

# LIN RESIDENCE

# LOS ALTOS, CALIFORNIA



## **ZONING COMPLIANCE**

|   | Existing  | Proposed  | Allowed / Required         |
|---|---|---|----------------------------|
| LOT COVERAGE:  Land area covered by all structures that are over 6 feet in height | 1,770 Sq.Ft.<br>(15.85%)  | 3,027 Sq.Ft.<br>(27.11%)  | 3,350 Sq.Ft.<br>(30.00%)   |
| FLOOR AREA:  Measured to the outside surface of exterior walls                    | 1st Floor: 1,770 Sq.Ft. 2nd Floor: Total: 1,770 Sq.Ft. (15.85%) | 1st Floor: 2,530 Sq.Ft.<br>2nd Floor: 1,336 Sq.Ft.<br>Total: 3,866 Sq.Ft.<br>(34.63%) | 3,867 Sq.Ft.<br>(34.64%)   |
| SETBACKS:   |   |   |                            |
| FRONT   | 24'-11"   | 25'-0 1/2"  | 25'-0"                     |
| REAR  | 87'-9"  | 65'-11 1/4"   | 25'-0"                     |
| SIDE - WEST (1st/2nd)   | 8'-2 3/4" / N/A   | 8'-9" / 14'-1"  | 6'-6 13/16" / 14'-0 13/16" |
| SIDE - EAST (1st/2nd)   | 7'-9 1/4" / N/A   | 7'-0 1/4" / 15'-0 3/4"  | 6'-6 13/16" / 14'-0 13/16" |
| HEIGHT:   | +/- 16'-0"  | +/- 23'-0"  | 27'-0"                     |

## SQUARE FOOTAGE BREAKDOWN

|  | Existing     | Change in    | <b>Total Proposed</b> |  |  |
|--|--------------|--------------|-----------------------|--|--|
| HABITABLE LIVING AREA: Includes habitable basement area          | 1,289 Sq.Ft. | 3,635 Sq.Ft. | 4,924 Sq.Ft.          |  |  |
| NON-HABITABLE AREA:  Does not include porches or open structures | 481 Sq.Ft.   | 1 Sq.Ft.     | 482 Sq.Ft.            |  |  |

## LOT CALCULATIONS

| NET LOT AREA:  |   | 11,165 Sq.Ft.                   |          |
|--|---|---------------------------------|----------|
| FRONT YARD HARDSCAPE ARE Hardscape area in the front yard setback shall not ex |   | 737 Sq.Ft. (45%)                |          |
|  | Total hardscape area (existing and proposed): |                                 | 5,935 SF |
| LANDSCAPE BREAKDOWN:   | Existing softscate (undisturbed) area:        |                                 | 1,100 SF |
| Em (B) OTH E BREFIRD O WIY.  | New softscape (new or                         | replaced landscaping) area:     | 4,130 SF |
|  | Sum of all three should                       | d equal the site's net lot area |          |

NOTICE: THIS SET HAS BEEN PRODUCED FOR THE PURPOSE OF OBTAINING A BUILDING PERMIT. THESE DRAWINGS ARE NOT INTENDED TO BE ACCURATE "AS-BUILTS," NOR INCLUSIVE OF ALL DETAILS, DRAWINGS, MATERIAL SPECIFICATIONS, ETC. NEEDED TO ADDRESS ALL POSSIBLE CONSTRUCTION ISSUES. THE DESIGNER HAS PREPARED THESE DOCUMENTS ONLY FOR THE IMPROVEMENTS AND CONSTRUCTION NOTED, INDICATED OR SHOWN AS "NEW" WORK AND ASSUMES NO RESPONSIBILITY FOR ALL OTHER CONSTRUCTION, MATERIALS OR EQUIPMENT NOTED, INDICATED OR SHOWN AS "EXISTING" OR AS PROVIDED "BY OTHERS".

THE DESIGNER HAS NOT BEEN RETAINED TO SURVEY FOR OR OTHERWISE DISCOVER THE PRESENCE OF HAZARDOUS MATERIALS INCLUDING BUT NOT LIMITED TO ASBESTOS. ASBESTOS PRODUCTS. PCB.S. OR OTHER TOXIC SUBSTANCES.

THE DESIGNER IS NOT RESPONSIBLE FOR THE HANDLING, REMOVAL OR DISPOSAL OF OR EXPOSURE OR PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE. OWNER HEREBY WARRANTS THAT IF IT KNOWS OR HAS ANY REASON TO KNOW OR HAS ANY REASON TO ASSUME OR SUSPECT THAT HAZARDOUS MATERIALS EXIST AT THE PROJECT SITE, THAT IT WILL INFORM THE ARCHITECT AND THAT OWNER WILL CAUSE SUCH ITEMS TO BE REMOVED OR TREATED BY A PROFESSIONAL AND LICENSED ASBESTOS ABATEMENT CONTRACTOR IN A MANNER PRESCRIBED BY ALL APPLICABLE CODES AND REGULATIONS.

## GENERAL PROJECT INFORMATION

Address: 1142 LISA LANE, LOS ALTOS, CA 94024

Zoning District: R-10

Decupancy Type: R3, U

Occupancy Type: R3, U

Construction Type: V-B

For Code Compliance: 2016 CALIFORNIA CODES (CBC, CRC, CEC, CMC, CPC) 2016 CALIFORNIA GREEN BUILDING STANDARD CODE (CALGreen) 2016 CALIFORNIA FIRE CODE 2016 CALIFORNIA ENERGY CODE

## PROJECT DESCRIPTION

## NEW HOUSE:

- REMOVE ALL EXISTING STRUCTURES.
- BUILD NEW, 3,866 Sq.Ft., TWO-STORY RESIDENCE WITH A BASEMENT, WITH A TOTAL OF FIVE BEDROOMS AND FOUR AND A HALF BATHROOMS.
- FIRST FLOOR TO INCLUDE AN ENTRY FOYER, LIVING ROOM, DINING ROOM, KITCHEN WITH NOOK AREA, FAMILY ROOM, A BEDROOM WITH PRIVATE BATHROOM, POWDER ROOM, MUD ROOM, PANTRY, ATTACHED GARAGE AND A COVERED LOGGIA.
- SECOND FLOOR TO INCLUDE A MASTER SUITE WITH PRIVATE BATHROOM AND WALK-IN CLOSET, TWO ADDITIONAL BEDROOMS, ONE BATHROOM AND A LAUNDRY ROOM.
- BASEMENT TO INCLUDE AN OPEN GAME ROOM, WORKOUT ROOM STORAGE ROOM, KITCHENETTE AND ONE BATHROOM.
- NEW HOUSE TO INCLUDE AND ELEVATOR CONNETING ALL THREE LEVELS

## PROJECT SIZE

1st FLOOR 2,530 SF 2nd FLOOR 1,336 SF BASEMENT 1,540 SF

## PROJECT TEAM

OWNERS
JAMES LIN
1142 LISA LANE
LOS ALTOS, CA 94024
TEL: (408) 253-7388
timeline@jameslin.name

DESIGNERS
TIMELINE DESIGN
14401 BIG BASIN WAY
SARATOGA CA, 95070
TEL: (408) 913-9262
FAX: (408) 741-3007
ATTN: OPE TANI

otani@tldesign.net

GEOTECHNICAL
EARTH SYSTEMS PACIFIC
48511 WARM SPRINGS BLVD., SUITE 210
FREMONT CA, 94539
TEL: (510) 353-3833
FAX: (888) 567-4292
ATTN: OKSAN GOUTHIER
ogouthier@earthsystems.com

CIVIL / SURVEYORS

LEA & BRAZE ENGINEERING, INC.
2495 INDUSTRIAL PRKY WEST
HAYWARD CA, 94545
TEL: (510) 887-4086 x.163
ATTN: DENA YANCY
dyancy@leabraze.com

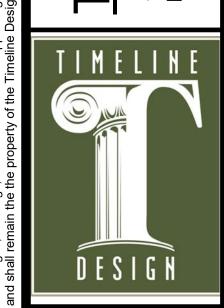
LANDSCAPE
GRIMES NATURAL LANDSCAPE
28010 ELENA ROAD
LOS ALTOS HILLS CA, 94022
TEL: (650) 948-6326
ATTN: STEVE GRIMES
steve@grimesnaturallandscape.com

ARBORIST

MCCLENAHAN CONSULTING, LLC
1 ARASTRADERO ROAD
PORTOLLA VALLEY CA, 94028
TEL: (650) 326-8781
FAX: (650) 854-1267
ATTN: JOHN MCCLENAHAN
john@spmcclenahan.com

| Design Review 7.26.2017 Planning Commission 10.18.2017 |
|--|
|  |

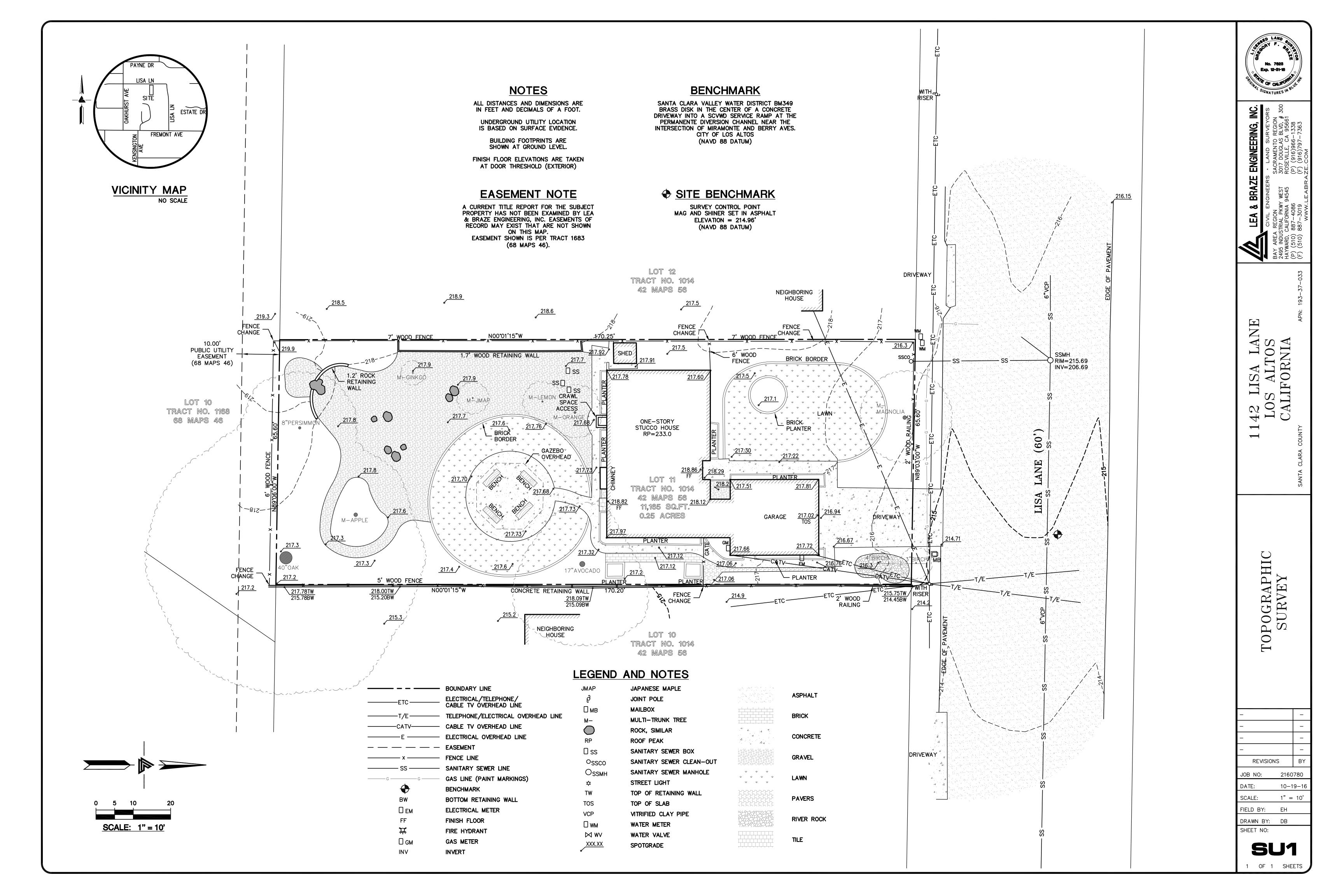
| A0.1 | COVER SHEET                        | • | • |  |  |
|------|------------------------------------|---|---|--|--|
| SU1  | SURVEY                             | • | • |  |  |
| C1.0 | CIVIL TITLE SHEET                  | • | • |  |  |
| C2.0 | GRADING AND DRAINAGE PLAN          | • | • |  |  |
| C3.0 | UTILITY PLAN                       | • | • |  |  |
| C4.0 | DETAILS                            | • | • |  |  |
| C4.1 | DETAILS                            | • | • |  |  |
| C4.2 | DETAILS                            | • | • |  |  |
| C5.0 | GRADING SPECIFICATIONS             | • | • |  |  |
| ER-1 | EROSION CONTROL PLAN               | • | • |  |  |
| ER-2 | EROSION CONTROL DETAILS            | • | • |  |  |
| SW-1 | BLUEPRINT FOR A CLEAN BAY          | • | • |  |  |
| A0.2 | AREA CALCULATION DIAGRAMS          | • | • |  |  |
| A0.3 | CONTEXT MAP AND EXISTING ELEVATION | • | • |  |  |
| A1.1 | SITE PLAN                          | • | • |  |  |
| A2.0 | BASEMENT PLAN                      | • | • |  |  |
| A2.1 | PROPOSED FIRST FLOOR PLAN          | • | • |  |  |
| A2.2 | PROPOSED SECOND FLOOR PLAN         | • | • |  |  |
| A2.3 | PROPOSED ROOF PLAN                 | • | • |  |  |
| A3.1 | EXTERIOR ELEVATIONS                | • | • |  |  |
| A3.2 | EXTERIOR ELEVATIONS                | • | • |  |  |
| A4.1 | BUILDING SECTIONS                  | • | • |  |  |
| A9.1 | EXTERIOR VIEWS                     | • | • |  |  |
| L1   | PLANTING PLAN                      | • | • |  |  |
| L2   | TREE PROTECTION PLAN               | • | • |  |  |



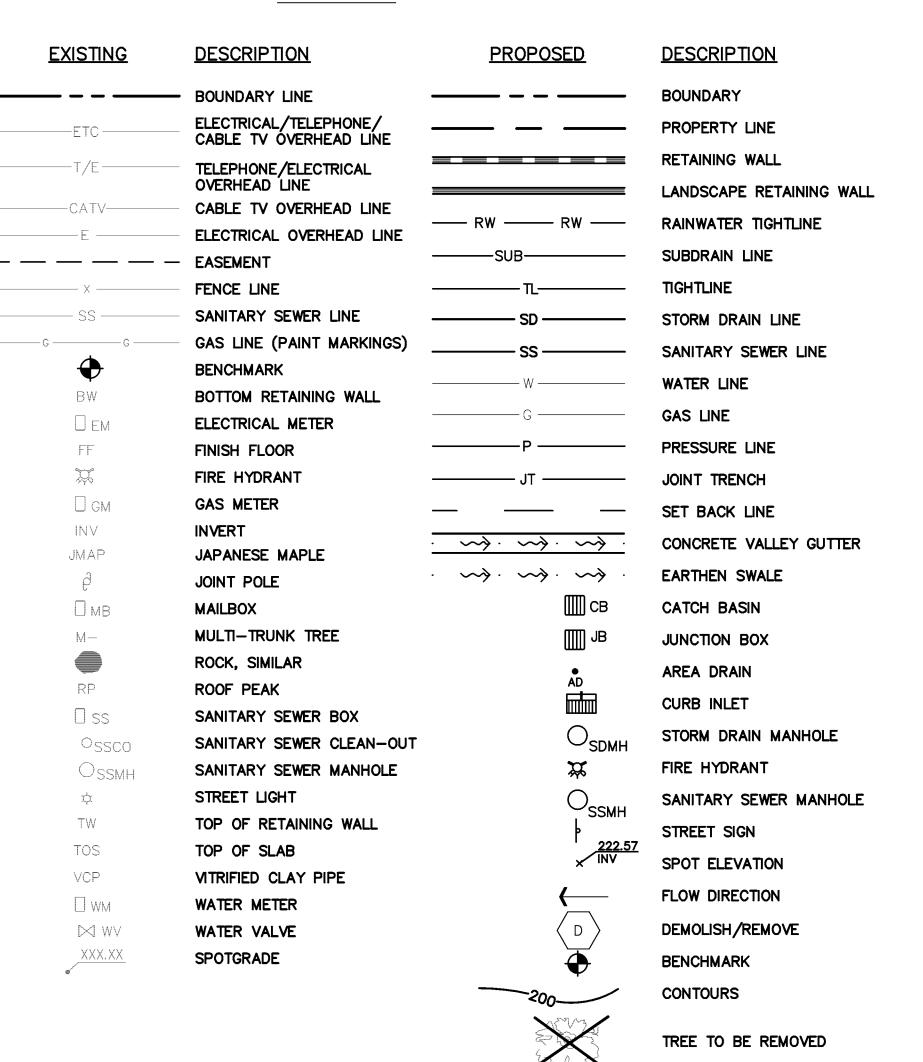
A.P.N. 193-37-033

A0.1

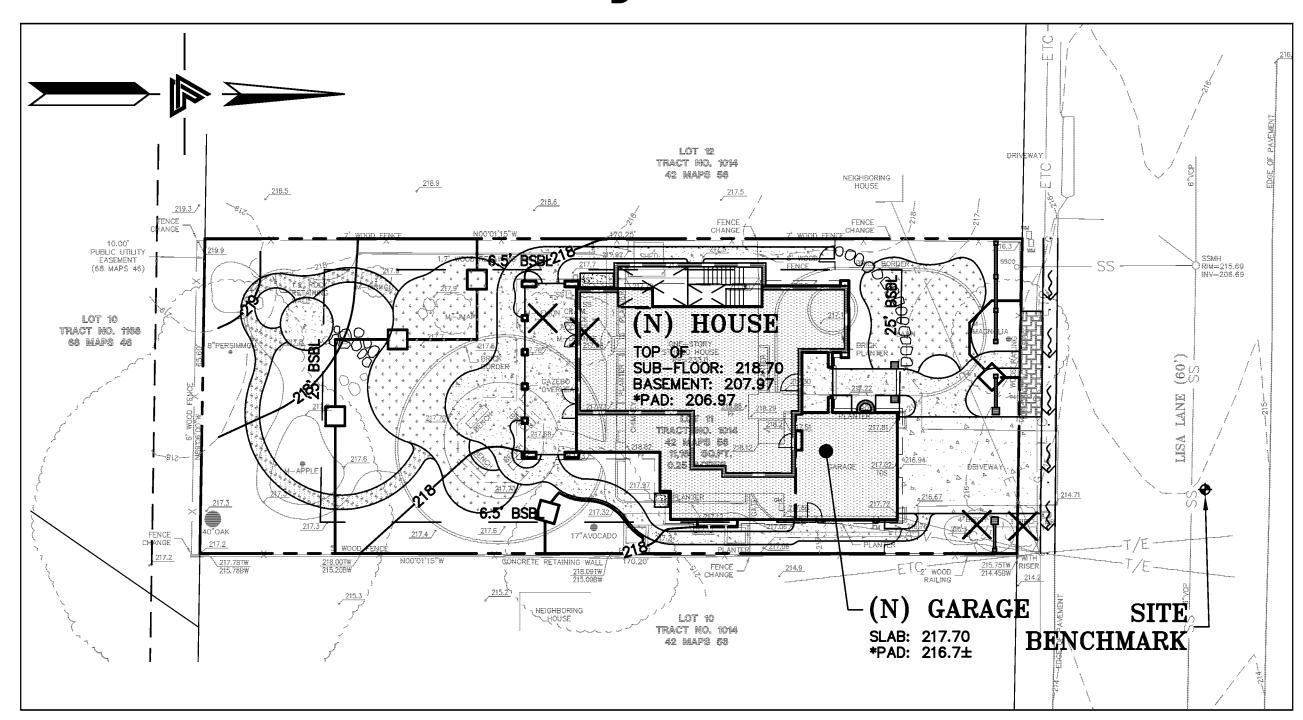
COVER SHEET



## LEGEND



# LIN RESIDENCE 1142 LISA LANE LOS ALTOS, CALIFORNIA



## KEY MAP 1" = 20'

## **ABBREVIATIONS**

| AB       | ACCRECATE DAGE  | MAX         | MAVIMINA                   |
|----------|---|-------------|----------------------------|
| AC       | AGGREGATE BASE ASPHALT CONCRETE   |             | MAXIMUM                    |
| ACC      | ACCESSIBLE  | MH          | MANHOLE                    |
|          |   | MIN         | MINIMUM                    |
| AD       | AREA DRAIN  | MON.        | MONUMENT                   |
| BC       | BEGINNING OF CURVE<br>BEARING & DISTANCE  | (N)         | NEW                        |
| B & D    | BEARING & DISTANCE  | ŇŎ.         | NUMBER                     |
| BM       | BENCHMARK   | NTS         | NOT TO SCALE               |
| BW/FG    | BOTTOM OF WALL/FINISH   | O.C.        | ON CENTER                  |
| GRÁDE    |   | 0/          | OVER                       |
| CB       | CATCH BASIN<br>CURB AND GUTTER  | (DA)        | PLANTING AREA              |
| C & G    | CURB AND GUTTER   | (PA)<br>PED | PEDESTRIAN                 |
| Ę.       | CENTER LINE   | PIV         |                            |
| ČPP      | CORRUGATED PLASTIC PIPE   | PIV         | POST INDICATOR VALVE       |
| OFF      | (CHOOTH INTERIOR)   | P22         | PUBLIC SERVICES EASEMENT   |
| 00       | (SMOOTH INTERIOR) CLEANOUT  | <u>"L</u>   | PROPERTY LINE              |
| CO       | CLEANOUT  | PP<br>PP    | POWER POLE                 |
| COTG     | CLEANOUT TO GRADE   | PUE<br>PVC  | PUBLIC UTILITY EASEMENT    |
| CONC     | CONCRETE  | PVC         | POLYVINYL CHLORIDE         |
| CONST    | CONSTRUCT or —TION  | R           | RADIUS                     |
| CONC COR | CONCRETE CORNER   | RCP         | REINFORCED CONCRETE PIPE   |
| CY       | CUBIC YARD  | RIM         | RIM ELEVATION              |
| D        | DIAMETER  | RW          | RAINWATER                  |
| DI       | CONCRETE CONSTRUCT or —TION CONCRETE CORNER CUBIC YARD DIAMETER DROP INLET DUCTILE IRON PIPE FACH | R/W         | RIGHT OF WAY               |
| DIP      | DUCTILE IRON PIPE   | S'          | SLOPE                      |
| EA       | EACH  | S.A.D.      | SEE ARCHITECTURAL DRAWINGS |
| EC       | END OF CURVE  | SAN         | SANITARY                   |
| EG       | EXISTING GRADE  | SD          |                            |
| EL       | ELEVATIONS  |             | STORM DRAIN                |
| EP       | FDGE OF PAVEMENT  | SDMH        | STORM DRAIN MANHOLE        |
| EQ       | EDGE OF PAVEMENT EQUIPMENT  | SHT         | SHEET                      |
| EW       | EACH WAY  | S.L.D.      | SEE LANDSCAPE DRAWNGS      |
|          |   | SPEC        | SPECIFICATION              |
| (E)      | EXISTING  | SS          | SANITARY SEWER             |
| FC       | FACE OF CURB  | SSCO        | SANITARY SEWER CLEANOUT    |
| FF       | FINISHED FLOOR  |             | SANITARY SEWER MANHOLE     |
| FG       | FINISHED GRADE  | ST.         | STREET                     |
| FH       | FIRE HYDRANT  | STA         | STATION                    |
| FL       | FLOW LINE   | STD         | STANDARD                   |
| FS       | FINISHED SURFACE  | STRUCT      | STRUCTURAL                 |
| G        | GAS   | SUB-F       | TOP OF SUB-FLOOR           |
| GA       | GAGE OR GAUGE   | T           | TELEPHONE                  |
| GB       | GRADE BREAK   | TC          | TOP OF CURB                |
| HDPE     | HIGH DENSITY CORRUGATED   | TEMP        | TEMPORARY                  |
|          | POLYETHYLENE PIPE   | TP          | TOP OF PAVEMENT            |
| HORIZ    | HORIZONTAL  | TS          | TOP OF SURFACE             |
| HI PT    | HIGH POINT  | TW/FG       | TOP OF WALL/FINISH GRADE   |
| H&T      | HUB & TACK  |             | TYPICAL                    |
| ID       | INSIDE DIAMETER   | TYP         |                            |
| inv      | INVERT ELEVATION  | VC<br>VCD   | VERTICAL CURVE             |
| JB       | JUNCTION BOX  | VCP         | VITRIFIED CLAY PIPE        |
| JT       | JOINT TRENCH  | VERT        | VERTICAL                   |
| JP       | JOINT TRENCH<br>JOINT UTILITY POLE  | W/          | WITH                       |
| L        |   | W, WL       | WATER LINE                 |
|          | LENGTH  | WM          | WATER METER                |
| LNDG     | LANDING   | WWF         | WELDED WIRE FABRIC         |
| LF       | LINEAR FEET   |             |                            |

## **NOTES**

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)

## **BENCHMARK**

SANTA CLARA VALLEY WATER DISTRICT BM349 A CURRENT TITLE REPORT FOR THE SUBJECT BRASS DISK IN THE CENTER OF A CONCRETE DRIVEWAY INTO A SCVWD SERVICE RAMP AT THE & BRAZE ENGINEERING, INC. EASEMENTS OF PERMANENTE DIVERSION CHANNEL NEAR THE INTERSECTION OF MIRAMONTE AND BERRY AVES. CITY OF LOS ALTOS (NAVD 88 DATUM)

## **EASEMENT NOTE**

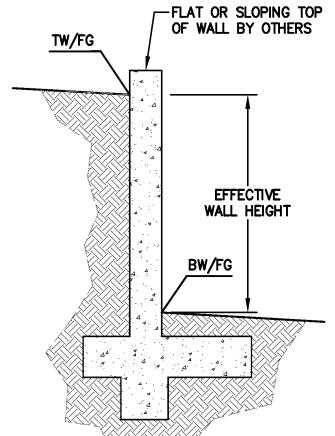
RECORD MAY EXIST THAT ARE NOT SHOWN ON THIS MAP. EASEMENT SHOWN IS PER TRACT 1683 (68 MAPS 46).

## PROPERTY HAS NOT BEEN EXAMINED BY LEA + SITE BENCHMARK

SURVEY CONTROL POINT MAG AND SHINER SET IN ASPHALT ELEVATION = 214.96(NAVD 88 DATUM)

## RETAINING WALL NOTES

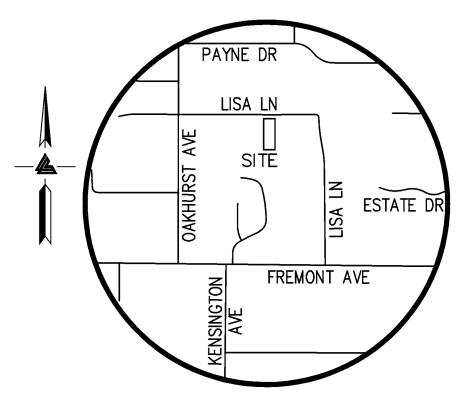
- 1. TW/FG REPRESENTS FINISHED EARTHEN GRADE OR PAVEMENT ELÉVATION AT TOP OF WALL, NOT ACTUAL TOP OF WALL MATERIAL. BW/FG REPRESENTS FINISH EARTHEN GRADE OR PAVEMENT ELÉVATION AT BOTTOM OF WALL NOT INCLUDING FILL FOUNDATION. GRADES INDICATED ON THESE PLANS REFER TO THE FINISHED GRADES ADJACENT TO THE RETAINING WALL, NOT INCLUDING FOOTING, FREEBOARD, ETC.
- 2. DIMENSIONS SHOWN IN BRACKETS SHOWN AS [X.X'] DENOTE THE EFFECTIVE WALL HEIGHT ONLY. THE ACTUAL WALL HEIGHT AND DEPTH MAY DIFFER DUE TO CONSTRUCTION REQUIREMENTS.
- 3. REFER TO SPECIFIC WALL CONSTRUCTION DETAIL FOR STRUCTURAL ELEMENTS, FREEBOARD, AND EMBEDMENT.
- 4. REFER TO ARCHITECTURAL, LANDSCAPE ARCHITECTURE, AND/OR STRUCTURAL PLANS FOR DETAILS, WALL ELEVATIONS, SUBDRAINAGE, WATERPROOFING, FINISHES, COLORS, STEEL REINFORCING, MATERIALS, ETC. PROVIDE CLIPS OR OTHER MEANS OF SECURING FINISH MATERIALS AS NECESSARY (WET SET INTO THE WALL).
- 5. ALL RETAINING WALLS SHOULD HAVE A BACK-OF-WALL SUB-SURFACE DRAINAGE SYSTEM INCLUDING WEEPHOLES TO PREVENT HYDROSTATIC PRESSURE.
- 6. SEE DETAIL SHEET FOR SPECIFIC INFORMATION.
- 7. PROVIDE GUARDRAIL (WHERE APPLICABLE AND DESIGNED BY OTHERS) AS REQUIRED FOR GRADE SEPARATION OF 30 INCHES OR MORE MEASURED 5' HORIZONTALLY FROM FACE OF WALL, PER CBC.



## ESTIMATED EARTHWORK QUANTITIES

| CUBIC YARDS | WITHIN BUILDING<br>FOOTPRINT | OUTSIDE<br>BUILDING<br>FOOTPRINT | TOTAL CUBIC<br>YARDS |
|-------------|------------------------------|----------------------------------|----------------------|
| СИТ         | 725                          | 0                                | 725                  |
| FILL        | 0                            | 50                               | 50                   |
| EXPORT      |                              |                                  | 675                  |
|             |                              |                                  |                      |

GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION. TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY QUANTITIES.



## VICINITY MAP NO SCALE

## OWNER'S INFORMATION

1142 LISA LANE LOS ALTOS, CA 94024

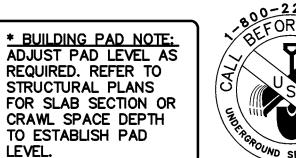
APN: 193-37-033

## REFERENCES

- THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO: TOPOGRAPHIC SURVEY BY LEA & BRAZE ENGINEERING, INC. ENTITLED; "TOPOGRAPHIC SURVEY" 1142 LISA LANE LOS ALTOS, CA 94024 DATED: 10-19-16
- 2. SITE PLAN BY TIMELINE DESIGN ENTITLED: "LIN RESIDENCE" 1142 LISA LANE LOS ALTOS, CA 94024 DATED: 10-18-17
- 3. SOIL REPORT BY XXX. ENTITLED: "GEOTECHNICAL ENGINEERING STUDY" 1142 LISA LANE LOS ALTOS, CA 94024 DATED: DECEMBER 19, 2016 JOB# SH-13153-SA
- 4. LANDSCAPE PLAN BY GRIMES NATURAL LANDSCAPE, ENTITLED "LIN RESIDENCE" 1142 LISA LANE LOS ALTOS, CA 94024 DATED: 6-9-17

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

**NOTE:** FOR CONSTRUCTION STAKING **SCHEDULING OR QUOTATIONS** PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com



## SHEET INDEX

TITLE SHEET C - 1.0C - 2.0GRADING & DRAINAGE PLAN C - 3.0UTILITY PLAN

C - 4.0DETAILS C - 4.1**DETAILS** C - 4.2**DETAILS** 

SW-1

GRADING SPECIFICATIONS C - 5.0ER-1 **EROSION CONTROL** ER-2EROSION CONTROL DETAILS

BLUEPRINT FOR A CLEANBAY

01 OF 10 SHEETS

RE

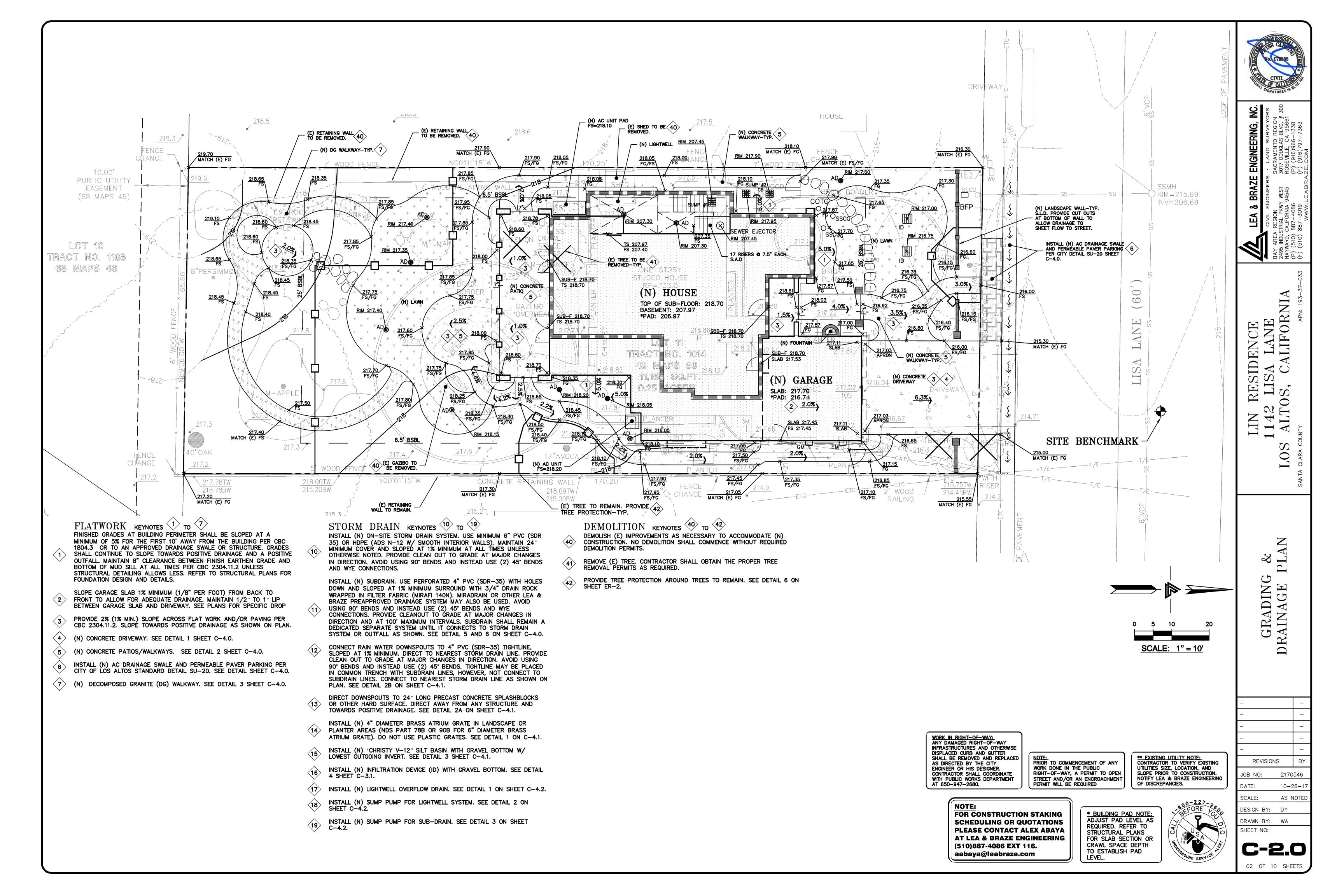
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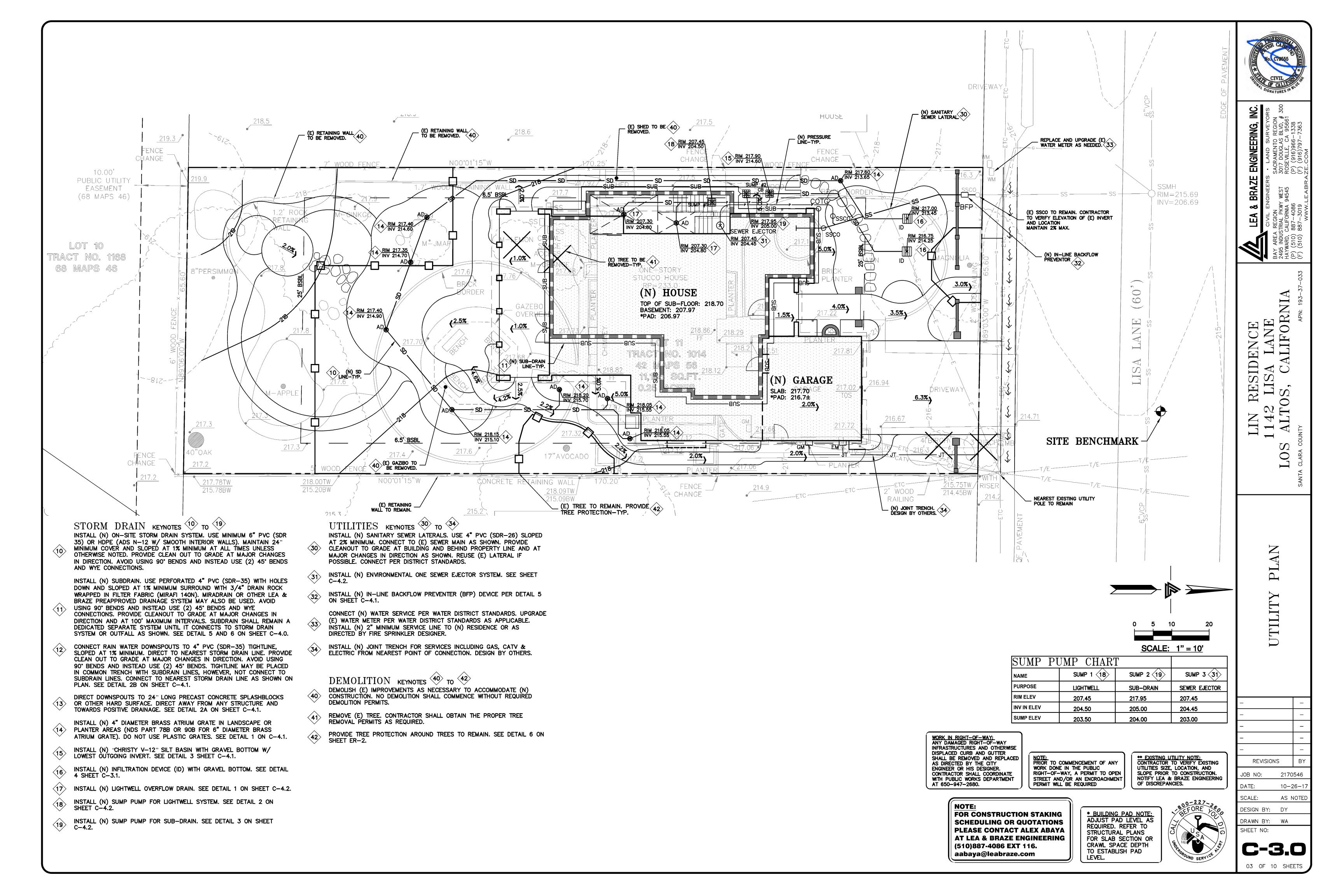
REVISIONS 2170546

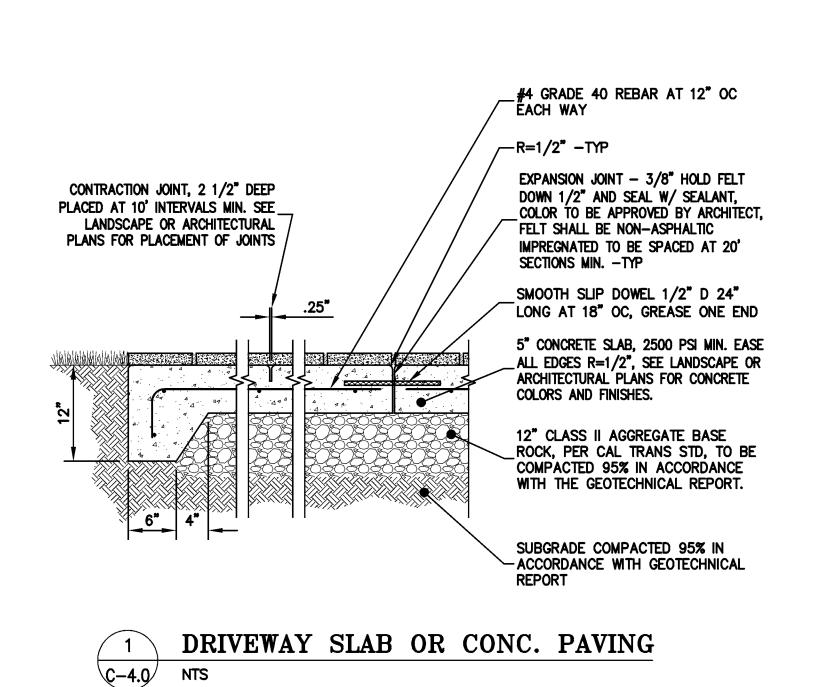
JOB NO: DATE: 10-26-17 AS NOTED SCALE: DESIGN BY: DY

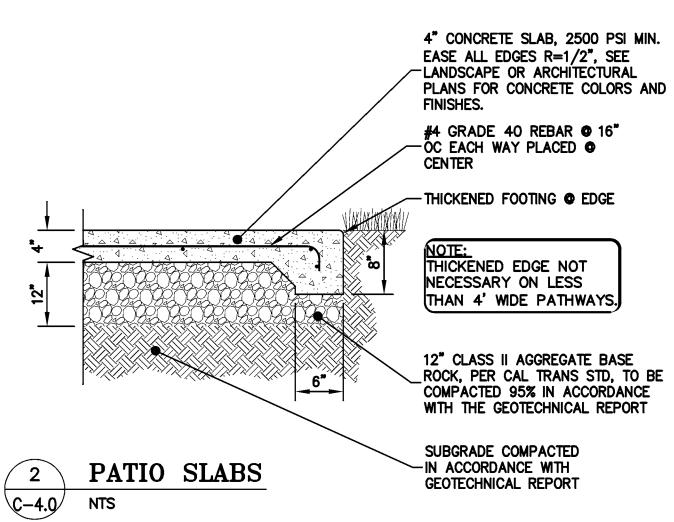
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SHEET NO:









NOTE: 1. SUBGRADE TO BE

C-4.0

COMPACTED PER

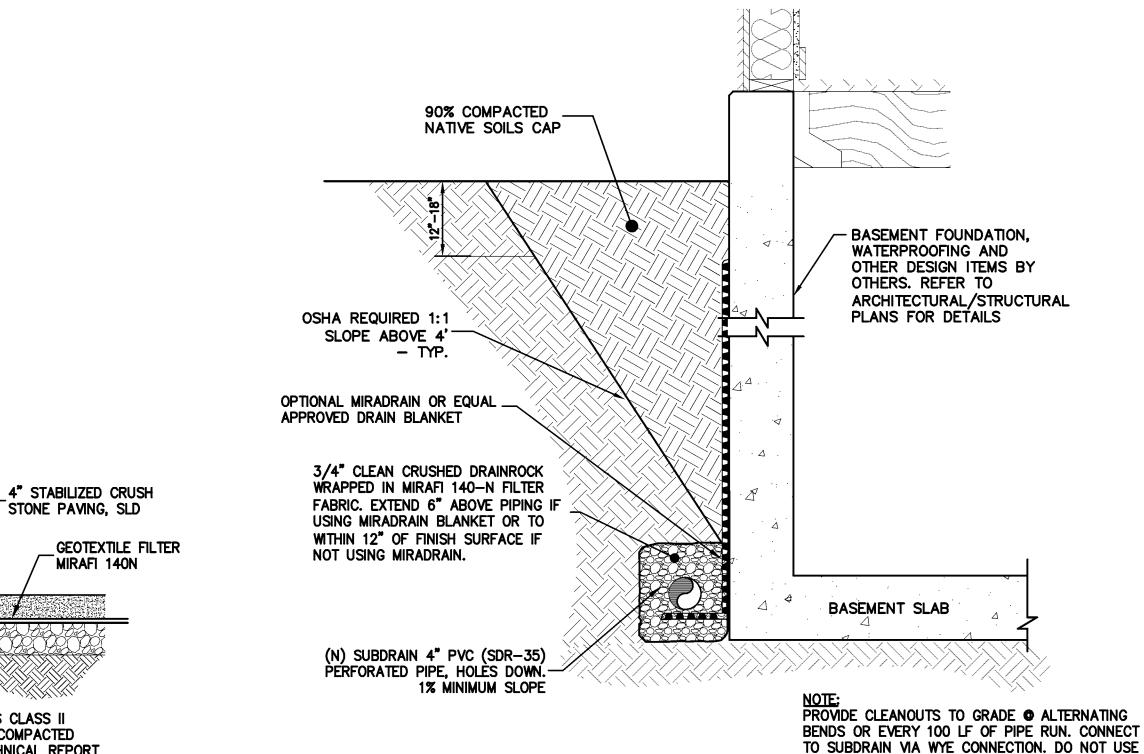
GEOTECHNICAL REPORT

6" CALTRANS CLASS II

-BASE ROCK COMPACTED

DECOMPOSED GRANITE (DG)

PER GEOTECHNICAL REPORT



C-4.0 NTS

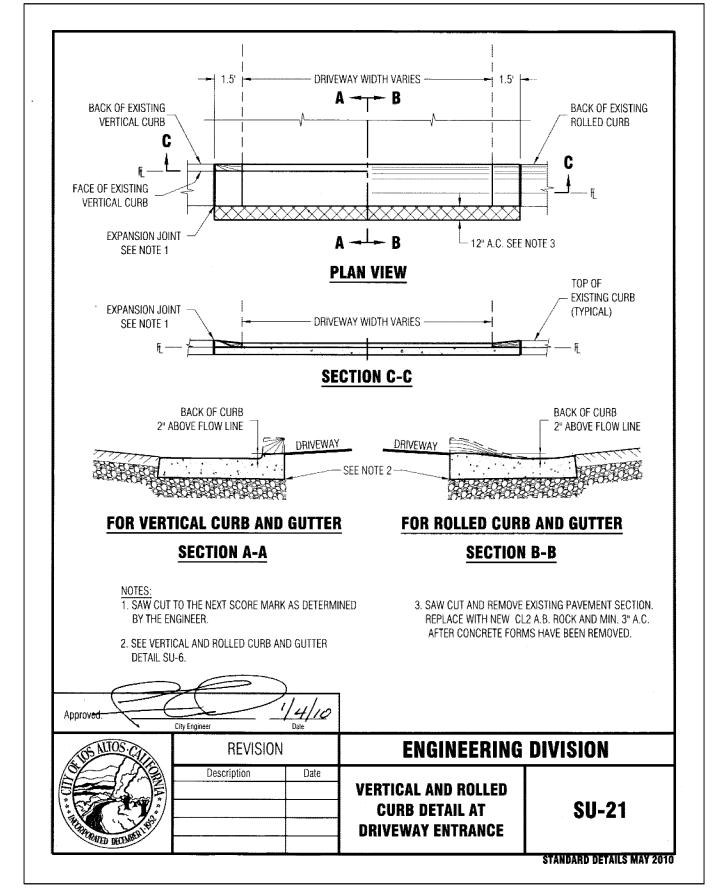
BASEMENT SUBDRAIN

DRIVEWAY (A.C., CONCRETE, \* PERVIÓUS PAVERS OR PAVERS) OR COMPACTABLE PERVIOUS MATERIAL ⊗NEW A.C. - ĎŘAINAGE SWALE S EDGE OF STREET PAVEMENT OF STREET OF STREE.

PAVEMENT

PAVEMENT EDGE OF STREET PAVEMENT lophNEW A.C . - DRAINAGE SWALElphaPERVIOUS PAVERS OR COMPACTABLE PERVIOUS MATERIAL DRIVEWAY (A.C., CONCRETE, OR PAVERS) 10' MIN --**PLAN VIEW** A.C. ASPHALT CONCRETE 1. IF THE STREET PAVEMENT WIDTH IS 36 FEET OR GREATER, P PROPERTY LINE NO SHOULDER IMPROVEMENTS ARE PERMITTED WITH € CENTERLINE THE EXCEPTION OF LANDSCAPING AND IRRIGATION. 2. POLICY DOES NOT APPLY FOR REPAIRS, RESEALING, AND WEXISTING OR NEW LANDSCAPING REPAVING IN KIND OF EXISTING SHOULDERS, NOR DOES IT REQUIRE THAT SHOULDERS MUST BE PAVED. STREET TREE (NEW OR EXISTING) 3. THE SHOULDER OF A NEWLY CONSTRUCTED OR 50% OR GREATER NEW PERMEABLE SURFACE SQUARE FOOTAGE REMODELED RESIDENCE IS REQUIRED TO BE BROUGHT INTO COMPLIANCE WITH THIS POLICY. NEW A.C. - DRAINAGE SWALE **ENGINEERING DIVISION** REVISION **SHOULDER PAVING SU-20** POLICY

TANDARD DETAILS MAY 2010



SHOULDER PAVING POLICY C-4.0 NTS



IDENCE A LANE CALIFORNIA RESL REVISIONS JOB NO: 2170546 DATE: 10-26-17

NTS

SCALE:

DESIGN BY: DY

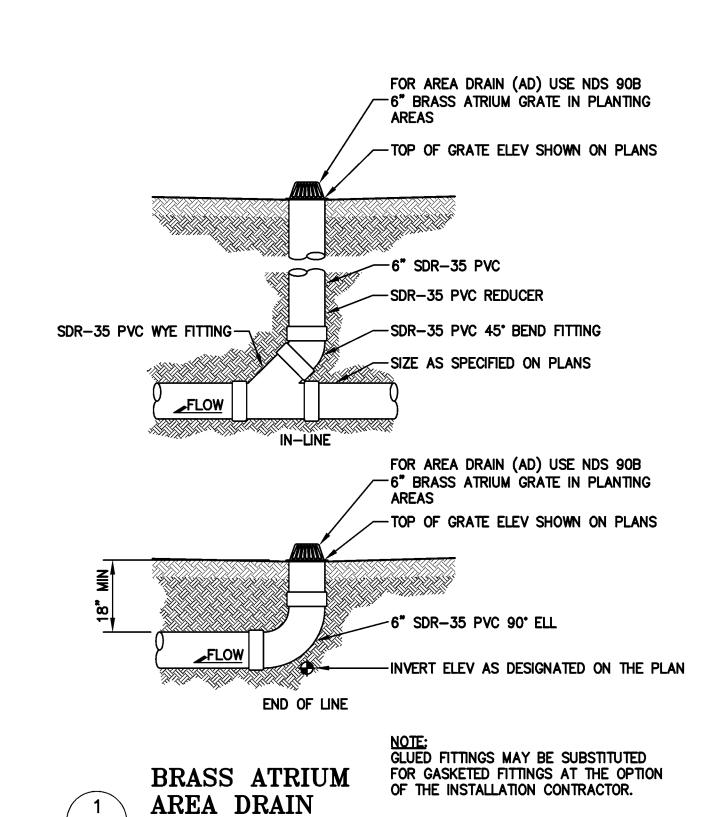
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04 OF 10 SHEETS

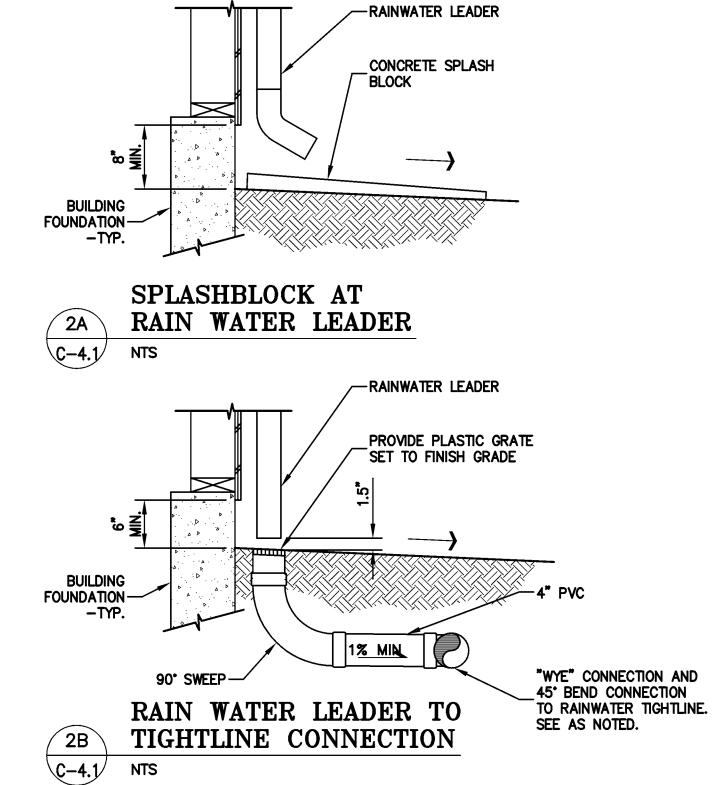
SHEET NO:

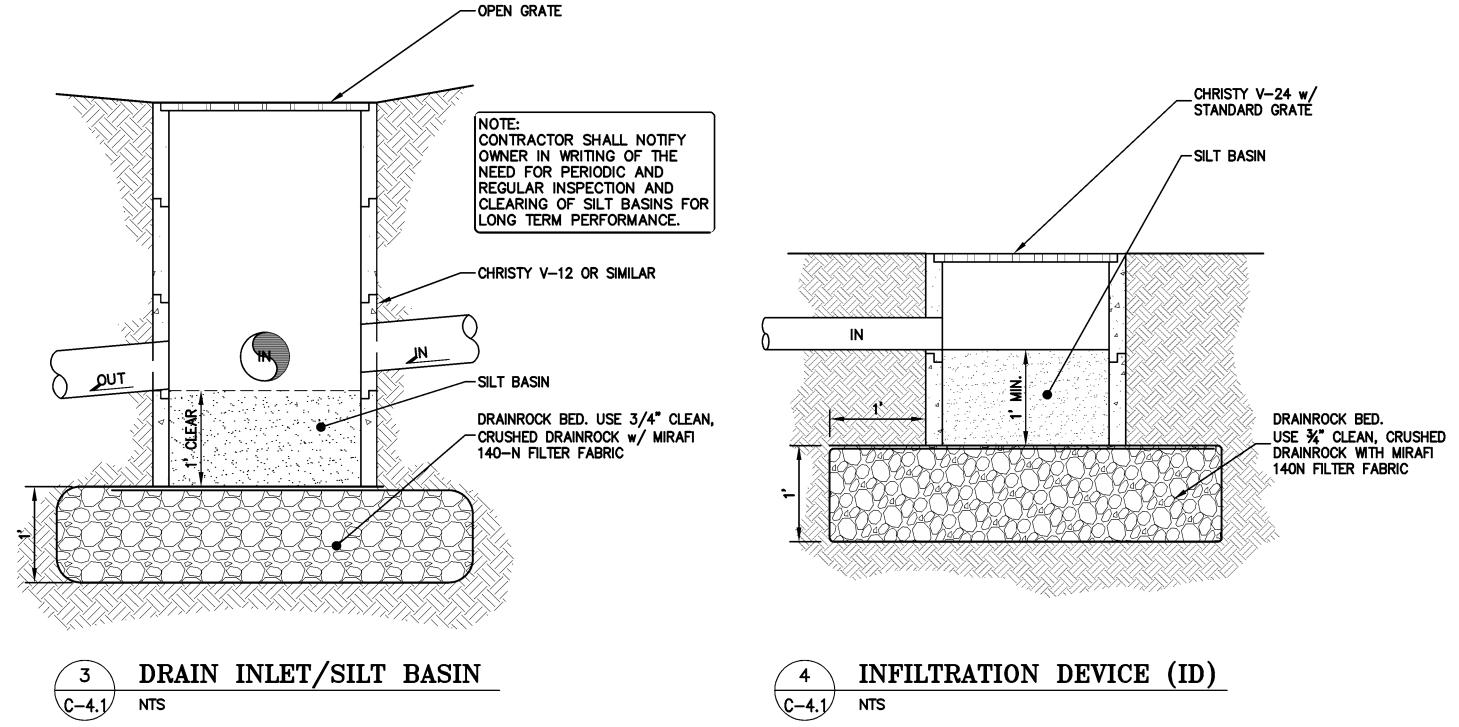
90° BENDS. USE 90° SWEEP OR TWO 45° BENDS TO

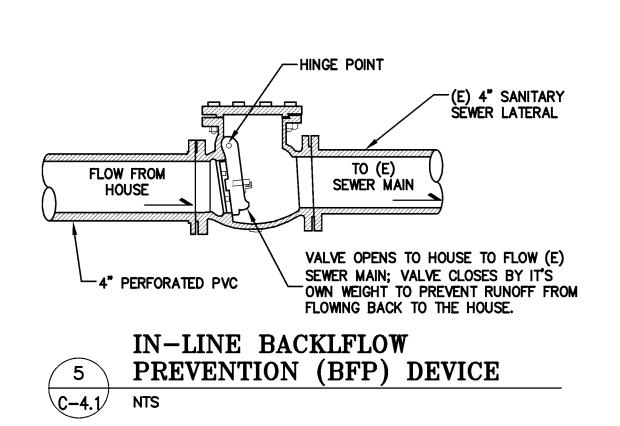
ALLOW FOR EASY CLEANOUT ACCESS.

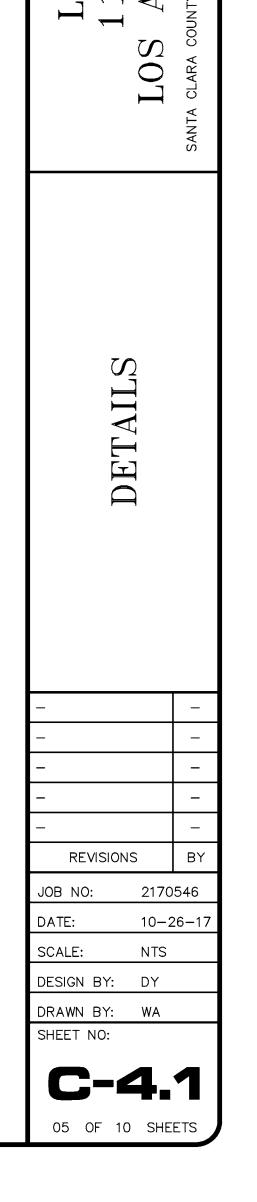


C-4.1

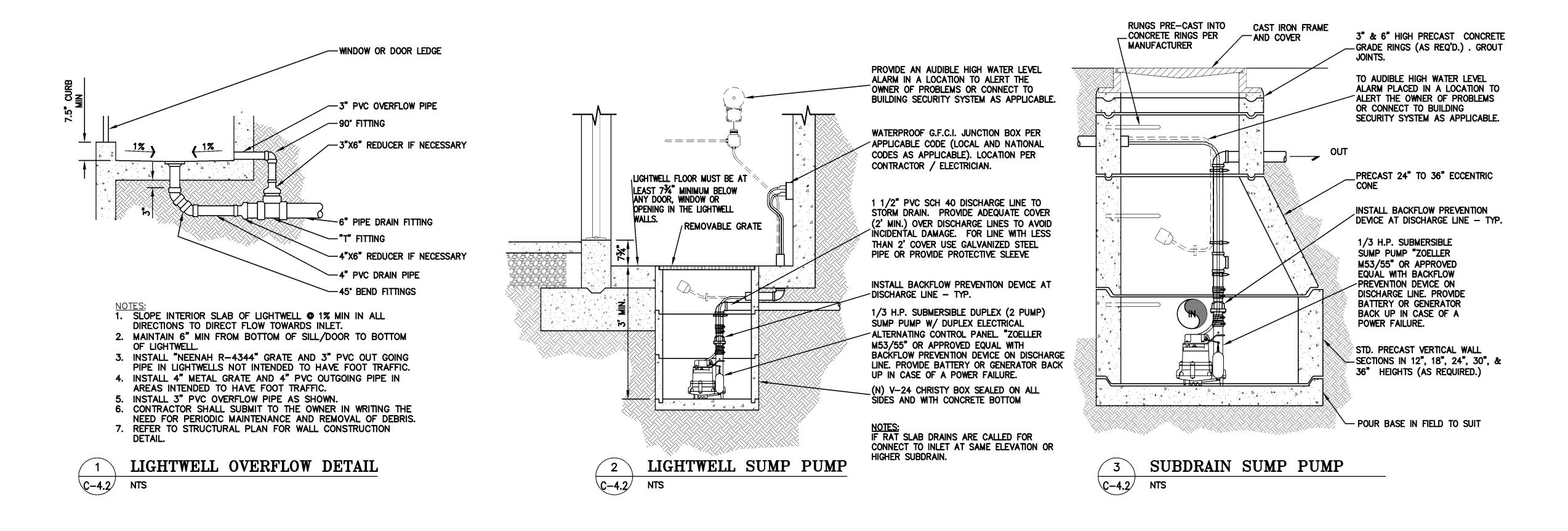


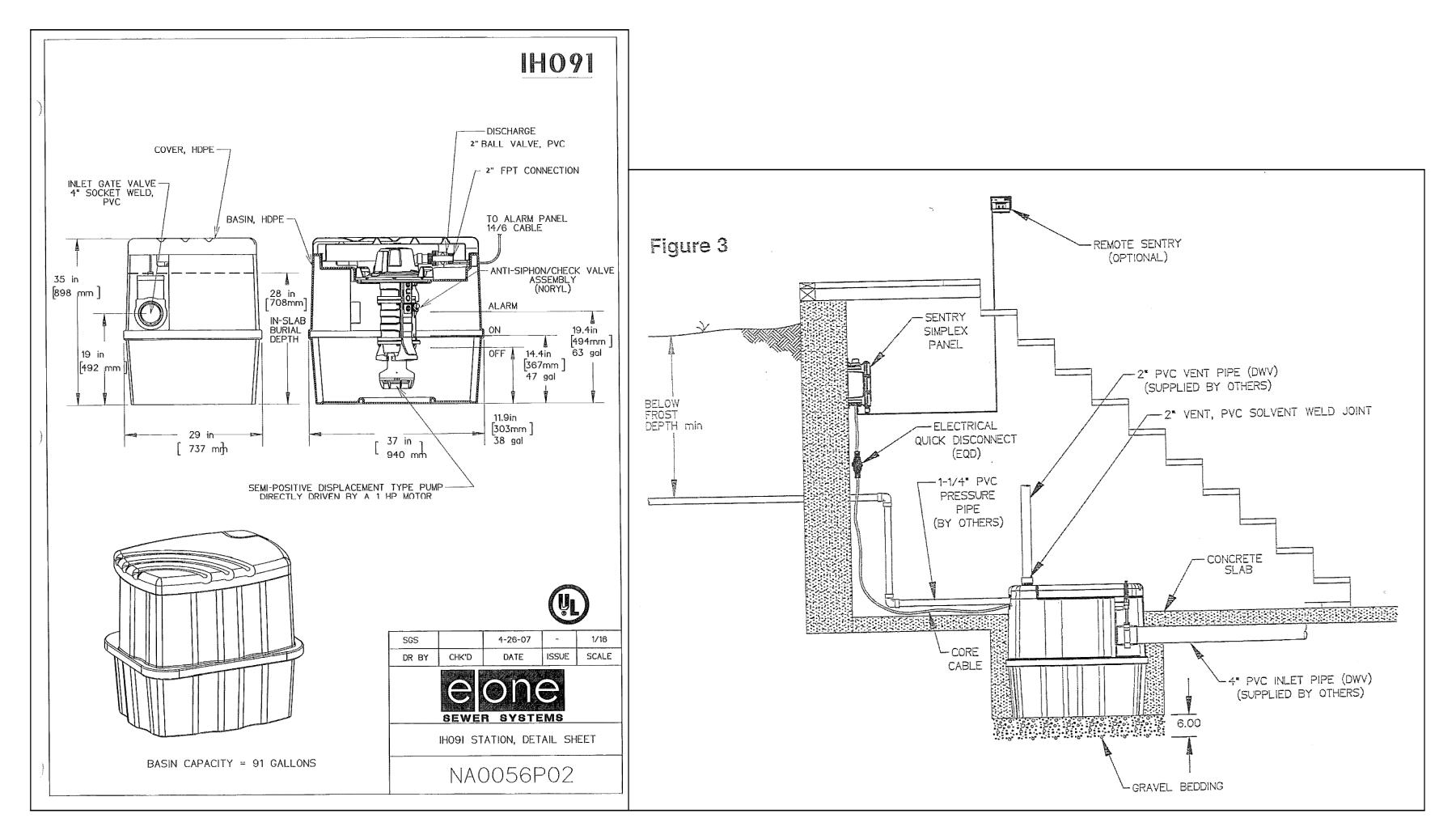






RESIDENCE LISA LANE OS, CALIFORNIA





E - ONE GRINDER PUMP EJECTOR

No. C79655

No. C79655

CIVIL

SIGNATURES IN BLICE

STORATURES IN BLICE

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ETAILS

JOB NO: 2170546

DATE: 10-26-17

SCALE: NTS

DESIGN BY: DY

DRAWN BY: WA

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SHEET NO:

THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

### WORK SEQUENCE

IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS. METHODS. TECHNIQUES. SEQUENCES. OR PROCEDURES. OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR. SUBCONTRACTORS. OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK. OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

## SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION. GRADING. OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

## STORMWATER POLLUTION PREVENTION NOTES

- 1) STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- 2) CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS. INCLUDING SOLID WASTES. PAINTS. CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.
- 3) USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- 4) AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.
- 5) DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.
- 6) PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- 7) PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT
- 8) LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.

9) LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.

10) AVOID TRACKING DIRT OR MATERIALS OFF—SITE; CLEAN OFF—SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

## SUPPLEMENTAL MEASURES

- A. THE PHRASE "NO DUMPING DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.
- B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.
- D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.
- E. STORING, HANDLING, AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.
- F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON—SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

## GRADING & DRAINAGE NOTES:

## 1. SCOPE OF WORK

these specifications and applicable plans pertain to and include all site grading and EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL, STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.

- A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS, THE SOILS REPORT BY EARTH SYSTEMS PACIFIC; DATED DECEMBER 19, 2016 AND THE CITY OF LOS ALTOS.
- B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TEST AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.

## CLEARING AND GRUBBING

- A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.
- B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
- C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.
- D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:
  - (1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.
  - (2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.
  - (3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. the locations at which the utility line will be capped will be determined by the UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

## SITE PREPARATION AND STRIPPING

- A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.
- B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION, THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS. STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE ( RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT UNIFORM SOIL COMPACTION. THE GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION. THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.

## **EXCAVATION**

- A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER. UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL, RESULTING GROUND LINE SHALL BE SCARIFIED. MOISTURE-CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.
- B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

## 6. PLACING. SPREADING AND COMPACTING FILL MATERIAL

THE MATERIALS PROPOSED FOR USE AS COMPACTED FILL SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL; HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, ANY IMPORTED MATERIAL SHALL BE APPROVED FOR USE BY THE SOILS ENGINEER, IN WRITING, BEFORE BEING IMPORTED TO THE SITE AND SHALL POSSESS SUFFICIENT FINES TO PROVIDE A COMPETENT SOIL MATRIX AND SHALL BE FREE OF VEGETATIVE AND ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.

### B. FILL CONSTRUCTION

THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND recompacted as specified in section 4 of these specifications. Compacted fill material SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT of the fill.

THE APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS NO THICKER THAN 8" IN LOOSE THICKNESS, LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. when the moisture content of the fill is below that specified, water shall be added until THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS above that specified, the fill material shall be aerated by blading or other satisfactory METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.

AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED, IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.

THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS. NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.

COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.

## CUT OR FILL SLOPES

all constructed slopes, both cut and fill, shall be no steeper than 2 to 1 (horizontal TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS FILL EXISTING ON THE SLOPES SHALL BE BLADED OFF TO CREATE THE FINISHED SLOPE EMBANKMENT. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND then be planted with erosion control slope planting. The soils engineer shall review all CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE time of their detection.

## 8. SEASONAL LIMITS AND DRAINAGE CONTROL

FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS Interrupted for any reason the fill operations shall not be resumed until field test PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.

## DUST CONTROL

THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

## 10. <u>INDEMNITY</u>

THE CONTRACTOR WILL HOLD HARMLESS. INDEMNIFY AND DEFEND THE ENGINEER. THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER. THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.

## 11. <u>SAFETY</u>

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

### 12. GUARANTEE

neither the final payment, nor the provisions in the contract, nor partial, nor entire use OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP.

THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THERE FROM WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

## TRENCH BACKFILL

either the on—site inorganic soil or approved imported soil may be used as trench BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS AND BE COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 90% RELATIVE COMPACTION. IMPORTED SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% relative compaction. Water Jetting associated with compaction using vibratory equipment WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THE PIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND

## EROSION CONTROL

DRAINAGE SYSTEM.

- A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE COUNTY GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.
- B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.
- C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIFTEENTH UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.
- D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE SOILS ENGINEER.
- E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT—LADEN RUNOFF TO ANY STORM
- F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
- G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT, SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.
- H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
- I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING

FIBER, 2000 LBS/ACRE SEED, 200 LBS/ACRE (SEE NOTE J, BELOW) FERTILIZER (11-8-4), 500 LBS/ACRE WATER, AS REQUIRED FOR APPLICATION

## J. SEED MIX SHALL BE PER CALTRANS STANDARDS.

- K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND
- L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.
- M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL, PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.
- N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE COUNTY ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.
- O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4—HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.
- P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE COUNTY ENGINEER MAY REQUIRE SPRAY APPLICATION OF WATER OR OTHER MAINTENANCE ACTIVITIES TO ASSURE THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.

## 15. <u>CLEANUP</u>

THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL

> NOTE:
> THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.



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07 OF 10 SHEETS

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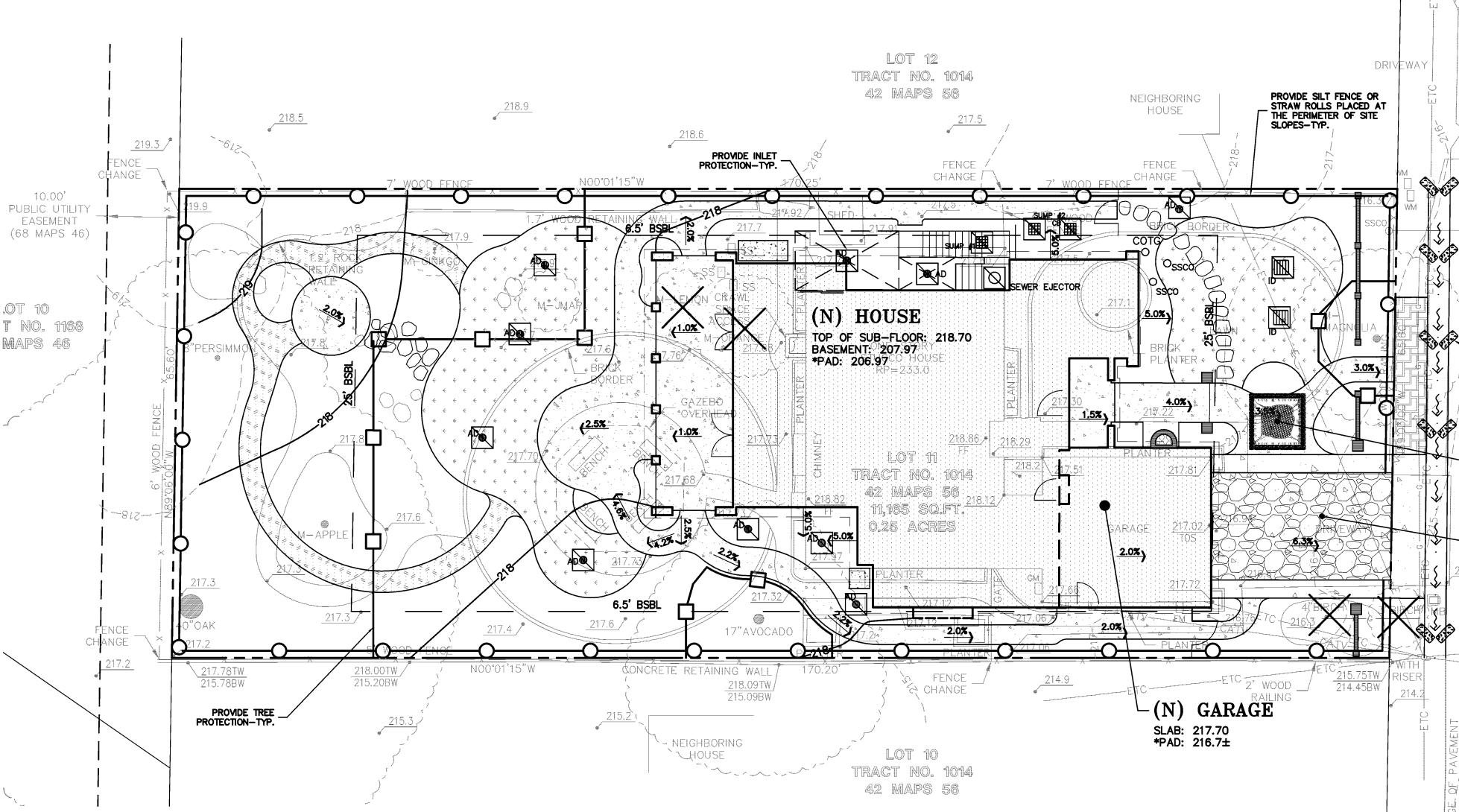
SHEET NO:

## PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

## **EROSION CONTROL NOTES:**

- 1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
- 2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
- 3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
- 4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT—LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
- 6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
- 7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
- 8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 1ST.
- 9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 1ST THROUGH APRIL 30TH, WHICHEVER IS LONGER.
- 10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
- 12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
- 13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
- 14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM OCTOBER 1ST THRU APRIL 30TH.
- 15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 1ST THROUGH APRIL 30TH, WHICHEVER IS GREATER.
- 16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
- 17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN SYSTEMS.
- 18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT—OF—WAY.
- 20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT—OF—WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
- 21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
- 22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL PAINLY SEASON
- 23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- 24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM,
- 25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
- 26. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO SEPTEMBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS, TO PUBLIC OWNED FACILITIES.



## **EROSION CONTROL MEASURES:**

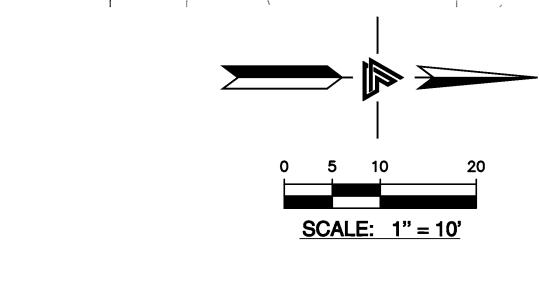
- 1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 1ST TO APRIL 30TH. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
- 2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
- 3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
- 4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 1ST, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE—STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
- 5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT, MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
- 6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
- 7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
- 8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

## **REFERENCES:**

- 1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
- 2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

## PERIODIC MAINTENANCE:

- 1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
- A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
- B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
- C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS
- D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
- E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT FRODE.
- F. RILLS AND GULLIES MUST BE REPAIRED.
- 2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
- 3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
- 4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
- 5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
- 6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION



SEAL ALL OTHER INLETS NOT INTENDED

TO ACCEPT STORM WATER AND DIRECT

FLOWS TEMPORARILY TO FUNCTIONAL

SEDIMENTATION BASIN INLETS. -TYP

PROVIDE TEMPORARY GRAVEL

BAGS OR STRAW BALES AT

FLOW LINE AS SHOWN

ENTRANCE. RELOCATE DURING

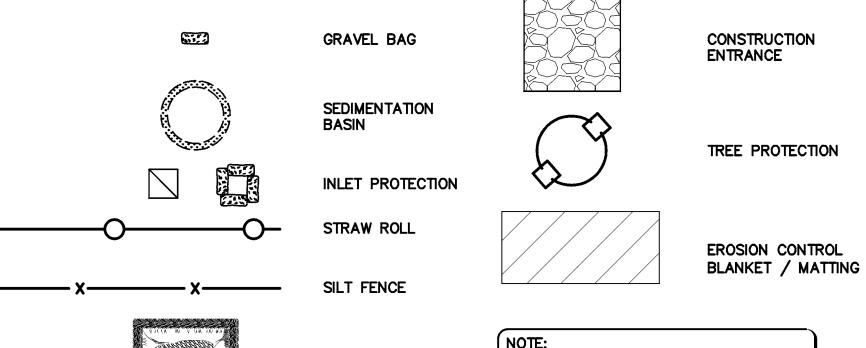
THE END OF PAVEMENT.

CONSTRUCTION AS REQUIRED AT

SITE

BENCHMARK





CONCRETE WASHOUT

08 OF 10 SHEETS

 $\bigcirc$ 

 $\Box$ 

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NOTES:

STABILIZED CONSTRUCTION SITE

STONE AGGREGATE.

MINIMUM OF 50'.

ACCESS SHALL BE CONSTRUCTED

OF 3" TO 4" WASHED, FRACTURED

MATERIAL SHALL BE PLACED TO A

LENGTH OF ENTRANCE SHALL BE A

WIDTH SHALL BE A MIN. OF 15' OR GREATER IF NECESSARY TO COVER

EGRESS. PROVIDE AMPLE TURNING RADII.

THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS

ACCESSES SHALL BE INSPECTED
WEEKLY DURING PERIODS OF HEAVY
USAGE, MONTHLY DURING NORMAL

PERIODIC TOP DRESSING SHALL BE

SPECIFIED IN ABOVE NOTE.

USAGE, AND AFTER EACH

PROVIDED AS NECESSARY.

DONE AS NEEDED.

RAINFALL, WITH MAINTENANCE

ALL VEHICULAR INGRESS AND

MINIMUM THICKNESS OF 12".

PUBLIC\_

RIGHT-OF-WAY

APPROPRIATE TRANSITION

CONSTRUCTION ENTRANCE

AND PUBLIC RIGHT-OF-WAY

12" MIN. PROVIDE

-BETWEEN STABILIZED

JOB NO: 2170546 DATE: SCALE: NTS DESIGN BY: DY

DRAWN BY: WA

SHEET NO: **ER-2** 

STRAW BALES (ABOVE GRADE) -TYP PLASTIC LINING PLAN VIEW STAPLES \_PLASTIC -MATERIAL (2 PER BALE) (OPTIONAL) STRAW

10' MIN.

PLYWOOD -48"x24" PAINTED WHITE **BLACK** -LETTERS **BINDING** 6" HEIGHT SCREWS WOOD POST <sup>-</sup>3"X3"X8' CONCRETE WASHOUT SIGN DETAIL

NOTES: ACTUAL LAYOUT DETERMINED

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN

CONCRETE WASHOUT FACILITY.

NOTE; IT IS ESSENTIAL THAT THE

EMBÉDDED INTO THE GROUND

SO RUN-OFF CANNOT FLOW

WRE/FABRIC BE FULLY

FREELY UNDER FENCE.

10' OF THE TEMPORARY

STAPLE DETAIL

STRAW ROLL 50' MIN BUTTED UP - AGAINST CONSTRUCTION **ENTRANCE** 4" TO 6" - ANGULAR RIP-RAP EXISTING GROUND \_PUBLIC RIGHT-OF-WAY <u>PLAN</u> PROVIDE DEPRESSION TO DIRECT RUN\_OFF AWAY FROM PUBLIC RIGHT-OF-WAY

CONSTRUCTION ENTRANCE

50' MIN.

<u>SECTION</u>

**EXISTING** 

GROUND

GEOTEXTILE

AGGREGATE

LINER BENEATH-

ER-2

GRAVEL BAG CONSISTS OF A -BURLAP SACK FILLED WITH 3/4" CRUSHED, CLEAN DRAIN ROCK FILTER FABRIC PLACED -BETWEEN GRATES & INLET COVER GRAVEL BAGS SHALL SIT ON TOP OF EACH SIDE OF STRAW ROLL AND OVERLAP ON CURB FLOW LINE -

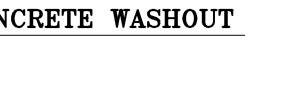
STREET INLET PROTECTION ER-2

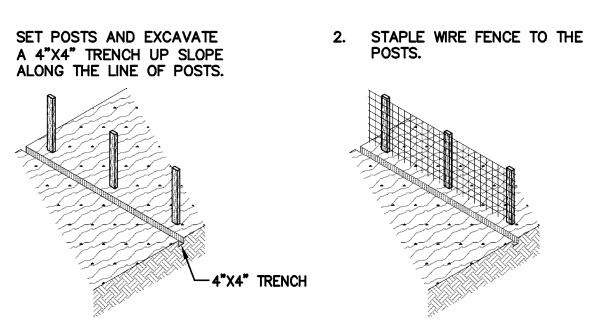
CONCRETE WASHOUT ER-2

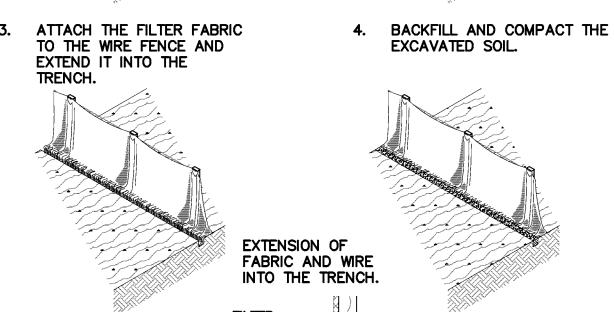
WOOD OR METAL STAKE

(2 PER BALE)

**SECTION** 

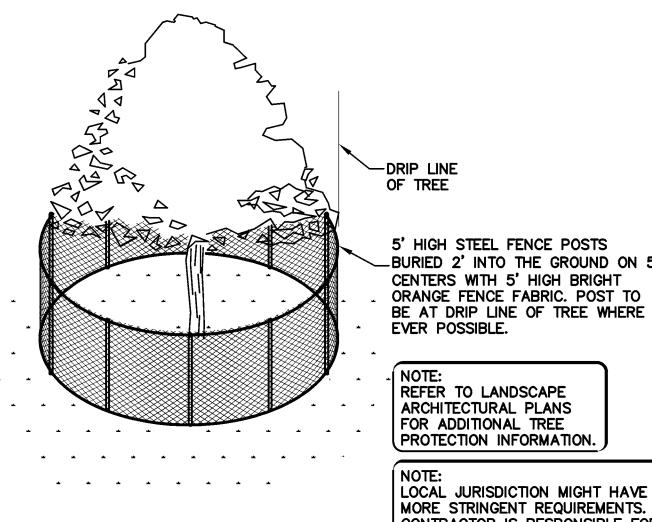












BEING FOLLOWED.

EXISTING TREE PROTECTION DETAIL ER-2

BURIED 2' INTO THE GROUND ON 5' ORANGE FENCE FABRIC. POST TO BE AT DRIP LINE OF TREE WHERE LOCAL JURISDICTION MIGHT HAVE

CONTRACTOR IS RESPONSIBLE FOR COORDINATING W/ INSPECTOR TO ENSURE PROPER PROCEDURES ARE

STRAW ROLLS FLAT LOT

**SEDIMENT** 

—(E) GRADE

STRAW ROLLS MUST

BE PLACED ALONG

SLOPE CONTOURS

STAKE

1" X 1" STAKE

1. STRAW ROLL INSTALLATION REQUIRES THE

ON CONTOUR. RUNOFF MUST NOT BE

HALF THE HEIGHT OF THE ROLL.

PLACEMENT AND SECURE STAKING OF THE

ROLL IN A TRENCH, 3" TO 5" DEEP, DUG

ALLOWED TO RUN UNDER OR AROUND ROLL.

CONTRACTOR IS RESPONSIBLE FOR REGULAR

MAINTENANCE AND INSPECTION. THE SILT

SHALL BE CLEANED OUT WHEN IT REACHES

FINISHED

GRADE

ER-2 NTS

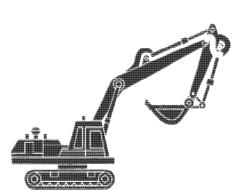
6" COBBLE \_ STONE MIN

ER-2

FILTER FABRIC \_
TO COVER INLET

INLET PROTECTION

09 OF 10 SHEETS



## Best Management Practices for the

- Vehicle and equipment operators
- Site supervisors

Landscaping,

Construction Industry

Gardening, and

**Pool Maintenance** 

Best Management Practices for the

 General contractors Home builders Developers

cleanup is easier.

any onsite cleaning.

Doing the Job Right

### Site Planning and Preventive Vehicle Maintenance

Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Perform major maintenance, repair jobs, and

drop cloths to catch drips and spills. Collect all

Do not use diesel oil to lubricate equipment

parts, or clean equipment. Use only water for

Cover exposed fifth wheel hitches and other oily

Storm water Pollution

from Heavy Equipment on

Construction Sites

Poorly maintained vehicles and heavy

equipment that leak fuel, oil, antifreeze or other

fluids on the construction site are common

and leaks by isolating equipment from runof

maintenance problems. Remove construction

sources of storm drain pollution. Prevent spill

channels, and by watching for leaks and other

equipment from the site as soon as possible

impermeable surfaces where fluids have vehicle and equipment washing off site where spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly If you must drain and replace motor oil, radiator dispose of absorbent materials. coolant, or other fluids on site, use drip pans or

Spill Cleanup

- spent fluids, store in separate containers, and immediately. Never attempt to "wash properly dispose as hazardous waste (recycle them away" with water, or bury them.
  - Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.

Sweep up spilled dry materials

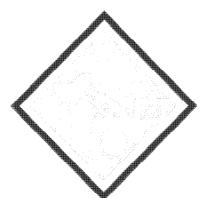
Clean up spills immediately when they

☐ Never hose down "dirty" payement or

- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills to the appropriate local spill response agencies immediately.
- If the spill poses a significant hazard to human health and safety, property or the environment, you must also report it to the State Office of Emergency

# Roadwork

Best Management Practices for the Construction Industry



## Best Management Practices for the

 Road crews Driveway/sidewalk/parking lot construction

Developers

- Seal coat contractors
- Operators of grading equipment, paying machines, dump trucks, concrete mixers Construction inspector.

Painting and

Adhesives

Construction Industry

Best Management Practices for the

 General contractors Home builders

## Doing The Job Right

## General Business Practices

- Develop and implement erosion/sediment control plans for roadway embankments.
- ☐ Schedule excavation and grading work during Check for and repair leaking equipment.
- Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.

Do not use diesel oil to lubricate equipment

- When refueling or when vehicle/equipment methods (with absorbent materials maintenance must be done on site, designate and/or rags), or dig up, remove, and a location away from storm drains and creeks.
- parts or clean equipment. Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly.

## During Construction

or when rain is forecast, to prevent fresh materials from contacting stormwater runoff Cover and seal catch basins and manholes

Avoid paving and seal coating in wet weather.

when applying seal coat, slurry seal, fog seal, Protect drainage ways by using earth dikes,

## Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, For excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

### Never wash excess material from exposed- aggregate concrete or similar treatments into a street or storm drain Collect and recycle, or dispose to dirt

### Cover stockoiles (asphalt\_sand\_etc.). and other construction materials with **Application** plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.

- Park paving machines over drip pans or Construction Industry absorbent material (cloth, rags, etc.) to catch drips when not in use. Clean up all spills and leaks using "dry"
- dispose of excess abrasive gravel or Avoid over-application by water trucks

Collect and recycle or appropriately

## Asphalt/Concrete Removal

Avoid creation excess dust when

- breaking asphalt or concrete. After breaking up old pavement, be sure
- to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.

When making saw cuts, use as little

- water as possible. Shovel or vacuum Sidewalk construction crews saw-cut slurry and remove from the site Cover or protect storm drain inlets during saw-cutting. Sweep up, and
- properly dispose of, all residues. Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dumo vacuumed liquor in storm drains.

☐ Never clean brushes or rinse paint

drain, French drain, or stream.

For water-based paints, paint out

containers into a street, gutter, storm

brushes to the extent possible, and rinse

into a drain that goes to the sanitary

sewer. Never pour paint down a storm

For oil-based paints, paint out brushes to

the extent possible and clean with thinner

or solvent in a proper container. Filter and

reuse thinners and solvents. Dispose of

excess liquids and residue as hazardous

Paint chips and dust from non-hazardous

and disposed of as trash

state-certified contractor

dry stripping and sand blasting may be

☐ Chemical paint stripping residue and chips

and dust from marine paints or paints

containing lead, mercury or tributyl tin-

Lead based paint removal requires a

must be disposed of as hazardous waste

exteriors with high-pressure water, block

storm drains. Direct wash water onto a dir.

the local wastewater treatment authority to

building cleaning water and dispose to the

treatment authority in making its decision

be required to assist the wastewate

Recycle or donate excess water-based

Reuse leftover oil-based paint. Dispose

of non-recyclable thinners, sludge and

unwanted paint, as hazardous waste.

Unopened cans of paint may be able to be

returned to the paint vendor. Check with

the vendor regarding its "buy-back" policy

(latex) paint, or return to supplier.

Recycle/Reuse Leftover Paints

Whenever Possible

find out if you can collect (mop or vacuum)

sanitary sewer. Sampling of the water may

area and spade into soil. Or, check with

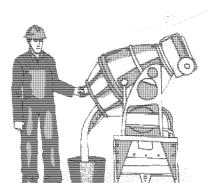
swept up or collected in plastic drop cloths

Painting Cleanup

Paint Removal

## Fresh Concrete and Mortar

## Best Management Practices for the



## Best Management Practices for the

- Masons and bricklayers
- Patio construction workers
- Construction inspectors
- General contractors
- Home builders Developers
- Concrete delivery/pumping workers

## **Doing The Job Right**

## General Business Practices

- Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area Let water percolate through soil and dispose o settled, hardened concrete as garbage Whenever possible, recycle washout by pumping back into mixers for reuse.
- Wash out chutes onto dirt areas at site that do not flow to streets or drains.
- the material has dried. Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind. ☐ Secure bags of cement after they are open. Be
- sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and

### Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

## Storm Drain Pollution from Fresh

Fresh concrete and cement-related mortars that wash into lakes streams or estuaries are toxic to fish and the aquatic environment. Disposing of thes materials to the storm drains or creeks can block storm drains, causes serious problems, and is

Los Altos Municipal Code Requirements

A. Unlawful discharges. It shall be unlawful to discharge any domestic waste or industrial waste into storm drains, gutters, creeks, or

permitted by a discharge permit or unless exempted pursuant to guidelines published by the superintendent

San Francisco Bay. Unlawful discharges to storm drains shall include, but not be limited to, discharge from toilets; sinks; industrial

processes; cooling systems; boilers; fabric cleaning; equipment cleaning; vehicle cleaning; construction activities, including, but not

limited to, painting, paving, concrete placement, saw cutting and grading; swimming pools; spas; and fountains, unless specifically

Threatened discharges. It shall be unlawful to cause hazardous materials, domestic waste, or industrial waste to be deposited in

such a manner or location as to constitute a threatened discharge into storm drains gutters creeks or San Francisco Bay. A

## Concrete and Mortar Applications

prohibited by law.

## **During Construction**

Don't mix up more fresh concrete or cement than you will use in a two-hour

dirt areas, not down the driveway or into

- Set up and operate small mixers on
- tarps or heavy plastic drop cloths. When cleaning up after driveway or sidewalk construction, wash fines onto

the street or storm drain.

- Protect applications of fresh concrete and mortar from rainfall and runoff until
- ☐ Wash down exposed aggregate concrete only when the wash water can flow onto a dirt area: (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach
- gutters or storm drains. ☐ When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a landfill.
- Never bury waste material. Dispose of small amounts of excess dry concrete,
- grout, and mortar in the trash. Never dispose of washout into the street, storm drains, drainage ditches, or

## Spill Response Agencies

**Preventing Pollution:** 

It's Up to Us

In the Santa Clara Valley, storm drains

transport water directly to local creeks

and San Francisco Bay without treatment.

Storm water pollution is a serious problem

for wildlife dependent on our waterways

and for the people who live near polluted

streams or bay lands. Some common

sources of this pollution include spilled oil.

fuel, and fluids from vehicles and heavy

equipment; construction debris; sediment

created by erosion; landscaping runoff

containing pesticides or weed killers; and

materials such as used motor oil,

antifreeze, and paint products that people

Thirteen valley municipalities have joined

together with Santa Clara County and the

Santa Clara Valley Water District to

educate local residents and businesses

and fight storm water pollution. TO

comply with this program, contractors

most comply with the practices described

pour or spill into a street or storm drain.

DIAL 9-1-1

this drawing sheet.

State Office of Emergency Services Warning Center (24 hours): 800-852-7550 Santa Clara County Environmental Health Services: (408) 299-6930

## Local Pollution Control Agencies

County of Santa Clara Pollution Prevention (408) 441-1195 County of Santa Clara Integrated Waste

Management Program: (408) 441-1198 County of Santa Clara District Attorney Environmental Crimes Hotline:

(408) 299-TIPS

Santa Clara County 1-800-533-8414

(408) 265-2600

1-888-510-5151 Regional Water Quality Control Board San

Palo Alto Regional Water Quality (650) 329-2598

Serving East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford

## City of Los Altos

Engineering Department: (650) 947-2780

## Best Management Practices for the

- Landscapers
- Gardeners Swimming pool/spa service and repair
- General contractors

## Home builders

Developers

Homeowner

Doing The Right Job

### General Business Practices Protect stockpiles and landscaping materials from wind and rain by storing them under tarps

- or secured plastic sheeting. Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage
- Schedule grading and excavation projects during dry weather Use temporary check dams or ditches to divert
- runoff away from storm drains. Protect storm drains with sandbags or other

## Re-vegetation is an excellent form of erosion control for any site Landscaping/Garden Maintenance

- instructions on the label. Rinse empty Dispose of rinsed, empty containers in the trash. Dispose of unused pesticides as
- hazardous waste. Collect lawn and garden clippings, pruning
- waste, place clippings and pruning waste at the curb in approved bags or containers. Or, take

Swimming Pool Maintenance

## Pool/Fountain/Spa Maintenance sediment controls.

## Use pesticides sparingly, according to containers, and use rinse water as product

- ☐ In communities with curbside pick-up of yard to a landfill that composts yard waste. No curbside pickup of yard waste is available for

## Storm Drain Pollution From Landscaping and

Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during rrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

### Do not blow or rake leaves, etc. into the street, or place yard waste in gutters or or dirt shoulders, unless you are piling them for recycling (allowed by San Jose and unincorporated County only). Sweep up any leaves, litter or residue in gutters or on

In San Jose, leave yard waste for curbside recycling pickup in piles in the street, 18 inches from the curb and completely out of the flow line to any storm drain.

Draining Pools Or Spas When it's time to drain a pool, spa, or fountain, please be sure to call your local wastewater quidance on flow rate restrictions, backflow prevention, and handling special cleaning

- waste (such as acid wash). Discharge flow shall not exceed 100 gallon per minute. ☐ Never discharge pool or spa water to a street or storm drain; discharge to a
- sanitary sewer cleanout. If possible, when emptying a pool or spa, then recycle/reuse water by draining it gradually onto a landscaped area Do not use copper-based algaecides
- alternatives, such as sodium bromide Filter Cleaning Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area,
- and spade filter residue into soil. Dispose of spent diatomaceous earth in the If there is no suitable dirt area, call your local wastewater treatment plant for instructions on discharging filter backwash

or rinse water to the sanitary sewer.

## Control algae with chlorine or other Best Management Practices for the

- Homeowners Paperhangers
  - Plasterers Graphic artists Drv wall crews Floor covering installer. General contractors

Home builders

Developers

## Application of Solvents and

### Handling Paint Products ☐ Keep all liquid paint products and wastes away from the gutter, street, and storm drains. Liquid residues from paints, thinners. solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program listed on the back of this brochure).

Doing The Job Right

When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Empty, dry paint cans also may be recycled as ☐ Wash water from painted buildings constructed

before 1978 can contain high amounts of lead,

even if paint chips are not present. Before you

begin stripping paint or cleaning pre-1978

building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory. If there is loose paint on the building, or if the paint tests positive for lead, block storm drains.

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local Foxic chemicals may come from liquid or solid

nto storm drains and watercourses

**Doing The Job Right** 

dry weather.

General Business Practices

## Storm Drain Pollution from

## for disposal as hazardous waste

Paints, Solvents, and Adhesives creeks. San Francisco Bay, and the Pacific Ocear products or from cleaning residues or rags. Paint

### determine whether you may discharge water to the sanitary sewer, or if you must send it offsite

material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing

Perform major equipment repairs away from the

maintenance must be done on site, designate a

☐ When refueling or vehicle/equipment

location away from storm drains.

Remove existing vegetation only when

absolutely necessary. Plant temporary

vegetation for erosion control on slopes or

Protect down slope drainage courses, streams,

and storm drains with wattles, or temporary

to divert runoff around excavations. Refer to

the Regional Water Quality Control Board's

proper erosion and sediment control

Erosion and Sediment Control Field Manual for

oil excavation and grading operations loosen large

amounts of soil that can flow or blow into storm

can clog storm drains, smother aquatic life, and

Discharging sediment-laden water from a

dewatering site into any water of the state

drainage swales. Use check dams or ditches

where construction is not immediately planned.

parts, or clean equipment.

Practices During Construction

Do not use diesel oil to lubricate equipment

## Los Altos Municipal Code Section 10.08.430 Requirements for construction operations

Los Altos Municipal Code Chapter 10.08.390 Non-storm water discharges

- A spill response plan for hazardous waste, hazardous materials and uncontained construction materials shall be prepared and available at the construction sites for all projects where the proposed construction site is equal to or greater than one acre of disturbed soil and for any other projects for which the city engineer determines is necessary to protect surface waters. Preparatio
- of the plan shall be in accordance with guidelines published by the city engineer. improve the water quality of the discharge. Contaminated groundwater or water that exceeds state or federal requirements for
- No cleanup of construction debris from the streets shall result in the discharge of water to the storm drain system; nor shall any construction debris be deposited or allowed to be deposited in the storm drain system. (Prior code § 5-5.643)

Criminal and judicial penalties can be assessed for non-compliance.

### "threatened discharge" is a condition creating a substantial probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural

threatened discharges unless they are actively being cleaned up.

Blueprint for a Clean Bay

- A storm water pollution prevention plan shall be prepared and available at the construction sites for all projects greater than one acre of disturbed soil and for any other projects for which the city engineer determines that a storm water management plan is necessary to protect surface waters. Preparation of the plan shall be in accordance with guidelines published by the city engineer. Prior approval shall be obtained from the city engineer or designee to discharge water pumped from construction sites to the storm drain. The city engineer or designee may require gravity settling and filtration upon a determination that either or both would
- discharge to navigable waters may not be discharged to the storm drain. Such water may be discharged to the sewer, provided that the requirements of Section 10.08.240 are met and the approval of the superintendent is obtained prior to discharge.

Remember: The property owner and the contractor share ultimate

responsibility for the activities that occur on a construction site.

You may be held responsible for any environmental damage

## resources. Domestic or industrial wastes that are no longer contained in a pipe, tank or other container are considered to be

Recycling Hotline: Santa Clara Valley Water

Santa Clara Valley Water District Pollution

Francisco Bay Region: (510) 622-2300

Building Department: (650) 947-2752

## General Construction **And Site** Supervision

## Best Management Practices For Construction

- Best Management Practices for the General contractors
- Site supervisors Inspectors Home builders

## Developers Storm Drain Pollution from

Construction Activities

Construction sites are common sources of storm

wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay. As a contractor, or site supervisor, owner or operator of a site, you may be responsible fo any environmental damage caused by your subcontractors or employees.

- Doing The Job Right
- ☐ Keep an orderly site and ensure good housekeeping practices are used Maintain equipment properly Cover materials when they are not in use.
- and drainage channels Ensure dust control water doesn't leave site or discharge to storm drains Advance Planning To Prevent Pollution Schedule excavation and grading activities for dry weather periods. To reduce soil erosion.

plant temporary vegetation or place other

- Erosion and Sediment Control Manual, available from the Regional Water Quality Control Board. as a reference. Control the amount of runoff crossing your site (especially during excavation!) by using berms or temporary or permanent drainage ditches to
- check dams or berms where appropriate. Train your employees and subcontractors Make these best management practices available to everyone who works on the construction site. Inform subcontractors about the storm water requirements and their own

contamination at the source. Cover exposed

sheeting or temporary roofs. Before it rains.

drain to storm drains, creeks, or channels.

Place trashcans and recycling receptacles

Keep pollutants off exposed surfaces.

piles of soil or construction materials with plastic

sweep and remove materials from surfaces that

Good Housekeeping Practices Designate one area of the site for auto parking, vehicle refueling, and routine equipment well away from streams or storm drain inlets bermed if necessary. Make major repairs off Keep materials out of the rain – prevent runoff

- Clean up leaks, drips and other spills immediately so they do not contaminate paved surfaces. Use dry cleanup methods whenever possible. If you must use water
- use just enough to keep the dust down. Cover and maintain dumpsters. Check Keep materials away from streets, storm drains frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting dumpster. Never clean out a dumpster by hosing it down on the construction site. Set portable toilets away from storm drains.
- working order. Check frequently for leaks. erosion controls before rain begins. Use the Materials/Waste Handling ☐ Practice Source Reduction — minimize waste when you order materials. Order only the amount you need to finish the job possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap divert water flow around the site. Reduce storm metal, solvents, degreasers, cleared water runoff velocities by constructing temporary
  - maintenance materials such as used oi antifreeze, batteries, and tires. Dispose of all wastes property. Many construction materials and wastes. including solvents, water-based paints vehicle fluids, broken asphalt and concrete wood, and cleared vegetation can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the

street or near a creek or stream bed.

☐ In addition to local building permits, you

State's General Construction Activity

site disturbs one acre or more. Obtain

information from the Regional Water

Quality Control Board.

Storm water Permit if your construction

will need to obtain coverage under the

vegetation, paper, rock, and vehicle

Make sure portable toilets are in good

## Earth-Moving Dewatering

Activities



## Best Management Practices for the Construction Industry

- Best Management Practices for the
- Bulldozer, back hoe, and grading machine Dump truck drivers Site supervisors

General contractors

Home builders

Developers

## Storm Drain Pollution from Earth-Moving Activities and Dewatering

destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runof rossing a site and slow the flow with check dams or roughened ground surface: Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxics (such as oil or solvents) or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation.

without treatment is prohibited

## Cover stockpiles and excavated soil with secured tarps or plastic sheeting. Dewatering Operations ☐ Schedule excavation and grading work during

- 1. Check for Toxic Pollutants ☐ Check for odors, discoloration, or an oily sheen on groundwater. ☐ Call your local wastewater treatment agency and ask whether the groundwate
- to the storm drain (if no sediments present) or sanitary sewer. QR, you ma be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment
- call your local wastewater treatment plant

for guidance.

o discharge.

Pumping through a perforated pipe sunk part way into a small pit filled with gravel: Pumping through a filtering device

the inlet using a barrier of burlap bags

filled with drain rock, or cover inlet with

filter fabric anchored under the grate. Of

pump water through a grassy swale prior

- must be tested. If contamination is suspected, have the water tested by a certified laboratory. Depending on the test results, you may be allowed to discharge pumped groundwate
- filtered or settled out by pumping to a settling tank prior to discharge. Options Pumping from a bucket placed below water level using a submersible pump

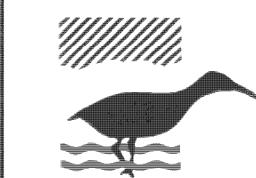
If the water is not clear, solids must be

### 2. Check for Sediment Levels If the water is clear, the pumping time is less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain. If the pumping time is more than 24 hours and the flow rate greater than 20 gpm.

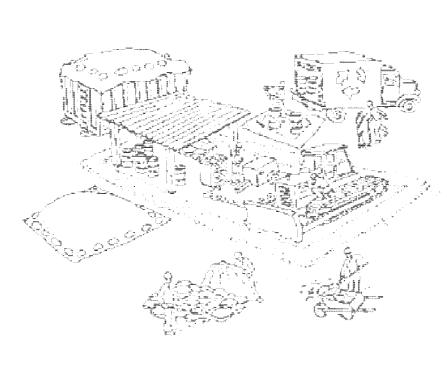
such as a swimming pool filter or filter fabric wrapped around end of suction When discharging to a storm drain, protect

## caused by your subcontractors or employees. **Best Management** Practices for the

**Construction Industry** 



Santa Clara **Urban Runoff Pollution Prevention Program** 



| IGNED BY: | T                                 |                   | T PS A PERS  |
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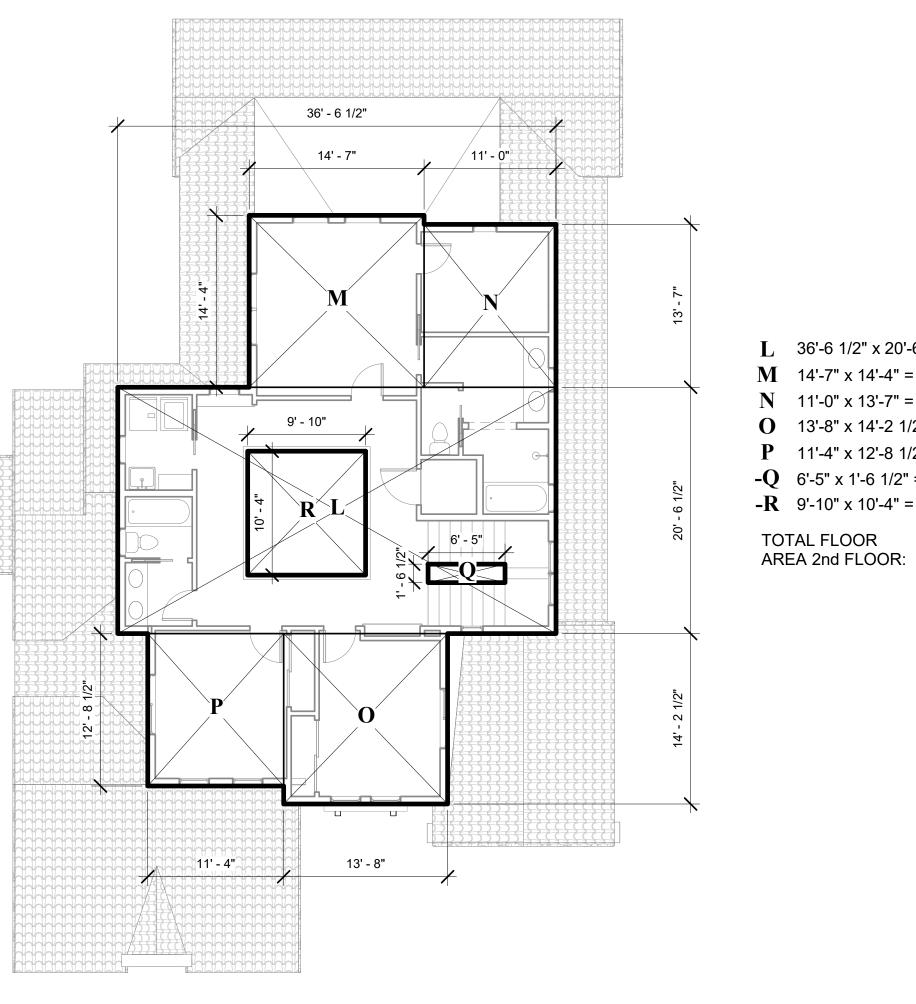
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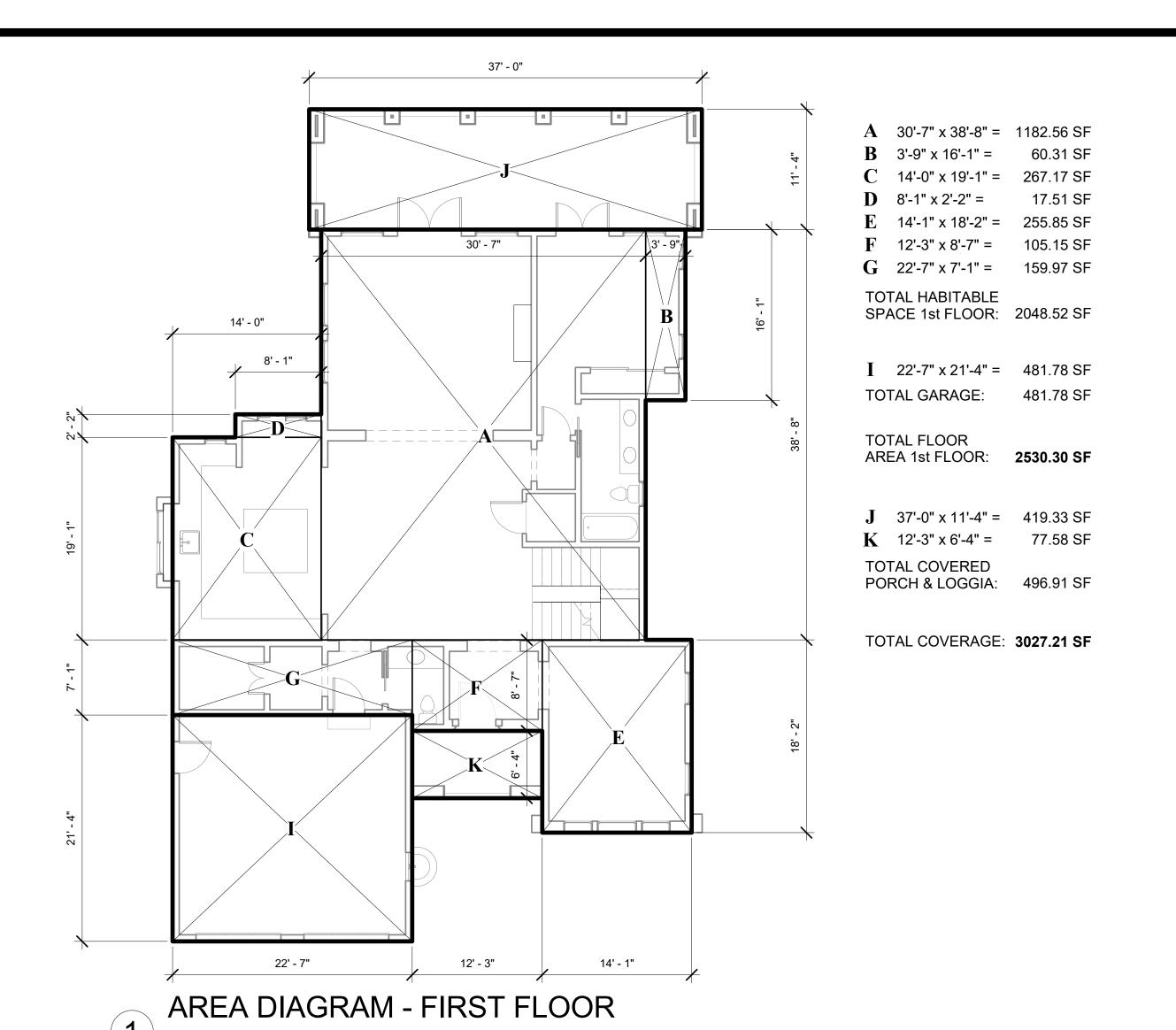


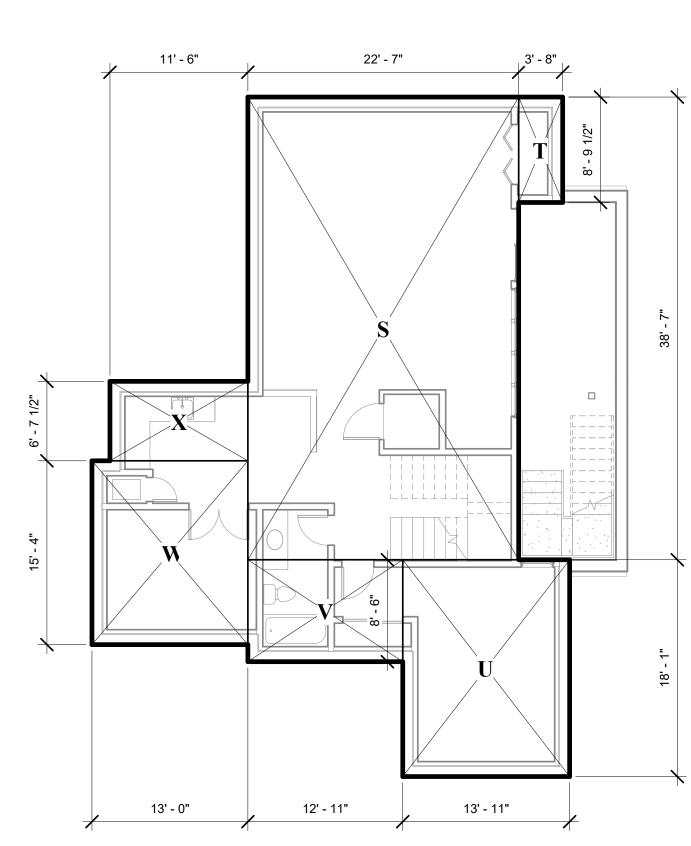
L 36'-6 1/2" x 20'-6 1/2" = 750.63 SF **M** 14'-7" x 14'-4" = 209.03 SF **N** 11'-0" x 13'-7" = 149.42 SF **O** 13'-8" x 14'-2 1/2" = 194.18 SF **P** 11'-4" x 12'-8 1/2" = 144.03 SF **-Q** 6'-5" x 1'-6 1/2" = -9.89 SF **-R** 9'-10" x 10'-4" = -101.61 SF

1335.79 SF

AREA DIAGRAM - SECOND FLOOR

1/8" = 1'-0"





**S** 22'-7" x 38'-7" = 871.34 SF T 3'-8" x 8'-9 1/2" = 32.24 SF **U** 13'-11" x 18'-1" = 251.66 SF **V** 12'-11" x 8'-6" = 109.73 SF **W** 13'-0" x 15'-4" = 199.33 SF **X** 11'-6" x 6'-7 1/2" = 76.19 SF

TOTAL BASEMENT AREA: 1540.49 SF

AREA DIAGRAM - BASEMENT

1/8" = 1'-0"

1/8" = 1'-0"



RESIDENCE

A.P.N. 193-37-033

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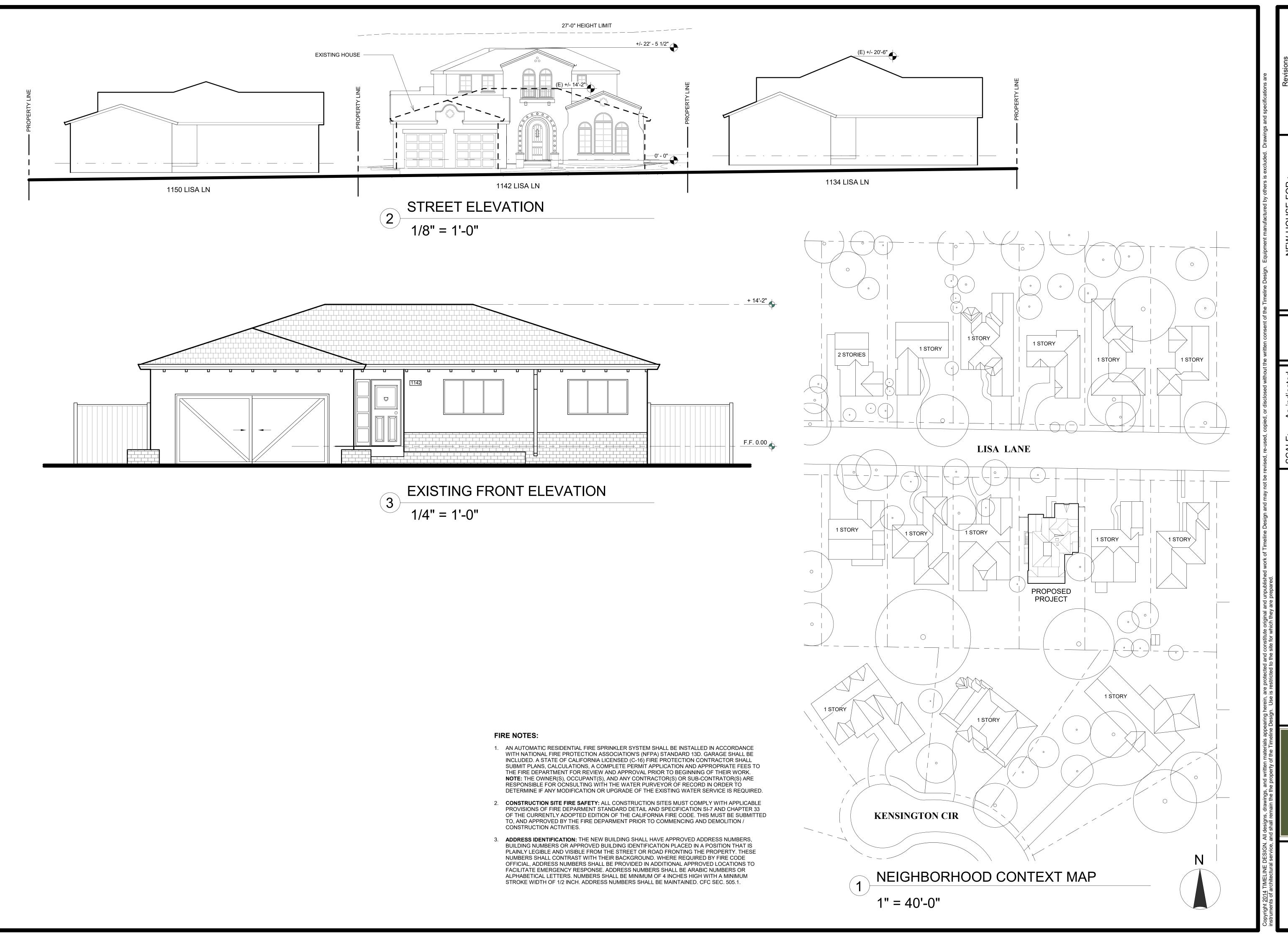
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14401 BIG BASIN WAY PHONE: 408.741.3000

DESIGN

AREA CALCULATION DIAGRAMS

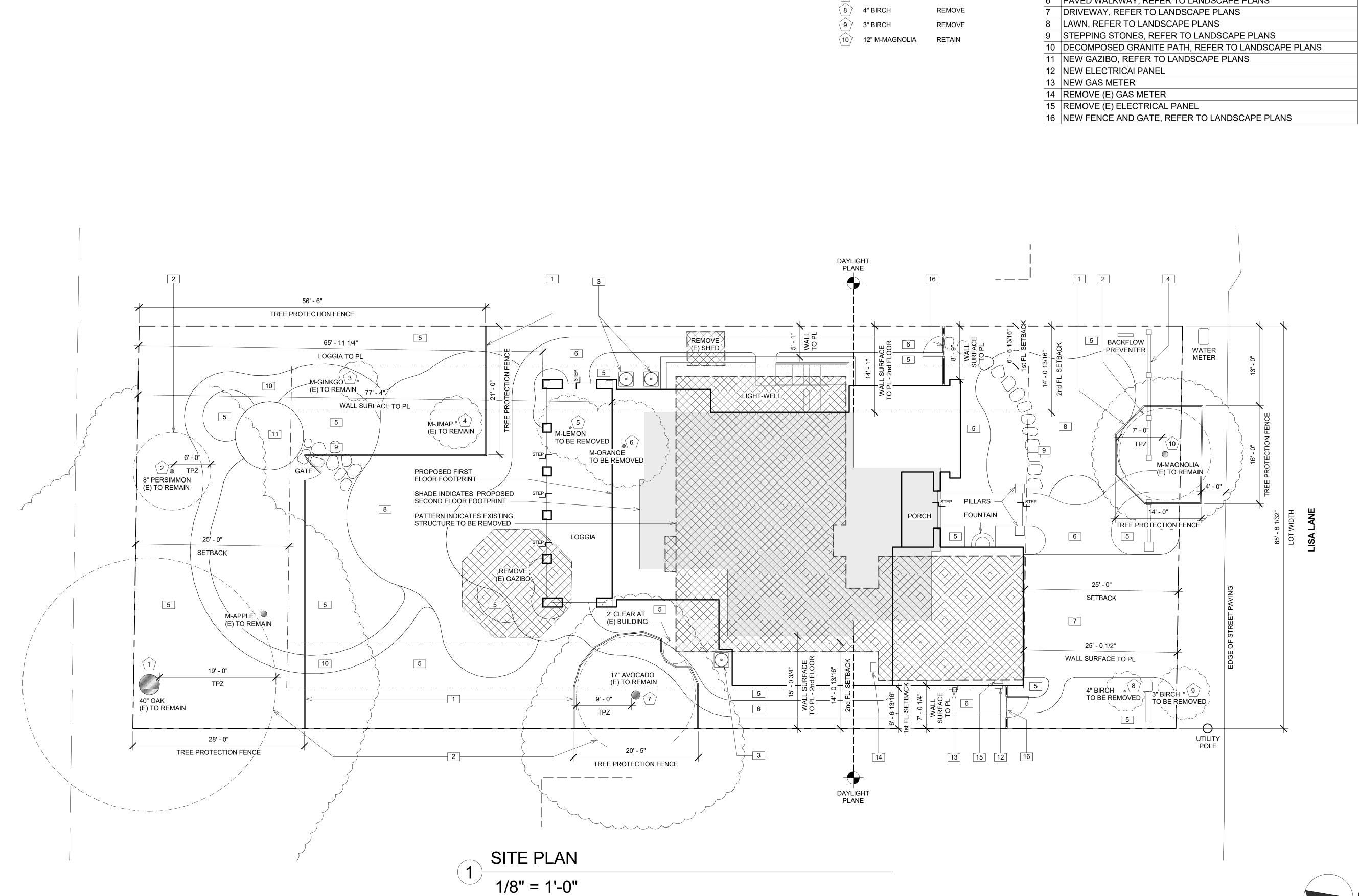
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A.P.N. 193-37-033

14401 BIG BASIN \ PHONE: 408.741.3

CONTEXT MAP AND **EXISTING ELEVATION** 



KEYNOTES

1 6'-0" HIGH CHAIN-LINK FENCE MOUNTED ON STEEL POSTS' DRIVEN 2'-0" INTO THE GROUND AT NO MORE THAN 10'-0" SPACING TREE PROPECTION ZONE; ANY GRADING OR EXCAVATION WITHIN THIS ZONE MUST BE ACCOMPLISHED BY HAND DIGGING; A QUALIFIED ARBORIST MUST SUPERVISE ANY CUTTING OF ROOTS GREATER THAN 1" WITHIN THIS ZONE;

3 A/C UNIT

**EXISTING TREE SCHEDULE** 

8" PERSIMMON

3" M-GINKGO

4" M-JMAP

5" M-LEMON

7" M-ORANGE

17" AVOCADO

1 40" OAK

No. SIZE AND SPECIES STATUS

RETAIN

RETAIN

RETAIN

RETAIN

REMOVE

REMOVE

RETAIN

4 LOW STUCCO WALL AND PILLARS, REFER TO LANDSCAPE PLANS

PLANTING AREA, REFER TO LANDSCAPE PLANS

PAVED WALKWAY, REFER TO LANDSCAPE PLANS

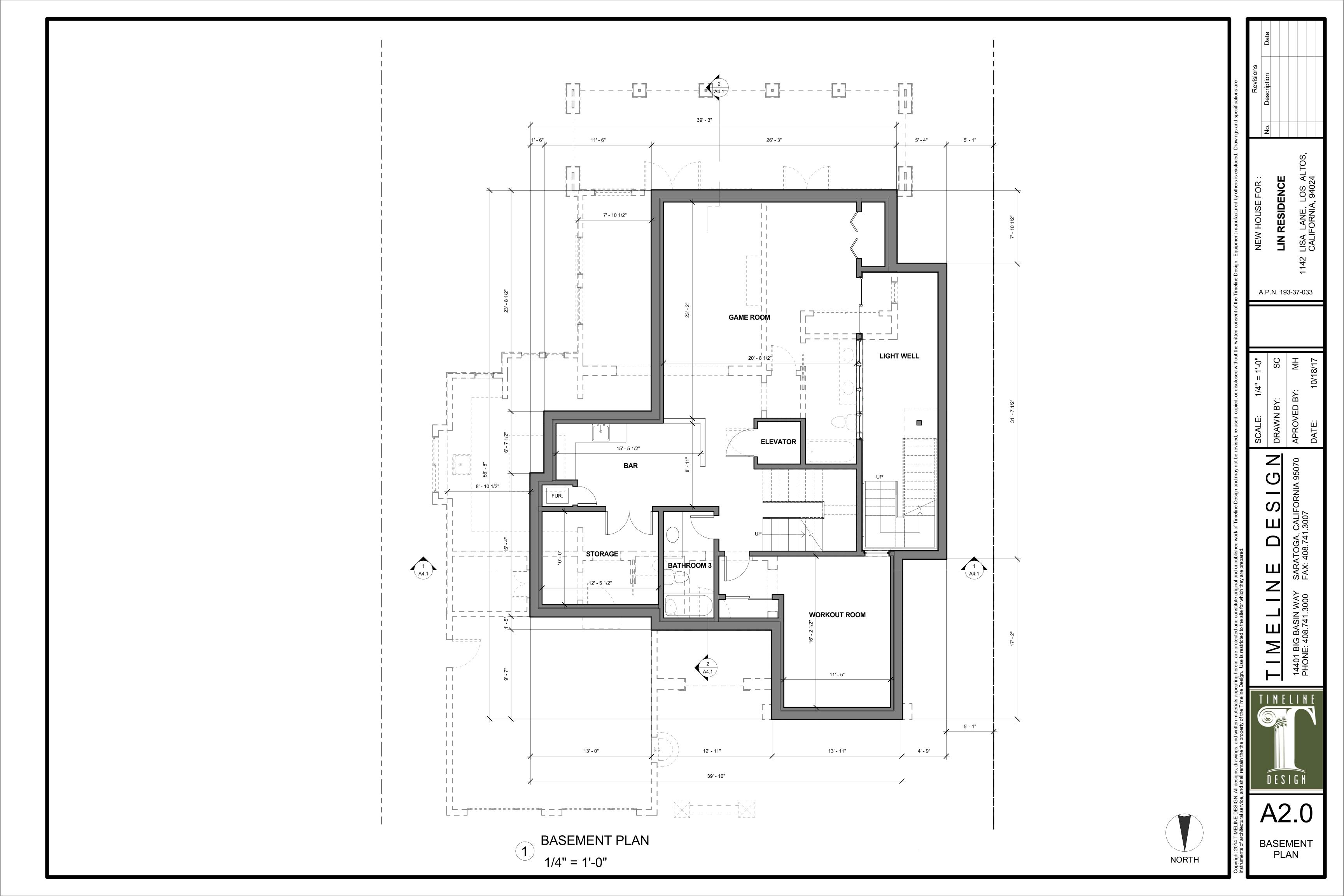
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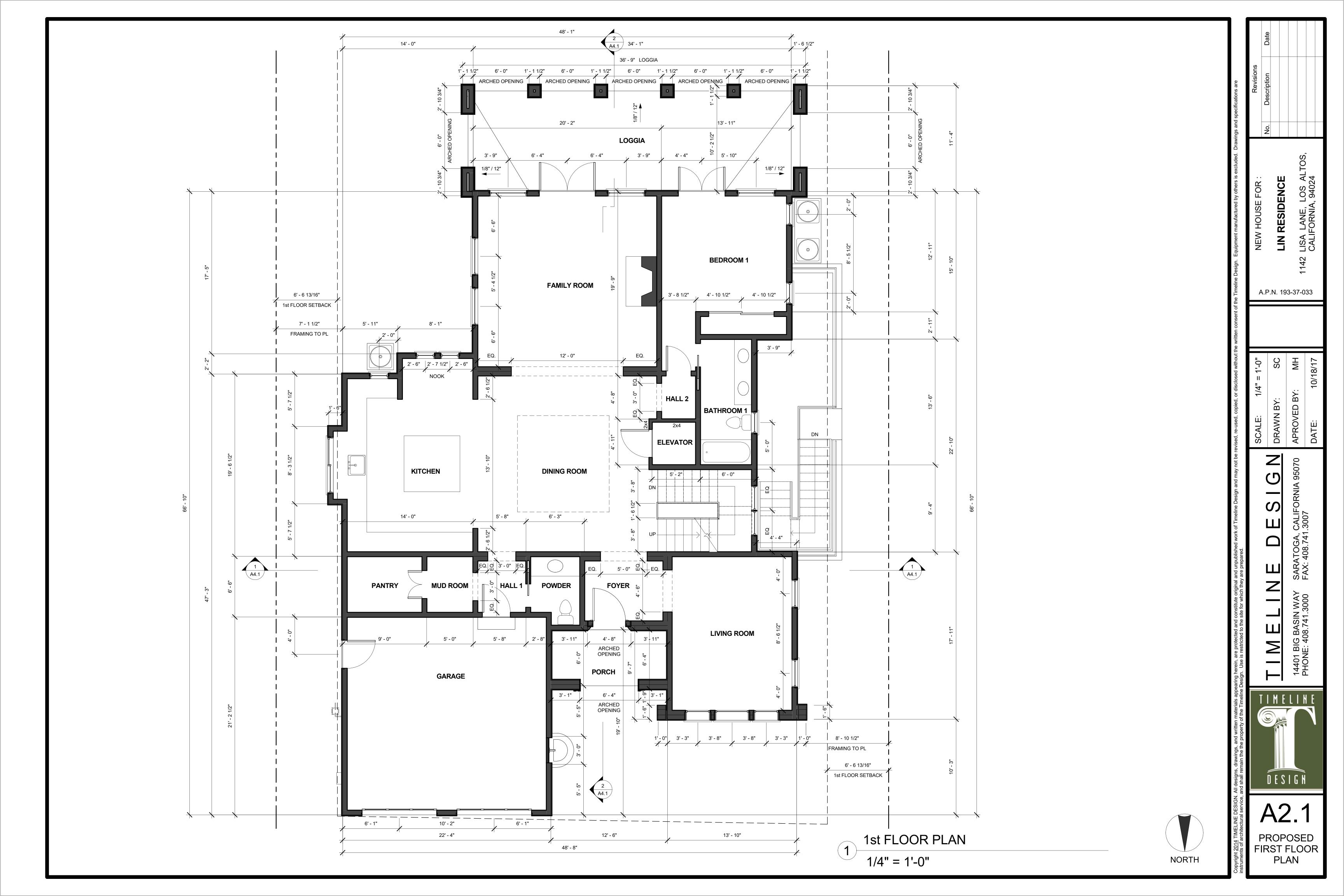
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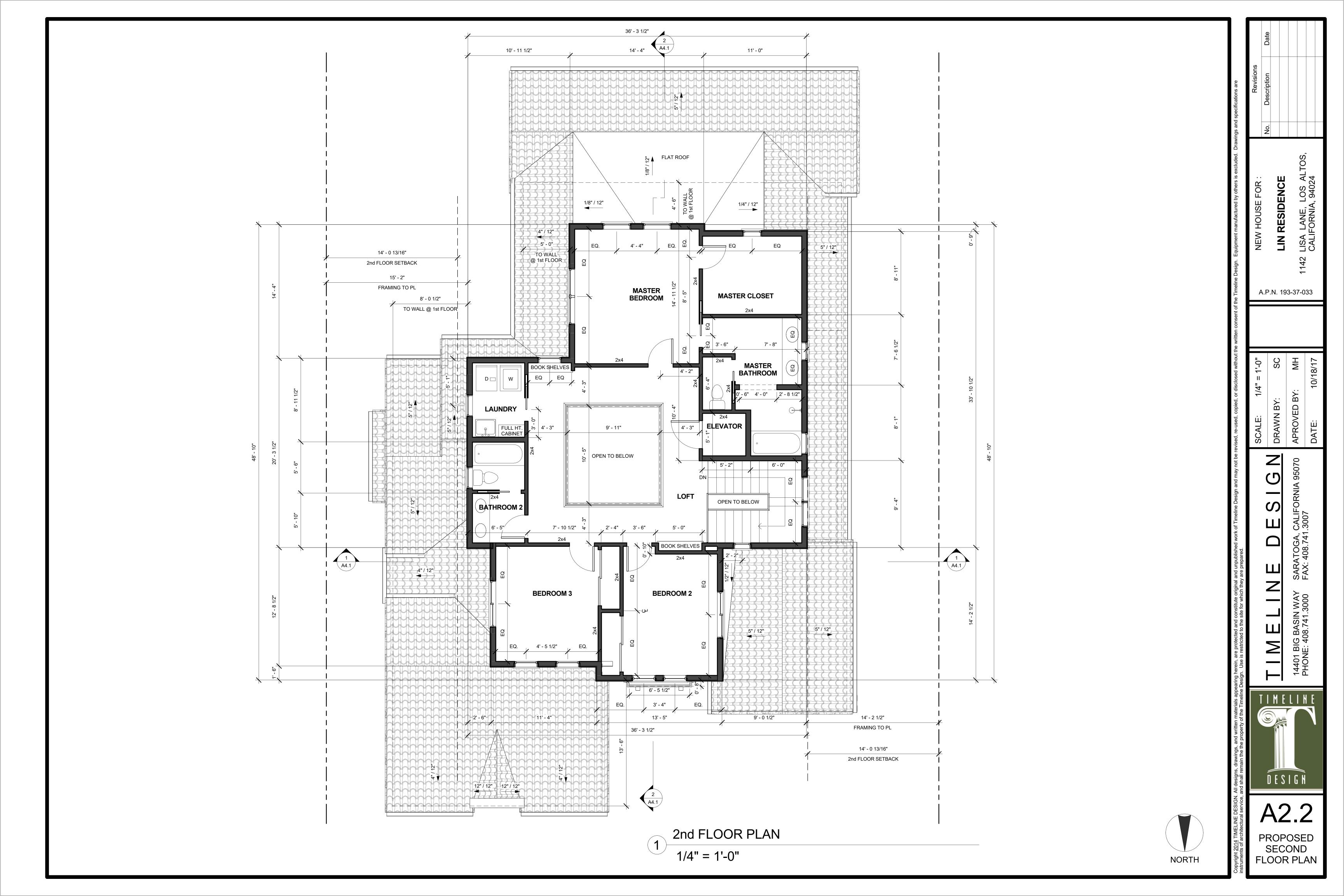
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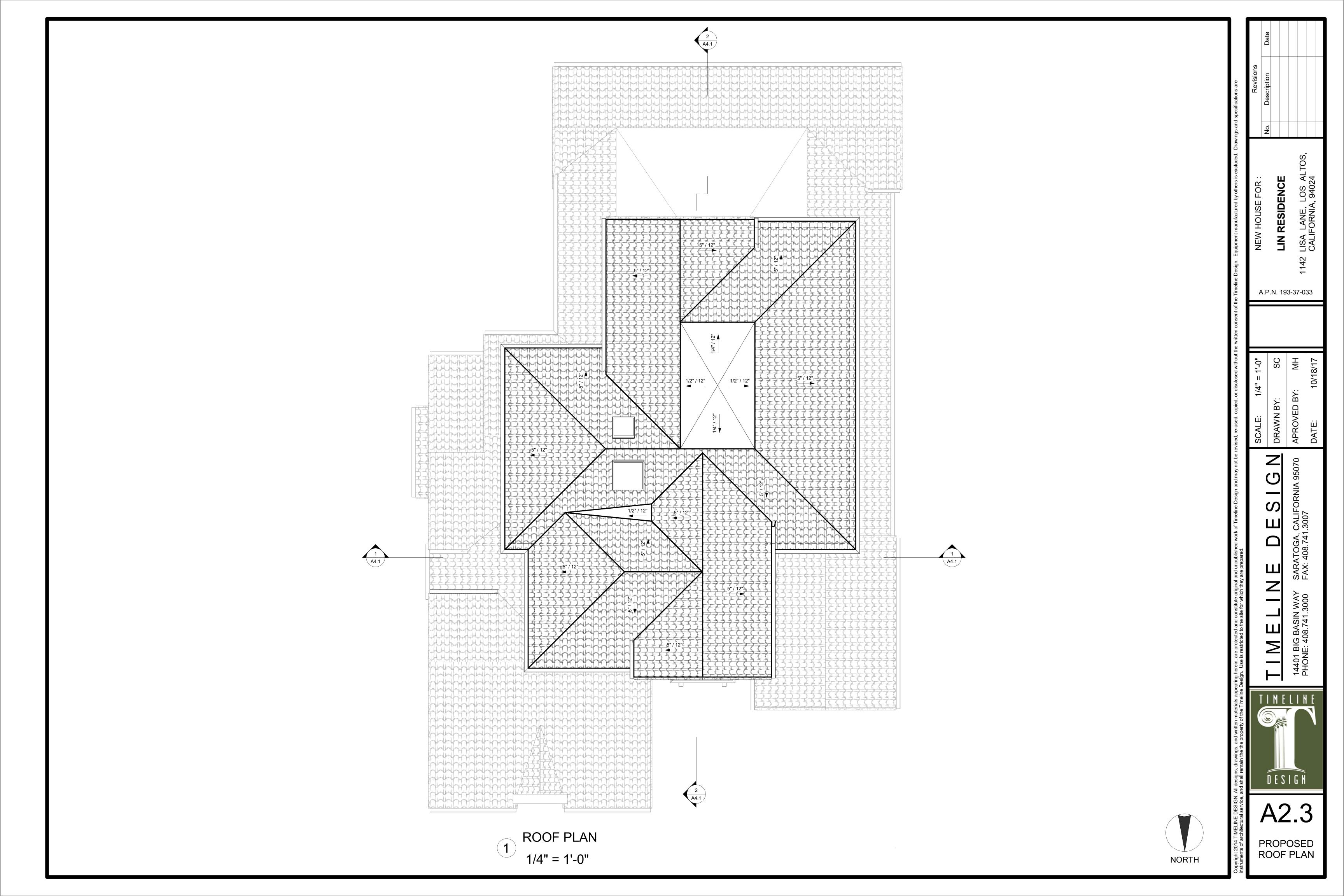
14401 BIG BASIN WAY PHONE: 408.741.3000

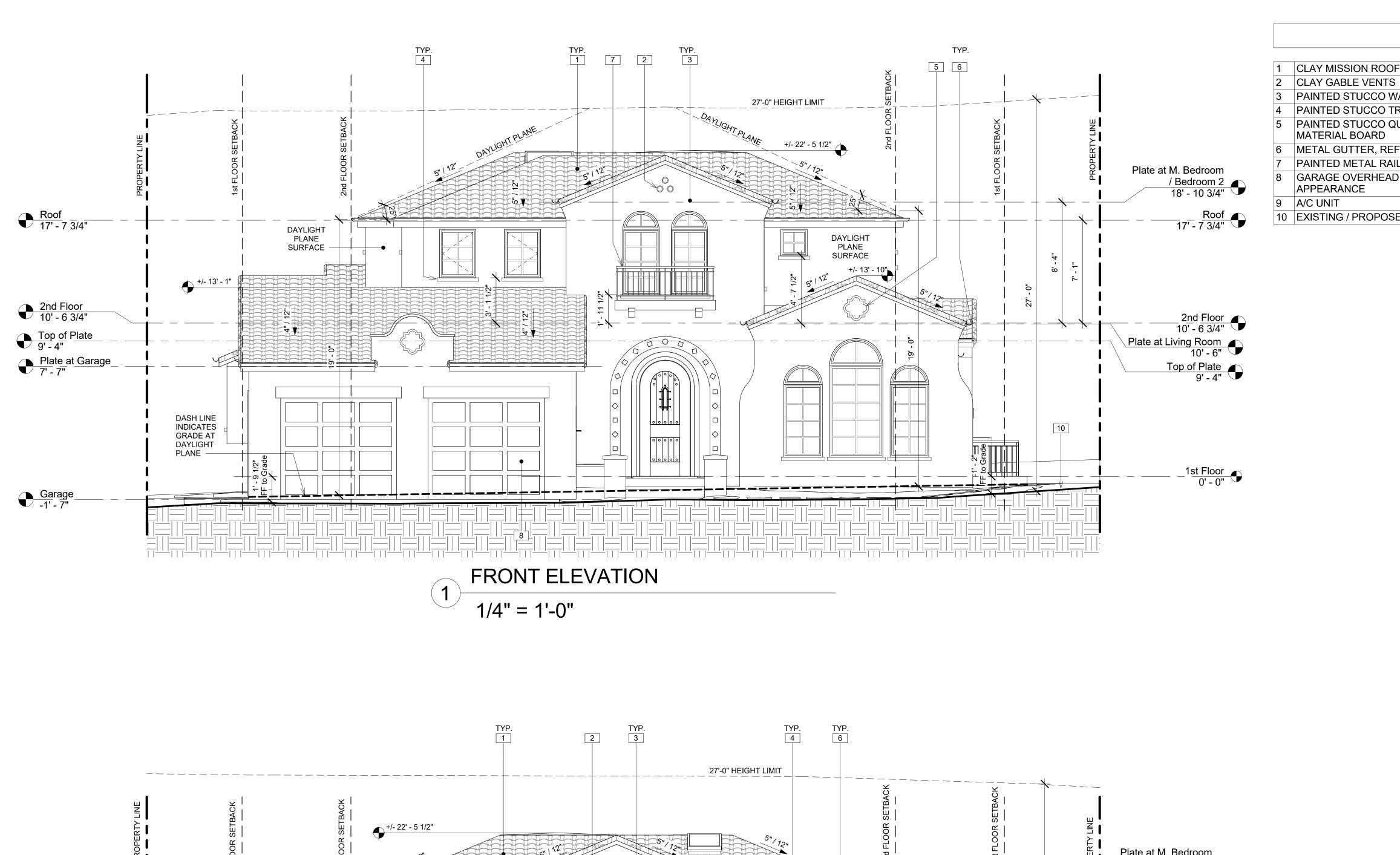
SITE PLAN

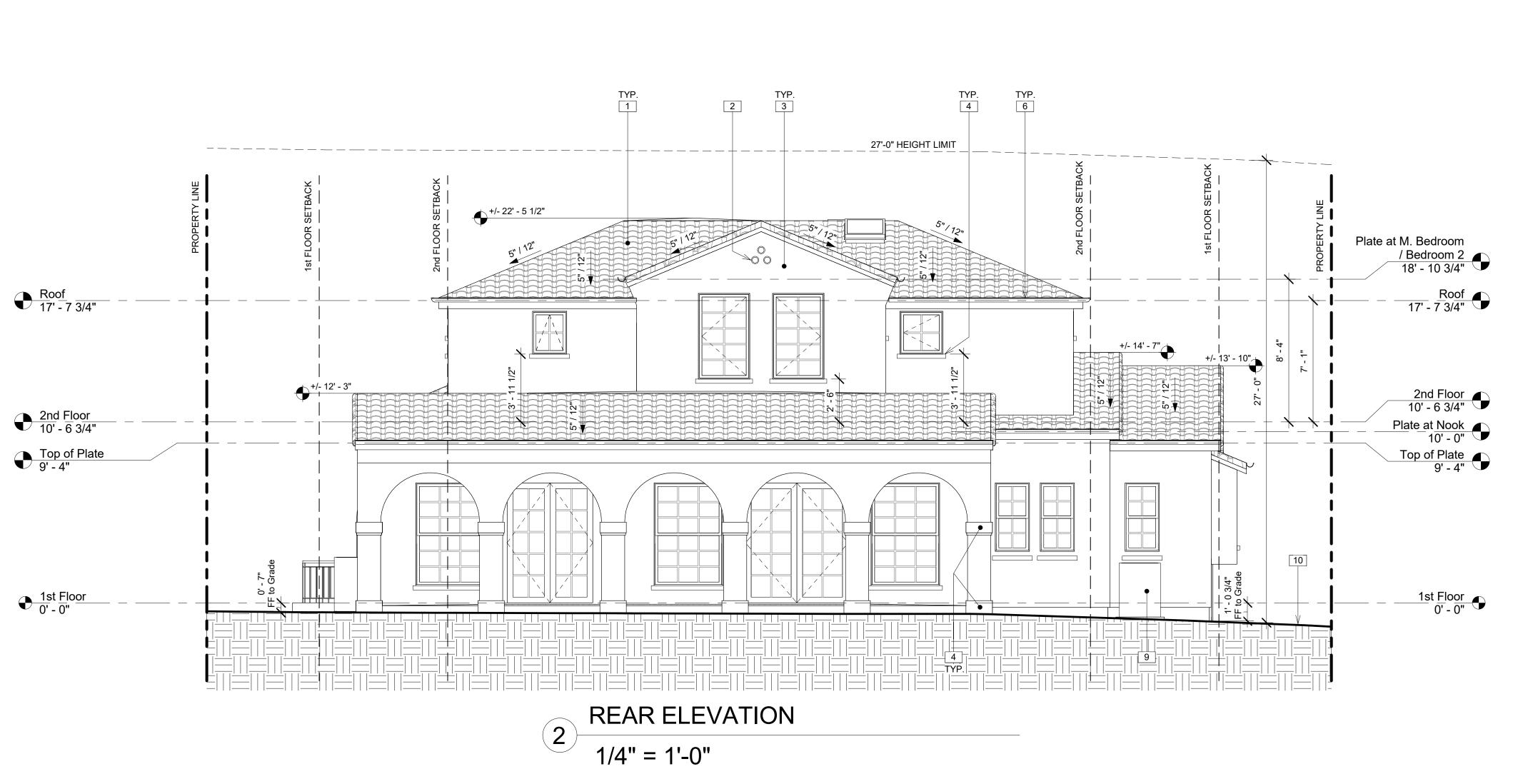












KEYNOTES CLAY MISSION ROOF TILES, REFER TO MATERIAL BOARD PAINTED STUCCO WALL FINISH, REFER TO MATERIAL BOARD

PAINTED STUCCO QUATREFOIL ACCENT, REFER TO MATERIAL BOARD

METAL GUTTER, REFER TO MATERIAL BOARD PAINTED METAL RAILING, REFER TO MATERIAL BOARD GARAGE OVERHEAD METAL DOORS WITH STAINED WOOD APPEARANCE

10 EXISTING / PROPOSED GRADE

14401 BIG BASIN V PHONE: 408.741.30 DESIGN

RESIDENCE

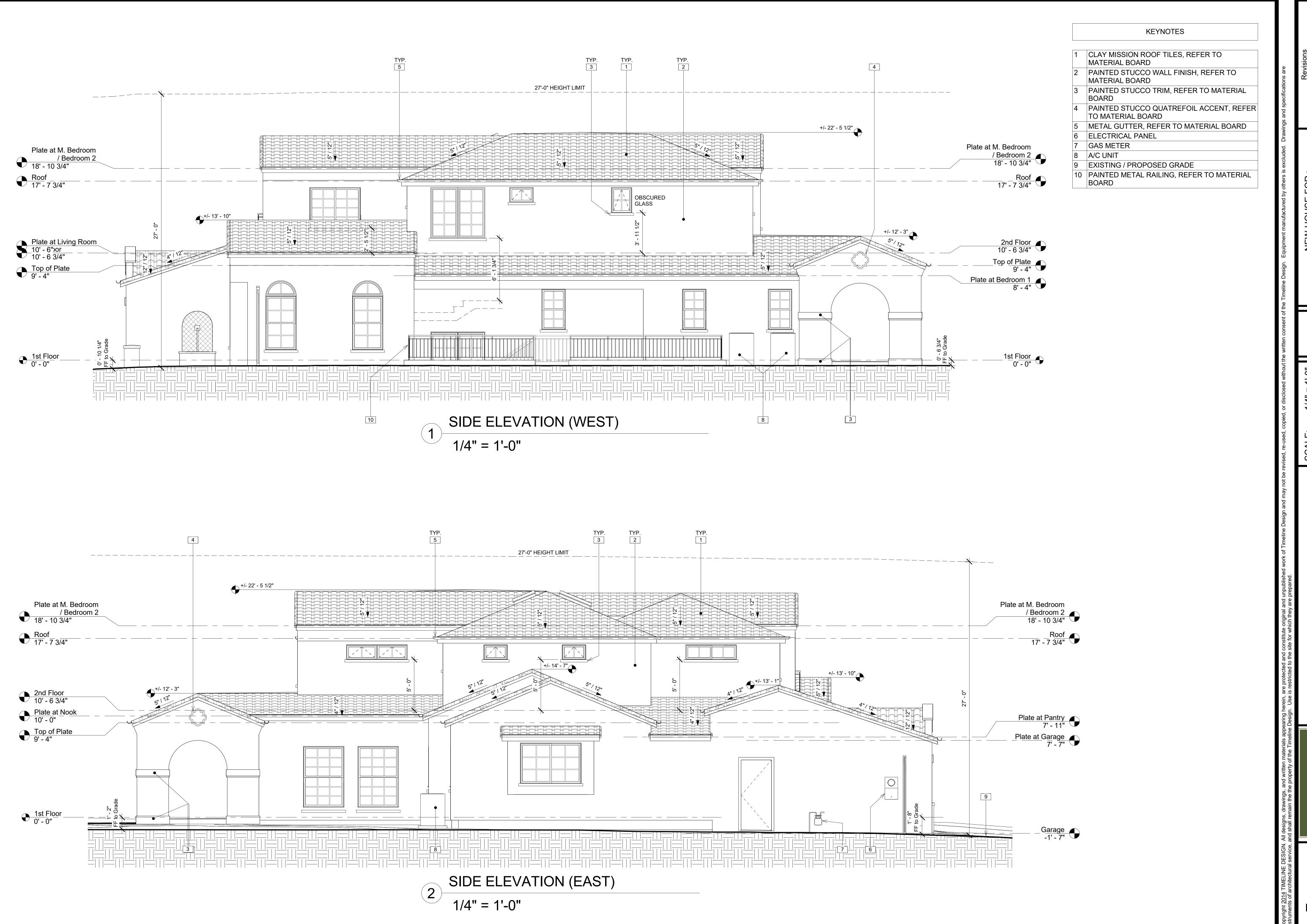
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**EXTERIOR ELEVATIONS** 



ngs and specifications

Revisions

No. Description Date

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A.P.N. 193-37-033

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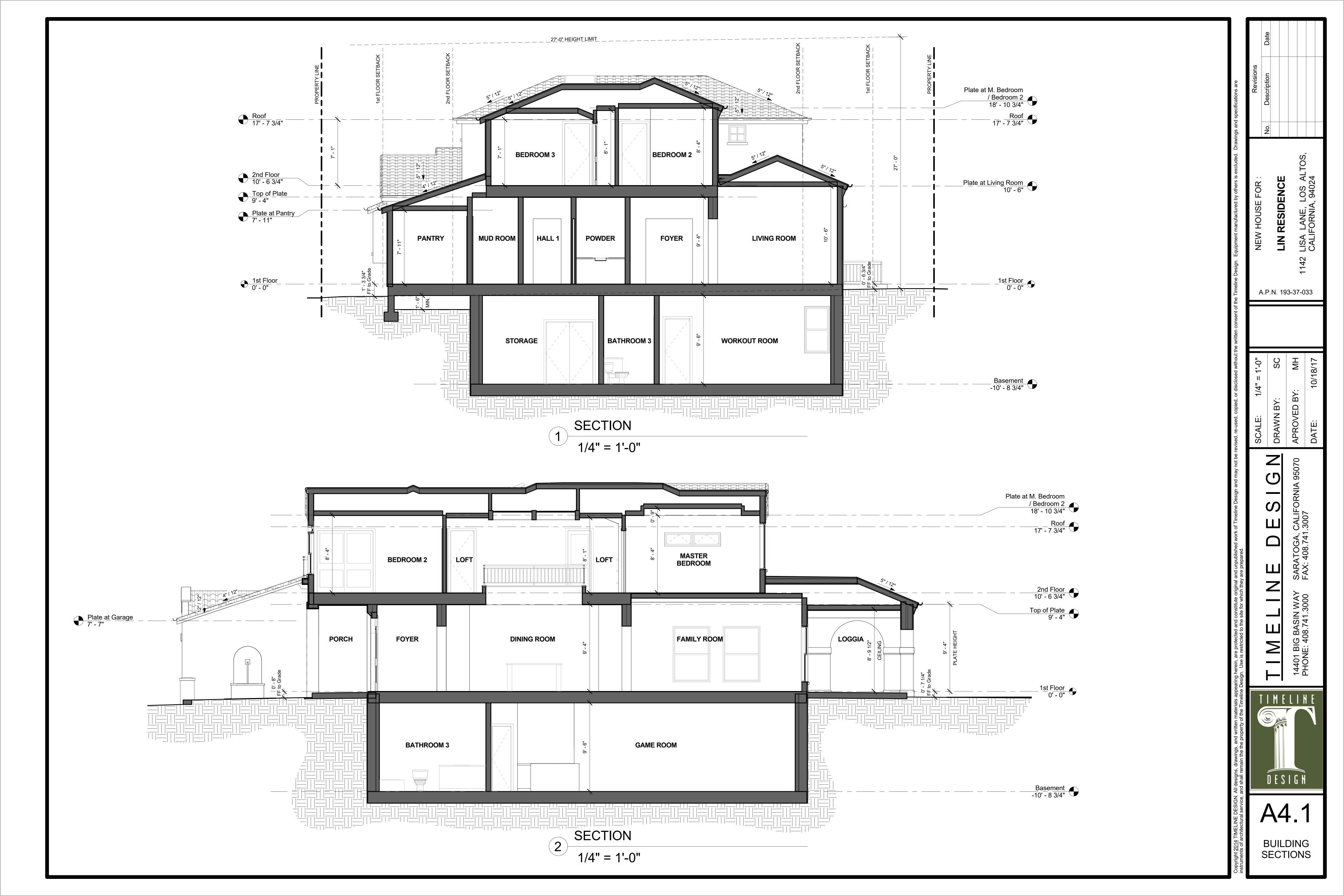
SARATOGA, CALIFORNIA 95070 FAX: 408.741.3007

14401 BIG BASIN WAY SARATO PHONE: 408.741.3000 FAX: 408

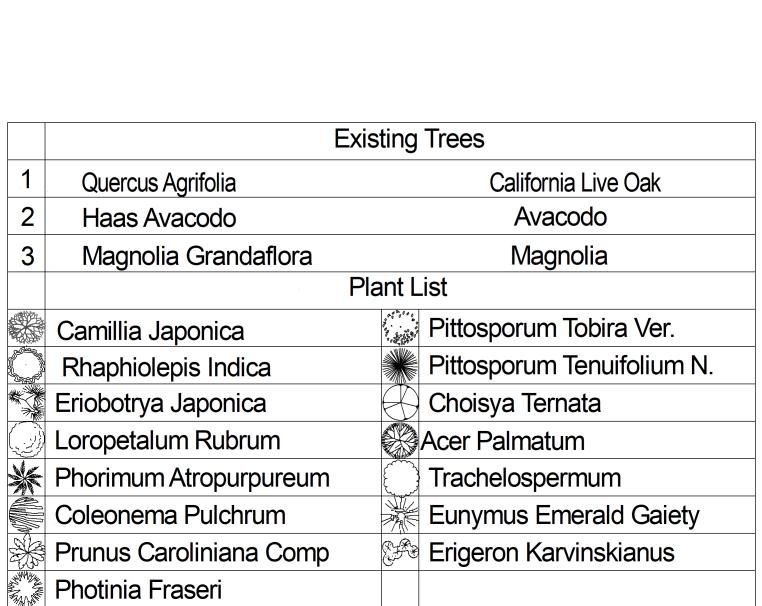
TIMELINE DESIGN

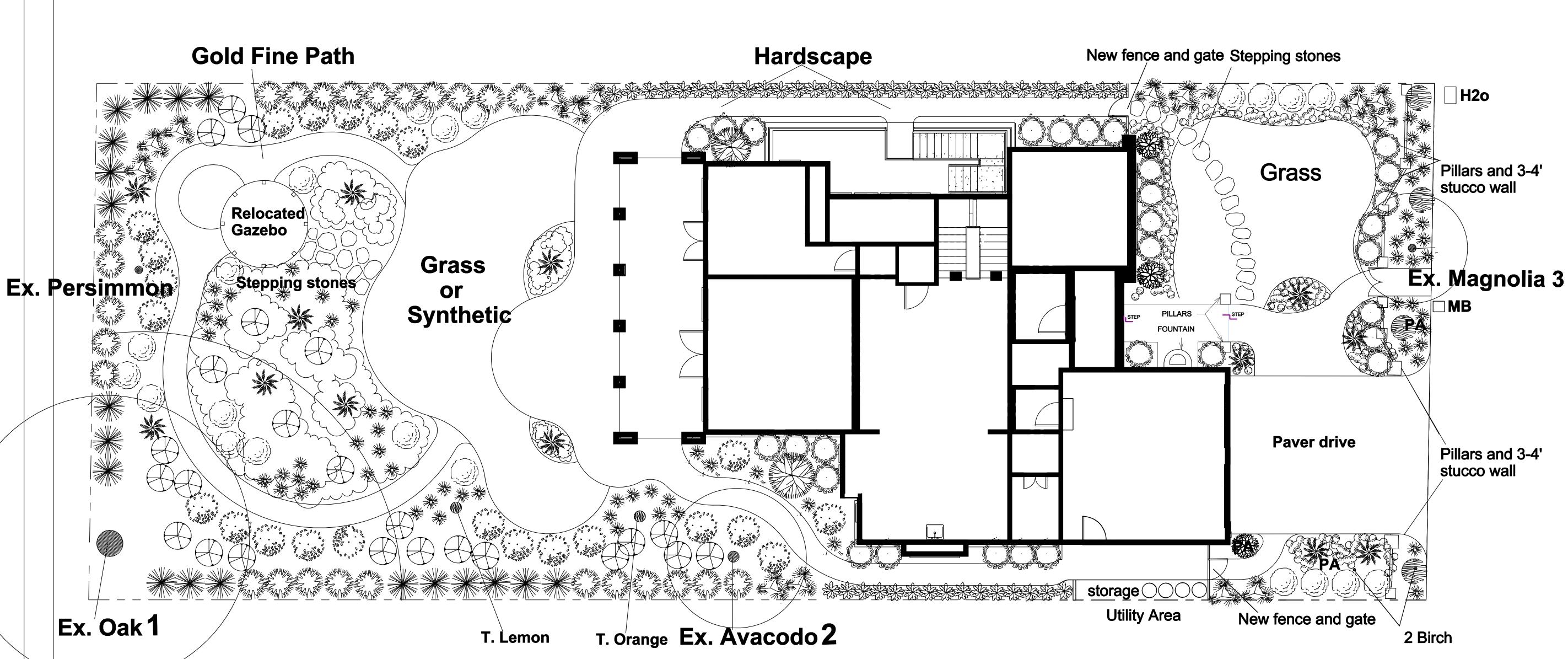
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EXTERIOR ELEVATIONS





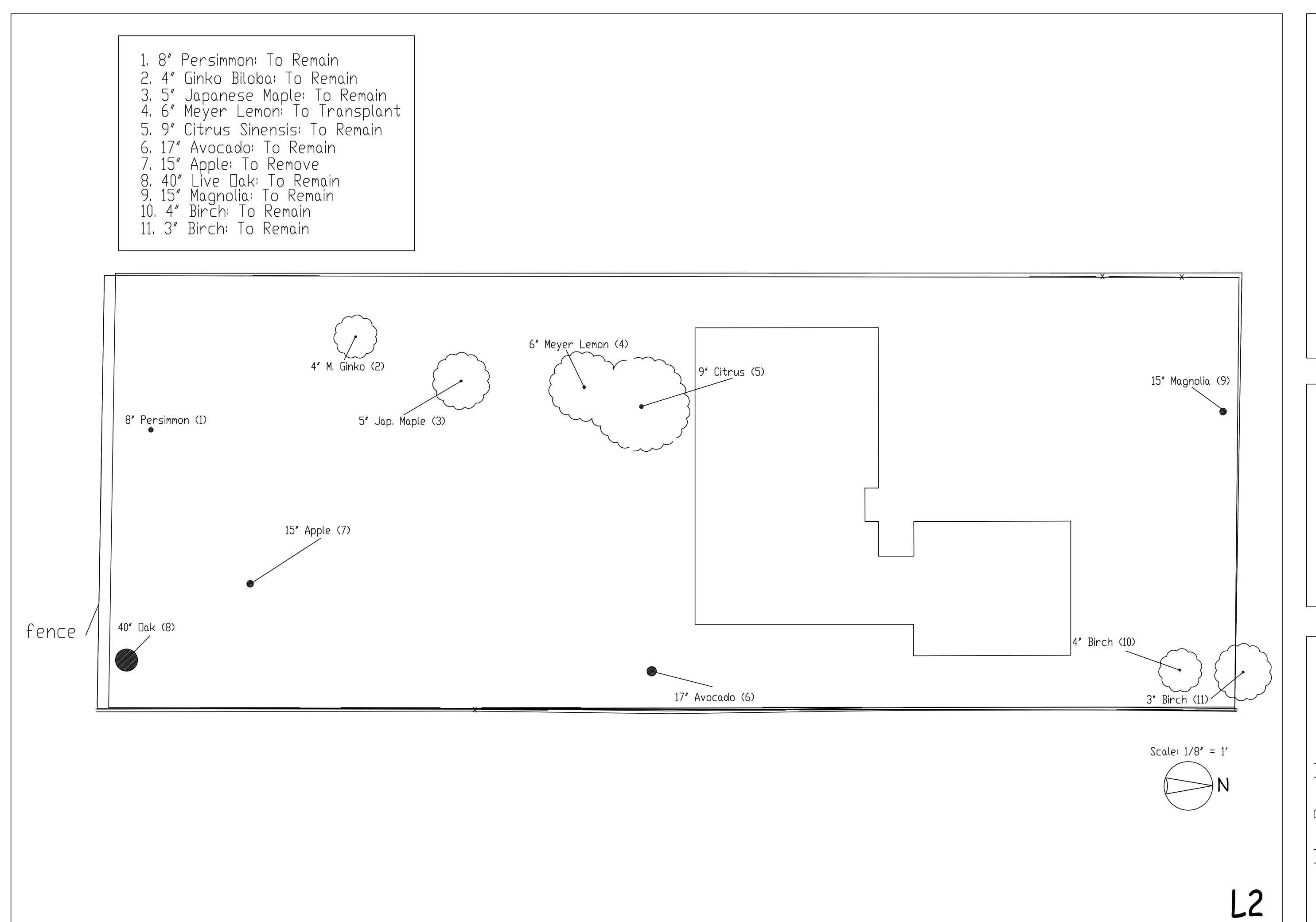




| Plant | lists |
|-------|-------|

| <b>Existing Trees QUERCUS</b> | CALIFORNIA                           |    |     |      |                                    |        |        |                     |
|-------------------------------|--------------------------------------|----|-----|------|------------------------------------|--------|--------|---------------------|
| AGRIFOLIA #1                  | LIVE OAK                             |    |     |      |                                    |        |        |                     |
| HAAS AVACODO #2               | AVACODO                              |    |     |      |                                    |        |        |                     |
| MAGNPLIA                      | MAGNOLIA                             |    |     |      |                                    |        |        |                     |
| GRANDAFLORA #3                |                                      |    |     |      |                                    |        |        |                     |
| NEW<br>PLANTING               |                                      |    |     |      |                                    |        |        |                     |
| ACER PALMATUM                 | JAPANESE<br>MAPLE<br>"BLOOD<br>GOOD" | 3  | 15G | TREE | PARTIAL<br>SUN<br>PARTIAL<br>SHADE | 15-20' | 15-20' | MODERATE<br>0.4-0.6 |
| ERIOBOTRYA<br>DEFLEXA         | BRONZE<br>LOQUAT                     | 8  | 15G | TREE | FULL SUN<br>PARTIAL<br>SHADE       | 15-20' | 15-20' | MODERATE<br>0.4-0.6 |
| PHOTINIA<br>FRASERI           | DWARF<br>FRASER<br>PHOTINIA          | 26 | 15G | STAN | FULL SUN<br>PARTIAL<br>SHADE       | 9-12'  | 9-12'  | MODERATE<br>0.4-0.6 |
| PITTOSPORUM<br>TOBIRA VAR.    | FRAGRANT<br>MOCK<br>ORANGE           | 23 | 5G  | BUSH | FULL SUN<br>FULL<br>SHADE          | 4-5'   | 4-5'   | LOW<br>0.1-0.3      |
| PITTOSPORUM<br>TENUIFOLIUM    | NIGRICANS                            | 20 | 15G | BUSH | FULL SUN<br>FULL<br>SHADE          | 15-20' | 4-6'   | MODERATE<br>0.4-0.6 |
| RHAPHIOLEPIS<br>INDICA        | PINK<br>DANCER<br>INDIAN<br>HAWTHORN | 30 | 5G  | BUSH | FULL SUN                           | 2-3'   | 3-4'   | LOW<br>0.1-0.3      |

| LOROPETALUM           | CHINESE     | 20 | 5G  | BUSH | FULL SUN  | 5-6'   | 10-12' | LOW      |
|-----------------------|-------------|----|-----|------|-----------|--------|--------|----------|
| CHINENSE              | FRINGE      |    |     |      | PARTIAL   |        |        | 0.1-0.3  |
|                       | FLOWER      |    |     |      | SHADE     |        |        |          |
| PHORMIUM TENAX        | PURPLE NEW  | 10 | 5G  | BUSH | 2 WHITE 2 | 4-6'   | 4-6'   | MODERATE |
| ATROPURPUREUM         | ZEALAND     |    |     |      | PINK 2    |        |        | 0.4-0.6  |
|                       | FLAX        |    |     |      | DARK      |        |        |          |
|                       |             |    |     |      | PINK      |        |        |          |
| COLEONEMA             | PINK BREATH | 4  | 5G  | BUSH | FULL SUN  | 6-10'  | 6-10'  | MODERATE |
| PULCHRUM              | OF HEAVEN   |    |     |      | PARTIAL   |        |        | 0.4-0.6  |
|                       |             |    |     |      | SHADE     |        |        |          |
| CAMELLIA              | PINK        | 2  | 15G | BUSH | PARTIAL   | 8-10'  | 5-8'   | MODERATE |
| JAPONICA              | PERFECTION  |    |     |      | SHADE     |        |        | 0.4-0.6  |
| CHOISYA TERNATA       | MOCK        | 18 | 5G  | BUSH | FULL SUN  | 3-5'   | 3-5'   | MODERATE |
|                       | ORANGE      |    |     |      | PARTIAL   |        |        | 0.4-0.6  |
|                       |             |    |     |      | SHADE     |        |        |          |
| ERIGERON X            | SANTA       | 50 | 1G  | GC   | FULL SUN  | 1-2'   | 3-5'   | LOW      |
| MOERHEIMII            | BARBARA     |    |     |      | PARTIAL   |        |        | 0.1-0.3  |
|                       | DAISY       |    |     |      | SHADE     |        |        |          |
| EUONYMUS              | EMERALD     | 50 | 1G  | GC   | FULL SUN  | 4-5'   | 3'     | MODERATE |
|                       | GAITY       |    |     |      | PARTIAL   |        |        | 0.4-0.6  |
|                       |             |    |     |      | SHADE     |        |        |          |
| TRACHELOSPERM         | STAR        | 35 | 1G  | GC   | FULL SUN  | 1-2'   | 3'     | MODERATE |
| <b>UM JASMINOIDES</b> | JASMINE     |    |     |      | PARTIAL   |        |        | 0.4-0.6  |
|                       |             |    |     |      | SHADE     |        |        |          |
| PRUNUS                | CHERRY      | 47 | 15G | TREE | FULL SUN  | 15-20' | 10-15' | LOW      |
| CAROLINIANA           | LAUREL      |    |     |      | PARTIAL   |        |        | 0.1-0.3  |
|                       |             |    |     |      | SHADE     |        |        |          |



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