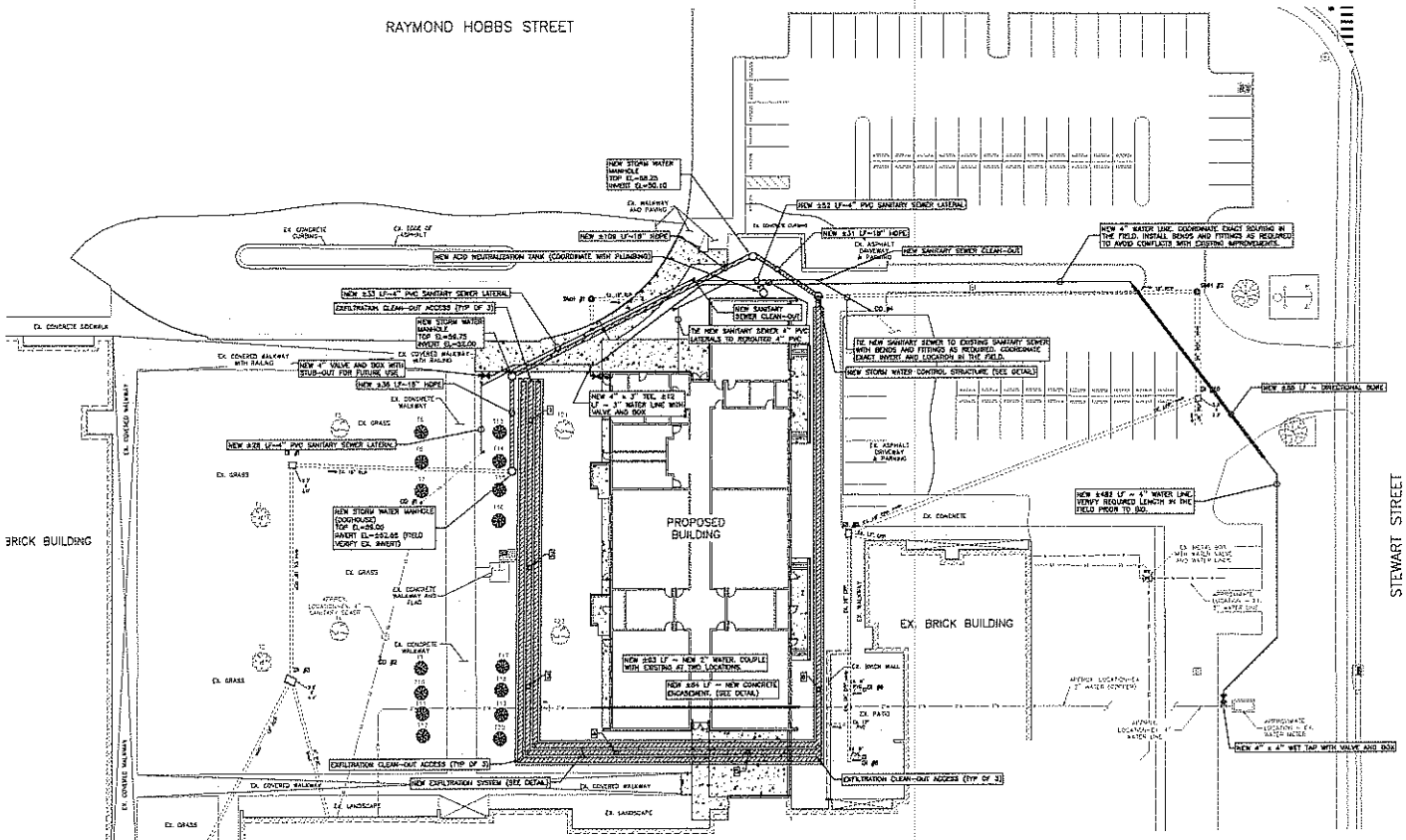
jhi jehle-halstead, inc.
Civil Engineering and Surveying



EX. STORM WATER STRUCTURES

DROP INLET #1 TOP = 57.92' 18" REINFORCED CONCRETE PIPE INVERT(E) = 52.73' INVERT(S) = 52.90'	DROP INLET #6 TOP = 54.57' 8" PVC PIPE INVERT = 51.07'
DROP INLET #2 TOP = 56.02' 18" REINFORCED CONCRETE PIPE INVERT(N) = 51.60' INVERT(E) = 51.52' INVERT(W) = 52.02'	DROP INLET #7 TOP = 57.22' 12" PVC PIPE INVERT = 52.62' REMOVE
DROP INLET #3 TOP = 57.21' 18" REINFORCED CONCRETE PIPE TOP = 54.21' INVERT(N) = 53.79' INVERT(SW) = 53.81' 8" PVC PIPE INVERT(VIT) = 53.62'	DROP INLET #8 18" REINFORCED CONCRETE PIPE TOP = 54.35' INVERT = 51.67'
DROP INLET #4 TOP = 58.15' 18" REINFORCED CONCRETE PIPE INVERT(U) = 52.71' REMOVE	DROP INLET #9 18" REINFORCED CONCRETE PIPE TOP = 54.35' INVERT = 54.56'
DROP INLET #5 TOP = 54.33' 18" CORRUGATED PLASTIC PIPE INVERT(W) = 48.85' 12" CORRUGATED PLASTIC PIPE INVERT(SE) = 51.90' 18" CORRUGATED PLASTIC PIPE INVERT(S) = 48.95'	DROP INLET #10 TOP = 57.13' 18" REINFORCED CONCRETE PIPE INVERT(W) = 47.80' INVERT(S) = 47.80' 18" CORRUGATED PLASTIC PIPE INVERT(SW) = 47.85'
	STORMWATER MANHOLE #1 TOP = 54.33' 18" REINFORCED CONCRETE PIPE INVERT(E) = 50.65' INVERT(S) = 50.95' PLUG FLUSH WITH STRUCTURE WALLS
	STORMWATER MANHOLE #2 TOP = 53.68' 18" REINFORCED CONCRETE PIPE INVERT(W) = 47.95' (36"ROP) INVERT(S) = 48.01'

EX. SANITARY SEWER STRUCTURES

SEWER CLEAN OUT #1 TOP ELEVATION = 59.21'	SEWER CLEAN OUT #3 TOP ELEVATION = 58.68' REMOVE
SEWER CLEAN OUT #2 TOP ELEVATION = 59.08'	SEWER CLEAN OUT #4 TOP ELEVATION = 55.31'

LEGEND:

- TBM — TEMPORARY BENCHMARK
- FFE — FINISHED FLOOR ELEVATION
- 53.21 — SPOT ELEVATION
- A/C — AIR CONDITIONING
- WV — WATER VALVE
- SD — STORMWATER MANHOLE
- SCO — SEWER CLEAN OUT
- RCP — REINFORCED CONCRETE PIPE
- PVC — POLYVINYL CHLORIDE PIPE
- CPP — CORRUGATED PLASTIC PIPE
- DI — DROP INLET
- CO — SEWER CLEAN OUT
- ASPHALT
- EX. CONCRETE
- NEW CONCRETE

TREE LEGEND:

- MAGNOLIA
- HARDWOOD
- PECAN

NEW NYLOPLAST STORM WATER STRUCTURES

1-4 NYLOPLAST 18" INLINE TOP EL=58.00 DROP INTO TOP OF 24" EXFILTRATION PIPE

5 12" INLINE TOP EL=59.25 DROP INTO TOP OF 24" EXFILTRATION PIPE

6 NYLOPLAST 18" INLINE TOP EL=58.00 DROP INTO TOP OF 24" EXFILTRATION PIPE

UTILITY NOTES:
1. ALL REFERENCES TO HDPE SHALL BE UNDERSTOOD TO MEAN ADS N-12 DUAL WALL WATER-TIGHT OR EQUIVALENT.
2. CONTRACTOR SHALL CONTACT MR. TIM TOLBERT, SRCSD BUILDING INSPECTOR, FOR INSPECTION AT 850-417-3950/850-916-4191 PRIOR TO COVERING ANY UNDERGROUND UTILITY INSTALLATIONS.

SITE UTILITY PLAN

20' 10' 0' 20' 40'

N

dag

CONSTRUCTION DOCUMENTS (PHASE II)

MILTON HIGH SCHOOL
Science Lab Addition

Revision

Drawn By: WEB
Checked By: CPJ
Date: 03-07-13
Project No.: 12025
Drawing Title: SITE UTILITY PLAN

Drawing No.: C-104

jhl jehle-halstead, inc.
CIVIL Engineering and Surveying

DAG ARCHITECTS INC.

CONSTRUCTION DOCUMENTS (PHASE II)

MILTON HIGH SCHOOL Science Lab Addition

GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION (PRIOR TO CONSTRUCTION) AND MAINTENANCE/REPAIRS OF (DURING CONSTRUCTION) EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO RETAIN ALL SEDIMENT AND EROSION ON THE SITE OF DEVELOPMENT. THE PROVISIONS SHOWN HEREIN REPRESENT THE MINIMUM EROSION CONTROL MEASURES TO BE TAKEN.
2. ALL SOIL, WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE SITE OR ONTO PUBLIC RIGHTS-OF-WAY WILL BE REMOVED IMMEDIATELY.
3. ALL AREAS OF DISTURBANCE SHALL BE TREATED AS APPROPRIATE TO PREVENT THE GENERATION OF DUST.
4. AT THE TIME OF SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT PERMANENT COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR PERMANENT COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION SHALL BE EMPLOYED (I.E. EROSION CONTROL FABRIC, RIP-RAP, ETC.).
5. THE CONTRACTOR SHALL MAKE REGULAR INSPECTIONS OF ALL CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PROCESS TO ENSURE THE OVERALL EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL PLAN. AT A MINIMUM, INSPECTIONS MUST OCCUR AT LEAST ONCE A WEEK AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM EVENT THAT IS ONE-HALF (0.50) INCH OR GREATER. ALL INSPECTIONS MUST BE DOCUMENTED PER THE NPDES STORMWATER POLLUTION PREVENTION PLAN.
6. IN THE EVENT THAT AN ON-SITE INSPECTION BY ANY PARTY REVEALS A DEFICIENCY IN THE INSTALLATION AND/OR MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMEDIATION OF THE PROBLEM.
7. FAILURE TO COMPLY WITH THE REQUIRED EROSION AND SEDIMENT CONTROL GUIDELINES MAY RESULT IN FINES LEVIED BY GOVERNMENTAL AGENCIES. ANY FINES SUFFERED DUE TO NON-COMPLIANCE SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.

SEQUENCE OF EROSION AND SEDIMENT CONTROL MEASURES IMPLEMENTATION

SITE PREPARATION

1. PRIOR TO ANY SOIL DISTURBANCE, SILT FENCE SHALL BE INSTALLED ALONG ENTIRE DOWN-GRADE PERIMETER OF PROJECT AREA, AS SHOWN IN PLANS AND DETAILS, OR BY EQUIVALENT MEASURES. SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL UP-GRADE AREAS OF DISTURBANCE HAVE BEEN PERMANENTLY STABILIZED.
2. A PROPER CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED AT ALL POINTS OF INGRESS/EGRESS FROM CONSTRUCTION SITE, PER DETAIL PROVIDED IN THE PLANS, OR BY EQUIVALENT MEASURES. ALL CONSTRUCTION ENTRANCES SHALL REMAIN IN PLACE UNTIL INGRESS/EGRESS FROM THE SITE AT THAT POINT HAS STOPPED.

CLEARING AND GRUBBING

1. ALL DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS, AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL RECEIVE A TEMPORARY SEEDING IMMEDIATELY UPON DISTURBANCE. IF THE SEASON PREVENTS ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREA WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE.
2. ALL DISTURBED AREAS THAT ARE SUBJECT TO HIGH AMOUNTS OF EROSION (I.E. STEEP SLOPES, EMBANKMENTS GREATER THAN 3:1, OR OTHER AS DICTATED BY SITE CONDITIONS) SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH MULCHING WITH STRAW, OR EQUIVALENT MATERIAL, AT A THICKNESS OF TWO (2) TO FOUR (4) INCHES MIXED WITH THE TOP TWO (2) INCHES OF SOIL.
3. ALL DISTURBED AREAS SHALL, AS A MINIMUM, BE MAINTAINED BY WATER TO MINIMIZE THE GENERATION OF DUST.

SITE GRADING

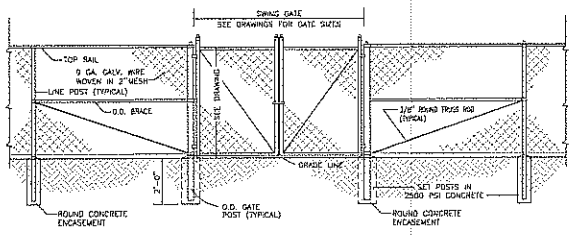
1. THE SITE SHALL, AT ALL TIMES, BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS CONTROLLED BY EROSION AND SEDIMENT CONTROL MEASURES.
2. ALL AREAS USED FOR MATERIAL STOCKPILE, BE IT FILL/EXCAVATED MATERIALS, STONE, OR OTHERWISE, ARE TO BE STABILIZED, AND SHALL HAVE SILT FENCE WITH HAY BALES INSTALLED PER THE DETAILS PROVIDED IN THE PLANS, OR BY EQUIVALENT MEASURES, AROUND THEIR ENTIRE PERIMETER.

INSTALLATION OF STORM SEWER AND UTILITIES

1. TEMPORARY OUTLET PROTECTION MUST BE INSTALLED AT ALL PROPOSED STORMWATER OUTFALLS PRIOR TO THE INSTALLATION OF THE DRAINAGE SYSTEM.
2. ALL SITE DRAINAGE, INCLUDING ROOF DRAINS, DOWN SPOUTS, GUTTERS, OR OTHERWISE SHALL BE ROUTED TO CARRY ALL STORM WATER TO THE PROPOSED STORMWATER MANAGEMENT SYSTEM(S).
3. ANY SLOPES GREATER THAN 3:1 (H:V) RECEIVING PIPELINE OR UTILITY INSTALLATION SHALL BE BACKFILLED AND STABILIZED DAILY AS THE INSTALLATION PROCEEDS.

FINAL STEWARD:

1. PERMANENT VEGETATION (I.E. SEED AND MULCH, SOD, ETC) TO BE INSTALLED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
2. UPON COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL ACCEPTANCE, ALL CONSTRUCTION WASTE AND DEBRIS SHALL BE REMOVED FROM THE SITE AND ALL PAVED ROADWAYS AND/OR PARKING AREAS SHALL BE SWEPT CLEAN OF ALL SEDIMENT.
3. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL SUCH TIME WHEN ALL UP-GRADE AREAS HAVE BEEN PERMANENTLY STABILIZED.



SEE ARCHITECTURAL PLANS FOR PAD MOUNTED FENCING FOUNDATION DETAILS.

TYPICAL FREESTANDING CHAIN LINK FENCE DETAIL
NOT TO SCALE

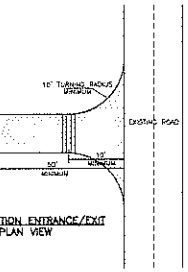
FABRIC:	K & K, 2" X 9 GAUGE, 2 OZ. G.A.W.
TOP RAIL:	1.66" O.D. SS40
LINEPOST:	2.00" O.D. SS40
TERMPOST:	2.5" O.D. SS40
GATEPOST:	3.5" O.D. SS40
DRIVE GATEPOST:	4" O.D. SS40
GATEFRAME:	1-5/8" O.D. WITH CENTER BRACE SS20
DRIVE GATEFRAME:	2" O.D. SS40
TIES:	9 GAUGE ALUMINUM
TENSION WIRE:	NO. 7 GALVANIZED STEEL
ALL CAPS AND HARDWARE:	HOT DIPPED GALVANIZED STEEL
POST SETTING:	10" DIA CENTER AND FULL DEPTH IN CONCRETE OF 2500 PSI
FOOTINGS:	LINEPOST, 8" x 16"; CORNERS, 8" x 42"; GATES, 12" x 36"
FINISHES & COATINGS	SEE SPECIFICATIONS

PURPOSE:
CONSTRUCTION ENTRANCES PROVIDE AN AREA WHERE MUD CAN BE REMOVED FROM VEHICLE TIRES BEFORE THEY ENTER A PUBLIC ROAD. THE MOTION OF THE VEHICLE AS IT MOVES OVER THE GRAVEL CONSTRUCTION MATERIAL DISLODGES CAKED MUD.

LIMITATIONS:
IF THE ACTION OF THE VEHICLE ON THE GRAVEL PAD IS NOT SUFFICIENT TO DISLODGE MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLE LEAVES THE SITE.

MATERIALS:
GRAVEL, 2"-3" (N.N.) IN DIAMETER, IS USED.

INSTALLATION:
GRAVEL LAYER SHOULD BE AT LEAST 6" THICK. THE PAD SHOULD BE AT LEAST 50' LONG. WIDTH SHOULD BE APPROPRIATE TO VEHICLE SIZE.

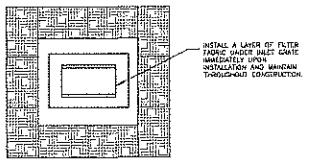


CONSTRUCTION ENTRANCE/EXIT
PLAN VIEW

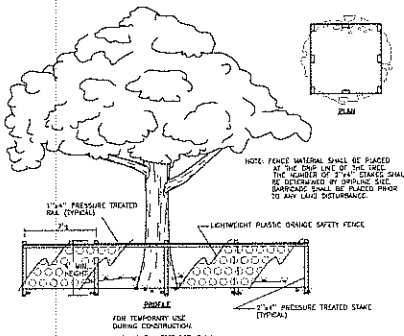
CONSTRUCTION ENTRANCE/EXIT
SECTION VIEW

CONSTRUCTION ENTRANCE/EXIT
NOT TO SCALE

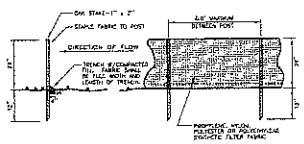
NOTE:
INSTALLS SHALL BE PLACED AT COMMENCEMENT OF CONSTRUCTION AND MAINTAINED THROUGHOUT PROJECT COMPLETION AND STABILIZATION IN ACCORDANCE WITH F.D.O.T. AND COUNTY STANDARDS WHERE APPLICABLE.



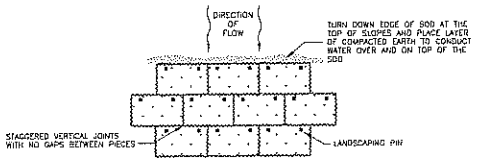
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
NOT TO SCALE

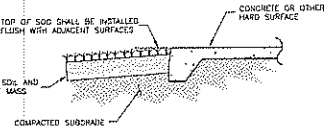


TREE PROTECTION
NOT TO SCALE



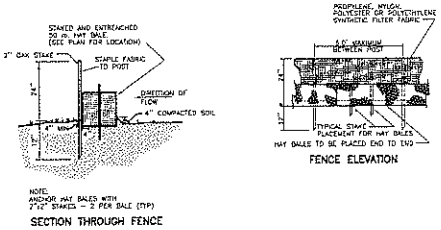
SILTATION FENCE DETAIL
NOT TO SCALE





NOTES:
1. SEE WRITTEN SPECIFICATIONS FOR FULL DETAILS.
2. PLACE SOD BEGINNING AT THE TOE OF THE SLOPE AND LONG EDGE PERPINDICULAR TO DIRECTION OF FLOW.
3. SOD SHALL BE PINNED ON ALL SLOPES 4:1 OR STEEPER, IN AREAS OF CONCENTRATED DRAINAGE FLOWS, AND ANYWHERE THAT THERE IS DANGER OF SOD SLIPPING.

SODDING DETAIL
NOT TO SCALE



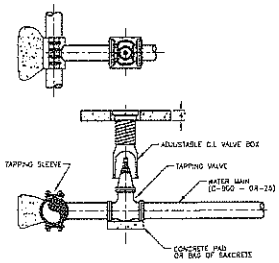
SILTATION FENCE DETAIL WITH HAY BALES
NOT TO SCALE

Revision

Date	No.	Comments

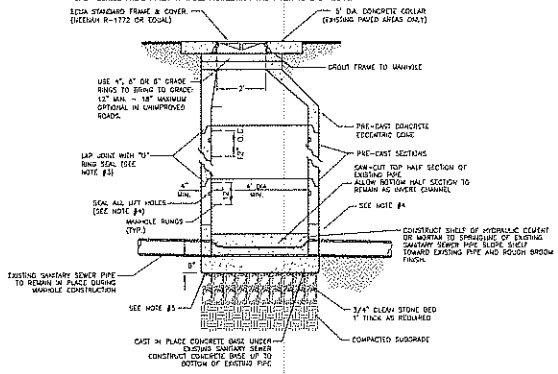
Drawn By: WGB
Checked By: DPJ
Date: 03-07-13
Project No.: 12025
Drawing Title: SITE EROSION CONTROL PLAN

Drawing No.: C-105



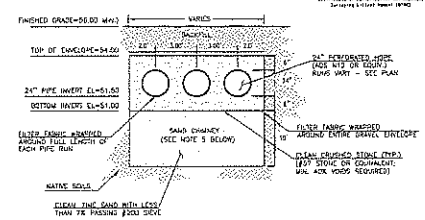
TYPICAL TAPPING SLEEVE & VALVE INSTALLATION
NOT TO SCALE

NOTES:
1. MANHOLE SHALL CONFORM TO A.S.T.M. C 478 SPECIFICATIONS WITH 4000 P.S.I. CONCRETE.
2. DIAMETER OF OPENING FOR PIPE SHALL BE 1" LARGER DIAMETER THAN HOLL OF THE PIPE BEING LAID.
3. JOINTING COMPOUND SHALL BE RAM NECK, TYPE 1, ROPE FORM PLASTIC GASKET OR EQUAL.
4. ALL PATCHING TO BE DONE WITH HYDRAULIC CEMENT. NO MORTAR REPAIRS PERMITTED.
5. CONCRETE TO BE 3000 P.S.I., REINFORCING STEEL TO BE A.S.T.M. A 615 GRADE 60. CAST IN PLACE BASE SECTION TO BE CONSTRUCTED ON 12-INCH LAYER OF 3/4" STONE MATERIAL. PRE-CAST SECTIONS MAY BE INSTALLED AFTER CONCRETE BASE HAS ATTAINED 75% OF DESIGN STRENGTH.
6. INTERIOR AND EXTERIOR OF MANHOLE TO HAVE 2 COATS OF SHOP APPLIED PROTECTIVE 16CH MIL EPOXY COATING. FIELD APPLY 2 COATS OF THE EPOXY COATING TO ALL EXPOSED MORTAR OR CEMENT AND DAMAGED SHOP COATED AREAS AFTER MANHOLE INSTALLATION AND PRIOR TO BACKFILLING.



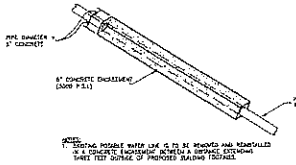
DOGHOUSE MANHOLE DETAIL
NOT TO SCALE

jhi jehle-halstead, inc.
Civil Engineering and Surveying
5414 Wilgrove Rd • Pace, Florida 32571
(850) 994-9003 • Fax (850) 994-9004
www.jehle-halstead.com
Certificate of Authorization No. 2000000
Surveying License Number 6176



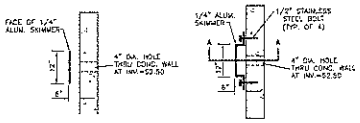
NOTES:
1. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INTERCONNECTING EACH RUN OF PIPE.
2. ONLY PIPE WITHIN TRENCH RUNS TO BE PERFORATED. ALL OTHER P.V.C. CONNECTIONS, ETC. TO BE NON-PERFORATED.
3. COVER ENTIRE TRENCH AREA WITH FILTER FABRIC PRIOR TO BACKFILLING.
4. CONTRACTOR SHALL SUBMIT DOCUMENTATION THAT THE PROPOSED STONE BACKFILL MEETS THE REQUIREMENTS OF FDOT STANDARD SPECIFICATION SECTION 921, INCLUDING THE GRADATION REQUIREMENTS OUTLINED IN SECTION 901-1.4.
5. GEOTECHNICAL REPRESENTATIVE TO BE ON SITE DURING CHIMNEY EXCAVATION AND BACKFILL TO ENSURE COMPLIANCE WITH GEOTECHNICAL RECOMMENDATIONS

EXFILTRATION SYSTEM DETAIL
NOT TO SCALE



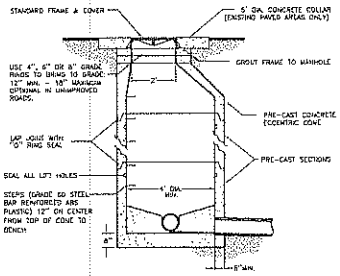
NOTES:
1. EXISTING POTABLE WATER LINE IS TO BE REMOVED AND REINSTALLED IN A CONCRETE ENCASEMENT BETWEEN A DRAINAGE EXTENSIONS SHORT TERM DURING OF PROPOSED BUILDING FOOTINGS.

POTABLE WATER ENCASEMENT DETAIL
NOT TO SCALE

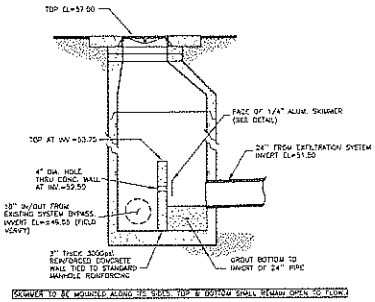


SECTION A-A
ENLARGED SKIMMER VIEW

PLAN VIEW
ENLARGED SKIMMER VIEW

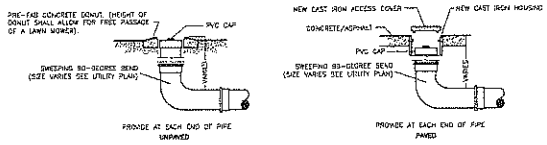


STANDARD MANHOLE DETAIL
NOT TO SCALE

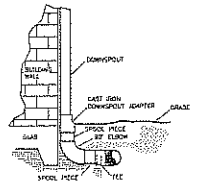


SKIMMER TO BE MOUNTED ALONG 3S SIDES. TOP & BOTTOM SHALL REMAIN OPEN TO FLOW.

STORM WATER CONTROL STRUCTURE
NOT TO SCALE

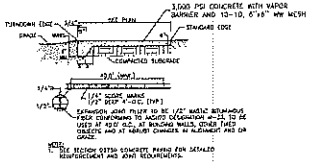


CLEAN-OUT DETAIL
NOT TO SCALE



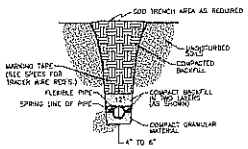
SEE ARCHITECTURAL PLANS TO COORDINATE DOWNSPOUT SIZE AND LOCATIONS

DOWNSPOUT CONNECTOR DETAIL
NOT TO SCALE

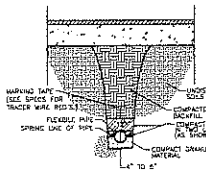


NOTE: SEE NEENAH SITTER CONCRETE PAVING FOR DETAILED REINFORCEMENT AND JOINT REQUIREMENTS.

TYPICAL SIDEWALK
NOT TO SCALE



FLEXIBLE PIPE BEDDING
NOT TO SCALE (UNPAVED)



FLEXIBLE PIPE BEDDING
NOT TO SCALE (PAVED)

dag
DAG ARCHITECTS INC.
A.R. PALMER AIA - CEO/PE
KENNETH L. STANSBURY AIA
TIMOTHY M. ANDERSON P.E., MANAGING ARCHITECT

CONSTRUCTION DOCUMENTS (PHASE II)

MILTON HIGH SCHOOL
Science Lab Addition

G. PATRICK JONES JR.
FL 17522

Revision

Drawn By: WEB
Checked By: DPJ
Date: 03-07-13
Project No.: 12030
Drawing Title: SITE CONSTRUCTION DETAILS
Drawing No.: C-106