ESTIMATED QUANTITIES

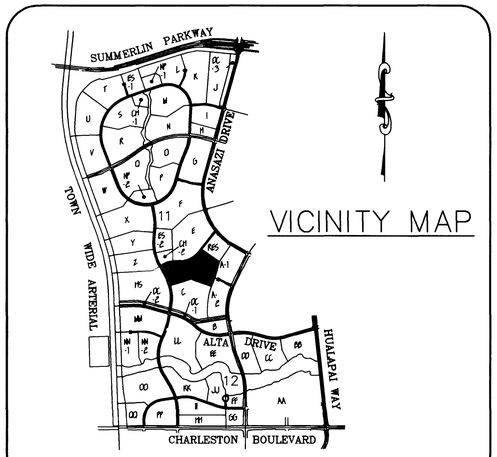
TYPE I BASE	4242 C.Y.
TYPE II BASE	2884 C.Y.
EXCAVATION	51,070 C.Y.
2" AC PAVEMENT	22,315 S.Y.
"L" ROLL CURB	11,142 L.F.
8" VALLEY GUTTER	3,748 S.F.
4' SIDEWALK	18,710 S.F.
STREET LIGHTS	41 EA.
DRIVEWAY APPROACH	4,324 S.F.

IMPROVEMENT PLANS

FOR

OAK KNOLL
SUMMERLIN VILLAGE 11/12

CITY OF LAS VEGAS
STATE OF NEVADA



VICINITY MAP

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "SUMMERLIN IMPROVEMENT STANDARDS", CLARK COUNTY AREA, LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST ISSUE; AND OTHER APPLICABLE APPROVED STANDARDS ISSUE BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".

2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND POWER, GAS AND/OR OTHER UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS AND LIABILITY IN CONNECTION THEREWITH.

3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.

4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.

5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT.

6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.

7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 150' IN EXTRUDED TYPE CURB.

8. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.

9. APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.

10. CURB & GUTTER WITH A GRADE OF LESS THAN SIX TENTHS OF ONE PERCENT FOR 30" ROLL TYPE CURB AND LESS THAN FIVE TENTHS OF ONE PERCENT FOR 24" 'L' TYPE CURB SHALL BE WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. ANY CURB & GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY SHALL BE REMOVED AND REPLACED.

11. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER SUMMERLIN STD. DRAWING S-77 OR SUMMERLIN STD. DRAWING S-75. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.

12. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS, OR AS DESIGNATED IN THE FIELD BY A CITY INSPECTOR.

13. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.

14. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS INSPECTOR IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.

15. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.550.

16. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC. SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

17. WALL NOTES:
    A. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN FOR THE PURPOSE OF GRADING RELATIONSHIPS.
    B. THE STRUCTURAL AND ARCHITECTURAL DESIGN OF ALL WALLS (RETAINING OR NON-RETAINING) MUST BE APPROVED BY THE CLV BUILDING DEPARTMENT.

18. ASPHALT MIX DESIGN MUST BE SUBMITTED & APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT ON CITY STREETS.

BENCHMARK

CONTROL POINT "SPANKY" - A BRASS CAP SET IN CONCRETE STAMPED "#42". SET BY G.C. WALLAGE ENGINEERING AND USED AS A BENCHMARK FOR SUMMERLIN CONSTRUCTION.

ELEVATION = 2825.38 (SUMMERLIN DATUM)= PROJECT DATUM
ELEVATION EQUATION: SUMMERLIN ELEV. -0.217 = NGVD'29 ELEV.
ELEVATION EQAUTION: SUMMERLIN ELEV. +2.437' = NAVD'88 ELEV.

BASIS OF BEARINGS

NORTH 89°53'30" EAST, BEING THE BEARING OF THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OD SECTION 25, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A PARCEL MAP ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 73 OF PARCEL MAPS, AT PAGE 9.

DEVIATIONS FROM STANDARDS

1. RESIDENTIAL OFF-SET CROWN STREET IS A DEVIATION FROM S.I.S. DWG. NO. S-15
2. ENTRY STREET OFF-SET CROWN STREET IS A DEVIATION FROM S.I.S. DWG. NO. S-12
3. RESIDENTIAL STREET RADIUS OF 200' IS A DEVIATION FROM 300' RADIUS FROM S.I.S. DWG. NO. DC-1
4. RESIDENTIAL 37' B.C. TYPICAL STREET SECTION AND 39' B.C. IVY ARBOR STREET SECTIONS ARE DEVIATIONS FROM S.I.S. DWG. NO. S-8.
5. THE 100.00 FOOT SAG VERTICAL CURVE AT THE PROJECT LOW POINT SHOWN ON SHEET 10(SWALE STREET STATION 4+92.87) IS A DEVATION FROM S.I.S. DWG. NO. DC-1.

SHEET INDEX

1. COVER SHEET
2. ROUGH GRADING PLAN
3. ROUGH GRADING PLAN
4. ROUGH GRADING PLAN
5. GRADING DETAILS
6. STREET PLAN & PROFILE - DART DRIVE
7. STREET PLAN & PROFILE - AIRE AVENUE
8. STREET PLAN & PROFILE - AIRE AVENUE, WEEN ROAD, WELLAND COURT
9. STREET PLAN & PROFILE - TYNE LANE, STOUR STREET
10. STREET PLAN & PROFILE - SWALE PLACE
11. STREET PLAN & PROFILE - ESK WAY
12. STREET PLAN & PROFILE - ESK WAY
13. STREET PLAN & PROFILE - DERWENT LANE, IVY ARBOR LANE
14. STREET PLAN & PROFILE - NENE COURT, KENNET COURT
15. MASTER UTILITY PLAN
16. MASTER UTILITY PLAN
17. MASTER UTILITY PLAN
18. SEWER PLAN & PROFILE - SWALE PLACE, SEWER&DRAINAGE EASEMENT&STORM DRAIN
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26. SEWER PLAN & PROFILE - DART DRIVE

OWNER

HOWARD HUGHES PROPERTIES, A LIMITED PARTNERSHIP
3800 HOWARD HUGHES PARKWAY
LAS VEGAS, NEVADA 89109
(702) 791-4200

DEVELOPER

KAUFMAN & BROAD OF NEVADA, INC.
4755 INDUSTRIAL ROAD
LAS VEGAS, NEVADA 89103
(702) 261-1300

SUMMERLIN APPROVAL

GERALD M. ROBBINS — DATE 3/21/97

APPROVAL

DENNIS ANDERSON, P.E.
LAS VEGAS CITY ENGINEER — DATE 4-4-97

APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHTS-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION ON ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIFICALLY LISTED UNDER "DEVIATIONS FROM STANDARDS" THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN "DEVIATIONS FROM STANDARDS" IN FAVOR OF THE UNIFORM STANDARDS DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA NEVADA.

CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89102-5148 PHONE (702) 873-7550 FAX (702) 362-2597

REV	DATE	BY	REVISION

KAUFMAN & BROAD
CITY OF LAS VEGAS, NEVADA

TITLE: COVER SHEET
PROJECT: OAK KNOLL, SUMMERLIN VILLAGE 11/12

SEAL

3.6.97

WO NO. 5070
BY DLG
DATE OCT.,1996
SCALE HORIZ. NONE, VERT. NONE
SHEET 1 OF 26 SHEETS

H:\CAD\LANDES\5070\5070COVR.DWG

Plotted by:

6280

1074-4509

IMPROVEMENT PLANS

FOR

OAK KNOLL
SUMMERLIN VILLAGE 11/12

CITY OF LAS VEGAS
STATE OF NEVADA

ESTIMATED QUANTITIES

TYPE I BASE	4242 C.Y.
TYPE II BASE	2884 C.Y.
EXCAVATION	51,070 C.Y.
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8" VALLEY GUTTER	3,748 S.F.
4' SIDEWALK	15,710 S.F.
STREET LIGHTS	41 EA.
DRIVEWAY APPROACH	4,334 S.F.

DEVIATIONS FROM STANDARDS

1. RESIDENTIAL OFF-SET CROWN STREET IS A DEVIATION FROM S.I.S. DWG. NO. S-18
2. ENTRY STREET OFF-SET CROWN STREET IS A DEVIATION FROM S.I.S. DWG. NO. S-13
3. RESIDENTIAL STREET RADIUS OF 200' IS A DEVIATION FROM 330' RADIUS FROM S.I.S. DWG NO. DC-1
4. RESIDENTIAL 37' B.C. TYPICAL STREET SECTION AND 39' B.C. IVY ARBOR STREET SECTIONS ARE DEVIATIONS FROM S.I.S. DWG. NO. S-8.
5. THE 100.00 FOOT SAG VERTICAL CURVE AT THE PROJECT LOW POINT SHOWN ON SHEET 10(SWALE STREET STATION 44+92.87) IS A DEVIATION FROM S.I.S. DWG. NO. DC-1.

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GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENTLY APPLICABLE STANDARDS, PLANS, SPECIFICATIONS, AND POLICIES OF THE CITY OF LAS VEGAS, UNLESS OTHERWISE NOTED. PUBLIC IMPROVEMENT CONSTRUCTION PLANS SHALL BE APPROVED BY THE CITY OF LAS VEGAS PRIOR TO ANY CONSTRUCTION. ALL CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF LAS VEGAS. THE CONTRACTOR SHALL NOTIFY THE CITY OF LAS VEGAS 48 HOURS PRIOR TO BEGINNING WORK.
2. THE OWNERSHIP AND LOCATIONS OF ANY UNDERGROUND OR OVERHEAD UTILITY LINES, PIPES, OR APPURTENANCES, SHOWN OR NOT SHOWN ON THESE PLANS, ARE NOT GUARANTEED BY THE ENGINEER. THE CONTRACTOR SHALL, AT LEAST 48 HOURS BEFORE BEGINNING EXCAVATION, CONTACT ALL UTILITY COMPANIES AND HAVE THEIR FACILITIES LOCATED OR VERIFIED AS TO EXACT LOCATION AND ELEVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS AND LIABILITY IN CONNECTION THEREWITH.
3. [illegible] SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. ANY REVISIONS SHALL BE APPROVED BY THE CITY ENGINEER.
4. ALL [illegible] ON THESE PLANS. ANY REVISIONS SHALL HAVE THE PRIOR APPROVAL OF THE CITY ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL [illegible] ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PROCESSING SERVICES FOR THE CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM JOINT SPACING SHALL BE 60 FEET.
8. NO PAVEMENT TO BE LAID ABOVE LIP OF ALL GUTTERS AFTER CONSTRUCTION JOINT AT SIDEWALK PRIOR.
9. APPLY FOG SEAL ONLY AFTER ALL OBSTRUCTIONS ARE ADJUSTED TO FINISH GRADE.
10. [illegible] SHALL BE A GUTTER WITH A GRADE OF LESS THAN OR EQUAL TO [illegible] SHALL EXIST OR BE CONSTRUCTED AT THE LOW POINT OF EACH SUMP. [illegible] SHALL BE INSTALLED AT THE LOW POINT OF EACH SUMP AS DIRECTED BY THE CITY ENGINEER.
11. [illegible] SHALL BE REPRESENTED BY A DULY REGISTERED ENGINEER IN GOOD STANDING BY THE STATE OF NEVADA AND SHALL BE RESPONSIBLE FOR THE [illegible] AS SHOWN ON THE PLANS. ANY [illegible] SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 48 HOURS PRIOR TO THE PRE-CONSTRUCTION MEETING.
12. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING IMPROVEMENTS TO PROVIDE FOR POSITIVE DRAINAGE AND FOR SMOOTH AND SAFE TRANSITIONS FOR VEHICULAR AND PEDESTRIAN TRAFFIC. ANY [illegible] SHALL BE AT THE DISCRETION OF THE CITY ENGINEER.
13. ALL GRADES SHOWN SHALL CONFORM TO THE GRADES DEPICTED AS PROPOSED BY THE GRADING PLANS AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
14. FINAL LOCATION OF ALL CURB AT LOW POINTS SHALL BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS REPRESENTATIVE. [illegible] ON PLANS IS NOT CLEARLY VISIBLE, AN ENGINEER REPRESENTATIVE SHALL BE PRESENT.
15. [illegible] SHALL BE CONSTRUCTED IN ACCORDANCE WITH [illegible] AND SHALL BE PERFORMED IN ACCORDANCE WITH U.B.C. SECTION 301 (b)(2).
16. [illegible] SHALL BE ADJUSTED TO FINISH GRADE AS DIRECTED BY THE CITY ENGINEER. ALL [illegible] SHALL BE LOCATED OUT OF DRIVEWAYS, HANDICAP RAMPS, PLANTERS, AND OTHER SITUATIONS UNLESS WRITTEN APPROVAL IS OBTAINED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
17. WELL NOTES
    A. [illegible]
    B. [illegible]
    C. [illegible]
18. ASPHALT MIX DESIGN SHALL BE SUBMITTED & APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT ON CITY STREETS.

BENCHMARK

[illegible]

BASIS OF BEARINGS

[illegible]

OWNER

HOWARD HUGHES PROPERTIES, A LIMITED PARTNERSHIP
3800 HOWARD HUGHES PARKWAY
LAS VEGAS, NEVADA 89109
(702) 791-4200

DEVELOPER

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4725 INDUSTRIAL ROAD
LAS VEGAS, NEVADA 89103
(702) 261-1300

SUMMERLIN APPROVAL

[illegible] 4/10/92
DATE

APPROVAL

[illegible] 4-16-92
DONNA ANDERSON, P.E. DATE
LAS VEGAS CITY ENGINEER

APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS VOID IF WORK HAS NOT COMMENCED WITHIN [illegible] OF THE DATE OF APPROVAL. [illegible] THAT REVISIONS TO THESE PLANS MAY BE REQUIRED IF CHANGES IN STANDARDS OCCUR PRIOR TO CONSTRUCTION. [illegible] AND ENCROACHMENT PERMITS SHALL BE OBTAINED FROM CLARK COUNTY, NEVADA PRIOR TO CONSTRUCTION WITHIN CLARK COUNTY AND NEVADA.

CONSULTING ENGINEERING & PLANNING & LAND SURVEYING
3202 W. CHARLESTON BLVD. LAS VEGAS, NEVADA 89102 (702) 384-2115 FAX (702) 384-2178

RAMPAIN & BROAD
CITY OF LAS VEGAS, NEVADA

COVER SHEET

OAK KNOLL
SUMMERLIN VILLAGE 11/12

JOB NO.	3870
BY	BLB
DATE	04/7/1992
SCALE	NOT TO SCALE
SHEET	1 OF 26 SHEETS

4/7-694