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ARCHAEOLOGICAL INVESTIGATIONS OF THE
CHILLED WATER LINE,
MANHATTAN PSYCHIATRIC CENTER
WARDS ISLAND, NEW YORK

1994

Prepared for:
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337



TABLE OF CONTENTS

	Page
Table of Contents	ii
List of Figures	iii
List of Plates	iv
List of Personnel	v
Introduction	1
Methodology	3
Stratigraphic Summary	6
Analysis of Osteological Remains	8
Summary of the History of Wards Island	27
Conclusions and Recommendations	30
Bibliography	31

Appendices:

- A. Osteological Inventory
- B. Osteological Vital Statistics
- C. Osteological Pathological and Variational Observations
- D. Osteological Illustrative Inventory
- E. Osteological Dentition Inventory
- F. Field Record Forms



LIST OF FIGURES

- Figure 1 Location of the project area as shown on portion of USGS 7.5 Minute Series Central Park, N.Y- N.J. Quadrangle, 1966, photorevised 1979.
- Figure 2 Locations of backhoe trenches 1 through 3 within the project area.
- Figure 3 Condition Statistics
- Figure 4 Location of the project area shown on a portion of the 1807-1811 Bridges' Map.
- Figure 5 Location of the project area shown on a portion of the 1851 U.S. Coast Survey.
- Figure 6 Location of the project area shown on portion of the 1885 Robinson Atlas.
- Figure 7 Location of the project area shown on portion of the 1907 U.S. Coast and Geodetic Survey.



LIST OF PLATES

		Page
Plate 1	View of Backhoe Trench 1 looking south, showing southeast section	5
Plate 2	View of Backhoe Trench 2 looking southwest	5
Plate 3	View of portion of burial in situ within the chilled water line trench, looking northeast	7
Plate 4	Bone #65, sternum and manubrium, ventral view	14
Plate 5	Bone #313, left ulnar fragment, anterior view	15
Plate 6	Bone #162, right femoral fragment, medial view	16
Plate 7	Bone #163, left femoral fragment, lateral view	16
Plate 8	Bone #180, proximal left tibial fragment, posterior view	17
Plate 9	Bone #187, left tibial fragment, lateral view	18
Plate 10	Bone #235, right proximal humeral fragment, anterior view	19
Plate 11	Bone #436, cranial fragment, interior view	21
Plate 12	Bone #528, parietal-frontal fragment, diploic view	22
Plate 13	Bone #164, right femoral fragment, posterior view	23
Plate 14	Bones #195, #176, and #208, long bones displaying transverse postmortem demarcation	24
Plate 15	Bone 327, a lower thoracic vertebrae, sagittally demarcated	25
Plate 16	Bones #485-6, cranial fragment, typical postmortem autopsy demarcation	26



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INTRODUCTION

The Manhattan Psychiatric Center occupies the majority of Wards Island which lies in the East River just north of Hell Gate. Landfilling during the twentieth century has joined it to Randall's Island to the north. Although these two islands are geographically separate from the island of Manhattan they are politically part of the Borough of Manhattan, New York City. See Figure 1 for the location of the Manhattan Psychiatric Center shown on the present USGS Quadrangle Map.

During early September 1993 Greenhouse Consultants Incorporated was notified that human remains had been discovered accidentally during the excavation of a trench for planned new chilled water lines for the Manhattan Psychiatric Center located on Wards Island. The local police and the Medical Examiner's Office had been notified, and most of the bones had been sent to the Medical Examiner. The principal investigator inspected the project area on September 8, 1993. The backdirt from the previously excavated trench was still located adjacent to the trench. Close inspection of the backdirt revealed the presence of additional fragments of what appeared to be human bones. Examinations of the sections revealed in the open trench and the project area maps revealed that many of the bones probably came from the fill of a trench for an existing steam tunnel evidently installed approximately 40 years ago. To the northwest of this steam tunnel trench, which crosses the present excavation at right angles, partial remains could be seen in the sections. These appeared to be human bones buried in wooden coffins, thus indicating that the human remains disturbed by the new trench are of the historic period. An additional portion of the chilled water trench to the north of the existing open trench remained to be excavated at that time. Project area maps indicated that water lines were to pass into the foundation location of an early twentieth century structure that previously served the psychiatric institution but has since been demolished. This 35 foot length of trench appeared to have the potential for containing additional remains.

Archaeological testing was recommended for the northwestern portion of the remaining chilled water line trench location where there was sufficient space to cut trenches without destroying any roadways. Based on the results of that testing, monitoring of the portion of the trench between the tested area and the point where excavation had ceased during August 1993 was also recommended.

The general purpose of archaeological testing is to document the presence or absence of potential prehistoric and/or historic archaeological resources through the use of physical testing techniques. The specific purpose of this testing was to

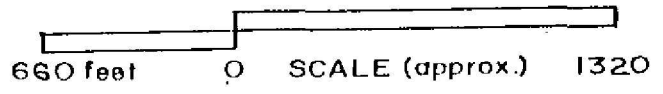
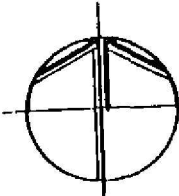
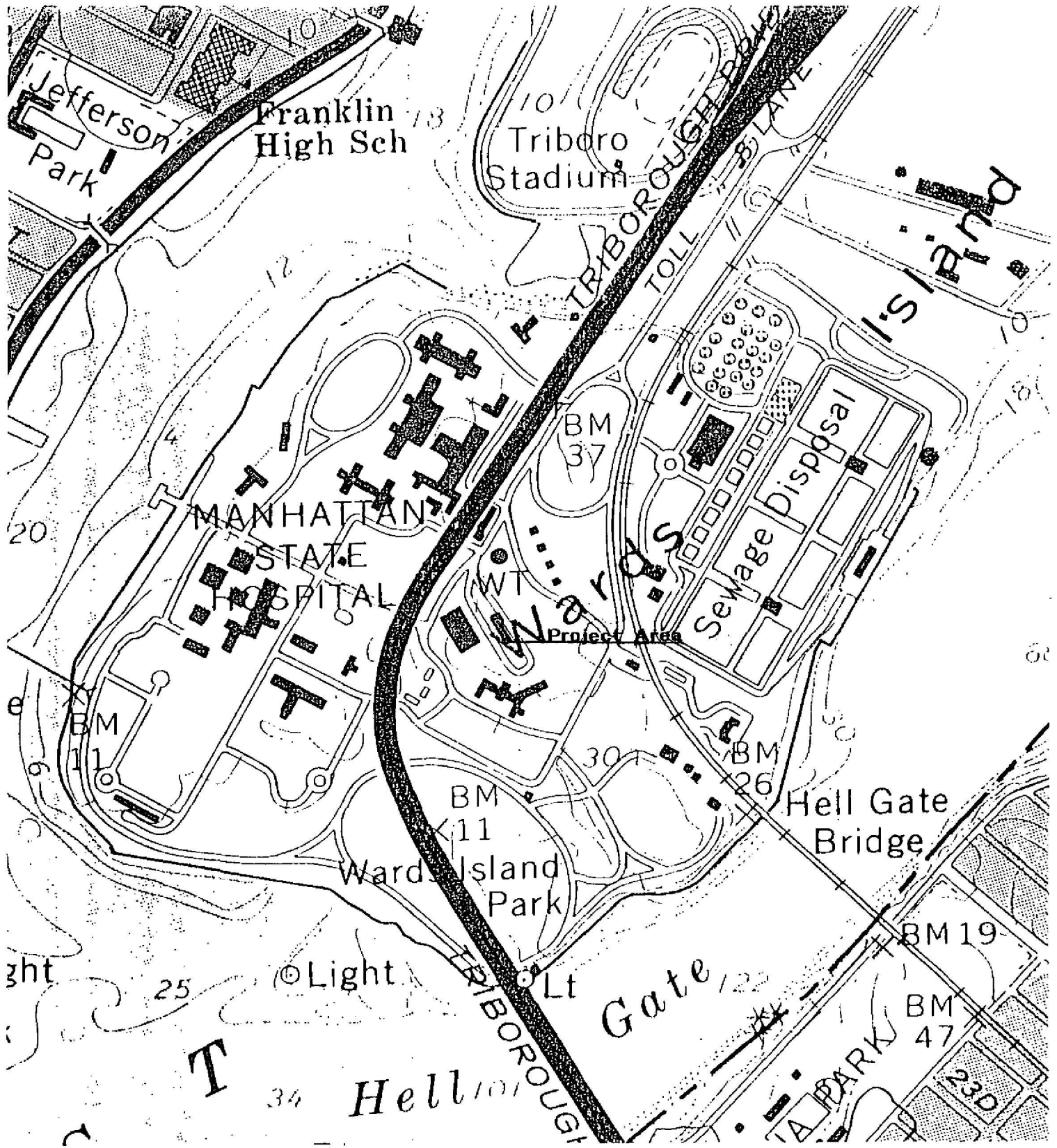


Figure 1 Location of the project area shown on portion of USGS 7.5 Minute Series, Central Park New York--New Jersey Quadrangle 1966, photorevised 1979.



provide evidence of the presence or absence of human remains within the remaining course of the planned chilled water lines. Monitoring of construction excavations by a professional archaeologist is an alternative method of determining the presence or absence of archaeological resources in situations where testing is not feasible.

This report is organized as follows. First this section describes the location of the project area and the purpose of the work. Second is a section describing the field methodology. Third is a section summarizing the stratigraphy encountered. Fourth is a section on the physical anthropology of the human remains recovered. This follows by a section providing an historical analysis of what population is represented by the remains, and finally by the conclusions and recommendations.



METHODOLOGY

The subsurface archaeological testing of the Chilled Water Line in the Manhattan Psychiatric Center on Wards Island, New York began on October 18, 1993 and was completed on October 25, 1993. As stated in the scope-of-work for this testing, the technique used to examine buried deposits and thereby determine the presence or absence of archaeological resources was the mechanical excavation of trenches. A total of two trenches were excavated by backhoe, the results of which were closely monitored by archaeologists. Following this, an additional 40 linear feet of the chilled water line pipe trench was closely monitored during its excavation. See Figure 2 for the location of Backhoe Trenches 1 and 2, and the monitoring location which is labeled Backhoe Trench 3. This testing strategy was designed by the principal investigator, and approved by the staff of the New York State Office of Parks, Recreation, and Historic Preservation; and Historic Preservation Field Services Bureau.

The use of mechanical means of excavation expedites the removal of large quantities of fill. A total of approximately 1376 cubic feet of soil were removed from the two trenches, the dimension of which varied from 18 feet to 26 feet long, approximately 5 feet wide, and 5.9 to 6.5 feet deep. Despite the excavation of the trenches being impeded by the collapse of unit sides, the proposed maximum depth of impact was exceeded in all of the trenches. See Plates 1 and 2 for views of Backhoe Trenches 1 and 2 respectively.

Soil samples were selectively removed from the deepest layer encountered. Layers above this were identified as probable fill. Samples from these layers were only screened if potential bones were observed. This soil was then screened through $\frac{1}{4}$ inch mesh in order to recover artifacts. Artifacts were also recovered when they were observed in the trench by directing the backhoe operator to selectively remove them with the backhoe bucket. Soil strata were measured, described, and recorded for all trenches. All trenches were backfilled immediately following excavation and the recording of data. The same procedure was followed for the monitoring, excepting that the location and size of the trench were specified by the project engineers and the trench was not backfilled.

Following the work described above, the backdirt from the original excavation of the chilled water pipe trench during August 1993 was examined. The backdirt was removed from its position adjacent to the trench to a clear area of pavement using a backhoe. As the backhoe deposited each bucket load of earth, it was examined by the archaeologists. All loads showing any possible evidence of bone were then

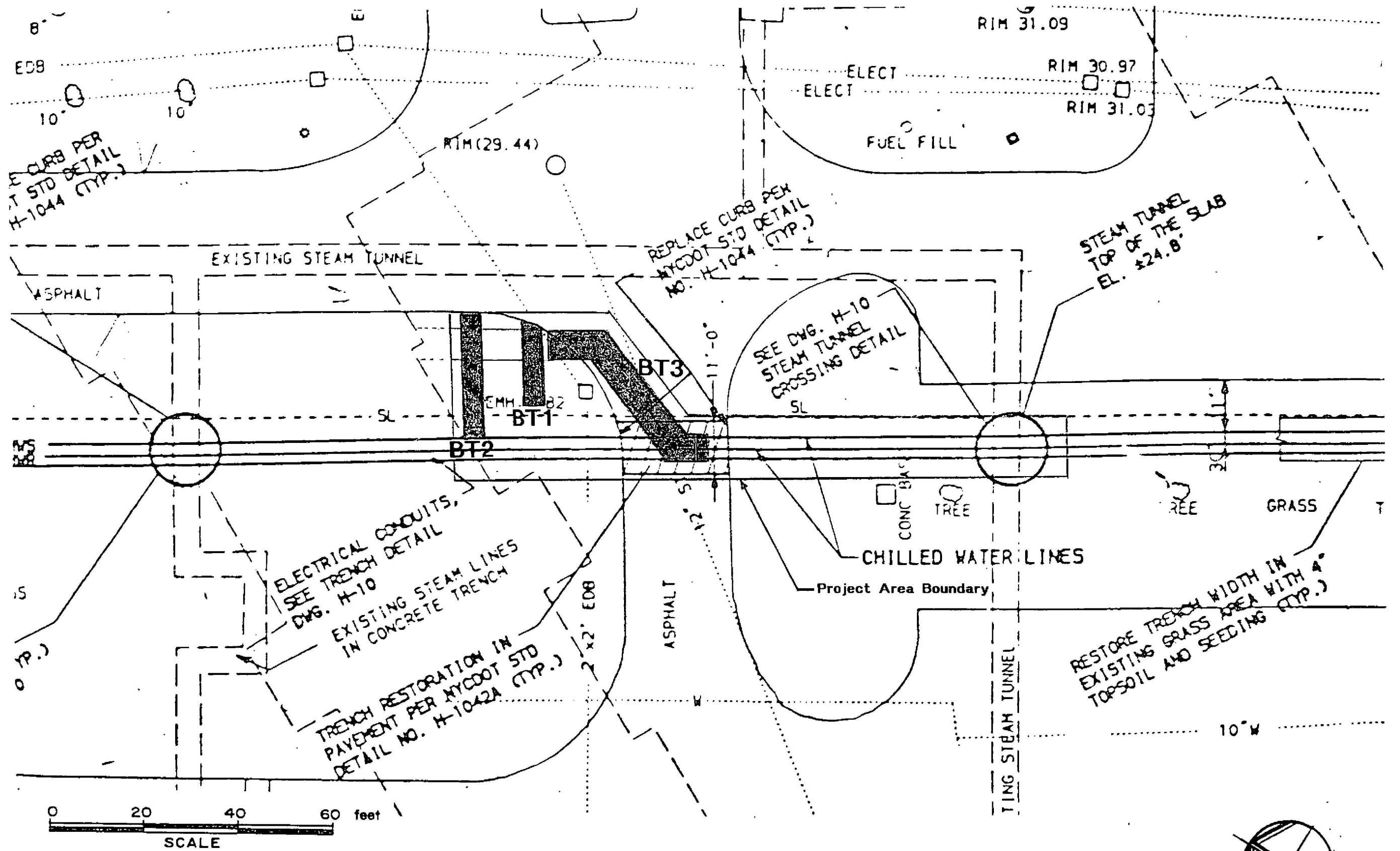


Figure 2 Locations of Backhoe Trenches 1 through 3 within the project area.



screened through ¼-inch mesh hardware cloth, and all bones were retained. A few other artifacts potentially related to the burials were also recovered. These proved to be mostly corroded nails and were not of use.

Plate 1: View of Backhoe Trench 1 looking south, showing southeast section

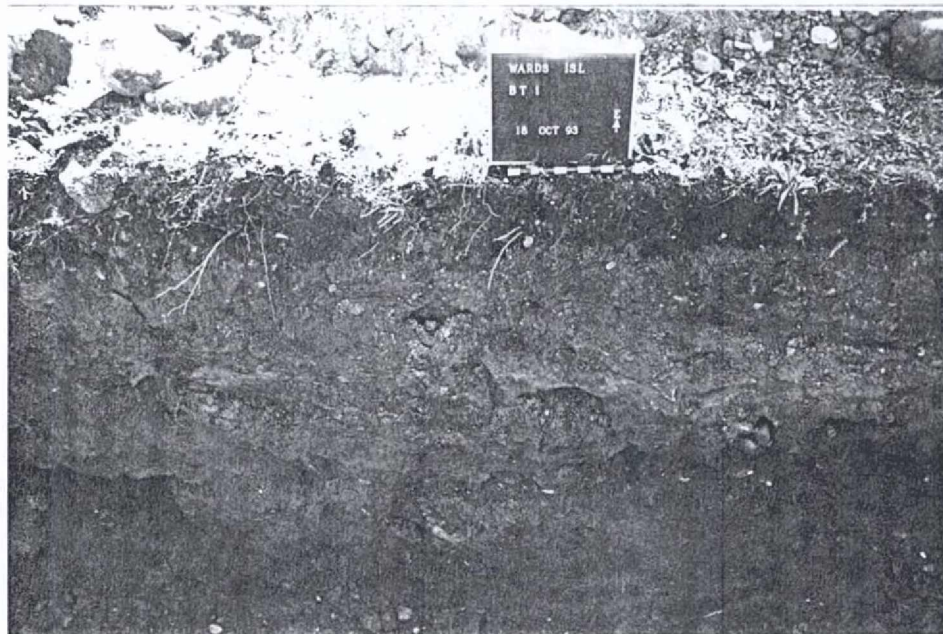
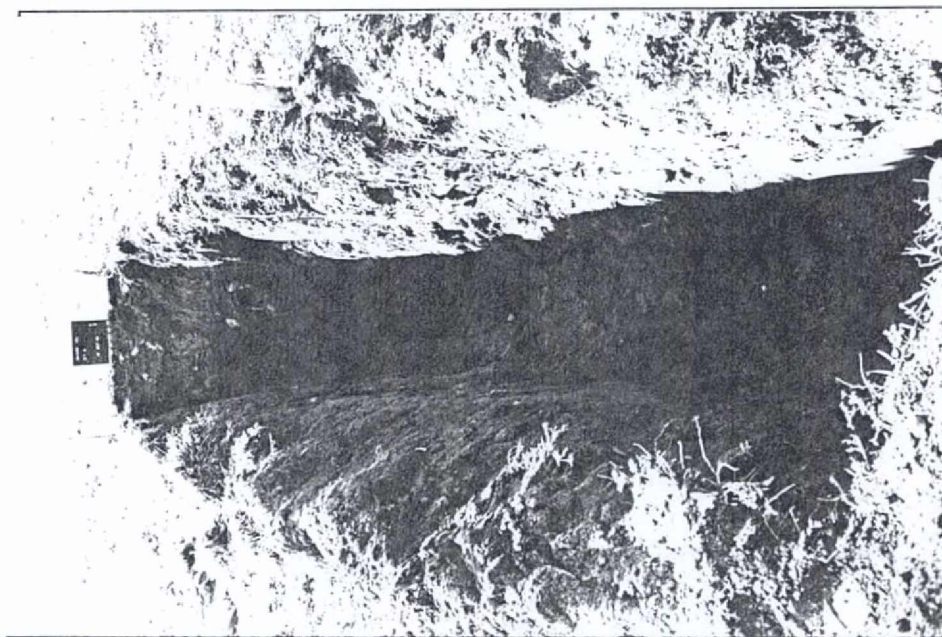


Plate 2: View of Backhoe Trench 2 looking southwest





STRATIGRAPHIC SUMMARY

Stratigraphy was observed and recorded in three locations: Backhoe Trenches 1 and 2, and the monitored construction excavation which was designated Backhoe Trench 3. Three deposits were identified in Backhoe Trench 1, four in Backhoe Trench 2, and eight in Backhoe Trench 3. Since Backhoe Trench 3 was cut through a paved surface, the top two layers relate to paving and were not present in Backhoe Trenches 1 or 2. Backhoe Trench 3 also contained the fill of a service trench, leaving five layers identified as compared with three or four in the other trenches. The deepest three layers are very similar to the bottom three layers recorded in Backhoe Trench 2. The top layer in Backhoe Trenches 1 and 2, consisting of turf and topsoil, was expected to be missing in Backhoe Trench 3 since it was located in a paved area. The top layer in Backhoe Trench 1 and 2 consisted of turf and black to very dark brown silty loam. It was 1.7 feet thick. This was followed by a layer of dark yellowish brown fine to medium sand with pebbles and a few cobbles. The third layer was 1.5 feet thick in Backhoe Trench 2. The last two layers described were also seen in Backhoe Trench 3 where they were the fifth and sixth layers identified. The upper layer was slightly sandier in Backhoe Trench 3, and both layers were strong brown instead of dark yellowish brown. The deepest layer seen consisted of coarse sand with a few pebbles. In Backhoe Trench 2 it began at 5.3 feet below grade and was light yellowish brown in color. In Backhoe Trench 3 it began at 5.7 feet below grade and its color was a mottled combination of strong brown and dark yellowish brown.

In Backhoe Trench 2, a pipe trench containing a ceramic drain-pipe was found cutting into the second layer. Its fill was very similar to layer 2. This pipe can be seen in the background in Plate 2.

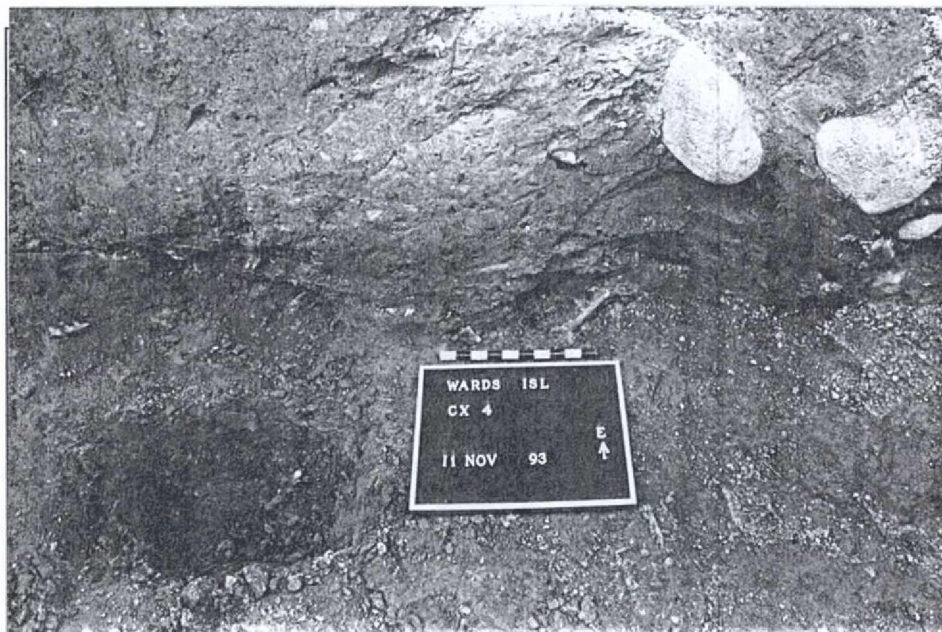
In Backhoe Trench 3, the monitored construction excavation, a trench for an electrical conduit was encountered that cut through the third through seventh layers. It was filled with pebbles, cobbles, and red brick fragments.

It appears likely that only the deepest layers identified represent natural subsoil. Both are sandy in texture and contain some pebbles and cobbles. The only possible artifacts found in them were a few shell fragments in the upper layer.

When the sections of the chilled water pipe trench excavated in August 1993 were examined, portions of three or four burials were seen which were still *in situ*. Human bones, decomposed wood from coffins, and iron nails were observed.

These burials were cut into the natural subsoil layers, usually in the deeper layer. Plate 3 provides a view of one of these burials.

Plate 3: View of portion of burial *in situ* within the chilled water line trench, looking northeast





PRELIMINARY ANALYSIS OF OSTEOLOGICAL REMAINS

This analysis includes all osseous remains recovered from the Manhattan Psychiatric Center Project area. No remains were recovered *in situ*. Virtually all the material was severely fragmented. Therefore, this analysis was limited in scope and adhered to descriptive statistics such as fragment counts, condition, and MNI (minimum number of individuals), with general discussion of age, gender, genetic affiliation, anomalies, pathologies and perimortem demarcations. Data recovery guidelines set by the Paleopathological Association (1991) for remains to be repatriated were followed closely as possible.

Remains brought to the laboratory were examined for condition and processed accordingly. Both anhydrous and hydrous methods utilizing soft natural brushes were employed to loosen the surrounding soil matrix. Only if the element was in a severe state of digenesis was a primary alcohol (ethanol) applied to limit further exfoliation of the cortical layer. A total of 1882 osseous elements were processed. Before inventory of the remains was initiated, reconstruction of 164 fragments into 35 elements was performed using a temporary, water soluble, non-toxic consolidant. In addition, coffin hardware recovered (nineteenth century?) along with non-descriptive copper alloy and ferric fragments, buttons, wood, textile and leather fragments were identified from the sample and sent to the artifact laboratory.

A total of 1753 elements were inventoried and given a bone number for database management. The inventory consisted of recording context, number of fragments, consolidation, side of element, element area, condition, age, gender, affiliation, pathologies, anomalies, measurements, and perimortem demarcations. Photographs were taken of pathologies, unusual anomalies and all perimortem demarcations. In addition, dates of excavation, cleaning and inventory were noted. Surprisingly, only three elements of faunal origin were discerned. These included a whole right juvenile femur from the *Avis genera*, a condyle fragment from a large mammal, and an innominate fragment from either a small mammal or bird. Perimortem demarcation or temperature alteration was not evident nor speculated for any of the faunal elements. Analysis could not conclude their usage as food substance given lack of evidence.

Of the remaining 1750 elements, 1075 were conclusively determined to be of human origin while 675 were unidentified but probably of human origin given general morphology and development. Only 58 (three percent) human elements excluding six teeth were entirely intact (whole). Elements which survived their



integrity include one subadult radius, one ulna, one clavicle, two patellae, 33 manual components and 20 pedal components. The high percentage of manual and pedal components was not unusual and suggested good archaeological recovery methods were employed. Only six isolated dental elements were present. Although surprised at this low number, a few reasons may be speculated. Mechanical removal may have missed the majority of upper torso areas given the spatial interment arrangement of historical burials. This evidence appears to be supported by a significantly higher number of lower limb elements. However, it can be argued that differential survivability of lower limb bones is always higher given their degree of compact bone. If this was truly the case then mandibles should have been predominant in this sample. They were not predominant. The mandible region was represented by only a small sample of 15 fragments. Another suggestion would be the retainment of skulls for anatomical purposes. The degree of perimortem demarcation as evinced by this sample appears to support this postulate. Whatever the case, the high recovery of whole manual and pedal components is evidence against the postulation of poor recovery techniques. The remaining material (1686 elements) was highly fragmented and exhibited varying degrees of digenesis which made analysis difficult.

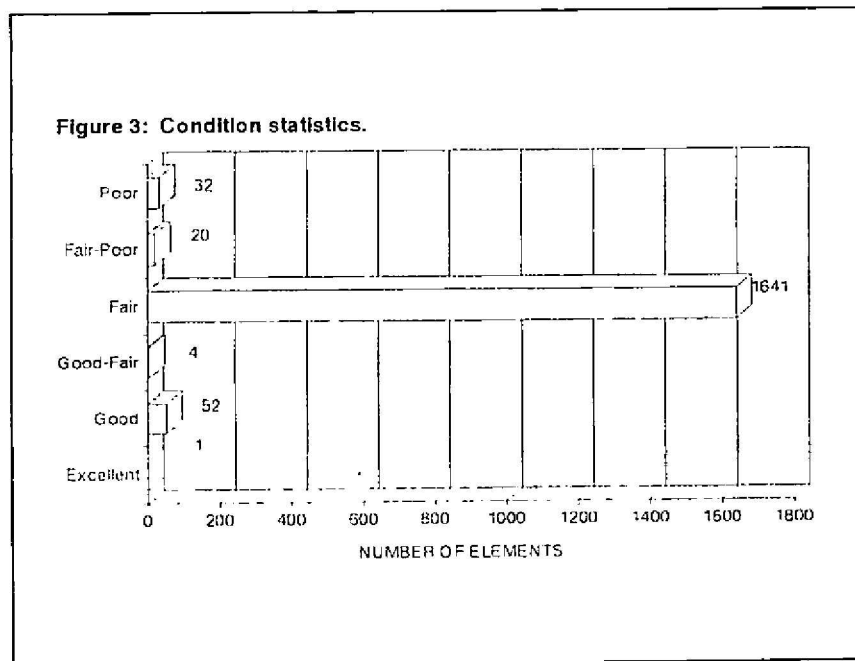




Figure 3 illustrates the condition of osseous remains encountered. The majority (94 percent) of elements were listed in fair condition. Conditions of the "Fair" category included those elements which exhibited minimal spalling (exfoliation of the cortical table), erosion, fragmentation, and warpage. Those elements which exhibited moderation of the previously listed conditions were classified into the "Fair-Poor" category. Elements which were in a severe state of digenesis were listed in poor condition. Only one fragment was listed in an excellent state of preservation. Three elements, Bones #162, #163, and #200 exhibited fungal growth of two types. On the former two elements a dark green substance was located sporadically over the entire diaphyseal surface. The substance appeared organic in origin as opposed to metallic (ie. copper alloy) residue. Bone #200 had a white "cotton-like" fungal growth near its mid-shaft located anterior-medially. A biocide mixture of ethanol and dihydrogen oxide (water) was applied to arrest fungal growth on these elements.

In order to determine MNI (minimum number of individuals) the author took a different approach than the usual method employed. In the past, the greatest number of elements from one side and area (usually the ends of long bones) were utilized along with juvenile counts. This approach is sufficient when the sample size is small or the condition of bone is excellent. Initially this method was used but seemed inadequate given that the diaphyses of the major long limb elements constituted the majority of fragments. This observation led to the construction and utilization of illustrative inventory sheets with osseous landmarks (see Appendix D). The majority of these inventory sheets were created utilizing *Human Body* software imported into a *Word Perfect* graphics format. With this system of observational quantification, results in the MNI count doubled. An MNI count of 20 was reached based on the evaluation of left femoral diaphyseal fragments (18) and the addition of two subadults of different ages (an infant and a child). Traditional methods would have resulted in an MNI count of 10. Table 1 illustrates the difference between the two methods. All lone bone elements were significantly increased when using the new method. Cranial elements, however, did not increase. Of interesting note, MNI count for this sample traditionally would have been based on the majority of left malars. This new method is a more accurate way of quantifying highly fragmented osseous remains for MNI determination.



TABLE 1: TRADITIONAL VS NEW MNI METHOD				
Element (new method)	Right	Left	N/A	Tradition vs New MNI Count
Humerus, proximal end	2	0		
Humerus, distal end	1	6		
Humerus, central diaphysis	9	9		
Humerus, distal diaphysis	9	15		
				6 / 15
Radius, proximal end	0	0		
Radius, distal end	4	1		
Radius, central diaphysis	10	9		
				4 / 10
Ulna, proximal end	5	5		
Ulna, distal end	2	3		
Ulna, central diaphysis	7	10		
				5 / 10
Femur, proximal end	4	3		
Femur, distal end	1	3		
Femur, central diaphysis	10	18		
				4 / 18
Tibia, proximal end	0	3		
Tibia, distal end	3	3		
Tibia, central diaphysis	9	9		
Tibia, proximal diaphysis	12	11		
				3 / 11
Fibula, proximal end	0	1		
Fibula, distal end	1	1		
Fibula, central diaphysis	5	5		
				1 / 5
Frontal, supraorbital	7	7		
Zygomatic	4	8		
Temporal, auditory area	2	5		
Occipital, protuber. area			8	
Mandible	5	7		
				8 / 8



General age assessment was derived from three types of analysis: auricular surface aging (Lovejoy *et al.* 1985), diaphyseal long bone measurement (Ubelaker 1989), and tympanic ring development (Weaver 1979). All major age categories were represented by a least one fragment. The right innominate provided 80 percent of the data obtained for aging. When evaluated in 10 year intervals, each age group is represented once with the exception of older and elderly groups (see Table 2). There tends to be an increased frequency associated with age. The older group (40-50 years) was represented by two elements while the elderly group (50 years+) was represented by three elements. Although only three subadult elements could be specifically aged, 19 subadult fragments were encountered during analysis. Eight of these fragments were from the rib area.

TABLE 2 MNI AGING STATISTICS							
Age Group	Gender	Age	Element	Age Group	Gender	Age	Element
Infant	U	0-6m	L. Temporal	Older Adult	U	40-44y	R. Innominate
Child	U	8.5-9.5 y	R. Radius	Older Adult	U	45-60	R. Innominate
Adolescent	U	13-17y	R. Innominate	Elderly Adult	M	50y+	R. Innominate
Adult?	M	17y+	R. Innominate	Elderly Adult	F	50-60y	R. Innominate
Young Adult	M	20-34y	L. Innominate	Elderly Adult	F	50-60y	R. Innominate
Middle Adult	M	35-39y	R. Innominate				

Evaluation of gender was based on pelvic morphology. The sciatic notch and preauricular area were given the highest ranking in gender determination. Four males were represented by the left side of the innominate while only three males were from the right side. Interestingly no females were assessed from the left side, however, two females were represented from the right innominate region (see Table 3). As a result both sides of the innominate were utilized to ensure a maximum number for both sexes. A minimum total of four males and two females were represented in this sample.



TABLE 3: MNI GENDER STATISTICS

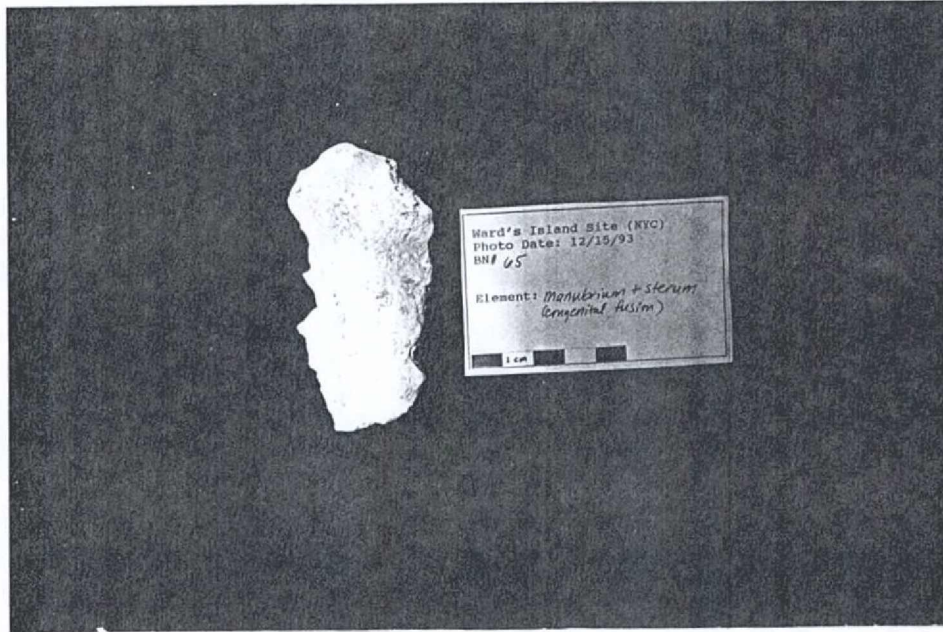
RIGHT SIDE			LEFT SIDE		
Age Group	Gender	Age	Age Group	Gender	Age
Adolescent	U	13-17y	Adult	M	25y +
Adult?	M	17y +	Young Adult	M	20-34y
Middle Adult	M	35-39y	Middle Adult	U	30-39y
Older Adult	U	40-44y	Older Adult	U	40-44y
Older Adult	U	45-60y	Older Adult	M	40-49y
Older Adult	M	50y +	Older Adult	M	40-49y
Elderly Adult	F	50-60y			
Elderly Adult	F	50-60y			

Assessment of genetic affiliation was provided by cases involving the skull region. Bone #467, a post-edentulous mandibular fragment, exhibited a remarkable prominent median profile as well as a parabolic dental arcade. Bone #479, a mandible with dentition, displayed a prominent profile, a pinched ascending ramus and moderate gonial eversion. Both fragments #467 and #479 were tentatively evaluated to be of European descent. A maxillary fragment, Bone #455, exhibited a remarkable degree of prognathism and a "U" shape dental arcade. Bone #455 was tentatively assigned of African affiliation. No definitive Amerindian traits were discerned in the skull region, however, a squatting facet was found on a distal tibia. It is not known at this time whether the facet is a true genetic variation or a response to disease or occupational stress. At least two broad affiliations are possibly represented. One individual appeared to be of African heritage and at least two individuals of European lineage.

Anomalies were mainly listed under the "Anomaly" category, however, the list is not entirely inclusive. Anomalies that related more specifically to gender or genetic affiliation were listed under criteria for those assessments. All dental anomalies were recorded on forms in Appendix E. Of interest in the cranial region, Bone #536 exhibited a palatine torus raised 0.5 cm above natural plane. Although no squatting facets were observed in the pedal region, a squatting type II facet was discerned on Bone #170, a distal tibia. Congenital fusion of the manubrium and sternal corpus was discerned on Bone #65 (see Plate 4). This element did not exhibit a reactionary response typical of disease. The fusion area was smooth with no abnormal or remarkable osteophytic growth. The articulating areas present did not

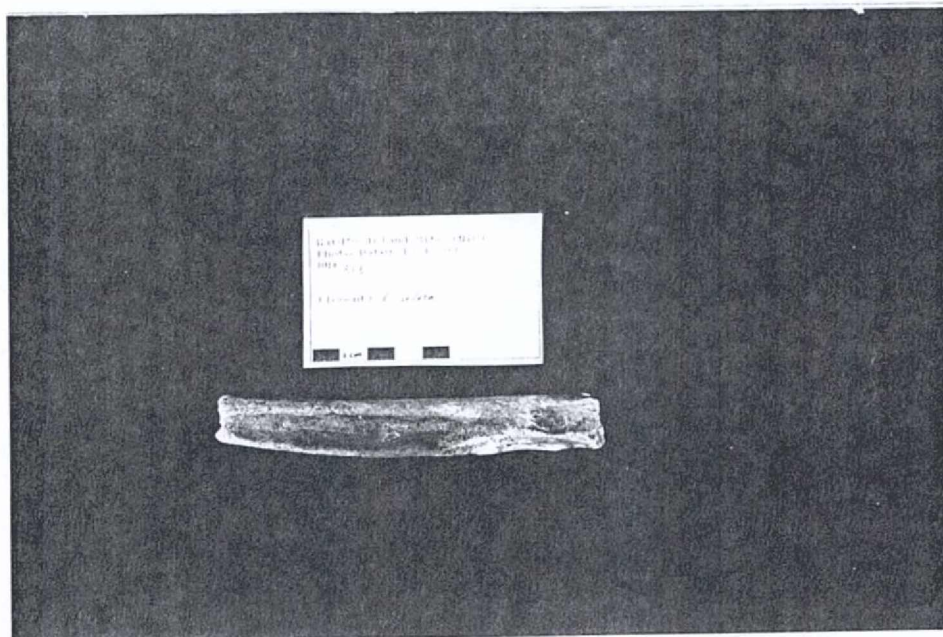
exhibit degenerative joint disease. The most unusual variation encountered was found on Bone #313, a left ulnar diaphyseal fragment. The entire fragment exhibits hypertrophic cortical development averaging 0.4 cm in thickness. The entire area lateral to the interosseous crest had a deep "sunken in" appearance (see Plate 5). It is uncertain whether this variation was genetic or pathological. No other remarkable attributes were present. Bone #280, a robust radial diaphysis, exhibited a high degree of radial tuberosity development. Although this is not an anomaly, it is felt that the area responded to occupational stress involving heavy usage of the bicep muscle.

Plate 4: Bone #65, sternum and manubrium, ventral view



Infracranial pathologies observed included healed and active periosteal reactions, diaphyseal bowing, degenerative joint disease, osteoporosis, lesions, diaphyseal hypertrophy, osteophytic growths possibly trauma induced, and a probable trauma related healed fracture. Most of the observations can be found in the "Pathology" category with further discussion in the "Other" and "Memo" sections.

Plate 5: Bone #313, left ulnar fragment, anterior view



A remarkable case of pathological femoral bowing was exhibited on Bones #162 and #163 (see Plates 6 and 7). Interestingly but not unusual, these elements were initially considered by a city examiner's office to be of faunal origin. Given the number and type of elements, the similar pathological nature exhibited, the general morphological development, and the context of recovery, it is speculated that femora #162 and #163 represent one individual. Bone #162 exhibits slight medial bowing and moderate anterior bowing. *Linea aspera* development is remarkable and hypertrophic development of the second trochanter is present with enlargement approximately three times normal size. Osteoporosis is noted on the distal anterior and posterior area superiorly adjacent to condylar region. Bone #163 exhibited the same responsive morphological attributes with the exception of osteoporosis. The area in question was not recovered. Two other femoral fragments exhibited moderate anterior bowing: Bone #150, a right diaphyseal element, and Bone #153, a diaphyseal fragment of unknown side. Both fragments were unremarkable in regards to further pathological changes.

Plate 6: Bone #162, right femoral fragment, medial view

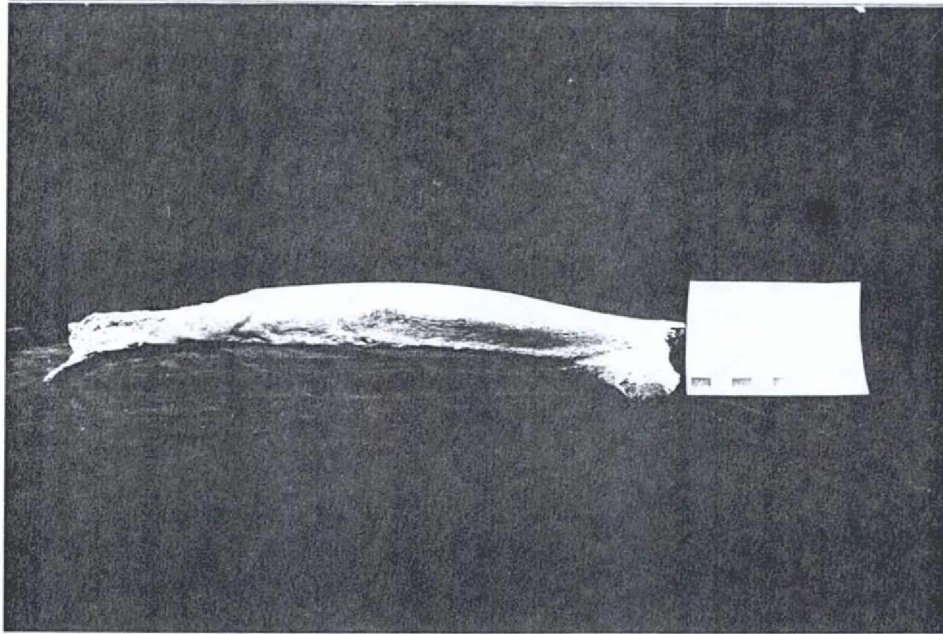


Plate 7: Bone #163, left femoral fragment, lateral view

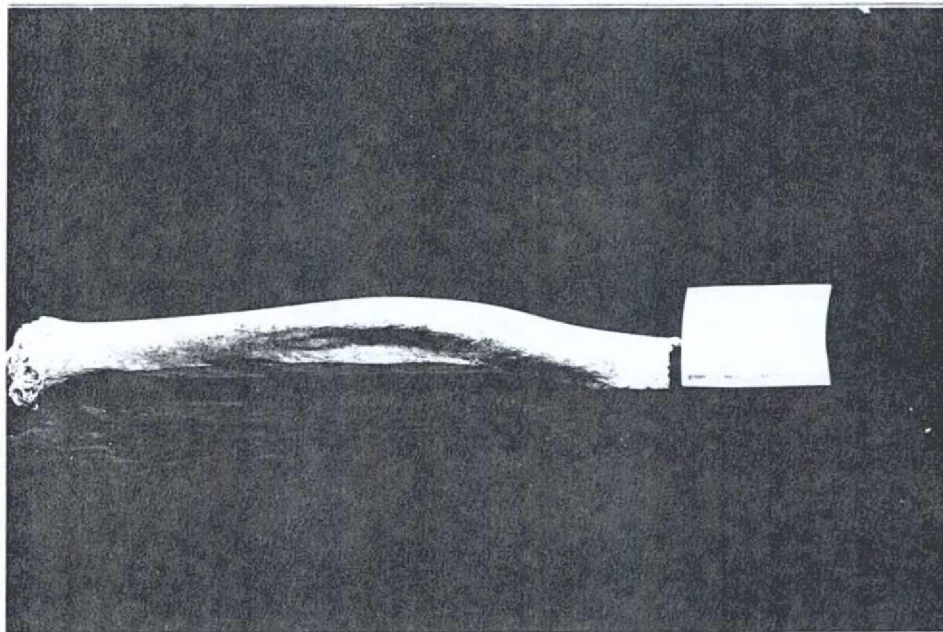
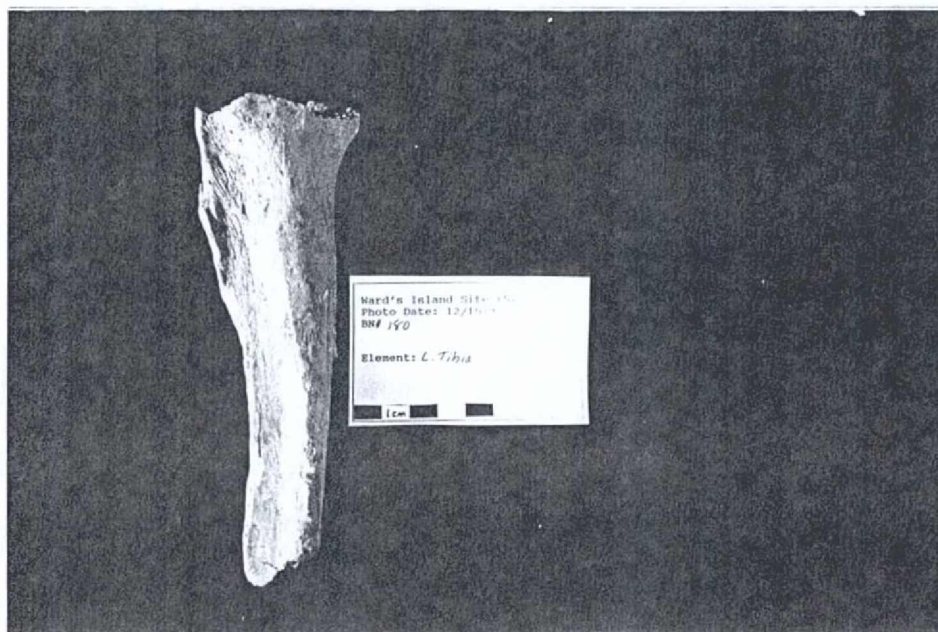


Plate 8: Bone #180, proximal left tibial fragment, posterior view



Another case of pathological bowing was found on Bone #180, a proximal tibial fragment (see Plate 8). Bowing was expressed medially toward the sagittal plane. Tibial torsion of 30° was recorded as a pathological response. An exostosis on the soleal line was present which projected distally. No periosteal reaction was discerned on the fragment. Differential diagnosis of elements expressing the bowing characteristic include Paget's disease and osteomalacia.

Possible trauma was evinced by two elements. On the medial side of bone #381, a distal fibula fragment, was evidence of a healed callous with irregular (rough) osteophytic growth. It is speculated that the exostotic growth was a reaction to trauma (ie. sprain) involving the interosseous membrane. A diaphyseal fragment of a right tibia, bone #187, exhibited characteristics of a healed, slightly malaligned fracture near its mid-shaft (see Plate 9). The fracture appears to have resulted from an outward lateral force towards the sagittal plane. Bones #196, #160, and #174, all left distal femoral fragments, exhibited a lesion in the gastrocnemius area. The lesion appeared healed in two of these elements, #160 and #174, while #196 showed no evidence of resorption. The active lesion of #196 suggests that stress involving the gastrocnemius muscle occurred within a month of the individual's death. Lesions were noted on right clavicular elements #78 and #74 tentatively

assigned the gender of male. Both elements exhibited active and resorptive lesions in the costoclavicular sulcus area. It is speculated both individuals experienced stress involving the costoclavicular or rhomboid ligament during different episodes of their life and were still experiencing it within a month of their death. On Bone #235, a proximal humeral fragment, an active lesion was present in the pectoralis major-eres minor area (see Plate 10). Again it is speculated, stress involving the muscle area(s) occurred shortly before death. A destructive lesion was present on the left superior facet of a collapsed upper thoracic (#327). The remaining articulating facets of this fragment were unremarkable. No speculation as to etiology can be given for this fragment owing to lack of additional information.

Plate 9: Bone #187, left tibial fragment, lateral view

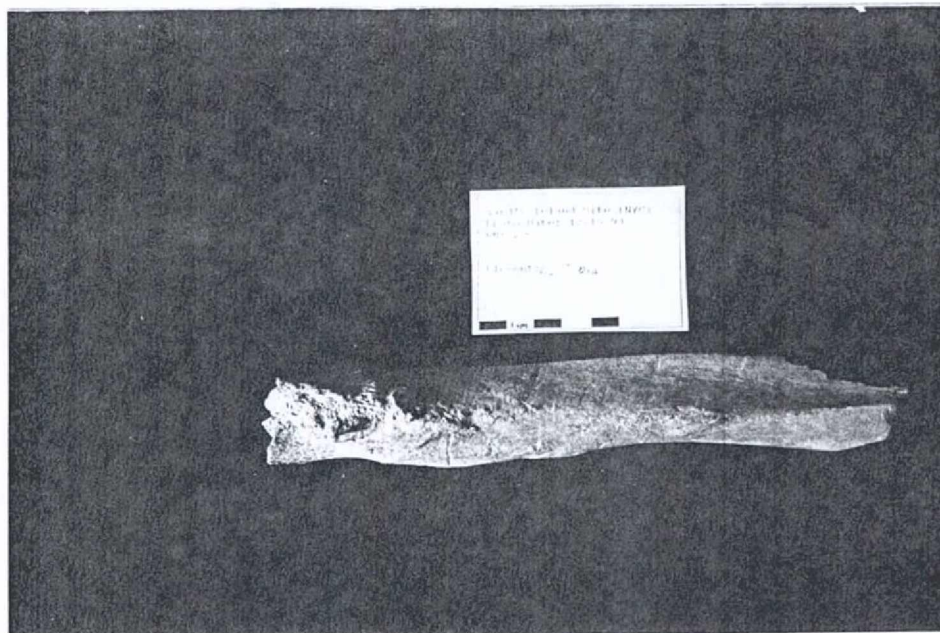
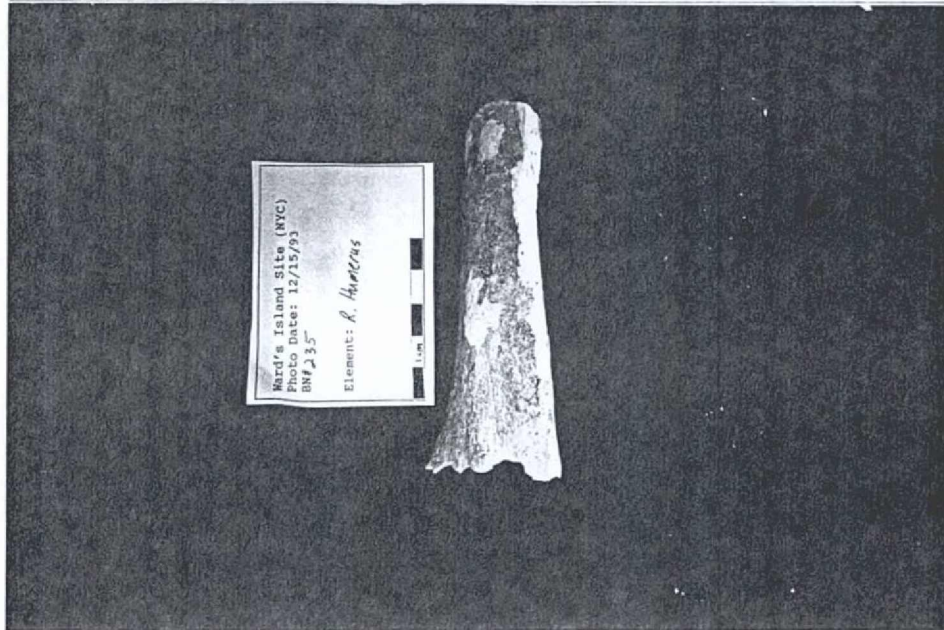


Plate 10: Bone #235, right proximal humeral fragment, anterior view



Marked hypertrophic development of the cancellous region (spongiosclerosis) resulting in diaphyseal expansion was noted for four tibial fragments labeled #193, #203, #204, #206 and one radial fragment labeled #370. All elements exhibited faint musculature markings and marked thinning of the outer table. All hypertrophic development was endosteal. Active periosteal lesions on the lateral side were present on three of the four tibial fragments. Given the nature of the fragments, MNI is one. Etiology of the disease(s) remains unknown at this time, however differential diagnosis includes Paget's disease, treponemal disease, osteomalacia, and sickle cell anemia.

Degenerative joint disease was present on vertebral thoracic and lumbar fragments, axial end of rib fragments, a sacral centrum fragment, a scapular glenoid fragment, a distal humeral fragment, and a cuboid. Moderate vertebral compression was noted for two thoracic and two lumbar elements. Three of these vertebra, one lower thoracic and two lumbar, exhibited active lesions atypical of Schmorl's nodes. The lesions had a "punched out", marginated appearance. Differential diagnosis should include myeloma. Slight osteoporosis was noted for the lower thoracic fragment.



Periosteal reactions in the form of deposition were noted for a minimum number of three individuals after viewing left tibial fragments from the new illustrative format. Two of these individuals had active periostitis on the lateral side at the time of death while one had a healed massive area that spared only the anterior crest. A distal radius and two fibular diaphyseal fragments also displayed active periosteal deposition at time of death.

Cranial pathologies discerned were a stellate lesion, diploic hypertrophy, ectocranial porosity, pacchionian lesions, *cribra orbitalia*, periosteal reaction, degenerative joint disease, alveolar resorption, caries, abscesses, calculus deposition, and enamel hypoplasia.

Active periosteal deposition was discerned on only one cranial fragment. The lesion was located inferiorly-posteriorly on an external auditory canal. It is speculated that the individual experienced discomfort due to infection at the time of death. No other pathologies were macroscopically observed for this fragment. Another temporal fragment exhibited ectocranial porosity on the superior border of the external canal. No speculation is offered as to etiology or implications of the disease. No auditory exostoses were observed for in the collection.

A stellate lesion with surrounding healed periostitis was present endocranially on the frontal region of a cranium (#436, see Plate 11). *Cribra orbitalia* was not expressed by the right orbit. The left orbit was not observable. The remainder of the cranium was unremarkable in regards to further pathological changes. No speculation as to etiology can be given. *Cribra orbitalia* was actively present in both orbits of #485. A right frontal fragment (#529) exhibited cribra in a stage of resorption or healing at the time of death. *Cribra orbitalia* is not a disease but a symptom indicating nutritional deficiency. The primary etiology may not always be diet insufficiency. Metabolic, parasitic, chronic inflammation or other disease processes may initiate the *cribra orbitalia* reaction.

Degenerative joint disease (DJD) was noted for an occipital condyle (#446). The degree of involvement was slight osteophytic growth. No DJD was discerned on the few representative fragments of the temporal mandibular joint region.

Diploic hypertrophy was present on a MNI of one individual, however, 19 fragments from the parietal, occipital, and frontal regions exhibited this characteristic. Plate 12 shows extensive involvement on a parietal-frontal fragment, #528. The researcher feels that a MNI of two would be more appropriate. Although there is no substantial evidence, the amount of material would make a cranium the size of a basketball. Diploic hypertrophy did not macroscopically exhibit bony nodules

typical of Paget's disease, but was consistent in its spongy appearance throughout all the fragments. Interestingly, the outer table as well as the inner appeared thin due to osteoclastic activity. Without the benefit of histology and radiography differential diagnosis should include iron deficient anemias and Paget's disease. Ectocranial porosity in the frontal-parietal region was noted on two of the 19 fragments (#528, #502) in the form of small healed pitting giving the appearance of an "orange peel" texture. Slight ectocranial porosity was present on a fragment which did not exhibit hypertrophic development, an occipital (#486). This porosity may have been related to age changes. Pacchionian lesions were present on two of the parietal fragments (#509, #527) exhibiting diploic hypertrophy. Pacchionian lesions were found on two other parietal fragments not exhibiting hypertrophic development. The lesions are generally believed to be age related changes.

Plate 11: Bone #436, cranial fragment, interior view

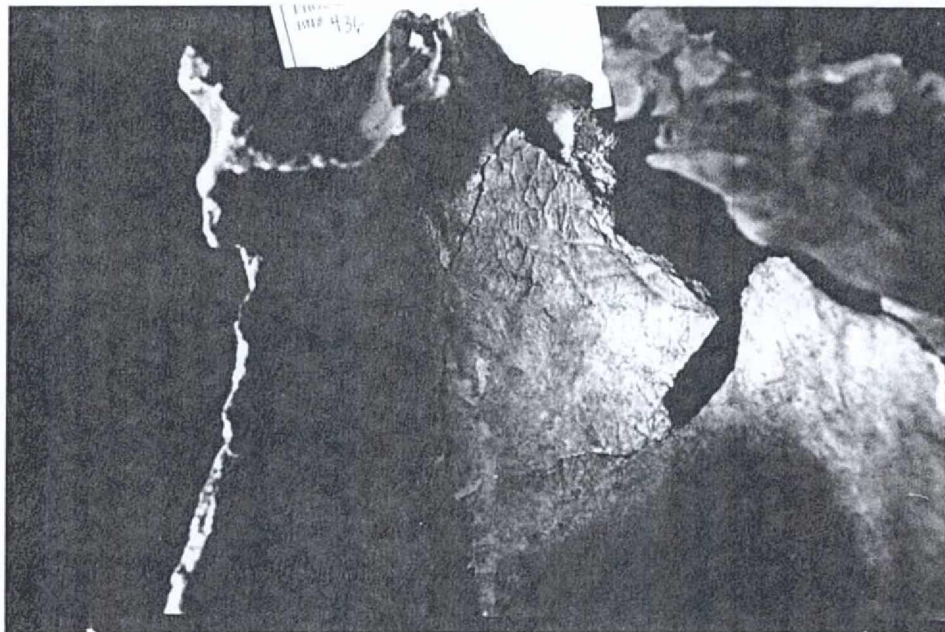
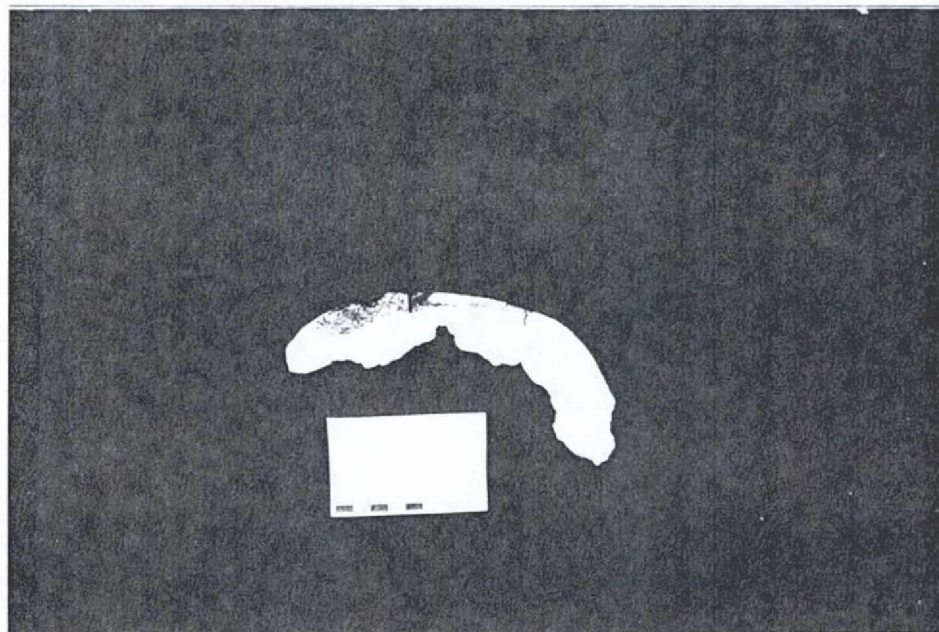


Plate 12: Bone #528, parietal-frontal fragment, diploic view



Although only a small amount of the dental region was present, information was recorded on illustrative inventory sheets and dental recording forms. No evidence of dental restorations or appliances was present. All fragments expressed alveolar resorption ranging from slight to severe. One apical abscess on the RP2 was noted for the maxillary region of #455, an individual tentatively assigned as African descent. Attrition ranged from none exhibited to severe. Antemortem loss of dentition was not uncommon. Carious lesions ranged from fissure caries to almost total destruction of the crown. Slight to moderate hypercementosis was noted on a mandibular fragment (#479). In at least three individuals calculus deposition was present ranging from slight to heavy. Linear enamel hypoplasia was recorded on two of the maxillary fragments (#480-1, #536). Growth disturbance episodes for #480-1 appears to have occurred at 1.9 and 2.75 years while #536 appears to have had growth arrestment at 2.3, 2.9, 3.6, 4.4, and 5.1 years.

The most noteworthy aspect of the collection was the presence of perimortem demarcation on 21 fragments. Areas determined to have been affected were the following: lower and upper leg, lower and upper arm, shoulder, chest, vertebral column and skull. Although erosion had precluded some elements from full analyzation, evidence of resorption was not discerned on the remaining material. All long bones were transversely dissected near mid-shaft. Not surprisingly, a

human femoral diaphyseal fragment was discerned from a group of elements identified by city examiner's office as "faunal" (see Plate 13). This fragment, #164, displayed fine linear grooving left by a blade less than 0.04 cm in width. The demarcation procedure was started from the medial side and terminated in the lateral-posterior area without interruption. Cortical exfoliation precluded assessment of pathological changes. A mandible (#479) and a lower thoracic vertebrae (#327) were sawed through their sagittal planes. Demarcations were not found on any of the known subadult material. Although the possibility of surgical intervention (ie amputation) exists, it is speculated for the majority of fragments that demarcation occurred postmortemly. It is highly probable that procedures such as autopsy or experimental anatomy were performed.

Plate 13: Bone #164, right femoral fragment, posterior view

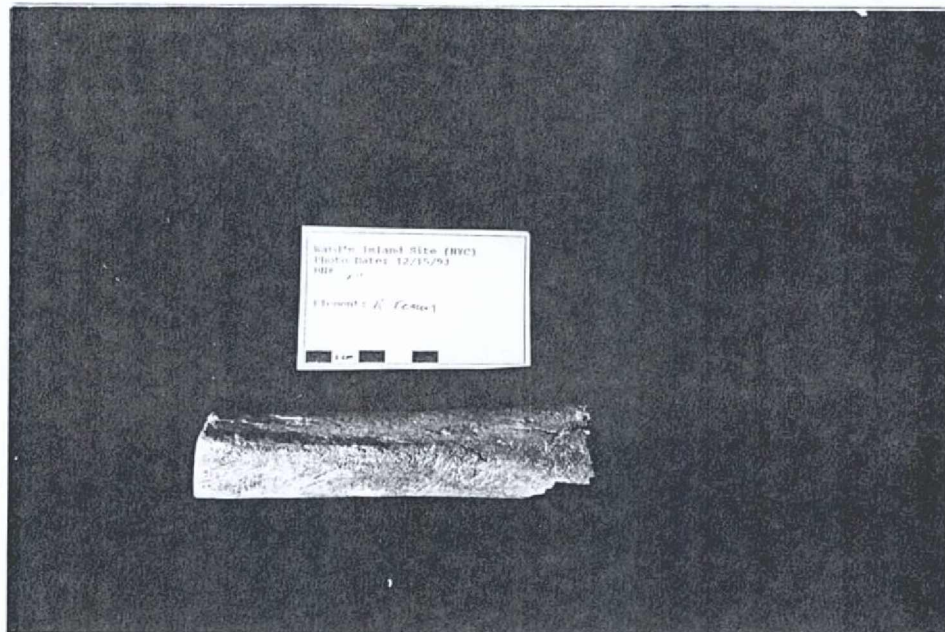
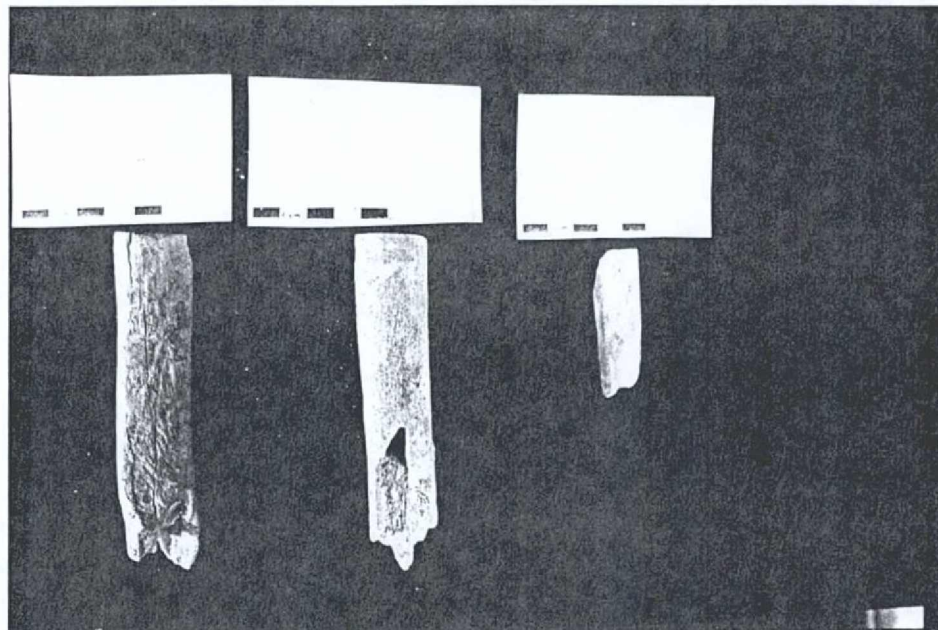


Plate 14: Bones #195, #176, and #208,
long bones displaying transverse perimortem demarcation

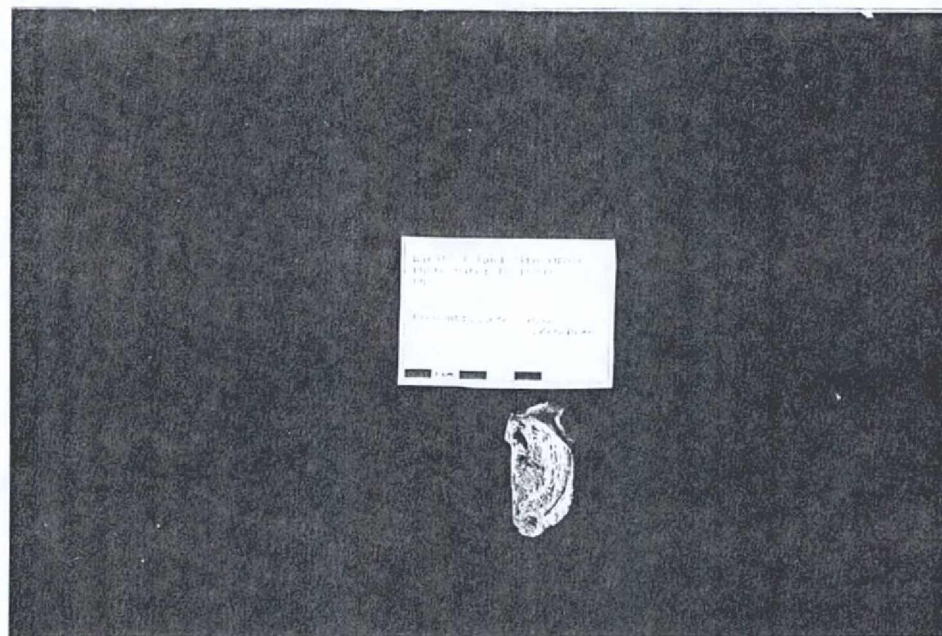


Only two fragments exhibited pathological evidence. A callous of one centimeter diameter with surrounding active periosteal deposition was present on the posterior lateral crest of a proximal tibial fragment (#176, see Plate 14). The periosteal reaction extended to the anterior crest of the specimen. Perimortem demarcation was initiated on the ventral side with a blade, probably that of a saw, which left fine linear marks 0.04 cm in width. At approximately two-thirds through the process, a different implement was utilized which left linear grooves of 0.08 cm in width and a depressional area on the posterior edge. This depressional area was probably where the terminal "snap" or separation occurred. Terminal "snap" areas, both raised and depressed, were found on nine fragments representing the mandibular, cranial, tibial and vertebral regions.

Bone #327, a lower thoracic fragment, displayed several pathological changes. Both surfaces of the centrum had small active lesions (see Plate 15). Two lesions were located central-superiorly and one was located on the central-inferior side of the centrum. All lesions were margined which precluded a firm Schmorl's node assessment. Moderate corporeal compression along with osteoporosis was observed. DJD of a moderate degree had occurred on the anterior-inferior edge of the centrum resulting in a classical "parrot beak" formation of smooth osteophytic

growth. Perimortem demarcation was initiated on the ventral side sagittally. A remnant of bone was left on the fragment's dorsal superior side probably indicating a terminal "snap" area. The implement suspected was a saw, but linear marks were not evident. This was not surprising given the inherent nature of cancellous bone in a vertebral body.

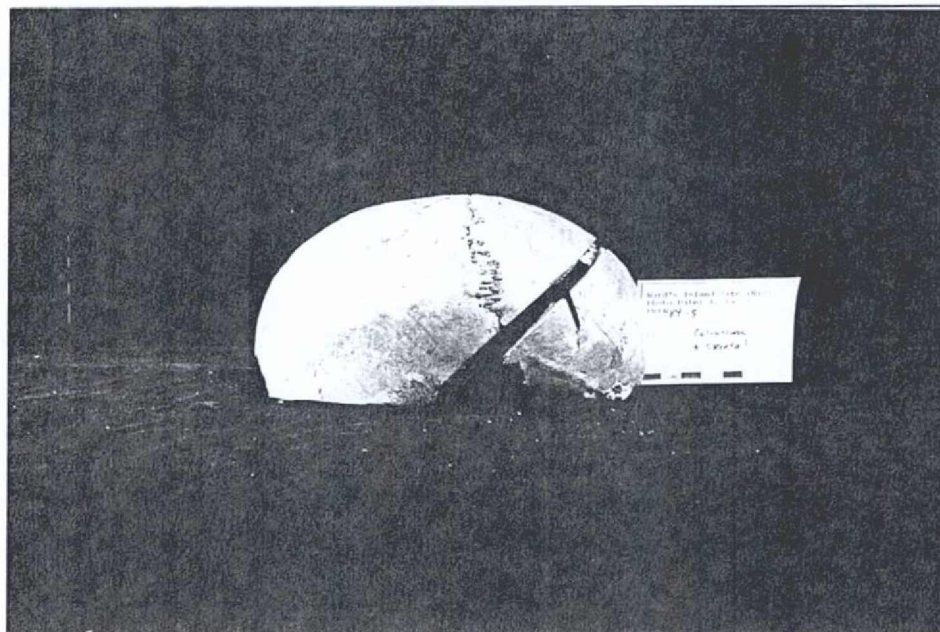
Plate 15: Bone #327, a lower thoracic vertebrae, sagittally demarcated



The most remarkable demarcation evidence is displayed by Bones #485 and #486 constituting a cranium (see Plate 16). The calvarium was mechanically separated from the remainder of the cranium indicating possible autopsy of the individual. Both circular and linear grooving were observed. The majority of linear grooving was 0.08 cm in width. Immeasurable fine linear marks were present on the right frontal adjacent to the coronal suture. One extraneous mark of 0.08 cm in width (skip? or initial cut?) was noted on the center of the frontal area 0.9 cm superior and parallel to the inferior cut edge. The major obtuse cut appears typical of modern procedures. It initially started at a 35° transverse angle 5.7 cm superiorly of the supraorbital region and proceeded toward the auditory meatus. When the area above the auditory meatus and slightly below the squamosal suture was reached, the cut direction changed and approached 0° (flatly transverse) till it terminated at the occipital region. Final separation was probably manual

considering the majority of surfaces exhibit terminal "snap" areas. The presence of hinges seems to preclude the involvement of soft tissue during this procedure.

Plate 16: Bones #485-6, cranial fragment,
typical postmortem autopsy demarcation



In conclusion, 1750 disarticulated elements, mainly fragments, were determined to be of human origin. Secondary recovery context precluded accurate demographic analysis and pathological assessment. At least 20 individuals were represented using a new innovative recording technique. Although all age categories were represented, older people (40 years +) constituted the majority. At least four of the individuals were men and two were women. One person of African and two people of European descent were tentatively identified. From general pathological and dental analysis it is speculated that the majority of the population did not enjoy good health and were subjected to stress of disease and occupation. Given the perimortem demarcation evidence, location of the site, and time period, it is plausible that the population may have been patients of a medical facility.



SUMMARY OF THE HISTORY OF WARDS ISLAND

The first occupant of Wards Island after its purchase from the aboriginal inhabitants was evidently Barent Johnson, who probably leased the island from Wouter Van Twiller. Van Twiller served as the second director of the Dutch West India Company from 1633 through 1637. Johnson's first name became the earliest known name for both Wards and Randalls Islands. The islands were known as Great Barent and Little Barent Island respectively. This was later corrupted to Barnes or Barns Islands (Rutsch and Porter 1980: 12-14). Van Twiller's grant was voided during 1652, so Johnson must have left the island by that time (Ibid:13).

The island then evidently remained vacant for approximately 35 years until Thomas Parcell became the next resident, having purchased all of Wards Island. The island remained in his family for about 75 years and was occasionally referred to as Parcell's Island (Ibid:16).

By 1767 the northern half of the island had been sold to Thomas Bohanna (Ibid.: 19). By 1772 the Bohanna property of approximately 140 acres on the northern half of the island, including a house with a view of the east river, had been sold to Benjamin Hildreth. During the Revolutionary War the island was the property of the Parcell and Hildreth families (Ibid.: 21). The British occupied both Wards and Randalls Islands for nearly all of the war. The only action noted on Wards Island was during 1781 when American forces raided the Hildreth farm (Ibid.: 27).

By 1785 the ownership of Wards Island had changed again. During that year William Lounds purchased the Hildreth property. John W. Pinfold had already bought the remaining half of the island from the Parcells. By 1806 the Lounds property was owned by Philip Parisen who advertised it for sale. Later during 1806, the entire island was purchased by Jasper and Bartholomew Ward (Ibid: 29-31). It was during the Ward brothers' ownership that Wards Island received its present name. Figure 4, taken from the Bridges' or Commissioners' Map, shows the island as of 1807. Several streets have been laid out. The project area is situated in the center of the island near the two hills. The Wards attempted to develop the island, but were not very successful in this endeavor. Only one business, a factory making cotton, appears to have been established. This business did well during the War of 1812, but was being offered for sale by 1821 (Ibid: 31-34). By the 1840s New York City moved the potters field to the south end of Randalls Island (Ibid: 33-34).

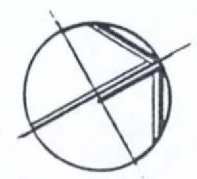
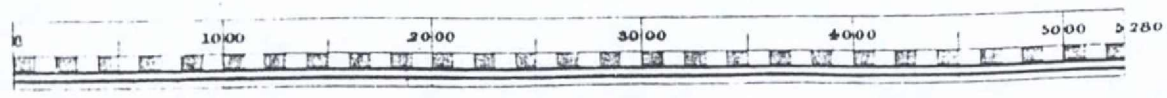


Figure 4 Location of the project area shown on portion of the 1807-1811 Bridges' Map.



During December of 1847 New York State leased part of Wards Island for the Emigration Refuge. The state subsequently purchased 120 acres of the island including all of the shore facing Manhattan. This was the first of several public institutions to be located on Wards Island during the nineteenth century. Figure 5, taken from the 1851 Coast Guard Survey, shows the Emigration Refuge along the northwestern shore of the island. Two other farm complexes are shown. The project area is in a vacant area in the center of the island surrounded by several hills. The second public institution to be located on the island was the Inebriate Asylum. Construction began in 1866 on an elevated location on the east side of the island, and the asylum was opened during July 1868. Since the inebriates had not filled the asylum by 1873, the eastern wing was temporarily assigned to disabled soldiers from New York (Richmond 1873:554-559; Rutsch and Porter 1980:34). These men were probably Civil War veterans.

During 1871 the New York Asylum for the Insane completed construction of their first building on Wards Island. The island had been chosen shortly after the Civil War as the site for the city's new large asylum which would relieve overcrowding at and eventually replace the other older asylums. During the 1880s a number of structures formerly used by Emigration Refuge were turned over to the Asylum for the Insane. Included in these was the Verplanck Hospital (NYSOMH n.d.:1). This brick structure consisted of a long two story corridor from which five wings projected. Each wing was two stories except for the central one which was three stories. Projecting from the opposite side of the corridor was a fire-proof structure containing the heating and ventilation plant, the kitchens, the bakery and laundry facilities (Richmond 1873:554-555). Figure 6, taken from the 1885 Robinson Atlas, shows three public institutions on Wards Island. The two farm complexes seen on the 1851 map have now disappeared. The Emigration Refuge is located near the northwest corner of the island. Its facilities include the Verplanck Hospital. The former Inebriate Asylum is now the Homeopathic Hospital. Comparison with the 1851 U.S. Coast Survey Map shows that this location near the southwestern corner of the island was elevated, thus confirming the identification. The Insane Asylum has two facilities, one near the southwestern corner of the island, and another near the center of the island. The project area is located within the front lawn of the central Insane Asylum facility. Evidently all of the island is the property of the State of New York or the City of New York.

During 1896 the New York City Asylum for the Insane was transferred to the State of New York. The asylum became Manhattan State Hospital. It consisted of two separate facilities: Manhattan State Hospital--East for men, and Manhattan State Hospital--West for women. Figure 6 shows these facilities prior to the transfer. The western facility is near the southwestern corner of the island, and the eastern

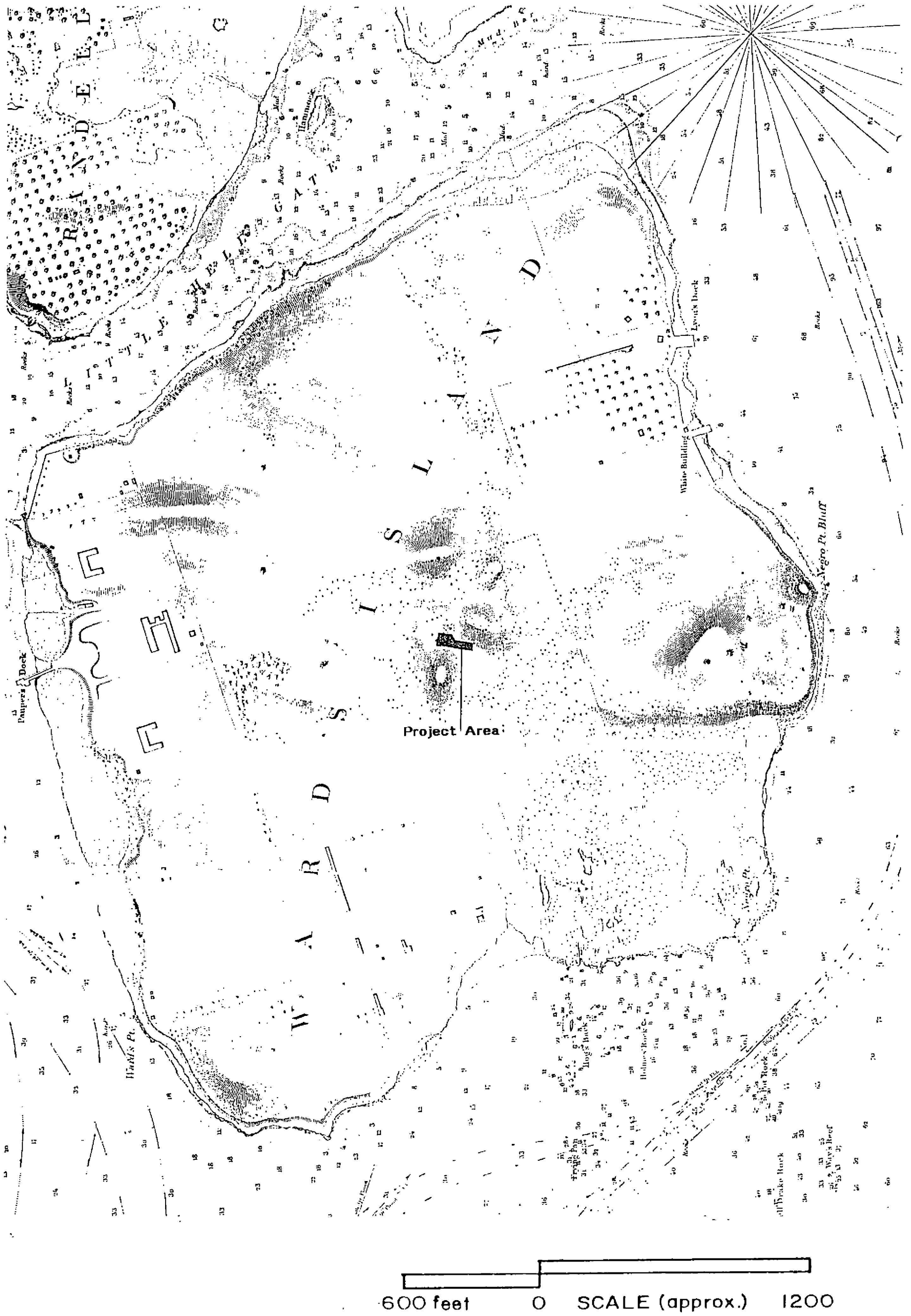


Figure 5 Location of the project area shown on portion of the 1851 U.S. Coast Survey.

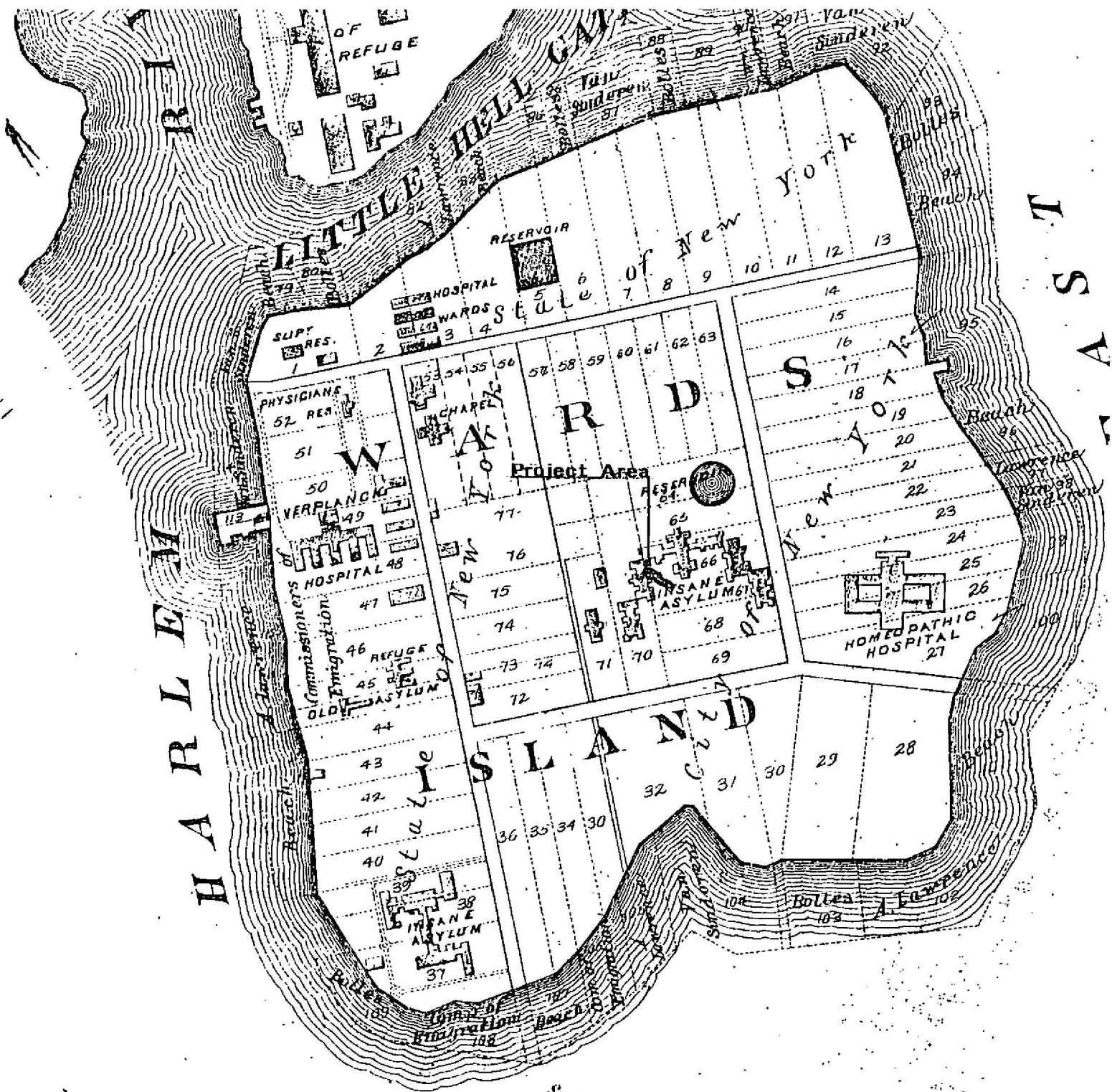


Figure 6 Location of the project area shown on portion of the 1885 Robinson Atlas.



facility is near the center of the island. During 1905 the two facilities were consolidated under one administration, although the actual buildings were not altered. Figure 7, taken from the 1907 U.S. Coast and Geodetic Survey, shows the two former city asylums and the old emigration refuge buildings, as well as the Homeopathic Hospital. All these were now part of Manhattan State Hospital except for the Homeopathic Hospital.

During the next 30 years, the two bridges that currently dominate Wards Island were constructed. The New York Connecting Railroad Bridge was begun during 1914 and completed during 1917 (Kouwenhoven 1972:421). This bridge is located east of the project area. See Figure 1. The Triborough Bridge was erected during 1929 through 1936. It provided road access to Wards Island from Manhattan, Queens, and the Bronx (ibid:487). The Triborough Bridge connection to Queens is located west of the project area. See Figure 1.

Manhattan State Hospital began planning to rebuild its facilities during 1946. Construction began during August 1953 and was to be completed by the end of 1956. It is during this period that the former Male Insane Asylum building was evidently demolished, and the project area was given its present appearance. Figure 1 illustrates the project area as of 1966, after the demolition of the Male Insane Asylum and completion of the present roadways.

The osteological analysis of the human remains from the project area indicates that at least 20 individuals were included. This strongly supports the assumption that the burials were from one of the public institutions on the island. They must have been buried prior to 1885, the date of the earliest map showing the Male Insane Asylum Building. It is very unlikely that burials would have been made on the front lawn of this structure. The earliest public institution on Wards Island was the Emigration Refuge, began during 1847. The second public institution on the island was the Inebriate Asylum which opened in 1868. During the early 1870s part of this facility was given to disabled Civil War veterans. The New York City Asylum for the Insane also located on Wards Island at this time, completing their first structure during 1871. These institutions make up the most likely sources of the people interred within the project area. The Civil War veterans would appear to be the least likely identification since no military artifacts such as uniform buttons or medals were recovered with the bones. It would appear that these people were residents of the Emigration Refuge, the New York State Inebriate Asylum, or the New York City Asylum for the Insane. They must have been buried after 1847 and before 1885.

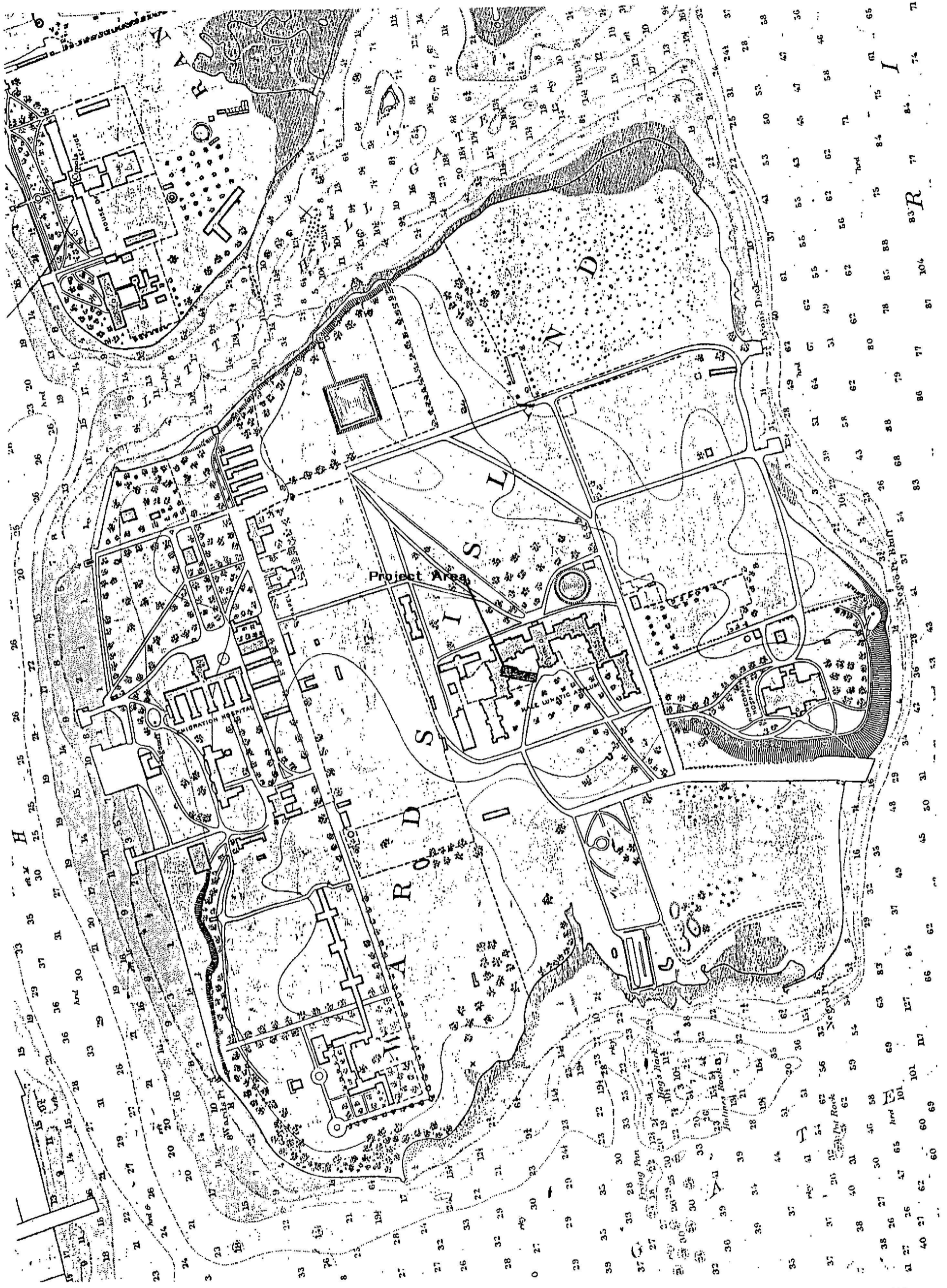


Figure 7 Location of the project area shown on a portion of the 1907 U.S. Coast and Geodetic Survey.



CONCLUSIONS AND RECOMMENDATIONS

It is our conclusion that the human remains recovered from the construction of the course of the chilled water line in the Manhattan Psychiatric Center on Wards Island originated in one of three public institutions that operated here during the nineteenth century. The remains must date to the period 1847 through 1885, and may represent residents of the New York State Emigration Refuge, the New York State Inebriate Asylum, or the New York City Asylum for the Insane. The excavation of two test trenches and the monitoring of the excavation of part of the chilled water line trench provided evidence that no additional burials remained *in situ* within the project area. For these reasons it was recommended that construction of the chilled water lines be continued. Evidence of additional burials was seen in the cross sections of the previously excavated chilled water line trench. It is our recommendation that no further archaeological work is necessary for the chilled water line project. It is also our recommendation that no other subsurface disturbances to the project area and its surroundings take place without first undertaking archaeological testing to determine whether additional burials are present. Finally it is our recommendation that a suitable location within the property of the Manhattan Psychiatric Center on Wards Island be selected to rebury the remains recovered during 1993. This location should be away from all anticipated subsurface disturbances.



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APPENDIX A

OSTEOLOGICAL INVENTORY

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
3.00	1	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	3	U	FAIR	10/25/93	11/26/93	12/10/93		
2.011	2	UNIDENTIFIED OSSEOUS FRAGMENT, PROBABLY HUMAN	1	U	FAIR	10/18/93	11/24/93	12/11/93		
5.001	3	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	17	U	FAIR	10/25/93	11/26/93	12/2/93		
4.00	4	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	185	U	FAIR	11/9/93	11/29/93	12/2/93		
4.00	5	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	162	U	FAIR	11/8/93	11/25/93	12/2/93		
4.00	6	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	1121	U	FAIR	11/10/93	11/29/93	12/2/93		
4001.00	7	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	1125	U	FAIR	11/12/93	11/30/93	12/2/93		
4001.00	8	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	131	U	FAIR	11/18/93	11/30/93	12/2/93		
4001.00	9	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	1123	U	FAIR	11/11/93	11/30/93	12/2/93		
4001.00	10	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	126	U	FAIR	11/16/93	11/30/93	12/2/93		
4001.00	11	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	115	U	FAIR	11/17/93	11/30/93	12/2/93		
6.00	12	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	136	U	FAIR	8/5/93	12/2/93	12/2/93		
6.00	13	RIB, CORPOREAL FRAGMENTS	12	U	FAIR	10/25/93	11/26/93	12/2/93		
6.00	14	RIB, FRAGMENT: AXIAL END XI OR XII	1	R	FAIR	10/25/93	11/26/93	12/2/93		
4.00	15	RIB, CORPOREAL FRAGMENTS	112	U	FAIR	11/9/93	11/29/93	12/2/93		
4.00	16	RIB, FRAGMENTS: AXIAL END	15	R	FAIR	11/9/93	11/29/93	12/2/93		
4.00	17	RIB, FRAGMENT: AXIAL AND CORPUS, III THRU X POSSIBLE	11	L	FAIR	11/9/93	11/29/93	12/2/93		
4.00	18	RIB, CORPOREAL FRAGMENTS (ONE HAS STERNAL END)	12	U	FAIR	11/9/93	11/29/93	12/2/93	DI	
4.00	19	RIB, CORPOREAL FRAGMENTS	17	U	FAIR	11/8/93	11/29/93	12/2/93		
4.00	20	RIB, CORPOREAL FRAGMENT	11	R	FAIR	11/8/93	11/29/93	12/2/93		
4.00	21	RIB, CORPOREAL FRAGMENT, RIB I	11	L	FAIR	11/8/93	11/29/93	12/2/93		
4.00	22	RIB, CORPOREAL FRAGMENTS, RIB I	12	R	FAIR	11/10/93	11/29/93	12/2/93		
4.00	23	RIB, FRAGMENTS: CORPOREAL WITH STERNAL END	2	U	FAIR	11/10/93	11/29/93	12/2/93		
4.00	24	RIB, CORPOREAL FRAGMENTS	44	U	FAIR	11/10/93	11/29/93	12/2/93		
4.00	25	RIB, CORPOREAL FRAGMENTS	2	U	GOOD	11/10/93	11/29/93	12/2/93	DI	
4.00	26	RIB, CORPOREAL FRAGMENT, II OR III	11	R	GOOD	11/10/93	11/29/93	12/2/93	DI	
4.00	27	RIB, FRAGMENTS: AXIAL END (II THRU X POSSIBLE)	13	R	FAIR	11/10/93	11/29/93	12/2/93		
4.00	28	RIB, FRAGMENTS: AXIAL END XI OR XII	12	R	FAIR	11/10/93	11/29/93	12/2/93		
4.00	29	RIB, FRAGMENT: AXIAL AND CORPUS, III THRU X POSSIBL	11	L	FAIR	11/10/93	11/29/93	12/2/93		
4001.00	30	RIB, CORPOREAL FRAGMENTS	117	U	FAIR	11/12/93	11/30/93	12/2/93		
4001.00	31	RIB, CORPOREAL FRAGMENTS	14	L	FAIR	11/12/93	11/30/93	12/2/93		
4001.00	32	RIB, FRAGMENTS: AXIAL ENDS EXCEPT ONE (ONLY CORPUS	4	R	FAIR	11/12/93	11/30/93	12/2/93		
4001.00	33	RIB, FRAGMENTS: CORPOREAL WITH STERNAL ENDS	5	U	FAIR	11/12/93	11/30/93	12/2/93		
4001.00	34	RIB, CORPOREAL FRAGMENT	11	U	GOOD	11/12/93	11/30/93	12/2/93	DI	
4001.00	35	RIB, FRAGMENTS: AXIAL END AND CORPUS, III-X POSSIBL	3	R	FAIR	11/18/93	11/30/93	12/2/93		
4001.00	36	RIB, CORPOREAL FRAGMENT	11	U	FAIR	11/18/93	11/30/93	12/2/93	DI	
4001.00	37	RIB, FRAGMENTS: CORPOREAL NEAR AXIAL ENDS	2	L	FAIR	11/18/93	11/30/93	12/2/93		
4001.00	38	RIB, CORPOREAL FRAGMENT	11	R	FAIR	11/17/93	11/30/93	12/2/93		
4001.00	39	RIB, CORPOREAL FRAGMENT	11	U	FAIR	11/17/93	11/30/93	12/2/93		
4001.00	40	RIB, CORPOREAL FRAGMENTS	15	U	FAIR	11/16/93	11/30/93	12/2/93		
4001.00	41	RIB, CORPOREAL FRAGMENTS	14	U	FAIR	11/16/93	11/30/93	12/2/93		
4001.00	42	RIB, CORPOREAL FRAGMENT	11	U	FAIR	11/11/93	11/30/93	12/2/93	DI	
4001.00	43	RIB, FRAGMENTS: CORPOREAL AND AXIAL ENDS	16	R	FAIR	11/11/93	11/30/93	12/2/93		
4001.00	44	RIB, FRAGMENTS: CORPOREAL AND AXIAL ENDS	16	L	FAIR	11/11/93	11/30/93	12/2/93		
4001.00	45	RIB, CORPOREAL FRAGMENTS	14	U	FAIR	11/18/93	11/30/93	12/2/93		
4001.00	46	MC II DIAPHYSIS (II-V)	11	U	FAIR	11/17/93	11/30/93	12/2/93		
4001.00	47	MC II PROXIMAL END MISSING	11	L	FAIR	11/17/93	11/30/93	12/2/93		
4001.00	47	MC DIAPHYSIS (II-V), DIST. AND MOST OF PROX. MISSING	11	U	FAIR	11/17/93	11/30/93	12/2/93		
5.00	48	MC (II-V) PROXIMAL END MISSING	11	U	FAIR	10/25/93	11/26/93	12/3/93		
5.00	48	MANUS, PROXIMAL PHALANX I	W	U	FAIR	10/25/93	11/26/93	12/3/93		
5.00	48	MC OR MT DIAPHYSIS	11	U	FAIR	10/25/93	11/26/93	12/3/93		
5.00	48	MC DIAPHYSEAL FRAGMENT	11	U	FAIR	10/25/93	11/26/93	12/3/93		
4.00	49	MT I	W	R	GOOD	10/25/93	11/26/93	12/3/93		
4001.00	50	MT I	W	L	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	MT OR MC DIAPHYSIS (II-V)	11	U	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	MC DIAPHYSIS MISSING DISTAL END (II-V)	11	U	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	MC I	W	R	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	MANUS, PROXIMAL PHALANX (II-IV)	W	U	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	MT III WITH DISTAL END MISSING	11	L	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	PES, TARSAL, TALUS (MAY BE A MATCH TO BN#66)	W	L	FAIR	11/16/93	11/30/93	12/3/93		
4001.00	50	PES, TARSAL, TALUS	W	L	FAIR	11/16/93	11/30/93	12/3/93		
4.00	51	MANUS, PROXIMAL PHALANX (II-IV)	W3	U	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, PROXIMAL PHALANX (II-IV) MISSING PROXIMAL END	11	U	FAIR	11/10/93	11/29/93	12/3/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4.00	51	MANUS, DISTAL PHALANX	W	U	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, MEDIAL PHALANX (II-V)	W	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, MEDIAL PHALANX (II-V)	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, PROXIMAL PHALANX I	I	L	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, PROXIMAL PHALANX I	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	PES, PROXIMAL PHALANX I	W	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC I	W	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC I MISSING PROXIMAL END	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MT V	W	L	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	MT (II-V) PROX END FRAG	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC I MISSING PROXIMAL END	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MT (II-V) DISTAL 1/2 FRAGMENT	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC OR MT DIAPHYSIS	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC III	W	R	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	MC II,III,IV	W3	R	GOOD (SOME SP	11/10/93	11/29/93	12/3/93		
4.00	51	MC IV DISTAL END MISSING	I	L	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	MC V WITH DISTAL END MISSING	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC (II-V) DISTAL END MISSING	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MC III DISTAL END MISSING	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MT IV WITH DISTAL END MISSING	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MT (II-V) WITH DISTAL END MISSING	I	U	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	MANUS, CARPAL, SCAPHOID	I	R	GOOD	11/10/93	11/29/93	12/3/93		
4.00	51	PES, TARSAL, NAVICULAR FRAGMENT	I	R	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	PES, TARSAL, NAVICULAR	W	L	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	PES, TARSAL, CUNEIFORM I FRAGMENT	I	L	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	PES, TARSAL, TALUS FRAGMENT	I	L	FAIR	11/10/93	11/29/93	12/3/93		
4.00	51	PES, CALCANEUS FRAGMENT	I	L	FAIR	11/10/93	11/29/93	12/3/93		
4.00	52	TRADIUS	W	R	FAIR	11/8/93	11/29/93	12/3/93	DI	
4001.00	53	HUMERUS, DISTAL 1/2 FRAGMENT	I	L	FAIR	11/11/93	11/30/93	12/3/93	DI	
4.00	54	MANUS, CARPAL, HAMATE	W	L	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MANUS, MEDIAL PHALANX (II-IV)	W	U	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MANUS, MEDIAL PHALANX (II-IV) PROXIMAL END MISSING	I	U	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MANUS, PROXIMAL PHALANX (II-IV)	W	U	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MANUS, PROXIMAL PHALANX (II-IV) PROXIMAL END MISSING	I	U	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MC (II-IV) PROXIMAL END ONLY	I	U	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	MC IV DISTAL END ONLY	I	R	FAIR	11/8/93	11/29/93	12/3/93		
4.00	54	PES, CALCANEUS, ONLY SUP. ARTIC. SURFACE PRESENT	I	L	FAIR	11/8/93	11/29/93	12/3/93		
4.00	55	PES, CALCANEUS, ONLY SUP. ARTIC. SURFACE PRESENT	I	L	FAIR	11/8/93	11/29/93	12/3/93		
4.00	55	MC DIAPHYSEAL FRAGMENT, (II-V)	I	U	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MC OR MT DIAPHYSIS (II-V)	I	U	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MANUS, PROXIMAL PHALANX (II-IV)	W	U	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MANUS, MEDIAL PHALANX (II-IV)	W	U	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MC I	W	R	GOOD	11/9/93	11/29/93	12/3/93		
4.00	55	MC II AND III	W2	R	GOOD	11/9/93	11/29/93	12/3/93		
4.00	55	MC IV	W	R	GOOD	11/9/93	11/29/93	12/3/93		
4.00	55	MC IV	W	L	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MC III DISTAL END MISSING	I	L	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MT II MISSING DISTAL END	I	L	FAIR	11/9/93	11/29/93	12/3/93		
4.00	55	MT IV MISSING DISTAL END	I	L	FAIR	11/9/93	11/29/93	12/3/93		
4.00	56	PATELLA	W	R	FAIR	11/8/93	11/29/93	12/3/93		
4001.00	57	PATELLA	W	L	FAIR	11/18/93	11/30/93	12/3/93		
4001.00	58	PES, CALCANEUS PROXIMAL FRAGMENT	I	L	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	PES, CALCANEUS FRAGMENT	I	U	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	PES, CALCANEUS FRAGMENT	I	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	PES, TARSAL, TALUS	W	R	GOOD	11/12/93	11/30/93	12/3/93		
4001.00	58	PES, PROXIMAL PHALANX (II-IV)	W	U	GOOD	11/12/93	11/30/93	12/3/93		
4001.00	58	MANUS, PROXIMAL PHALANX (II-IV)	W	U	GOOD	11/12/93	11/30/93	12/3/93		
4001.00	58	MC I	W	R	GOOD	11/12/93	11/30/93	12/3/93		
4001.00	58	MC I	W	L	GOOD	11/12/93	11/30/93	12/3/93		
4001.00	58	MT I	W	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MT I	I	L	POOR	11/12/93	11/30/93	12/3/93		
4001.00	58	MT II MISSING DISTAL END	I	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MT IV MISSING DISTAL END	I	R	FAIR	11/12/93	11/30/93	12/3/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4001.00	58	MC III DISTAL END MISSING	1	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MC V	W	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MC III DISTAL END MISSING	1	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MC DIAPHYSEAL FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	58	MT V MISSING DISTAL END	1	R	FAIR	11/12/93	11/30/93	12/3/93		
4001.00	59	MT OR MC DIAPHYSIS (II-V)	1	U	GOOD	11/12/93	11/30/93	12/3/93	D1	
4001.00	60	PES. TARSAL. TALUS (MAY BE A MATCH TO BN#50)	W	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. TARSAL. CUNEIFORM I	W	R	GOOD	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. TARSAL. NAVICULAR FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. TARSAL. CUNEIFORM II FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. TARSAL. CUBOID	W	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	MT (II-V) PROXIMAL END ONLY	1	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. PROXIMAL PHALANX (II-IV)	1	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. PROXIMAL PHALANX (II-IV) DISTAL END MISSING	2	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. PROXIMAL PHALANX (II-IV)	W	U	GOOD	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. PROXIMAL PHALANX (IV?)	W	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. MEDIAL PHALANX (II-IV)	W	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMANUS. PROXIMAL PHALANX I	W	U	GOOD	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. MEDIAL PHALANX (II-IV)	W	U	GOOD	11/11/93	11/30/93	12/3/93		
4001.00	60	PES. PROXIMAL PHALANX (I-V)	W4	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMT I	W	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMT I	W	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMT I DISTAL END ONLY	1	L	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMC I DISTAL END ONLY	1	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMC I	W	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMC V DISTAL END MISSING	1	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMC DIAPHYSEAL FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMC III DISTAL END MISSING	2	L	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMT V MISSING DISTAL END	1	R	FAIR	11/11/93	11/30/93	12/3/93		
4001.00	60	IMT V MISSING DISTAL END	1	L	FAIR	11/11/93	11/30/93	12/3/93		
0.00	61	IMANUS. CARPAL. LESSER MULTANGULAR	W	R	GOOD	8/3/93	12/2/93	12/6/93		
0.00	61	PES. CALCANEUS, ONLY PART OF ARTIC. SURFACE PRES	1	R	FAIR	8/3/93	12/2/93	12/6/93		
4001.00	62	PES. CALCANEUS FRAGMENT	1	L	GOOD	11/18/93	11/30/93	12/6/93		
4001.00	62	PES. TARSAL. TALUS FRAGMENT	1	R	GOOD	11/18/93	11/30/93	12/6/93		
4.00	63	CLAVICLE. DISTAL END OF DIAPHYSIS	1	U	GOOD	11/10/93	11/30/93	12/6/93		
4.00	64	LONG BONE. PARTIAL CONDYLAR FRAGMENT	1	U	FAIR	10/25/93	11/26/93	12/6/93		
4.00	64	LONG BONE. DIAPHYSEAL FRAGMENT	1	U	FAIR	10/25/93	11/26/93	12/6/93		
4.00	65	STERNUM. MANUBRIUM AND SUPERIOR HALF OF CORPUS	1	U	GOOD	11/18/93	11/30/93	12/6/93	D2	R1-F3 (ANTERIOR VIEW)
4001.00	66	SCAPULA. 2 SPINE AND ONE LATERAL BORDER FRAGMENT	13	U	FAIR	11/11/93	11/30/93	12/6/93		
4001.00	66	SCAPULA. GLENOID AND SURROUNDING AREA	11	L	FAIR	11/11/93	11/30/93	12/6/93		
4001.00	67	SCAPULA. GLENOID AND SURROUNDING AREA	11	R	FAIR	11/16/93	11/30/93	12/6/93		
4001.00	68	SCAPULA. LATERAL BORDER FRAGMENT	1	R	GOOD	11/12/93	11/30/93	12/6/93		
4.00	70	SCAPULA. LATERAL SPINAL WITH PROX. ACROMIAL AREA	1	R	FAIR	11/10/93	11/29/93	12/6/93		
4.00	70	SCAPULA. LATERAL BORDER FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/6/93		
4.00	71	SCAPULA. LATERAL SPINE WITH PROX. ACROMIAL AREA	1	R	FAIR	11/9/93	11/29/93	12/6/93		
4.00	71	SCAPULA. GLENOID AND SURROUND AREA. ESP. LAT BORDER	1	R	FAIR	11/9/93	11/29/93	12/6/93		
4.00	71	SCAPULA. GLENOID AND SURROUNDING AREA	1	L	GOOD	11/18/93	11/30/93	12/6/93		
4.00	71	SCAPULA. LATERAL SPINE AREA FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/6/93		
4.00	71	SCAPULA. LATERAL SPINE AREA FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/6/93		
4001.00	72	SCAPULA. GLENOID AND SURROUND AREA. ESP. LAT BORDER	1	L	GOOD	11/12/93	11/30/93	12/6/93	D1	
4001.00	73	CLAVICLE. DISTAL END OF DIAPHYSIS	1	R	FAIR	11/16/93	11/30/93	12/6/93		
4.00	74	CLAVICLE. PROXIMAL 2/3 PRESENT	1	R	FAIR	11/10/93	11/29/93	12/6/93		
4001.00	75	CLAVICLE. DISTAL END OF DIAPHYSIS	1	R	FAIR-POOR. SPALLIN	11/11/93	11/30/93	12/6/93		
4.00	76	CLAVICLE. MISSING UNFUSED EPIPHYSES	W	L	GOOD	11/9/93	11/29/93	12/6/93		
4.00	77	CLAVICLE. DIAPHYSEAL FRAGMENT	1	R	POOR. SPALLIN	10/25/93	11/26/93	12/6/93		
4001.00	78	CLAVICLE FRAGMENT. ACROMIAL END MISSING	1	R	FAIR	11/12/93	11/30/93	12/6/93		
4001.00	78	CLAVICLE. DIAPHYSEAL FRAGMENT. MAJORITY PRESENT	1	R	POOR-FAIR	11/12/93	11/30/93	12/6/93		
4001.00	78	CLAVICLE FRAGMENT. ACROMIAL END MISSING	1	L	POOR-FAIR	11/12/93	11/30/93	12/6/93		
4.00	79	INNOMINATE OR STERNUM FRAGMENT (PLAT. BLADE)	1	U	FAIR	11/8/93	11/29/93	12/7/93		
4.00	80	VERTEBRAE. THORACIC OR LUMBAR. CENTRUM FRAGMENT	1	U	POOR. CAN NOT	11/8/93	11/29/93	12/7/93		
4001.00	81	VERTEBRAE. CERVICAL (II-VII). SPINOUS PROCESS FRAG	1	U	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	82	VERTEBRAE. THORACIC. SPINOUS PROCESS FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/7/93		
4001.00	82	VERTEBRAE. CERVICAL (II-VII). SPINOUS PROCESS FRAG	1	U	FAIR	11/16/93	11/30/93	12/7/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4001.00	83	VERTEBRAE, CERVICAL (II-VI), NEURAL ARCH FRAGMENT	1	R	GOOD	11/16/93	11/30/93	12/7/93	D1	
4.00	84	VERTEBRAE, CERVICAL I, FRAGMENT	1	R	FAIR	10/25/93	11/26/93	12/7/93		
4.00	84	VERTEBRAE, LUMBAR, TRANSVERSE PROCESSES MISSING	1	U	GOOD	10/25/93	11/26/93	12/7/93		
4.00	85	VERTEBRAE, CERVICAL (II-VII), SPINOUS PROCESS FRAG	1	U	GOOD	11/9/93	11/29/93	12/7/93		
4.00	85	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/7/93		
4.00	85	VERTEBRAE, THORACIC-UPPER, FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/7/93		
4.00	85	VERTEBRAE, LUMBAR FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/7/93		
4.00	85	VERTEBRAE, LUMBAR-UPPER, FRAGMENT	1	U	GOOD	11/9/93	11/29/93	12/7/93		
4001.00	86	VERTEBRAE, LUMBAR V7, DORSAL PART OF CENTRUM MISSIN	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, LUMBAR, DORSAL, PART OF CENTRUM MISSING	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, LUMBAR-UPPER, CENTRUM MISSING	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, MISSING INF, DORSAL 1/2	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, CENTRUM FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, CENTRUM FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, CENTRUM FRAGMENT, SUP 1/2	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, CERVICAL, CENTRUM FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC I, MISSING L, NEURAL ARCH	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, LUMBAR, SPINOUS PROCESS FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, SPINOUS PROCESS FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC XII, NEURAL ARCH FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, FACET FRAGMENT, PROBABLY HUMAN	1	U	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	R	GOOD	11/12/93	11/30/93	12/7/93		
4001.00	86	VERTEBRAE, CERVICAL III-VII, CENTRUM & NEURAL ARCH FRA	1	L	FAIR	11/12/93	11/30/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR-UPPER, FRAGMENT	1	U	GOOD	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, CERVICAL III-VII, NEURAL ARCH FRAGMENT	1	R	GOOD	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, CERVICAL III-VII, NEURAL ARCH FRAGMENT	1	L	GOOD	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, CERVICAL II, NEURAL ARCH FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	SACRUM, FRAGMENT, S1 ELEMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, CERVICAL?, CENTRUM FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR?, CENTRUM FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR-UPPER, NEURAL ARCH FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, THORACIC, NEURAL ARCH WITH CENTRUM FRAG	1	L	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/7/93		
4.00	87	SACRUM, FRAGMENT, S1 ELEMENT	1	L	FAIR	11/10/93	11/29/93	12/7/93		
4001.00	88	SACRUM, FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	SACRUM, FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CENTRUM FRAGMENTS	4	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CENTRUM FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, LUMBAR, CENTRUM FRAGMENTS	3	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, THORACIC, CENTRUM FRAGMENTS	2	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, LUMBAR FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	SACRUM, FRAGMENT, S1 ELEMENT	1	L	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CERVICAL II, FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CERVICAL I, NEURAL ARCH FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, LUMBAR, CENTRUM FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, THORACIC, SPINOUS PROCESS FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CERVICAL, NEURAL ARCH FRAGMENT	2	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CERVICAL, NEURAL ARCH FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, CERVICAL, NEURAL ARCH FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, THORACIC, NEURAL ARCH FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	88	VERTEBRAE, LUMBAR, NEURAL ARCH FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/7/93		
4.00	89	UNIDENTIFIED OSSEOUS FRAGMENT, PROBABLY HUMAN	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4001.00	90	UNIDENTIFIED OSSEOUS FRAGMENT, PROBABLY HUMAN INNO	1	U	FAIR	11/11/93	11/30/93	12/7/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4.00	91	INNOMINATE, PUBC. INF 1/2 OF SYM FACE	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	92	INNOMINATE, PUBC FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4001.00	93	INNOMINATE, PUBC FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	94	INNOMINATE, PUBC AND SUP ISCHIAL FRAG (ACETAB)	1	L	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	95	SCAPULA, SPINE FRAGMENT NEAR ACROMIAL AREA	1	R	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	95	SCAPULA, SPINE FRAGMENT NEAR ACROMIAL AREA	1	L	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	96	INNOMINATE, ISCHIAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	96	INNOMINATE, PUBC FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	96	INNOMINATE, ILIAC FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/7/93		
4.00	97	INNOMINATE, ILIAC FRAGMENT	14	U	FAIR	11/9/93	11/29/93	12/7/93		
4001.00	98	INNOMINATE, ILIAC FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	98	INNOMINATE, ISCHIAL FRAGMENT	3	R	FAIR	11/11/93	11/30/93	12/7/93		
4001.00	98	INNOMINATE, ISCHIAL FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/7/93		
4.00	99	INNOMINATE, ISCHIAL FRAGMENT	11	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, ISCHIAL FRAGMENT	12	L	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, ISCHIAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, ILIAC FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, ILIAC FRAGMENT	16	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, ISCHIAL FRAGMENT	11	U	FAIR	11/10/93	11/29/93	12/7/93		
4.00	99	INNOMINATE, PUBC FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/7/93		
4001.00	100	INNOMINATE, ILIAC FRAGMENT	11	R	FAIR	11/12/93	11/30/93	12/7/93		
4001.00	101	INNOMINATE, ILIAC FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/7/93		
4001.00	102	INNOMINATE, ILIAC FRAGMENT	1	L	FAIR	11/17/93	11/30/93	12/7/93		
4001.00	102	INNOMINATE, ILIAC FRAGMENT	1	U	FAIR	11/17/93	11/30/93	12/7/93		
4001.00	102	INNOMINATE, ISCHIAL FRAGMENT	1	R	FAIR	11/17/93	11/30/93	12/7/93		
4.00	103	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/7/93		
4001.00	104	INNOMINATE, ILIAC FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/7/93		
4001.00	105	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93		
4001.00	106	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	L	FAIR	11/16/92	11/30/93	12/8/93		
4001.00	107	INNOMINATE, ILIAC FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/8/93		
4001.00	108	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	5=1	L	FAIR	11/18/93	11/30/93	12/8/93		
4.00	109	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/8/93		
4.00	110	INNOMINATE, ILIAC FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/8/93		
4001.00	111	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/8/93		
4.00	112	INNOMINATE, ILIAC FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93		
4001.00	113	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	1	R	FAIR	11/10/93	11/30/93	12/8/93		
4001.00	114	INNOMINATE, ILIAC + ISCHIAL FRAGMENT	12=1	R	FAIR	11/12/93	11/30/93	12/8/93		
4.00	115	INNOMINATE, ILIAC FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/8/93		
4.00	116	INNOMINATE, ILIAC FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/8/93		
4001.00	117	FEMUR, CONDYLAR FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	118	FEMUR, CONDYLAR FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	119	FEMUR, CONDYLAR FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	120	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	121	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	122	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/29/93	12/8/93	D3	
4001.00	123	FEMUR, DIAPHYSEAL FRAGMENT	3=1	R	POOR, SPALLIN	11/11/93	11/29/93	12/8/93	D3	
4001.00	124	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/8/93		
4.00	125	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/8/93	11/29/93	12/8/93		
4.00	126	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/8/93	11/29/93	12/8/93	D3	
4.00	127	FEMUR, DIAPHYSEAL FRAGMENT	1	L	POOR, SPALLIN	11/8/93	11/29/93	12/8/93	D3	
4.00	128	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/8/93	D3	
4.00	129	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	10/25/93	11/26/93	12/8/93	D3	
4.00	130	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	R	FAIR	10/25/93	11/26/93	12/8/93	D3	
4001.00	131	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/8/93	D3	
4.00	132	FEMUR, CONDYLAR FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93	D3	
4.00	133	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/8/93		
4.00	134	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/8/93		
4.00	135	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93		
4.00	136	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93	D4	
4.00	137	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93	D4	
4.00	138	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/8/93	D4	
4.00	139	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/8/93	D3	
4.00	140	FEMUR, DIAPHYSEAL FRAGMENT + DISTAL + EPIPHYSIS	13=1	R	FAIR	11/16/93	11/29/93	12/8/93	D3	

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4.00	141	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	L	FAIR	11/10/93	11/29/93	12/8/93	D3	
4.00	142	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	L	FAIR	11/10/93	11/29/93	12/8/93	D3	
4.00	143	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	R	FAIR	11/10/93	11/29/93	12/8/93	D3	
4001.00	144	FEMUR, CONDYLAR FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/8/93		
4001.00	145	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/8/93		
4001.00	146	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/8/93	D4	
4002.00	147	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/8/93	D4	
4001.00	148	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/8/93	D4	
4001.00	149	FEMUR, PROXIMAL END + DIAPHYSIS	1	R	FAIR	11/18/93	11/30/93	12/8/93	D4	
4001.00	150	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/8/93	D4	
4.00	151	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/8/93	D4	
4.00	152	FEMUR, PROXIMAL END + DIAPHYSIS	1	L	FAIR	11/9/93	11/29/93	12/8/93	D5	
4.00	153	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/8/93		
4.00	154	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/8/93		
4.00	155	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/8/93	D4	
0.00	156	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	L	FAIR	8/3/93	12/2/93	12/8/93		
0.00	157	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	8/3/93	12/2/93	12/8/93	D5	
0.00	158	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	8/3/93	12/2/93	12/8/93	D5	
0.00	159	FEMUR, DIAPHYSEAL FRAGMENT	1	L	POOR	8/3/93	12/2/93	12/8/93	D5	
0.00	160	FEMUR, DIAPHYSEAL FRAGMENT - DISTAL	1	L	FAIR	8/3/93	12/2/93	12/8/93	D5	
0.00	161	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	8/3/93	12/2/93	12/8/93	D5	
0.00	162	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	8/3/93	12/2/93	12/8/93	D5	R2:F12-16 (16-MEDIAL VIEW) IS WRONG SIDE
0.00	165	FEMUR, DIAPHYSEAL FRAGMENT	1	L	FAIR	8/3/93	12/2/93	12/8/93	D4	R2:F12-15,17 (17-LAT. VIEW) IS WRONG SIDE
0.00	164	FEMUR, DIAPHYSEAL FRAGMENT	1	R	FAIR	8/3/93	12/2/93	12/8/93	D5	R2:F11 (POST. VIEW)
4001.00	163	TIBIA, DIAPHYSEAL FRAGMENT NEAR PROXIMAL END	1	R	POOR, SPALLIN	11/12/93	11/30/93	12/9/93		
4001.00	166	TIBIA, DIAPHYSIS + DISTAL END	1	R	EXCELLENT	11/12/93	11/30/93	12/9/93		
4001.00	167	TIBIA, DIAPHYSEAL FRAGMENT	1	R	POOR, SPALLIN	11/12/93	11/30/93	12/9/93	D6	
4.00	168	TIBIA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/9/93	D6	
4.00	169	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/9/93	D6	R1:F22
4.00	170	TIBIA, DISTAL END FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/9/93	D6	
4.00	171	TIBIA, DISTAL END FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/9/93		
4.00	172	TIBIA, PROXIMAL END FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/9/93		
4001.00	173	FEMUR, DIAPHYSEAL FRAGMENT, LINEA ASPERA	1	U	FAIR	11/11/93	11/30/93	12/9/93		
4001.00	174	FEMUR, DISTAL END DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/9/93		
4001.00	175	TIBIA, DISTAL END FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/9/93		
4001.00	176	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/9/93	D9	R2:F3(CENTER); PHOTO ELEMENT NAME INCORCT
4001.00	177	TIBIA, DIAPHYSEAL FRAGMENT	1	R	POOR, SPALLIN	11/11/93	11/30/93	12/9/93	D6	
4001.00	178	TIBIA, DIAPHYSEAL FRAGMENT	1	L	FAIR, BUT SPAL	11/11/93	11/30/93	12/9/93	D6	
4001.00	179	TIBIA, MISSING MEDIAL SIDE OF PROXIMAL END	1	L	FAIR, BUT SPAL	11/11/93	11/30/93	12/9/93	D6	
4001.00	180	TIBIA, DIAPHYSIS, PROXIMAL FRAGMENT	1	L	FAIR, BUT SPAL	11/11/93	11/30/93	12/9/93	D6	R1:F26-27 (27-POSTERIOR/LATERAL VIEW)
4001.00	181	TIBIA, DIAPHYSIS, PROXIMAL FRAGMENT	1	L	FAIR, BUT SPAL	11/11/93	11/30/93	12/9/93	D9	
4001.00	182	TIBIA, DIAPHYSEAL FRAGMENT, DISTAL	1	L	FAIR	11/11/93	11/30/93	12/9/93	D6	R1:F18
4.00	183	TIBIA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/9/93		
4.00	184	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93		
4.00	185	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR, BUT SPAL	11/9/93	11/29/93	12/9/93	D7	
4.00	186	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93	D7	
4.00	187	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93	D7	R2:F4-6 (5-LAT. VIEW); PHOTO SIDE INCORCT
4.00	188	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93	D7	
4.00	189	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93		
4.00	190	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/9/93		
4.00	191	TIBIA, DIAPHYSEAL FRAGMENT	1	L	POOR, SPALLIN	11/9/93	11/29/93	12/9/93	D7	
4.00	192	TIBIA, DIAPHYSEAL FRAGMENT	1	L	POOR, VERY ER	11/9/93	11/29/93	12/9/93	D7	R1:F25
4.00	193	TIBIA, DIAPHYSEAL FRAGMENT	2 = 1	L	FAIR, BUT FRA	11/9/93	11/29/93	12/9/93	D7	R2:F10
4.00	194	TIBIA, DIAPHYSEAL FRAGMENT	1	R	POOR, WARPED	10/23/93	11/26/93	12/9/93	D7	
2.01	195	TIBIA, DIAPHYSEAL FRAGMENT NEAR MID POINT	1	L	FAIR, EKOSION	10/18/93	11/26/93	12/9/93	D7	R2:F3 LEFT SIDE, PHOTO ELEMENT INCORRECT
4.00	196	FEMUR, DIAPHYSEAL FRAGMENT	2 = 1	L	FAIR, BUT SPAL	10/23/93	11/26/93	12/9/93	D8	R1:F11
4.00	197	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR, POOR EXT	10/23/93	11/26/93	12/9/93	D7	
4.00	198	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR, MODERAT	10/23/93	11/26/93	12/9/93	D6	
4.00	199	TIBIA, MISSING MEDIAL SUPERIOR CONDYLE	1	L	FAIR	11/8/93	11/29/93	12/9/93	D7	
4.00	200	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR, MODERAT	11/8/93	11/29/93	12/9/93	D6	
4.00	201	TIBIA, DIAPHYSEAL FRAGMENT	1	U	GOOD	11/8/93	11/29/93	12/9/93		
0.00	202	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	8/3/93	12/2/93	12/9/93	D6	
0.00	203	TIBIA, PROXIMAL + DIAPHYSEAL FRAGMENT	1	L	FAIR	8/3/93	12/2/93	12/9/93	D7	R2:F7

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
0.00	204	TIBIA, DIAPHYSEAL FRAGMENT	4 = 1	R	FAIR	8/3/93	12/2/93	12/9/93	D6	R2:F9
0.00	205	TIBIA, DIAPHYSEAL FRAGMENT	1	U	FAIR	8/3/93	12/2/93	12/9/93		
0.00	206	TIBIA, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR	8/3/93	12/2/93	12/9/93	D7	R2:F5
4001.00	207	TIBIA, PROXIMAL CONDYLAR FRAGMENT	1	R	FAIR	11/17/93	11/30/93	12/9/93		
4001.00	208	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/17/93	11/30/93	12/9/93	D8	R2:F3 RIGHT SIDE OF PHOTO
4001.00	209	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/9/93		
4001.00	210	TIBIA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/9/93		
4001.00	211	TIBIA, PROXIMAL CONDYLAR FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/9/93		
4001.00	212	TIBIA, PROXIMAL CONDYLAR FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/9/93		
4001.00	213	TIBIA, PROXIMAL CONDYLAR FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/9/93		
4001.00	214	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/9/93	D7	R1:F21
4001.00	215	TIBIA, DIAPHYSEAL FRAGMENT	1	L	POOR, SPALLIN	11/18/93	11/30/93	12/9/93	D7	
4001.00	216	TIBIA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/9/93	D6	R1:F12
4001.00	217	TIBIA, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR	11/18/93	11/30/93	12/9/93		
4001.00	218	TIBIA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/9/93		R1:F16-17 SAME PHOTO AS #219
4001.00	219	TIBIA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/9/93		R1:F16-17 SAME PHOTO AS #218
4001.00	220	TIBIA, DIAPHYSEAL FRAGMENT	1	L	GOOD	11/10/93	11/29/93	12/10/93		
4001.00	221	HUMERUS, DISTAL EPIPHYSIS FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/10/93		
4001.00	222	HUMERUS, FRAGMENT, MISSING PROXIMAL 1/3	1	L	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	223	HUMERUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	224	HUMERUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	225	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	226	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	R	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	227	HUMERUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/10/93	D10	
4001.00	228	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/10/93		
4001.00	229	HUMERUS, DISTAL EPICONDYLAR FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/10/93		
4001.00	230	FEMUR, PROXIMAL END FRAGMENT (HEAD AND NECK)	1	U	FAIR	11/11/93	11/30/93	12/10/93		
4001.00	231	SCAPULA, LATERAL BORDER FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/10/93		
4001.00	232	TIBIA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/10/93		
4001.00	233	HUMERUS, DIAPHYSEAL FRAGMENT	1	L	FAIR-POOR, SPA	11/11/93	11/30/93	12/10/93		
4001.00	234	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR-POOR, SPA	11/11/93	11/30/93	12/10/93	D10	
4001.00	235	HUMERUS, DIAPHYSEAL FRAGMENT NEAR PROXIMAL END	1	R	FAIR-POOR, SPA	11/11/93	11/30/93	12/10/93	D10	R1:F2 (ANTERIOR VIEW)
4001.00	236	HUMERUS, DIAPHYSEAL FRAGMENT NEAR PROXIMAL END	1	R	FAIR, BUT COR	11/12/93	11/30/93	12/10/93	D10	
4001.00	237	HUMERUS, DIAPHYSEAL + PROXIMAL END	1	R	GOOD-FAIR	11/12/93	11/30/93	12/10/93	D10	
4001.00	238	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	5 = 1	R	FAIR	11/12/93	11/30/93	12/10/93	D10	
4001.00	239	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	POOR, EXTENSI	11/12/93	11/30/93	12/10/93	D10	
4001.00	240	FEMUR, DIAPHYSEAL FRAGMENTS	2	U	FAIR	11/12/93	11/30/93	12/10/93		
4001.00	241	HUMERUS, HEAD FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/10/93		
4001.00	242	LONG BONE, DIAPHYSEAL FRAGMENT	1	U	POOR, CORTICA	11/17/93	11/30/93	12/10/93		
4001.00	243	HUMERUS, DIAPHYSEAL + PROXIMAL END	1	R	FAIR	11/18/93	11/30/93	12/10/93	D10	R1:F24 (ANTERIOR VIEW)
4001.00	244	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	POOR, EXTENSI	11/18/93	11/30/93	12/10/93		
4001.00	245	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR	11/18/93	11/30/93	12/10/93	D10	
4001.00	246	HUMERUS, DIAPHYSIS + DISTAL END FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/10/93	D11	
4001.00	247	HUMERUS, TROCHLEAR FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/10/93		
4001.00	248	HUMERUS, DIAPHYSIS + DISTAL END FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/10/93	D11	
4.00	249	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	POOR, EXTENSI	11/8/93	11/29/93	12/10/93	D11	
4.00	250	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/10/93	D11	
4.00	251	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/10/93	D11	
4.00	252	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	POOR, EXTENSI	11/8/93	11/29/93	12/10/93	D11	
4.00	253	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR	11/8/93	11/29/93	12/10/93	D11	
4.00	254	HUMERUS, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	L	FAIR	11/8/93	11/29/93	12/10/93	D11	
3.00	255	HUMERUS, DIAPHYSIS + DISTAL END FRAGMENT	10 = 1	L	FAIR-POOR, EX	10/25/93	11/26/93	12/10/93	D12	
4.00	256	HUMERUS, DIAPHYSIS + DISTAL END FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/10/93	D12	
4.00	257	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/10/93	D12	
4.00	258	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR, SPALLING	11/9/93	11/29/93	12/10/93	D12	
4.00	259	HUMERUS, DISTAL END FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/10/93	D12	
4.00	260	HUMERUS, DIAPHYSEAL FRAGMENT	12 = 1	L	FAIR-POOR, EX	11/9/93	11/29/93	12/10/93	D12	
4.00	261	HUMERUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/10/93	D12	
4.00	262	HUMERUS, HEAD FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/10/93		
0.00	263	HUMERUS, DIAPHYSIS + DISTAL END	1	R	FAIR	10/13/93	11/26/93	12/10/93	D11	
0.00	264	TIBIA, DIAPHYSEAL FRAGMENT	1	R	FAIR	8/3/93	12/2/93	12/10/93	D7	R1:F20
0.00	265	HUMERUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	8/3/93	12/2/93	12/10/93	D11	
4.00	266	RIB, CORPOREAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/10/93	D13	R1:F31 (ANTERIOR VIEW)

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4.00	267	LONG BONE, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/8/93	11/29/93	12/11/93		R1:F23
4.00	268	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	23	U	FAIR	11/8/93	11/29/93	12/11/93		
4.00	269	ULNA, DIAPHYSEAL FRAGMENT	11=1	L	POOR, EXTENSI	11/8/93	11/29/93	12/11/93		
4.00	270	ULNA, DIAPHYSEAL FRAGMENT	1	L	POOR, EXTENSI	11/8/93	11/29/93	12/11/93		
4.00	271	ULNA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/8/93	11/29/93	12/11/93	D14	
4.00	272	LONG BONE, DIAPHYSEAL FRAGMENTS	13	U	FAIR	11/8/93	11/29/93	12/11/93		
4.00	273	RADIUS, DIAPHYSEAL FRAGMENT	1	L	POOR, EXTENSI	11/8/93	11/29/93	12/11/93	D15	
4.00	274	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/8/93	11/29/93	12/11/93	D15	
4.00	275	FIBULA, DIAPHYSEAL FRAGMENT	2=1	L	FAIR	11/8/93	11/29/93	12/11/93	D16	
4.00	276	FIBULA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/11/93	D16	
4.00	277	FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/8/93	11/29/93	12/11/93		
4.00	278	LONG BONE FRAGMENT, POSSIBLY R.CLAV. NEAR ACRO. END	1	U	FAIR	11/10/93	11/29/93	12/11/93	D2	R1:F30
5.00	279	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR, FRAGME	10/23/95	11/26/95	12/11/93	D15	
1.01	280	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR, CORTICA	10/18/95	11/26/95	12/11/93	D15	
1.01	281	ULNA, DIAPHYSEAL FRAGMENT	1	R	POOR, EXTENSI	10/18/95	11/26/95	12/11/93	D14	
4001.00	282	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	10/18/95	11/26/95	12/11/93	D15	
4001.00	283	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	10/18/95	11/26/95	12/11/93		
4001.00	284	RADIUS, DIAPHYSEAL FRAGMENT	12=1	L	FAIR	10/18/95	11/26/95	12/11/93	D15	
4001.00	285	FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	10/18/95	11/26/95	12/11/93		
4001.00	286	LONG BONE, DIAPHYSEAL FRAGMENT	1	U	FAIR	10/18/95	11/26/95	12/11/93		
4001.00	287	ULNA, DIAPHYSEAL FRAGMENT - PROXIMAL END	1	R	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	288	ULNA, DIAPHYSEAL FRAGMENT - PROXIMAL END	1	L	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	289	ULNA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	290	ULNA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	291	ULNA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	292	ULNA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/11/93	D14	
4001.00	293	FIBULA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/11/93	D16	R1:F14
4001.00	294	TIBIA, DIAPHYSEAL FRAGMENTS	2	U	FAIR	11/12/93	11/30/93	12/11/93		
4001.00	294	LONG BONE, DIAPHYSEAL FRAGMENTS	8	U	FAIR	11/12/93	11/30/93	12/11/93		
4001.00	294	LONG BONE, EPIPHYSEAL FRAGMENTS	2	U	FAIR	11/12/93	11/30/93	12/11/93		
4001.00	295	RADIUS, DIAPHYSIS NEAR PROXIMAL END FRAGMENT	12=1	L	FAIR	11/12/93	11/30/93	12/11/93	D15	
4001.00	296	RADIUS, DIAPHYSEAL FRAGMENT	1	U	FAIR, FRAGME	11/12/93	11/30/93	12/11/93		
4001.00	297	RADIUS, DIAPHYSEAL FRAGMENT	14=1	U	POOR, EXTENSI	11/12/93	11/30/93	12/11/93		
4001.00	298	FIBULA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/11/93	D16	
4001.00	299	FIBULA, DIAPHYSIS MISSING PROXIMAL END	1	R	FAIR	11/11/93	11/30/93	12/11/93	D16	
4001.00	300	FIBULA, PROXIMAL END FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/11/93	D16	
4001.00	301	FIBULA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/11/93	D16	
4001.00	302	ULNA, DIAPHYSIS - PROXIMAL END	1	R	FAIR	11/11/93	11/30/93	12/11/93	D14	
4001.00	303	ULNA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/11/93	11/30/93	12/11/93	D17	
4001.00	304	ULNA, DIAPHYSEAL FRAGMENT	1	L	POOR, SPALLIN	11/11/93	11/30/93	12/11/93	D17	
4001.00	305	ULNA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/11/93	D17	
4001.00	306	RADIUS, DIAPHYSEAL FRAGMENT + DISTAL END	1	R	FAIR	11/11/93	11/30/93	12/11/93	D15	R1:F14
4001.00	307	RADIUS, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	308	FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	309	FIBULA OR ULNA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	310	LONG BONE, DIAPHYSEAL FRAGMENTS	16	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	310	LONG BONE, EPIPHYSEAL FRAGMENTS	2	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	310	FEMUR, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/11/93	11/30/93	12/11/93		
4001.00	311	LONG BONE, DIAPHYSEAL FRAGMENTS	15	U	FAIR	11/16/93	11/30/93	12/11/93		
4001.00	311	LONG BONE, EPIPHYSEAL FRAGMENTS	2	U	FAIR	11/16/93	11/30/93	12/11/93		
4001.00	312	INNOMINATE, ILIAC FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/11/93		
4001.00	313	ULNA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/11/93	D17	R1:F28
4001.00	314	ULNA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/11/93	D17	
4001.00	315	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/16/93	11/30/93	12/11/93	D18	
4001.00	316	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR, SPALLING	11/16/93	11/30/93	12/11/93	D18	
4001.00	317	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/16/93	11/30/93	12/11/93	D18	
4001.00	318	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR-POOR, SPA	11/16/93	11/30/93	12/11/93	D18	
4001.00	319	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/11/93	D16	
4001.00	320	LONG BONE, DIAPHYSEAL FRAGMENTS	4	U	FAIR-POOR, ON	11/16/93	11/30/93	12/11/93		
0.00	321	TIBIA, DIAPHYSEAL FRAGMENT NEAR DISTAL END	1	R	GOOD	8/3/93	12/2/93	12/11/93	D1	
0.00	322	RADIUS OR ULNA, DIAPHYSEAL FRAGMENT	1	U	POOR, EXTENSI	8/3/93	12/2/93	12/11/93		
0.00	323	LONG BONE, DIAPHYSEAL FRAGMENTS	2	U	FAIR	8/3/93	12/2/93	12/11/93		
0.00	323	LONG BONE, EPIPHYSEAL FRAGMENT	1	U	FAIR	8/3/93	12/2/93	12/11/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO.	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
0.00	324	RADIUS, DIAPHYSEAL FRAGMENT	1	U	FAIR	8/7/93	12/2/93	12/11/93		
4001.00	325	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/11/93	D18	
4001.00	326	ULNA, DIAPHYSEAL FRAGMENT	2=1	L	FAIR	11/18/93	11/30/93	12/11/93	D17	
4001.00	327	VERTEBRAE, THORACIC-LOWER, BODY/CENTRUM FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/11/93	D19	R1:F34-36 (35-INF.VIEW;36-R.LAT.VIEW)
4001.00	328	MC 7, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/11/93		
4001.00	329	MT V, DIAPHYSIS + PROXIMAL	7	L	FAIR	11/18/93	11/30/93	12/11/93		
4001.00	340	LONG BONE, DIAPHYSEAL FRAGMENTS	9	U	FAIR	11/18/93	11/30/93	12/11/93		
4001.00	341	ULNA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/11/93	D17	
4001.00	342	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/11/93	D15	
4001.00	343	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/11/93	D15	
4001.00	344	RADIUS, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/11/93		
4001.00	345	FIBULA, DIAPHYSEAL FRAGMENT	5+1	L	POOR, SPALLIN	11/9/93	11/29/93	12/11/93	D16	
4001.00	346	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/11/93	D16	
4001.00	347	FIBULA, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/11/93	D16	
4001.00	348	RADIUS, DIAPHYSEAL FRAGMENT	7	R	FAIR	11/9/93	11/29/93	12/11/93	D15	
4001.00	349	FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/11/93		
4001.00	350	FIBULA, DIAPHYSEAL FRAGMENT	20=1	L	POOR, EXTENSI	11/9/93	11/29/93	12/11/93	D16	
4001.00	351	LONG BONE, DIAPHYSEAL FRAGMENTS	15	U	FAIR	11/9/93	11/29/93	12/11/93		
4001.00	352	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/12/93	D16	R1:F13
4001.00	353	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/12/93	D20	
4001.00	354	FIBULA, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/12/93	D16	
4001.00	355	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/18/93	11/30/93	12/12/93	D15	
4001.00	356	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/18/93	11/30/93	12/12/93	D15	
4001.00	357	RADIUS, DIAPHYSEAL FRAGMENT	7	R	FAIR	11/18/93	11/30/93	12/12/93	D15	
4001.00	358	ULNA OR FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/12/93		
4001.00	359	FIBULA, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/18/93	11/30/93	12/12/93		
4001.00	360	FIBULA, DIAPHYSEAL FRAGMENTS	2	U	FAIR	11/18/93	11/30/93	12/12/93		
4001.00	361	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	7	U	FAIR	11/18/93	11/30/93	12/12/93		
4.00	362	LONG BONE, DIAPHYSEAL FRAGMENTS	42	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	362	TIBIA, DIAPHYSEAL FRAGMENTS	15	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	362	FEMUR, DIAPHYSEAL FRAGMENTS	17	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	362	CLAVICLET, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	363	ULNA	W	L	FAIR	11/10/93	11/29/93	12/12/93	D17	
4.00	364	ULNA, DIAPHYSIS + PROXIMAL END	1	L	POOR, SPALLIN	11/10/93	11/29/93	12/12/93	D21	
4.00	365	ULNA, DIAPHYSIS + PROXIMAL END	1	L	FAIR	11/10/93	11/29/93	12/12/93	D21	
4.00	366	ULNA, DIAPHYSIS + PROXIMAL END	1	L	FAIR	11/10/93	11/29/93	12/12/93	D17	
4.00	367	ULNA, DIAPHYSIS + PROXIMAL END	1	R	FAIR	11/10/93	11/29/93	12/12/93	D17	
4.00	368	ULNA, DIAPHYSIS + DISTAL END	1	R	FAIR	11/10/93	11/29/93	12/12/93	D17	
4.00	369	ULNA, DIAPHYSIS + DISTAL END	1	L	FAIR	11/10/93	11/29/93	12/12/93	D17	
4.00	370	RADIUS, DIAPHYSIS + DISTAL END FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D15	
4.00	371	RADIUS, DIAPHYSIS + DISTAL END	1	R	FAIR	11/10/93	11/29/93	12/12/93	D15	
4.00	372	RADIUS, DISTAL EPAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93		
4.00	373	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D18	
4.00	374	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D18	R1:F29 (POSTERIOR VIEW)
4.00	375	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR-POOR SPA	11/10/93	11/29/93	12/12/93	D18	
4.00	376	RADIUS, DIAPHYSEAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D22	
4.00	377	RADIUS, DIAPHYSEAL FRAGMENT NEAR PROXIMAL END	1	R	FAIR	11/10/93	11/29/93	12/12/93	D18	
4.00	378	RADIUS, DIAPHYSEAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D18	
4.00	379	RADIUS, DIAPHYSEAL FRAGMENT	1	L	POOR, SPALLIN	11/10/93	11/29/93	12/12/93	D18	R1:F32-33
4.00	380	FIBULA, DIAPHYSEAL FRAGMENTS	3	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	381	FIBULA, DIAPHYSIS NEAR DISTAL END	1	L	FAIR	11/10/93	11/29/93	12/12/93	D20	R1:F18
4.00	382	RADIUS, DIAPHYSEAL FRAGMENT	21=1	U	FAIR-POOR, SPA	11/10/93	11/29/93	12/12/93		
4.00	383	LONG BONE, DIAPHYSEAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	384	CRANIAL, PARIETAL FRAGMENT	1	R	FAIR	11/8/93	11/29/93	12/12/93	D23	
4.00	385	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/8/93	11/29/93	12/12/93	D23	
4001.00	386	CRANIAL, FRAGMENTS	17	U	FAIR	11/12/93	11/30/93	12/12/93		
4001.00	397	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/12/93	11/30/93	12/12/93		
4001.00	398	CRANIAL, FRONTAL FRAGMENT	13=1	U	FAIR	11/12/93	11/30/93	12/12/93	D23	
4001.00	399	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/12/93	11/30/93	12/12/93	D23	
4001.00	400	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	2	U	FAIR	11/12/93	11/30/93	12/12/93		
4001.00	401	CRANIAL, MAXILLARY FRAGMENT	1	U	FAIR	11/12/93	11/30/93	12/12/93		
4001.00	402	MANDIBLE, FRAGMENT, CONDYLE	1	R	FAIR	11/12/93	11/30/93	12/12/93	D23	
4001.00	403	CRANIAL, ZYGOMATIC-MAXILLARY FRAGMENT	1	R	FAIR	11/12/93	11/30/93	12/12/93	D23	

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE EXCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4001.00	404	CRANIAL, ZYGOMATIC-MAXILLARY FRAGMENT	1	L	FAIR	11/12/93	11/30/93	12/12/93	D23	
4001.00	405	CRANIAL, ZYGOMATIC-MAXILLARY FRAGMENT	1	R	FAIR, BUT EROS	11/12/93	11/30/93	12/12/93	D24	
4001.00	406	CRANIAL, TEMPORAL FRAGMENT (MASTOID REGION)	1	R	FAIR, BUT EROS	11/12/93	11/30/93	12/12/93	D23	
4001.00	407	MANDIBLE + DENTITION	1	R	POOR, EROSION	11/12/93	11/30/93	12/12/93		R1:F8
0.00	408	MANDIBLE, FRAGMENT CONDYLE	1	L	FAIR	10/13/93	11/26/93	12/12/93	D23	
0.00	409	CRANIAL, MAXILLARY FRAGMENT	1	U	FAIR	10/13/93	11/26/93	12/12/93		
0.00	410	UNIDENTIFIED OSSEOUS FRAGMENTS, PROBABLY HUMAN	5	U	FAIR	8/3/93	12/2/93	12/12/93		
0.00	411	CRANIAL, FRAGMENTS	2	U	FAIR	8/3/93	12/2/93	12/12/93		
4.00	412	CRANIAL, FRAGMENTS	4	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	413	CRANIAL, FRONTAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	414	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	415	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	416	CRANIAL, PARIETAL FRAGMENT	2=1	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	417	CRANIAL, PARIETAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	418	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D23	
4.00	419	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	420	CRANIAL, OCCIPITAL FRAGMENT	1	U	POOR, EXTENS	11/10/93	11/29/93	12/12/93	D23	
4.00	421	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93	D23	
4.00	422	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	423	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	424	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/10/93	11/29/93	12/12/93		
4.00	425	CRANIAL, ZYGOMATIC FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	426	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	427	CRANIAL, FRONTAL FRAGMENT	1	R	POOR-FAIR, EX	11/10/93	11/29/93	12/12/93	D24	
4.00	428	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	429	CRANIAL, PARIETAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	430	CRANIAL, FRONTAL FRAGMENT	1	R	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	431	CRANIAL, TEMPORAL FRAGMENT (ZYG REGION)	1	R	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	432	CRANIAL, TEMPORAL FRAGMENT (ZYG REGION)	1	L	FAIR	11/10/93	11/29/93	12/12/93	D25	
4.00	433	CRANIAL, TEMPORAL FRAGMENT (MASTOID & AUD. REGION)	1	L	FAIR	11/10/93	11/29/93	12/12/93	D24	
4.00	434	CRANIAL, TEMPORAL FRAGMENT (MASTOID & AUD. REGION)	1	L	FAIR	11/10/93	11/29/93	12/12/93	D23	
4.00	435	CRANIAL, TEMPORAL FRAGMENT, PETROUS PORTION	1=1	R	FAIR	11/10/93	11/29/93	12/12/93		
4.00	436	CRANIUM, INCOMPLETE, NO MASS, ZYGOS, OCCIP. OR K, TEMP	6=1	U	FAIR	11/10/93	11/29/93	12/12/93	D26	R3-7-13 (13 INTERIOR FRONTAL)
4001.00	437	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/13/93	D23	
4001.00	438	CRANIAL, TEMPORAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	439	CRANIAL, TEMPORAL FRAGMENT (ZYG REGION)	1	R	FAIR	11/16/93	11/30/93	12/13/93	D27	
4001.00	440	CRANIAL, TEMPORAL FRAGMENT (CONDYLAR REGION)	1	L	FAIR	11/16/93	11/30/93	12/13/93	D27	
4001.00	441	CRANIAL, ZYGOMATIC FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93	D23	
4001.00	442	CRANIAL, ZYGOMATIC FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93	D23	
4001.00	443	CRANIAL, ZYGOMATIC FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93	D24	
4001.00	444	CRANIAL OCCIPITAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93	D23	
4001.00	445	CRANIAL, TEMPORAL FRAGMENT (MASTOID & AUD. REGION)	1	L	FAIR	11/16/93	11/30/93	12/13/93	D27	
4001.00	446	CRANIAL, OCCIPITAL FRAGMENT (CONDYLAR REGION)	1	L	FAIR	11/16/93	11/30/93	12/13/93	D27	
4001.00	447	CRANIAL, PARIETAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	448	CRANIAL, FRONTAL FRAGMENT	1	U	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	449	CRANIAL, PARIETAL FRAGMENT (SQUAMOSAL AREA)	1	U	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	450	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	451	CRANIAL, PARIETAL FRAGMENT	1	R	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	452	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	453	CRANIAL, FRAGMENTS	26	U	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	454	CRANIAL, MAXILLARY MOLAR 1 OR 2	1	R	FAIR	11/16/93	11/30/93	12/13/93		
4001.00	455	CRANIAL, MAXILLARY FRAGMENT + DENTITION	12=1	RL	FAIR	11/16/93	11/30/93	12/13/93	D27	R1:F6
4001.00	456	MANDIBLE, FRAGMENT	1	RL	FAIR	11/16/93	11/30/93	12/13/93	D27	
4001.00	462	MANDIBLE, FRAGMENT	1	RL	FAIR	11/16/93	11/30/93	12/13/93	D23	
4001.00	468	CRANIAL, FRAGMENT	1	U	GOOD	11/18/93	11/30/93	12/15/93		
4001.00	469	MANDIBLE, FRAGMENT (CONDYLAR REGION)	1	R	GOOD	11/18/93	11/30/93	12/15/93	D24	
4001.00	470	CRANIAL, ZYGOMATIC FRAGMENT	1	L	GOOD	11/18/93	11/30/93	12/15/93	D27	
4001.00	471	CRANIAL, TEMPORAL FRAGMENT	1	L	GOOD	11/18/93	11/30/93	12/15/93	D1	
4001.00	472	CRANIAL, TEMPORAL FRAGMENT (CONDYLAR REGION)	1	L	FAIR	11/17/93	11/30/93	12/15/93		
4001.00	473	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR	11/17/93	11/30/93	12/15/93	D27	
4001.00	474	MANDIBLE, RAMUS FRAGMENT	1	L	FAIR, WARPING	11/17/93	11/30/93	12/15/93		
4001.00	475	CRANIAL, PARIETAL FRAGMENT	2=1	U	FAIR	11/17/93	11/30/93	12/15/93		
4001.00	476	CRANIAL, FRAGMENTS	17	U	FAIR	11/17/93	11/30/93	12/15/93		

APPENDIX A
INVENTORY

CONTEXT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE ENCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4001.00	477	CRANIAL, FRONTAL FRAGMENT	2=1	U	FAIR	11/11/93	11/30/93	12/15/93	D28	
4001.00	478	MANDIBLE, FRAGMENT	1	RL	FAIR	11/11/93	11/30/93	12/15/93	D28	
4001.00	479	MANDIBLE, FRAGMENT + DENTITION	1	R	FAIR	11/11/93	11/30/93	12/15/93	D25	R1:F7
4001.00	480	CRANIAL, MAXILLARY FRAGMENT + DENTITION	1	L	FAIR	11/11/93	11/30/93	12/15/93	D25	R1:F3
4001.00	481	CRANIAL, MAXILLARY FRAGMENT + DENTITION	1	R	FAIR	11/11/93	11/30/93	12/15/93	D25	R1:F5
4001.00	482	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/11/93	11/30/93	12/15/93	D25	R2:F1
4001.00	483	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR-POOR. EX	11/11/93	11/30/93	12/15/93	D25	R2:F2 (PHOTO ELEMENT NAME INCORRECT)
4001.00	484	CRANIAL, CALVARIUM	6=1	U	FAIR-POOR. EX	11/11/93	11/30/93	12/15/93	D29	R2:F31-34 (PHOTO ELEMENT NAME INCORRECT)
4001.00	485	CRANIAL, FRONTAL FRAGMENT	4=1	U	FAIR-POOR. EX	11/11/93	11/30/93	12/15/93	D29	R2:F23-30, R3:F6; #484 + 5 = R3:1-5, R2:35-6
4001.00	486	CRANIAL, OCCIPITAL FRAGMENT	1	U	GOOD	11/11/93	11/30/93	12/15/93	D29	R3:14-18
4001.00	487	CRANIAL, OCCIPITAL FRAGMENT	2=1	U	FAIR, EXFOLIA	11/11/93	11/30/93	12/15/93	D29	R3:14-18
4.00	488	CRANIAL, ZYGOMATIC FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	489	CRANIAL, ZYGOMATIC-MAXILLARY FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	490	CRANIAL, ZYGOMATIC-MAXILLARY FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D25	
4.00	491	CRANIAL, ZYGOMATIC FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D25	
4.00	492	CRANIAL, ZYGOMATIC FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D25	
4.00	493	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	494	CRANIAL, FRONTAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	495	CRANIAL, FRONTAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	496	CRANIAL, FRONTAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	497	CRANIAL, FRONTAL OR PARIETAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	498	CRANIAL, FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	499	MANDIBLE, RAMUS FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	500	MANDIBLE, RAMUS FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	501	CRANIAL, FRONTAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	502	CRANIAL, FRONTAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D23	
4.00	503	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D29	
4.00	504	CRANIAL, FRONTAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	505	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	506	CRANIAL, OCCIPITAL FRAGMENT (CONDYLAR)	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	507	CRANIAL, TEMPORAL FRAGMENT (MASTOID & AUD. REGION)	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	R1:F15
4.00	508	CRANIAL, TEMPORAL FRAGMENT (MASTOID & AUD. REGION)	1	R	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	509	CRANIAL, PARIETAL FRAGMENT	1	RL	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	510	CRANIAL, TEMPORAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	511	CRANIAL, OSSICLES	3	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	512	CRANIAL, PARIETAL FRAGMENT	1	R	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	513	CRANIAL, PARIETAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	514	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	515	CRANIAL, PARIETAL FRAGMENT	1	L	FAIR-POOR. INT	11/9/93	11/29/93	12/15/93	D24	
4.00	516	CRANIAL, FRAGMENTS	50	U	FAIR	11/9/93	11/29/93	12/15/93	D24	
4.00	517	CRANIAL, PARIETAL FRAGMENT	12=1	R	FAIR, BUT WAR I	11/9/93	11/29/93	12/15/93	D24	
4.00	518	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D27	
4.00	519	CRANIAL, OCCIPITAL FRAGMENT	2	U	FAIR	11/9/93	11/29/93	12/15/93	D31	
4.00	520	CRANIAL, OCCIPITAL FRAGMENTS	3	U	FAIR	11/9/93	11/29/93	12/15/93	D30	
4.00	521	CRANIAL, OCCIPITAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	522	CRANIAL, FRAGMENTS	12	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	523	CRANIAL, PARIETAL FRAGMENT	1	U	FAIR	11/9/93	11/29/93	12/15/93	D28	
4.00	524	CRANIAL, PARIETAL FRAGMENT	2=1	L	FAIR	11/9/93	11/29/93	12/15/93	D31	
4.00	525	CRANIAL, PARIETAL OCCIPITAL FRAGMENT	12=1	U	FAIR	11/9/93	11/29/93	12/15/93	D27	
4.00	526	CRANIAL, FRONTAL-PARIETAL FRAGMENT	3=1	RL	FAIR	11/9/93	11/29/93	12/15/93	D31	R2:F20
4.00	527	CRANIAL, PARIETAL FRAGMENT	2=1	R	FAIR	11/9/93	11/29/93	12/15/93	D31	R2:F21
4.00	528	CRANIAL, PARIETAL-FRONTAL FRAGMENT	6=1	R	FAIR	11/9/93	11/29/93	12/15/93	D27	R2:F18-19, (18-DIPLOE VIEW)
4.00	529	CRANIAL, FRONTAL-PARIETAL FRAGMENT	13=1	RL	FAIR	11/9/93	11/29/93	12/15/93	D30	R2:F22
4.00	530	MANDIBLE, FRAGMENT	1	RL	FAIR	11/9/93	11/29/93	12/15/93	D30	
4.00	531	CRANIAL, MAXILLARY MOLAR 1 (OR 2)	T	R	FAIR	11/9/93	11/29/93	12/15/93	D32	
4.00	532	CRANIAL, MAXILLARY MOLAR 3	T	L	FAIR	11/9/93	11/29/93	12/15/93	D32	
4.00	533	CRANIAL, MAXILLARY INCISOR 2	T	L	FAIR	11/9/93	11/29/93	12/15/93	D32	
4.00	534	CRANIAL, MAXILLARY PREMOLAR 1 OR 2	T	L	FAIR	11/9/93	11/29/93	12/15/93	D32	
4.00	535	MANDIBULAR CANINE	T	L	FAIR	11/9/93	11/29/93	12/15/93	D32	
4.00	536	CRANIAL, MAXILLARY FRAG + DENTITION	1	RL	FAIR	11/9/93	11/29/93	12/15/93	D30	R1:F4
4.00	537	MANDIBLE, FRAGMENT + DENTITION	1	L	FAIR	11/9/93	11/29/93	12/15/93	D31	R1:F9
4.00	538	MANDIBLE, FRAGMENT + DENTITION	1	RL	FAIR	11/9/93	11/29/93	12/15/93	D30	R1:F10
4001.00	9001	FAUNAL, INNOMINATE FROM SMALL MAMMALIAN OR AVIS	1	U	FAIR	11/11/93	11/30/93	12/22/93		

APPENDIX A
INVENTORY

CONTENT	BONE NO	ELEMENT	FRAGMENT	SIDE	CONDITION	DATE ENCAV	DATE CLEAN	DATE INVEN	DRAWING REF	PHOTO REF
4001.00:	9002	FAUNAL: FBMUR FROM AVIS GENERA	W	R	GOOD	11/11/93	11/30/93	12/2/93		
4.00:	9003	FAUNAL: LARGE MAMMAL CONDYLAR FRAGMENT	I	U	IFAIR	11/10/93	11/29/93	12/7/93		
	KEY	CONTENT = ASSIGNED FIELD #			DATE EX = DATE EXCAVATED					
		BONE = ASSIGNED BONE INVENTORY #			DATE CL = DATE CLEANED					
		ELEMENT = ELEMENT DESCRIPTION			DATE IN = DATE INVENTORIED					
		FRAG = # OF FRAGMENTS			DRAW = DRAWING PAGE #					
		ISI = SIDE			PHOTO REF = ROLL AND FRAME #, VIEW DESCRIPTION					
		L = LEFT		RL = BOTH SIDES						
		R = RIGHT		U = UNKNOWN OR CENTRAL						



APPENDIX B

OSTEOLOGICAL VITAL STATISTICS

APPENDIX B
VITAL STATISTICS

bone no	AGE	AGE CRITER	GENDER	GENDER CRT	AFFILIATIO	AFF CRITER
1	U		U		U	
2	U		U		U	
3	U		U		U	
4	U		U		U	
5	U		U		U	
6	U		U		U	
7	U		U		U	
8	U		U		U	
9	U		U		U	
10	U		U		U	
11	U		U		U	
12	U		U		U	
13	U		U		U	
14	ADULT?	EPIPHYSES COMPLETELY FUSED	18y -	U	U	
15	U		U		U	
16	ADULT?	EPIPHYSES COMPLETELY FUSED	18y +	U	U	
17	ADULT?	EPIPHYSES COMPLETELY FUSED	18y +	U	U	
18	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
19	U		U		U	
20	U		U		U	
21	U		U		U	
22	U		U		U	
23	U		U		U	
24	U		U		U	
25	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
26	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
27	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
28	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
29	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	VERY ROBUST	
30	U		U		U	
31	U		U		U	
32	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
33	U		U		U	
34	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
35	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
36	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
37	U		U		U	
38	U		U		U	
39	U		U		U	
40	U		U		U	
41	U		U		U	
42	CHILD?	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT		U	U	
43	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
44	ADULT?	EPIPHYSEAL UNION COMPLETE	18y +	U	U	
45	U		U		U	
46	U		U		U	
47	U	EPIPHYSEAL UNION COMPLETE	13Y -	U	U	
47	U	EPIPHYSEAL UNION COMPLETE	13Y -	U	U	
48	U	EPIPHYSEAL UNION COMPLETE	13Y +	M?	VERY ROBUST	
48	U	EPIPHYSEAL UNION COMPLETE	13Y +	U	U	
48	U		U		U	
48	U		U		U	
49	U	EPIPHYSEAL UNION COMPLETE	13Y +	M?	VERY ROBUST	
50	U	EPIPHYSEAL UNION COMPLETE	13Y +	M?	VERY ROBUST	
50	U		U		U	
50	U	EPIPHYSEAL UNION COMPLETE	13Y -	U	U	
50	U	EPIPHYSEAL UNION COMPLETE	13Y +	U	U	
50	U	EPIPHYSEAL UNION COMPLETE	13Y +	U	U	
50	U	EPIPHYSEAL UNION COMPLETE	13Y +	U	U	
50	U	EPIPHYSEAL UNION COMPLETE	13Y +	M?	VERY ROBUST	

APPENDIX B
VITAL STATISTICS

BONE NO	AGE	AGE CRITER	GENDER	GENDER CRI	AFFILIATIO	AFF CRITER
77	U		U		U	
78	ADULT	COMPLETE EPIPHYSEAL UNION OF STERNAL END 26Y -	M?	VERY ROBUST	U	
78	U		U		U	
78	SUBADULT?	COMPLETE EPIPHYSEAL NON-UNION OF STERNAL END < 20Y	U		U	
79	U		U		U	
80	U		U		U	
81	U		U		U	
82	U		U		U	
82	U		U		U	
83	INFANT/CHILD	COMPLETE NON-FUSION OF ARCH. GENERAL MORPH. & SIZE	U		U	
84	U	COMPLETE EPIPHYSEAL UNION	U		U	
84	U		U		U	
85	U		U		U	
85	U		U		U	
85	U		U		U	
85	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
85	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	U		U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
86	U		U		U	
86	U		U		U	
86	U		U		U	
86	U		U		U	
86	U		U		U	
86	U		U		U	
86	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
87	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
87	U		U		U	
87	U		U		U	
87	U		U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF 2 ELEMENTS 16-17Y -	U		U	
88	U		U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	
88	ADULT?	COMPLETE EPIPHYSEAL UNION OF CENTRUM RING 17Y -	U		U	

APPENDIX B
VITAL STATISTICS

BONE NO	AGE	AGE CRITER	GENDER	GENDER CRT	AFFILIATIO	AFF CRITER
126	U		U		U	
127	U		U		U	
128	U		U		U	
129	U		U		U	
130	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U	MEASUREMENT = INDETERMINATE SEX	U	
131	U		U		U	
132	U		U		U	
133	U		U		U	
134	U		U		U	
135	U		U		U	
136	U		U		U	
137	U		U		U	
138	U		U		U	
139	U		U		U	
140	ADOLESCENT	DISTAL END NON-UNION OF EPIPHYSES. < 19Y. SEE OTHER	U		U	
141	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	M?	VERY ROBUST. LARGE CAPITUS DIAMETER	U	
142	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U	CAPITUS COMPLETELY UNMEASURABLE	U	
143	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	M?	VERY ROBUST. LARGE CAPITUS DIAMETER	U	
144	U		U		U	
145	U		U		U	
146	U		U		U	
147	U		U		U	
148	U		U		U	
149	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	M?	VERY ROBUST. SMALL CAPITUS DIAMETER	U	
150	U		U		U	
151	U		U		U	
152	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	M?	VERY ROBUST. SMALL CAPITUS DIAMETER	U	
153	U		U		U	
154	U		U		U	
155	U		U		U	
156	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
157	U		U		U	
158	U		U		U	
159	U		U		U	
160	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
161	U		U		U	
162	U		U		U	
163	U		U		U	
164	U		U		U	
165	U		U		U	
166	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y+	U		U	
167	ADULT?	DISTAL & PROX END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
168	U		U		U	
169	U		U		U	
170	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y+	U		U	
171	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y+	U		U	
172	U		U		U	
173	U		U		U	
174	U		U		U	
175	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y+	U		U	
176	U	GENERAL SIZE AND CORTICAL DVLPMNT SUGGEST ADULT	U		U	
177	U		U		U	
178	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
179	ADULT?	DISTAL & PROX END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
180	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
181	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	
182	U		U		U	
183	U		U		U	
184	U		U		U	
185	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y+	U		U	

APPENDIX B
VITAL STATISTICS

BOLE NO	AGE	AGE CRITER	GENDER	GENDER CRT	AFFILIATIO	AFF CRITER
186	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y +	U		U	
187	ADULT?	GENERAL SIZE AND CORTICAL DEVELOPMENT	U		U	
188	U		U		U	
189	U		U		U	
190	U		U		U	
191	U		U		U	
192	U		U		U	
193	U		U		U	
194	U		U		U	
195	U		U		U	
196	ADOL-ADULT?	GENERAL SIZE AND MORPHOLOGY	U		U	
197	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y +	U		U	
198	U		U		U	
199	ADULT?	PROX & DISTAL END COMPLETE EPIPHYSEAL UNION 17Y -	U		U	
200	ADULT?	DISTAL END COMPLETE EPIPHYSEAL UNION 16Y +	U		U	
201	U		U		U	
202	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y -	U		U	
203	ADULT?	PROXIMAL END COMPLETE EPIPHYSEAL UNION 17Y +	U		U	
204	U		U		U	
205	U		U		U	
206	U		U		U	
207	U		U		U	
208	U	ADULT? GIVEN MORPHOLOGICAL DEVELOPMENT AND SIZE	U		U	
209	U		U		U	
210	U		U		U	
211	ADULT?	PROXIMAL COMPLETE EPIPHYSEAL UNION 17Y +	U		U	
212	ADULT?	PROXIMAL COMPLETE EPIPHYSEAL UNION 17Y -	U		U	
213	ADULT?	PROXIMAL COMPLETE EPIPHYSEAL UNION 17Y +	U		U	
214	U	ADULT? GIVEN MORPHOLOGICAL DVLPMT AND SIZE	U		U	
215	ADULT?	PROXIMAL COMPLETE EPIPHYSEAL UNION 17Y -	U		U	
216	U	ADULT? GIVEN MORPHOLOGICAL SIZE AND DEVELOPMENT	U		U	
217	U		U		U	
218	U		U		U	
219	U		U		U	
220	U		U		U	
221	U		U		U	
222	ADULT?	MEDIAL & DISTAL COMPLETE EPICONDYLAR FUSION 19Y+	M	ROBUST. EPICONDYLAR MEASUREMENT	U	
223	U		U		U	
224	U		U		U	
225	U		U		U	
226	U		U		U	
227	ADULT?	GIVEN SIZE AND MOPROLOGICAL DEVELOPMENT	M?	VERY ROBUST. HIGHLY DEVELOPED DELTOID TUBEROSITY	U	
228	U		U		U	
229	U		U		U	
230	U		U		U	
231	U		U		U	
232	U		U		U	
233	U		U		U	
234	U		U		U	
235	ADOL-ADULT?	GIVEN SIZE AND MORPHOLOGICAL DEVELOPMENT	U		U	
236	U		U		U	
237	ADULT?	PROXIMAL END COMPLETE FUSION 23Y +	M	VERY ROBUST. HEAD DIAMETER LARGE. SEE OTHER	U	
238	U		U		U	
239	U		U		U	
240	U		U		U	
241	U		U		U	
242	U		U		U	
243	ADULT?	PROXIMAL END COMPLETE FUSION 23Y +	M	ROBUST. HEAD DIAMETER IN MALE RANGE SEE OTHER	U	
244	U		U		U	
245	U		U		U	

APPENDIX B
VITAL STATISTICS

BONE NO.	AGE	AGE CRITER	GENDER	GENDER CRT	AFFILIATIO	AFF CRITER
246	ADULT?	DISTAL END COMPLETE FUSION	19Y +	M	VERY ROBUST, LARGE EPICONDYLAR WIDTH	U
247	U			U		U
248	ADULT?	DISTAL END COMPLETE FUSION	19Y +	U		U
249	U			U		U
250	U			U		U
251	U			U		U
252	U			U		U
253	U			U		U
254	U			U		U
255	ADULT?	DISTAL COMPLETELY FUSED	19Y +	M	ROBUST, LARGE EPICONDYLAR WIDTH	U
256	ADULT?	DISTAL COMPLETELY FUSED	19Y +	U		U
257	U			U		U
258	U			U		U
259	ADULT?	DISTAL COMPLETELY FUSED	19Y +	U		U
260	U			U		U
261	U			U		U
262	U			U		U
263	ADULT?	DISTAL COMPLETELY FUSED	19Y +	M	ROBUST, LARGE EPICONDYLAR WIDTH	U
264	U			U		U
265	U			U		U
266	U			U		U
267	U			U		U
268	U			U		U
269	U			U		U
270	U			U		U
271	U			U		U
272	U			U		U
273	U			U		U
274	U			U		U
275	U			U		U
276	U			U		U
277	U			U		U
278	U			U		U
279	U			U		U
280	U			M	GENERAL SIZE, ROBUSTICITY AND MORPHOLOGICAL DVLPMT	U
281	U			U		U
282	U			U		U
283	U			U		U
284	U			U		U
285	U			U		U
286	U			U		U
287	ADULT?	PROXIMAL END COMPLETE FUSION	18Y +	U		U
288	ADULT	PROXIMAL & DISTAL END COMPLETE FUSION	21Y -	U		U
289	U			U		U
290	ADULT?	PROXIMAL END COMPLETE FUSION	18Y +	U		U
291	U			U		U
292	U			U		U
293	U			U		U
294	U			U		U
294	U			U		U
294	U			U		U
295	U			U		U
296	U			U		U
297	U			U		U
298	U			U		U
299	U			U		U
300	U			U		U
301	U			U		U
302	ADULT?	PROXIMAL END COMPLETE FUSION	18Y +	U		U
303	U			U		U

APPENDIX B
VITAL STATISTICS

ZONE NO	AGE	AGE CRITER	GENDER	GENDER CR1	AFFILIATIO	AFF CRITER
304	U		U		U	
305	U		U		U	
306	ADULT	DISTAL END COMPLETE FUSION 22Y +	U		U	
307	U		U		U	
308	U		U		U	
309	U		U		U	
310	U		U		U	
310	U		U		U	
310	U		U		U	
311	U		U		U	
311	U		U		U	
312	U		U		U	
313	U		U		U	
314	U		U		U	
315	U		U		U	
316	U		U		U	
317	U		U		U	
318	U		U		U	
319	U		U		U	
320	U		U		U	
321	CHILD-ADOL	GENERAL SIZE & MORPHOLOGY...LATE CHILDHOOD-EARLY ADOL	U		U	
322	U		U		U	
323	U		U		U	
323	U		U		U	
324	U		U		U	
325	U		U		U	
326	U		U		U	
327	ADULT	COMPLETE FUSION OF EPIPHYSEAL RINGS 25Y +	U		U	
328	U		U		U	
329	ADULT?	COMPLETE FUSION OF PROXIMAL END 15Y +	U		U	
340	U		U		U	
341	U		U		U	
342	U		U		U	
343	U		U		U	
344	U		U		U	
345	U		U		U	
346	U		U		U	
347	U		U		U	
348	U		U		U	
349	U		U		U	
350	U		U		U	
351	U		U		U	
352	U		U		U	
353	U		U		U	
354	U		U		U	
355	U		U		U	
356	U		U		U	
357	U		U		U	
358	U		U		U	
359	U		U		U	
360	U		U		U	
361	U		U		U	
362	U		U		U	
362	U		U		U	
362	U		U		U	
362	U		U		U	
363	ADULT	PROXIMAL AND DISTAL END COMPLETE FUSION 22Y +	U		U	
364	ADULT?	PROXIMAL END COMPLETE FUSION 18Y +	U		U	
365	ADULT?	PROXIMAL END COMPLETE FUSION 18Y +	U		U	
366	ADULT?	PROXIMAL END COMPLETE FUSION 18Y +	U		U	

APPENDIX B
VITAL STATISTICS

bone no	AGE	AGE CRITER	GENDER	GENDER CR	AFFILIATIO	AFF CRITER
367	ADULT	PROXIMAL END COMPLETE FUSION 18Y -	U		U	
368	ADULT	DISTAL END COMPLETE FUSION 22Y +	U		U	
369	ADULT	DISTAL END COMPLETE FUSION 22Y +	U		U	
370	ADULT	DISTAL END COMPLETE FUSION 22Y +	U		U	
371	ADULT	DISTAL END COMPLETE FUSION 22Y +	U		U	
372	U		U		U	
373	U		U		U	
374	U		U		U	
375	U		U		U	
376	U		U		U	
377	U		U		U	
378	U		U		U	
379	U		U		U	
380	U		U		U	
381	U		U		U	
382	U		U		U	
383	U		U		U	
384	U	CORONAL SUTURE FRAGMENT IS OPEN	U		U	
385	U	SAGITTAL SUTURE FRAGMENT IS OPEN	U		U	
386	U					
397	U					
398	U	CORONAL SUTURE FRAGMENT IS OPEN				
399	U					
400	U					
401	U					
402	U					
403	U				?	S-SHAPED ZYGOMAXILLARY SUTURE
404	U				?	S-SHAPED ZYGOMAXILLARY SUTURE
405	U				?	S-SHAPED ZYGOMAXILLARY SUTURE
406	U		M?	LARGE MASTOID PROCESS	?	LARGE ZYGOMAT. PROCESS. UNABLE TO SCORE OVAL WINDOW
407	ADULT	SLIGHT ATTRITION. PREMORTEM LOSS OF RM2-3	U	ATROPHY & PREMORTEM LOSS OF DENTITION PRECLUDES IT	?	RAMUS SLIGHTLY INVERTED - . ENAMEL EXTENSION ON RMI
408	U		U		U	
409	U		U		U	
410	U		U		U	
411	U		U		U	
412	U		U		U	
413	U		U		U	
414	U		U		U	
415	U		U		U	
416	U		U		U	
417	U	SQUAMOSAL SUTURE FRAGMENT IS OPEN	U		U	
418	U	CORONAL SUTURE FRAGMENT IS OPEN	U		U	
419	U	SAGITTAL & CORONAL SUTURE FRAGMENT IS OPEN	U		U	
420	U	LAMBDOID SUTURE FRAGMENT IS OPEN	U	CONDITION PRECLUDES SCORING OF NUCHAL CREST	U	
421	U	LAMBDOID SUTURE FRAGMENT IS OPEN	M??	NUCHAL CREST DEVELOPMENT IS STRONG	U	
422	U	LAMBDOID SUTURE FRAGMENT IS OPEN	F??	NUCHAL CREST DVLPMT APPEARS WEAK. SEE OTHER	U	
423	U		U	NUCHAL CREST = MODERATE	U	
424	U		U		U	
425	U		U		U	
426	U		U		C	
427	U	CORONAL SUTURE FRAGMENT IS OPEN	U		U	
428	U		F??	SUPRAORB = SHARP. PROMINANT GLABELAR REGION. SEE OTHER	U	
429	U	SAGITTAL AND LAMBDOID SUTURE FRAGMENT IS OPEN	U		U	
430	U	CORONAL SUTURE FRAGMENT IS OPEN	U		U	
431	U		U		U	
432	U		U		U	
433	U	SQUAMOSAL SUTURE FRAGMENT OPEN	M?	MASTOID PROCESS IS LARGE	U	INNER OVAL WINDOW UNOBSERVABLE. EXT. AUD MEA. OVAL
434	U	SQUAMOSAL SUTURE FRAGMENT OPEN	F?	MASTOID PROCESS IS SMALL	U	INNER OVAL WINDOW UNOBSERVABLE. EXT. AUD MEA. OVAL
435	U		U		U	OVAL WINDOW OBSERVED
436	U	LAMBDOID, SAGITTAL, CORONAL, TEMPORAL, SUT. FRAGS. OPEN	F?	GRACILE. R. SUPRAORBITAL, MARGIN SHARP, MASTOID SMALL.	U	OVAL WINDOW OBSERVED, EXT AUD. MEA. ROUND.

APPENDIX B
VITAL STATISTICS

BOLE NO	AGE	AGE CRITER	GENDER	GENDER CRI	AFFILIATIO	AFF CRITER
437	U		U		U	
438	U		U		U	
439	U		U		U	
440	U		U		U	
441	U		U		U	
442	U		U		U	
443	U		U		U	
444	U		U		U	
445	U		U		U	OVAL WINDOW VISABLE, EXT. AUDITORY MEA. = ROUND
446	U		U		U	
447	U		U		U	
448	U		U		U	
449	U	SQUAMOSAL SUTURE FRAGMENT IS OPEN	U		U	
450	U		U		U	
451	U		U		U	
452	U		U		U	
453	U		U		U	
454	U		U		U	
455	U		U		U	
456	U		U	ROBUST IN OVERALL MORPHOLOGY	U	BLUNT CHIN, ARCADE = PARA
467	U		U		U	PROMINANT PROFILE, MEDIAN PT CHIN SHAPE, ARCADE = PARA
468	INFANT	GENERAL SIZE AND MORPHOLOGICAL DEVELOPMENT	U		U	
469	U		U		U	
470	U		U		U	
471	INFANT	0-6M BASED ON TYMPANIC RING FUSION & DEVELOPMENT	U		U	
472	U		U		U	
473	U		U		U	
474	U		U		U	
475	U		U		U	
476	U		U		U	
477	U		U	EXTREME GLABELLAR DVLPMT, ROUNDED SUPR ORBITAL MAR	U	AVIATOR SHAPED ORBITS BUT INTERORB. DIST. IS WIDE
478	U		U	BILOBATE CHIN, ROBUST MORPHOLOGY	U	PROMINANT CHIN
479	ADULT	ATTRITION, PREMORTEM LOSS OF DENT, RESORPTION	M?	BILOBATE CHIN, ROBUST MORPHOLOGY, WIDE RAMUS	B?	PROM. CHIN, MOD. GONIAL EVERSION, PINCHED RAMUS
480	Y ADULT	SLIGHT ATTRITION, VERY SLIGHT AVEL, RESORP. 2CM	M?	DENTAL SIZE IS LARGE	U	NO SHOVELING, NO CARABELLI'S, NO CRINULATION
481	X	SEE #480	X	SEE #480	X	SEE #480
482	U		U		U	
483	U		U		U	
484	U	CORONAL, SQUAMOSAL AND TEMPORAL SUTURE FRAGS OPEN	U		U	
485	U		?	IR SUPERCIL. RIDGE DVLPMT MODERATE, OVERALL GRACILE	U	2 FRONTAL GROOVES ON RIGHT SIDE
486	U	LAMBDOID SUTURE FRAGMENT OPEN	U		U	
487	U	LAMBDOID SUTURE FRAGMENT OPEN	U	NUCHAL DEVELOPMENT IS GRACILE	U	
488	U		U		U	
489	U		U		U	S SHAPED ZYGOMAXILARY SUTURE
490	U		U		U	S SHAPED ZYGOMAXILARY SUTURE
491	U		U		U	
492	U		U		U	
493	U		U		U	
494	U		M?	SUPRAORBITAL RIDGE IS DULL, ROUNDED	U	
495	U		U		U	
496	U		U		U	
497	INFANT	MORPHOLOGICAL SIZE AND DEVELOPMENT	U		U	
498	INFANT	MORPHOLOGICAL SIZE AND DEVELOPMENT	U		U	
499	U		U		U	
500	U		U		U	
501	U		U		U	
502	U		U		U	
503	U	SAGITTAL AND LAMBDOID SUTURE FRAGMENT OPEN	U		U	
504	U		U		U	
505	U	SAGITTAL AND CORONAL SUTURE FRAGMENT OPEN	U		U	
506	U		U		U	

APPENDIX B
VITAL STATISTICS

BONE NO	AGE	AGE CRITER	GENDER	GENDER CRI	AFFILIATIO	AFF CRITER
507	U		U		U	OVAL WINDOW VISABLE, EXT. AUD. MEA. SHAPE= OVAL
508	U		U		U	OVAL WINDOW VISABLE, EXT. AUD. MEA. SHAPE= OVAL
509	ADULT	CORON. FRAG OPEN, SAGITTAL ALMOST OBLIT....SEE OTHER	U		U	
510	U		U		U	
511	U		U		U	
512	U	SQUAMOSAL AND CORONAL SUTURE FRAGMENT OPEN	U		U	
513	U	SAGITTAL SUTURE FRAGMENT OPEN	U		U	
514	U	SAGITTAL..SQUAMOSAL..LAMBDOID OPEN	U		U	
515	U		U		U	
516	U		U		U	
517	U	SQUAMOSAL AND LAMBDOIDAL SUTURE FRAGMENTS OPEN	U		U	
518	U	LAMBDOIDAL SUTURE FRAGMENT OPEN	U	NUCHAL CREST UNREMARKABLE	U	
519	U	LAMBDOIDAL SUTURE FRAGMENT OPEN	U	NUCHAL CREST UNREMARKABLE	U	
520	U		U		U	
521	U		U		U	
522	U		U		U	
523	U		U		U	
524	U	CORONAL SUTURE FRAGMENT OPEN	U		U	
525	U	LAMBDOID AND SAGITTAL SUTURE FRAGMENT 90% OBLITERAT	U		U	
526	U	CORONAL AND SAGITTAL SUTURE FRAGMENT OPEN	U		U	
527	U	CORONAL AND SAGITTAL SUTURE FRAGMENT OPEN	U		U	
528	ADULT	CORONAL SUTURE FRAGMENT FUSED BUT NOT OBLITERATED	U		U	
529	U	CORONAL AND SAGITTAL SUTURE FRAGMENT OPEN	U	OVERALL GRACILE, R ORBIT ROUNDED, NO SUPERCILIARY RG	U	
530	U		U	BLUNT CHIN	U	BLUNT CHIN
531	U	SLIGHT ENAMEL ATTRITION	U		U	SLIGHT RIDGE FOR CARABELLI'S TRAIT, NO ENAM EXTEN
532	U	SLIGHT ENAMEL ATTRITION	U		U	NO ENAMEL EXTENSION
533	U	SLIGHT ENAMEL ATTRITION	U		U	NO SHOVELING
534	U	SLIGHT ENAMEL ATTRITION	U		U	
535	U	SLIGHT ENAMEL ATTRITION	U		U	
536	ADULT	SLIGHT ENAMEL ATTRITION	U	IRROBUST MORPHIOLOGY	6?	NASAL SILL SHARP, PARABOLIC ARCH, CARABELLI, NO PROX N
537	Y ADULT	SLIGHT ENAMEL ATTRITION	U		U	PINCHED ASCENDING RAMUS, GONIAL EVERSION SLIGHT
538	ADULT	SLIGHT ENAMEL ATTRITION, DENTINE EXPOSED ON RM1	U	IWIDE RAMUS	?	CRINULATION ON RLM3'S, GONIAL EVERSION SLIGHT
9001	U		U			
9002	JUVENILE	EPIPHYSEAL NON-UNION	U			
9003	U		U		U	



APPENDIX C

OSTEOLOGICAL PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

APPENDIX C
 PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BOLE N	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
86	DORSALLY. SEE OTHER	FORAMINA.SPUR=NO(L&R)	WITH ACTIVE LESIONS		
86	NO DID DISCERNED ON ALL FACETS	FORAMINA.SPUR=NO(L&R)			
86	SURFACES	NO BUTTERFLY CENTRUM, NO BIFIDA, NO ANTERIOR SPURRING			
86	NO DID ON CENTRUM SURFACES OR SUP. R FACET	NO BUTTERFLY CENTRUM			
86	NO DID ON CENTRUM SURFACES	NO BUTTERFLY CENTRUM			
86	NO DID ON SUPERIOR CENTRUM SURFACE	NO BUTTERFLY CENTRUM			
86	NO DID ON CENTRUM SURFACES	NO BUTTERFLY CENTRUM			
86	COLLAPSE OF CENTRUM	NO BUTTERFLY CENTRUM, NO BIFIDA			
86		NO BIFIDA			
86	NO DID ON L. SUP AND INF FACETS	NO BIFIDA, NO ANTERIOR SPURRING			
86	NO DID ON R. SUP AND INF FACETS				
86					
86					
86	NO DID DISCERNED ON FACET				
86	NO DID DISCERNED ON R SUP AND INF FACET	NO BIFIDA, NO ANTERIOR SPURRING			
86	FRAG				
87	NO DID DISCERNED ON ALL FACETS	PROCESS.SPONDYLO.BIFIDA.MAM.FORAM. =NO(L&R) SEE OTHER	PRESENT		
87	NO DID DISCERNED ON R SUP AND INF FACETS				
87	NO DID DISCERNED ON R SUP AND INF FACETS				
87	NO DID DISCERNED ON R SUP AND INF FACETS				
87	NO DID DISCERNED ON SUP CENTRUM AND SUP FACETS				
87	NO DID DISCERNED ON CENTRUM				
87	NO DID DISCERNED ON CENTRUM				
87	NO DID DISCERNED ON L SUP, L INF AND SUP FACETS	NO BIFIDA, NO SPURRING, NO MAMILLARY FORAMINA			
87		NO BIFIDA			
87	NO DID DISCERNED ON INF FACETS	NO BIFIDA, NO SPURRING			
87	NO DID DISCERNED ON L INF AND SUP FACETS				
87					
87	NO DID DISCERNED ON R SUP FACET	NO SPONDYLO			
87					
87	CENTRUM FRAG				
87					
87	NO DID DISCERNED ON L INF AND SUP FACETS				
87					
88					
88					
88	NO DID DISCERNED				
88	NO DID DISCERNED				
88	NO DID DISCERNED	NO BUTTERFLY CENTRUM			
88	NO DID DISCERNED	NO BUTTERFLY CENTRUM			
88	NO DID DISCERNED ON CENTRA OR R SUP AND INF FACETS	NO BUTTERFLY CENTRUM, NO SPONDYLO			
88	FACET OR SUP CENTRUM				
88	NO DID DISCERNED ON DENS, CENTRUM, ALL FACETS.	NO BUTTERFLY CENTRUM, NO OSS. APICAL, R. FORAMEN = ONE			
88					
88					
88	NO DID ON INF FACETS	NO BIFIDA, NO SPURRING			
88	NO DID ON RIGHT INF AND SUP FACETS				
88					
88	NO DID ON L, INF AND SUP FACETS				
88					
88	NO DID ON L, INF AND SUP FACETS	NO SPONDYLO			
88	NO DID ON L, INF AND SUP FACETS	NO SPONDYLO			
89					
90					
91					
92					
93		NO PARTURATION PTS			
94		NO PARTURATION PTS			
95					
95					
96					
96					
96					
97					
98					
98					

APPENDIX C
PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BONE N	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
136			MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
137			MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
138		3RD TROCHANTER & HYPOTROCH. FOSSA ABSENT	MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
139			MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
160	HEALED LESION IN THE GASTROCNEMIUS ATTACHMENT AREA	ATTACHMENT AREA PRESENT	MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
161			MEINYOICASE NOM93-6242 FROM BAG LABELED AS "FEMORA"		
162	CHANGES...SEE MEMO & DRAWO		HUMAN.....SEE MEMO		Y
163	CHANGES...SEE MEMO & DRAWG		HUMAN.....SEE MEMO		Y
164	EVIDENCE IS PRESENT		LABELED "NON HUMAN"SEE MEMO		Y
165					
166	NO DID PRESENT.	IMALLEOLOUS			
167	NO BOWING	TORSION			
168					
169	INTROSS. MARGIN				
170	NO DID OBSERVED	SCORE TYPE I			
171	NO DID OBSERVED				
172					
173					
174	HEALED LESION IN THE GASTROCNEMIUS ATTACHMENT AREA				
175	NO DID OBSERVED	IMALLEOLOUS			
176	MEMO, DRAWING & OTHER		MARKS...SEE DRAWING & MEMO		Y
177	NO BOWING				
178	NO TIBIAL TUBEROSITY SPURS, NO BOWING				
179	DISTAL END	IMALLEOLOUS			
180	TIBIAL TUBEROSITY SPURRING, MOD. SEVERE MEDIAL BOWING...SEE MEMO & DRAWING				Y
181	NO TIBIAL TUBEROSITY SPURS				
182	POST. TO INTROSS MARG				
183					
184					
185					
186	NO TIBIAL TUBEROSITY SPURRING, NO BOWING, NO OSGOOD SCHLAT.				
187	SHAFT(SEE OTHER&DRAW)		TOWARDS SAGITTAL PLAN		Y
188					
189					
190					
191					
192	MEMO & DRAWING				
193SEE OTHER		OF CANCELLOUS BONE		
194					
195	NO.....SEE OTHER		MEMO & DRAWING		Y
196	AREA.....SEE DRAWING				
197	NO BOWING, NO DID OBSERVED ON DISTAL END	TORSION			
198	NO BOWING				
199	NO BOWING, NO DID OBSERVED ON DISTAL END, NO OSGOOD SCHL	OR TORSION			
200	NO BOWING	OR TORSION	SHAFT		
201					
202	NO BOWING, NO OSGOOD SCHLAT		MEINYOICASE NOM93-6242, LABELED "TIBIAE AND FRAGS"		
203	MARKING BECOMING FAINT		MEINYOICASE NOM93-6242, LABELED "TIBIAE AND FRAGS"		
204	BECOMING FAINT,SEE MEMO		MEINYOICASE NOM93-6242, LABELED "TIBIAE AND FRAGS"		Y
205			MEINYOICASE NOM93-6242, LABELED "TIBIAE AND FRAGS"		
206	BECOMING FAINT,SEE MEMO		MEINYOICASE NOM93-6242, LABELED "TIBIAE AND FRAGS"		
207					
208	NO.....SEE OTHER		MARKS...SEE MEMO & DRAWING		Y
209					
210					
211					
212					
213	SURFACE				
214	EXPANSION...SEE MEMO & DRAWING				
215	NO OSGOOD SCHLAT.				
216	ANT-LAT...SEE MEMO				
217					
218	NO.....SEE OTHER		PRESENT.....SEE MEMO		Y
219	NO.....SEE OTHER		PRESENT.....SEE MEMO		Y
220					
221	NO DID OBSERVED ON DISTAL END				

APPENDIX C
 PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BONE N	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT BIBLIO. WILCOX	MEMO
222	NO DJD OBSERVED ON DISTAL END	EPICONDYLAR SULCUS			
223					
224					
225					
226		NO SUPRACONDYLAR SPUR			
227					
228					
229					
230					
231					
232					
233					
234		NO SUPRACONDYLAR SPUR			
235	AREA SEE OTHER		DRAWING		Y
236					
237	NO DJD ON PROXIMAL ART. SURFACE		DELTOID.	MAXIMUM VERTICAL DIAMETER OF HUMERAL HEAD 3.09 CM	
238		NO SUPRA CONDYLAR SPUR			
239		NO SUPRA CONDYLAR SPUR			
240					
241					
242					
243			MEMO & DRAWING	MAXIMUM VERTICAL DIAMETER OF HUMERAL HEAD 4.70 CM	Y
244					
245		NO SUPRA CONDYLAR SPUR			
246	CORONOID FOSSA SUPERIORLY	NO SUPRA CONDYLAR SPUR. SEPTAL ART. EPICONDYLAR SULCUS		EPICONDYLAR WIDTH 6.24 CM	
247		NO MEDIAL EPICONDYLAR SULCUS			
248		NO SUPRACONDYLAR SPUR			
249					
250					
251					
252					
253		NO SUPRACONDYLAR SPUR			
254					
255	NO DJD DISCERNED	SULCUS		EPICONDYLAR WIDTH 6.35 CM	
256		NO SUPRACONDYLAR SPUR. SEPTAL APERTURE.			
257					
258					
259	NO DJD DISCERNED	SULCUS			
260					
261		NO SUPRACONDYLAR SPUR			
262					
263	NO DJD DISCERNED	SULCUS		EPICONDYLAR WIDTH 6.20 CM	
264	SIDE SEE MEMO & DRAWING		MEMO AND DRAWING		
265		NO SUPRA CONDYLAR SPUR	MENTYCHCASE N°M93-6242 LABELED AS "ARM BONES"		
266	NO		MEMO AND DRAWING		Y
267	NO		(TRANSVERSE) POSSIBLE SEE MEMO		
268					
269					
270					
271					
272					
273					
274					
275					
276					
277					
278	NO		MARKS SEE DRAWING & MEMO		Y
279					
280	TUBEROSITY SEE OTHER	NO	SEE OTHER	HEAVY USAGE OF BICEPS	
281					
282					
283					
284					
285					
286					
287	NO DJD ON PROXIMAL END	TROCHLEAR NOTCH FORM IS 2 DISCRETE + ISLAND			

APPENDIX C
PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BONE #	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
288	NO DJD ON PROXIMAL END	TROCHLEAR NOTCH FORM IS INDENTED; DISTAL SULCUS PRESENT			
289					
290	NO DJD ON PROXIMAL END	TROCHLEAR NOTCH FORM IS 2 DISCRETE + ISLAND			
291		TROCHLEAR NOTCH; FORM IS INDENTED			
292					
293	ACTIVE PERIOSTEAL RX ON LATERAL SIDE OF FRAGMENT				
294					
294					
295					
296					
297					
298					
299					
300					
301					
302	NO DJD ON PROXIMAL ART. SURFACE	HOURLASS MORPHOLOGY OF TROCHLEAR NOTCH			
303					
304					
305					
306	DJD = DIST. ART. SURF. SEE DRAWING				
307					
308					
309					
310					
310					
310					
311					
312					
313	SUNKEN IN APPEARANCE OF VENTRAL DIAPHYSEAL SURF. (MEDIA - MEMO)		POSSIBLE.....SEE MEMO		Y
314					
315					
316					
317					
318					
319					
320					
321			MEANYC CASE NO. N93-6242 FROM BAG LABELED AS "ARM BONES"		
322			MEANYC CASE NO. N93-6242 FROM BAG LABELED AS "ARM BONES"		
323					
323					
324			MEANYC CASE NO. N93-6242 FROM BAG LABELED AS "ARM BONES"		
325					
326					
327	PARROT STARTLING, SEE OTHER		BODY PRESENT, SEE MEMO		Y
328					
329					
340					
341					
342					
343					
344					
345					
346					
347					
348					
349					
350					
351					
352	ACTIVE PERIOSTEAL RX ON LATERAL BORDER OF FRAGMENT				
353					
354					
355					
356					
357					

APPENDIX C
 PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BONE N°	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
338					
339					
360					
361					
362					
362					
362					
363	NO DID OBSERVED ON DISTAL OR PROXIMAL ART. AREAS	SULCUS			
364	NO DID OBSERVED ON PROXIMAL ART. AREA	TROCHLEAR NOTCH FORM = HOURGLASS + ISLAND			
365	NO DID OBSERVED ON PROXIMAL ART. AREA	TROCHLEAR NOTCH FORM = HOURGLASS + ISLAND			
366	NO DID OBSERVED ON PROXIMAL ART. AREA	TROCHLEAR NOTCH FORM = 2 DISCRETE			
367	NO DID OBSERVED ON PROXIMAL ART. AREA	TROCHLEAR NOTCH FORM = 2 DISCRETE + ISLAND			
368	NO DID OBSERVED ON PROXIMAL ART. AREA	NO DISTAL SULCUS			
369	NO DID OBSERVED ON PROXIMAL ART. AREA	NO DISTAL SULCUS			
370	NO DID OBSERVED ON PROXIMAL ART. AREA				
371	NO DID OBSERVED ON PROXIMAL ART. AREA				
372	NO DID OBSERVED ON PROXIMAL ART. AREA				
373					
374					
375			PRESENT.....SEE MEMO & DRAWING		Y
376					
377					
378					
379	AREA SWOLLEN/SEE OTHER		LESS DEFINED OR SHARP		Y
380					
381	(TRAUMA? RX BONE OSTEOPHYTIC ACTIVITY) MEDIALY(DISTAL END)...SEE DRAWING&MEMO				
382					
383					
384					
385					
386					
397					
398					
399					
400					
401					
402	NO DID OBSERVED				
403		JAPONICUM			
404		ZYGOMATIC FACIAL FORAMEN - 1 . NO OS JAPONICUM			
405		JAPONICUM			
406					
407	MEDIUM HEAVY	UNDULATION ENAMEL EXT.	POST LOSS OF R11-P2	(OF DENTITION)	
408					
409					
410			TO BE LONG BONE FG		
411			(NYC CASE NO#193-6242 BAG LABELED "CRANIAL")		
412					
413					
414					
415					
416					
417					
418					
419					
420		NO INCA			
421		NO INCA			
422		NO INCA	IS AN ADJESCENT		
423					
424					
425		ZYGOFACIAL FORAMEN - 1. NO OS JAPONICUM			
426					
427					
428		SUPRAORBITAL NOTCH NEAR GLABELLA. TRACE OF METOPIC SUTURE	OLDER FEMALES		
429					
430					

APPENDIX C
PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

BONE N	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
431					
432					
433	NO AUDITORY EXOSTOSES	PARAMASTOID TUBERCLE			
434	NO AUDITORY EXOSTOSES	PARAMASTOID TUBERCLE			
435					
436	INTERIOR... SEE MEMO & DRAWING	TRACE, NO KEELING	NO DENTITION		Y
437					
438					
439					
440					
441		ZYGOFACIAL FORAMINA = 2 LARGE, 1 SMALL, NO OS JAPONICUM			
442		NO OS JAPONICUM			
443		NO OS JAPONICUM			
444		DIVIDED INTERNALLY SPUR			
445	POROSITY NOTED ON SUPERIOR EDGE OF EXT. AUD. CASAL AREA.	NO TYMPANIC DES OR THICKENING			
446	DID - ON POSTERIOR SIDE OF OCCIPITAL CONDYLE	INTERNALLY			
447					
448		FRONTAL GROOVE PRESENT			
449					
450					
451					
452					
453	DIPLOE EXPANSION NOTED IN 3 FRAGMENTS				
454					
455					
456	MINI INACTIVE RB	R MENTAL FORAMEN = 1	NO DENT. POST MODERN LOSS OF RC-P2		
467		TORUS	RESORBING		
468					
469	NO DID ON CONDYLE				
470		NO OS JAPONICUM, ZYGOFACIAL FORAMEN = 3 LARGE			
471					
472					
473					
474					
475					
476					
477	NO CRIBRA IN L. ORBIT	NOTCH & FORAMEN		INTERORBITAL DISTANCE IS WIDE 2.80 CM	
478	PRE LOSS OF RM1-2 (RESORPTION INACTIVE)	R. MENTAL FORAMEN, NO TORUS	POST LOSS OF RM3		
479	PRE LOSS OF M1 (RESORPTION ALMOST INACTIVE), MODERATE AVE	BRIDGE, UNDULATING LOWER BORDER	MEMO & DRAWING	GONIAL ANGLE 120 DEGREES	
480	AVTL. RESORPTION	CARABELLI'S	MATCH TO BN#481... POST LOSS OF R11-2, L11		
481	SEE #480	SEE #480	MATCH TO BN#480... SEE #480		
482	MEMO		PRESENT... SEE MEMO		
483	NO... SEE MEMO		PRESENT... SEE MEMO		
484	NO... SEE MEMO	ACCURATE... FRAGMENT	#483... SEE MEMO		Y
485	PRE FINE TEXT... SEE MEMO	ORBITAL NOTCH	DENTITION... SEE MEMO		Y
486	OTHER		GIVEN MORPH&TEXT: MEMO		Y
487	UNREMARKABLE... SEE OTHER		GIVEN MORPH&TEXT: MEMO		Y
488		LARGE			
489		LARGE			
490		NO OS JAPONICUM, ZYGOMATIC FACIAL FORAMINA = 2 (2 LARGE)			
491		NO OS JAPONICUM			
492					
493					
494					
495					
496		SUPRAORBITAL FORAMEN PRESENT, NO SUPRAORBITAL NOTCH			
497					
498					
499					
500					
501	DIPLOIC EXPANSION (HYPERTROPHY)				
502	OUTER TABLE, ORANGE PIEL	FRONTAL GROOVE PRESENT			
503	SMALL PACCHIONIAN PRESENT				
504	DIPLOIC EXPANSION (HYPERTROPHY)	2 FRONTAL GROOVES PRESENT			
505					
506		POST CONDYLAR CANAL PRESENT = 1, HYPOGLOSSAL CANAL = 1			

APPENDIX C
PATHOLOGICAL AND VARIATIONAL OBSERVATIONS

STONE N	PATHOLOGY	ANOMALY	OTHER	MEASUREMENT	MEMO
507	ACTIVE PERIOSTEAL DEPOSITION ON EXT. AUD. CANAL INF. POST A	NO TYMPANIC DES OR THICKENING.			
508	NO AUDITORY EXOSTOSIS	NO TYMPANIC DES OR THICKENING.			
509	ALONG..... SEE OTHER		FROM BREGMA UNFUSED		
510					
511					
512					
513	DIAMETER LESTON!				
514					
515					
516					
517					
518		NO INCA			
519		NO INCA			
520	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
521	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
522	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
523	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
524	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
525	DIPLOTTIC EXPANSION (MODERATE HYPERTROPHY)				
526	HYPERTROPHY)..... SEE MEMO		DOES NOT MATCH 527		
527	HYPERTROPHY)..... SEE MEMO		DOES NOT MATCH 526		
528	(DEVELOPMENT)..... SEE MEMO	COMPLETE FRAGMENT			
529	THROUGHOUT..... SEE OTHER		1CM FROM BREGMA		Y
530			NO DENTITION		
531	NO CARIES OR CALCULUS	4X CUSP PATTERN			
532	NO CARIES OR CALCULUS	4 + CUSP PATTERN			
533	NO CARIES OR CALCULUS				
534	NO CARIES OR CALCULUS	3 CUSP, 4 ROOTS LONG 2 SHORT			
535	NO CARIES OR CALCULUS. ENAMEL HYPOPLASIA IS REMARKABLE				
536	MO ON RM1 AFFECTING 2/3 CROWN. SLIGHT CALCULUS ACCUMUL	PALATINE TORUS .3 CM RAISED. NO MAX. TORUS. NO ENAMEL EXTEN.			
537	MOD. AVEL RESORPTION	CONDYLE. SEE OTHER			GONIAL ANGLE 120 DEGREES
538	NO DID. LMC PRE MORT LOSS (INACT. RESORP). FISSURE CARIE ON R	HEIGHT AS CORACOID	SLIGHT CALCULUS NOTED		GONIAL ANGLE 140 DEGREES
9001					
9002			EPHYPHSES ARE NOT PRESENT		
9003					
	KEY	KEY			
	ACCUMUL = ACCUMULATION	INACT = INACT	ANT = ANTERIOR	MANUB = MANUBRIUM	
	ANT, ANTER = ANTERIOR	INF, INFER = IN	APT = APERTURE	MED = MEDIAL	
	ART, ARTIC = ARTICULAR	INTEROSS = IN	ART = ARTICULAR	MORPH = MORPHOLOGY	
	AUD = AUDITORY	L = LEFT	CLAV = CLAVICULAR OR CLAVIAN	NP = NOT PRESENT	
	AVEL = ALVEOLAR	LAT = LATERAL	DES = DEHISCENCE	OCCIPIT = OCCIPITAL	
	CA = AROUND	MARG = MARG	DEVELO = DEVELOPMENT	OSS = OSSIFIED	
	CANCEL = CANCELLOUS	MED = MEDIA	EX = EXTERNAL	PERON = PERONAL	
	CM = CENTIMETER	MO = MESIAL	EXT, EXTEN = EXTENSION	POST = POSTERIOR	
	COMPRESS = COMPRESSION	MOD, MODER =	FORAM = FORAMINE	R = RIGHT	
	DEPOSIT = DEPOSITION	OSTEOBLAS = O	HYPGLOS = HYPOGLOSAL	SACRALIZ = SACRALIZATION	
	DIAPH = DIAPHYSIS	POST = POSTE	HYPOTROCH = HYPOTROCHANTERIC	SPONDYLO = SPONDYLOLYSIS	
	DIST = DISTAL	PRE = PREMO	INF = INFERIOR	SQUAT = SQUATTING	
	DTD = DEGENERATIVE JOINT DISEASE	R = RIGHT	L = LEFT	TRANS = TRANSVERSE	
	DRAWING, DRAWG = DRAWING	RE, RESOP, RESO	LAT = LATERAL	TROCH = TROCHANTERIC	
	DVLPT = DEVELOPMENT	RX = REACTION	MAM = MAMILLARY	TYPAN = TYPANIC	
	FRAGS = FRAGMENTS	SCHLAT = SCHLATTERS			
	HYPERTROPH = HYPERTROPHIC	SUP = SUPERIOR			
	SURF = SURFACE				

MEMOS OF OBSERVATION

- BONE_NO 162 FEMUR, DIAPHYSEAL FRAGMENT
- MEDIAL BOWING OF DIAPHYSIS IS SLIGHT. ANTERIOR BOWING OF DIAPHYSIS IS MODERATE. BOWING (0° PLANE) APPROXIMATES TO 10° (SEE DRAWING).
 - LINEAR ASPERA DEVELOPMENT IS STRONG.
 - HYPERTROPHIC DEVELOPMENT OF 2ND TROCHANTER-ENLARGED APPROXIMATELY 3X NORMAL SIZE.
 - OSTEOPOROSIS NOTED ON DISTAL ANTERIOR AND POSTERIOR AREA SUPERIORLY ADJACENT TO CONDYLAR REGION (SEE DRAWING)
 - GREEN SUBSTANCE FOUND SPORADICALLY OVER ENTIRE SURFACE. SUBSTANCE APPEARS ORGANIC(MOLD?) IN ORIGIN AS OPPOSED TO METALLIC RESIDUE (IE COPPER).
 - #162 IS A PROBABLE MATCH TO #163 GIVEN MORPHOLOGY AND CONTEXT.
 - DIFFERENTIAL DIAGNOSIS INCLUDES NUTRITIONAL DEFICIENCY.
 - THE PATHOLOGICAL ELEMENT IS OF HUMAN ORIGIN DESPITE PREVIOUS ASSESSMENT BY THE NEW YORK CITY EXAMINER'S OFFICE.
- BONE_NO 163 FEMUR, DIAPHYSEAL FRAGMENT
- MEDIAL BOWING OF DIAPHYSIS IS SLIGHT. ANTERIOR BOWING OF DIAPHYSIS IS MODERATE. BOWING (0° PLANE) APPROXIMATES TO 10° (SEE DRAWING).
 - LINEAR ASPERA DEVELOPMENT IS STRONG.
 - HYPERTROPHIC DEVELOPMENT OF 2ND TROCHANTER-ENLARGED APPROXIMATELY 3X NORMAL SIZE.
 - OSTEOPOROSIS WAS UNABLE TO BE NOTED ON DISTAL ANTERIOR AND POSTERIOR AREA SUPERIORLY ADJACENT TO CONDYLAR REGION (SEE DRAWING).
 - GREEN SUBSTANCE FOUND SPORADICALLY OVER ENTIRE SURFACE. SUBSTANCE APPEARS ORGANIC(MOLD?) IN ORIGIN AS OPPOSED TO METALLIC RESIDUE (IE COPPER).
 - #163 IS A PROBABLE MATCH TO #163 GIVEN MORPHOLOGY AND CONTEXT.
 - DIFFERENTIAL DIAGNOSIS INCLUDES NUTRITIONAL DEFICIENCY.
 - THE PATHOLOGICAL ELEMENT IS OF HUMAN ORIGIN DESPITE PREVIOUS ASSESSMENT BY THE NYC EXAMINER'S OFFICE.
- BONE_NO 164 FEMUR, DIAPHYSEAL FRAGMENT
- OUTER CORTICAL BONE EROSION PRECLUDES PATHOLOGICAL ASSESSMENT, INNER CORTICAL IS UNREMARKABLE IN GROSS APPEARANCE.
 - TRANSVERSE PERIMORTEM DEMARCATION IS EVINCED BY FINE LINEAR GROOVING IN ONE UNINTERRUPTED DIRECTION. WIDTH OF SAW GROOVING IS APPROXIMATELY 0.04 CM. INITIAL ACTION PROBABLY OCCURRED FROM MEDIAL SIDE OF ELEMENT AND TERMINATED ON LATERAL SIDE. NO HINGE OR TERMINAL "SNAP" AREA PRESENT. GROOVES RUN 5° (LATERALLY) FROM THE ANTERIOR-POSTERIOR PLANE (SEE DRAWING).
 - THE ELEMENT IS OF HUMAN ORIGIN DESPITE PREVIOUS ASSESSMENT BY NEW YORK CITY EXAMINER'S OFFICE.
- BONE_NO 176 TIBIA, DIAPHYSEAL FRAGMENT
- CALLOUS (BULGE) ON POSTERIOR LATERAL CREST (1 CM CIRCULAR HEALED AREA). ACTIVE PERIOSTEAL DEPOSITION PRESENT ON ANTERIOR CREST AND SURROUNDING AREA OF CALLOUS.
 - PERIMORTEM DEMARCATION WAS INITIATED ON THE VENTRAL SIDE AT AN ANGLE OF ALMOST 45 DEGREES (DOWNWARD MEDIAL-DORSALLY). AT APPROXIMATELY 1/3 THROUGH DIAPHYSIS, DIRECTION (AND SIZE) OF SAW MARKS CHANGE TO 0° (FLAT [LAT - MEDIANLY] ACROSS DIAPHYSIS). SEE DRAWING. MARKINGS WERE LINEAR AS OPPOSED TO CIRCULAR AND DIFFERENT GROOVING SIZES WERE NOTED. THE INITIAL IMPLEMENT CREATED FINE GROOVES 0.04 CM IN WIDTH WHILE THE SECOND IMPLEMENT CREATED GROOVES 0.08 CM IN WIDTH. A DEPRESSION WAS OBSERVED ON THE POSTERIOR EDGE. THIS WAS PROBABLY THE LOCATION OF THE TERMINAL "SNAP" AREA.
- BONE_NO 180 TIBIA, DIAPHYSIS, PROXIMAL FRAGMENT
- BOWING EXPRESSED MEDIANLY (INWARD) TOWARD SAGITTAL PLANE.
 - AN EXOSTOSIS ON THE SOLEAL LINE PROJECTS DISTALLY.
 - PATHOLOGICAL TORSION OF 30° NOTED (SEE DRAWING).
 - NO PERIOSTEAL RX DISCERNED.
- BONE_NO 192 TIBIA, DIAPHYSEAL FRAGMENT
- HEALED THICK PERIOSTEAL DEPOSITION AFFECTS OVER 90% OF DIAPHYSIS SPARING ONLY THE ANTERIOR CREST (SEE DRAWING).

- BONE_NO 195 TIBIA, DIAPHYSEAL FRAGMENT NEAR MID-POINT
 - END TOO ERODED TO DISCERN TYPE OF IMPLEMENT UTILIZED.
- BONE_NO 204 TIBIA, DIAPHYSEAL FRAGMENT
 - ACTIVE PERIOSTEAL RX ON ANTERIOR-LATERAL SIDE
- BONE_NO 206 TIBIA, DIAPHYSEAL FRAGMENT NEAR DISTAL END
 - ACTIVE PERIOSTEAL RX ON LATERAL SIDE
- BONE_NO 208 FEMUR, DIAPHYSEAL FRAGMENT
 - SIDE OF ELEMENT FRAGMENT COULD NOT BE DETERMINED.
 - PERIMORTEM DEMARCATION WAS STRAIGHT LINEAR GROOVING. IMPLEMENT UTILIZED (SAW) CREATED 0.08 CM WIDTH GROOVES. NO CHANGE IN SIZE OR DIRECTION OF GROOVES WAS DISCERNED (SEE DRAWING).
- BONE_NO 214 TIBIA, DIAPHYSEAL FRAGMENT
 - DIAPHYSEAL EXPANSION PRESENT DUE TO HYPERTROPHIC DEVELOPMENT OF CANCELLOUS BONE.
 - 5.3 X 2.3 CM HEALED LESION (CALLOUS) PRESENT ON LATERAL-ANTERIOR SURFACE SURROUNDED BY ACTIVE PERIOSTEAL DEPOSITION.
- BONE_NO 216 TIBIA, DIAPHYSEAL FRAGMENT
 - ACTIVE PERIOSTEAL DEPOSITION ON INTEROSSEOUS MARGIN EXTENDING 2 CM FROM AND SUPERIOR TO CALLOUS AREA. ENTIRE ANTERIOR PORTION EVINCES HEALED PERIOSTEAL RX.
- BONE_NO 218 TIBIA, DIAPHYSEAL FRAGMENT
 - AFFECTED END EROSION PRECLUDES ASSESSMENT OF IMPLEMENT UTILIZED.
- BONE_NO 219 TIBIA, DIAPHYSEAL FRAGMENT
 - AFFECTED END EROSION PRECLUDES ASSESSMENT OF IMPLEMENT UTILIZED.
- BONE_NO 243 TIBIA, DIAPHYSEAL FRAGMENT
 - AFFECTED END EROSION PRECLUDES ASSESSMENT OF IMPLEMENT UTILIZED.
- BONE_NO 264 TIBIA, DIAPHYSEAL FRAGMENT
 - HEALED 3 X 3 CM CALLOUS (TRAUMA?) WITH INACTIVE SURROUNDING 8 X 3 CM PERIOSTITIS ON INTEROSSEOUS MARGIN.
- BONE_NO 266 RIB, CORPOREAL FRAGMENT
 - AFFECTED END APPEARS SLIGHTLY POLISHED. NO SAW MARKS WERE DISCERNED, HOWEVER, THEY WERE NOT EXPECTED GIVEN MORPHOLOGICAL ATTRIBUTES OF THE ELEMENT INVOLVED (IE CORTICAL THICKNESS).
 - NO PATHOLOGICAL CHANGES DISCERNED.
- BONE_NO 267 LONG BONE, DIAPHYSEAL FRAGMENT
 - END EROSION PRECLUDES DISCERNMENT OF POSITIVE IDENTIFICATION OF PERIMORTEM DEMARCATION.
- BONE_NO 278 LONG BONE FRAGMENT, POSSIBLY R. CLAVICLE NEAR ACROMIAL END
 - DIFFICULT TO DISCERN IF ELEMENT WAS A CLAVICLE. GIVEN CROSS SECTION, FIBULA ORIGIN WAS RULED OUT. INDIVIDUAL MAY NOT HAVE BEEN FULLY ADULT.
 - IF THE ELEMENT WAS A CLAVICLE, IT WAS SAWED PERPENDICULAR TO THE DIAPHYSIS OR SAGITTALLY IN RELATION TO CORPOREAL INTEGRITY. SEE DRAWING. SAW GROOVES WERE CIRCULAR IN ORIGIN AND A HINGE (BREAK OFF SPUR OR RAISED TERMINAL EDGE OF REMANENT BONE) REMAINED ON THE INFERIOR-POSTERIOR SIDE. DIRECTION OF SAW MARK INDICATES NO CHANGE OF DIRECTION DURING IMPLEMENTS USAGE. WIDTH OF SAW DEPRESSION(GROOVE) IS CA. 0.08 CM.
- BONE_NO 313 ULNA, DIAPHYSEAL FRAGMENT
 - END EROSION PRECLUDES POSITIVE DETERMINATION OF PERIMORTEM DEMARCATION
 - LINEAL SUNKEN-IN APPEARANCE ALONG ENTIRE DIAPHYSIS LATERALLY ADJACENT TO INTEROSSEOUS CREST (SEE DRAWING AND PHOTO). SEEMS CONGENITAL RATHER THAN ACQUIRED PATHOLOGICAL CHARACTERISTIC.
 - CORTICAL THICKNESS IS REMARKABLE (0.4 CM.!!!)

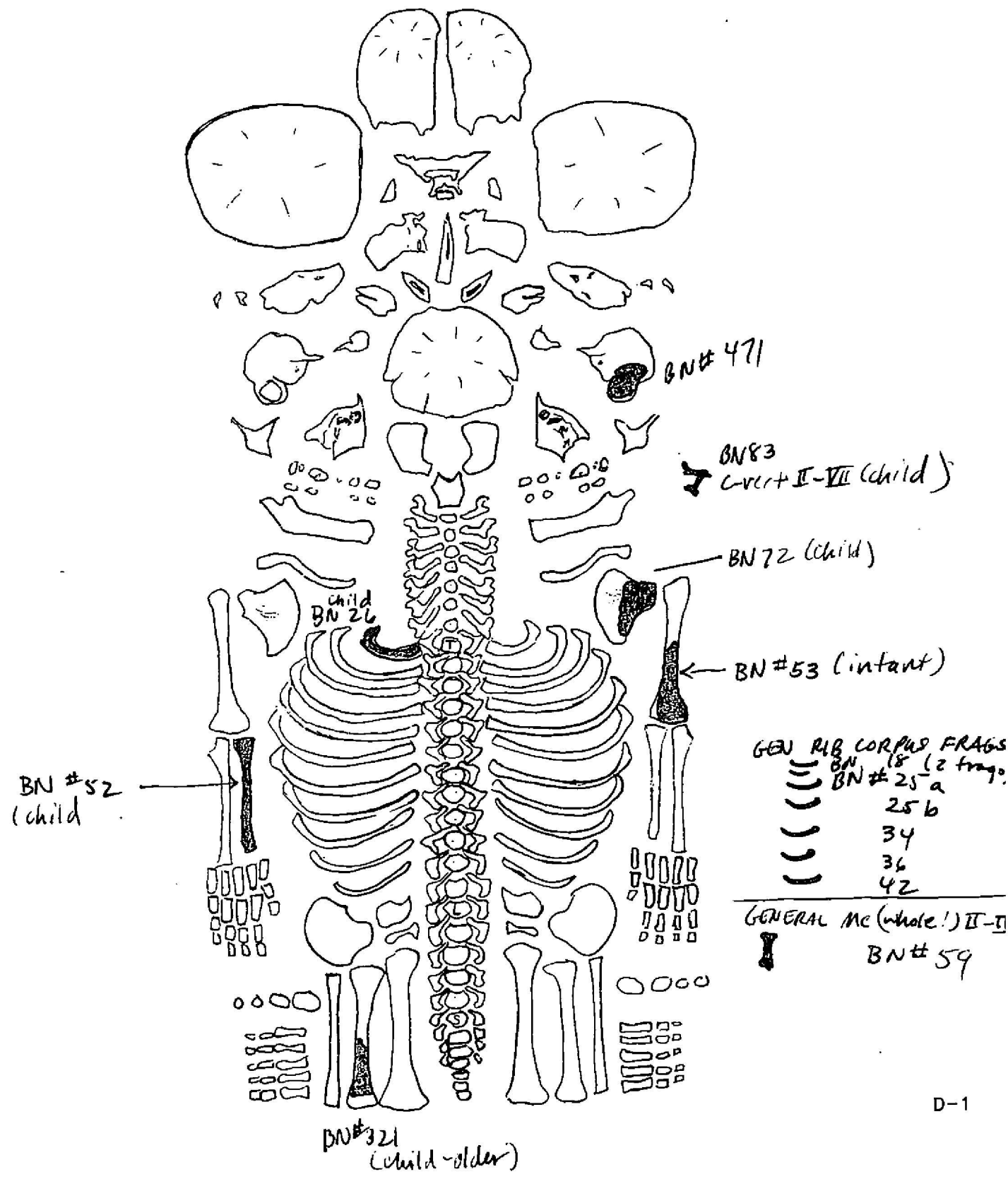
- BONE_NO 327 VERTEBRAE, LOWER THORACIC, 1/2 OF BODY FRAGMENT
- ELEMENT WAS SAWED THROUGH SAGITTALLY LEAVING A HINGE ON ITS DORSAL-SUPERIOR SIDE (SEE DRAWING). NO GROOVES WERE DISCERNED IN ORDER TO DETERMINE IMPLEMENT UTILIZED (NOT UNEXPECTED GIVEN MORPHOLOGY OF THE BODY ... THAT IS LACK OF COMPACT BONE AND NATURE OF CANCELLOUS REGION).
 - PATHOLOGICAL CHANGES INCLUDE: MODERATE BODY COMPRESSION, SLIGHT OSTEOPOROSIS OF BODY, ++DJD IN THE FORM OF "PARROT BEAKING" (SMOOTH OSTEOPHYTOSIS) ON SUPERIOR-ANTERIOR EDGE OF CENTRUM, +DJD ON ANTERIOR-INFERIOR EDGE OF CENTRUM. TWO SMALL ACTIVE MARGINATED LESIONS NODES ON SUP. SURFACE OF CENTRUM LOCATED CENTRAL-DORSALLY. ONE SMALL ACTIVE LESION NODE LOCATED ON INFERIOR CENTRUM CENTRALLY.
- BONE_NO 374 RADIUS, DIAPHYSEAL FRAGMENT
- EROSION OF BOTH DIAPHYSEAL ENDS PRECLUDE PERIMORTEM DEMARCATION ASSESSMENT.
 - NO REMARKABLE PATHOLOGICAL CHANGES DISCERNED.
- BONE_NO 381 FIBULA, DIAPHYSIS NEAR DISTAL END
- HEALED CALLOUS BUT ROUGH APPEARANCE ON MEDIAL SIDE OF DISTAL END.
 - EXOSTOTIC RX PRESENT POSSIBLY TRAUMATICALLY INDUCED (SPRAIN?) INVOLVING THE INTEROSSEOUS MEMBRANE (SEE DRAWING).
- BONE_NO 436 CRANIUM, INCOMPLETE... NO MAXILLARIES, ZYGOMATICS, OCCIPITAL OR R. TEMPORAL
- LATERAL TO FRONTAL EMINENCE AND 3.8 CM POSTERIOR TO LEFT ORBIT WAS AN INTERIORLY LOCATED STELLATE (RADIATING) TYPE HEALED LESION. THE LESION APPEARS AS A SMALL PINHOLE WITH SURROUNDING HEALED DEPOSITION IN 2 DISTINCT PLACES (SEE DRAWING).
 - NO EVIDENCE EXISTS EXTERIORLY ON THE CRANIUM.
 - THE REMAINDER OF CRANIUM IS UNREMARKABLE WITH REGARD TO FURTHER PATHOLOGICAL CHANGES.
- BONE_NO 479 MANDIBLE, FRAGMENT + DENTITION
- POST MORTEM LOSS OF RPI, RII-2 AND LII
 - PERIMORTEM DEMARCATION OCCURRED SAGITTALLY BETWEEN LII-2 LEAVING A DORSAL-INTERIOR HINGE (RAISED TERMINAL "SNAP" OR SPUR) AREA. IMPLEMENT WAS NOT DISCERNED BUT SPECULATED AS A TYPE OF SAW GIVEN THE PLANARITY AND CLEANNESS OF THE DEMARCATION. DIRECTION OF THE CUT PROCEEDED FROM ANTERIOR TO POSTERIOR.
- BONE_NO 482 CRANIAL, PARIETAL FRAGMENT
- THE TYPE OF IMPLEMENT UTILIZED FOR PERIMORTEM DEMARCATION CAN NOT BE DETERMINED..PROBABLY A SAW.
 - THE FRAGMENT APPEARS SLIGHTLY ERODED, HOWEVER, THE AFFECTED SURFACE APPEARS POLISHED (SHEEN PRESENT).
 - SEE DRAWING FOR PLACEMENT OF TRANSVERSE CUT (INFERIOR SIDE OF FRAGMENT).
- BONE_NO 483 CRANIAL, FRONTAL FRAGMENT
- THE TYPE OF IMPLEMENT UTILIZED FOR PERIMORTEM DEMARCATION CAN NOT BE DETERMINED..PROBABLY A SAW.
 - THE FRAGMENT APPEARS SLIGHTLY ERODED, HOWEVER, THE AFFECTED SURFACE APPEARS POLISHED (SHEEN PRESENT).
 - SEE DRAWING FOR PLACEMENT OF TRANSVERSE CUT (INFERIOR SIDE OF FRAGMENT).
- BONE_NO 484 CRANIAL, CALVARIUM
- PERIMORTEM DEMARCATION WAS EXHIBITED BY CIRCULAR GROOVING, LINEAR GROOVING AND ONE EXTRANEOUS CUT MARK. WIDTH OF A CIRCULAR GROOVE (L. PARIETAL) MEASURED 0.08 CM DIRECTION (ANGLE) OF THE GROOVING WAS CLEAR ON THE L. PARIETAL SIDE (SEE DRAWING).
 - FINE LINEAR GROOVING APPEARED ON THE RIGHT FRONTAL ADJACENT TO CORONAL SUTURE BUT WAS NOT MEASURABLE (SEE DRAWING).
 - ONE EXTRANEOUS CUT TRANSVERSE CUT MARK (INITIAL? OR SKIP? CUT) WAS NOTED ON CENTER OF FRONTAL AREA 0.9 CM SUPERIOR AND PARALLEL TO INFERIOR EDGE. THE WIDTH OF CUT MEASURES 0.08 CM IN WIDTH.
 - INTERNAL HINGE AREAS (RAISED TERMINAL SNAP OR SPUR) WERE PRESENT ON THE MAJORITY OF SAWED SURFACE.
 - COMMON, TYPICAL AUTOPSY CUT. THE CUT INITIALLY STARTS AT A TRANSVERSE ANGLE 5.7 CM SUPERIORLY OF SUPRAORBITAL MARGINS AND PROCEEDS AT SAME ANGLE (35°) TOWARDS AUDITORY MEATUS. WHEN AREA ABOVE AUDITORY MEATUS AND SLIGHTLY BELOW SQUAMOSAL SUTURE IS REACHED, THE CUT DIRECTION CHANGES AND APPROACHES AND REMAINS 0° (FLATLY TRANSVERSE) TILL IT TERMINATES AT THE OCCIPITAL REGION.
 - THE PRESENCE OF HINGES PRECLUDES SOFT TISSUE INVOLVEMENT DURING THE IMPLEMENTAL PROCESS OF SEPARATING THE CALVARIUM FROM THE REMAINDER OF THE CALVARIUM.

- BONE_NO 485 CRANIAL, FRONTAL FRAGMENT
- PERIMORTEM DEMARCATION PRESENT IN THE FORM OF CIRCULAR GROOVES ANGLED CA. 45° POSTERIORLY AWAY FROM SAGITTAL PLANE (SEE DRAWING). TRANSVERSE SAW CUT IS 5.7 CM SUPERIOR TO SUPRAORBITAL MARGINS AND PROCEEDS DOWN AT A 35° ANGLE TOWARDS THE AUDITORY MEATUS. AN INTERNAL HINGE (RAISED TERMINAL SNAP OR SPUR) AREA IS PRESENT ABOVE THE RIGHT ORBITAL AND CONNECTED TO A FRAGMENT THAT DID NOT SEPARATE DURING THE TERMINAL REMOVAL OF THE CALVARIUM. THE UT WHICH DID NOT BREAK MEASURES .3 CM WIDE.
- BONE_NO 486 CRANIAL, OCCIPITAL FRAGMENT
- TRANSVERSE PERIMORTEM DEMARCATION (SAW MARKS) EXHIBITED 2.1 CM INFERIOR TO LAMBDA. GROOVING WAS CIRCULAR AND HAD A WIDTH OF 0.08 CM AN INTERIOR HINGE (RAISED TERMINAL SNAP AREA) WAS PRESENT AND LOCATED DIRECTLY INFERIOR TO LAMBDA. THE HINGE AREA MADE IT POSSIBLE TO MATCH THIS FRAGMENT WITH THAT OF #487 (SEE DRAWING).
- BONE_NO 487 CRANIAL, OCCIPITAL FRAGMENT
- TRANSVERSE PERIMORTEM DEMARCATION (SAW MARKS) EXHIBITED 2.1 CM INFERIOR TO LAMBDA OR 3.5 CM SUPERIOR TO INTERNAL OCCIPITAL PROTUBERANCE. GROOVING WAS CIRCULAR AND HAD A WIDTH OF 0.08 CM AN INTERIOR DEPRESSION (MATCHING RAISED TERMINAL SNAP AREA OF #486) WAS PRESENT AND LOCATED DIRECTLY INFERIOR TO LAMBDA (SEE DRAWING).
- BONE_NO 526 CRANIAL, FRONTAL-PARIETAL FRAGMENT
- HYPERTROPHIC DEVELOPMENT OF DIPLOE THROUGHOUT FRAGMENT. PARIETAL THICKNESS AVERAGES 0.70 CM. FRONTAL THICKNESS AVERAGES 0.94 CM.
- BONE_NO 527 CRANIAL, PARIETAL FRAGMENT
- HYPERTROPHIC DEVELOPMENT OF DIPLOE THROUGHOUT FRAGMENT. PARIETAL THICKNESS NEAR CORONAL SUTURE AVERAGES 1.44 CM. PARIETAL THICKNESS NEAR SAGITTAL SUTURE AVERAGES 0.69 CM.
 - ACTIVE PACCHIONIAN LESIONS RUNNING LATERAL TO SAGITTAL SULCUS.
- BONE_NO 528 CRANIAL, PARIETAL-FRONTAL FRAGMENT
- MINUTE RESORBED PITTING ADJACENT TO SAGITTAL SULCUS REGION.
 - ORANGE PEEL TEXTURE OF OUTER TABLE ESP. ON FRONTAL AREA.
 - OUTER TABLE IS FAIRLY NORMAL IN THICKNESS AS OPPOSED TO THE SEVERE DIPLOIC EXPANSION THAT OCCURRED.
 - THICKNESS OF HYPERTROPHIC DEVELOPMENT INCLUDING THE OUT TABLE AVERAGES 1.21 CM ON PARIETAL REGION WHILE FRONTAL REGION AVERAGES A GREATER VALUE OF 1.40 CM.

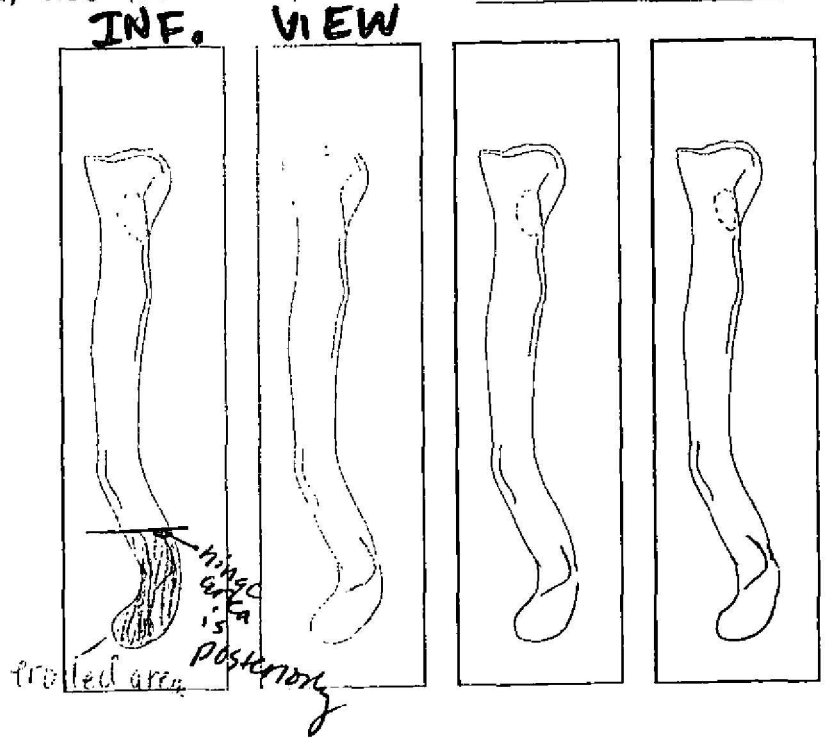
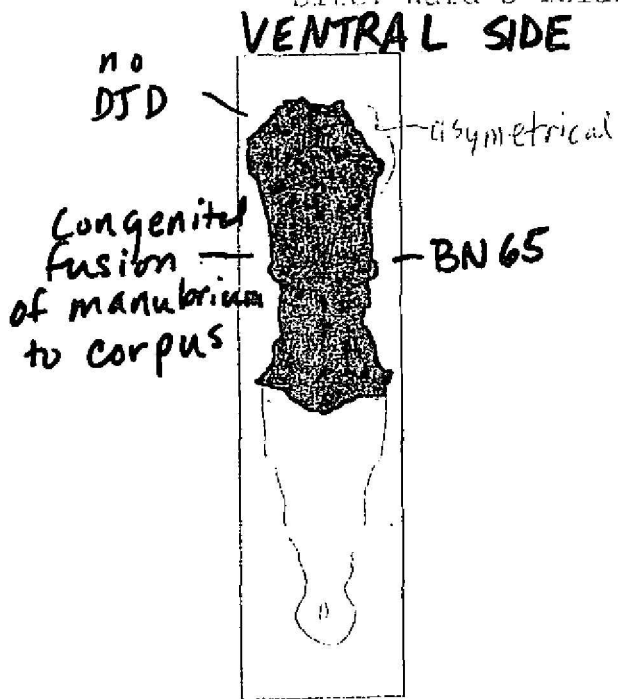


APPENDIX D

OSTEOLOGICAL ILLUSTRATIVE INVENTORY



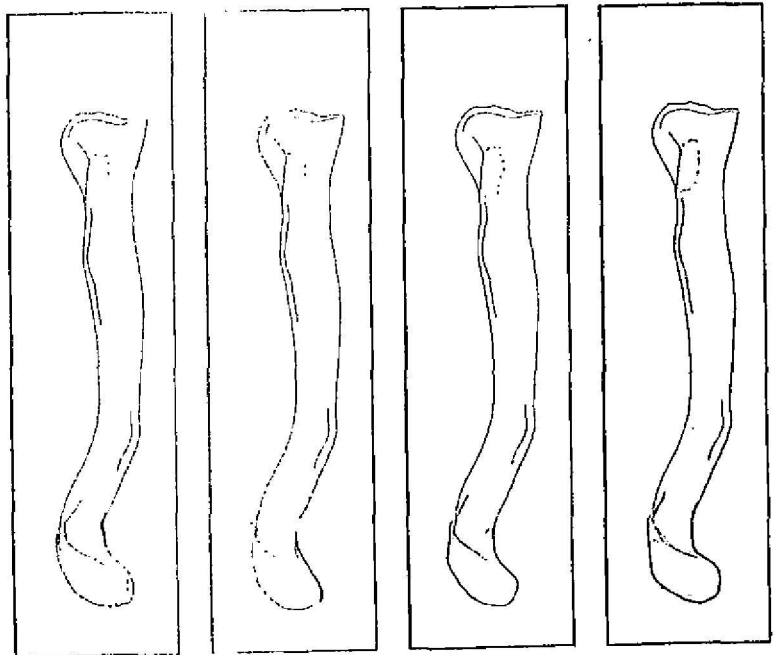
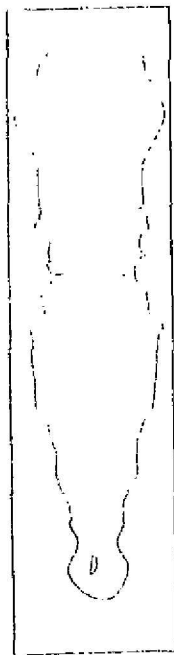
Site: Ward's Island, NYC (Nov. '93) Context _____



#278

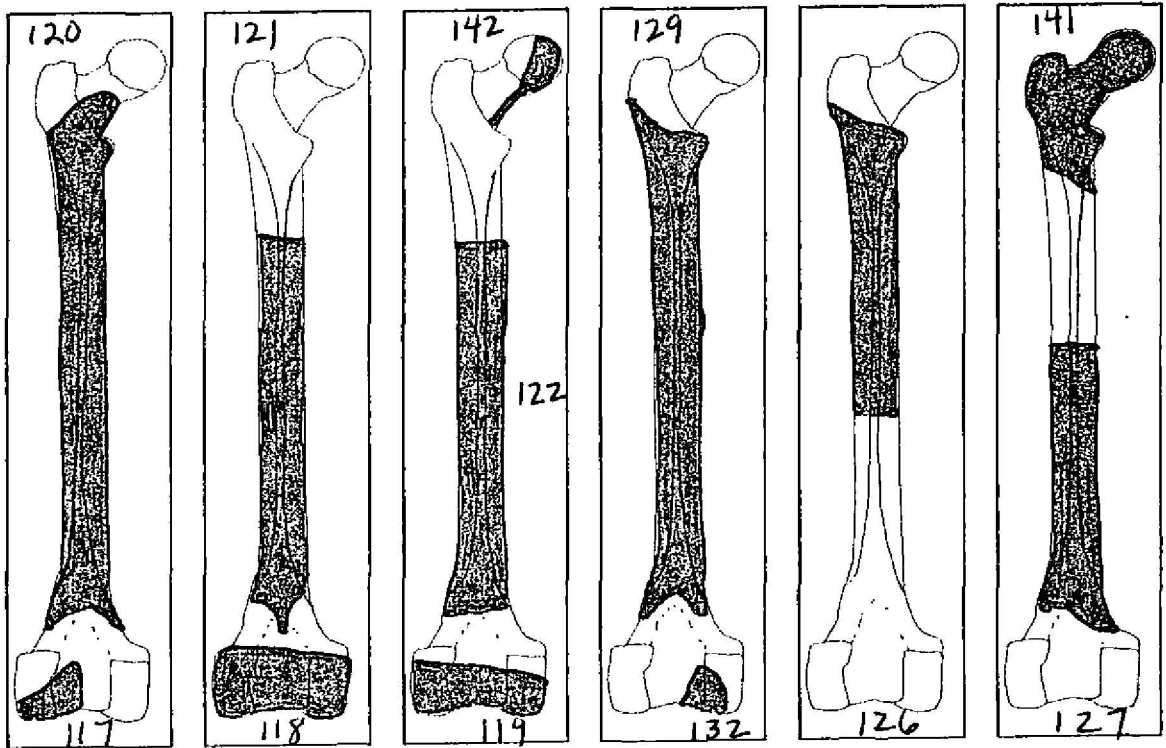
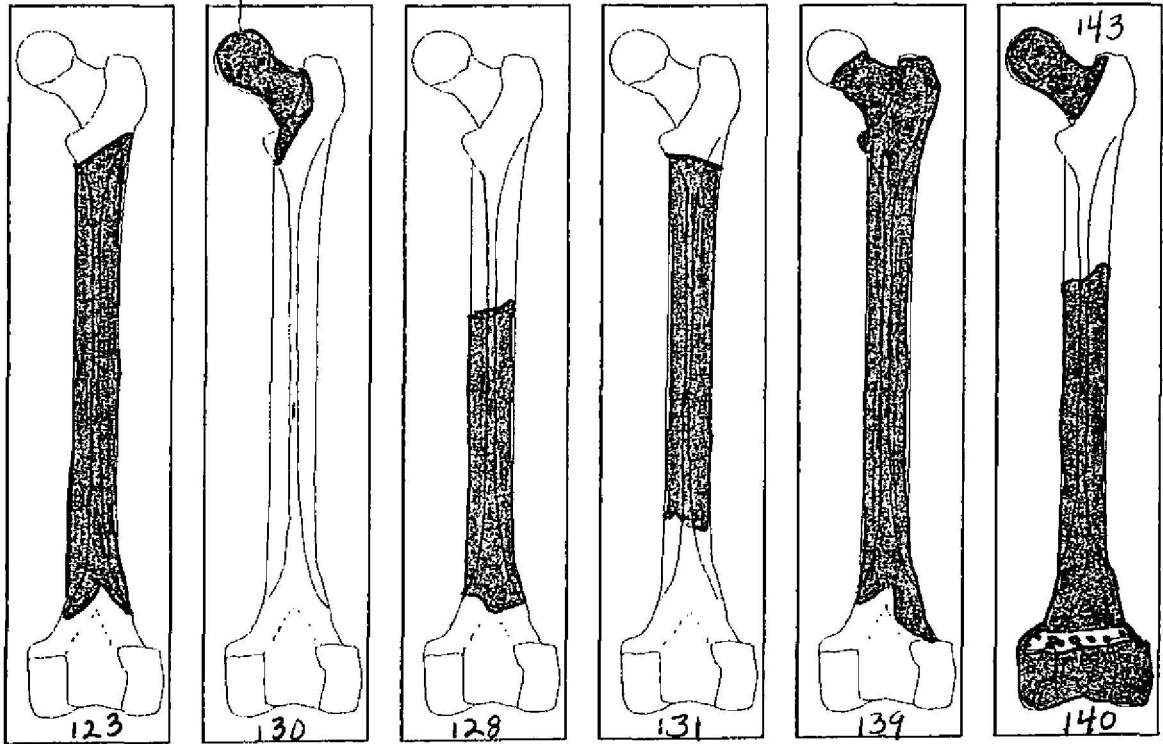
— saw marks

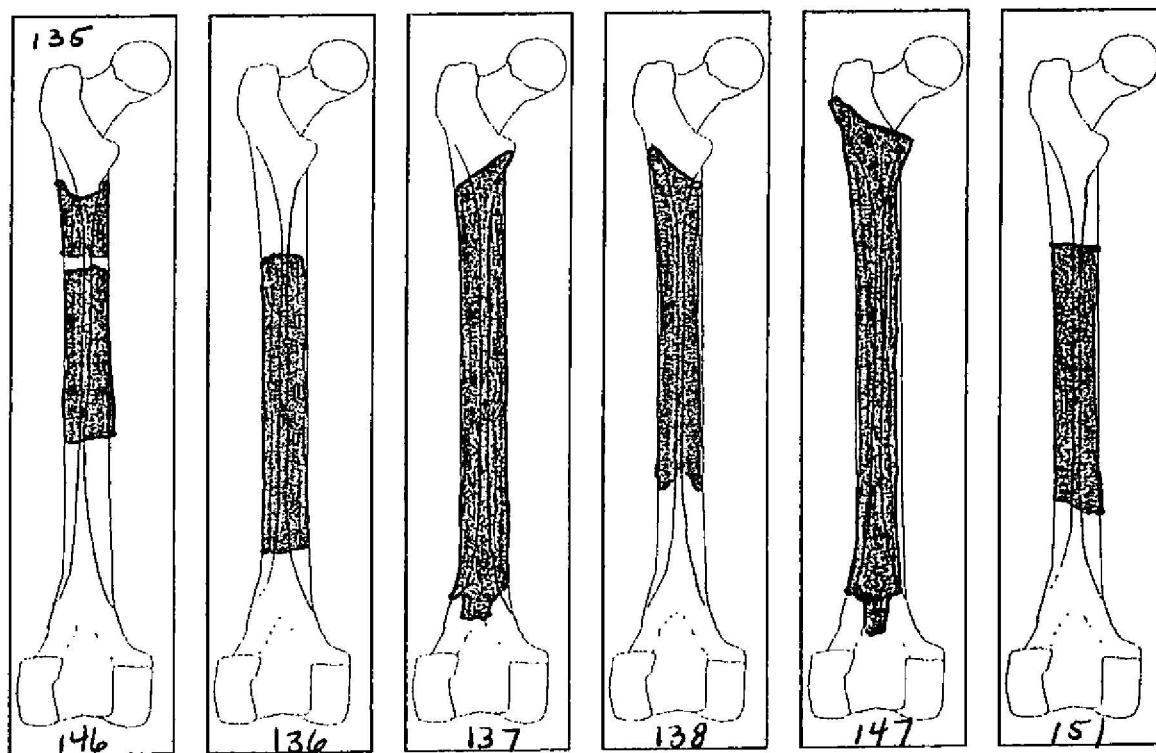
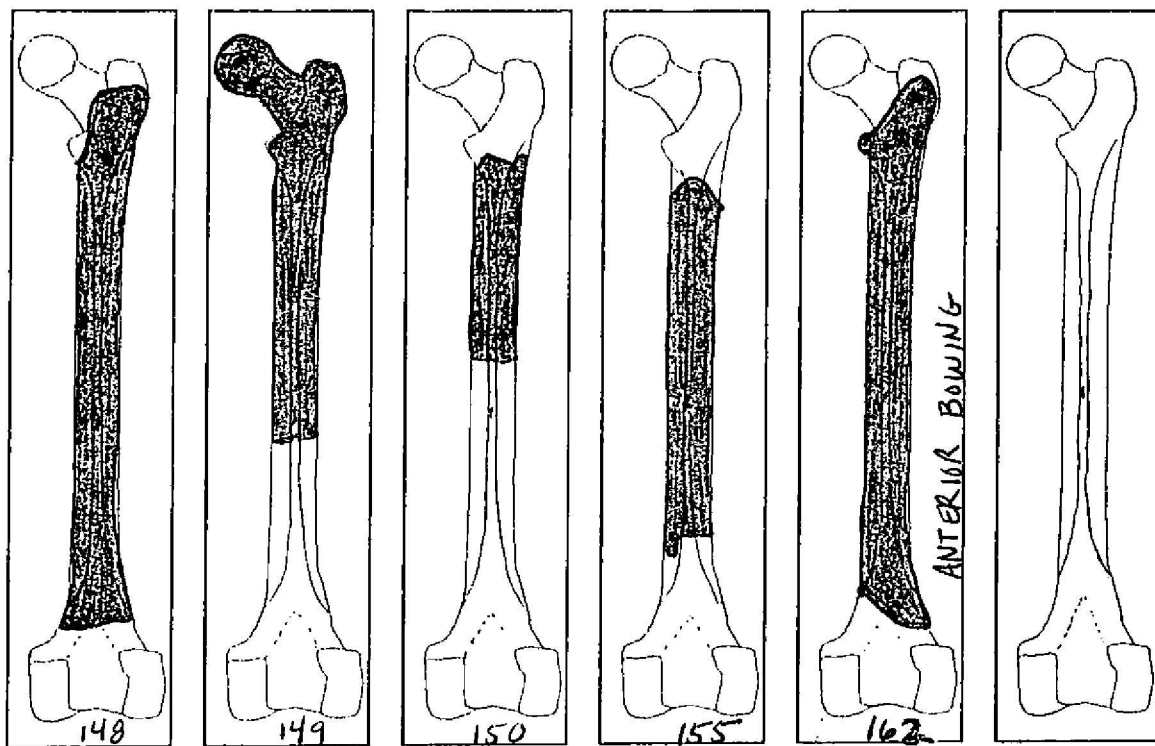
hinge area



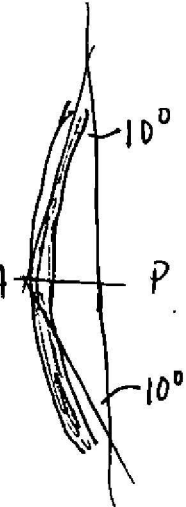
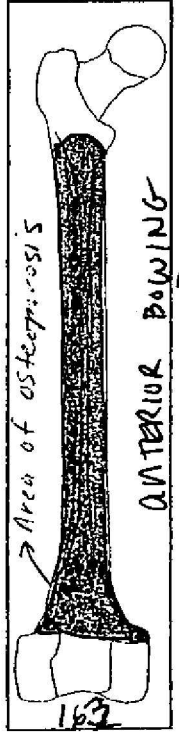
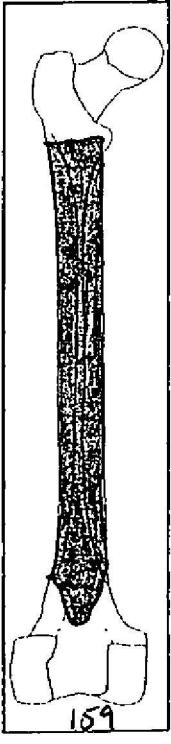
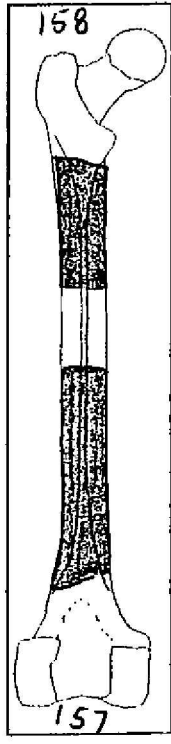
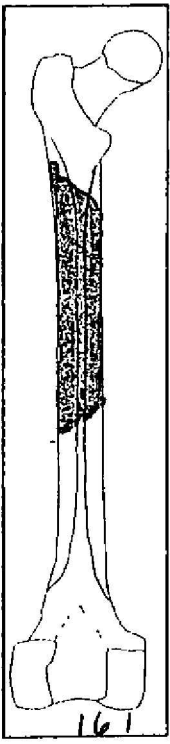
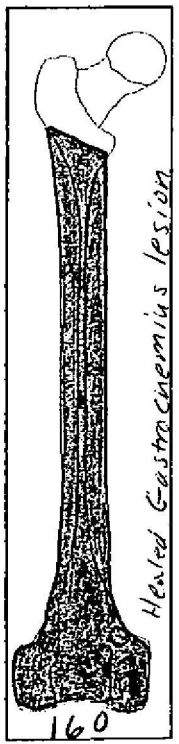
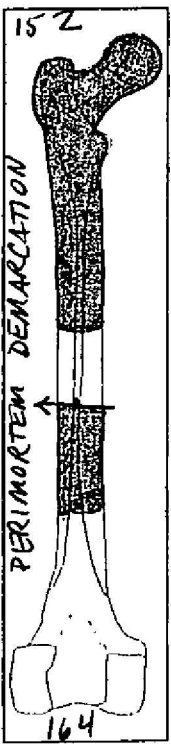
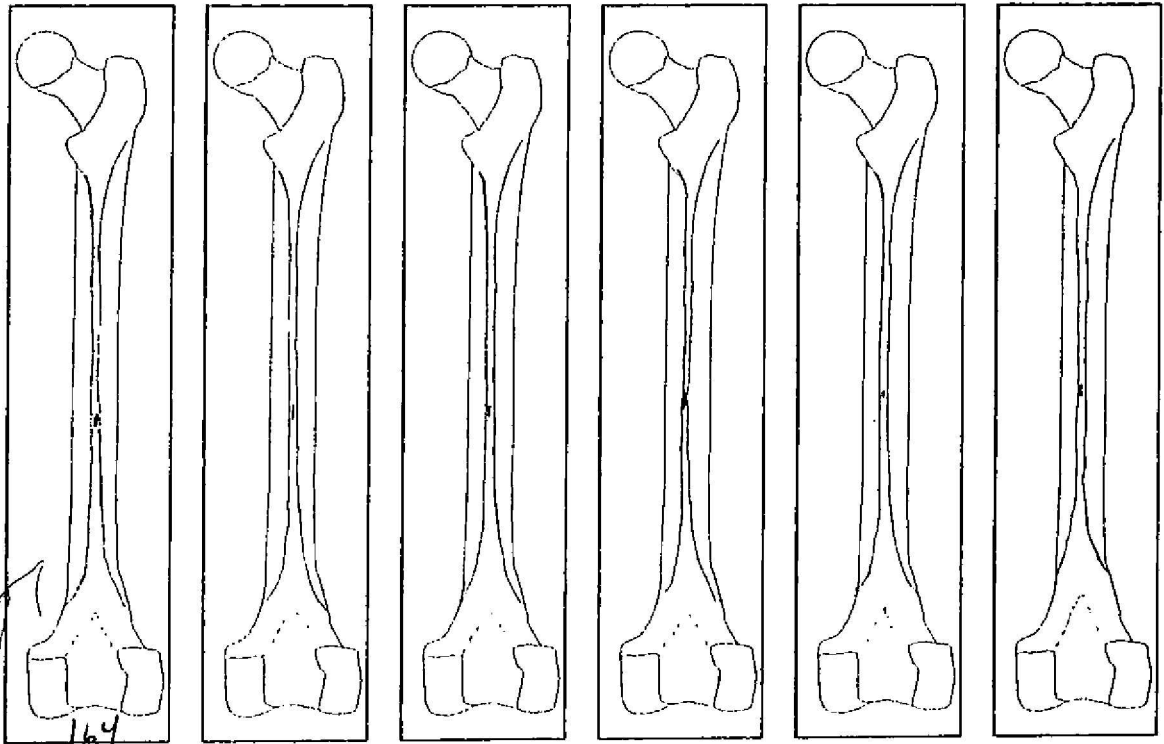
Site: Ward's Island, NYC (Nov. '93) Context

Fovea
Morph.
Double?



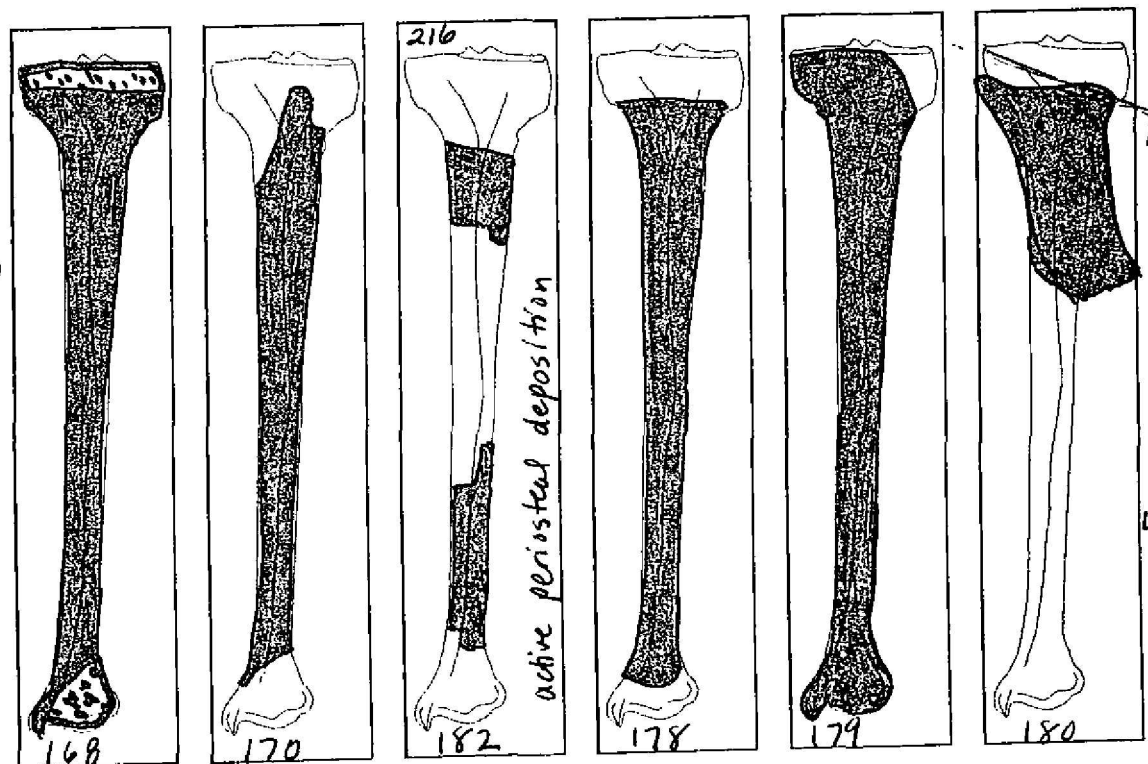
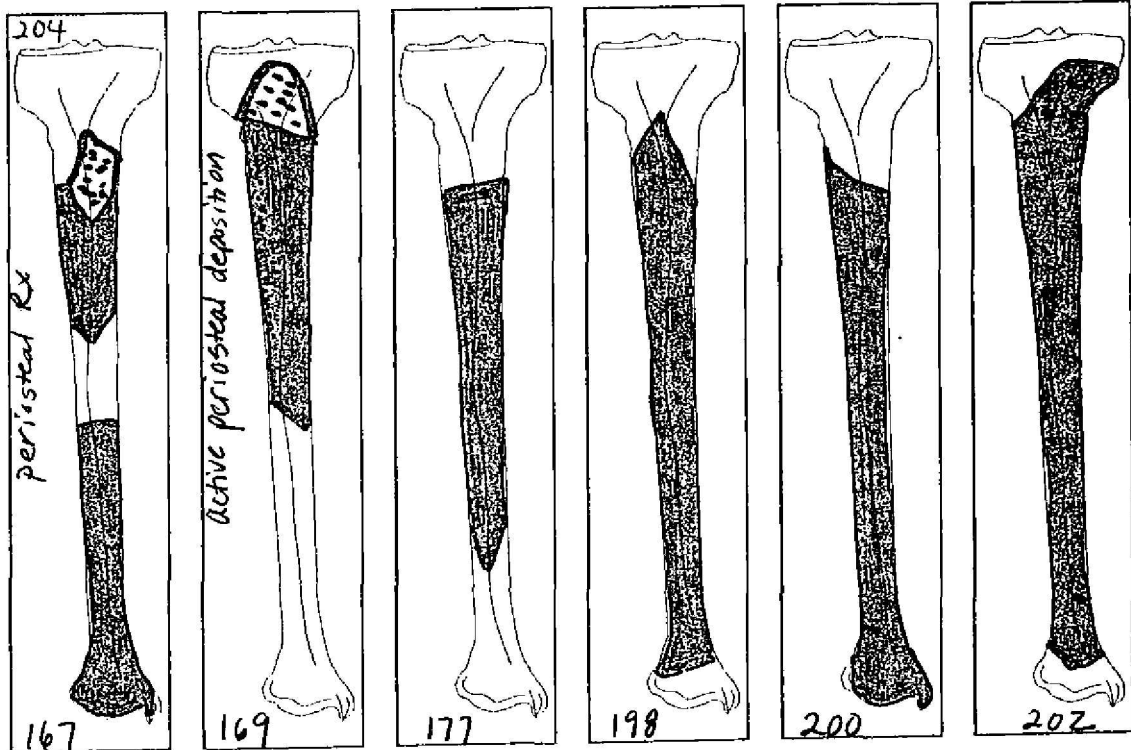


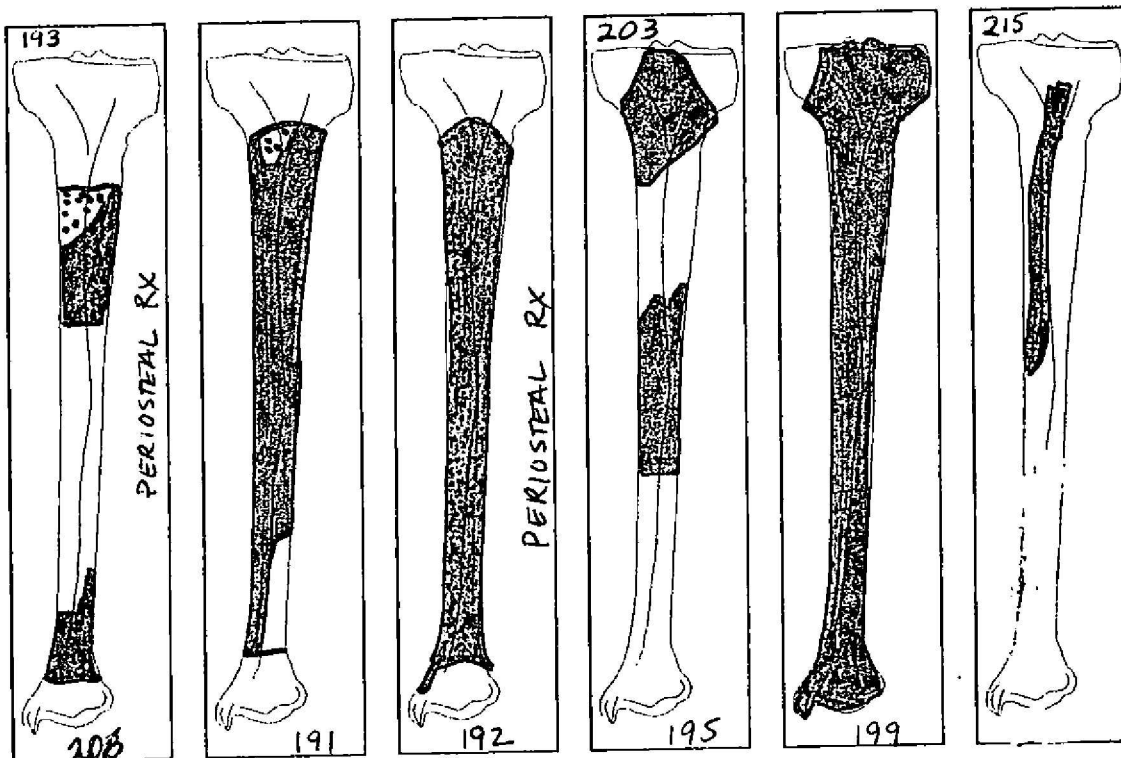
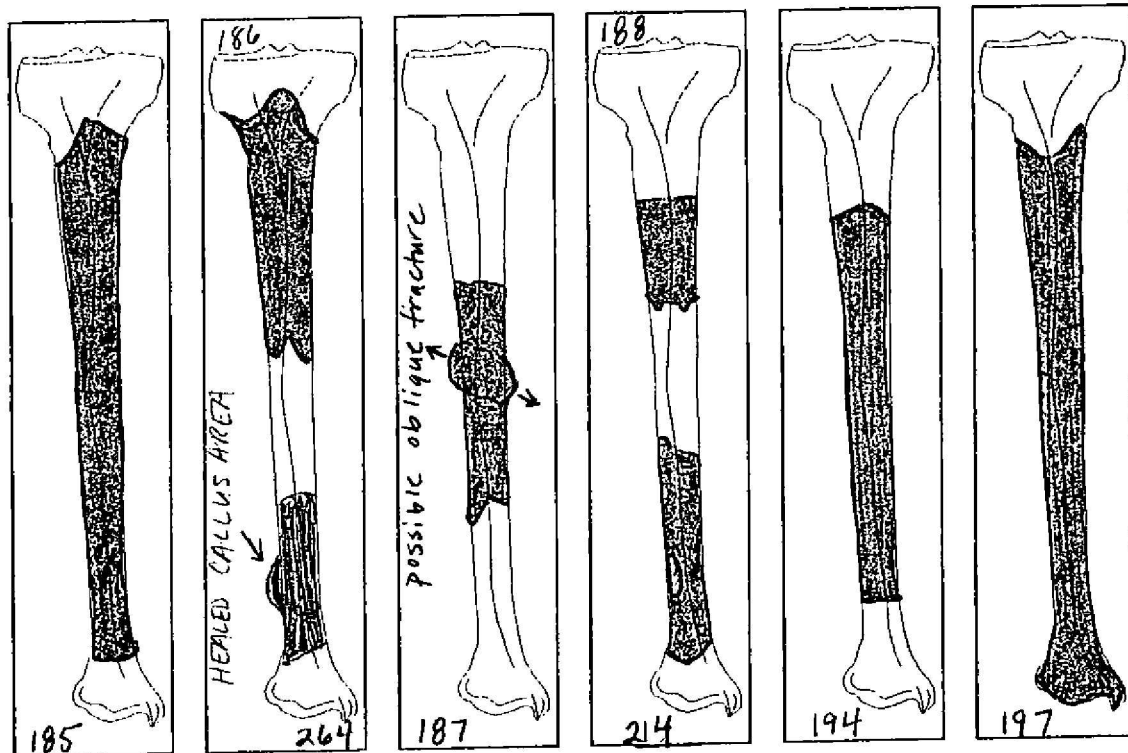
164
A
L



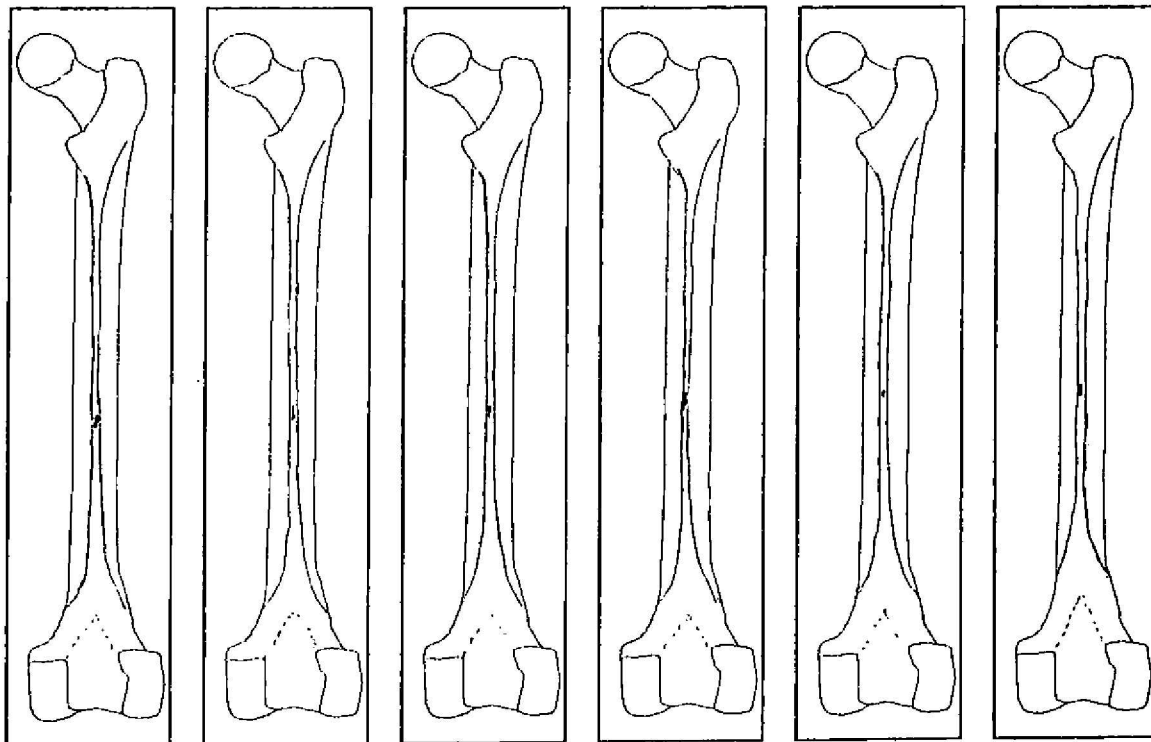
152
162
ANT. VIEW

164 is a Right!





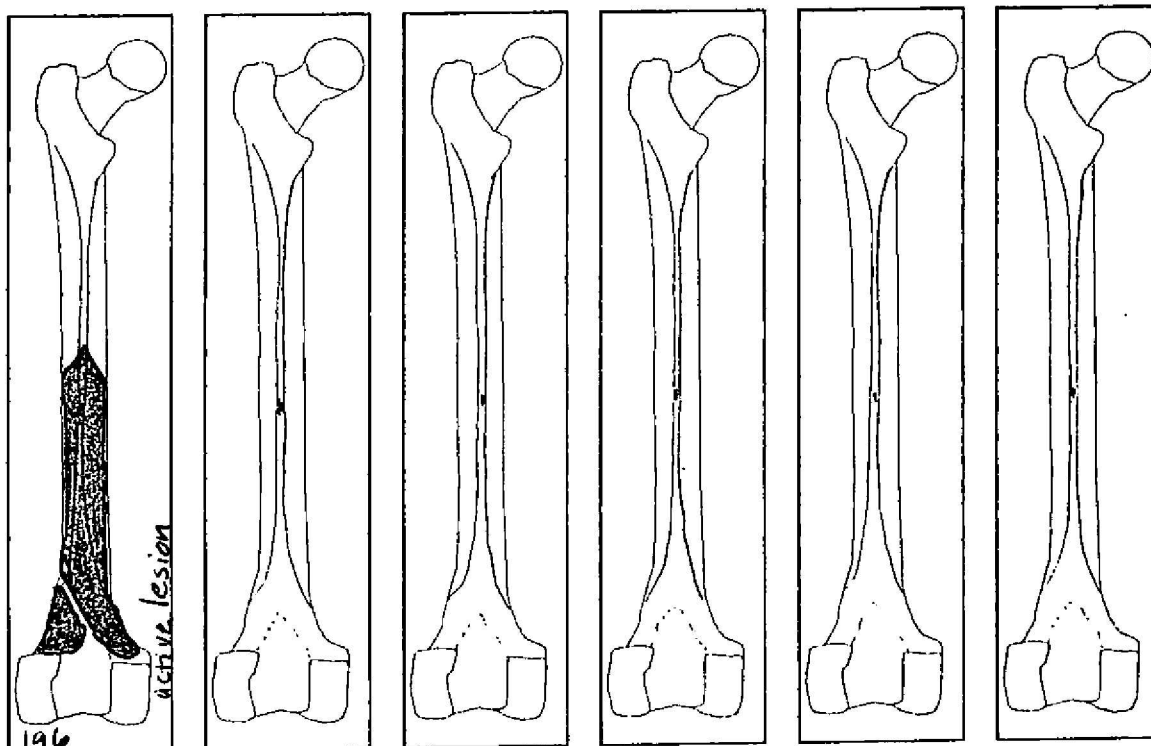
Site: Ward's Island, NYC (Nov. '93) Context _____



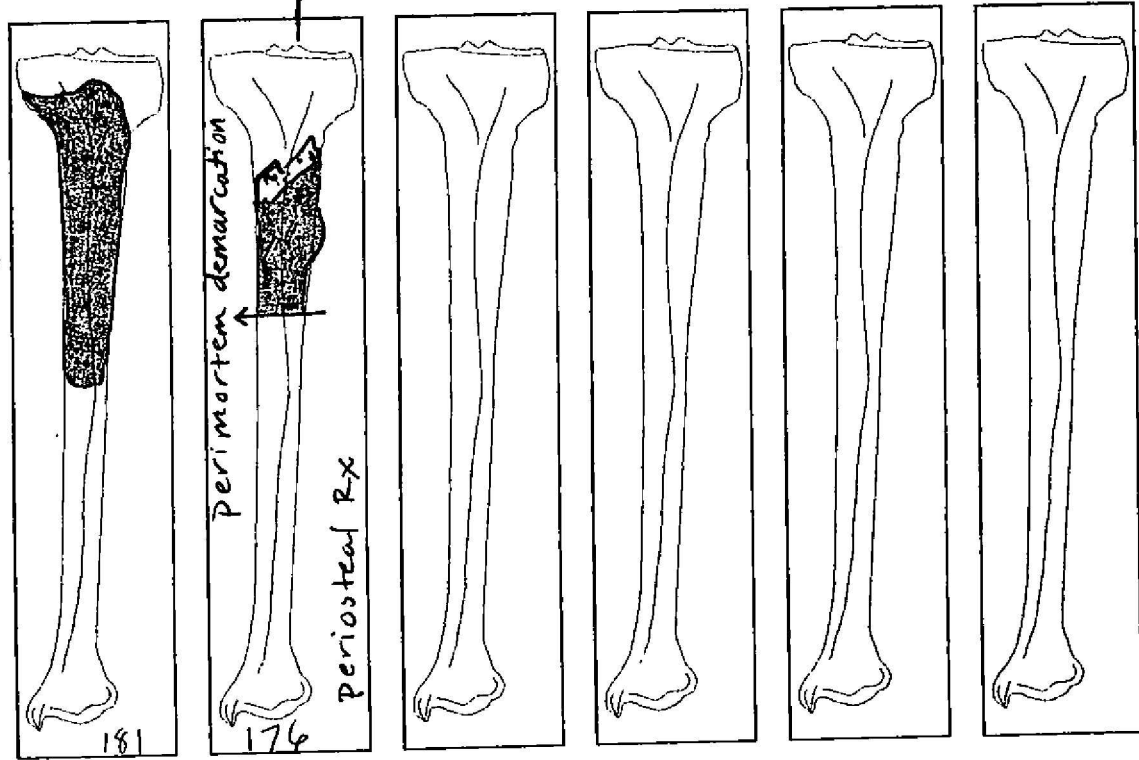
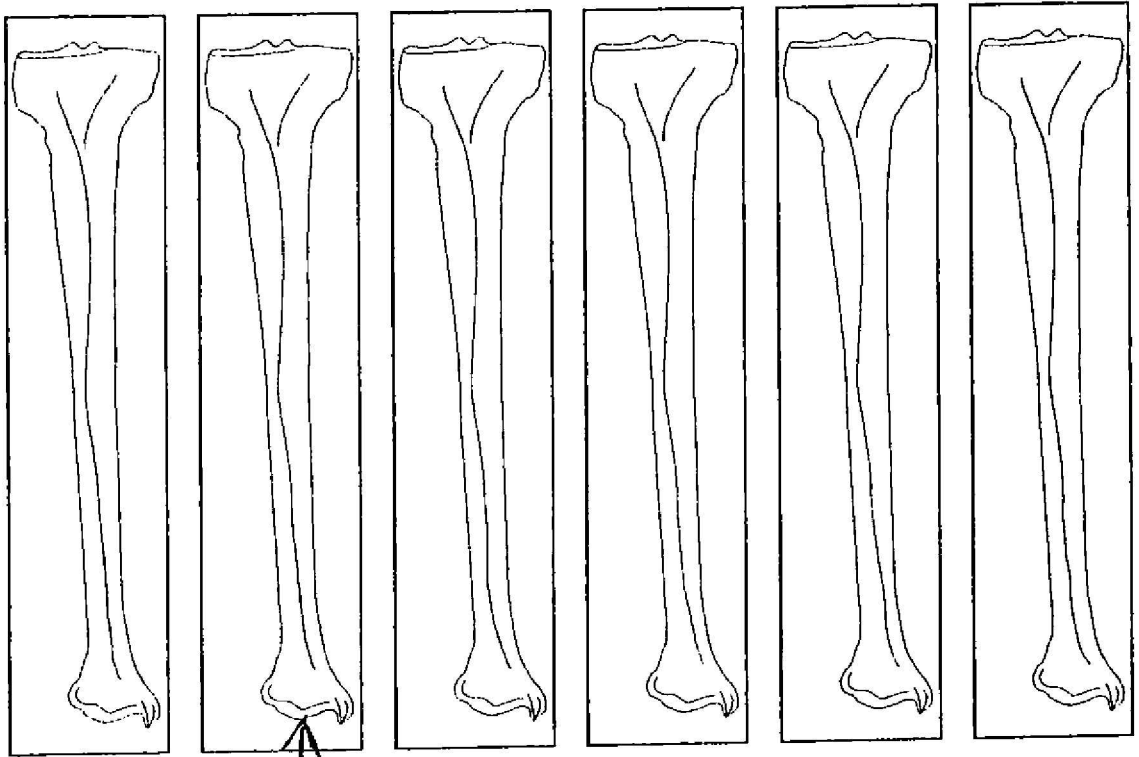
#208



unknown
SIDE
Femoral
diaphysis

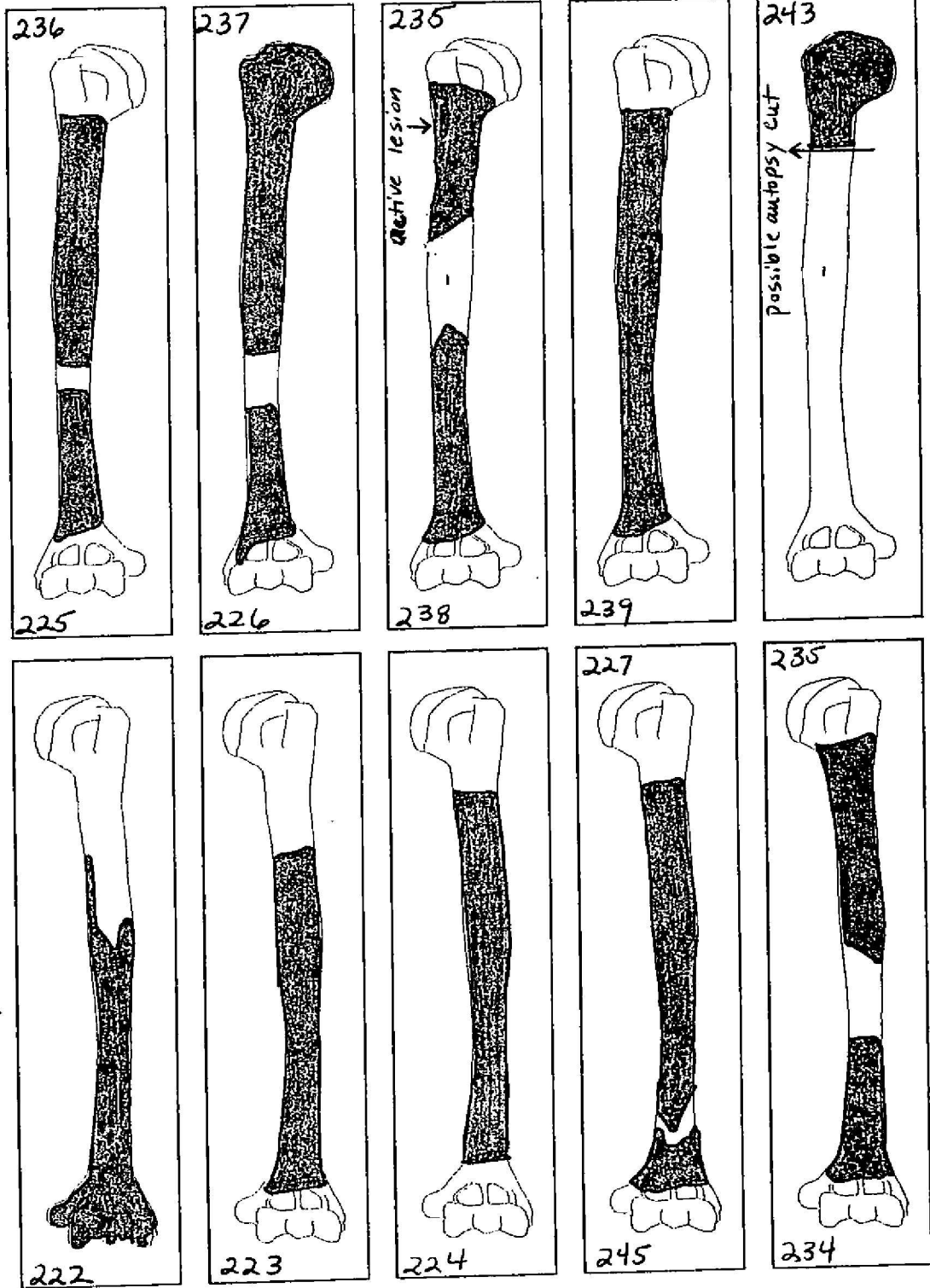


196
(2 matching
fragments)

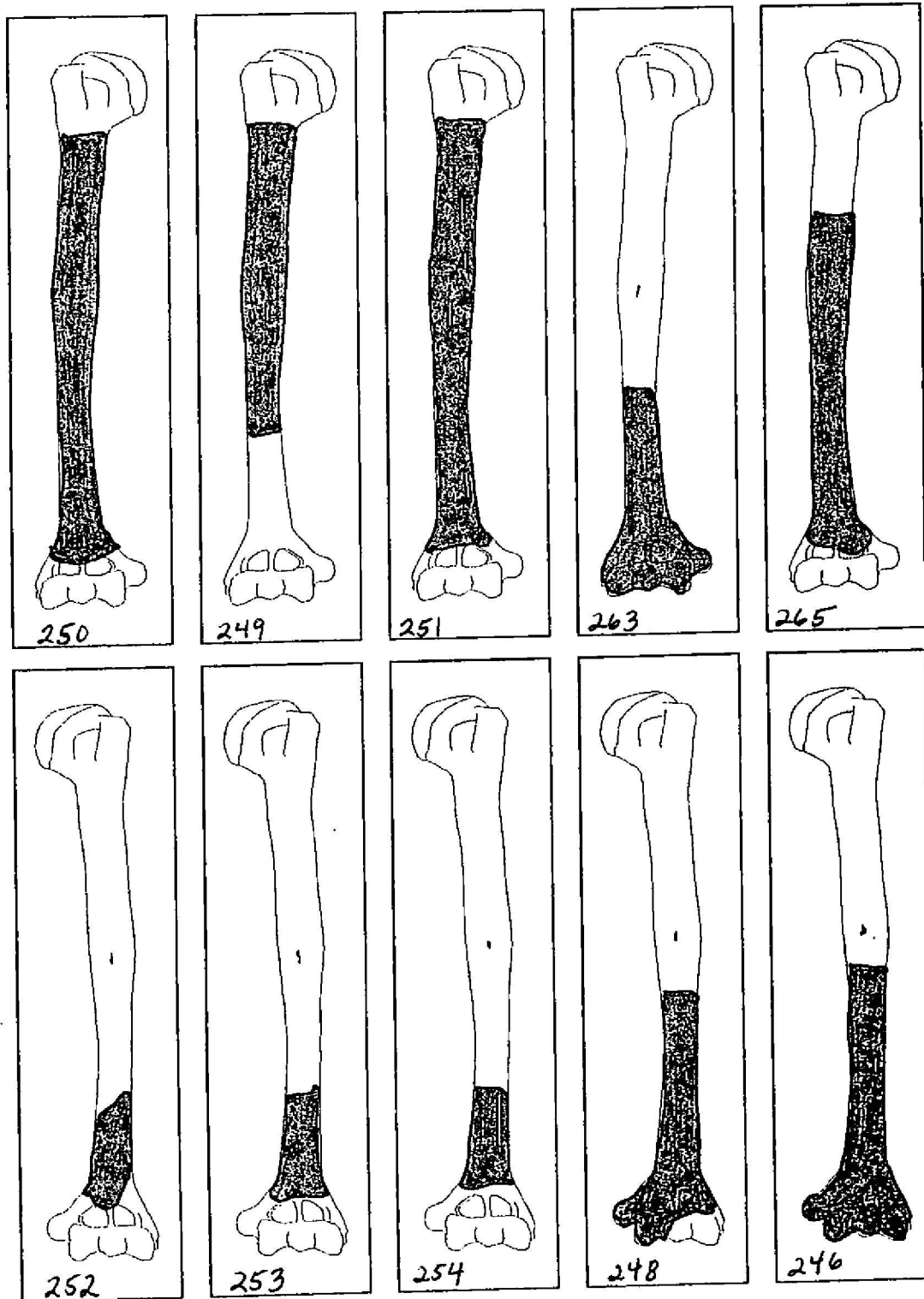


176 is a Right

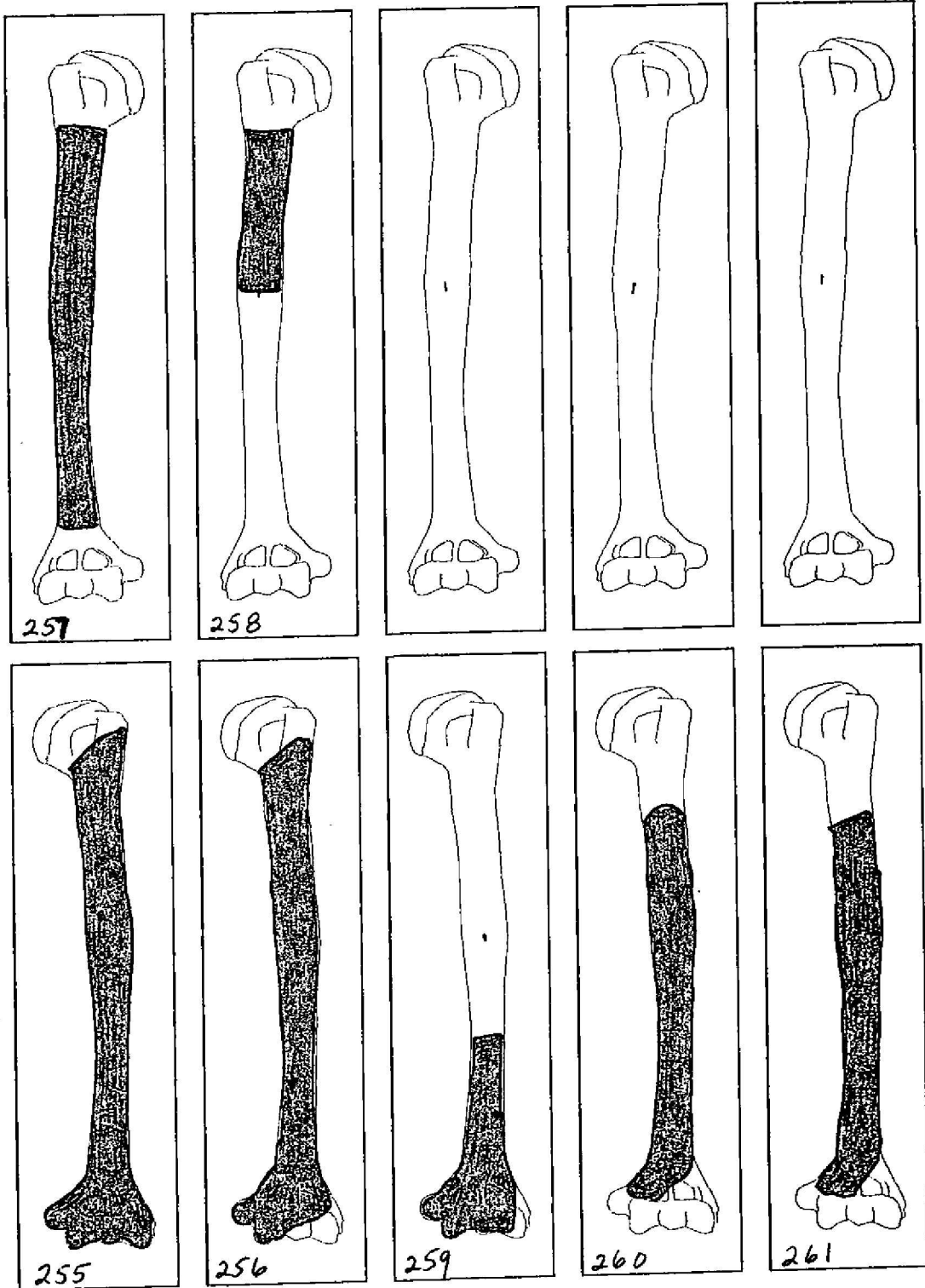
Site: Ward's Island, NYC (Nov. '93) Context _____

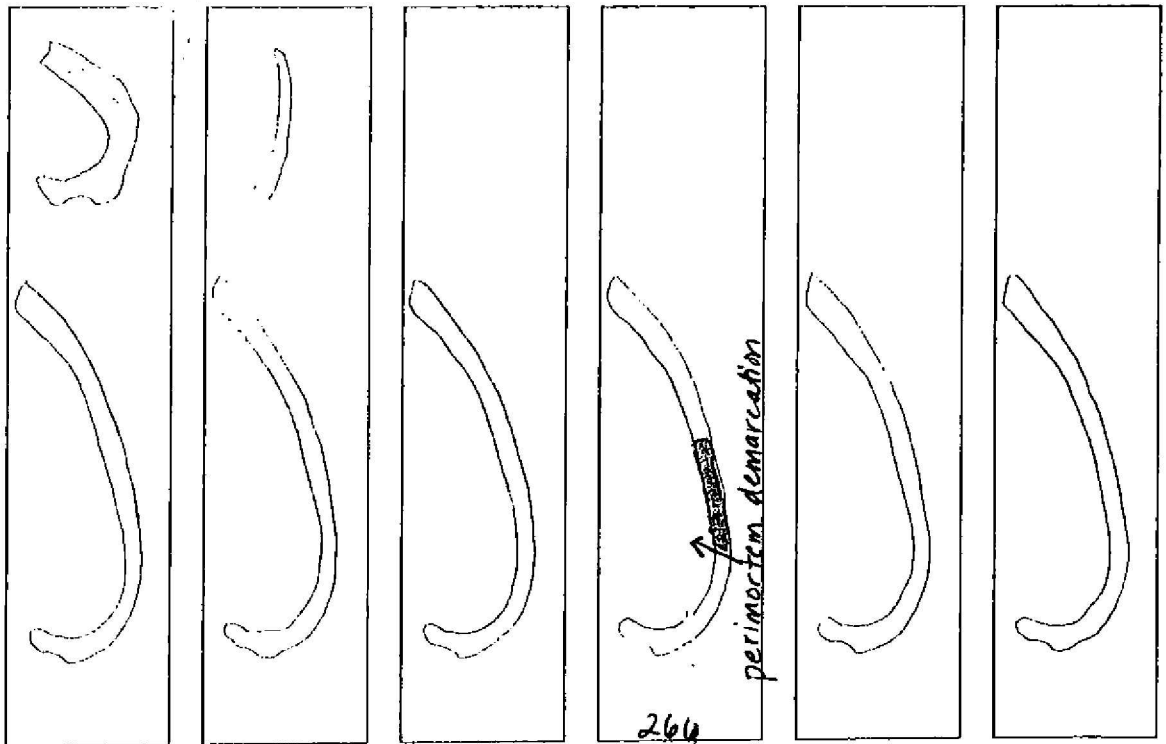


Site: Ward's Island, NYC (Nov. '93) Context _____

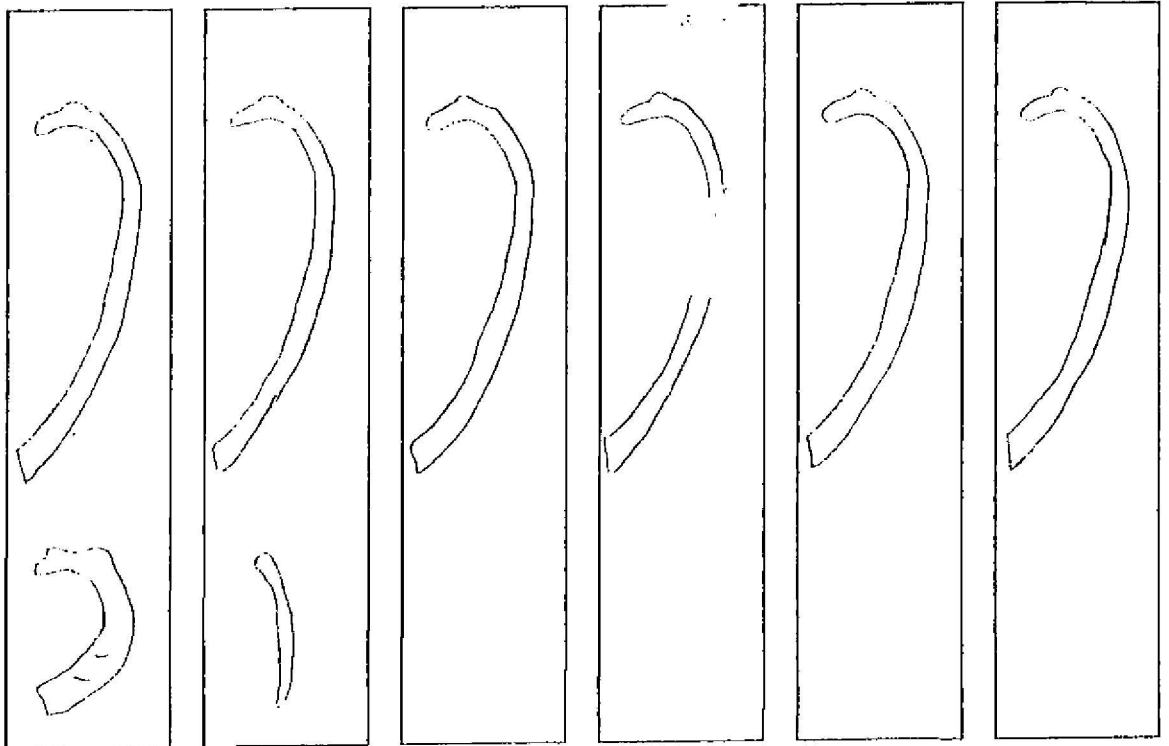


Site: Ward's Island, NYC (Nov. '93) Context _____

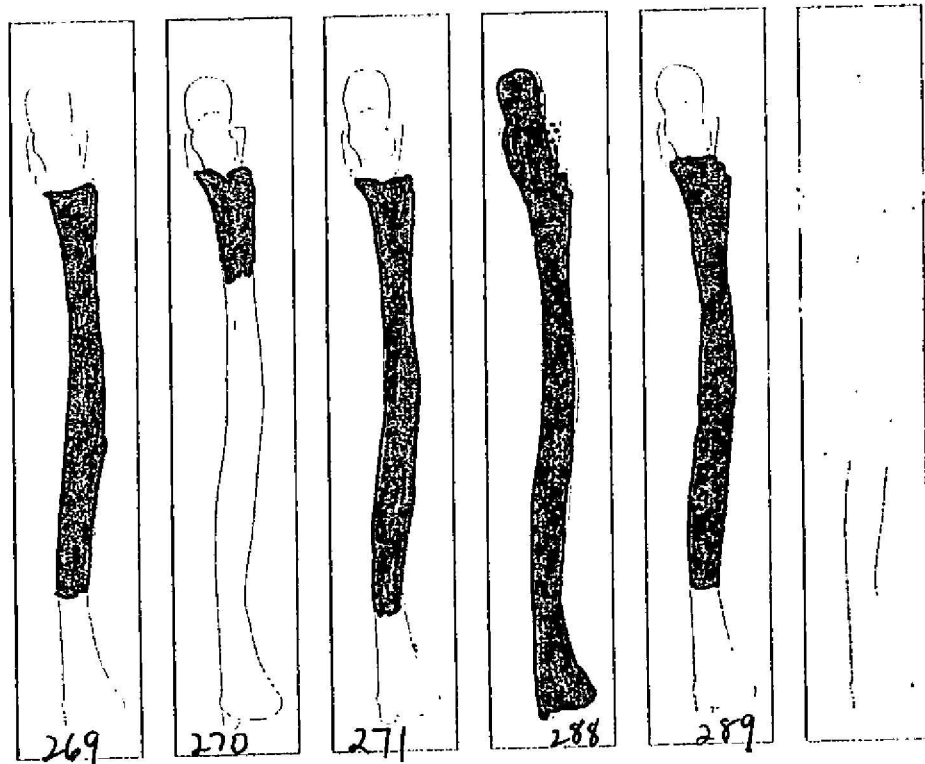
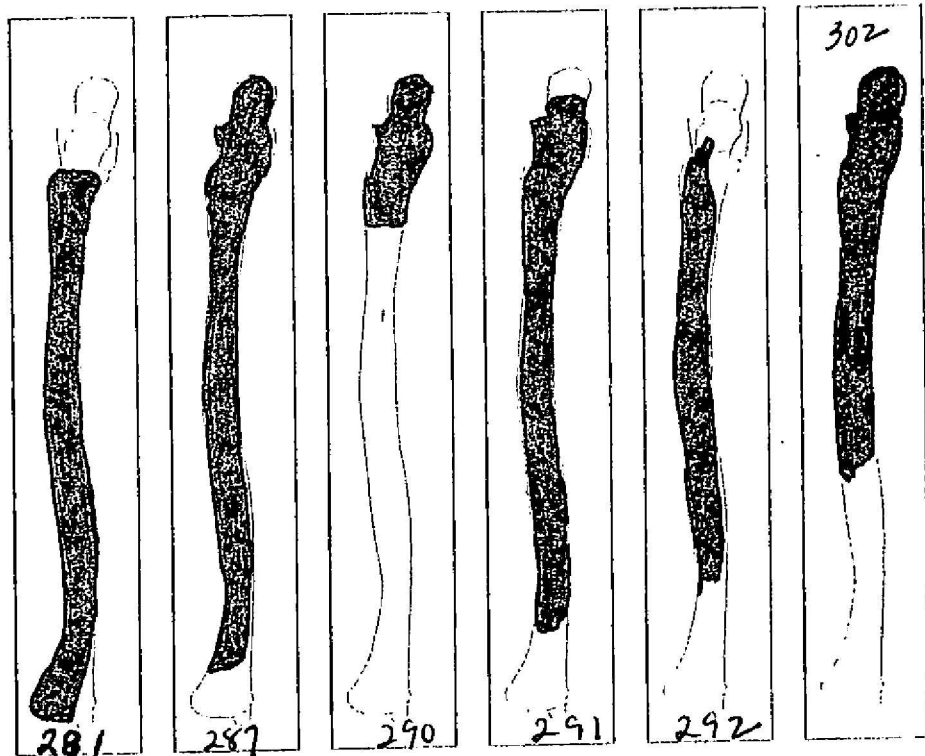




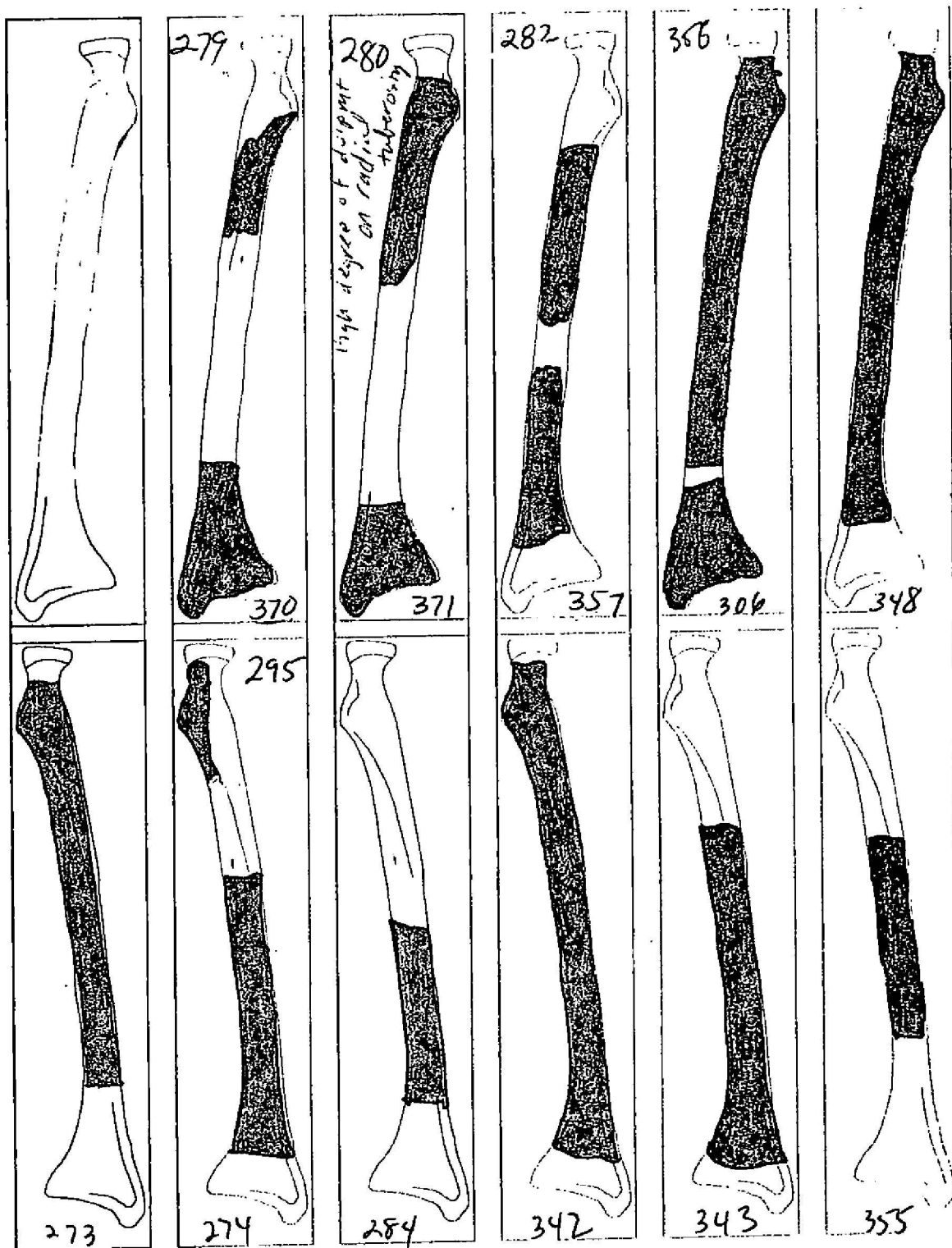
RIGHT RIBS



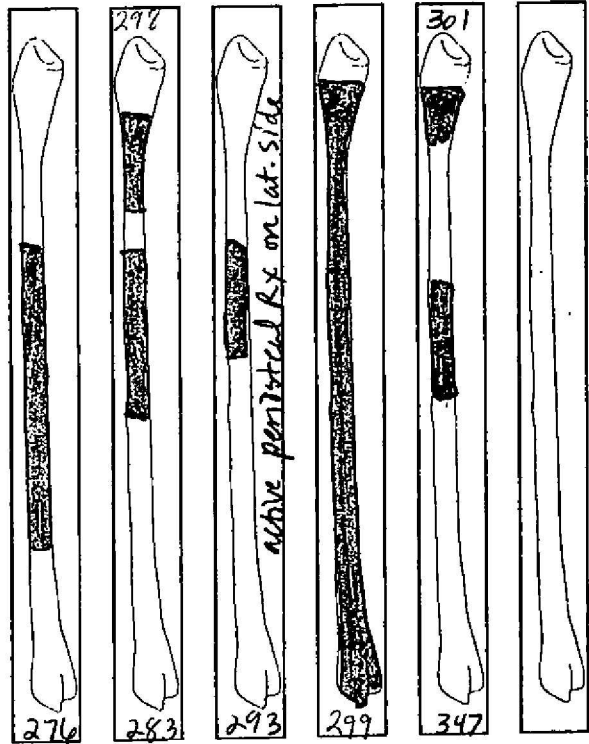
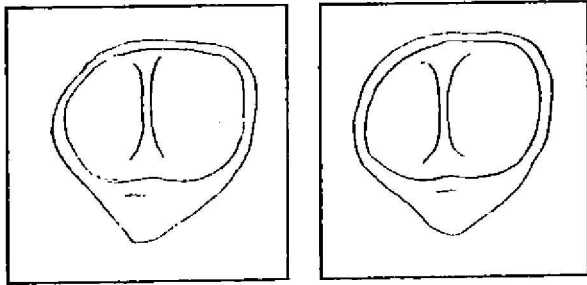
Site: Ward's Island, NYC (Nov. '93) Context: _____



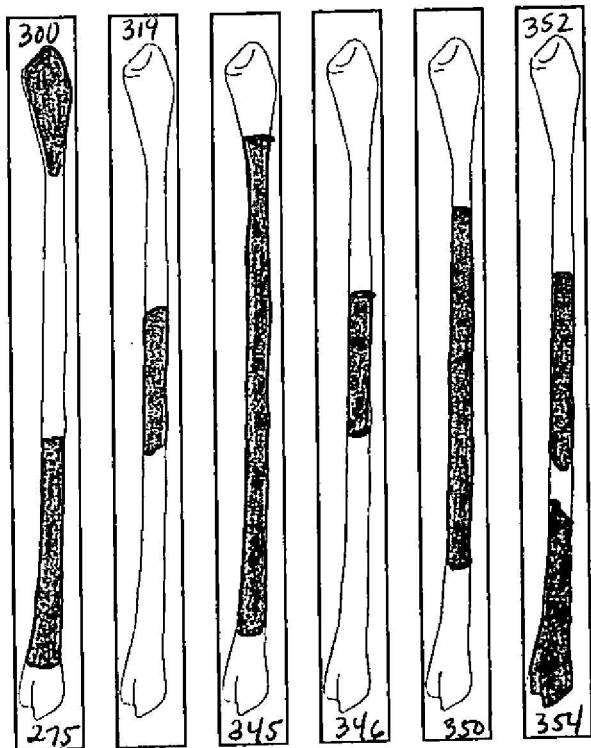
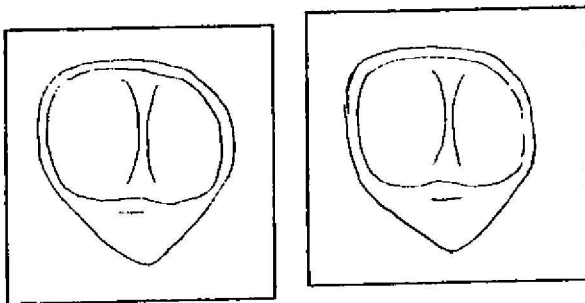
Site: Ward's Island, NYC (Nov. '93) Control



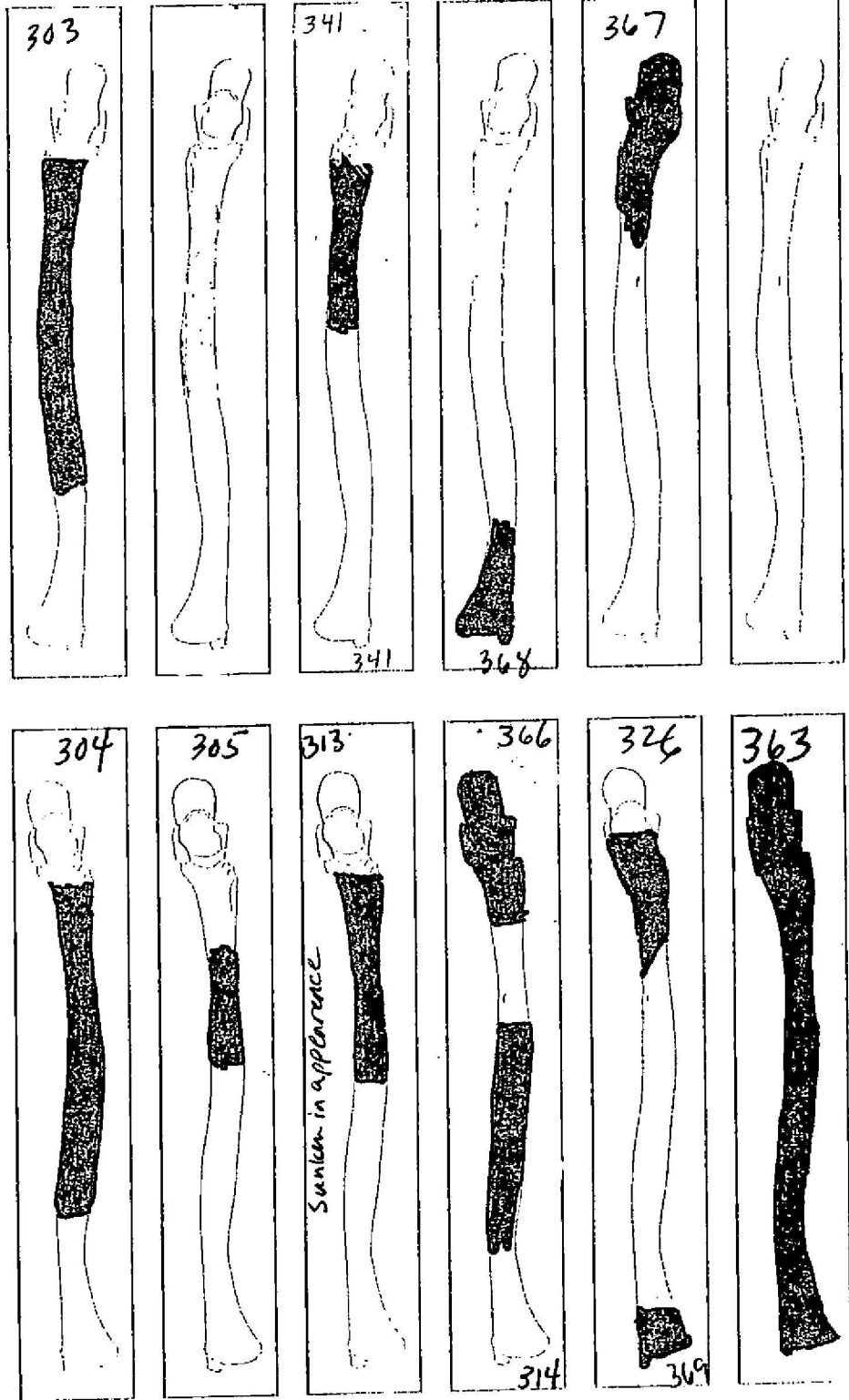
Site: Ward's Island, NYC (Nov. '93) Context _____



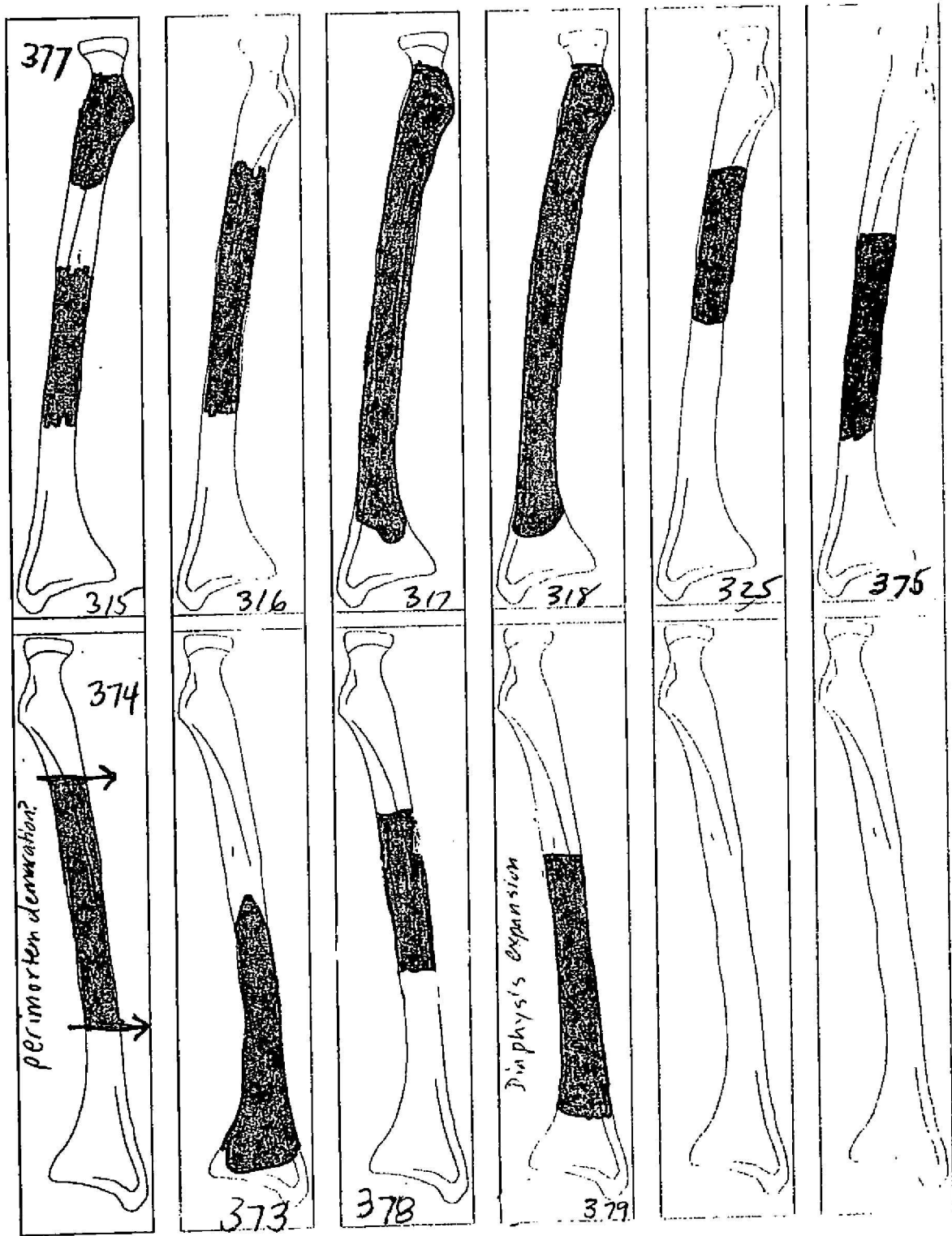
RIGHT SIDE - LAT. VIEW



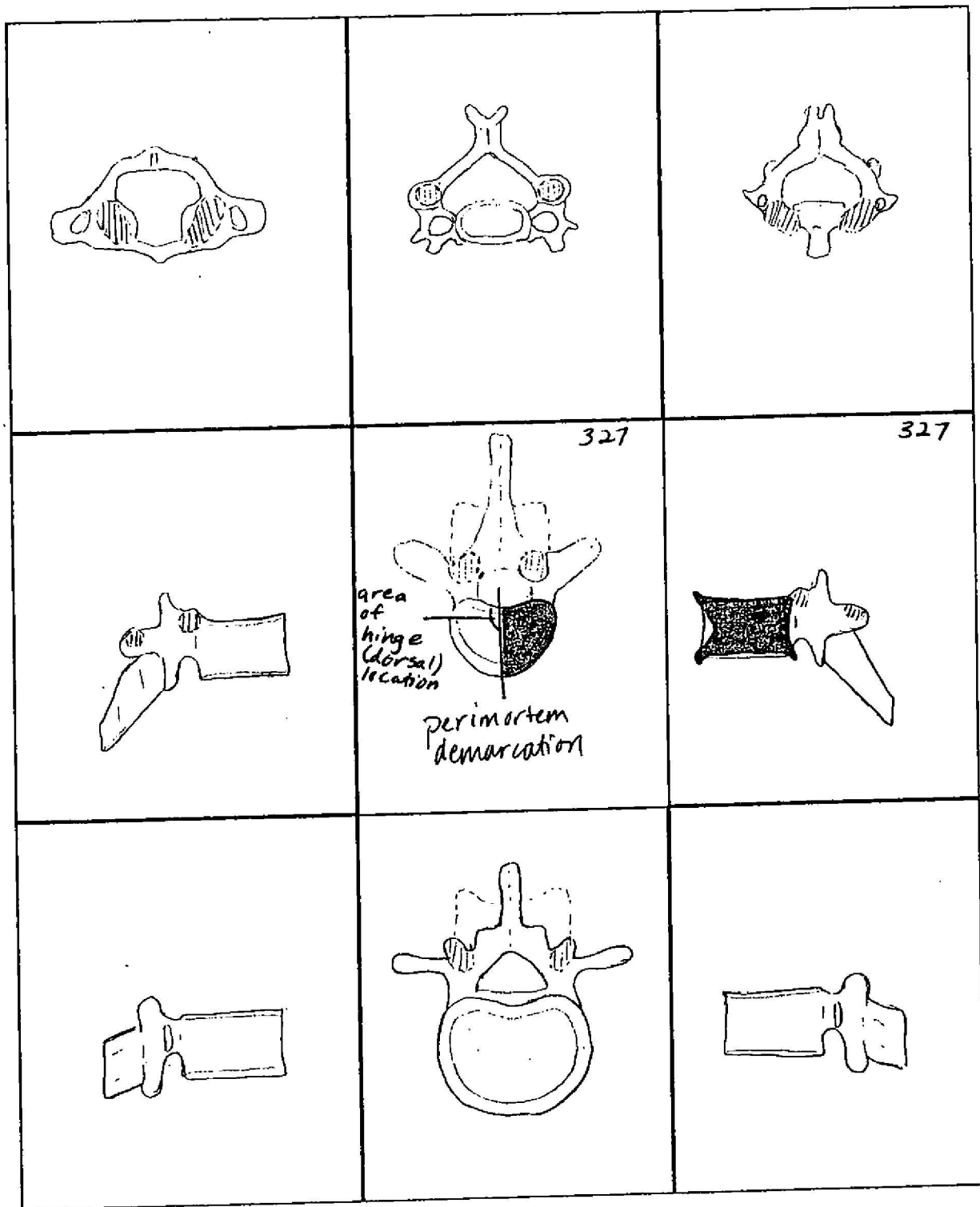
Site: Ward's Island, NYC (Nov. '93) Context: _____



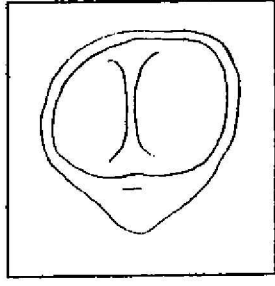
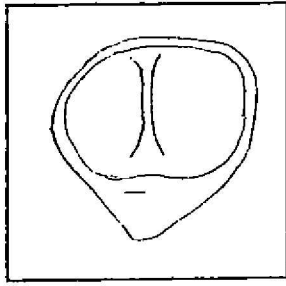
Site: Ward's Island, NYC (Nov. '93) Context: ...



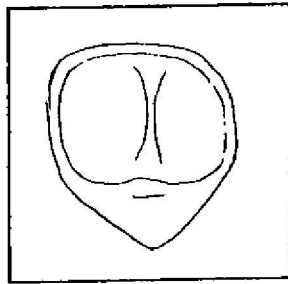
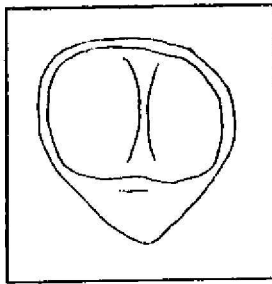
Site: Ward's Island, NYC (Nov. '93) Context _____



Site: Ward's Island, NYC (Nov. '93) Context _____

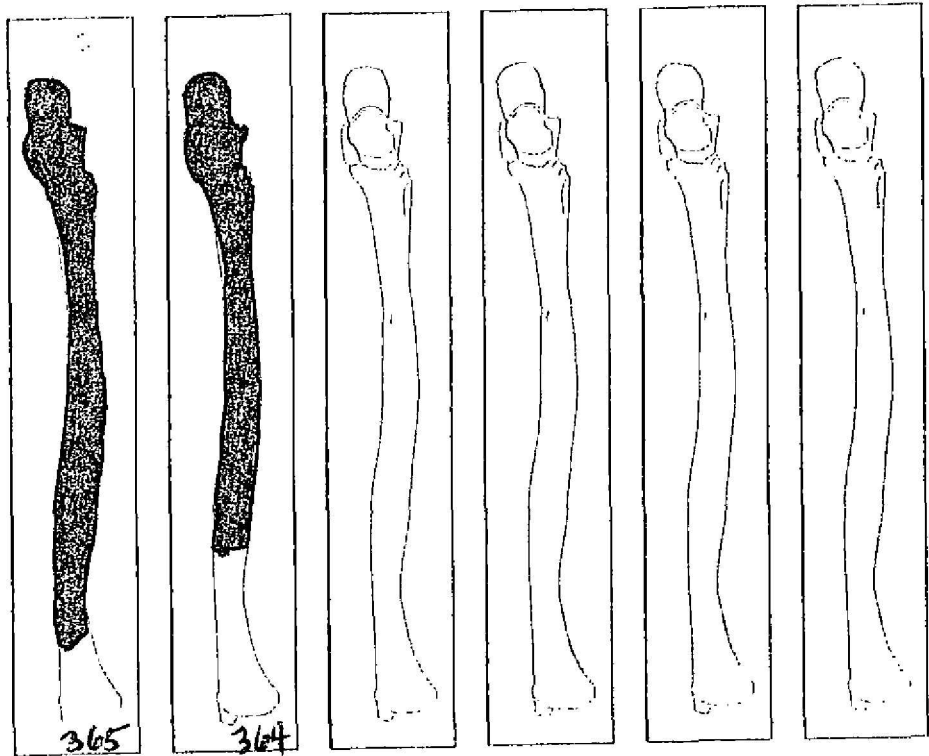
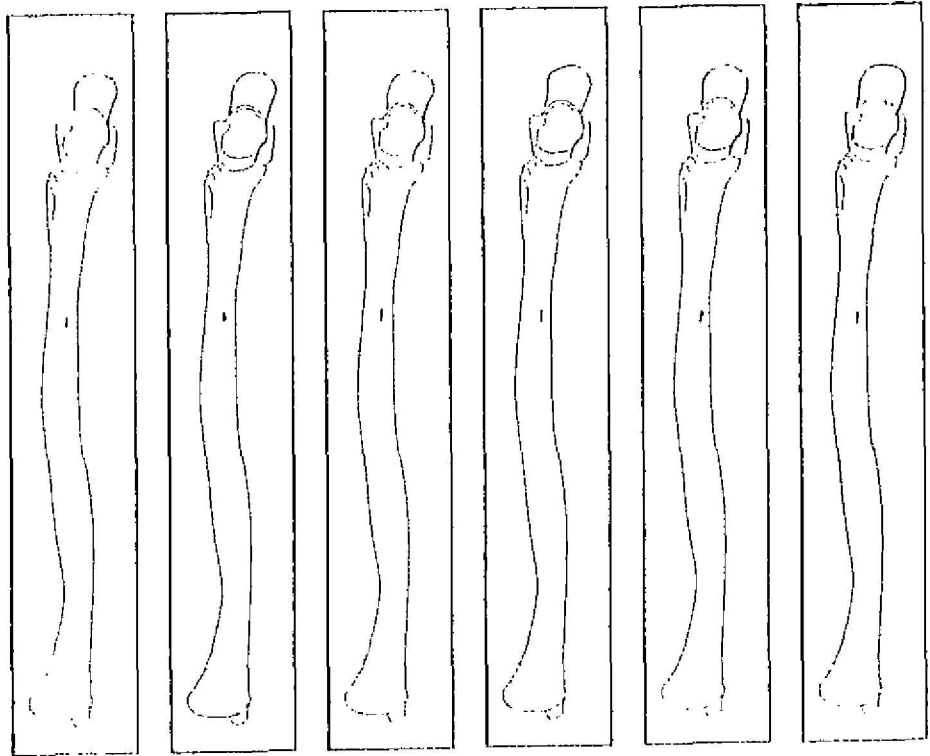


RIGHT SIDE - LAT. VIEW

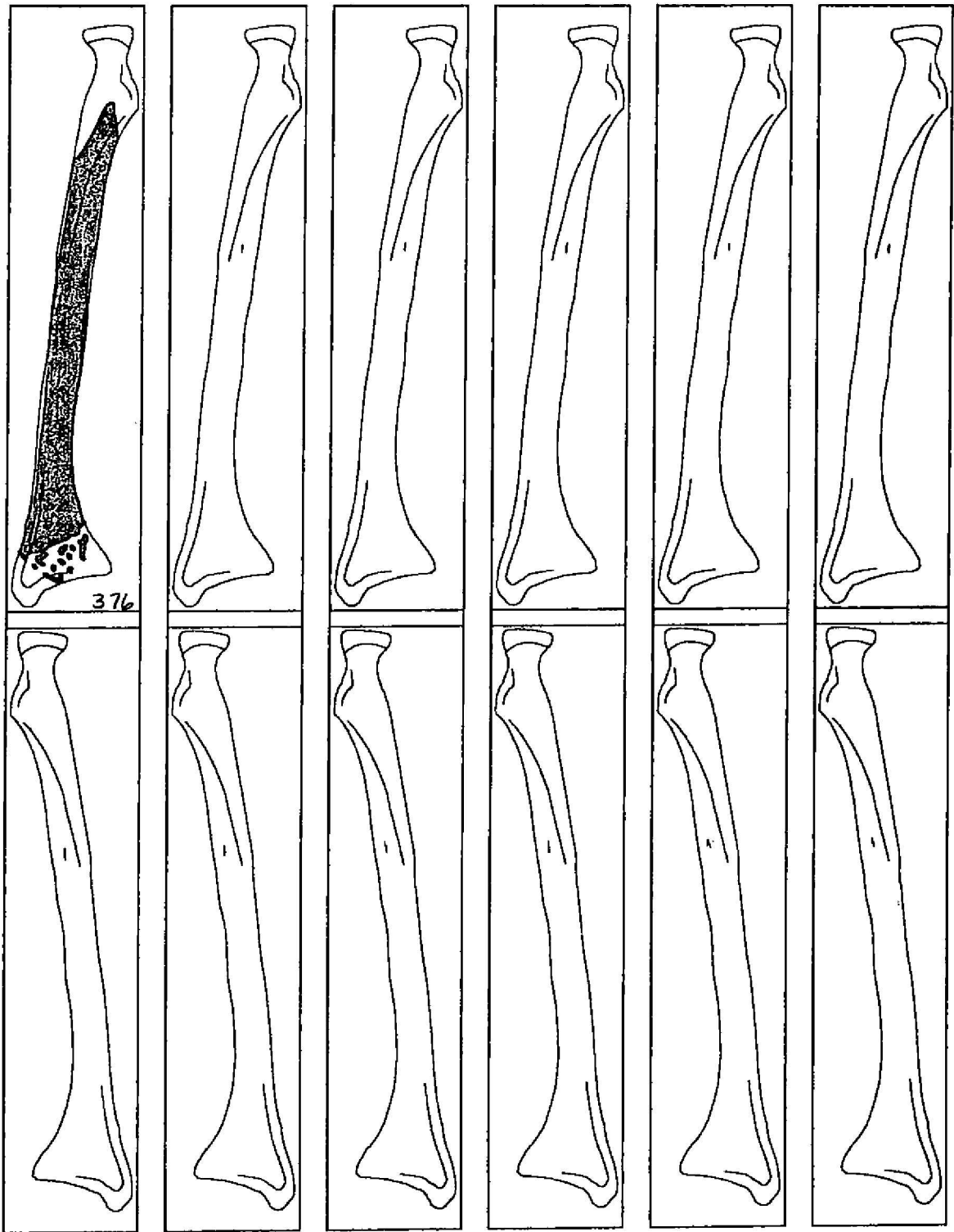


Rough
Callus
Area

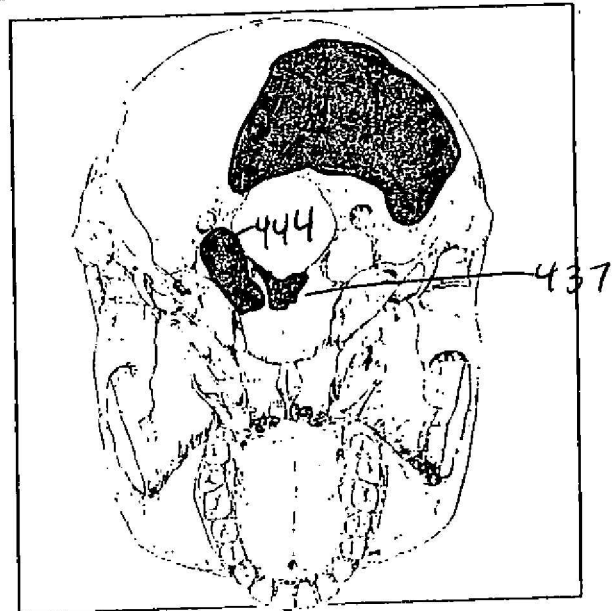
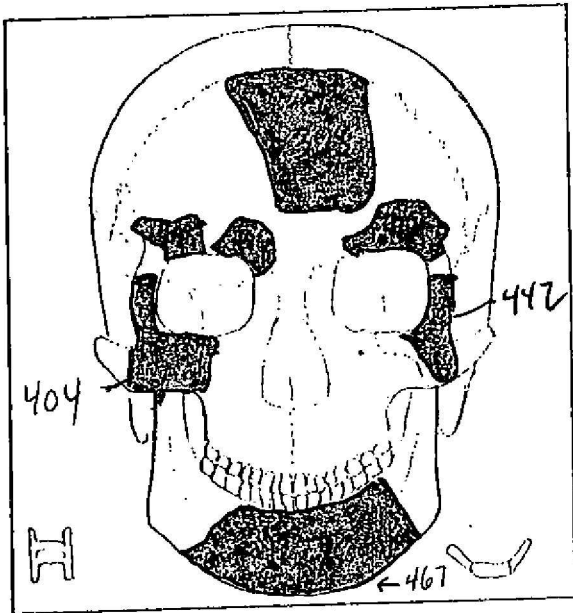
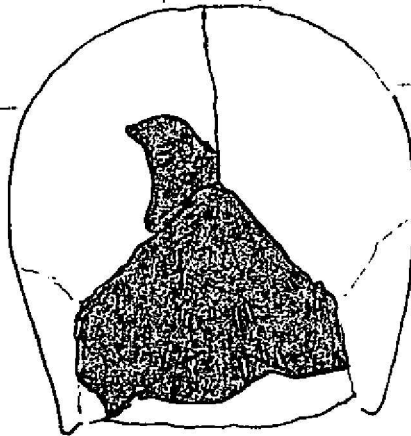
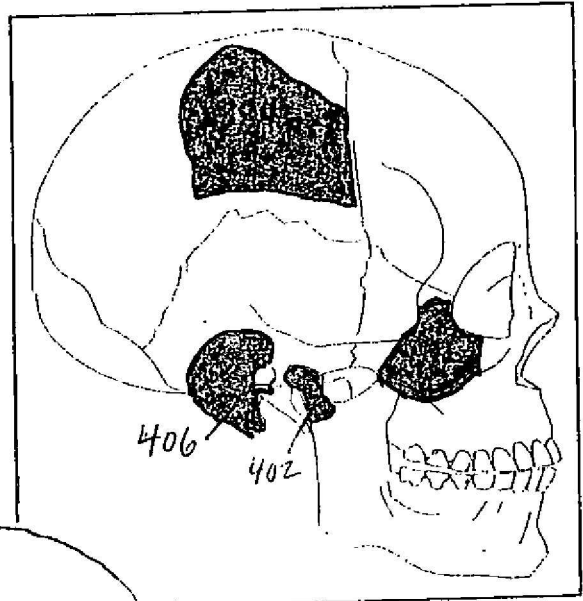
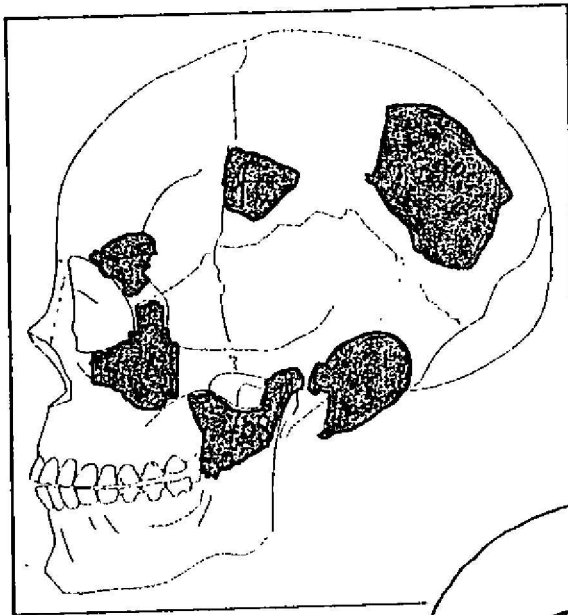
Site: Ward's Island, NYC (Nov. '93) Context _____



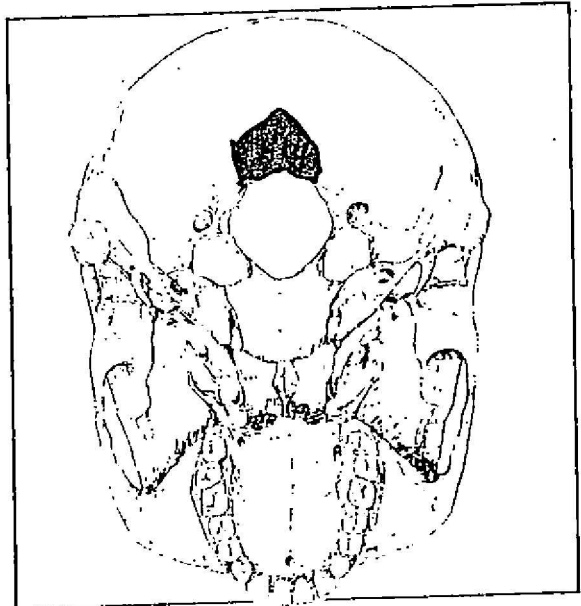
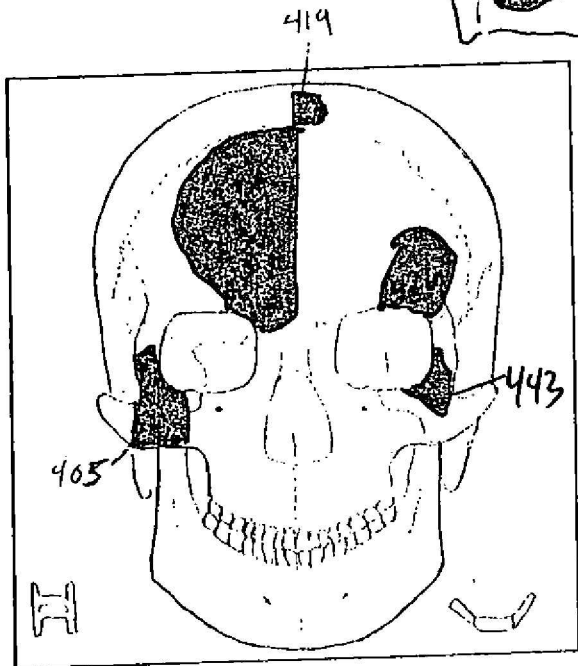
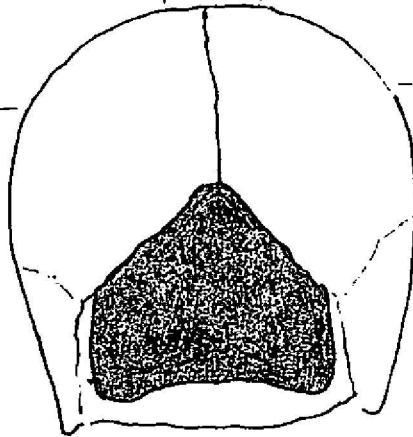
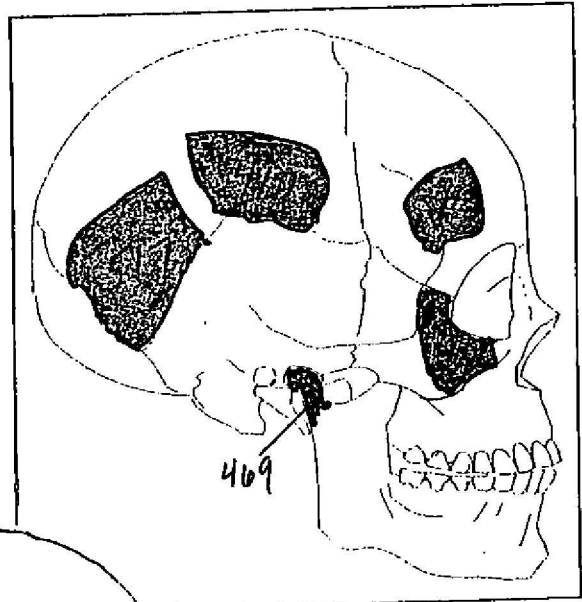
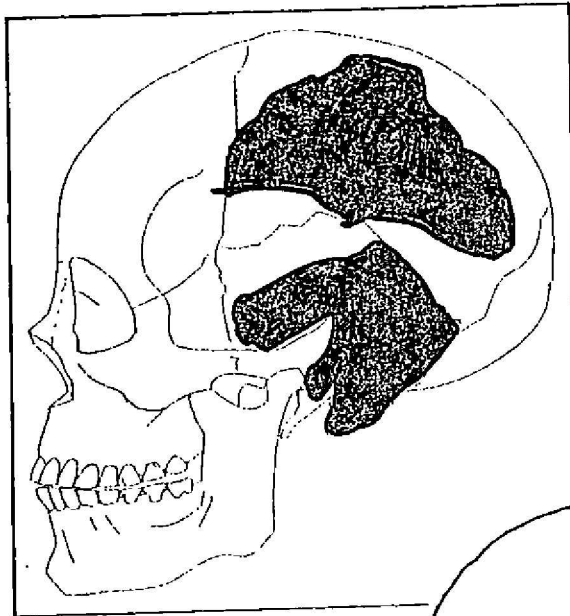
Site: Ward's Island, NYC (Nov. '93) Context _____



Site: Ward's Island, NYC (Nov. '93) Context _____

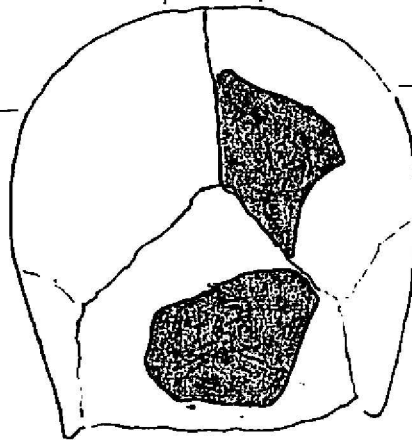
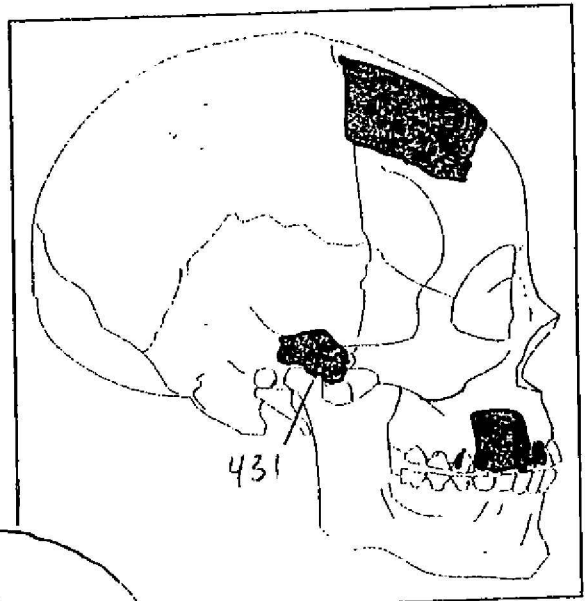
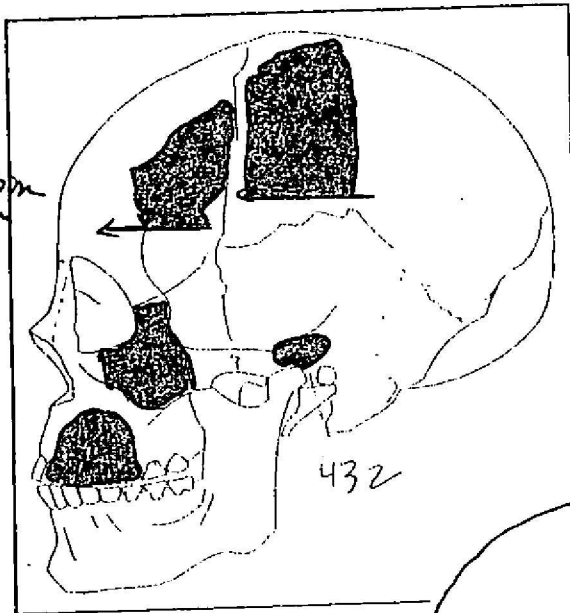


Site: Ward's Island, NYC (Nov. '93) Context _____

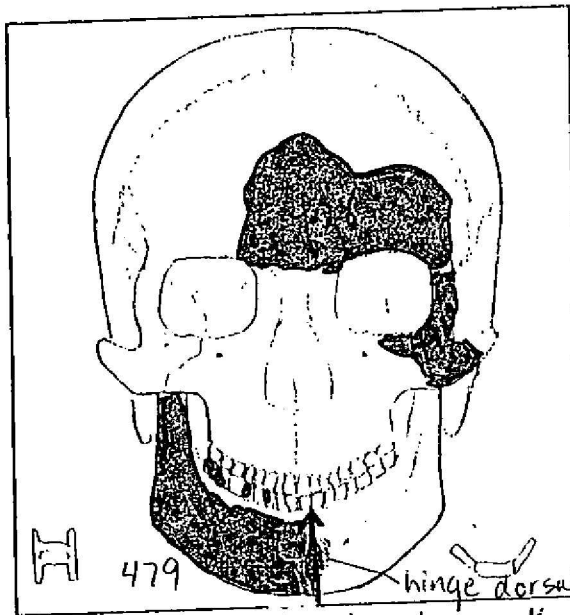


Site: Ward's Island, NYC (Nov. '93) Context _____

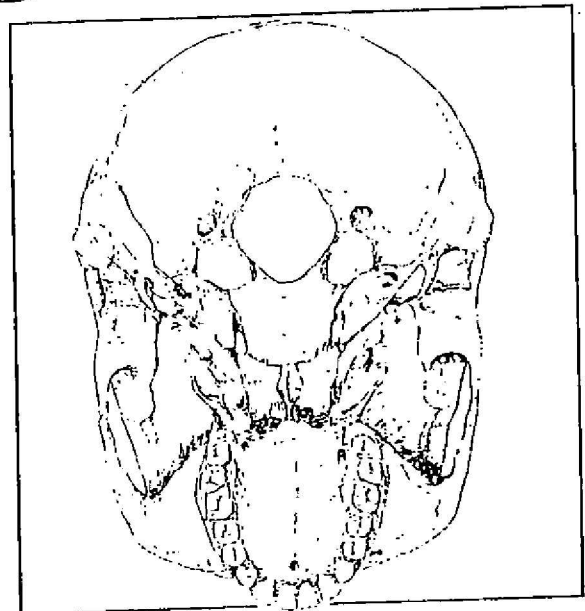
482-3
demarcation
perimortem



480-481
probably are
same individual
given dental
morphology,
attrition etc.

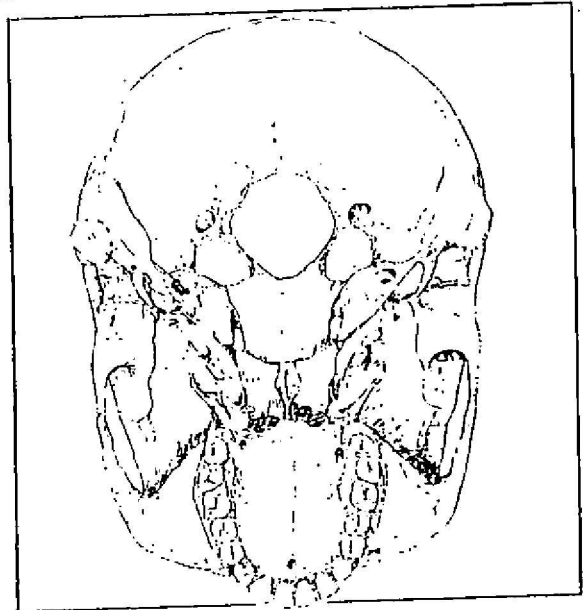
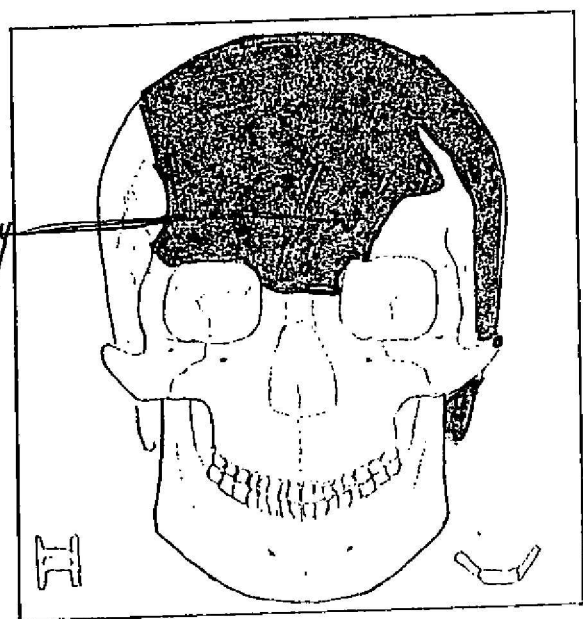
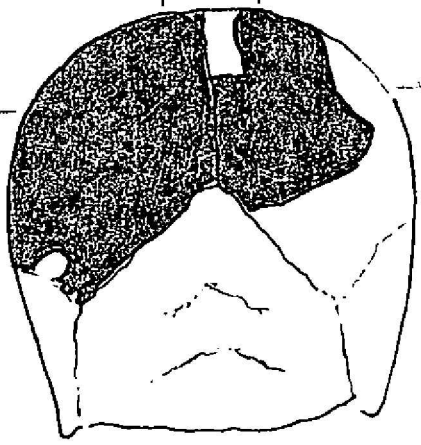
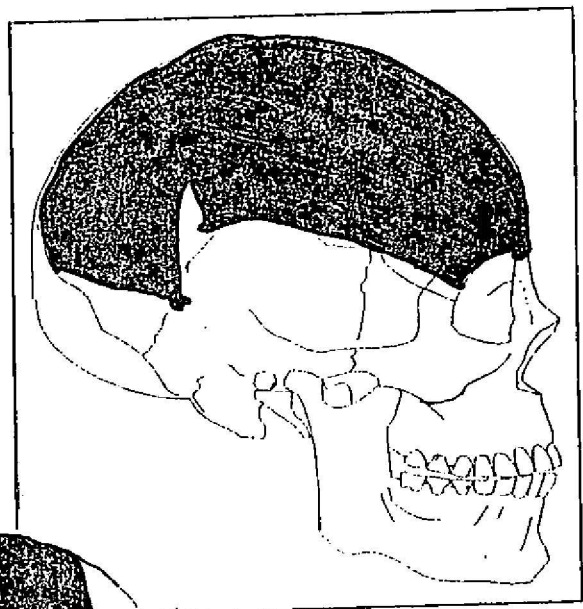
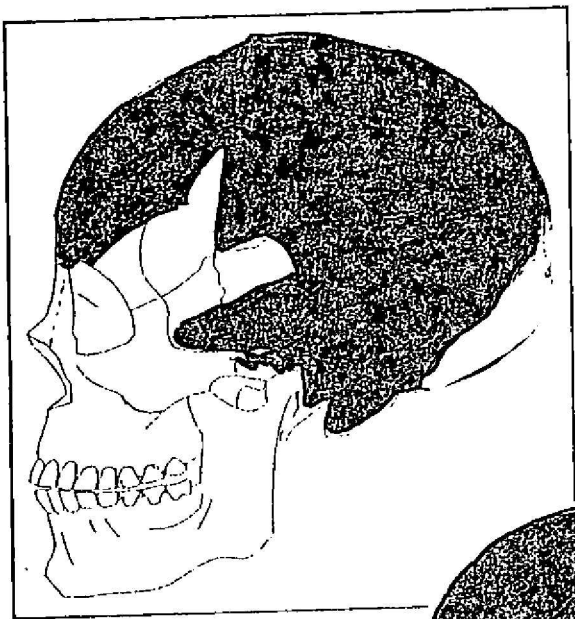


hinge dorsal
perimortem demarcation
(saw) between LII-2



BN#436

Site: Ward's Island, NYC (Nov. '93) Context: _____

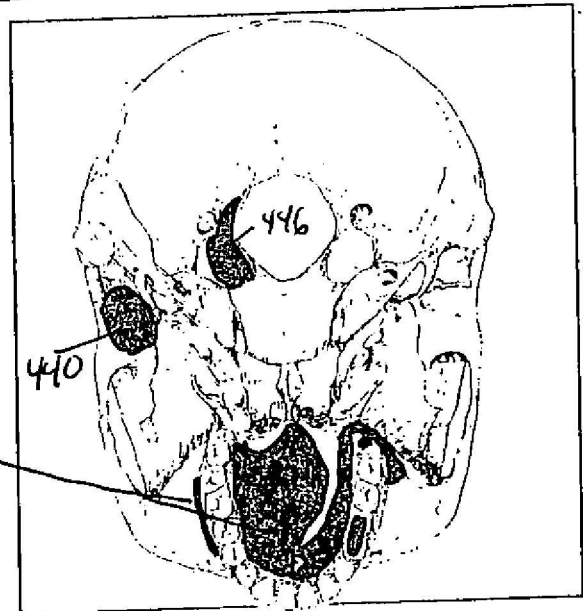
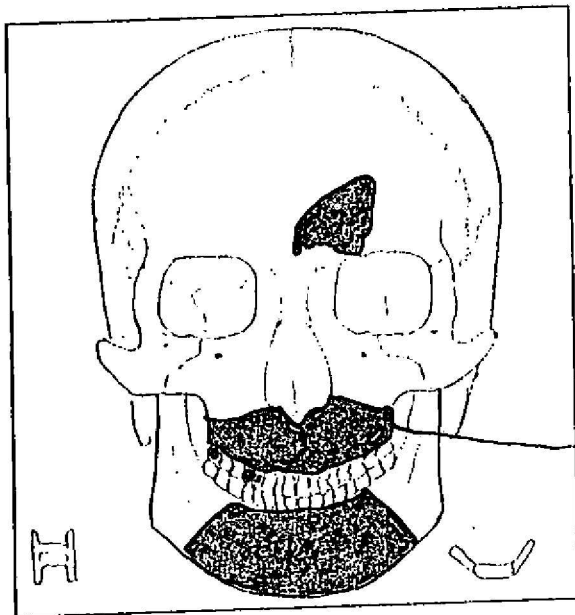
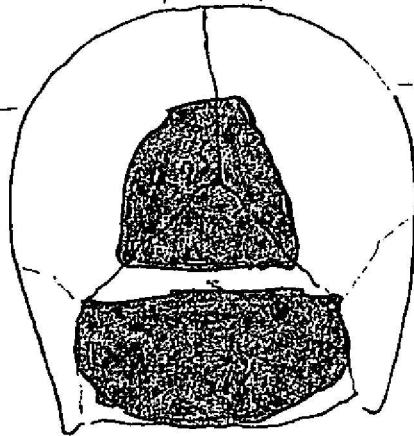
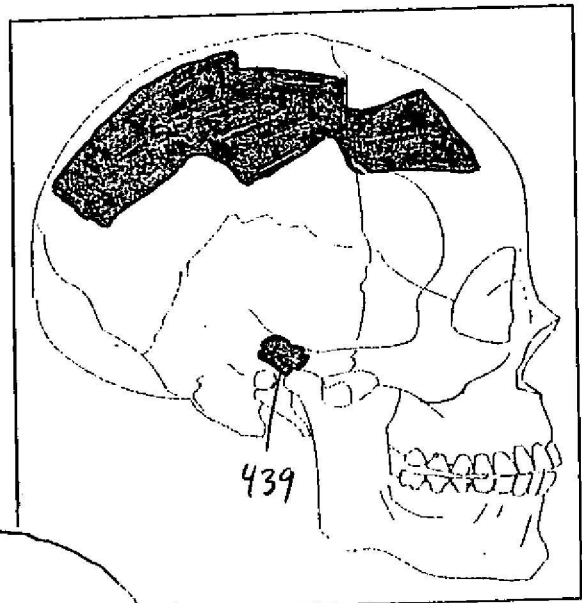
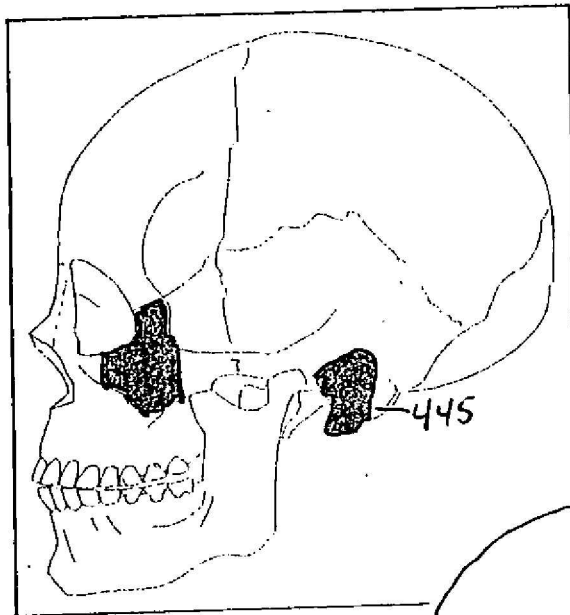


INTERIOR
PATHOLOGY
stellate
scar
healed

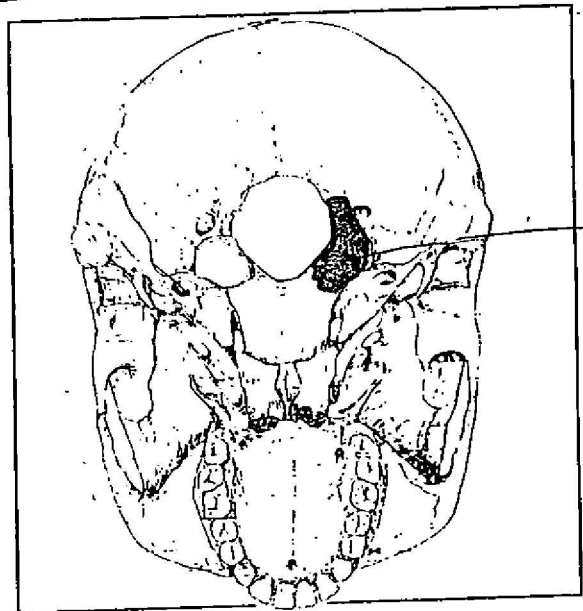
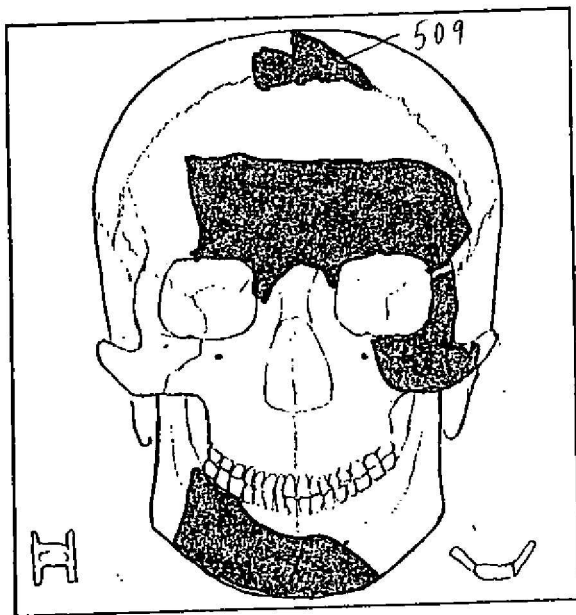
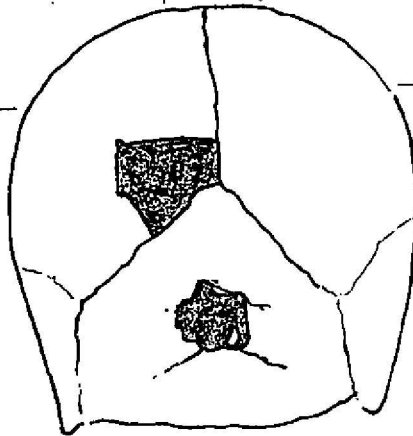
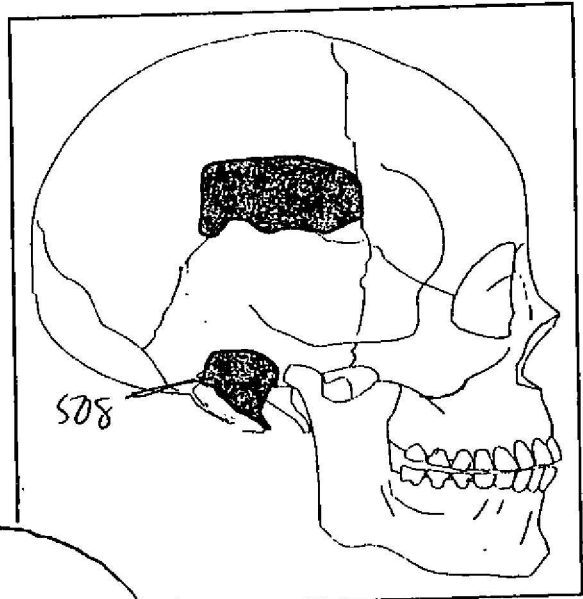
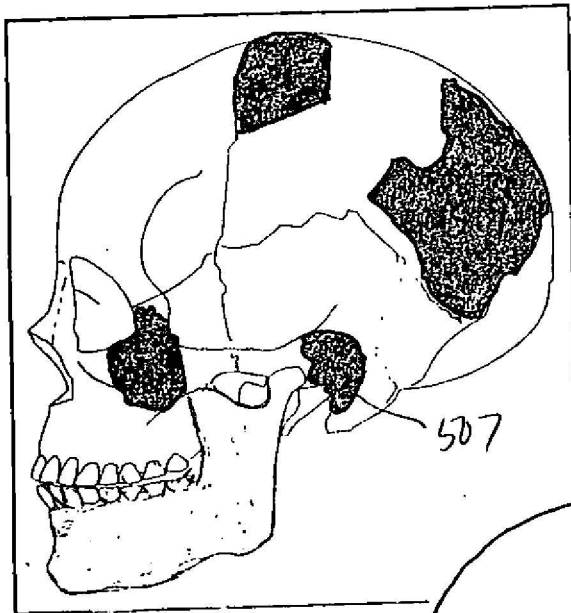
small
foramen
+ surrounding
deposition

actual size

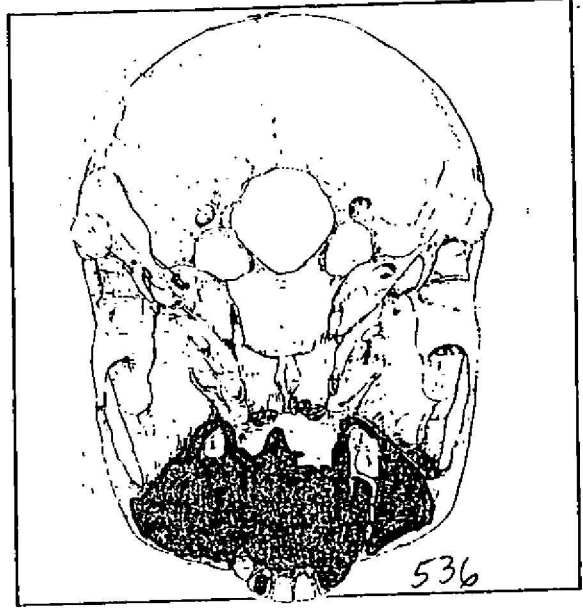
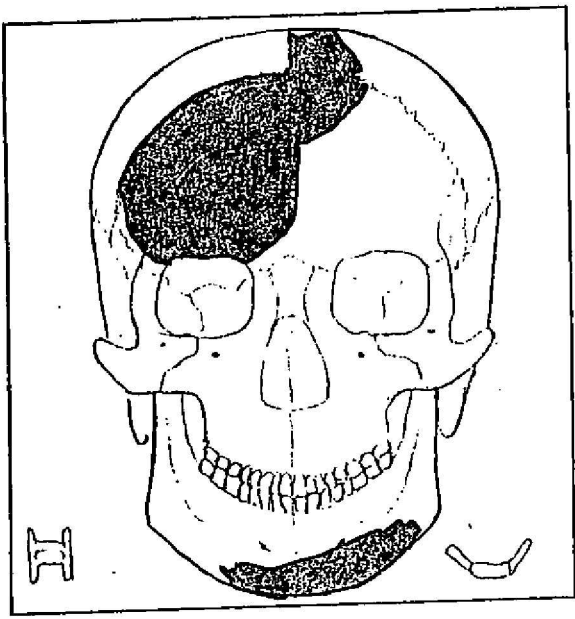
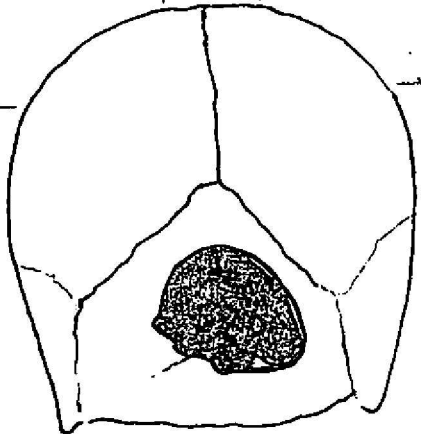
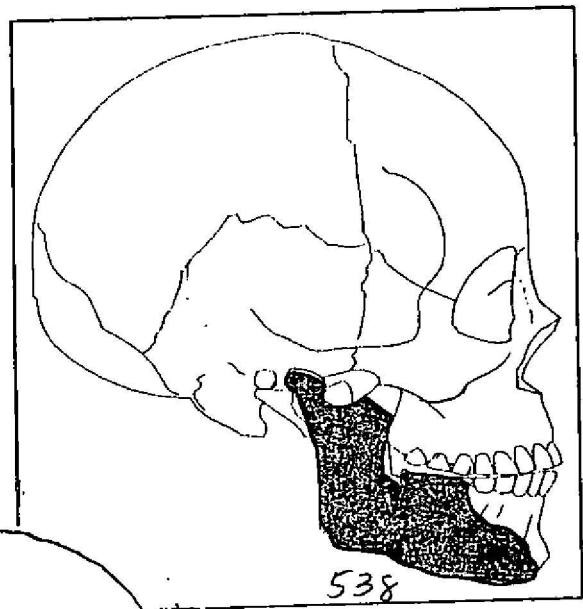
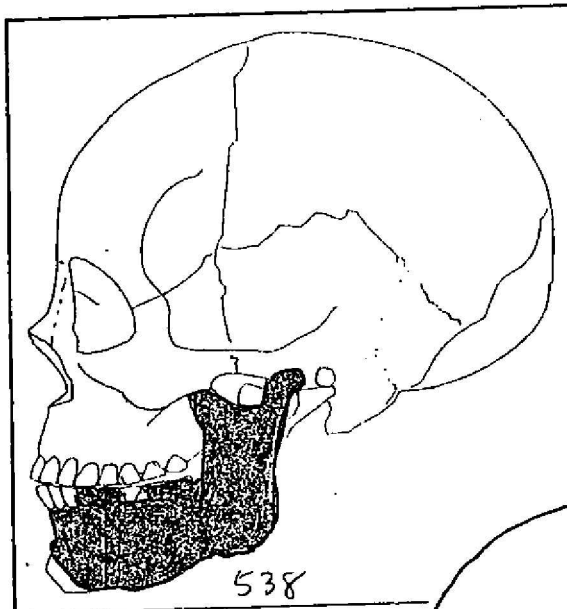
Site: Ward's Island, NYC (Nov. '93) Context _____



Site: Ward's Island, NYC (Nov. '93) Context _____



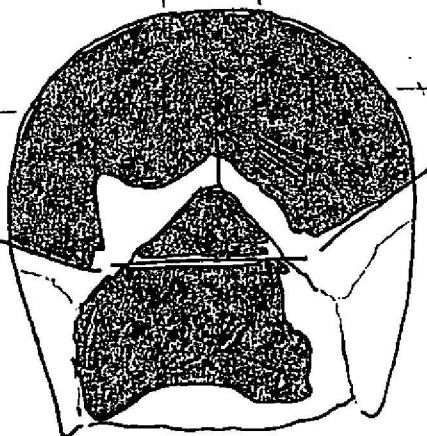
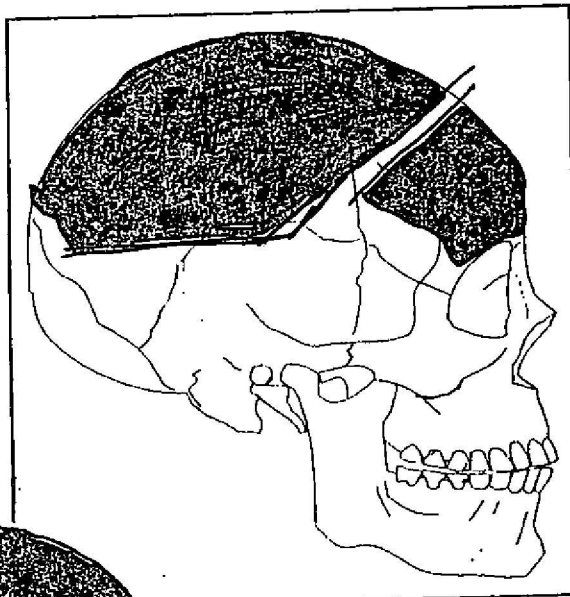
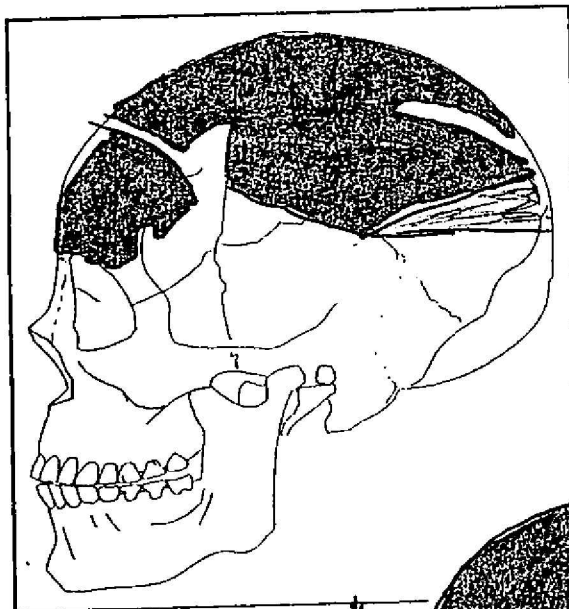
Site: Ward's Island, NYC (Nov. '93) Context _____



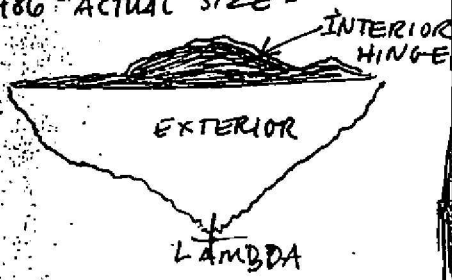
Probably same individual

484-485-486-487

Site: Ward's Island, NYC (Nov. '93) Context _____

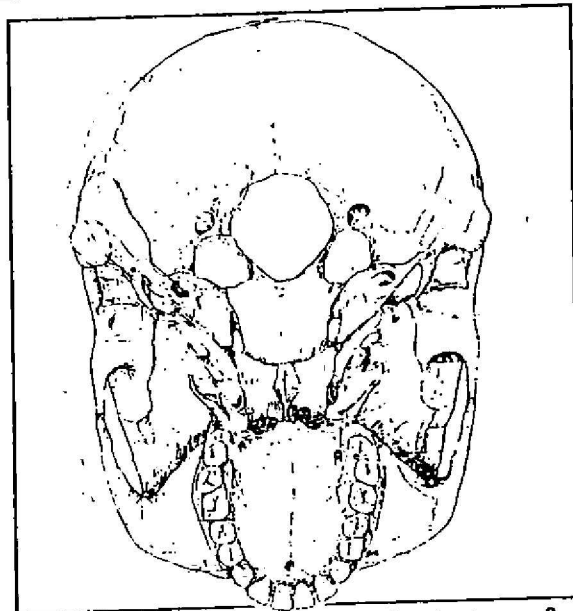
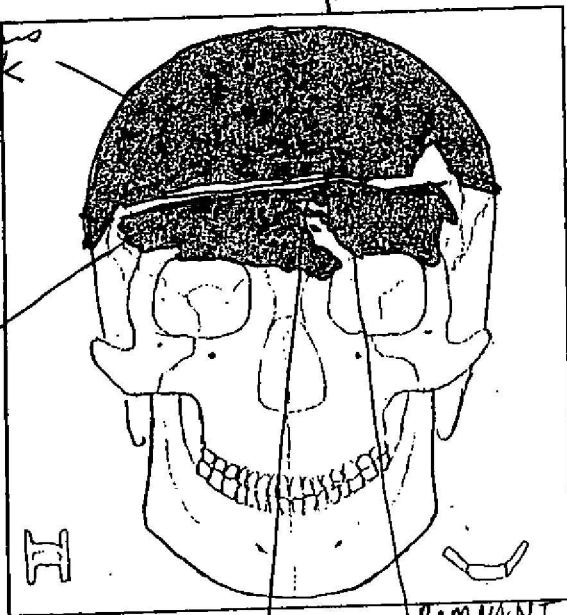


#486 - ACTUAL SIZE -



perimortem demarcations

extraneous cut mark

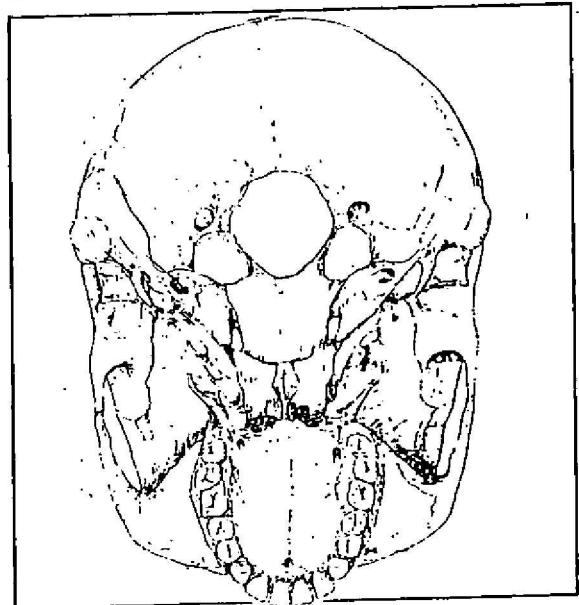
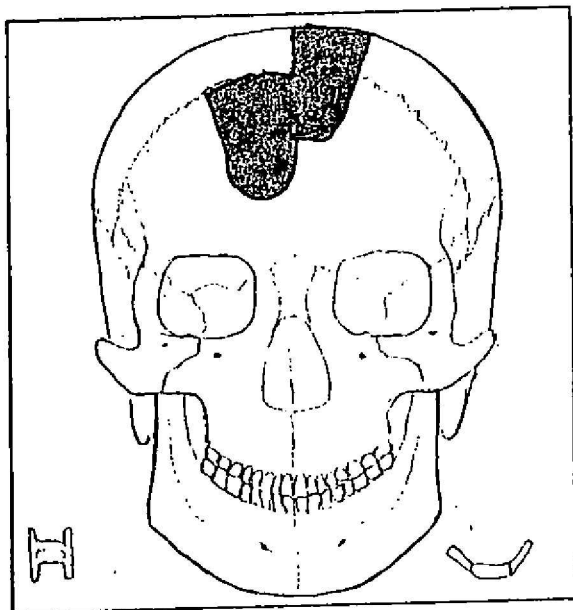
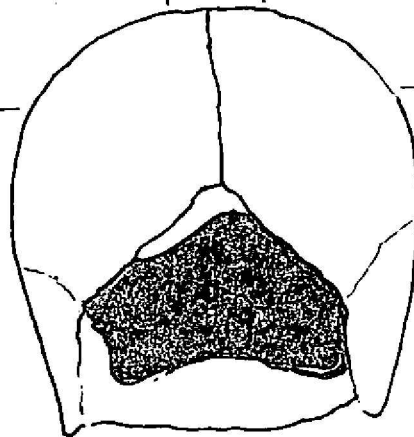
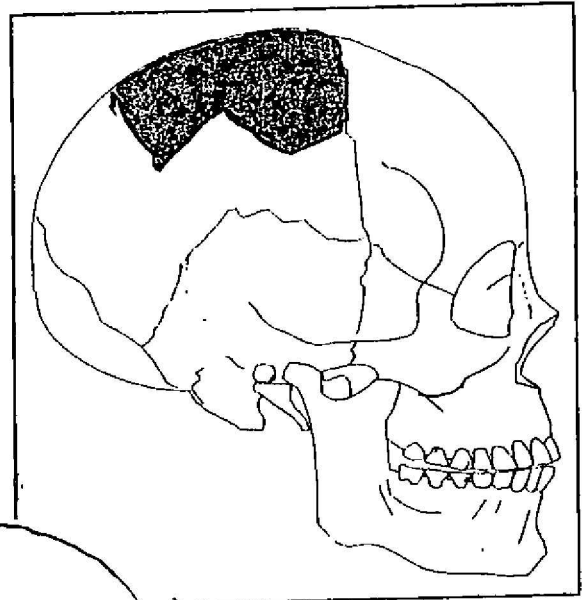
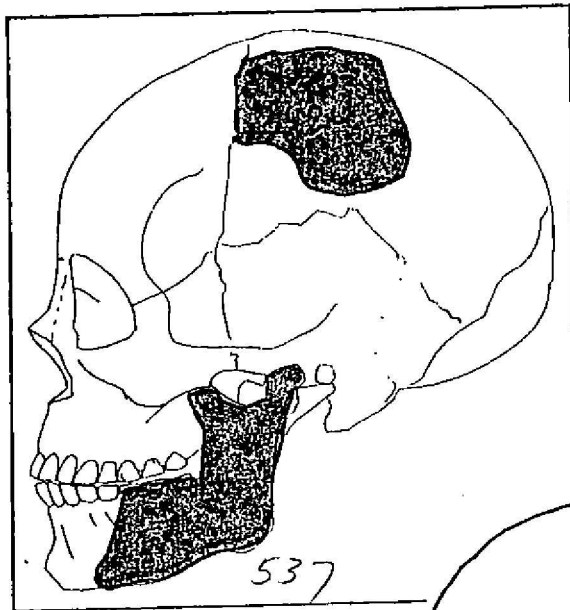


REMNANT OF CALVARIUM
hinge on frontal, inner table

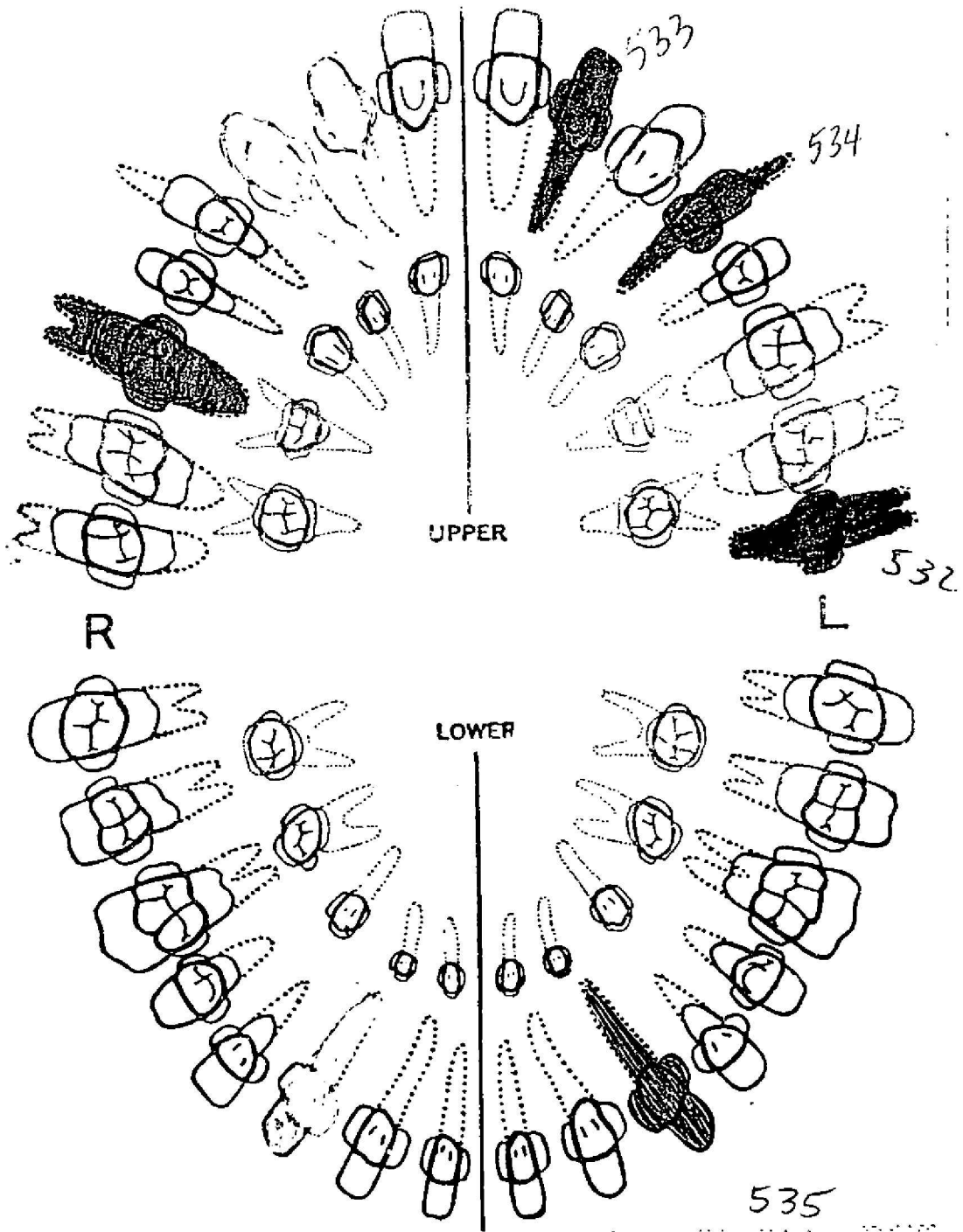
of straight fine linear grooves
area of circular grooving

A P D-29

Site: Ward's Island, NYC (Nov. '93) Context _____



531



ISOLATED DENTITION



APPENDIX E

OSTEOLOGICAL DENTITION INVENTORY

MAXILLARY

	LEFT					RIGHT										
	M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Status/Atrition	0	0	2	1	1	2	2	P	P	P	2	1	1		0	0
Caries	NO										NO			NO		
Calculus	SB										SB			SB		
Alveolar Resorption	S										S			S		
Abscess	NO										NO			NO		
Hypercementosis																
Root number								1	1	1						
Radical number																
Winging/rotation/torsion	NO										NO			NO		
Agenesis(hypodontia)	NO			NO			NO				NO			NO		
Peg (<7mm b-I))reduce	NO						NO									NO
Labial Curve																
Evulsion							NO									
Interruption Groove						NO					NO					
Double Shoveling						NO					NO					
Shoveling						NO					NO					
Tuberculum Dentale																
Canine mesial ridge																
Canine distal assess. ridge																
Distosagittal ridge, Uto Aztec Premolar																
Premolar Mesial and Distal Access. Cusps																
Odontome																
Enamel Extension	NO										NO			NO		
Cusp Number																
Cusp pattern																
Metacone																
Hypocone																
Cusp 5	NO													NO		
Carabelli	NO													NO		
C2 parastyle	NO													NO		
Crenulation	NO													NO		
Hypoplasia measurements							.65				.69					
							.51				.55					

2 cm

Crowding	Discoloration	Prognathism	Enamel Pearl
Impaction NO	Restoration NO	Palatine suture	Hutchinson Incisors
Drift	TMJ damage	Heterotopic teeth	Mulberry/Moon molars
Diastema NO	Hypoplasia type <i>Linear</i>	Palatine torus	Fusion
Hypereruption	Cultural Alteration	Alveolar torus NO	Nasal sill morphology
Deciduous retention	Trauma	Arcade morphology	Canine fossa NO
Occlusion	Chipping	Zygomatic suture	Infrasure
Supernumerary teeth	Pipe notching	Cleft palate	

Hypoplasia Area
 LC RC
 2.0y 1.8y
 2.9y 2.6y

Specimen # 480-1 Site Ward's Island Age Adult Gender: M? Affiliation: ?
 Date# 12/16-20/93 Recorder SKP Photo R1:F5 *very large teeth*

MANDIBULAR

	LEFT					RIGHT										
	M3	M2	M1	P2	P1	C	I2	I1	I2	C		P1	P2	M1	M2	M3
Status/Atrition									P	P	P	P	2	2	A	Am
Caries													NO	NO		
Calculus													HB	HB		
Alveolar Resorption													M	M		
Abscess													NO	NO		
Hypercementosis																
Root number									1	1	1	1				
Radical number																
Rotation/Torsion													NO	NO		
Agensis(hypodontia)													NO	NO		?
Evulsion									NO	NO						
Shoveling																
Double Shoveling																
Canine distal access. ridge																
Tome's																
Odontome																
Premolar Lingual cusp var.																
Enamel Extension													NO	yes		
Cusp Number													2	?		
Cusp Pattern																
Anterior Fovea																
Deflecting wrinkle																
Cusp 5																
Cusp 6																
Cusp 7																
Protostylid																
Crenulation														NO		
Distal Trigonid Crest														yes		
Torsal Molar Angle																
Hypoplasia measurements														NO	NO	

heavy on buccal
slight on distal

crenulation precludes
assessment

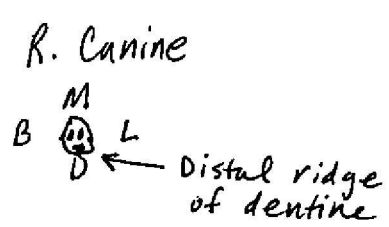
- | | | | |
|---------------------------------|----------------------------|--|-----------------------|
| Crowding | Mylohyoid groove <i>NO</i> | Gonial Angle | Mulberry/Moon molars |
| Impaction | Restoration | Gonial Eversion <i>slight inv.</i> | Hutchinson's incisors |
| Diastema | Discoloration | Ascending ramus <i>straight</i> | Enamel Pearls |
| Drift | Trauma | Median Profile | Hypoplasia type |
| Occlusion | Chipping | Median Shape | Heterotopic teeth |
| Deciduous retention | Cultural Alteration | Mandibular torus | Fusion |
| Hypereruption | Pipe notching | Rocker jaw | Mental foramina |
| Supernumerary teeth(hyperdonia) | TMJ damage | Lower Border morphology <i>slight undulation</i> | Arcade Morphology |

Specimen # 407 Site Ward's Island Age: Adult Gender: ? Affiliation: _____
 Date# 12/16-20/93 Recorder SLP Photo R1:F8

assumption MAXILLARY

	LEFT					RIGHT													
	M3	M2	M1	P2	P1	C	I2	I1	I2	C	P1	P2	M1	M2	M3				
Status/Attrition	A	br	P	A	A	A	P	P	P	P	P	L	L	P	A	L	A	br	U
Caries												L0				L0			
Calculus												SB	SB			SB			
Alveolar Resorption												M	M			M			
Abscess														yes					
Hypercementosis																			
Root number							1	1	1	1				1		3			
Radical number																			
Winging/rotation/torsion												NO	NO			NO			
Agenesis(hypodontia)	?						NO			NO				NO					?
Peg (<7mm b-l)/reduce																			
Labial Curve																			
Evulsion																			
Interruption Groove																			
Double Shoveling																			
Shoveling																			
Tuberculum Dentale																			
Canine mesial ridge																			
Canine distal assess. ridge																			
Distosagittal ridge, Uto Aztec Premolar																			
Premolar Mesial and Distal Access. Cusps																NO			
Odontome																			
Enamel Extension																NO		NO	
Cusp Number																3			
Cusp pattern																			
Metacone																			
Hypocone																			
Cusp 5																			
Carabelli																			
C2 parastyle																			
Crenulation																			
Hypoplasia measurements																			

apical



- | | | | |
|---------------------|---------------------|-------------------|-----------------------|
| Crowding | Discoloration | Prognathism | Remarkable! |
| Impaction | Restoration NO | Palatine suture | Enamel Pearl |
| Drift | TMJ damage | Heterotopic teeth | Hutchinsen Incisors |
| Diastema NO | Hypoplasia type | Palatine torus | Mulberry/Moon molars |
| Hypereruption | Cultural Alteration | Alveolar torus NO | Fusion |
| Deciduous retention | Trauma | Arcade morphology | Nasal sill morphology |
| Occlusion | Chipping | Zygomatic suture | Canine fossa NO |
| Supernumerary teeth | Pipe notching | Cleft palate | Infra-suture |
- parabolic = NO!
"U" shaped = YES!

Specimen # 455 Site Ward's Island Age: Adult Gender: ? Affiliation: African American?
 Date# 12/16-20/93 Recorder SIKP Photo R1:FL6

MANDIBULAR

	LEFT							RIGHT								
	M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Status/Attrition	-	-	-	-	-	-	-	P	P	P	P	P	4	A	4	4
Caries													NO		NO	→
Calculus															SL	
Alveolar Resorption													5		5	→
Abscess													NO		NO	→
Hypercementosis															5-M	
Root number															2	
Radical number																
Rotation/torsion													NO		NO	NO
Agensis(hypodontia)													NO		NO	NO
Evulsion																
Shoveling																
Double Shoveling																
Canine distal access. ridge																
Tome's																
Odonolome																
Premolar Lingual cusp var.																
Enamel Extension													NO		4/4	NO
Cusp Number															4	5-6?
Cusp Pattern															X	+?
Anterior Fovea																
Deflecting wrinkle																
Cusp 5																
Cusp 6																
Cusp 7																
Protostylid															NO	NO
Crenulation																
Distal Trigonid Crest																
Torsal Molar Angle																0°
Hypoplasia measurements													NO		NO	

slight-moderate on apical

- could have been obscured by attrition

- Crowding *NO*
- Impaction *NO*
- Diastema *NO*
- Drift *mesial drift RM2-3*
- Occlusion
- Deciduous retention
- Hypereruption
- Supernumerary teeth(hyperdontia)
- Mylohyoid groove
- Restoration *NO*
- Discoloration
- Trauma
- Chipping
- Cultural Alteration
- Pipe notching
- TMJ damage
- Gonial Angle *12i°*
- Gonial Eversion *yes, mod.*
- Ascending ramus *wide*
- Median Profile *prominent*
- Median Shape *bilobate*
- Mandibular torus *NO*
- Rocker jaw
- Lower Border morphology
- Mulberry/Moon molars
- Hutchinson's incisors *→ & pinched*
- Enamel Pearls
- Hypoplasia type
- Heterotopic teeth
- Fusion
- Mental foramina *m on R. side, no internal*
- Arcade Morphology

Perimortem Demarcation !!! see drawing, memo & photo

overall robust, ascend. ramus

Specimen # 479 Site Ward's Island Age: Adult Gender: M? Affiliation: European?
 Date# 12/16-20/93 Recorder SKP Photo R1:F7

MAXILLARY

From OCC to cervical
80-90% of crown gone/
destroyed

	LEFT						RIGHT									
	M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Status/Attrition	P	4	4	2	2	P	2	P	P	2	2	2	2	4	2	P
Caries		NO	NO				NO			NO			D	LO LB	NO	
Calculus		SL	SL													
Alveolar Resorption		S					S			S						
Abscess		NO					NO			NO						
Hypercementosis		NO					NO			NO						
Root number	3					1		1	1							3
Radical number																
Winging/rotation/torsion	NO															NO
Agensis(hypodontia)	NO			NO			NO			NO			NO			NO
Peg (<7mm b-1)/reduce							NO			NO						
Labial Curve																
Evulsion							NO									
Interruption Groove							NO			NO	NO					
Double Shoveling							NO			NO	NO					
Shoveling							NO			NO	NO					
Tuberculum Dentale																
Canine mesial ridge												NO				
Canine distal assess. ridge																
Distosagittal ridge. Ulo Aztecan Premolar																
Premolar Mesial and Distal Access. Cusps																
Odontome																
Enamel Extension			NO	NO	NO	NO						NO				
Cusp Number			3	4										4	3	
Cusp pattern			Y	X										Y	X	
Metacone																
Hypocone			1	3.5										3.5	1	
Cusp 5				NO											NO	
Carabelli				1											D	
C2 parastyle				1											1	
Crenulation			NO	NO										NO	NO	
Hypoplasia measurements												.4	.35	.28		
													.20	.15		

Hypoplasia Years

C	P2	M1
3.6 y	4.4 y	2.3 y
	5.1 y	2.9 y

- Crowding **NO**
- Impaction **NO**
- Drift
- Diastema **NO**
- Hypereruption
- Deciduous retention
- Occlusion
- Supernumerary teeth
- Discoloration
- Restoration **NO**
- TMJ damage
- Hypoplasia type **Linear**
- Cultural Alteration
- Trauma
- Chipping
- Pipe notching
- Prognathism **NO**
- Palatine suture
- Heterotopic teeth
- Palatine torus
- Alveolar torus
- Arcade morphology
- Zygomatic suture
- Cleft palate
- Enamel Pearl
- Hutchinson Incisors
- Mulberry/Moon molars
- Fusion
- Nasal sill morphology - **sharp!**
- Canine fossa
- Infrasuture

yes, moderate, .2-.5cm ht
parabolic

Robust morphology

Specimen # **536** Site **Ward's Island** Age: **Adult** Gender: **?** Affiliation: **European Aff.** — nasal sill arcade Carabelli's
 Date: **12/16-20/93** Recorder **SKP** Photo **R1:F4**

MANDIBULAR

	LEFT						RIGHT									
	M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Status/Attrition	1	2	A	2	2	P	P	P	P	P	-	-	-	5	2	1
Caries	NO	NO ^{MO.} OC	-	NO	NO									OC	OC	NO
Calculus	SL	→		SL	→									SL	→	
Alveolar Resorption	S	→		S	→									S	→	
Abscess	NO	→		NO	→									NO	→	
Hypercementosis																
Root number						1	1	1	1	1						
Radical number																
Rotation/torsion	NO	→		NO	→									NO	→	
Agensis(hypodontia)	NO			NO		NO				NO			-			NO
Evulsion						NO				NO						
Shoveling																
Double Shoveling																
Canine distal access. ridge																
Tome's																
Odontome																
Premolar Lingual cusp var.																
Enamel Extension	NO	→		NO	→									NO	→	
Cusp Number	4	4		2	2									4	→	
Cusp Pattern	4	+												+	Y	?
Anterior Fovea																
Deflecting wrinkle																
Cusp 5																
Cusp 6																
Cusp 7																
Protostylid	NO	NO												NO	→	
Crenulation	YES															YES ←
Distal Trigonid Crest		NO												NO	NO	
Torsal Molar Angle	0°															
Hypoplasia measurements	NO	NO		NO	NO									NO	→	

→ small fissure carie

- | | | | | | |
|----------------------------------|---------------------|---------|-------------------------|--------|-----------------------|
| Crowding | Mylohyoid groove | NO | Gonial Angle | 140° | Mulberry/Moon molars |
| Impaction | Restoration | NO | Gonial Eversion | slight | Hutchinson's incisors |
| Diastema | Discoloration | | Ascending ramus | wide | Enamel Pearls |
| Drift | Trauma | | Median Profile | | Hypoplasia type |
| Occlusion | Chipping | | Median Shape | | Heterotopic teeth |
| Deciduous retention | Cultural Alteration | | Mandibular torus | NO | Fusion |
| Hypereruption | Pipe notching | | Rocker jaw | NO | Mental foramina |
| Supernumerary teeth(hyperdontia) | TMJ damage | NO DSTD | Lower Border morphology | | Arcade Morphology |

Condyle same
lit as coronoid

Specimen # 538 Site Ward's Island Age Adult Gender: ? Affiliation: _____
 Date# 12/16-20/93 Recorder SKP Photo RI; E10

MANDIBULAR

	LEFT					RIGHT												
	M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3		
Status/Attrition	1	9	1															
Caries	NO	0	NO															
Calculus																		
Alveolar Resorption	M	M	M															
Abscess																		
Hypercementosis																		
Root number	?	2	2															
Radical number																		
Rotation/torsion	NO																	
Agensis(hypodontia)	NO																	
Evulsion																		
Shoveling																		
Double Shoveling																		
Canine distal access. ridge																		
Tome's																		
Odontome																		
Premolar Lingual cusp var.																		
Enamel Extension	NO		NO															
Cusp Number	5		5															
Cusp Pattern	Y		Y															
Anterior Fovea																		
Deflecting wrinkle	NO		NO															
Cusp 5	Med		Med.															
Cusp 6																		
Cusp 7																		
Protostylid	NO		NO															
Crenulation																		
Distal Trigonid Crest																		
Torsal Molar Angle	0°																	
Hypoplasia measurements	NO		NO															

(No dentin left on M2
95% of crown destroyed
only slight lingual
ridge of enamel
remains)

Crowding	Mylohyoid groove NO	Gonial Angle 120°	Mulberry/Moon molars
Impaction	Restoration NO	Gonial Eversion slight	Hutchinson's incisors
Diastema	Discoloration	Ascending ramus pinched	Enamel Pearls
Drift	Trauma	Median Profile	Hypoplasia type
Occlusion	Chipping	Median Shape	Heterotopic teeth
Deciduous retention	Cultural Alteration	Mandibular torus	Fusion
Hypereruption	Pipe notching	Rocker jaw	Mental foramina
Supernumerary teeth(hyperdontia)	TMJ damage NO DTP on left	Lower Border morphology	Arcade Morphology

Coracoid remarkably
higher (> 1cm)
than condyle

Specimen # 537 Site Ward's Island Age: Adult Gender: ? Affiliation: _____
 Date# 12/16-20/93 Recorder SLP Photo R1:F9

DENTAL FORM KEY

<u>Status/Atrition</u>	Atrition = Scott(1979), Status A=antemort. loss,P=postmort. loss, U=unerupted
<u>Caries</u>	Turner et al. (1991)
<u>Calculus</u>	Rose (1985)+ description of area (ie. buccal, lingual, distal, mesial)
<u>Alveolar Resorption</u>	Rose (1985)
<u>Abscess</u>	No or Yes, description of area (ie. apical)
<u>Hypercementosis</u>	No or Yes, description of area
<u>Root number</u>	Turner et al. (1991)
<u>Radical number</u>	Turner et al. (1991)
<u>Winging/rotation/torsion</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Agensis(hypodontia)</u>	No or Yes
<u>Peg (<7mm b-l)/reduce</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Labial Curve</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Evulsion</u>	No or Yes
<u>Interruption Groove</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Double Shoveling</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Shovelng</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Tuberculum Dentale</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Canine mesial ridge</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Canine distal assess. ridge</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Distosagittal ridge, Uto Aztecan Premolar</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Premolar Mesial and Distal Access. Cusps</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Tome's</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Premolar Lingual cusp var.</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Odontome</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Enamel Extension</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Cusp Number</u>	Turner et al.(1991)
<u>Cusp pattern</u>	Turner et al.(1991)
<u>Metacone</u>	Turner et al.(1991)
<u>Hypocone</u>	Turner et al.(1991)
<u>Cusp 5</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Carabelli</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>C2 parastyle</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Crenulation</u>	No or Yes
<u>Anterior Fovea</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Deflecting wrinkle</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Cusp 6</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Cusp 7</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Protostylid</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Distal Trigonid Crest</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Torsal Molar Angle</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Hypoplasia measurements</u>	Goodman et al.(1980), Walker (1985)
<u>Gonial Eversion</u>	Angel and Kelley (1990)
<u>Palatine torus</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)
<u>Alveolar torus</u>	No or Yes, if Yes and scorable then use Turner et al.(1991)



APPENDIX F

FIELD RECORD FORMS

SURVEY RECORD SHEET : Postholes, Auger holes, Shovel tests

PROJECT : Words Island : Man. Psych. Centre			COORDINATES :		
SITE :	SUPERVISOR : WR	EXCAVATOR : GS	SCREENED ? 1/4" Samples of .02 .03	DATE : 10 Oct. 1993	TEST TYPE AND NO. : B.T. 1

STRATIGRAPHY :

LAYER	DEPTH *	DESCRIPTION	COLOR	CULT. MAT.	NOTES
1	0 - 1.7'	Topsoil w/ silty loam.	10 YR 3/2 V. Dk. Gr. Br.	Plastic Fork, Bone, Polythene Shells, etc.	No. Cult. Mat. Retained except for 1 human bone.
2	1.7' - 3.8'	Compacted silt w/ cobbles and large rocks.	10 YR 4/5 Dk. Yel. Br.	Possibly Red Bricks No interface w/ Loam	
3	3.8' - ?	Soil w/ very few cobbles.	10 YR 4/4 Dk. Yel. Br.	Shell Frag.	
4					
5					
6					
7					
8					

* Give depths relative to ground surface

General Notes : (Note if cult. material retained, and if soil samples are taken.)

Stopped @ 5.9' below ground

Cross Refs :

Plan

Section

Photos

Looking S Fr. 9-10
Looking E Fr. 11-14

Notebook

SURVEY RECORD SHEET : Postholes, Auger holes, Shovel tests

PROJECT : <i>Wards Island; Maca Psych. Center</i>			COORDINATES :		
SITE :	SUPERVISOR :	EXCAVATOR :	SCREENED ?	DATE :	TEST TYPE AND NO. :
	<i>WR</i>	<i>GS</i>	<i>1/4"</i> <i>Samples</i>	<i>18 Oct. '83</i>	<i>B.T. 2</i>

STRATIGRAPHY. :

LAYER	DEPTH *	DESCRIPTION	COLOR	CULT. MAT.	NOTES
1	<i>0 - 1.7'</i>	<i>Test w/ Silty Loam</i>	<i>10 YR 2/1 Black</i>	<i>Plastic (discarded)</i>	<i>Test & Topsoil</i>
2	<i>1.7 - 3.8'</i>	<i>Compact silt w/ cobbles, pebbles + large rocks</i>	<i>10 YR 3/4 Dk. Yel. Br.</i>		<i>Disturbed by pipe trench.</i>
3	<i>3.8 - 5.3'</i>	<i>Fine Sand w/ pebbles + cobbles</i>	<i>10 YR 4/6 Dk. Yel. Br.</i>		
4	<i>5.3 - ?</i>	<i>Coarse Sand</i>	<i>10 YR 6/4 Lt. Yel. Br.</i>		
5					
6					
7					
8					

* Give depths relative to ground surface

General Notes : (Note if cult. material retained, and if soil samples are taken.)

Stopped @ 6.5'

Cross Refs :

Plan

Section

Photos

Notebook

SURVEY RECORD SHEET : Postholes, Auger holes, Shovel tests

PROJECT : Woods Island; Mau. Psych. Center			COORDINATES :		
SITE :	SUPERVISOR : WR	EXCAVATOR : NR	SCREENED ? 1/4" sample	DATE : 25 Oct. '93	TEST TYPE AND NO. : B.T. 3

STRATIGRAPHY :

LAYER	DEPTH *	DESCRIPTION	COLOR	CULT. MAT.	NOTES
1	0 - 0.2'	Asphalt	Black 10YR 2/1		Pavement
2	0.2' - 1.1'	Gravel with sand	2.5Y 4/1 Gr.		Fill under Pavement
3	1.1' - 1.5'	Silt	10YR 4/2 DK. Gr. Br.		Fill ?
4	1.5' - 2.0'	Silt	10YR 6/6 Brownish Yellow		
5	2.0' - 3.8'	Silty sand w/ pebbles	7.5YR 4/6 str. Br.		
6	3.8' - 5.7'	sand w/ pebbles + cobbles	7.5YR 4/6 str. Br.		
7	5.7' - ?	Mottled coarse sand w/ pebbles	7.5YR 4/6 and 10YR 4/6 str. Br. / DK. Yel. Br.		
8	1.1' - 6.1'	Silty sand w/ pebbles cobbles + Red Brick	7.5 YR 4/6 str. Br.	Human Bone	fill of Elec. Conduit Trench

* Give depths relative to ground surface

General Notes : (Note if cult. material retained, and if soil samples are taken.)

Stopped @ 6.1'

Cult. Mat. Retrieved from ex. 3.08 fill of Elec-Conduit Trench

Cross Refs :

Plan

Photos ✓ NE section

Section

Notebook