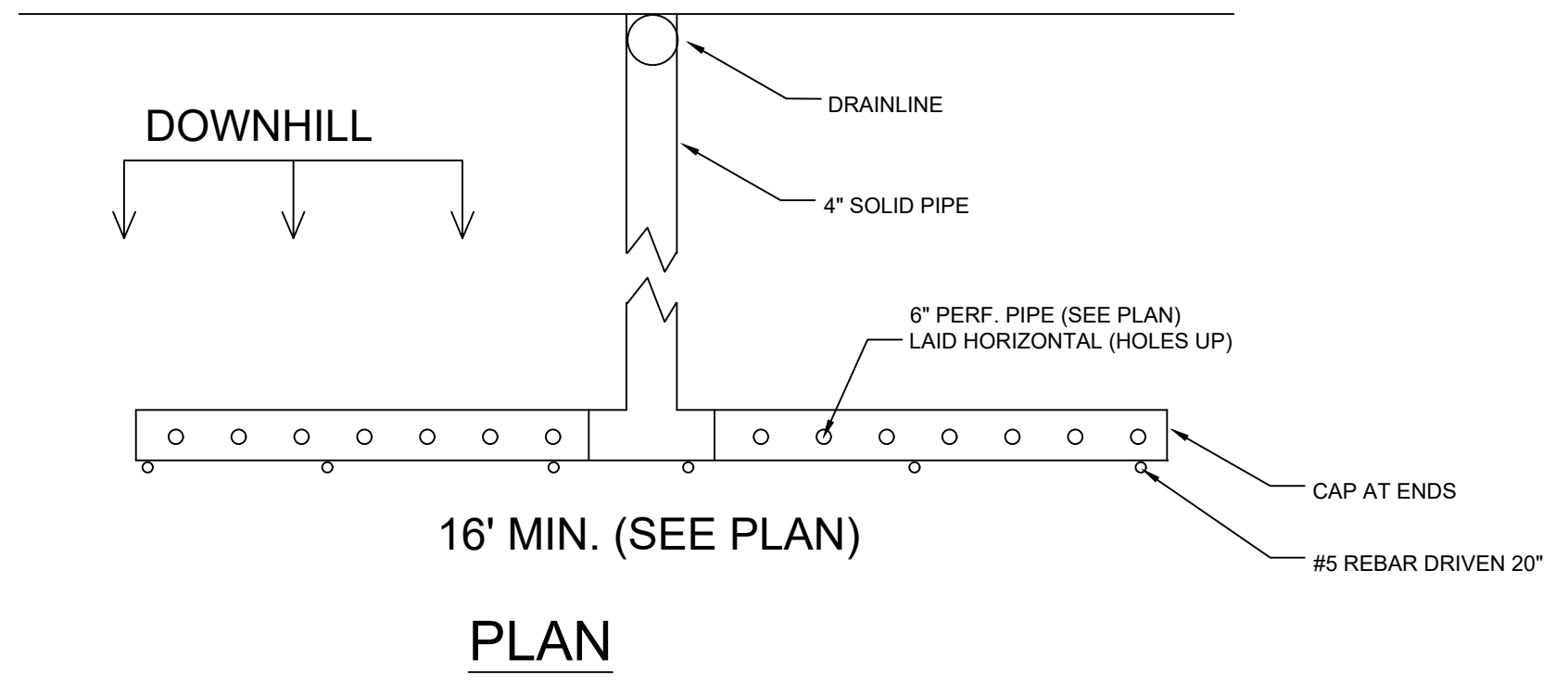
1 STRAW WATTLE
NTS



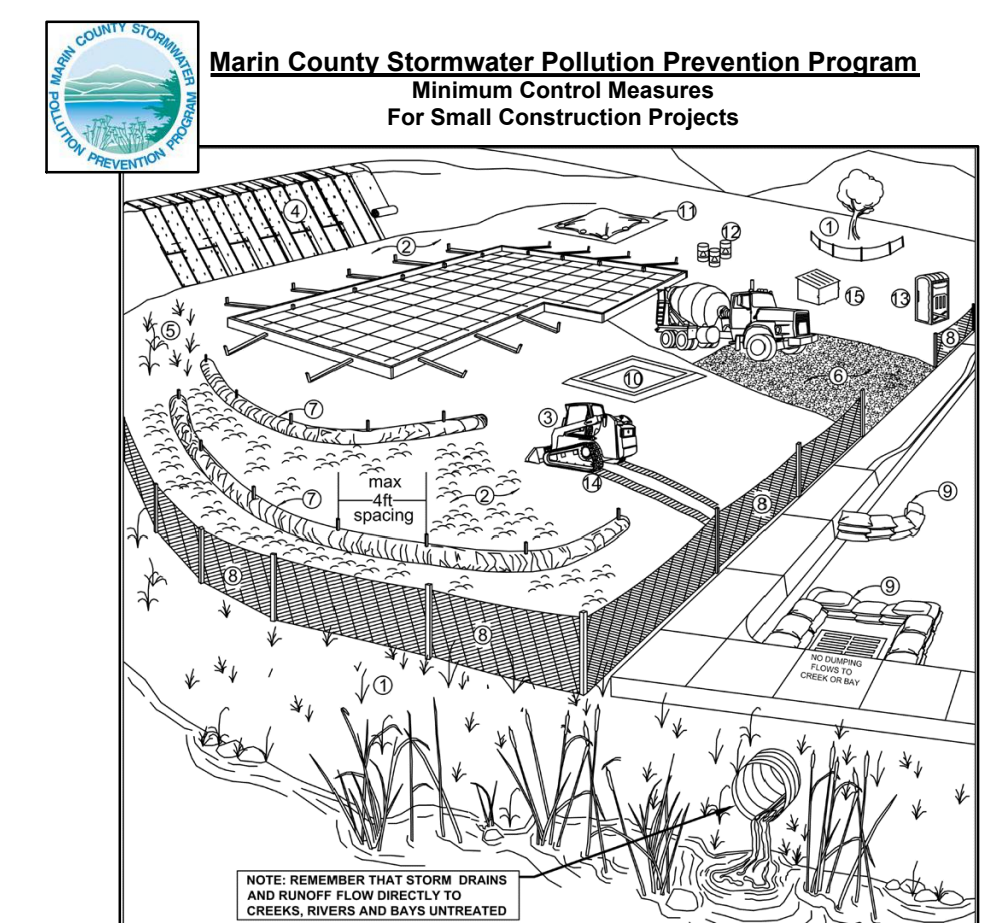
2 DRAINAGE DISCHARGE (DISSIPATOR)
SCALE: NTS



3 RETAINING WALL
NTS

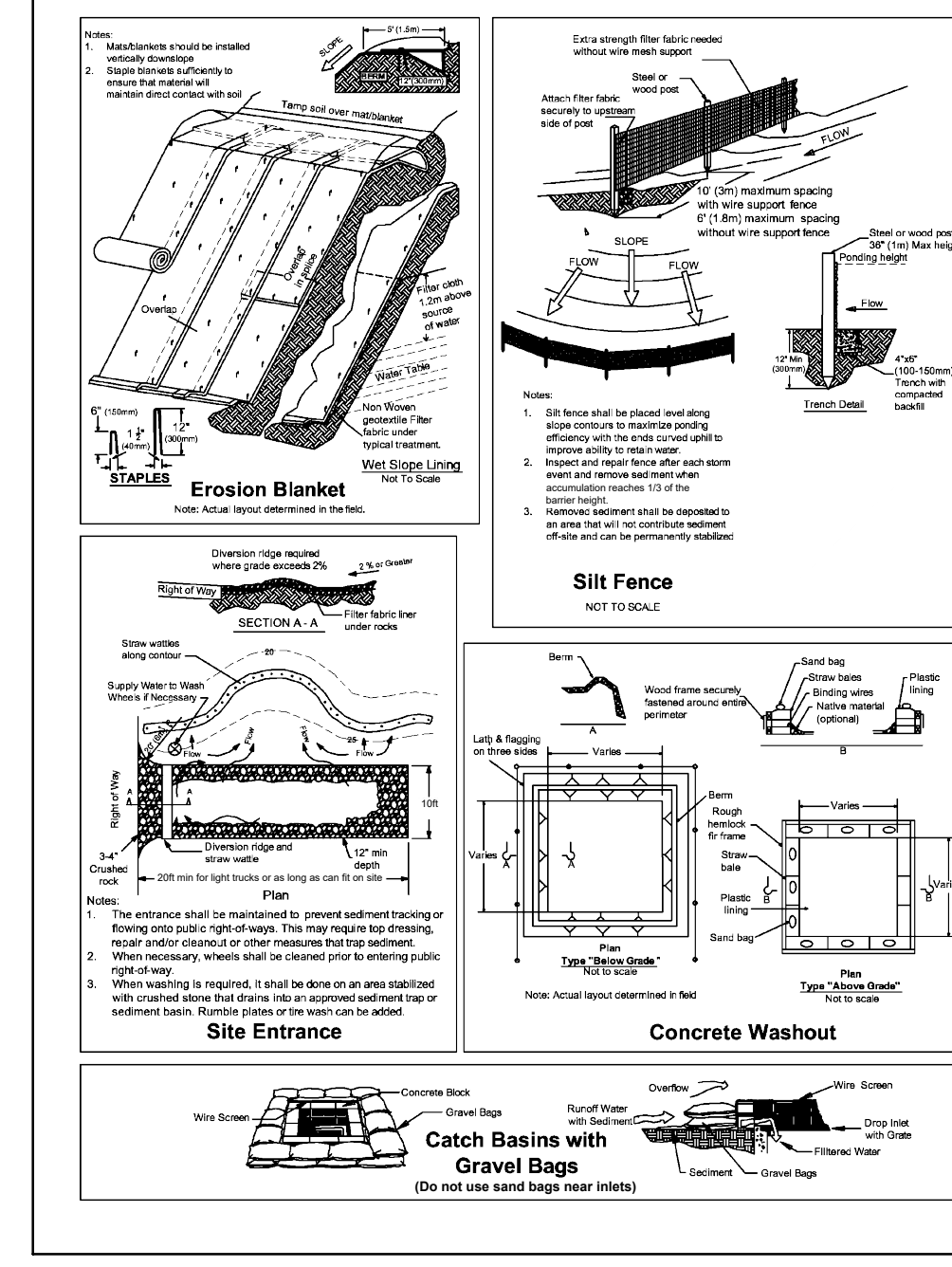


SECTION
NOTE: LEVEL AREA AND KEY ROCK @ LEVEL A FOOT HORIZONTAL BELOW PIPE.



Erosion Controls	Sediment Controls	Good Housekeeping
NS Scheduling	8. Tracking Controls	10. Concrete Washout
1. Preserve Vegetation & Creek Set Backs 7	9. Silt Fence	11. Stockpile Management
2. Soil Cover	10. Silt Fence	12. Hazardous Material Management
3. Soil Preparation/Roughening	11. Silt Fence Protection	13. Spill Prevention
4. Erosion Control Blankets	NS Trench Dewatering	14. Equipment and Vehicle Maintenance
5. Revegetation		15. Litter and Waste Management

Note: Select an effective combination of control measures from each category, Erosion Control, Sediment Control, and Good Housekeeping. Control measures shall be continually implemented and maintained throughout the project until activities are complete, disturbed areas are stabilized with permanent erosion controls, and the local agency has agreed on a permit that may have been required for the project. Inspect and maintain the control measures before and after rain events, and as required by the local agency or state permit. More detailed information on the BMPs can be found in the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factheets, CASQA factheets are available by subscription in the California Best Management Practices Handbook. For more information on the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factheets, CASQA factheets are available by subscription in the Construction Site BMP Manual (BMP Manual) at <http://www.motdotp.org>. For more information on the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factheets, CASQA factheets are available by subscription in the Construction Site BMP Manual (BMP Manual) at <http://www.motdotp.org>. For more information on the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factheets, CASQA factheets are available by subscription in the Construction Site BMP Manual (BMP Manual) at <http://www.motdotp.org>.



Control Measure	General Description
Erosion Control Best Management Practices	
NS Scheduling	Plan the project and develop a schedule showing each phase of construction. Schedule construction activities to reduce erosion potential, such as scheduling ground disturbing activities during the summer and dry periods. Minimize the amount of area disturbed. For more info see the following factheets: CASQA: EC-1; or Caltrans: SS-1
1. Preserve Existing Vegetation and Creek Setbacks	Preserve or reseed existing vegetation to the extent possible, especially along creek banks. Slope cover follows are maps and identify areas to be preserved in the field with temporary fencing. Check with the local Planning and Public Works Departments for specific creek bank requirements. For more info see the following factheets: CASQA: EC-2; or Caltrans: SS-2
2. Soil Cover	Cover exposed soil with straw matting and mulch or equivalent. For more info see the following factheets: CASQA: EC-3; EC-4; EC-5; EC-6; EC-7; EC-8; EC-9; EC-10; EC-11; EC-12; EC-13; EC-14; EC-15; EC-16; EC-17; EC-18; EC-19; EC-20; EC-21; EC-22; EC-23; EC-24; EC-25; EC-26; EC-27; EC-28; EC-29; EC-30; EC-31; EC-32; EC-33; EC-34; EC-35; EC-36; EC-37; EC-38; EC-39; EC-40; EC-41; EC-42; EC-43; EC-44; EC-45; EC-46; EC-47; EC-48; EC-49; EC-50; EC-51; EC-52; EC-53; EC-54; EC-55; EC-56; EC-57; EC-58; EC-59; EC-60; EC-61; EC-62; EC-63; EC-64; EC-65; EC-66; EC-67; EC-68; EC-69; EC-70; EC-71; EC-72; EC-73; EC-74; EC-75; EC-76; EC-77; EC-78; EC-79; EC-80; EC-81; EC-82; EC-83; EC-84; EC-85; EC-86; EC-87; EC-88; EC-89; EC-90; EC-91; EC-92; EC-93; EC-94; EC-95; EC-96; EC-97; EC-98; EC-99; EC-100; EC-101; EC-102; EC-103; EC-104; EC-105; EC-106; EC-107; EC-108; EC-109; EC-110; EC-111; EC-112; EC-113; EC-114; EC-115; EC-116; EC-117; EC-118; EC-119; EC-120; EC-121; EC-122; EC-123; EC-124; EC-125; EC-126; EC-127; EC-128; EC-129; EC-130; EC-131; EC-132; EC-133; EC-134; EC-135; EC-136; EC-137; EC-138; EC-139; EC-140; EC-141; EC-142; EC-143; EC-144; EC-145; EC-146; EC-147; EC-148; EC-149; EC-150; EC-151; EC-152; EC-153; EC-154; EC-155; EC-156; EC-157; EC-158; EC-159; EC-160; EC-161; EC-162; EC-163; EC-164; EC-165; EC-166; EC-167; EC-168; EC-169; EC-170; EC-171; EC-172; EC-173; EC-174; EC-175; EC-176; EC-177; EC-178; EC-179; EC-180; EC-181; EC-182; EC-183; EC-184; EC-185; EC-186; EC-187; EC-188; EC-189; EC-190; EC-191; EC-192; EC-193; EC-194; EC-195; EC-196; EC-197; EC-198; EC-199; EC-200; EC-201; EC-202; EC-203; EC-204; EC-205; EC-206; EC-207; EC-208; EC-209; EC-210; EC-211; EC-212; EC-213; EC-214; EC-215; EC-216; EC-217; EC-218; EC-219; EC-220; EC-221; EC-222; EC-223; EC-224; EC-225; EC-226; EC-227; EC-228; EC-229; EC-230; EC-231; EC-232; EC-233; EC-234; EC-235; EC-236; EC-237; EC-238; EC-239; EC-240; EC-241; EC-242; EC-243; EC-244; EC-245; EC-246; EC-247; EC-248; EC-249; EC-250; EC-251; EC-252; EC-253; EC-254; EC-255; EC-256; EC-257; EC-258; EC-259; EC-260; EC-261; EC-262; EC-263; EC-264; EC-265; EC-266; EC-267; EC-268; EC-269; EC-270; EC-271; EC-272; EC-273; EC-274; EC-275; EC-276; EC-277; EC-278; EC-279; EC-280; EC-281; EC-282; EC-283; EC-284; EC-285; EC-286; EC-287; EC-288; EC-289; EC-290; EC-291; EC-292; EC-293; EC-294; EC-295; EC-296; EC-297; EC-298; EC-299; EC-300; EC-301; EC-302; EC-303; EC-304; EC-305; EC-306; EC-307; EC-308; EC-309; EC-310; EC-311; EC-312; EC-313; EC-314; EC-315; EC-316; EC-317; EC-318; EC-319; EC-320; EC-321; EC-322; EC-323; EC-324; EC-325; EC-326; EC-327; EC-328; EC-329; EC-330; EC-331; EC-332; EC-333; EC-334; EC-335; EC-336; EC-337; EC-338; EC-339; EC-340; EC-341; EC-342; EC-343; EC-344; EC-345; EC-346; EC-347; EC-348; EC-349; EC-350; EC-351; EC-352; EC-353; EC-354; EC-355; EC-356; EC-357; EC-358; EC-359; EC-360; EC-361; EC-362; EC-363; EC-364; EC-365; EC-366; EC-367; EC-368; EC-369; EC-370; EC-371; EC-372; EC-373; EC-374; EC-375; EC-376; EC-377; EC-378; EC-379; EC-380; EC-381; EC-382; EC-383; EC-384; EC-385; EC-386; EC-387; EC-388; EC-389; EC-390; EC-391; EC-392; EC-393; EC-394; EC-395; EC-396; EC-397; EC-398; EC-399; EC-400; EC-401; EC-402; EC-403; EC-404; EC-405; EC-406; EC-407; EC-408; EC-409; EC-410; EC-411; EC-412; EC-413; EC-414; EC-415; EC-416; EC-417; EC-418; EC-419; EC-420; EC-421; EC-422; EC-423; EC-424; EC-425; EC-426; EC-427; EC-428; EC-429; EC-430; EC-431; EC-432; EC-433; EC-434; EC-435; EC-436; EC-437; EC-438; EC-439; EC-440; EC-441; EC-442; EC-443; EC-444; EC-445; EC-446; EC-447; EC-448; EC-449; EC-450; EC-451; EC-452; EC-453; EC-454; EC-455; EC-456; EC-457; EC-458; EC-459; EC-460; EC-461; EC-462; EC-463; EC-464; EC-465; EC-466; EC-467; EC-468; EC-469; EC-470; EC-471; EC-472; EC-473; EC-474; EC-475; EC-476; EC-477; EC-478; EC-479; EC-480; EC-481; EC-482; EC-483; EC-484; EC-485; EC-486; EC-487; EC-488; EC-489; EC-490; EC-491; EC-492; EC-493; EC-494; EC-495; EC-496; EC-497; EC-498; EC-499; EC-500; EC-501; EC-502; EC-503; EC-504; EC-505; EC-506; EC-507; EC-508; EC-509; EC-510; EC-511; EC-512; EC-513; EC-514; EC-515; EC-516; EC-517; EC-518; EC-519; EC-520; EC-521; EC-522; EC-523; EC-524; EC-525; EC-526; EC-527; EC-528; EC-529; EC-530; EC-531; EC-532; EC-533; EC-534; EC-535; EC-536; EC-537; EC-538; EC-539; EC-540; EC-541; EC-542; EC-543; EC-544; EC-545; EC-546; EC-547; EC-548; EC-549; EC-550; EC-551; EC-552; EC-553; EC-554; EC-555; EC-556; EC-557; EC-558; EC-559; EC-560; EC-561; EC-562; EC-563; EC-564; EC-565; EC-566; EC-567; EC-568; EC-569; EC-570; EC-571; EC-572; EC-573; EC-574; EC-575; EC-576; EC-577; EC-578; EC-579; EC-580; EC-581; EC-582; EC-583; EC-584; EC-585; EC-586; EC-587; EC-588; EC-589; EC-590; EC-591; EC-592; EC-593; EC-594; EC-595; EC-596; EC-597; EC-598; EC-599; EC-600; EC-601; EC-602; EC-603; EC-604; EC-605; EC-606; EC-607; EC-608; EC-609; EC-610; EC-611; EC-612; EC-613; EC-614; EC-615; EC-616; EC-617; EC-618; EC-619; EC-620; EC-621; EC-622; EC-623; EC-624; EC-625; EC-626; EC-627; EC-628; EC-629; EC-630; EC-631; EC-632; EC-633; EC-634; EC-635; EC-636; EC-637; EC-638; EC-639; EC-640; EC-641; EC-642; EC-643; EC-644; EC-645; EC-646; EC-647; EC-648; EC-649; EC-650; EC-651; EC-652; EC-653; EC-654; EC-655; EC-656; EC-657; EC-658; EC-659; EC-660; EC-661; EC-662; EC-663; EC-664; EC-665; EC-666; EC-667; EC-668; EC-669; EC-670; EC-671; EC-672; EC-673; EC-674; EC-675; EC-676; EC-677; EC-678; EC-679; EC-680; EC-681; EC-682; EC-683; EC-684; EC-685; EC-686; EC-687; EC-688; EC-689; EC-690; EC-691; EC-692; EC-693; EC-694; EC-695; EC-696; EC-697; EC-698; EC-699; EC-700; EC-701; EC-702; EC-703; EC-704; EC-705; EC-706; EC-707; EC-708; EC-709; EC-710; EC-711; EC-712; EC-713; EC-714; EC-715; EC-716; EC-717; EC-718; EC-719; EC-720; EC-721; EC-722; EC-723; EC-724; EC-725; EC-726; EC-727; EC-728; EC-729; EC-730; EC-731; EC-732; EC-733; EC-734; EC-735; EC-736; EC-737; EC-738; EC-739; EC-740; EC-741; EC-742; EC-743; EC-744; EC-745; EC-746; EC-747; EC-748; EC-749; EC-750; EC-751; EC-752; EC-753; EC-754; EC-755; EC-756; EC-757; EC-758; EC-759; EC-760; EC-761; EC-762; EC-763; EC-764; EC-765; EC-766; EC-767; EC-768; EC-769; EC-770; EC-771; EC-772; EC-773; EC-774; EC-775; EC-776; EC-777; EC-778; EC-779; EC-780; EC-781; EC-782; EC-783; EC-784; EC-785; EC-786; EC-787; EC-788; EC-789; EC-790; EC-791; EC-792; EC-793; EC-794; EC-795; EC-796; EC-797; EC-798; EC-799; EC-800; EC-801; EC-802; EC-803; EC-804; EC-805; EC-806; EC-807; EC-808; EC-809; EC-810; EC-811; EC-812; EC-813; EC-814; EC-815; EC-816; EC-817; EC-818; EC-819; EC-820; EC-821; EC-822; EC-823; EC-824; EC-825; EC-826; EC-827; EC-828; EC-829; EC-830; EC-831; EC-832; EC-833; EC-834; EC-835; EC-836; EC-837; EC-838; EC-839; EC-840; EC-841; EC-842; EC-843; EC-844; EC-845; EC-846; EC-847; EC-848; EC-849; EC-850; EC-851; EC-852; EC-853; EC-854; EC-855; EC-856; EC-857; EC-858; EC-859; EC-860; EC-861; EC-862; EC-863; EC-864; EC-865; EC-866; EC-867; EC-868; EC-869; EC-870; EC-871; EC-872; EC-873; EC-874; EC-875; EC-876; EC-877; EC-878; EC-879; EC-880; EC-881; EC-882; EC-883; EC-884; EC-885; EC-886; EC-887; EC-888; EC-889; EC-890; EC-891; EC-892; EC-893; EC-894; EC-895; EC-896; EC-897; EC-898; EC-899; EC-900; EC-901; EC-902; EC-903; EC-904; EC-905; EC-906; EC-907; EC-908; EC-909; EC-910; EC-911; EC-912; EC-913; EC-914; EC-915; EC-916; EC-917; EC-918; EC-919; EC-920; EC-921; EC-922; EC-923; EC-924; EC-925; EC-926; EC-927; EC-928; EC-929; EC-930; EC-931; EC-932; EC-933; EC-934; EC-935; EC-936; EC-937; EC-938; EC-939; EC-940; EC-941; EC-942; EC-943; EC-944; EC-945; EC-946; EC-947; EC-948; EC-949; EC-950; EC-951; EC-952; EC-953; EC-954; EC-955; EC-956; EC-957; EC-958; EC-959; EC-960; EC-961; EC-962; EC-963; EC-964; EC-965; EC-966; EC-967; EC-968; EC-969; EC-970; EC-971; EC-972; EC-973; EC-974; EC-975; EC-976; EC-977; EC-978; EC-979; EC-980; EC-981; EC-982; EC-983; EC-984; EC-985; EC-986; EC-987; EC-988; EC-989; EC-990; EC-991; EC-992; EC-993; EC-994; EC-995; EC-996; EC-997; EC-998; EC-999; EC-1000; EC-1001; EC-1002; EC-1003; EC-1004; EC-1005; EC-1006; EC-1007; EC-1008; EC-1009; EC-1010; EC-1011; EC-1012; EC-1013; EC-1014; EC-1015; EC-1016; EC-1017; EC-1018; EC-1019; EC-1020; EC-1021; EC-1022; EC-1023; EC-1024; EC-1025; EC-1026; EC-1027; EC-1028; EC-1029; EC-1030; EC-1031; EC-1032; EC-1033; EC-1034; EC-1035; EC-1036; EC-1037; EC-1038; EC-1039; EC-1040; EC-1041; EC-1042; EC-1043; EC-1044; EC-1045; EC-1046; EC-1047; EC-1048; EC-1049; EC-1050; EC-1051; EC-1052; EC-1053; EC-1054; EC-1055; EC-1056; EC-1057; EC-1058; EC-1059; EC-1060; EC-1061; EC-1062; EC-1063; EC-1064; EC-1065; EC-1066; EC-1067; EC-1068; EC-1069; EC-1070; EC-1071; EC-1072; EC-1073; EC-1074; EC-1075; EC-1076; EC-1077; EC-1078; EC-1079; EC-1080; EC-1081; EC-1082; EC-1083; EC-1084; EC-1085; EC-1086; EC-1087; EC-1088; EC-1089; EC-1090; EC-1091; EC-1092; EC-1093; EC-1094; EC-1095; EC-1096; EC-1097; EC-1098; EC-1099; EC-1100; EC-1101; EC-1102; EC-1103; EC-1104; EC-1105; EC-1106; EC-1107; EC-1108; EC-1109; EC-1110; EC-1111; EC-1112; EC-1113; EC-1114; EC-1115; EC-1116; EC-1117; EC-1118; EC-1119; EC-1120; EC-1121; EC-1122; EC-1123; EC-1124; EC-1125; EC-1126; EC-1127; EC-1128; EC-1129; EC-1130; EC-1131; EC-1132; EC-1133; EC-1134; EC-1135; EC-1136; EC-1137; EC-1138; EC-1139; EC-1140; EC-1141; EC-1142; EC-1143; EC-1144; EC-1145; EC-1146; EC-1147; EC-1148; EC-1149; EC-1150; EC-1151; EC-1152; EC-1153; EC-1154; EC-1155; EC-1156; EC-1157; EC-1158; EC-1159; EC-1160; EC-1161; EC-1162; EC-1163; EC-1164; EC-1165; EC-1166; EC-1167; EC-1168; EC-1169; EC-1170; EC-1171; EC-1172; EC-1173; EC-1174; EC-1175; EC-1176; EC-1177; EC-1178; EC-1179; EC-1180; EC-1181; EC-1182; EC-1183; EC-1184; EC-1185; EC-1186; EC-1187; EC-1188; EC-1189; EC-1190; EC-1191; EC-1192; EC-1193; EC-1194; EC-1195; EC-1196; EC-1197; EC-1198; EC-1199; EC-1200; EC-1201; EC-1202; EC-1203; EC-1204; EC-1205; EC-1206; EC-1207; EC-1208; EC-1209; EC-1210; EC-1211; EC-1212; EC-1213; EC-1214; EC-1215; EC-1216; EC-1217; EC-1218; EC-1219; EC-1220; EC-1221; EC-1222; EC-1223; EC-1224; EC-1225; EC-1226; EC-1227; EC-1228; EC-1229; EC-1230; EC-1231; EC-1232; EC-1233; EC-1234; EC-1235; EC-1236; EC-1237; EC-1238; EC-1239; EC-1240; EC-1241; EC-1242; EC-1243; EC-1244; EC-1245; EC-1246; EC-1247; EC-1248; EC-1249; EC-1250; EC-1251; EC-1252; EC-1253; EC-1254; EC-1255; EC-1256; EC-1257; EC-1258; EC-1259; EC-1260; EC-1261; EC-1262; EC-1263; EC-1264; EC-1265; EC-1266; EC-1267; EC-1268; EC-1269; EC-1270; EC-1271; EC-1272; EC-1273; EC-1274; EC-1275; EC-1276; EC-1277; EC-1278; EC-1279; EC-1280; EC-1281; EC-1282; EC-1283; EC-1284; EC-1285; EC-1286; EC-1287; EC-1288; EC-1289; EC-1290; EC-1291; EC-1292; EC-1293; EC-1294; EC-1295; EC-1296; EC-1297; EC-1298; EC-1299; EC-1300; EC-1301; EC-1302; EC-1303; EC-1304; EC-1305; EC-1306; EC-1307; EC-1308; EC-1309; EC-1310; EC-1311; EC-1312; EC-1313; EC-1314; EC-1315; EC-1316; EC-1317; EC-1318; EC-1319; EC-1320; EC-1321; EC-1322; EC-1323; EC-1324; EC-1325; EC-1326; EC-1327; EC-1328; EC-1329; EC-1330; EC-1331; EC-1332; EC-1333; EC-1334; EC-1335; EC-1336; EC-1337; EC-1338; EC-1339; EC-1340; EC-1341; EC-1342; EC-1343; EC-1344; EC-1345; EC-1346; EC-1347; EC-1348; EC-1349; EC-1350; EC-1351; EC-1352; EC-1353; EC-1354; EC-1355; EC-1356; EC-1357; EC-1358; EC-1359; EC-1360; EC-1361; EC-1362; EC-1363; EC-1364; EC-1365; EC-1366; EC-1367; EC-1368; EC-1369; EC-1370; EC-1371; EC-1372; EC-1373; EC-1374; EC-1375; EC-1376; EC-1377; EC-1378; EC-1379; EC-1380; EC-1381; EC-1382; EC-1383; EC-1384; EC-1385; EC-1386; EC-1387; EC-1388; EC-1389; EC-1390; EC-1391; EC-1392; EC-1393; EC-1394; EC-1395; EC-1396; EC-1397; EC-1398; EC-1399; EC-1400; EC-1401; EC-1402; EC-1403; EC-1404; EC-1405; EC-1406; EC-1407; EC-1408; EC-1409; EC-1410; EC-1411; EC-1412; EC-1413; EC-1414; EC-1415; EC-1416; EC-1417; EC-1418; EC-1419; EC-1420; EC-1421; EC-1422; EC-1423; EC-1424; EC-1425; EC-1426; EC-1427; EC-1428; EC-1429; EC-1430; EC-1431; EC-1432; EC-1433; EC-1434; EC-1435; EC-1436; EC-1437; EC-1438; EC-1439; EC-1440; EC-1441; EC-1442; EC-1443; EC-1444; EC-1445; EC-1446; EC-1447; EC-1448; EC-1449; EC-1450; EC-1451; EC-1452; EC-1453; EC-1454; EC-1455; EC-1456; EC-1457; EC-1458; EC-1459; EC-1460; EC-1461; EC-1462; EC-1463; EC-1464; EC-1465; EC-1466; EC-1467; EC-1468; EC-1469; EC-1470; EC-1471; EC-1472; EC-1473; EC-1474; EC-1475; EC-1476; EC-1477; EC-1478; EC-1479; EC-1480; EC-1481; EC-1482; EC-1483; EC-1484; EC-1485; EC-1486; EC-1487; EC-1488; EC-1489; EC-1490; EC-1491; EC-1492; EC-1493; EC-1494; EC-1495; EC-1496; EC-1497; EC-1498; EC-1499; EC-1500; EC-1501; EC-1502; EC-1503; EC-1504; EC-1505; EC-1506; EC-1507; EC-1508; EC-1509; EC-1510; EC-1511; EC-1512; EC-1513; EC-1514; EC-1515; EC-1516; EC-1517; EC-1518; EC-1519; EC-1520; EC-1521; EC-1522; EC-1523; EC-1524; EC-1525; EC-1526; EC-1527; EC-1528; EC-1529; EC-1530; EC-1531; EC-1532; EC-1533; EC-1534; EC-1535; EC-1536; EC-1537; EC-1538; EC-1539; EC-1540; EC-1541; EC-1542; EC-1543; EC-1544; EC-1545; EC-1546; EC-1547; EC-1548; EC-1549; EC-1550; EC-1551; EC-1552; EC-1553; EC-1554; EC-1555; EC-1556; EC-1557; EC-1558; EC-1559; EC-1560; EC-1561; EC-1562; EC-1563; EC-1564; EC-1565; EC-1566; EC-1567; EC-1568; EC-1569; EC-1570; EC-1571; EC-1572; EC-1573; EC-1574; EC-1575; EC-1576; EC-1577; EC-1578; EC-1579; EC-1580; EC-1581; EC-1582; EC-1583; EC-1584; EC-1585; EC-1586; EC-1587; EC-1588; EC-1589; EC-1590; EC-1591; EC-1592; EC-1593; EC-1594; EC-1595; EC-1596; EC-1597; EC-1598; EC-1599; EC-1600; EC-1601; EC-1602; EC-1603; EC-1604; EC-1605; EC-1606; EC-1607; EC-1608; EC-1609; EC-1610; EC-1611; EC-1612; EC-1613; EC-1614; EC-1615; EC-1616; EC-1617; EC-1618; EC-1619; EC-1620; EC-1621; EC-1622; EC-1623; EC-1624; EC-1625; EC-1626; EC-1627; EC-1628; EC-1629; EC-1630; EC-1631; EC-1632; EC-1633; EC-1634; EC-1635; EC-1636; EC-1637; EC-1638; EC-1639; EC-1640; EC-1641; EC-1642; EC-1643; EC-1644; EC-1645; EC-1