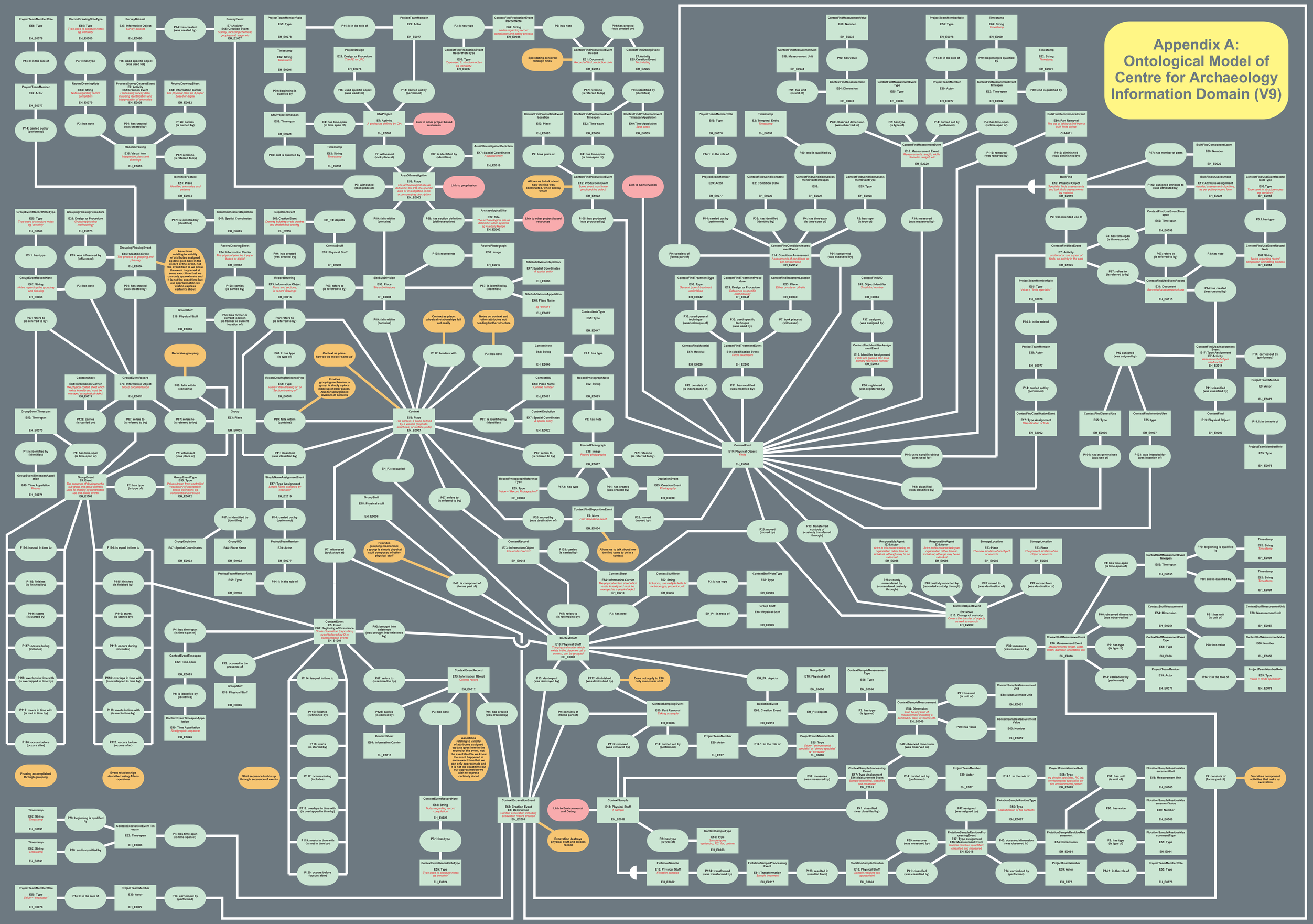
Appendix A: Ontological Model of Centre for Archaeology Information Domain (V9)


ProjectTeamMemberRole
E55: Type
EH_E0078
P14.1: in the role of
ProjectTeamMember
E39: Actor
EH_E0077
P14: carried out by (performed)
RecordDrawingNoteType
E55: Type
Type used to structure notes eg 'certainty'
EH_E0080
P3.1: has type
RecordDrawingNote
E62: String
Notes regarding record compilation
EH_E0079
P3: has note
SurveyDataset
E37: Information Object
Survey dataset
EH_E0090
P16: used specific object (was used for)
ProcessSurveyDatasetEvent
E7: Activity
E65:Creation Event
Processing survey data, including identification and interpretation of anomalies
EH_E2008
P94: has created (was created by)
RecordDrawing
E36: Visual Item
Interpretive plans and drawings
EH_E0016
RecordDrawingSheet
E84: Information Carrier
The physical plan, be it paper based or digital
EH_E0082
P128: carries (is carried by)
P67: refers to (is referred to by)
IdentifiedFeature
E53: Place
Identified features and phasing
EH_E0074
P94: has created (was created by)
SurveyEvent
E7: Activity
E65: Creation Event
Survey including chemical, geophysical, auger etc.
EH_E2007
ProjectTeamMemberRole
E55: Type
EH_E0078
P14.1: in the role of
Timestamp
E62: String
Timestamp
EH_E0091
P79: beginning is qualified by
CIAProjectTimespan
E52: Time-span
EH_E0021
P80: end is qualified by
Timestamp
E62: String
Timestamp
EH_E0091
ProjectTeamMember
E29: Actor
EH_E0077
P14.1: in the role of
ProjectDesign
E29: Design or Procedure
The PD or UPD
EH_E0076
P16: used specific object (was used for)
P14: carried out by (performed)
CIAProject
E7: Activity
A project as defined by CIA
EH_E0001
P4: has time-span (in time span of)
P7: witnessed (took place at)
Link to other project based resources
P7: witnessed (took place at)
AreaOfInvestigation
E53: Place
The archaeological site as defined in the PD, the specific area of investigation in the accompanying description
EH_E0003
P87: is identified by (identifies)
AreaOfInvestigationDepiction
E47: Spatial Coordinates
A spatial entity
EH_E0019
Link to geophysics
P89: falls within (contains)
P58: has section definition (defines section)
ArchaeologicalSite
E27: Site
The archaeological site as defined by the authorities eg Avebury Henge
EH_E0002
Link to other project based resources
P138: represents
RecordPhotograph
E38: Image
EH_E0017
SiteSubDivision
E53: Place
Site sub-divisions
EH_E0004
P87: is identified by (identifies)
SiteSubDivisionDepiction
E47: Spatial Coordinates
A spatial entity
EH_E0088
SiteSubDivisionAppelation
E48: Place Name
eg "trench1"
EH_E0087
P89: falls within (contains)
Context as place: physical relationships fall out easily
Notes on context and other attributes not needing further structure
P122: borders with
P3: has note
ContextNote
E62: String
EH_E0046
P3.1: has type
ContextNoteType
E55: Type
EH_E0047
ContextUID
E48: Place Name
Context number
EH_E0061
ContextDepiction
E47: Spatial Coordinates
A spatial entity
EH_E0022
P3: has note
Context
E53: Place
The context, a place defined by a volume (deposits, structures) or surface (cuts)
EH_E0007
EH_P3: occupied
P67: refers to (is referred to by)
P67: refers to (is referred to by)
P67.1: has type
(is type of)
RecordDrawingReferenceType
E55: Type
Value="Plan drawing of" or "Section drawing of"
EH_E0081
Context as place: how do we model 'same as'
Provides grouping mechanism; a group is simply a place made up of other places. Also for sub-granular divisions of contexts
P89: falls within (contains)
P41: classified (was classified by)
SimpleNameAssignmentEvent
E17: Type Assignment
Simple name assigned by excavator
EH_E2019
P14: carried out by (performed)
ProjectTeamMember
E39: Actor
EH_E0077
P14.1: in the role of
P67: refers to (is referred to by)
P67: refers to (is referred to by)
Group
E53: Place
EH_E0005
P89: falls within (contains)
P67: refers to (is referred to by)
P7: witnessed (took place at)
GroupEventRecordNoteType
E55: Type
Type used to structure notes eg 'certainty'
EH_E0069
P3.1: has type
GroupEventRecordNote
E62: String
Notes regarding the grouping and phasing
EH_E0068
P3: has note
GroupingPhasingProcedure
E29: Design or Procedure
Grouping/phasing methodology
EH_E0073
P15: was influenced by (influenced)
GroupingPhasingEvent
E65: Creation Event
The process of grouping and phasing
EH_E2004
P94: has created (was created by)
Assertions relating to validity of attributes assigned eg date goes here in the record of the event, not the event itself is we know the event happened at some exact time that we can only approximate and it is not the exact time but our approximation we wish to express certainty about
IdentifiedFeatureDepiction
E47: Spatial Coordinates
EH_E0075
DepictionEvent
E65: Creation Event
Drawing, including on-site drawing and detailed finds drawing
EH_E2010
P94: has created (was created by)
RecordDrawingSheet
E84: Information Carrier
The physical plan, be it paper based or digital
EH_E0082
P128: carries (is carried by)
EH_P4: depicts
ContextStuff
E18: Physical Stuff
EH_E0008
RecordDrawing
E73: Information Object
Plans and sections, ie record drawings
EH_E0016
P67: refers to (is referred to by)
P67: refers to (is referred to by)
GroupStuff
E18: Physical Stuff
EH_E0006
P3: has former or current location (is former or current location of)
Recursive grouping
P89: falls within (contains)
P67: refers to (is referred to by)
GroupEventRecord
E73: Information Object
Group documentation
EH_E0011
ContextSheet
E84: Information Carrier
The physical context sheet which exists in reality and must be managed as a physical object
EH_E0013
GroupEventTimespan
E52: Time-span
EH_E0070
P128: carries (is carried by)
P67: refers to (is referred to by)
P1: is identified by (identifies)
P4: has time-span (is time-span of)
P7: witnessed (took place at)
GroupEventTimespanAppellation
E49: Time Appellation
Phases
EH_E0071
GroupEvent
E5: Event
The sequence of development is sub-group and group activities used for phasing eg construction, use, destruction events
EH_E0065
P2: has type (is type of)
GroupEventType
E55: Type
Values drawn from controlled vocabulary of acceptable phase definitions eg construction/use/abandonment
EH_E0072
P87: is identified by (identifies)
GroupDepiction
E47: Spatial Coordinates
EH_E0093
GroupUID
E48: Place Name
EH_E0092
P14: carried out by (performed)
ProjectTeamMemberRole
E55: Type
EH_E0078
P14.1: in the role of
P114: isequal in time to
P115: finishes (is finished by)
P116: starts (is started by)
P117: occurs during (includes)
P118: overlaps in time with (is overlapped in time by)
P119: meets in time with (is met in time by)
P120: occurs before (occurs after)
P114: is equal in time to
P115: finishes (is finished by)
P116: starts (is started by)
P117: occurs during (includes)
P118: overlaps in time with (is overlapped in time by)
P119: meets in time with (is met in time by)
P120: occurs before (occurs after)
Phasing accomplished through grouping
Event relationships described using Allens operators
P4: has time-span (is time span of)
ContextEventTimespan
E52: Time-span
EH_E0025
P1: is identified by (identifies)
ContextEventTimespanAppelation
E49: Time Appellation
Stratigraphic sequence
EH_E0026
P12: occurred in the presence of
GroupStuff
E18: Physical Stuff
EH_E0006
Strat sequence builds up through sequence of events
P114: isequal in time to
P115: finishes (is finished by)
P116: starts (is started by)
P117: occurs during (includes)
P118: overlaps in time with (is overlapped in time by)
P119: meets in time with (is met in time by)
P120: occurs before (occurs after)
ContextEvent
E5: Event
E63: Beginning of Existance
Context formation (deposition) event followed by C..n transformation events
EH_E1001
P92: brought into existence (was brought into existence by)
P67: refers to (is referred to by)
P128: carries (is carried by)
ContextSheet
E84: Information Carrier
EH_E0013
ContextEventRecord
E73: Information Object
Context record
EH_E0012
P3: has note
P94: has created (was created by)
Assertions relating to validity of attributes assigned eg date goes here in the record of the event, not the event itself is we know the event happened at some exact time that we can only approximate and it is not the exact time but our approximation we wish to express certainty about
ContextEventRecordNote
E62: String
Notes regarding record compilation
EH_E0023
P3.1: has type
ContextEventRecordNoteType
E55: Type
Type used to structure notes eg 'certainty'
EH_E0024
ProjectTeamMemberRole
E55: Type
Value = "excavator"
EH_E0078
P14.1: in the role of
ProjectTeamMember
E39: Actor
EH_E0077
P14: carried out by (performed)
P79: beginning is qualified by
Timestamp
E62: String
Timestamp
EH_E0091
P80: end is qualified by
Timestamp
E62: String
Timestamp
EH_E0091
ContextExcavationEventTimespan
E52: Time-span
EH_E0098
P4: has time-span (is time-span of)
ContextExcavationEvent
E65: Creation Event
E6: Destruction
Context excavation including excavation creation
EH_E2001
Link to Environmental and Dating
Excavation destroys physical stuff and creates record
ContextSample
E18: Physical Stuff
A sample
EH_E0018
P2: has type (is type of)
ContextSampleType
E55: Type
Sample types eg dendro, RC, Rof, column
EH_E0053
FlotationSample
E18: Physical Stuff
Flotation samples
EH_E0062
P124: transformed (was transformed by)
FlotationSampleProcessing Event
E81: Transformation
Sample treatment
EH_E2017
P123: resulted in (resulted from)
FlotationSampleResidue
E18: Physical Stuff
Sample residues (as appropriate)
EH_E0063
P41: classified (was classified by)
P39: measures (was measured by)
FlotationSampleResidueProcessingEvent
E17: Type assignment
E16: Measurement Event
Sample residues (as appropriate) classified and measured
EH_E2018
P42 assigned (was asigned by)
FlotationSampleResidueType
E55: Type
Classification of flot contents
EH_E0067
P40: observed dimension (was observed in)
P14: carried out by (performed)
FlotationSampleResidueMeasurement
E54: Dimensions
EH_E0064
ProjectTeamMember
E39: Actor
EH_E077
P14.1: in the role of
ProjectTeamMemberRole
E55: Type
Value = "flots specialist"
EH_E0078
P91: has unit (is unit of)
FlotationSampleResidueMeasurementUnit
E58: Measurement Unit
EH_E0065
P90: has value
FlotationSampleResidueMeasurementValue
E60: Number
EH_E0066
P2: has type (is type of)
FlotationSampleResidueMeasurementType
E55: Type
EH_E094
P14.1: in the role of
ProjectTeamMemberRole
E55: Type
EH_E0078
P9: consists of (forms part of)
Describes component activities that make up excavation
P3.1: has type
ContextSampleMeasurementUnit
E58: Measurement Unit
EH_E0051
P90: has value
ContextSampleMeasurementValue
E60: Number
EH_E0052
P2: has type (is type of)
ContextSampleMeasurement Type
E55: Type
EH_E0050
ContextSampleMeasurement
E54: Dimension
Can be any kind of measurement including a dendroRC date, a volume etc.
EH_E0049
P40: observed dimension (was observed in)
P14: carried out by (performed)
ProjectTeamMember
E39: Actor
EH_E077
P14.1: in the role of
ProjectTeamMemberRole
E55: Type
ex dendro specialist, RC lab, environmental specialist, on site environmental person
EH_E0078
P91: has unit (is unit of)
FlotationSampleResidueMeasurementUnit
E58: Measurement Unit
EH_E0065
P90: has value
FlotationSampleResidueMeasurementValue
E60: Number
EH_E0066
P2: has type (is type of)
FlotationSampleResidueMeasurementType
E55: Type
EH_E094
P14.1: in the role of
ProjectTeamMemberRole
E55: Type
EH_E0078
P9: consists of (forms part of)
Does not apply to E18, only man-made stuff
P113: removed (was removed by)
P14: carried out by (performed)
ProjectTeamMember
E39: Actor
EH_E077
P14.1: in the role of
ProjectTeamMemberRole
E55: Type
Value= "environmental specialist" or "dendro specialist" or "excavator"
EH_E0078
P39: measures (was measured by)
ContextSampleProcessing Event
E17: Type Assignment
E16:Measurement Event
Sample quantified, classified and measured
EH_E2015
P41: classified (was classified by)
ContextStuff
E18: Physical Stuff
Stuff in the deposit which exists in reality and must be contextualised as an object
EH_E0008
P13: destroyed (was destroyed by)
P112: diminished (was diminished by)
EH_P4: depicts
GroupStuff
E18: Physical Stuff
EH_E0006
EH_P4: depicts
DepictionEvent
E65: Creation Event
EH_E2010
ContextSamplingEvent
E80: Part Removal
Taking a sample
EH_E2006
P67: refers to (is referred to by)
P67: refers to (is referred to by)
EH_P1: is trace of
Group Stuff
E18: Physical Stuff
EH_E0006
P3: has note
ContextStuffNote
E62: String
Inclusions, use multiple fields for inclusion type, proportion, etc
EH_E0059
P3.1: has type
ContextStuffNoteType
E55: Type
EH_E0060
P128: carries (is carried by)
ContextSheet
E84: Information Carrier
The physical context sheet which exists in reality and must be managed as a physical object
EH_E0013
Allows us to talk about how the find came to be in a context
ContextRecord
E73: Information Object
The context record
EH_E0048
P46: is composed of (forms part of)
P7: witnessed (took place at)
Provides grouping mechanism; a group is simply physical stuff composed of other physical stuff
GroupStuff
E18: Physical stuff
EH_E0006
P67: refers to (is referred to by)
P67: is identified by (identifies)
P67: refers to (is referred to by)
P26: moved by (was destination of)
ContextFindDepositionEvent
E9: Move
Find deposition event
EH_E1004
P25: moved (moved by)
RecordPhotographReference Type
E55: Type
Value = "Record Photograph of"
EH_E0085
P67.1: has type
P94: has created (was created by)
DepictionEvent
E65: Creation Event
Photography
EH_E2010
RecordPhotograph
E38: Image
Record photographs
EH_E0017
P3: has note
P67: is identified by (identifies)
P67: refers to (is referred to by)
P67: refers to (is referred to by)
ContextNoteType
E55: Type
EH_E0047
P3.1: has type
ContextNote
E62: String
EH_E0046
P3: has note
P122: borders with
Context as place: physical relationships fall out easily
Notes on context and other attributes not needing further structure
P89: falls within (contains)
P58: has section definition (defines section)
P138: represents
P94: has created (was created by)
P128: carries (is carried by)
P112: diminished (was diminished by)
Does not apply to E18, only man-made stuff
P13: destroyed (was destroyed by)
P9: consists of (forms part of)
P25: moved (moved by)
P30: transferred custody of (custody transferred through)
P25: moved (moved by)
P67: refers to (is referred to by)
P67: refers to (is referred to by)
P3: has note
P94: has created (was created by)
P67: refers to (is referred to by)
P67: refers to (is referred to by)
P67: refers to (is referred to