

4/23/08 F:\#DEPOT\CITY_ENGINEER\ENG_DESIGN\DESIGN\OAKEY & TENAYA STORM DRAIN\DWG\OAKEY-100%DWG

- REV. DATE JUNE 22, 2006

AC	AT	MLCP	MULTI-LAYER COMPOSITE PIPE
AC	ASPHALTIC CONCRETE	NPC	NEVADA POWER COMPANY
ACP	ASBESTOS CEMENT PIPE	NTS	NOT TO SCALE
AEP	AUTHORIZATION TO ENTER PROPERTY	QHP	OVERHEAD POWER LINE
APPROX.	APPROXIMATE	PC	POINT OF CURVE
B/C, BC	BACK OF CURB	P.I.P.	PROTECT IN PLACE
BCR	BACK OF CURB RADIUS	PP	POWER POLE
BM	BENCHMARK	PT	POINT OF TANGENCY
BT	BOTTOM	PRC	POINT OF REVERSE CURVE
B.R.	BACK OF RAMP	PB	PULLBOX
C, CL	CENTERLINE	P, PL	PROPERTY LINE
CATV	CABLE T.V.	R	RADIUS
CLV	CITY OF LAS VEGAS	RT	RIGHT
COMM.	COMMERCIAL	R/W, R.O.W.	RIGHT OF WAY
CONC.	CONCRETE	SCCP	STEEL CYLINDER CONCRETE PIPE
COND.	CONDUCTOR	SD	STORM DRAIN
CLSM	CONTROLLED LOW STRENGTH MATERIAL	SF	SQUARE FOOT
C & G	CURB AND GUTTER	SS	SANITARY SEWER
D/W	DRIVEWAY	STATION	STATION
DWG.	DRAWING	STD.	STANDARD
ECR	EDGE OF CURB RETURN (AT B/C)	SY	SQUARE YARD
ELEC.	ELECTRIC	S/W	SIDEWALK
EOP, EP	EDGE OF PAVEMENT	T	TELEPHONE LINE
ELEV.	ELEVATION	TC	TOP OF CURB
EXIST., EX.	EXISTING	TEL	TELEPHONE
EXOH	EXISTING OVERHEAD UTILITY	TRANS.	TRANSITION
FD	FOUND	T.R.C.	TOP OF RAMP CURB
FL	FLOWLINE	TS	TRAFFIC SIGNAL
FG	FINISHED GRADE	TYP.	TYPICAL
FH	FIRE HYDRANT	U.S.D.	UNIFORM STANDARD DRAWING
FT.	FOOT/FEET	W	WATER LINE
FC	FACE OF CURB	WC	WHEEL CHAIR
G	GAS	WM	WATER METER
GV	GAS VALVE	WV	WATER VALVE
GW	GUY WIRE	W/	WITH
INT.	INTERSECTION	Δ	INCLUDED DELTA ANGLE
L	LENGTH		
LF	LINEAL FOOT, LINEAR FEET		
LT	LEFT		
MH	MANHOLE		

CENTERLINE OF TENAYA WAY, BEARS N 3°21'07" W, BETWEEN DEL REY AND OAKEY, AS SHOWN ON THE FINAL MAP OF "TENAYA AND OAKEY", RECORDED IN BOOK 108 OF PLATS, PAGE 93, CLARK COUNTY, NEVADA, RECORDS.

CLV BM 1LV10 3C4: RIVET & PLATE IN TOP OF CURB, SW CORNER OF OAKLEY
AND TENAYA
ELEV. 2465.44' (NAVD88)

IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.

CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.

THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OF LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.

CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMP ACTION, IN THE AREAS INDICATED:

	<u>HORIZONTAL</u>	<u>VERTICAL</u>	<u>COMPACTION</u>
A. PAVEMENT AREA SUBGRADE	0.1'+	+0.0'TO-0.1'	95%
B. ENGINEERED FILL	0.5'+	+0.1'TO-0.1'	95%

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.

ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.

THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.

THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.

IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE CONTRACTOR AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK, LATEST EDITION, AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.

BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.

WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCRoACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.

IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKINGS SUCH PAVEMENT MARKINGS SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.

WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGN POST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGN POST SHALL BE ELIMINATED.

ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

STREET SIGNS AND STOPS SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLUERS TO ENSURE THE SAFETY OF THE PUBLIC IN AND AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR ISMA WORK ZONE SAFETY SPECIALIST SET-UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHTS OF WAY.

WORK IN PUBLIC STREETS, SINCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (229-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.

ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.

ALL SIGNS SHALL BE MANUFACTURED WITH CLASS B REFLECTIVE SHEETING.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER APPROVAL. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY PLANNING ENGINEER.

CHISEL "S" OR "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.

POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.

ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETEIFF IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.

TREE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" 'S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.

WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.

ALL CONTRACTORS INSTALLING SEWER MAINS WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.

THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY PLANNING ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.

INSTALLATION OF CURVED SEWERS REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

V. DATE JANUARY 2008

LVVWD PROJECT # 114357

NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT IDENTIFIED ABOVE.

ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2003 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS).

ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.

A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.

ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.

ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.

ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.

ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.19 OF THE 2003 EDITION OF THE UDACS.

ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.

THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.

ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.13.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.

ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

TELEPHONE "CALL BEFORE YOU DIG" AT 1-800-227-2600.

Call before you Dig

Avoid cutting underground utility lines. It's easily.

Call



OR

1-800-227-2600

CLARK COUNTY POWER AND GAS

1-702-455-7544

Avoid cutting underground utility lines. It's easily.



before you

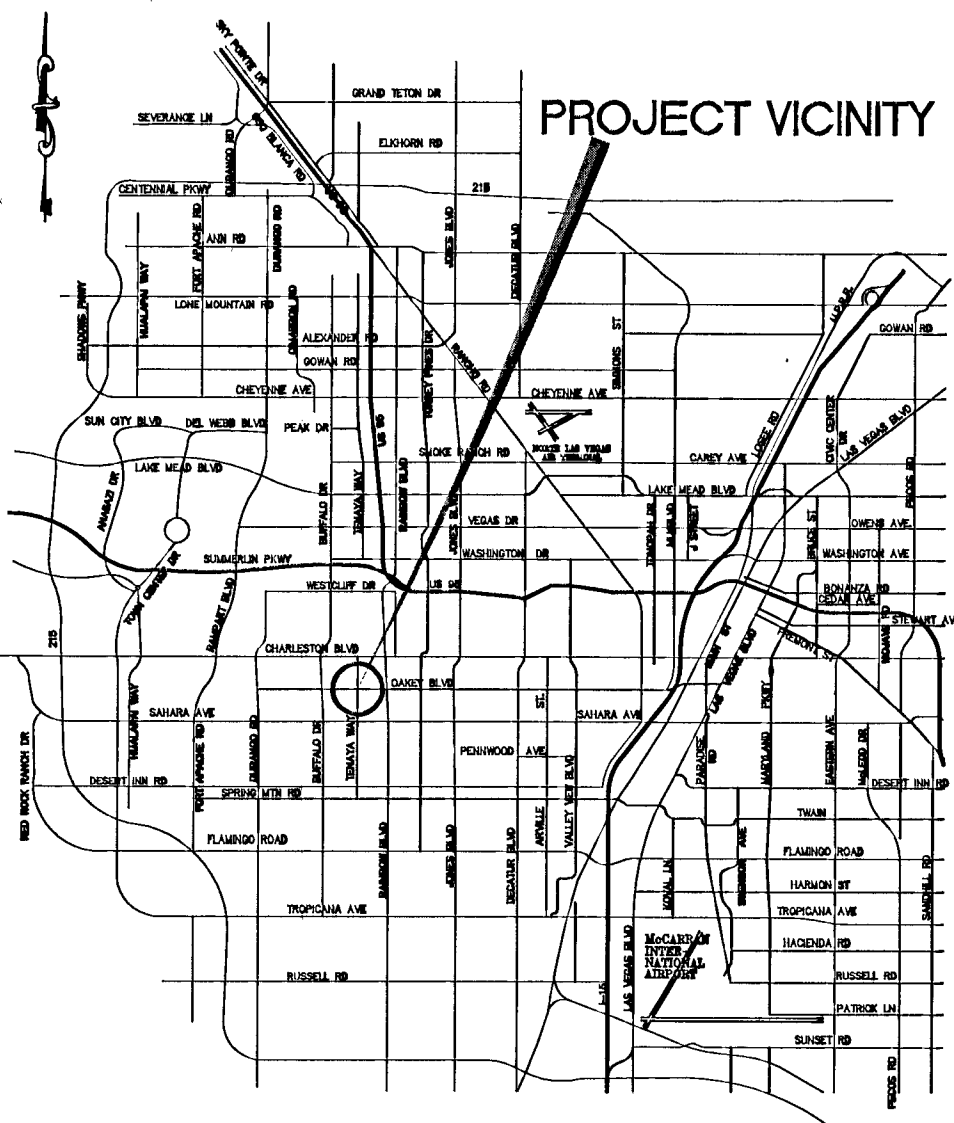
Overhead

1-702-227-2029

Nevada Power, Environment and Safety Services Department

	CENTERLINE
	RIGHT OF WAY LINE
	PROPERTY LINE
	PAVEMENT REMOVAL LIMITS (SAWCUT)
	BENCHMARK
	CABLE T.V. PULL BOX
	ELECTRIC VAULT/PULL BOX
	ELECTRIC MANHOLE
	FIRE HYDRANT
	FOUND MONUMENT AS NOTED
	GAS VALVE
	POWER OR TELEPHONE POLE
	SANITARY SEWER MANHOLE
	SET MONUMENT AS NOTED
	SIGN
	STORM DRAIN MANHOLE
	STREET LIGHT
	STREET LIGHT PULL BOX
	TELEPHONE MANHOLE
	TELEPHONE PULL BOX
	WATER METER
	WATER VALVE

1	G1	COVER SHEET
2	G2	NOTES
3	H1	HORIZONTAL CONTROL PLAN
4	C1	PLAN AND PROFILE OAKLEY BLVD - STA 17+00 TO 24+00
5	C2	PLAN AND PROFILE OAKLEY BLVD - STA 24+00 TO 31+00
6	C3	PLAN AND PROFILE OAKLEY BLVD - STA 31+00 TO 38+00
7	C4	PLAN AND PROFILE OAKLEY BLVD - STA 38+00 TO 41+00
8	C5	BELCASTRO STREET - PLAN AND PROFILE CROSS SECTIONS AT LATERALS
9	C6	PLAN AND PROFILE TENAWAY WAY - STA 50+00 TO 57+00
10	C7	PLAN AND PROFILE TENAWAY WAY - STA 57+00 TO 64+00
11	C8	PLAN AND PROFILE DEL REY AVE - STA 7+00 TO 13+00
12	C9	TRAFFIC STRIPING RESTORATION PLAN



VICINITY MAP
NOT TO SCALE

22099

REVISIONS					
NO.	DATE:		DESCRIPTION	APP'D	

MENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION



STORM DRAIN IMPROVEMENTS
OAKLEY BLVD AND TENAYA WAY

NOTES

TITLE: _____ SHEET: _____

Jeremy P. Leavitt

REGISTERED PROFESSIONAL ENGINEER-STATE OF NEW YORK

JEREMY
P.
LEAVITT

CIVIL

NO. 015536

4-23-08

COUNCIL: 13 (2007-2010)

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