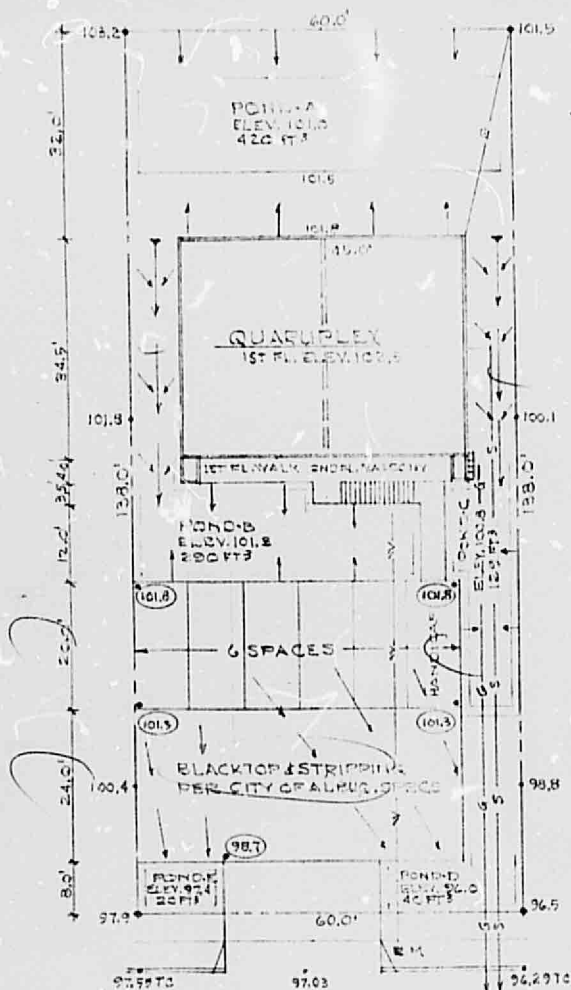


9-7-78

522/047



CHELWOOD PARK BLVD N.E.

SCALE: 1"=200'

SITE PLAN
LOT: #2
BLK: #10
GRANDVIEW HEIGHTS

DRAWN BY: FNL ROBINSON 8/6/78

ALBUQUERQUE
BLDG. DEPT.
AUG 24 1978
U.S.C.
PLAIN CHECK
SECTION



158 Chalmers Park Blvd. N.E.

SITE DESCRIPTION

LOT: 2
BLK: 10
ADD: SEASIDE VIEW - GTS.

DRAINAGE

UNDEVELOPED SITE

USING RATIONAL FORMULA $Q = CIA$

WHERE $A =$ ACRE AREA

$C = .35$

$I = 7.0$

$$(.35)(7.0)(1.901) = .4657$$

$$Q = (.35)(7.0)(\text{ACRE}) = \text{CFS (UNDEVELOPED)}$$

COMPOSITE FACTOR "C"

$$\text{BUILDINGS, BLACKTOP, WALKS} = .95 \times \text{AC} =$$

$$(.95)(.0972) = .0924$$

$$\text{TOP SOIL & PLANTING} = .35 \times \text{AC} =$$

$$(.35)(.0923) = .0323$$

$$\text{TOTAL} =$$

$$.1247$$

$$\text{TOTAL (ACRE)} =$$

$$.1901$$

$$"C" = .66$$

DEVELOPED SITE

$$Q = (C \times 7.0)(\text{ACRE}) = \text{CFS (DEV)}$$

$$\text{MINUS CFS (UNDEVELOPED)}$$

$$\text{TOTAL CFS RETAINAGE}$$

$$.66(7.0)(1.901) = .8782$$

$$.4657$$

$$.4126$$

RETAINAGE AREA

USING 2.5" FOR A 6HR-100YR STORM

TOTAL VOLUME OF RUNOFF = 2.5" x AREA FT^2 x RUNOFF COEFF. / 12 = FT^3 RETENTION

$$(2.5)(.66)(.8782) = 1.3662 = 1138.5 \text{ FT}^3 \text{ RETENTION}$$

OPEN SPACE & PARKING REQ.

$$\text{TOTAL SITE AREA} = 8280$$

$$\text{BALCONY AREA CREDIT} = 160$$

$$\text{TOTAL USABLE SPACE} = 8440$$

OPEN SPACE REQ.

$$\text{NO. TYPE FT}^2 = \text{FT}^2$$

$$1 \text{ BR} = 1000$$

$$2 \text{ BR} = 250$$

$$3 \text{ BR} = 1000$$

$$\text{OTHER} =$$

$$\text{TOTAL} = 1000$$

PARKING REQ.

$$\text{PER. PATH SPACES}$$

$$G = 1/2 = 6$$

$$C = 1 = 6$$

$$E = 1 = 6$$

$$\text{TOTAL} = 6 \text{ SPACES}$$

COVERED AREA FT

$$\text{TOTAL LIVING GRND AREA} = 1353$$

$$\text{TOTAL EXT. STOR. OR UTIL. AREA} = 21$$

$$\text{TOTAL BLACKTOP & PARKING} = 2436$$

$$\text{TOTAL OTHER} = 0$$

$$\text{TOTAL COVERED AREA} = 4010$$

$$\text{AVAILABLE UNCOVERED AREA} = 7440$$

$$\text{TOTAL COVERED AREA} = 4010$$

$$\text{TOTAL EXCESS AREA} = 3430$$

	AREA	2467
POND A	840 X	720
✓ B	579 X	290
✓ C	257 X	129
✓ D	81 X	40
✓ E	43 X	20
MISC.		308
		1207

DKHFI

by Bruno

STANDARD REQUIREMENTS FOR DRAINAGE PLANS

PURPOSE: The increasing volume of drainage plans submitted to this office makes it mandatory that such plans be standardized as much as possible in order to expedite reviews. This standardization is as much to the advantage of the developer and engineer as it is to the Hydrology Section which enforces the AMAFCA RES. 72-2. For parcels of land less than 20,000 sq. ft. in surface area no formal drainage report is required; the construction plans need only to include the (standard form) attached herein and the site drainage plan. Developers for larger parcels of land will have to submit a formal drainage report as specified in the Resolution.

check list ?

RUNOFF PONDING: In most instances on site ponding is mandatory, with dispersal in the ground of the excess runoff arising from newly created impervious surfaces. The only exception allowed, is for those properties adjacent to a diversion channel which was designed for higher standard than 100 years frequency storm (existing conditions). For detailed computations of the runoff before and after development the assumed runoff coefficient recommended are C = 0.4 for undeveloped, landscaped or similar open areas and C = 0.9 for all other impervious surfaces, including areas in south-western type landscaping with underlying polyethylene film and gravel covered parking areas where vehicular traffic will compact the soil and render it impervious. Due to the inadequacy of the existing drainage facilities in the valley area and to the limited capabilities of the City for providing relief, ponding requirements in the valley are higher than elsewhere.

(A)

(B)

(C)

Valley
Area
100

COMPUTATION OF VOLUME OF RETENTION:

$$\text{Valley Area} = 1.0 \times \frac{2.2}{12} \times \text{Area (ft.}^2\text{)} = 0.18 \times A$$

$$\text{East and West Mesa} = (0.9 - 0.4) \times \frac{2.4}{12} \times \text{Area (ft.}^2\text{)} = 0.1 \times A$$

In order to facilitate the design of drainage facilities, a checklist that will be followed in the review process is listed below attached.

CHECK LIST

1 - Flooding potential - adjacent water courses

no Is property located in the flood plain? *J22 FNDM 18,25*

If so is the finished floor above the 100 yrs. flood level?

no Is property adjacent to a natural or artificial water course?

If so what are the specific AMAFCA or City requirements?

no Are drainage R.O.W. or easements shown on, or in the proximity of property? If so are there drainage problems?

2 - Relation of property to surroundings

no Per topo map, does property intercept other drainage upstream?

If so how is runoff conveyed across property?

no May there be erosion associated with offsite runoff conveyance?

no May erosion or siltation result from proposed construction activities?

no Does development block drainage from adjacent property?

3.- Site grading

no Does site plan show contours before development (extending a minimum of 25 ft. beyond property lines)?

yes Does site plan show proposed grading with adequate swale definition to convey water to ponds?

yes Is all runoff conveyed to ponding areas before it overflows to public facilities?

no Does the proposed grading plan indicate that under cutting or backfilling adjacent to property lines may require retention walls?

Is there continuity between proposed new contours on site match

CHECK LIST

Page 2.

old contours offsite?

yes Is elevation of property line at least 0.3 ft. above top of curb?

4 - Storm water retention

yes Is ponding volume adequate (supply detailed completion)? ^{station}

yes Are ponds balanced with areas they drain (can area draining to each pond be easily identified and will actually water flow there)? The plot plan must outline each drainage area.

yes Can pond volume be computed and verified?

yes Are ponds practical, can they be built as shown?

5 - Safety

Do the drainage provisions constitute an attractive nuisance, or safety hazard?

If the pond depth is greater than 18" are safety provisions supplied? (Minimum 3.0 ft. high chain link fence or similar physical barrier of ponding areas are adjacent to public R.O.W.?)

In general ponds of depth greater than 18" will not be accepted for both safety consideration and for long term effectiveness of the facilities. In those cases where limited space is available for ponding, the use of gravel pits under the parking areas is suggested. It must be pointed out that maintenance and effectiveness of these facilities is necessary and is the responsibility of the owner. Existing or planned City facilities (streets, channels, storm sewers) can accommodate the natural runoff volumes. Greater discharges would cause flooding downstream and need to be limited at the source.