CHAUDHARY & ASSOCIATES, INC.

ENGINEERS
SURVEYORS
INSPECTORS

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LETTER OF TRANSMITTAL

To: ARUP
901 MARKET ST., SUITE 260
SAN FRANCISCO, CA. 94103

Attn: JOHN KARN, P.E.
ASSOCIATE PRINCIPAL

Job No.: 07-07-036
Date: 3/28/08
Re: DOYLE DRIVE 'C' SUBMITTAL

Mailed Via: CA. OVERNIGHT
Faxed On:

Enclosed are the following items:
☐ Letter ☐ Blackline prints ☐ Proposal ☐ Floppy Disk ☒ Other

No. of Copies	Date of Item	DESCRIPTION
1		DIGITAL MAPPING FILES ON CD
		IN .DWG & .DGN FORMATS
1		PHOTO REPRODUCTION OF PHOTO
		INDEX
1		FILE & LAYERING CONVERTION

If enclosures are not as noted, please call us at (707) 255-2729 immediately.

The enclosed items are transmitted:
☒ For Your Use ☐ For Your Review and Comments ☐ For Your Approval
☐ As Requested ☐ Other _____

REMARKS: ALL TO BE SUBMITTED TO CALTRANS DISTRICT 4 OFFICE.

COPY TO: _____ ☐ with enclosures
_____ ☐ with enclosures
_____ ☐ with enclosures

SIGNED E. Karn
TITLE P.E.

Radman Aerial Surveys, Inc.
6220 24th Street
Sacramento, CA 95822
916/391-1651, Fax 916/391-6537
RADAERIAL@AOL.COM

26-MAR-2008

Client: Chaudhary & Associates, Inc.
Job name: Doyle Drive / San Francisco
RAS number: 270037

1. AutoCAD files: 27003701 through 27003706.DWG (6 DWG files)
   -- covers area shown on paper Microstation check plots 01 through 06 (see attached layout). Plot 05 required 2 windows.

   -- name correspondence between AutoCAD files and Microstation files: 270037xx.DWG = 407220e05xx.dgn (xx = 01 through 06)

CALTRANS-type layering/symbology is used to emulate a CALTRANS DGN file. Planimetric features were projected to an elevation of zero with linear features represented as 2D polylines so that CALTRANS specified dash patterns and line weights can be shown using linetypes and polyline widths. LTSCALE is set to 50.0.

DTM data are included as 3D entities on layers 11A & 11B, turned off (see table below).

PLAN/CONTOURS	entity-type	elevation
Linear plan	2D polylines(dashes/widths displayed)	0
Symbolized plan	BLOCKS	0
Annotation/plan	TEXT	0
Contours	2D polylines(dashes/widths displayed)	ground
Spot elevations	TEXT	ground
DTM DATA (color coded--see layer-assignment chart)		
Breaklines	3D polylines (layer 11A-turned off)	ground
DTM spots	BLOCKS (layer 11B-turned off)	ground

2. Microstation files: 407220e05xx.dgn (xx = 01 through 06)

   A. The global origin is set to CALTRANS English design plane 29R.

   B. The level assignments and graphics are CALTRANS English standards using custom line styles (update 0805). Levels are the same as the layer assignments indicated in the attached chart.

   C. The contour interval is set to the standard of 2 feet.

Notes:
In the AutoCAD files, any linear plan features designated to be used as source data for digital terrain models are duplicated as breaklines in layer 11A. This places all breaklines in a single layer for ease of use. The Microstation files (407220e05xx.dgn) are formatted for final submittal to CALTRANS. In these files the duplicated breaklines are eliminated so that level 11 contains only supplemental breaklines (turned off) in accordance with the CALTRANS standard for files using custom line styles.

Received
MAR 28 2008
Chaudhary & Assoc., Inc.

N

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

4-SF-101/1 FILE 00 OF 06
PHOTO ASC: 0720-20 PHOTO DATE: 9-17-07 PHOTO SCALE 1:3000
MAP ASC: 0720-20 MAP COMPLETION DATE: 3-17-08
FILENAME: 407220e05xx.dgn
DIGITAL COMPILATION BY:
RADMAN AERIAL SURVEYS

VERTICAL DATUM: NAVD 1988
COORDINATE SYSTEM: CCS 83 (1991.35) ZONE 3
UNITS: US SURVEY FEET MAP SCALE 1"= 50' CONTOUR INTERVAL: 2'
DESIGN PLANE: 29R GO= 5830251.6352,1894251.6352,-214748.3648

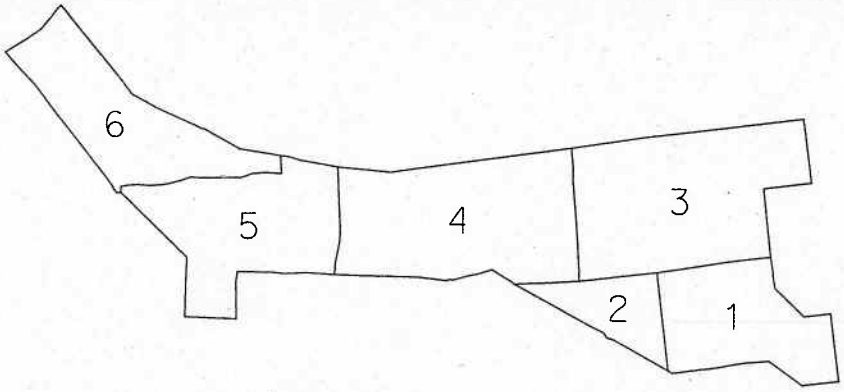

Photo date for photos in file 06 = 9-18-07

270037 -- Doyle Drive / San Francisco
LAYER ASSIGNMENT CHART
18-MAR-2008

Linear features:

ACAD Layer	FC KORK	Description
11A (off)	950	HIDDEN_BREAK_LINE (color = 1)
11A (off)	970	BREAK_LINE_BUILDINGS_OUTLINE (color = 4)
11A (off)	990	BREAK_LINE_BOUNDARY (color = 10)
11A (off)	999	BREAK_LINE (color = 7)
11A (off)	1xxxx	BREAK_LINE (color = 6)derived from planimetric features
2	1000	PAVED_AREA
3	1001	EDGE_TRAVELED_WAY_PAVED
2	1002	CONCRETE
3	1003	PAVED_SHOULDER
3	1004	WHITE_LINES
3	1005	CURB_ONLY_SINGLE_LINE
3	1006	GUTTER
3	1007	CENTER_LINE_STRIPES
3	1008	BERM
2	1009	CONCRETE_BUMPERS
3	1010	CURB/W_GUTTER/SIDEWALK
3	1011	SHOULDER
3	1012	TRAIL
3	1013	DIRT_ROAD/AREA
3	1014	BRIDGE
3	1015	BRIDGE
3	1016	ROLLED_CURB
2	1017	CONCRETE_SOLID
3	1019	BRIDGE RAIL
2	1020	DRIVEWAY
2	1021	MASONRY_WALLS
2	1022	FENCE/WALL
3	1023	EDGE_CONC_TRAVELED_WAY
3	1024	EDGE_CONC_STATE_HWY
3	1025	EDGE_TRAVELED_STATE/HIWAY_PAVED
3	1026	GUTTER
3	1027	PAINTED_EDGE_TRAVELED_WAY
2	1028	RETAINING_WALL_WITH_MASONRY_WALL
2	1031	CURB-PARKING
2	1032	CURB/W_GUTTER-PARKING
2	1034	GUTTER-PARKING
2	1035	ROLLED_CURB-PARKING
2	1036	GUTTER-PARKING
2	1042	RETAINING_WALL
2	1043	GUARDRAIL
2	1045	HWY_DIVIDER
2	1047	MASONRY_WALL/FENCE
2	1051	SAND
2	1052	DIRT_PILES
2	1071	RUBBISH
3	1081	BRIDGE_EDGE/TRV_ST_HWY_CONC
3	1082	BRIDGE_EDGE/TRV_ST_HWY_PAVED
3	1083	BRIDGE_PAINTED_EDGE_TRV_WAY
3	1084	BRIDGE_CURB
3	1085	BRIDGE_CENTER_LINE_STRIPES
3	1086	BRIDGE_CONCRETE
3	1087	BRIDGE_HWY_MEDIAN_BARRIER_WALL
2	1072	SHADOWS
2	1101	FENCE
5	1306	LIGHT_POLE_ARM
5	1329	LINE_HOLLOW_POLE

5	1330	GUY_WIRE
5	1339	POLE_LINE
3	1402	RAILROAD_SWITCH
2	1411	RAILROAD
2	1412	RAILROAD
2	1413	RAILROAD
2	1501	BILLBOARD
2	1560	CATTLE_GUARD_TERMINATORS
2	1561	CATTLE_GUARD_LINE
2	1584	HIWAY_SIGN
5	1608	VAULT
5	1609	TOWER
5	1610	VALVE
5	1612	MANHOLE
5	1614	ELECTRICAL_TOWER
5	1617	DI_DRAWN
5	1622	ELECTRICAL_TRANSFORMER
5	1623	ANTENNA
5	1625	MISC._OR_UNIDENTIFIED_UTILITY
5	1628	ELECTRICAL_TRANSMISSION_LINES
5	1631	CATCH_BASIN_DRAWN
2	2001	BUILDING
2	2002	HIDDEN_BUILDING
2	2003	TRAILER
2	2004	SHED
2	2005	BUILDING_INTERIOR_WALL
2	2006	BUILDING_NO-CLIP
2	2007	HIDDEN_BUILDING
2	2010	STRUCTURE_MISCELLANEOUS
2	2012	COVER/PATIO
2	2013	FOUNDATION
2	2014	STEPS
2	2015	SIDEWALK
2	2016	CEMETERY
2	2021	CONSTRUCTION
5	2023	TELEPHONE_BOOTH
2	2051	DECK
2	2052	DOCK
2	2071	POOL
2	2072	SPA
2	2101	TANK
5	2121	PIPE
2	2301	PARKING_LINE_STRIPES
3	2302	CENTERLINE_SOLID
3	2303	WHITE_LINES_SOLID
6	3001	WATER/STREAMS/DRAINS (obs)
6	3002	SWAMP
6	3003	WATER_LINE_FLOW
6	3005	WATER FLOW/STREAMS/DRAINS
6	3006	WATER EDGE/LAKES/PONDS
5	3007	CONCRETE_DITCH/CANAL
6	3008	WATER/STREAMS/DRAINS_HIDDEN
6	3009	WATER_LINE_FLOW_HIDDEN
5	3311	CULVERT
5	3312	HEADWALL
3	3313	RAMP
4	3901	ROCK/OUTCROP_CLOSED
4	3902	ROCK/OUTCROP_CLOSED
4	4001	TREE_LINE
4	4002	BRUSH_LINE
4	4003	GROUND_COVER
4	4004	HEDGE_LINE
4	4009	FIELD_LINE

4	4018	CALTRANS_VINEYARD
4	4021	TREE_LINE_CLOSED
4	4022	BRUSH_LINE_CLOSED
4	4023	1TREE_CLOSED
4	4024	GROUND_COVER_CLOSED
4	4030	TREE_LINE
4	4031	BRUSH_LINE
4	4032	GROUND_COVER
7	5001	SOLID_INTERMEDIATE
7	5002	HIDDEN_INTERMEDIATE
7	5003	DEPRESSION_INTERMEDIATE
7	5004	HIDDEN/DEP_INTERMEDIATE
7	5011	SOLID_INDEX
7	5012	HIDDEN_INDEX
7	5013	DEPRESSION_INDEX
7	5014	HIDDEN/DEPRESSION_INDEX
7	8001	BRIDGE_SOLID_INTERMEDIATE
7	8002	BRIDGE_HIDDEN_INTERMEDIATE
7	8003	BRIDGE_DEPRESSION_INTERMEDIATE
7	8004	BRIDGE_HIDDEN/DEP_INTERMEDIATE
7	8011	BRIDGE_SOLID_INDEX
7	8012	BRIDGE_HIDDEN_INDEX
7	8013	BRIDGE_DEPRESSION_INDEX
7	8014	BRIDGE_HIDDEN/DEPRESSION_INDEX
10	32001	SHEET BORDER
12	32003	GRID
12	32004	GRID

Symbolized features:

ACAD Layer	FC KORK	BLOCK Name	Description
11B (off)	4060	RRSWSE	DTM_SPOT(map spot) (color = 40)
2	1030	SP	CRASH_CUSHION
2	1101	SP	FENCE
5	1301	PP	POWER_POLE
5	1302	EL	LIGHT_POLE
5	1304	ELT	LIGHT_ON_ARM
5	1305	EL	SIGNAL_LIGHT
5	1306	SP	LIGHT_POLE_ARM
2	1309	SP	POST
5	1329	SP	HOLLOW_SIGNAL_POLE
5	1330	ANCHT	GUY_WIRE ANCHOR
5	1339	POLE	POLE
2	1340	SP	FLAGPOLE
2	1402	RRSWSE	RR_SWITCH
2	1505	SIGN1	T/SIGN
2	1506	SIGN2	T/SIGN
3	1558	LTA	LEFT TURN ARROW
3	1559	DIAMND	HOV_LANE_INDICATOR
2	1584	POLE	HWY_SIGN_POLE
5	1608	STRSYM	VAULE
5	1609	STRSYM	TOWER
5	1610	SP	VALVE
5	1612	MH	MH
5	1613	SP	STAND_PIPE
5	1615	STRSYM	ELECTRICAL_BOX
5	1616	STRSYM	WATER_METER
5	1618	DI	D.I._RECTANGLE
5	1619	RDI	D.I._ROUND
5	1621	FH	FIRE_HYDRANT
5	1624	SP	WATER_VALVE
5	1625	STRSYM	UTILITY
5	1626	SP	WELL

2	1627	SP	WINDMILL
5	1636	CBX	CALLBOX
2	1671	SP	FLAGPOLE
1	1726	PC	PICTURE_CENTER
1	1745	VC	VERTICAL_CONTROL_POINT
1	1746	HVC	HORIZ/VERT_CONTROL_POINT
1	1748	BM	BENCH_MARK
1	1751	C4	PHOTO_ID_CONTROL
1	1752	ATC	ANALYTICAL PUG POINT
4	3002	MRSH	MARSH
5	3311	STRSYM	CULVERT
4	4007	TR8	TREE
4	4008	TR4	TREE
4	4017	STRSYM	INSIDE_ORCHARD_TREE_DOT
4	4025	TR4	TREE
4	4031	TR8	TREE
8	406x	RRSWSE	SPOT_ELEVATION (x = 1 - 4)
8	407x	RRSWSE	STRUCTURAL_SPOT_ELEVATION (x = 1 - 4)

Text

ACAD Layer	FC KORK	Feature annotated
2	1000	PAVED_AREA
3	1001	EDGE_TRAVELED_WAY_PAVED
2	1002	CONCRETE
3	1003	PAVED_SHOULDER
3	1005	CURB
3	1008	BERM/DIKE
3	1010	CURB
3	1011	DIRT_SHOULDER
2	1012	TRAIL
3	1013	DIRT_ROAD/AREA
3	1016	CURB
2	1020	DRIVEWAY
2	1021	WALLS
3	1023	CONCRETE
3	1024	CONCRETE
3	1025	EDGE_TRAVELED_STATE/HIWAY_PAVED
3	1026	GUTTER
3	1027	PAINTED_EDGE_WAY
3	1030	CRASH_CUSHION
2	1043	GUARDRAIL
2	1045	HWY_DIVIDER
2	1051	SAND
2	1052	DIRT_PILES
2	1071	RUBBISH
2	1072	SHADOWS
2	1101	FENCE
5	1305	TRAFFIC SIGNAL
2	1309	POST
5	1329	HOLLOW_POLE
5	1339	POLE
2	1340	FLAGPOLE
2	1501	BILLBOARD
2	1505	T/SIGN
2	1506	T/SIGN
2	1584	HIWAY_SIGN
5	1608	VAULT
5	1609	TOWER_LABEL
5	1610	VALVE
5	1612	MH
5	1613	STAND_PIPE
5	1614	TOWER

5	1615	ELECTRICAL BOX
5	1616	WATER_METER
5	1617	D.I._LABEL
5	1618	D.I._LABEL
5	1622	TRANSFORMER
5	1624	WATER_VALVE
5	1625	UTILITY
5	1630	WELL
2	1671	FLAGPOLE
1	1726	PICTURE_CENTER
1	1745	VERTICAL_CONTROL_POINT
1	1746	HORIZ/VERT_CONTROL_POINT
1	1751	PHOTO_ID_CONTROL
1	1752	ANALYTICAL POINT-(DEC. JUST. TEXT)
2	2001	BUILDING
2	2003	TRAILER
2	2010	STRUCTURE_MISCELLANEOUS
2	2013	FOUNDATION
2	2014	STEPS
2	2015	SIDEWALK
2	2021	CONSTRUCTION
2	2024	PUMP
2	2051	DECK
2	2052	DOCK
2	2071	POOL
2	2101	TANK
5	2121	PIPE
6	3001	WATER
4	3901	ROCK/OUTCROP
4	3902	ROCK/OUTCROP_CLOSED
4	4001	TREE_LINE
4	4002	BRUSH_LINE
4	4003	GROUND_COVER
4	4004	HEDGE_LINE
4	4007	ORCHARD_TREE
4	4021	TREES
4	4022	BRUSH_LINE_CLOSED
8	4060	SPOT_ELEVATION (DEC. JUST. TEXT)
8	406x	SPOT_ELEVATION (x=1-4)
8	4070	STRUCTURAL_SPOT_ELEVATION (DEC. JUST. TEXT)
8	407x	STRUCTURAL_SPOT_ELEVATION (x=1-4)
8	5011	SOLID_INDEX
8	5012	HIDDEN_INDEX
8	5013	DEPRESSION_INDEX
8	5014	HIDDEN_DEPRESSION_INDEX
10	999x	Notes/Disclaimers
12	320xx	Grid