

A REPORT ON
THE COYOTEPE REFUGEE CAMP
IN
MASAYA, NICARAGUA

by
Frederick C. Cuny, PIC
INTERTECT



A REPORT ON
THE COYOTEPE REFUGEE CAMP
IN
MASAYA, NICARAGUA

by
Frederick C. Cuny, PIC
INTERTECT

Contents:

- Camp Description
- Aerial Photo
- Priorities List

COYOTEPE REFUGEE CAMP

The Coyotepe Refugee Camp, located 3 kilometres from Masaya, Nicaragua, was built to house refugees from the December 1972 earthquake in Managua.

The camp, built by the refugees themselves, was designed and supervised by Intertect with assistance and supplies provided by OXFAM, the Nicaraguan Boy Scouts and the U. S. Army.

The following is an outline and summary of the facilities and systems of the camp:

Layout: The camp utilizes a modified cross-axis plan. Essentially, the camp is made up of a series of planning units or "communities", each consisting of approximately 16 tents. Each community is designed to allow both community and individual living, cooking and washing facilities. Sanitary facilities are located within easy access to each community and provisions have been made for installation of semi-permanent water and sewage facilities.

Circulation: An integrated road/walkway system was built for access to the various communities by emergency vehicles and was allotted enough width to provide firebreaks throughout the camp. Sufficient width has been provided to allow the installation of surface drainage systems utilizing standard sizes (see Report 2 of this series). Normally, all vehicles are stopped at the entrance and directed to parking facilities away from housing areas to prevent dust from entering the camp.

Administration: A central administration area was designated and facilities for reception, clinics, storage and staff quarters were built. The center is surrounded by a large open space which serves to provide a common meeting ground as well as play areas for children.

Sanitation: Bore-hole latrines utilizing an OXFAM-supplied seat unit paired in series of 8 are currently installed. Also utilized are permanent flush toilets on the west side of the camp previously utilized by the Boy Scouts for their camp. Under consideration is the possible development of a polythene septic tank to be developed by OXFAM.

Showers are to be constructed proximate to the latrines. Construction of showers will be supervised by Masaya Health authorities.

Housing: 360 Sears highwall Chalet and Continental tents were provided by the U. S. Army for housing the refugees. OXFAM and the British Red Cross supplied an additional 6 Army field tents for use by staff and administration. Several permanent structures nearby belonging to the Boy Scouts were not utilized. It is the opinion of the consultant that the Sears tents are grossly inadequate and will not last the rainy season.

Water: Initial water supplies were provided in individual water cans (10-gallon) to be resupplied by truck transports daily. At present, upgrading and extension of existing water lines is being completed by Masaya Water Authority. Requests for U. S. Army lister bags have not been met. Plans call for water taps to be placed in each community.

Lighting: High intensity, mercury vapor lights have been installed throughout the camp. One has been placed at each intersection and one in the center of each square. Power outlets have been provided to each community also.

Recreation: In addition to play space in each square and the area around the administrative center, a large playground and sports area has been designated near the center of the camp. Recreational equipment has been provided by the Nicaraguan government and the Nicaraguan Boy Scouts.

Organization of Refugees: OXFAM social workers have provided organizational assistance to the refugees. A reception committee was

formed consisting of a recording clerk, nurse, doctor and social worker. Each family was interviewed to determine medical needs and housing requirements. An OXFAM dietitian also helped provide special diets for the refugees. Social workers then assisted refugees in moving into their tents and helped establish routines. Information was disseminated by a camp newspaper published by the Boy Scouts assigned to the camp.

Food Distribution: Food is supplied by the central government from a central bodega (warehouse). Refugees must show ration cards to obtain food. At present, distribution and quality of food is poor.

Waste Disposal: Solid wastes are deposited in 50-gallon drums placed in each square and these are emptied on a scheduled basis by the Sanitation Department of Masaya. At this time, there are no incinerators or other means of disposal at the camp, nor are they contemplated.

Storage: There are adequate storage facilities in the central area of the camp and additional buildings are available adjacent to the camp. All storage facilities are accessible by road.

Access to Camp: Coyotepe is located on a large gravel road leading directly to Masaya to the west (3 km.) and to the Las Mercedes airfield to the northeast (20 km.). Two sites have been designated as helicopter landing fields in areas adjacent to the camp.

Miscellaneous: Road information signs, community and individual tent numbering signs have been painted and installed. In addition, copies of the camp rules and regulations have been printed and distributed to incoming refugees. Bulletin boards have been erected in each square.

Flyproofing of bodegas, clinics, kitchens, etc., has not been installed at this time. Vector control procedures will begin one month prior to start of the rainy season.

At this time, Stage I of the camp has been completed and facilities for 888 people have been installed. Current plans call for 1600 persons to be settled in the camp. Ultimate design capacity of this site is 3500 people.

El Coyotepe Refugee Camp

Masaya, Nicaragua

Aerial Photo of Stage I (11 Jan. 1973)



1. Housing Areas (Communities)
2. Administration
3. Clinic
4. Storage
5. Staff Quarters
6. Playground

7. Latrines
8. Showers
9. Heliport
10. Parking
11. Guardhouse

RECOMENDACIONES SOBRE EL ESTABLECIMIENTO DE CAMPAMENTOS DE DAMNIFICADOS

POR FREDERICK CUNY

1. Planificación: Se debe acordar que los campamentos son pequeñas ciudades y que, por lo tanto, deben de ser planeados para subsanar todas las necesidades que tiene una ciudad, ya que todos los factores implicados en la planificación influyen el uno sobre el otro.
2. Planes: Para razones de salud y de organización de los damnificados, no se debe emplear el sistema de cuadros.
3. Saneamiento Ambiental: Se necesita lo siguiente:
 1. Facilidades sanitarias - 1 letrina para cada 20 personas.
 2. Facilidades para lavar ropa - 1 pila para cada 20 familias.
 3. Facilidades para deshacerse de la basura cada día:
- 1 sumidero para cada 100 familias; colección diaria de la basura; facilidades para disponer de la basura fuera del campamento - posiblemente un incinerador; un basurero para cada sector o comunidad.
4. Agua:
 1. Se deben de establecer puntos de distribución de agua en cada sector o comunidad.
 2. Se deben de cavar hoyos, y llenarlos de piedra triturada para impedir el agua de difundirse por el campamento. Las facilidades de agua potable, lavaderos y duchas deben de ser enladrillados para que no se formen charcos.
5. Cocinas: Se debe de proveer cada sector o comunidad con estufas colocadas en un area central alejado de las casas de campo. Se recomienda 2 estufas grandes y de 7 a 10 estufas individuales para cada area.
6. Salud: Una clinica permanente con por lo menos 1 médico y 1 enfermera debe de abrirse con la llegada de los primeros damnificados y funcionar cada día. Los damnificados deben de ser examinados cuando llegan al campamento para verificar que están en buena salud.
7. Iluminación: El campamento debe de ser bien alumbrado en el interés de salud pública y del orden.
8. Distribución de de comida: Se deben de establecer puestos de distribución de comida protegidos contra las moscas.

9. Combustible: Se debe facilitar carbón a los damnificados para minimizar el riesgo de incendio.
10. Administración: Se debe nombrar un administrador a tiempo completo con autoridad de hacer compras para subsanar las necesidades del campamento. A medida que los damnificados entran al campamento deben de ser inscritos y asignados a un area conforme a sus necesidades.
11. Protección contra incendios: Se debe instalar barriles de agua para apagar posibles incendios lo más pronto posible.
12. Almacenamiento: Se debe establecer una bodega protegida con cedazo para cada clase de provisiones (medicina, comida, ropa, etc.)
13. Desagües:
 1. Se debe de proveer un sistema de desagües para alejar el agua del campamento sin dañar el terreno.
 2. Se debe de instalar cunetas para facilitar el paso de los vehiculos.
 3. Los desagües principales deben de ser formados con sacos de arena.
14. Carteles: Las facilidades del campamento deben de ser claramente indicadas.
15. Infraestructura: Debe de haber un red de caminos y carreteras adecuadas. En la medida del posible, no se debe permitir la entrada de vehiculos al campamento.
16. Recreación: Se necesita:
 1. Parques infantiles
 2. Terrenos deportivos
 3. Una casa comunal
17. Alojamiento: Se recomienda reemplazar las casas de campaña actuales con otra forma de casita lo más pronto posible; se debería investigar la posibilidad de proveer estructuras semi-permanentes.

* * * * *

Así es que se necesitan los materiales siguientes:

- 10 toneladas de piedra triturada, tamaño mediano.
- 25 tanques de agua, tipo "lister"
- 7 toneladas de ladrillos
- pies de tubería de agua x 2"
- 8 toneladas de ladrillos para horno
- Combustible para las estufas
- 21 estufas (Ya tenemos unas 15)
- Letrinas (1 x cada 20 personas)
- 100 metros de madera x 18"
- 2 galones de pintura blanca

Equipo básico para agrimensura

Material para hacer divisiones en las casas, por ejemplo: plástico
Cedazo