
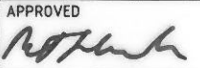
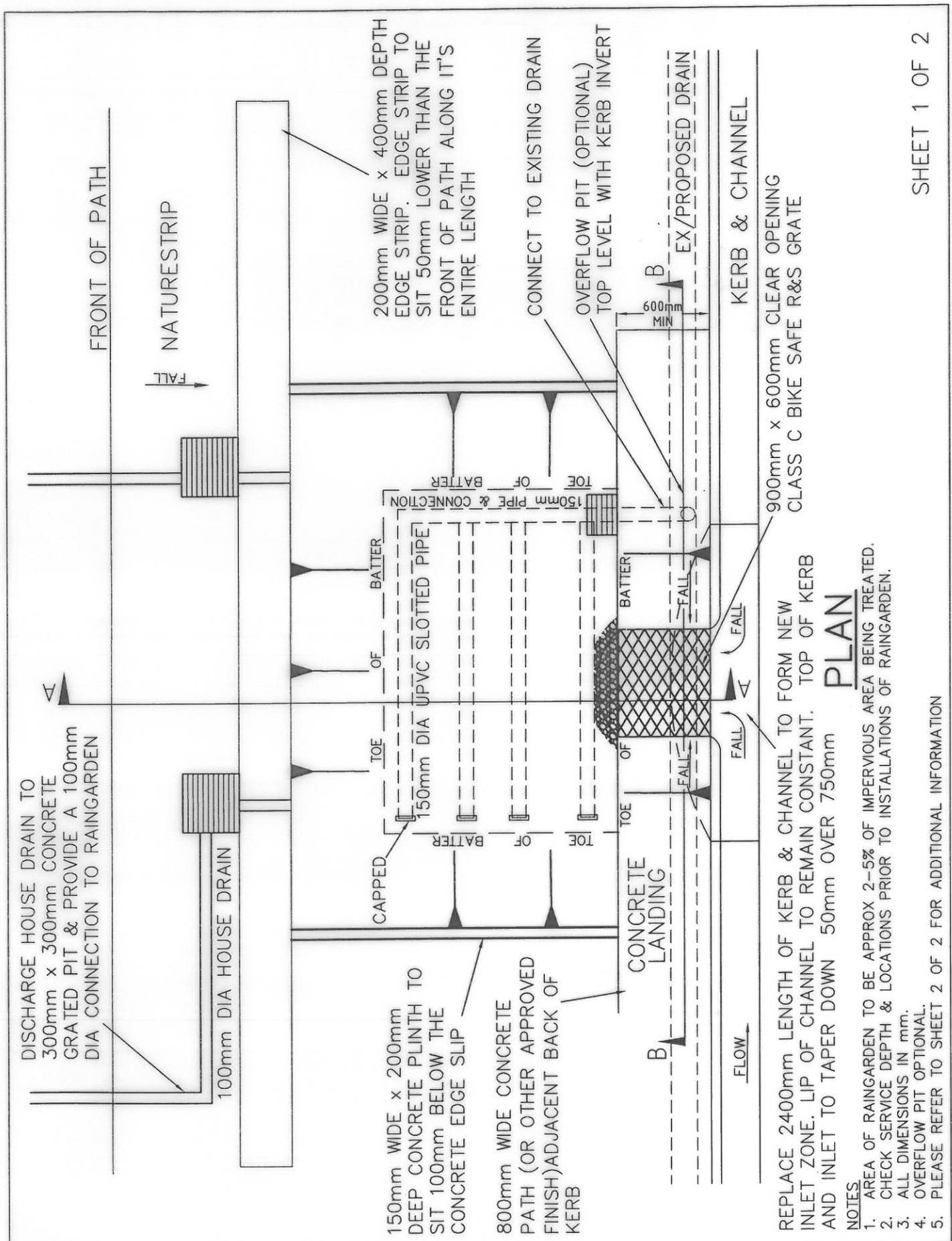


NOTES

1. SWALE WIDTH SHALL BE DESIGNED TO ACCOMODATE 1 in 5 YEAR ARI FLOW AT VELOCITY LESS THAN 0.5 M/S
2. ROAD RESERVE SHALL BE DESIGNED TO ACCOMODATE 1 in 100 YEAR ARI FLOW AT LESS THAN 1 M/S
3. VELOCITY x DEPTH FOR 100 YEAR ARI EVENT TO BE LESS THAN 0.4 M²/S
4. REFER TO S190.2 FOR HOUSE DRAIN CONNECTION DETAILS AND VEHICLE CROSSING LAYOUT.
5. ROAD WIDTH AND KERB TYPE TO BE DETERMINED FROM 'STREET DESIGN CRITERIA'.
6. PROVIDE FOR WATER ENTRY THROUGH THE LOW SIDE KERB AS PER S190.5 AT 15 M. MAX. INTERVALS.
7. REFER TO WSUD ENGINEERING PROCEDURES: STORMWATER FOR DETAILED DESIGN
8. EDGE OF SWALE DRAINS TO BE A MINIMUM OF 1.0M FROM BACK OF KERB

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1>	DATE 13-08-2013
APPROVED 	<h2 style="margin: 0;">ROAD RESERVE WITH SWALE DRAIN</h2>	REVISION <b style="font-size: 1.2em;">A
SCALE N.T.S.		CAD FILE NAME S190.1



DISCHARGE HOUSE DRAIN TO 300mm x 300mm CONCRETE GRATED PIT & PROVIDE A 100mm DIA CONNECTION TO RAINGARDEN

FRONT OF PATH

NATURESTRIP

100mm DIA HOUSE DRAIN

200mm WIDE x 400mm DEPTH EDGE STRIP. EDGE STRIP TO SIT 50mm LOWER THAN THE FRONT OF PATH ALONG IT'S ENTIRE LENGTH

CAPPED TOE OF BATTER

150mm WIDE x 200mm DEEP CONCRETE PLINTH TO SIT 100mm BELOW THE CONCRETE EDGE SLIP

800mm WIDE CONCRETE PATH (OR OTHER APPROVED FINISH) ADJACENT BACK OF KERB

CONNECT TO EXISTING DRAIN

OVERFLOW PIT (OPTIONAL) TOP LEVEL WITH KERB INVERT

CONCRETE LANDING

600mm MIN

EX/PROPOSED DRAIN

FLOW

KERB & CHANNEL

900mm x 600mm CLEAR OPENING CLASS C BIKE SAFE R&S GRATE

REPLACE 2400mm LENGTH OF KERB & CHANNEL TO FORM NEW INLET ZONE. LIP OF CHANNEL TO REMAIN CONSTANT. TOP OF KERB AND INLET TO TAPER DOWN 50mm OVER 750mm

PLAN

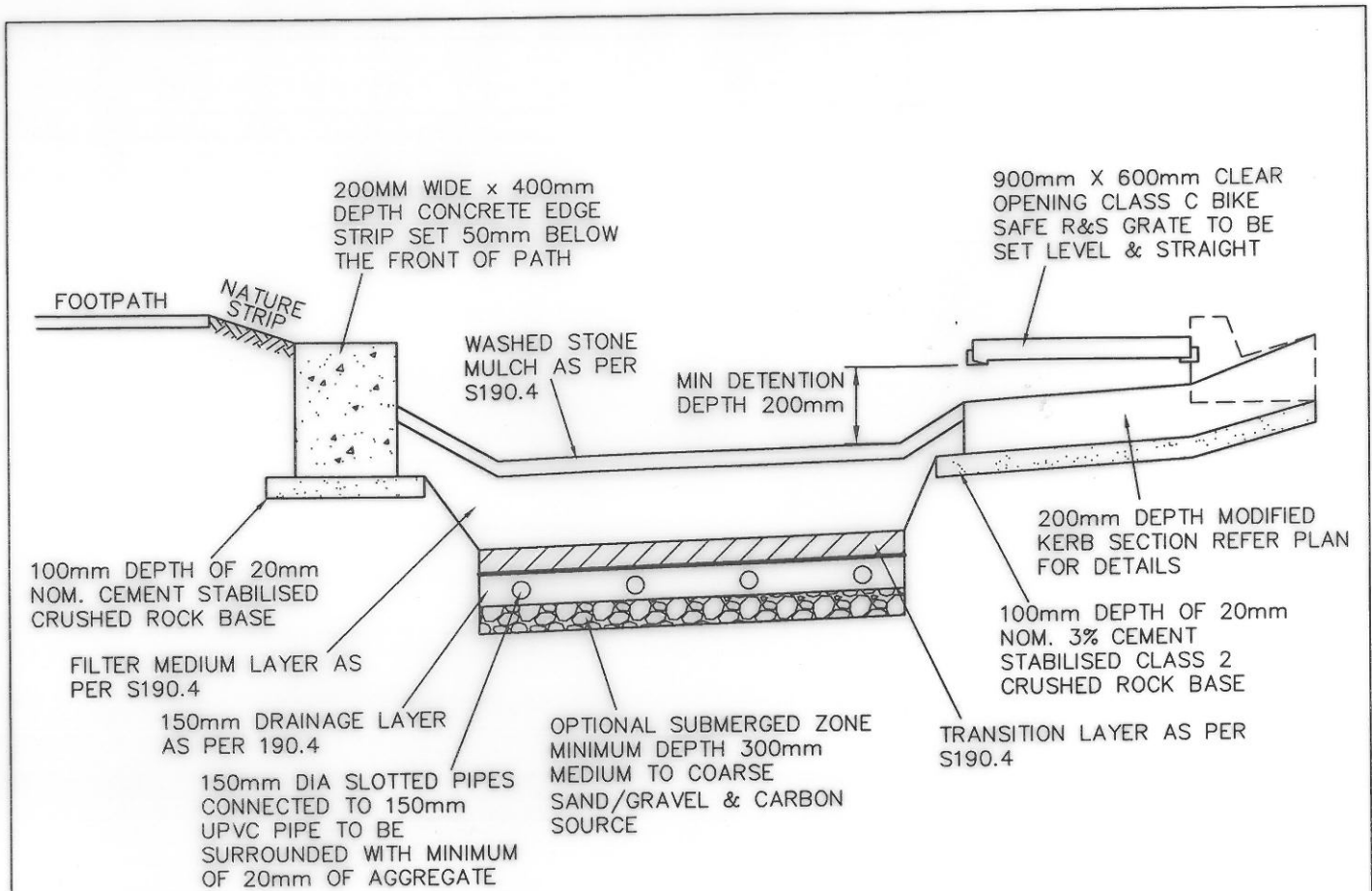
- NOTES:
1. AREA OF RAINGARDEN TO BE APPROX 2-5% OF IMPERVIOUS AREA BEING TREATED.
 2. CHECK SERVICE DEPTH & LOCATIONS PRIOR TO INSTALLATIONS OF RAINGARDEN.
 3. ALL DIMENSIONS IN mm.
 4. OVERFLOW PIT OPTIONAL.
 5. PLEASE REFER TO SHEET 2 OF 2 FOR ADDITIONAL INFORMATION

CHECKED	<i>M. H. H.</i>
APPROVED	<i>M. H. H.</i>
SCALE	N.T.S.

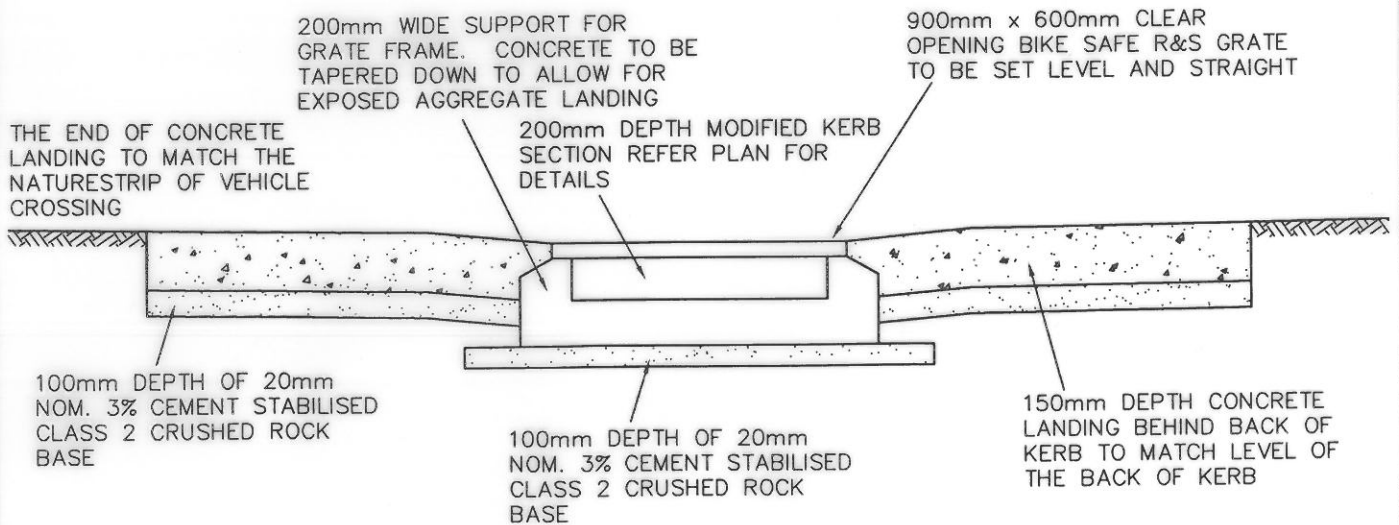
KNOX CITY COUNCIL

HOUSE DRAIN & LAYOUT ADJACENT TO RAINGARDEN (BIO-RETENTION BED) IN NATURESTRIPS

DATE	13-08-2013
REVISION	B
CAD FILE NAME	S190.3





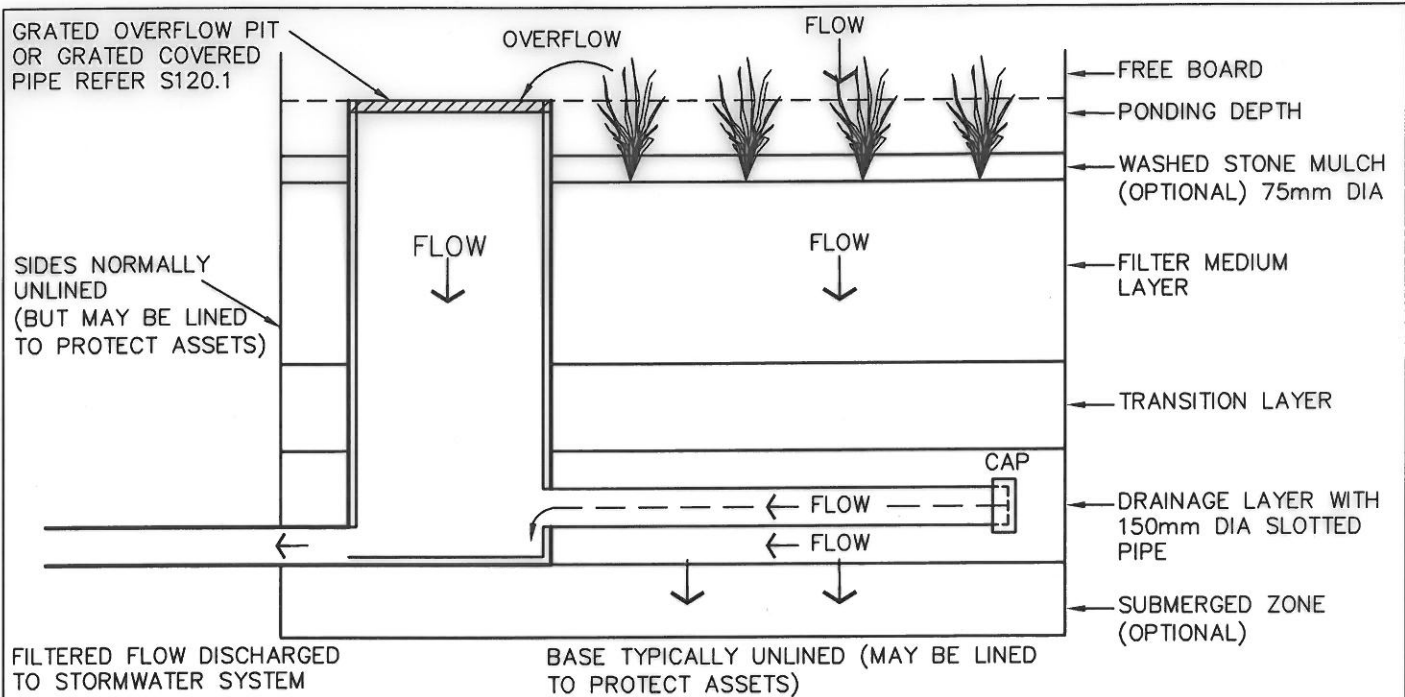
CROSS SECTION A-A



SECTION B-B

SHEET 2 OF 2

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1> <p style="margin: 0;">HOUSE DRAIN & LAYOUT ADJACENT TO RAINGARDEN (BIO-RETENTION BED) IN NATURESTRIPS</p>	DATE 13-08-2013
APPROVED 		REVISION B
SCALE N.T.S.		CAD FILE NAME S190.3



LONGITUDINAL SECTION

FILTER MEDIUM LAYER (LOAMY SAND) – FILTERS, NUTRIENTS FROM STORMWATER

SOIL COMPOSITION	PROPORTION	GRADING	TYPICAL PROPERTIES
CLAY AND SILT	<3%	<0.05mm	CERTIFIED HYDRAULIC CONDUCTIVITY
VERY FINE SAND	5–30%	0.05–0.15mm	150–350mm/hr (ASTM 1815–06)
FINE SAND	10–30%	0.15–0.25mm	ORGANIC MATTER 3–10% (W/W)
MED–COARSE SAND	40–60%	0.25–1.0mm	PH NEUTRAL (5.5–7.5) ADD DOLOMITE AS REQUIRED
COARSE SAND	7–10%	1.0–2.0mm	ELECTRICAL CONDUCTIVITY TO BE <1.2ds/m
FINE GRAVEL	<3%	2.0–3.4mm	

TRANSITION LAYER

SEPARATES FILTER FROM DRAINAGE LAYER

- SAND/COARSE SAND eg. VICROADS A2 FILTER
- DRAINS AT A FASTER RATE THAN FILTER MEDIUM LAYER
- D15 (TRANSITION LAYER) $\leq 5 \times D_{85}$ (TRANSITION LAYER)
- POTENTIAL PITFALL – INAPPROPRIATE CLADDING TOO FINE OR TOO COARSE

DRAINAGE LAYER

- HIGHEST HYDRAULIC CONDUCTIVITY
- UNDER DRAIN TO BE CONNECTED TO COUNCIL DRAIN/INTERNAL DRAINAGE SYSTEM
- TYPICALLY
 - 150mm DIA SLOTTED PIPE
 - 2–5mm DIA CLEANED WASHED GRAVEL
- SLOTS IN AG PIPE MUST NOT BE WIDER THAN GRAVEL DIAMETER
- SLOTTED PIPE TO BE CAPPED

SUBMERGED ZONE

- MAINTAINS A SOIL MOISTURE RESERVE IN THE BASE OF THE SYSTEM & ALSO HELPS TO PROMOTE HEALTHY PLANT GROWTH EVEN DURING LONG DRY PERIODS
- MEDIUM TO COARSE SAND/GRAVEL WITH A CARBON SOURCE

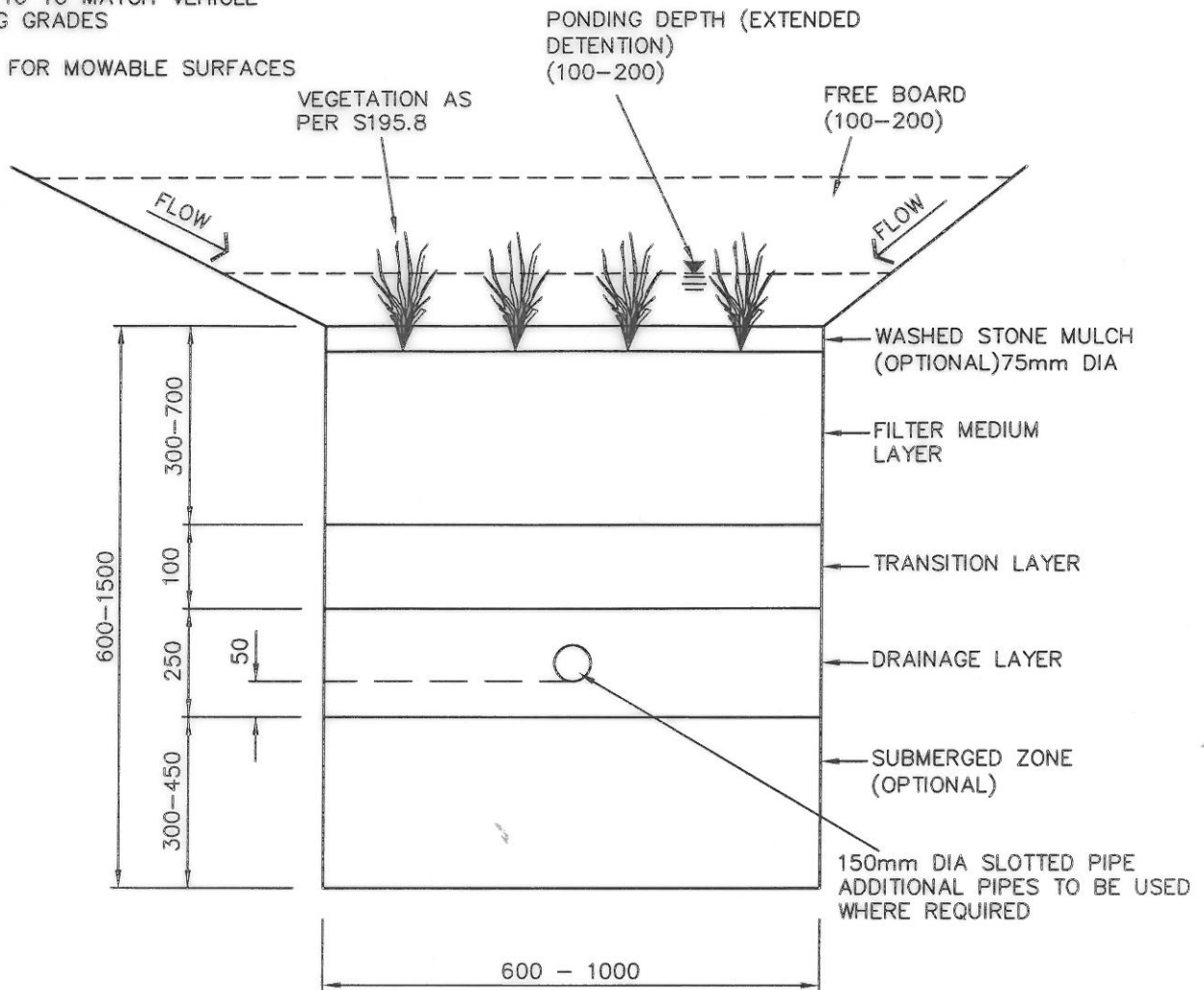
REFER SHEET 2 OF 2 FOR ADDITIONAL INFORMATION

SHEET 1 OF 2

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1> <p style="margin: 0;">FILTRATION TRENCH/BIO–RETENTION RAINGARDEN</p>	DATE 13–08–2013
APPROVED 		REVISION A
SCALE N.T.S.		CAD FILE NAME S190.4

SWALE SIDE GRADE VARIES FROM 1:3 - 1:10 TO MATCH VEHICLE CROSSING GRADES

NOTE
1:4 MAX FOR MOWABLE SURFACES



TYPICAL CROSS SECTION OF SWALE FOR OPEN SPACE/STREETSCAPING

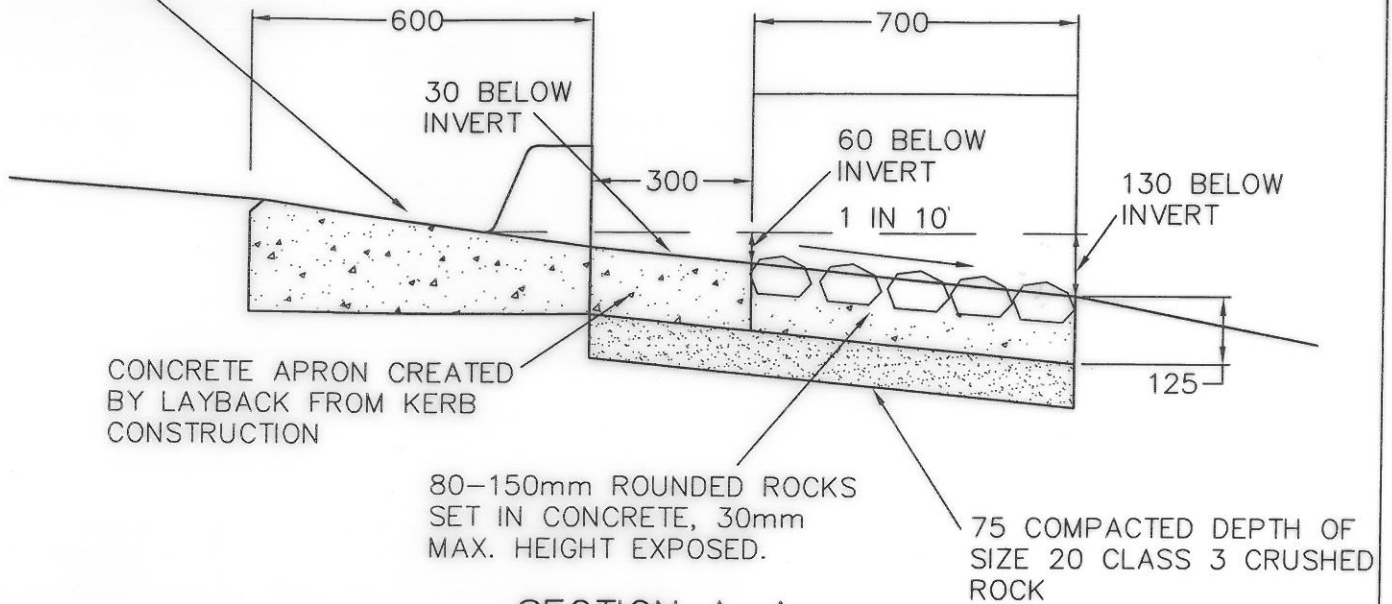
NOTES

1. SWALE WIDTH SHALL BE DESIGNED TO ACCOMMODATE 1:5 YEAR RECURRENCE INTERVAL & VELOCITY OF FLOW <0.5m/s.
2. AREA OF RAINGARDEN TO BE APPROX 2-5% OF IMPERVIOUS AREA BEING TREATED.
3. REFER TO MELBOURNE WATER WSUD ENGINEERING PROCEDURES : BIO RETENTION SWALES CHTP 5 www.public.csiro.au/nid/18/pid/4974.htm
4. CONSIDER LOCATION OF TREES SURROUNDING TRENCH. KEEP WORKS OUTSIDE DRIPLINE OF TREES.
5. REFER TO S190.6 FOR SUITABLE PLANT SPECIES.
6. ALL DIMENSIONS IN mm.
7. SET BACK DISTANCE FROM STRUCTURES/SIZING/MATERIAL/PLANT LIST REFER S190.6.
8. DO NOT USE FILTER SOCKS OR GEOTEXTILE ON DRAINAGE PIPE.
9. IN CAR PARKS & AREAS WHERE FLOODING IS TO BE AVOIDED A 600mm X 600mm (MIN) OVERFLOW PIT TO BE ADDED. AS PER KCC STANDARD.
10. USE AN IMPERMEABLE LINER ADJACENT TO FOOTINGS OF BUILDINGS.
11. IF A SYSTEM IS TO ABUTT A BUILDING REFER TO S195.8 AND CONSIDERATION OF GEOTECHNICAL REQUIREMENTS.

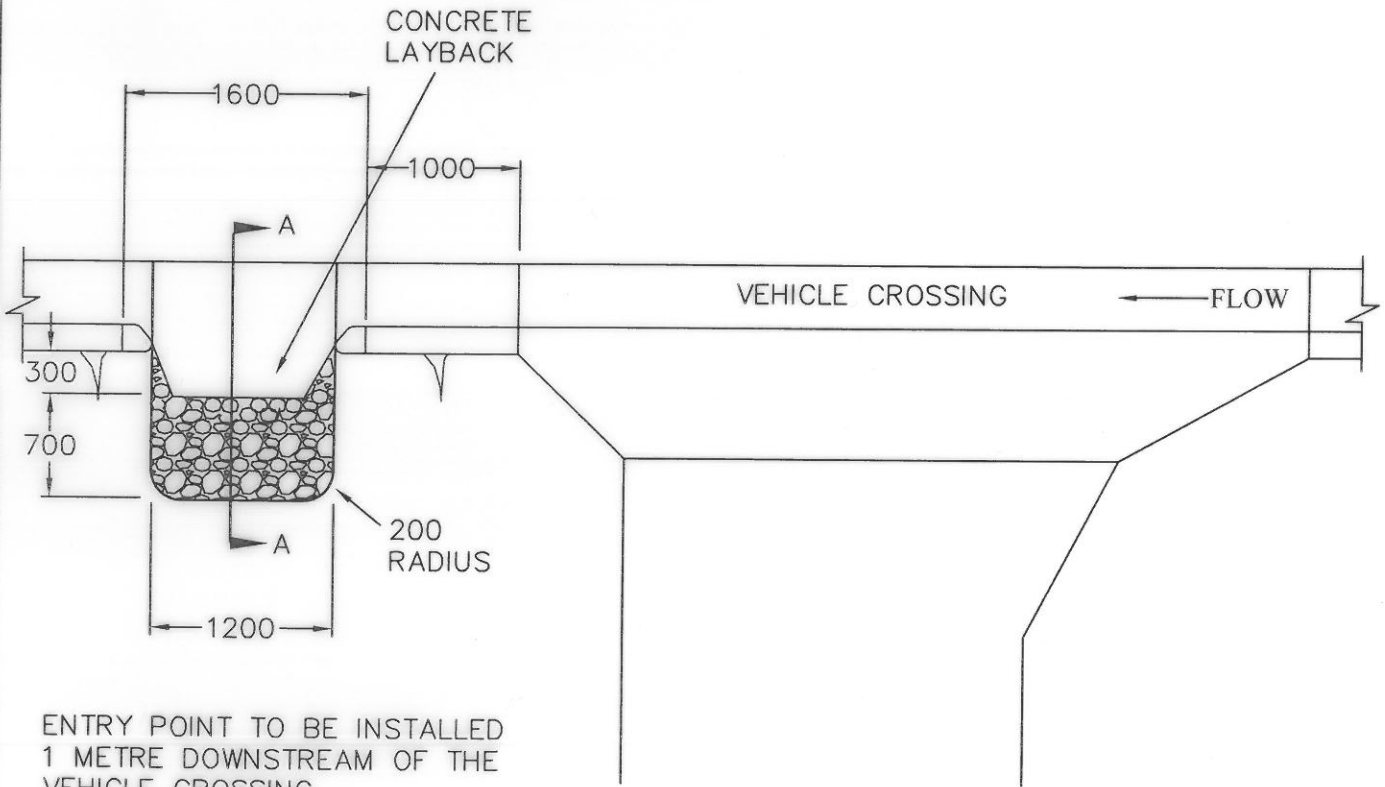
SHEET 2 OF 2

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1> <p style="margin: 0;">FILTRATION TRENCH/BIO-RETENTION RAINGARDEN</p>	DATE 17-06-2014
APPROVED 		REVISION B
SCALE N.T.S.		CAD FILE NAME S190.4

BARRIER AS PER
S301.1 OR ROLLOVER
KERB AS PER S301.4



SECTION A-A



ENTRY POINT TO BE INSTALLED
1 METRE DOWNSTREAM OF THE
VEHICLE CROSSING

PLAN

NOTES

1. ALL DIMENSIONS IN MM

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KNOX CITY COUNCIL

DATE
13-08-2013

APPROVED
[Signature]

WATER ENTRY VIA
DEPRESSED KERB

REVISION
A

SCALE
N.T.S.

CAD FILE NAME
S190.5

(National Construction Code NCC)

FOOTING DEPTH CHART	
EXISTING HOUSE FOUNDATION DEPTH	RAINGARDEN MINIMUM DISTANCE FROM FOOTING
150mm	800mm
250mm	700mm
350mm	600mm
450mm	500mm
550mm	400mm
650mm	300mm

NOTE: SOIL TYPES SHOULD ALWAYS BE CONSIDERED

*IN THE EVENT THAT THE RAINGARDEN IS ABUTTING A BUILDING A FOOTING EXPOSURE IS TO BE COMPLETED BY A GEOTECH ENGINEER TO CONFIRM DEPTH OF FOOTING AND SOIL CLASSIFICATION.

NOTE: SAND HAS A DIFFERENT ANGLE OF REPOSE.

RAINGARDEN SIZING CHART	
IMPERVIOUS AREA AREA OF RUN-OFF (m ²)	RAINGARDEN (m ²) 3-5% OF IMPERVIOUS AREA
50	1-2.5
100	2-5
150	3-7.5
200	4-10
250	5-12.5
300	6-15
350	7-17.5
400	8-20
450	9-22.5

NOTE: IMPERVIOUS AREAS ARE HARD SURFACES SUCH AS ROOFS, DRIVEWAYS & PATHS

THE ABOVE CHARTS ARE SOURCED FROM MELBOURNE WATER, INTRODUCTION SHEET - BUILDING A RAINGARDEN PAMPHLET

WSUD/RAINGARDEN PLANT LIST (KNOX INDIGENOUS PLANT SPECIES)

*CAREX SPECIES *JUNCUS SPECIES *LOMANDRA SPECIES
*ISOLEPIS NODOSA *HELICHRYSUM RUTIDOLEPIS *BRACHYSCOME MULTIFIDA
*CHRYSOCEPHALUM APICULATUM *GOODENIA OVATA *MALALEUCA

NOTE: AT LEAST 50% OF THE AREA OF A WSUD SYSTEM SHOULD WHERE POSSIBLE BE MADE UP OF SPECIES OF CAREX, JUNCUS, GOODENIA AND THE ABOVE SPECIES. PLANTS SHOULD BE NON WOODY (AS THESE CANNOT TAKE HIGH MOISTURE CONTENT) AND HAVE THE GREATEST POSSIBLE SURFACE AREA EXPOSED TO THE RUNOFF. THE REMAINDER OF THE AREA CAN BE PLANTED WITH SPECIES CHOSEN FOR THEIR AESTHETIC OR BIODIVERSITY ATTRIBUTES.



MAINTAINING A RAINGARDEN

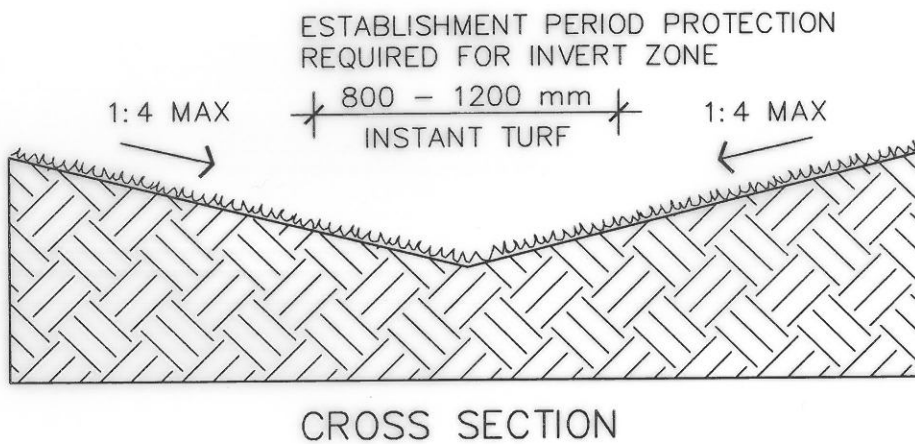
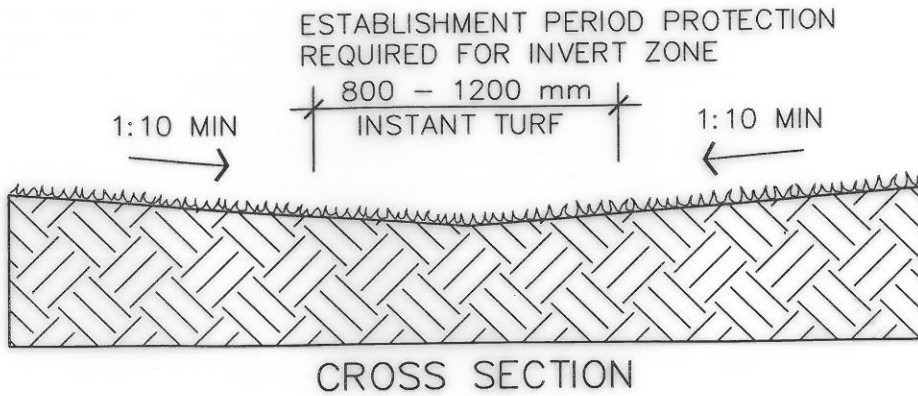
ONCE ESTABLISHED, RAINGARDENS ARE LOW MAINTENANCE. THEY DON'T NEED TO BE WATERED, MOWED OR FERTILISED. HOWEVER, HERE ARE A FEW TIPS TO HELP YOUR RAINGARDEN MATURE AND FUNCTION WELL.

- GRAVEL MULCH WILL HELP RETAIN MOISTURE IN YOUR RAINGARDEN AND PREVENT WEEDS FROM GROWING. (AVOID USING TIMBER MULCH AS THIS WILL FLOAT IN THE RAINGARDEN AND MAY CAUSE BLOCKAGES)
- ENSURE THAT THE OVERFLOW IS NEVER BLOCKED.
- SOME OF THE WEEDING MAY NEED TO TAKE PLACE UNTIL PLANTS ARE FULLY MATURED.
- EVENLY DISTRIBUTE WATER FLOW INTO THE RAINGARDEN TO LIMIT EROSION FROM HEAVY RAINFALL. STRATEGICALLY PLACED ROCKS MAY HELP WITH THIS.
- INSPECT THE RAINGARDEN REGULARLY - REPLACE PLANTS AND REPAIR EROSION WHEN NECESSARY.
- DRIVING OVER OR SQUASHING A RAINGARDEN WILL AFFECT ITS ABILITY TO WORK EFFICIENTLY

NOTE: IF NECESSARY WATER THE RAINGARDEN UNTIL PLANTS HAVE ESTABLISHED IN COMPLIANCE WITH LOCAL WATER AUTHORITY.

SOURCE: STORMWATER TREATMENT TECHNOLOGIES, LATEST ADVANCES, PRINCIPLES AND DESIGN PROCEDURES, MONASH UNIVERSITY & CLEARWATER (SHORT COURSE FEB 22-25, 2010)

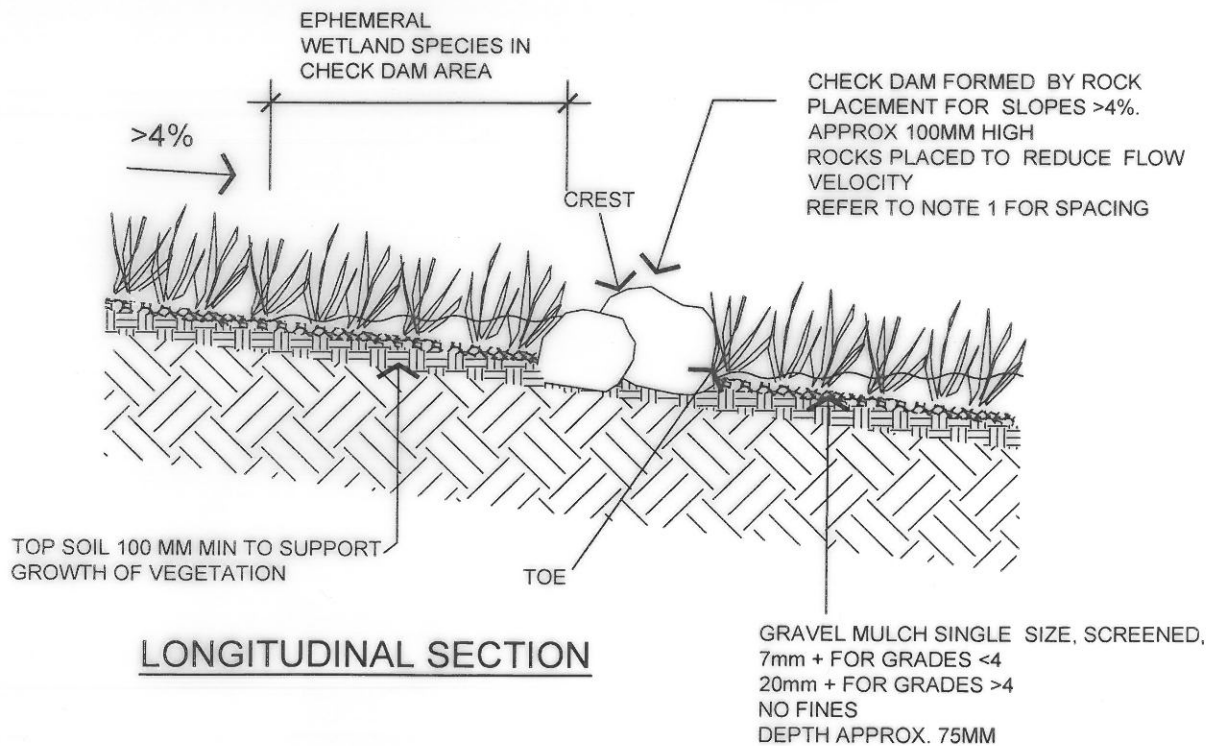
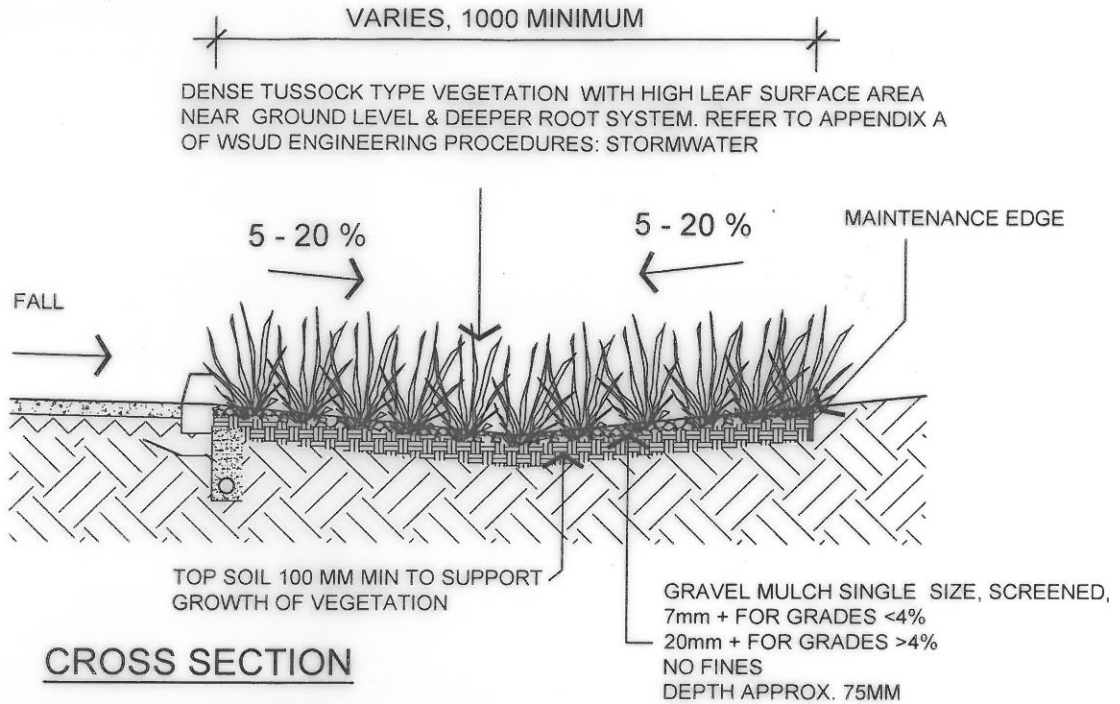
CHECKED 	KNOX CITY COUNCIL	DATE 13-08-2013
APPROVED 		REVISION
SCALE N.T.S.	FOOTING DEPTH CHART, RAINGARDEN SIZING CHART AND WSUD PLANT LIST	CAD FILE NAME S 190.6



NOTES

1. GRASS SWALES SHOULD BE USED ON LONGITUDINAL GRADES LESS THAN 1:25.
2. SWALE WIDTH SHALL BE DESIGNED TO ACCOMMODATE 1 in 5 YEAR AVERAGE RECURRENCE INTERVAL FLOW, AT VELOCITY LESS THAN 0.5 m/s.
3. SWALE SIDE SLOPES MAY BE MODIFIED WHERE VEHICLE ACCESS TO PROPERTIES IS REQUIRED.
4. SWALE TO BE CONNECTED TO OPEN DRAIN VIA A LEVEL GRATE AT SWALE INVERT DEPTH. APRON OR ROCK BEACHING AROUND PIT IS REQUIRED TO PREVENT EROSION.
5. REFER TO MELBOURNE WATER WSUD ENGINEERING PROCEDURES: STORMWATER FOR DESIGN OF SWALE CHPT 8. www.publish.csiro.au/nid/18/pid/4974.htm
6. EDGE OF SWALE DRAIN TO BE AT A MINIMUM OF 1m FROM BACK OF KERB.

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1>	DATE 13-08-2013
APPROVED 	<h2 style="margin: 0;">GRASSED SWALES</h2>	REVISION B
SCALE N.T.S.		CAD FILE NAME S191.1



NOTE

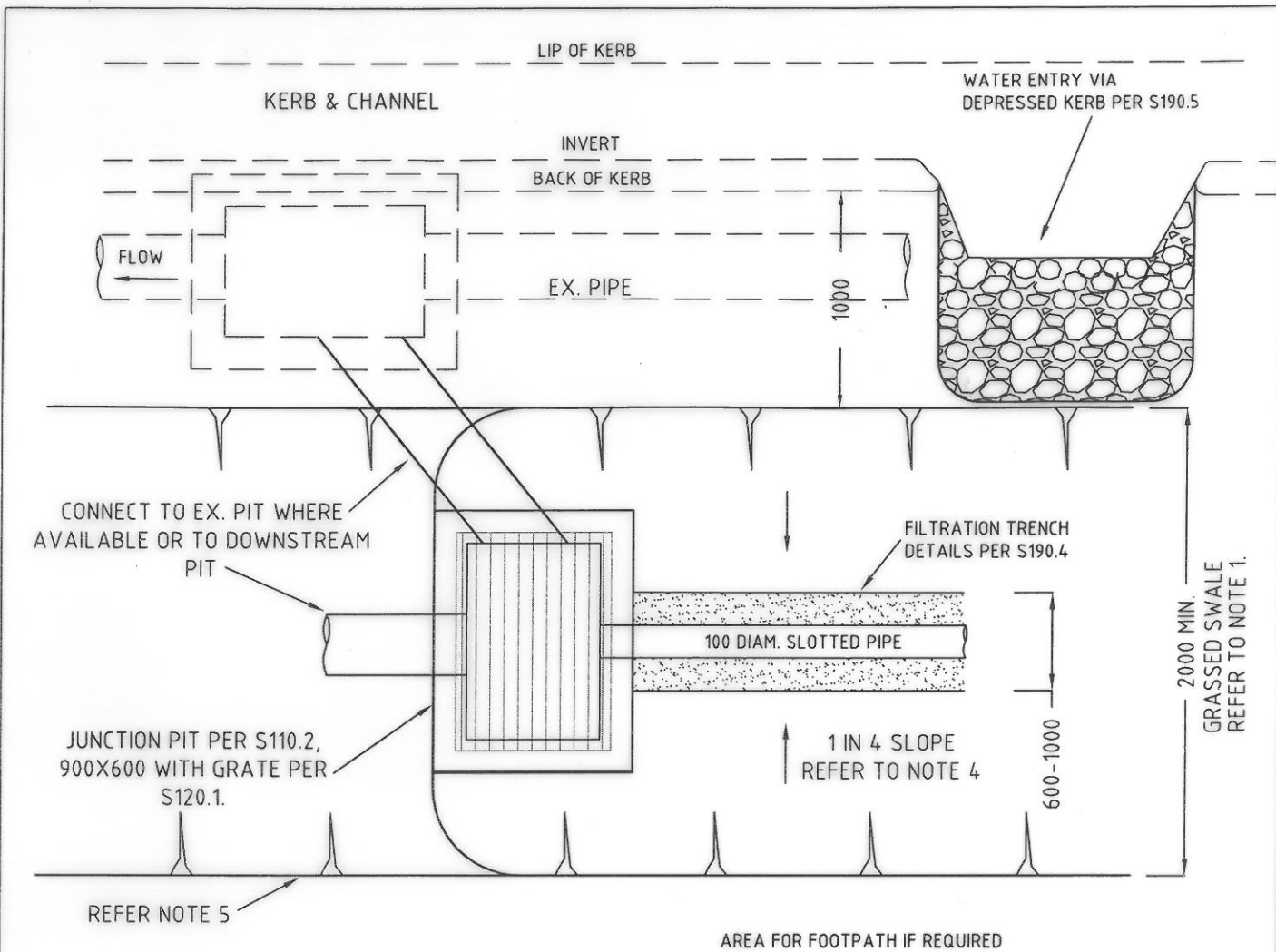
1. PLACEMENT OF CHECK DAMS TO BE SUCH THAT FOR SLOPES = 4% TOE OF UPSTREAM CHECK DAM IS 100MM ABOVE CREST OF DOWNSTREAM CHECK DAM. THIS DIFFERENCE IN ELEVATION IS TO BE LESS THAN 100MM FOR SLOPES > 4%
2. GEOFABRIC PRODUCTS MAY BE REQUIRED TO PREVENT TOPSOIL EROSION
3. DIMENSIONS IN MM

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SCALE N.T.S.

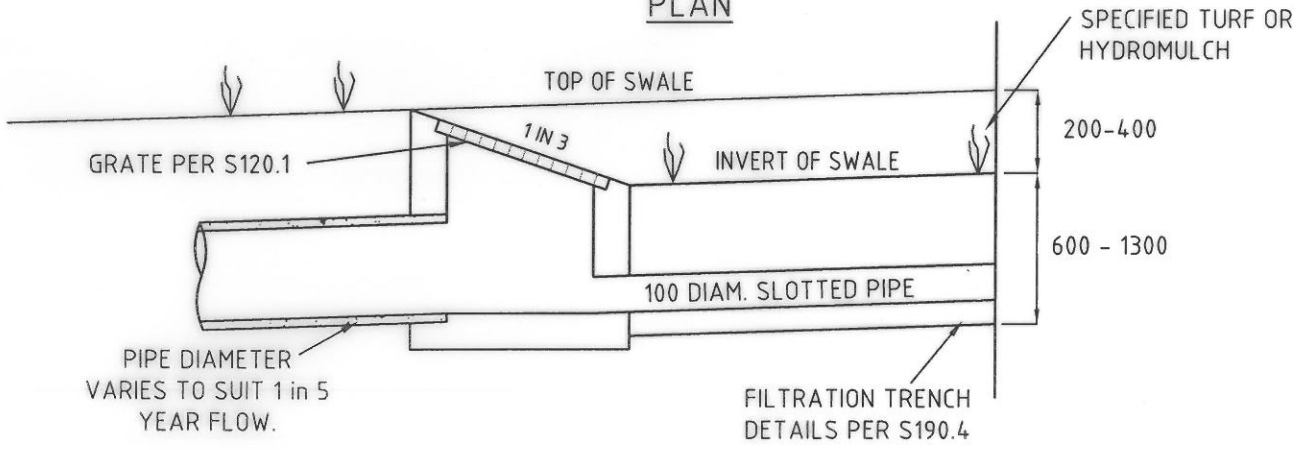
KNOX CITY COUNCIL

VEGETATED SWALES

DATE 13-08-2013
REVISION A
CAD FILE NAME S191.2



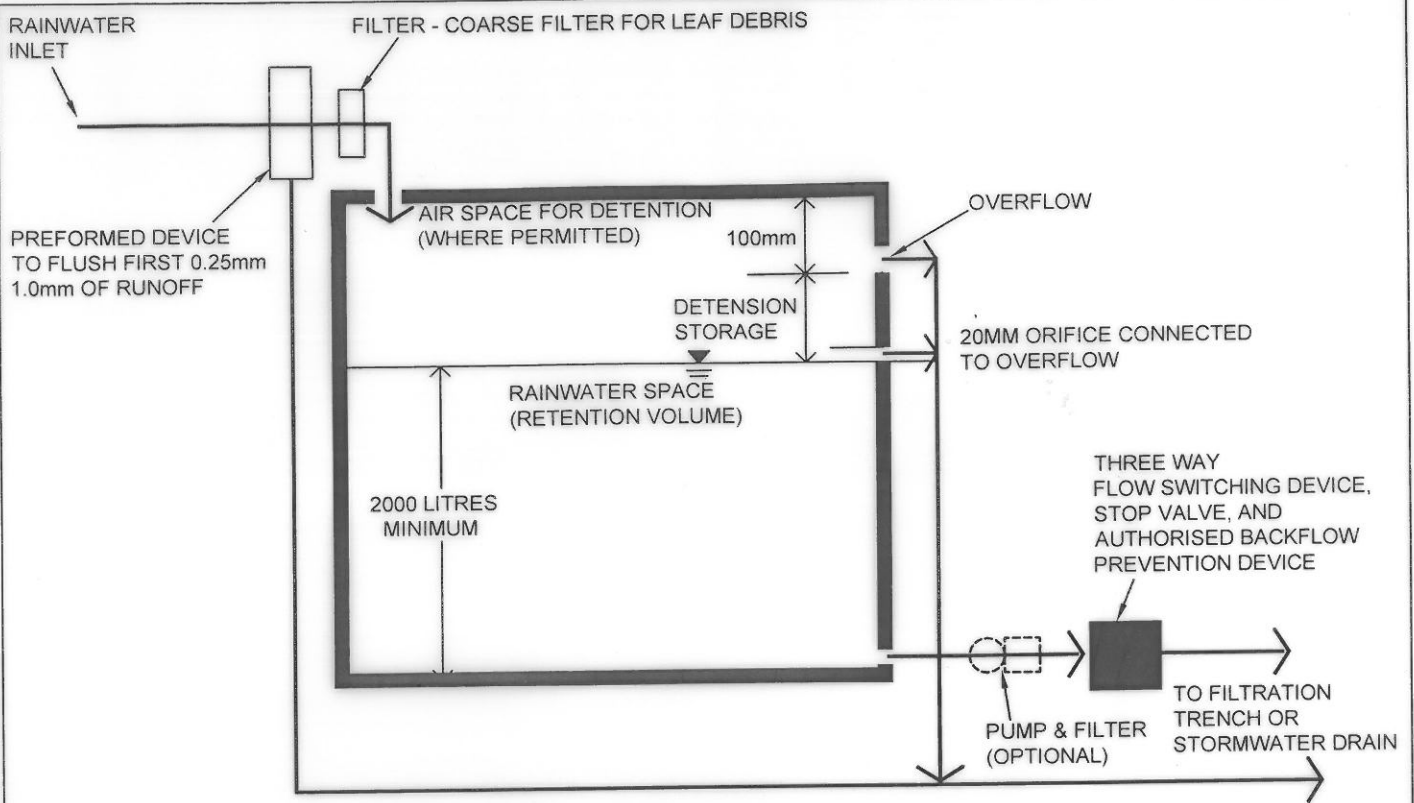
PLAN



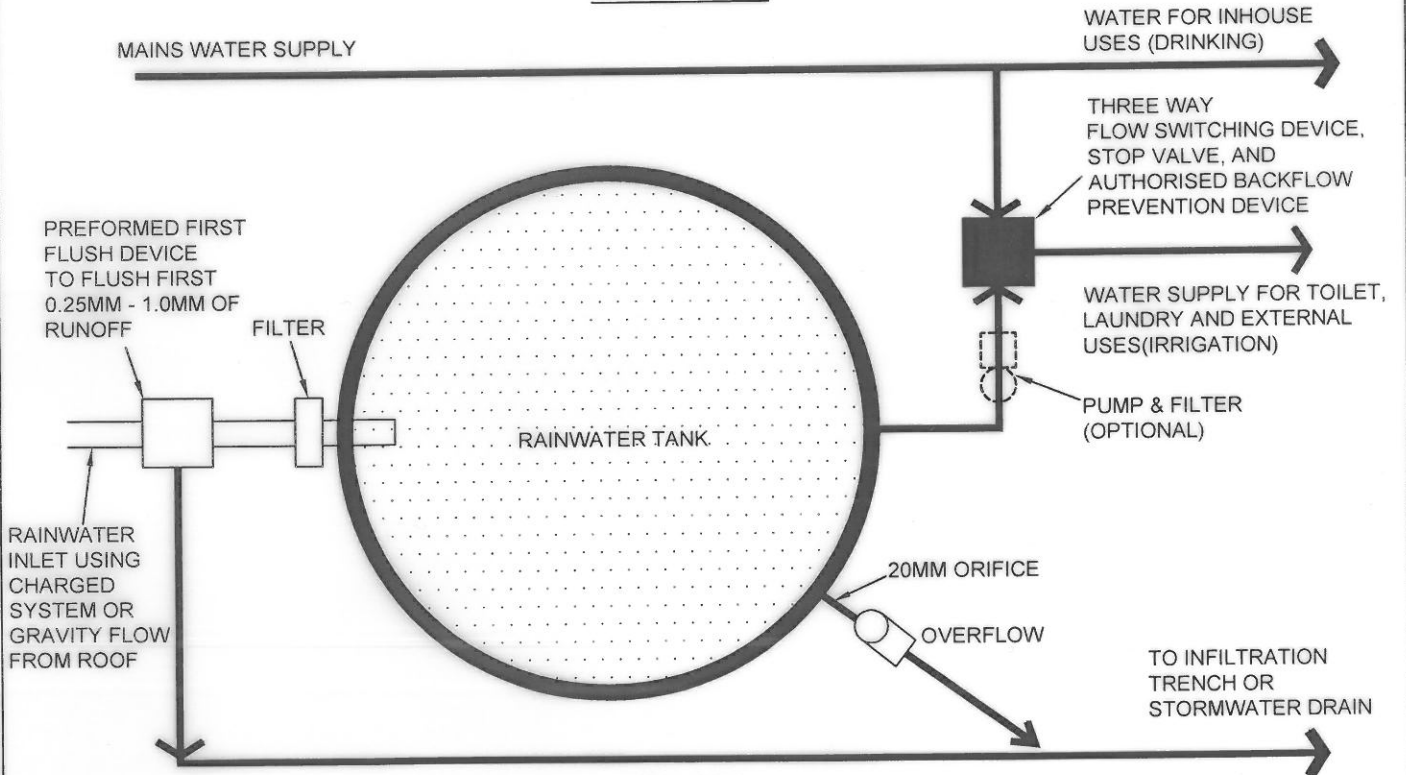
SECTION

- NOTES**
1. SWALE WIDTH SHALL BE DESIGNED TO ACCOMODATE 1 in 5 YEAR ARI FLOW WITH VELOCITY <math>< 0.5\text{M/S}</math>.
 2. FLOW \times VELOCITY IN SWALE SHOULD NOT EXCEED 0.4 SQ.M/S
 3. REFER TO CHAPTER 8 OF WSUD ENGINEERING PROCEDURES: STORMWATER FOR DETAILED DESIGN
 4. SWALE SIDE SLOPES MAY BE MODIFIED WHERE VEHICLE ACCESS TO PROPERTIES IS REQUIRED.
 5. WHERE SWALE IS TO BE CONTINUED DOWNSTREAM, PROVIDE LEVEL GRATE AT SWALE INVERT DEPTH.
 6. ALL DIMENSIONS IN MM

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SCALE N.T.S.		CAD FILE NAME S191.3
SWALE DRAIN AND COLLECTION PIT		



SECTION

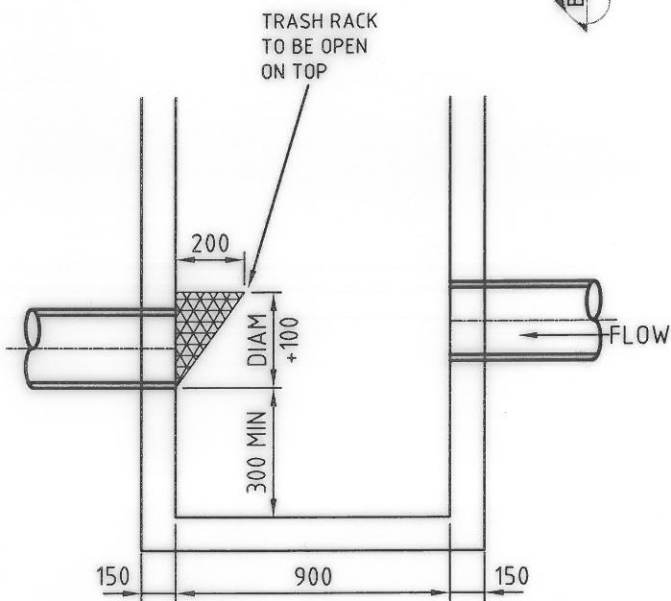
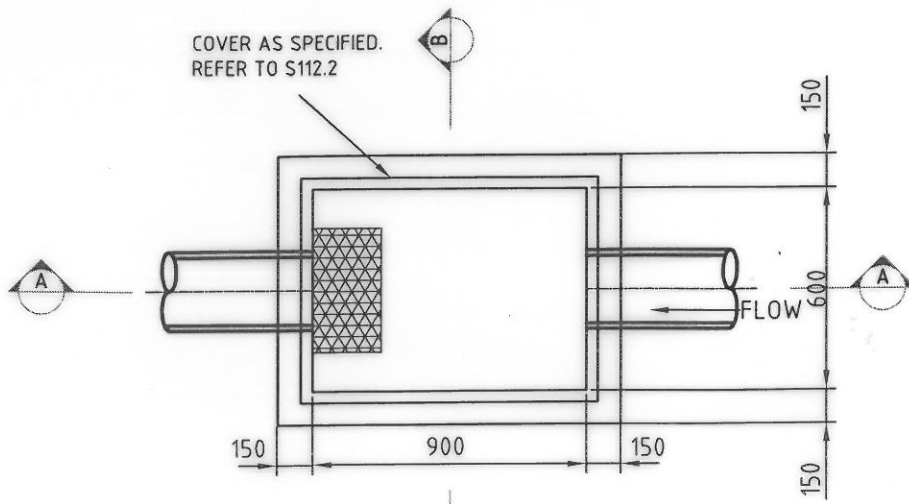


PLAN

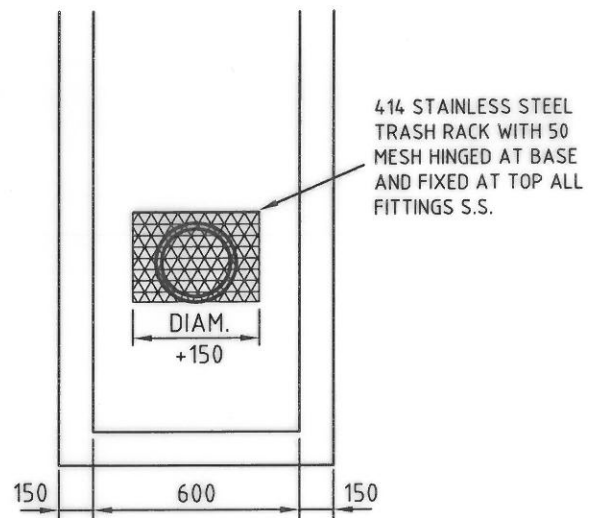
NOTES

1. MAINTENANCE PIT/VALVE TO BE PROVIDED.
2. CONNECTION OF STORMWATER TO TANK TO BE COMPLIANT WITH AS 3500 SERIES.
3. ALL OPENINGS TO BE MOSQUITO PROOFED.
4. APPLY THE CURRENT REGULATIONS FROM THE DEPARTMENT OF HEALTH (VIC) AND EPA (VIC)

CHECKED <i>[Signature]</i>	KNOX CITY COUNCIL	DATE 13-08-2013
APPROVED <i>[Signature]</i>	RAINWATER STORAGE TANK	REVISION B
SCALE N.T.S.		CAD FILE NAME S193.1



SECTION A-A



SECTION B-B

NOTES

1. PIT DIMENSIONS SHOWN ARE FOR STANDARD JUNCTION AND SIDE ENTRY PITS. REFER TO STANDARD DRAWINGS FOR PIT CONSTRUCTION DETAILS.
2. SUMP DEPTH IS DEPENDENT ON FREQUENCY OF CLEANING & APPROPRIATE SAFETY LEVELS FOR LOCATION & USE.
3. DIMENSIONS OF TRASH RACK MAY BE VARIED DEPENDING ON EXPECTED VOLUME OF TRASH TO BE STORED & CLEANING FREQUENCY.
4. PITS ARE REQUIRED TO BE REINFORCED WHEN LOCATED UNDER ROADS.
5. DIMENSIONS IN MM

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SCALE
N.T.S.

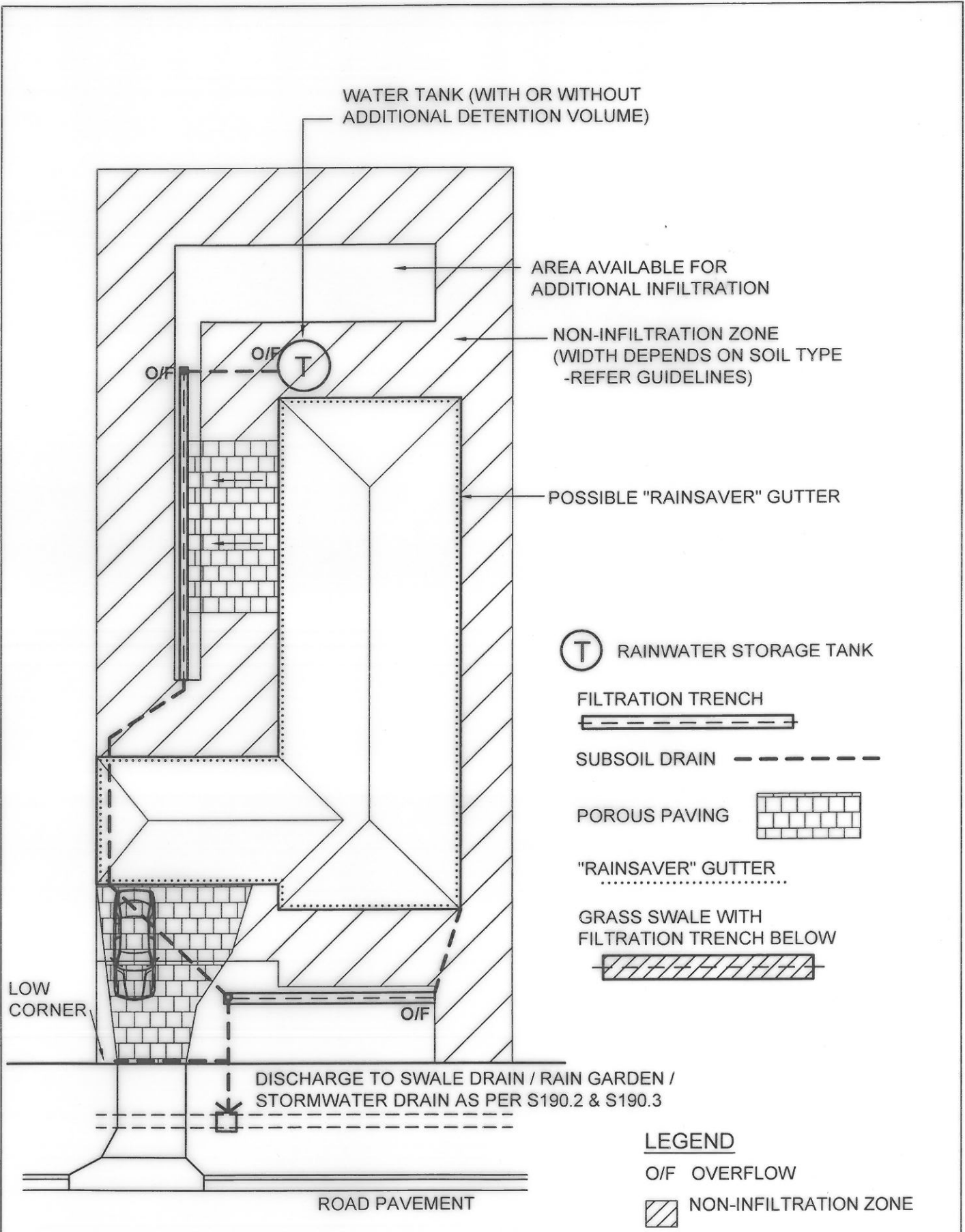
KNOX CITY COUNCIL

DATE
13-08-2013

REVISION
A

CAD FILE NAME
S194.1

LITTER TRAP / SUMP PIT



NOTE: PROVISION FOR FOOTPATHS & OTHER SERVICES SHOULD BE INCLUDED IN DESIGN

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M. H. H.

APPROVED
M. H. H.

SCALE
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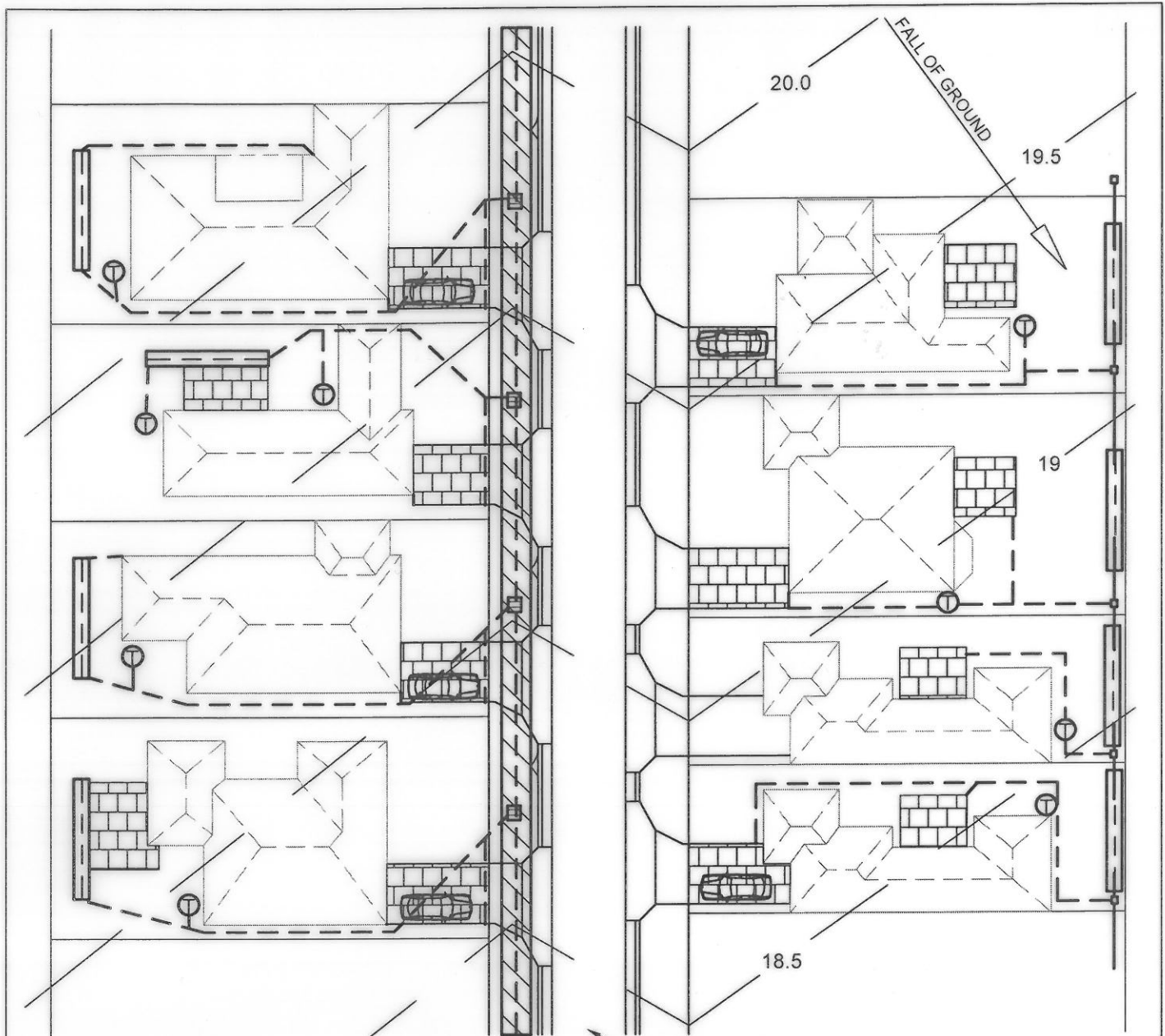
KNOX CITY COUNCIL

EXAMPLE LAYOUT
DETACHED RESIDENCE
(NEW OR RETROFIT SITUATION)

DATE
13-08-2013

REVISION
A

CAD FILE NAME
S195.1



ROAD RESERVE DESIGN PER S190.1 AND S190.2

LEGEND

-  RAINWATER STORAGE TANK PER S193.1
-  FILTRATION TRENCH WITH SOIL PROFILE PER S190.4
-  SUBSOIL DRAIN
-  GRATED PIT PER S120.1
-  POROUS PAVING
-  KERB INLET PER S190.5
-  GRASS SWALE WITH FILTRATION TRENCH BELOW PER S190.4 & S191.1

NOTE: PROVISION FOR FOOTPATHS AND OTHER SERVICES SHOULD BE INCLUDED IN DESIGN

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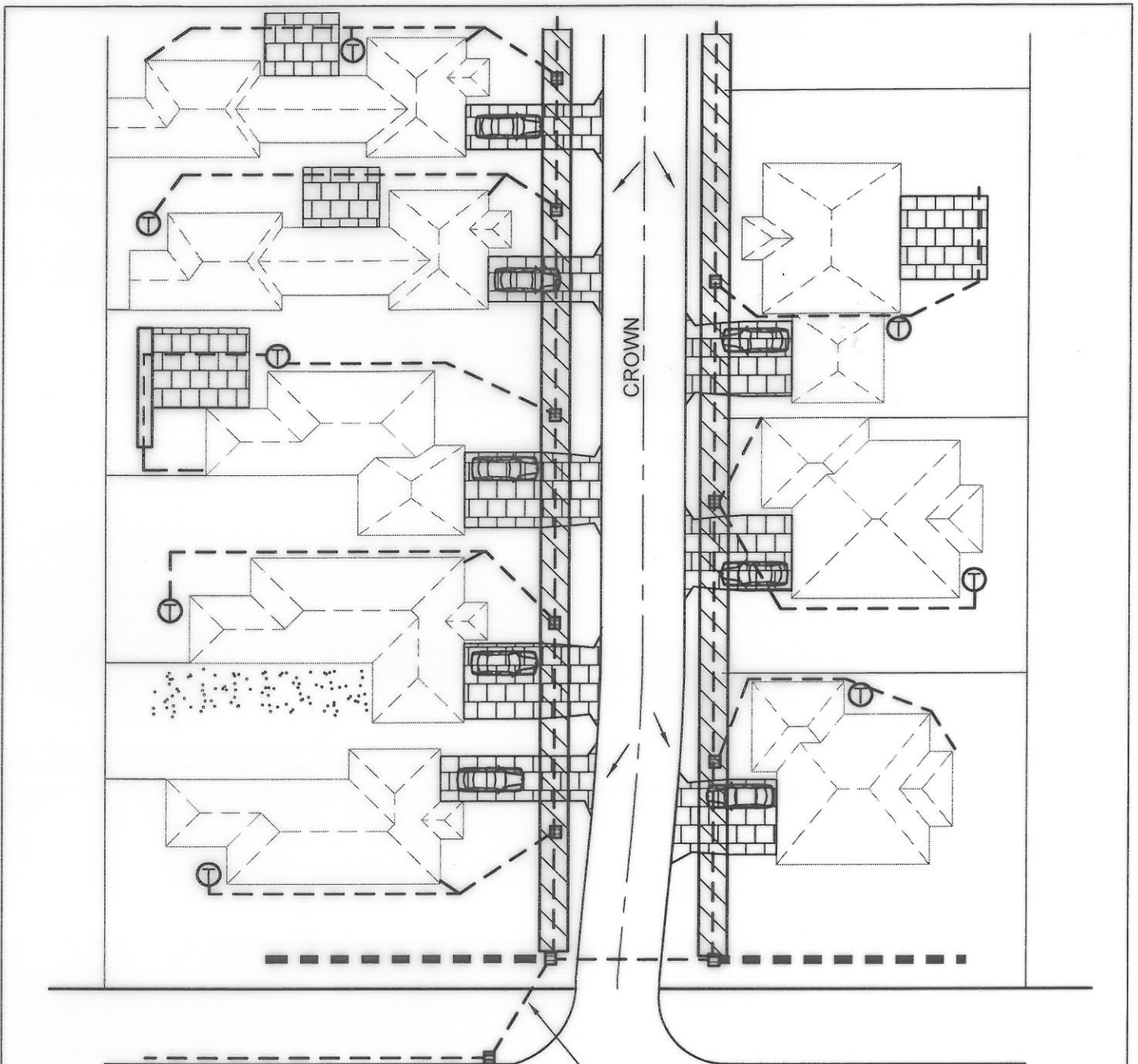
KNOX CITY COUNCIL

EXAMPLE SUBDIVISION LAYOUT

DATE
13-08-2013


REVISION
A

CAD FILE NAME
S195.2





VOLUME LIMITED CONNECTION TO STORMWATER SYSTEM (WITH OVERFLOW PROVISION)

LEGEND


- 


RAINWATER STORAGE TANK PER S193.1




GRASS SWALE WITH FILTRATION TRENCH BELOW PER S190.4 & S191.1
- 


FILTRATION TRENCH WITH SOIL PROFILE PER S190.4




DETENTION STORAGE
- 

SUBSOIL DRAIN





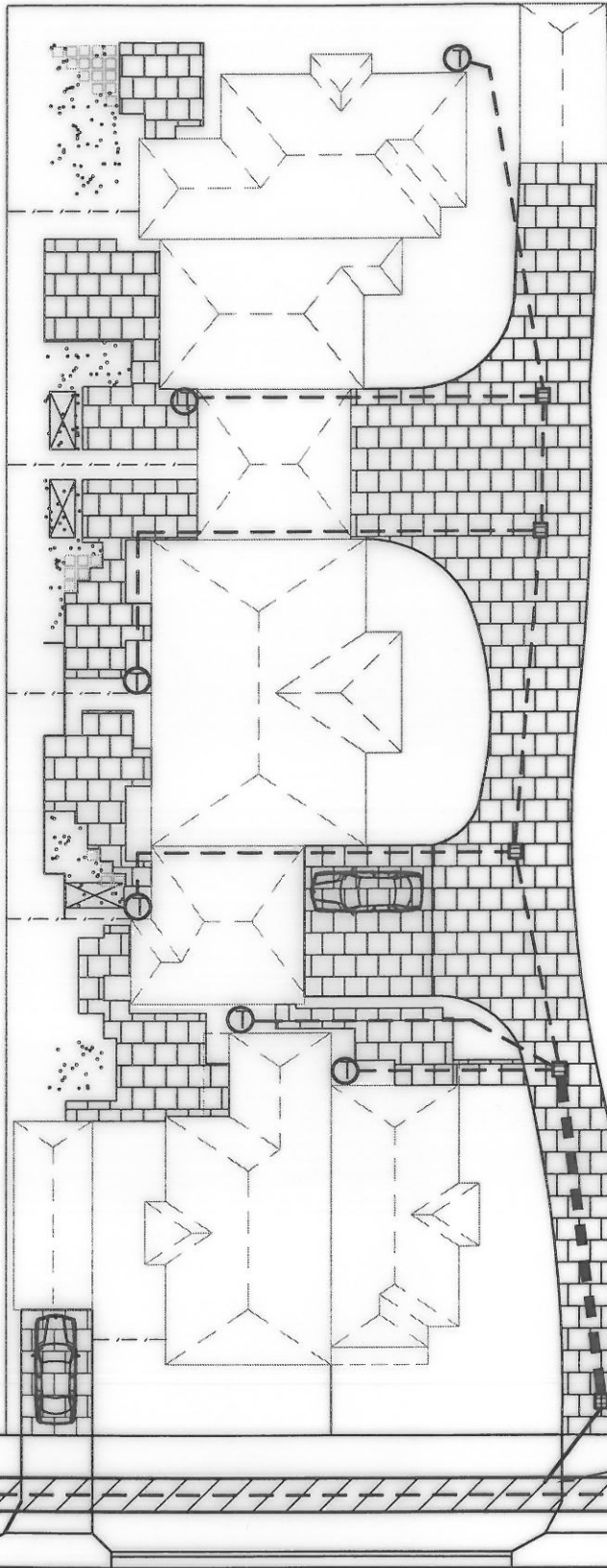
GRAVEL MULCH
- 

GRATED PIT PER S120.1
- 





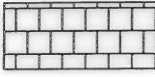




POROUS PAVING

NOTE: PROVISION FOR FOOTPATHS AND OTHER SERVICES SHOULD BE INCLUDED IN DESIGN

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1>	DATE 13-08-2013
APPROVED 	<h2 style="margin: 0;">EXAMPLE LAYOUT INTEGRATED HOUSING DEVELOPMENT</h2>	REVISION
SCALE N.T.S.		CAD FILE NAME S195.3



LEGEND

-  RAINWATER STORAGE TANK PER S193.1
-  FILTRATION TRENCH WITH SOIL PROFILE PER S190.4
-  SUBSOIL DRAIN
-  GRATED PIT PER S120.1
-  POROUS PAVING
-  "RAINSAVER" GUTTER
-  GRASS SWALE WITH FILTRATION TRENCH BELOW PER S190.4 & S191.1
-  DETENTION STORAGE
-  GRAVEL MULCH

VOLUME LIMITED CONNECTION TO STORMWATER SYSTEM (WITH OVERFLOW PROVISION)

DISCHARGE TO FILTRATION TRENCH/SWALE DRAIN IN NATURESTRIP OR STORMWATER DRAIN

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APPROVED
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SCALE
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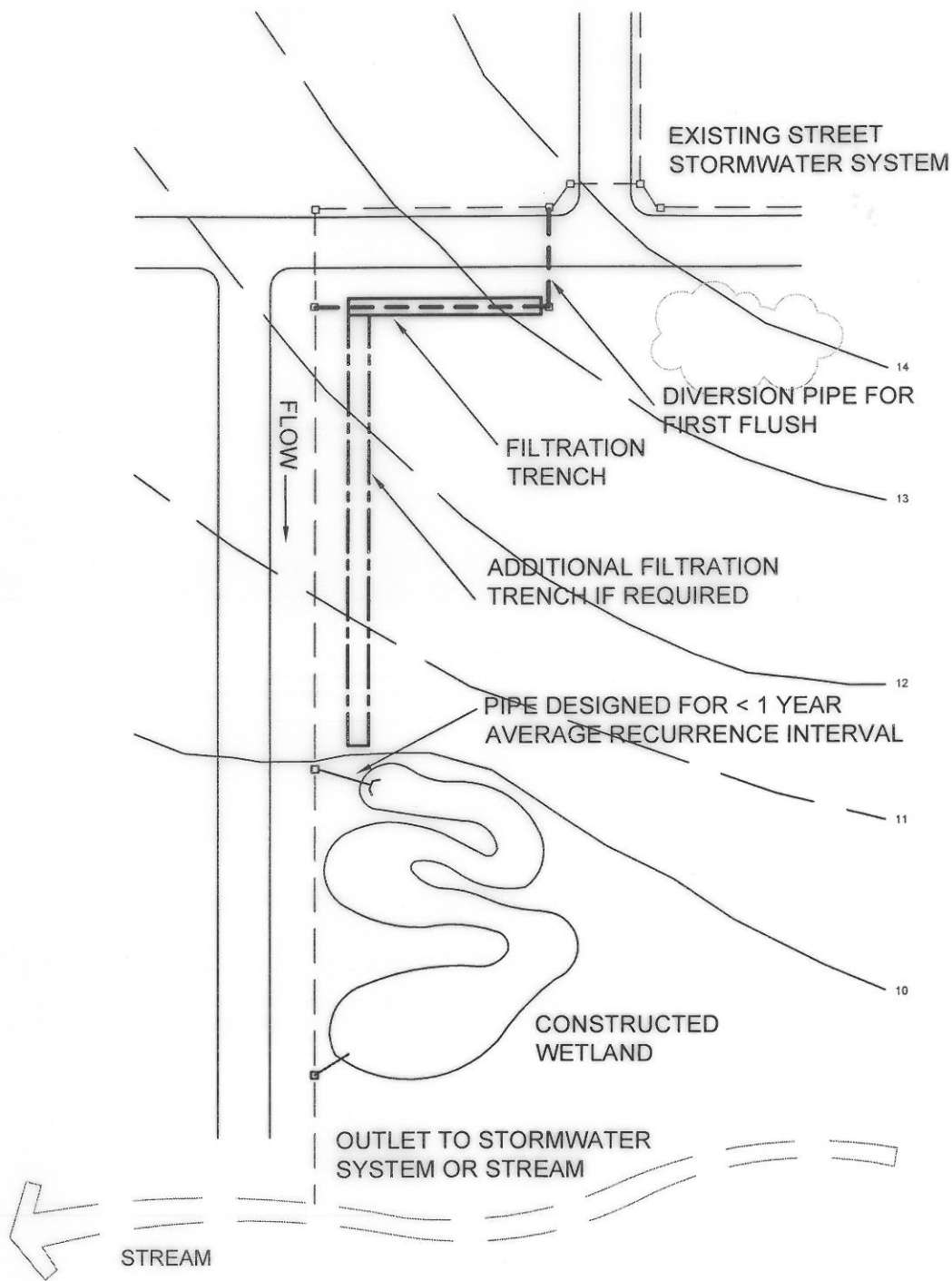
KNOX CITY COUNCIL

**EXAMPLE LAYOUT
UNIT DEVELOPMENT**

DATE
13-08-2013

REVISION
A

CAD FILE NAME
S195.4

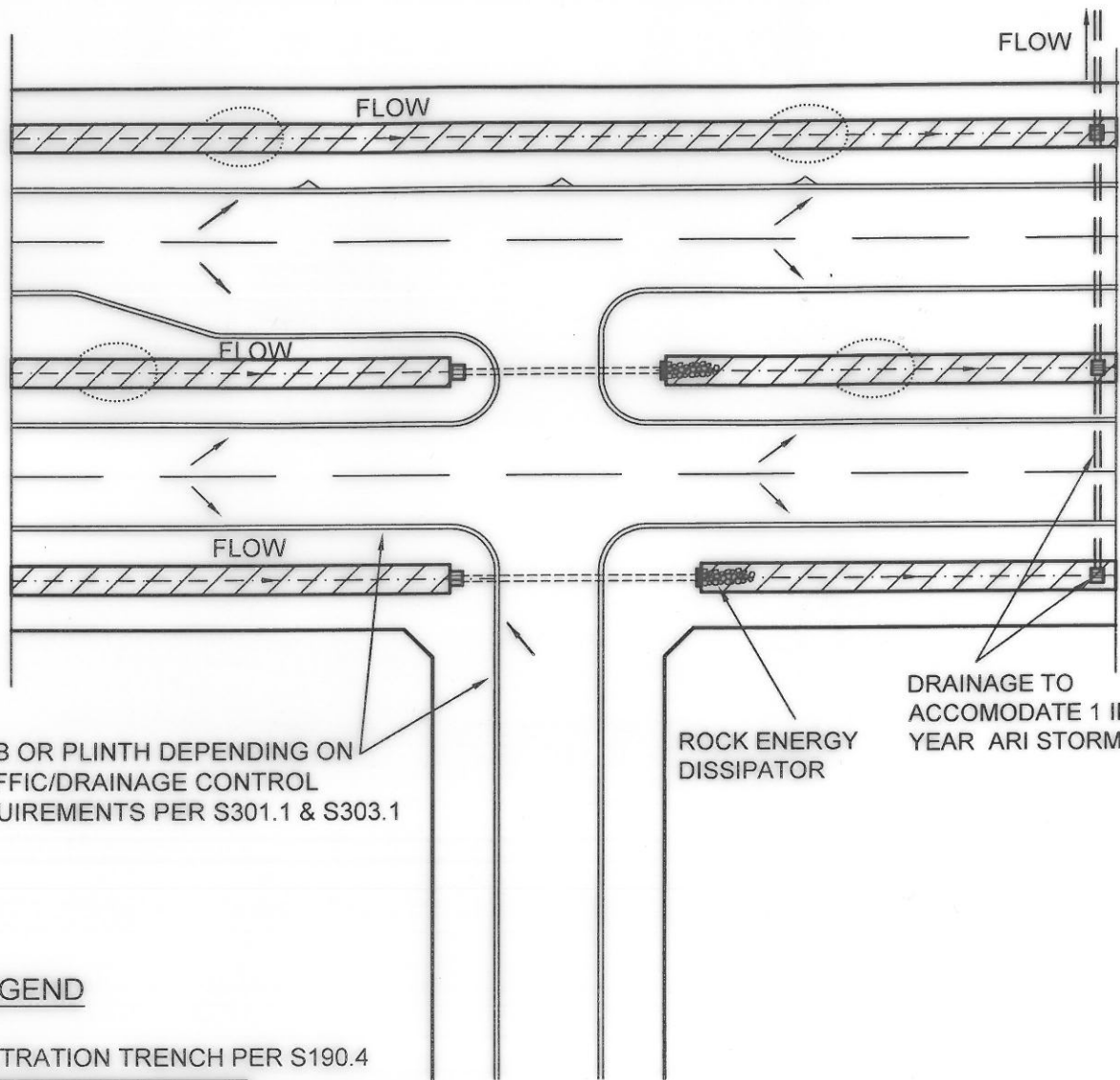


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KNOX CITY COUNCIL

EXAMPLE LAYOUT URBAN PARK RETROFIT

DATE
 13-08-2013
 REVISION
 A
 CAD FILE NAME
 S195.5



KORB OR PLINTH DEPENDING ON TRAFFIC/DRAINAGE CONTROL REQUIREMENTS PER S301.1 & S303.1

ROCK ENERGY DISSIPATOR

DRAINAGE TO ACCOMMODATE 1 IN 5 YEAR ARI STORM

LEGEND

FILTRATION TRENCH PER S190.4



GRATED PIT PER S110.2/S120.1



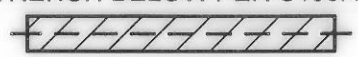
FALL ON PAVEMENT



CHECK DAMS OR DEPRESSIONS IF REQUIRED BY SLOPE PER S191.2



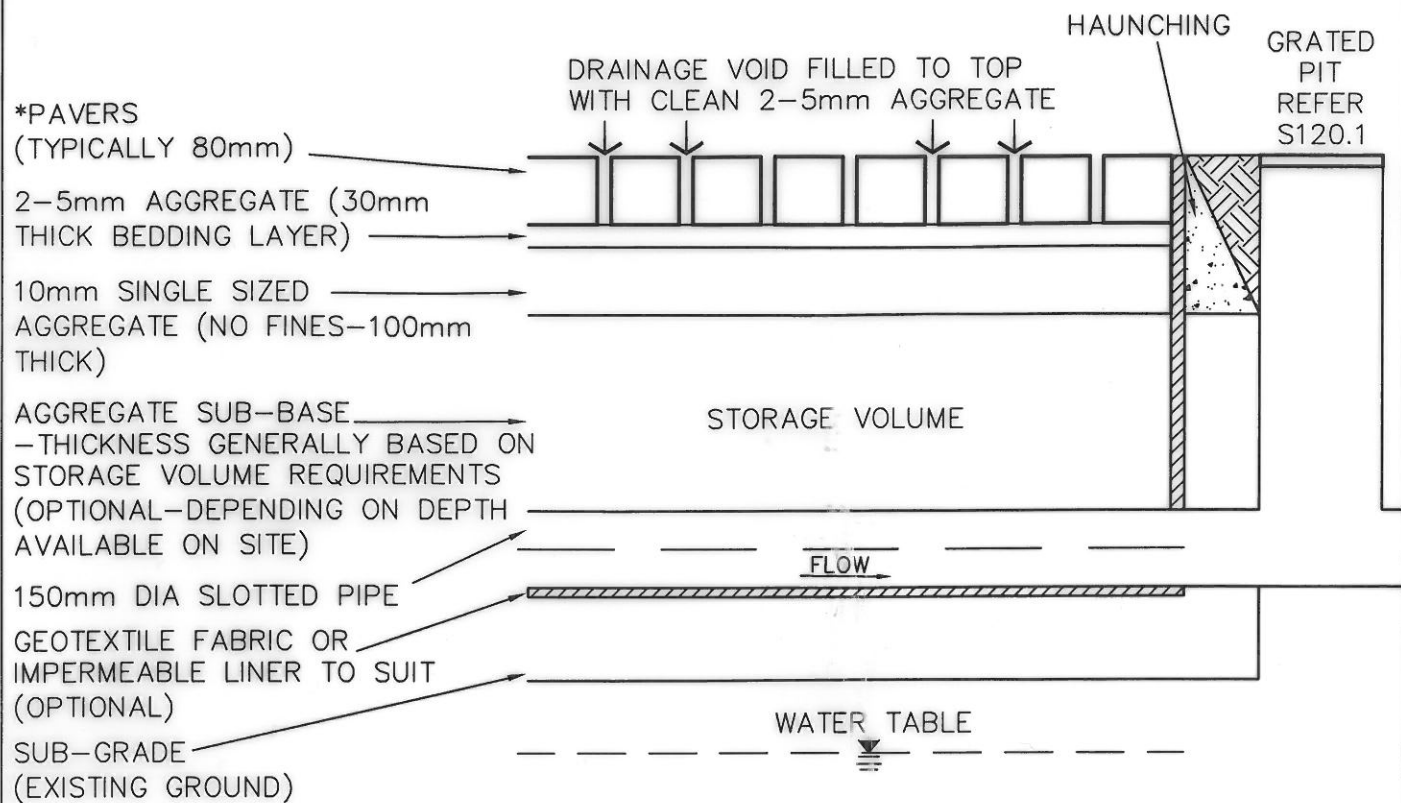
GRASS SWALE WITH FILTRATION TRENCH BELOW PER S190.4 & S191.1



KORB INLET PER S190.5 OR FLOW OVER PLINTH



CHECKED 	<h1>KNOX CITY COUNCIL</h1>	DATE 13-08-2013
APPROVED 	<h2>DRAINAGE CONTROL MEASURES MEDIAN DIVIDED ROADWAY</h2>	REVISION A
SCALE N.T.S.		CAD FILE NAME S195.6



*CHECK PRODUCT TYPE FOR PAVER THICKNESS & BASE REQUIREMENTS

NOTE

1. FOR NON-TRAFFICABLE PAVING USE
2. SOIL TYPES SHOULD ALWAYS BE CONSIDERED
3. WHERE THERE ARE EXISTING TREES. 10mm SINGLE SIZED AGGREGATE TO BE LAID AT OR ABOVE GRADE IN ROOT ZONE AREAS, NO STORAGE VOLUME OR SLOTTED PIPE REQUIRED. REFER TO LANDSCAPE GUIDELINES FOR URBAN PLANNING APPLICATION'S "TYPICAL DETAIL OF ABOVE GRADE PERMEABLE PAVING"

NOTE

ONE EXAMPLE OF A FREE SOFTWARE TO DESIGN THESE SYSTEMS IS :
 LOCKPAVE® – PERMPAVE® ARE SOFTWARE PACKAGES FOR CONCRETE SEGMENTAL & PERMEABLE PAVEMENTS DEVELOPED BY THE CONCRETE MASONRY ASSOCIATION OF AUSTRALIA – UNIVERSITY OF AUSTRALIA – FREE TO USE
 (FREE SOFTWARE TO DESIGN & TEST STRUCTURAL STABILITY OF SEGMENTAL & PERMEABLE PAVEMENTS)

CHECKED 	<h1 style="margin: 0;">KNOX CITY COUNCIL</h1>	DATE 13-08-2013
APPROVED 	<h2 style="margin: 0;">NON-TRAFFICABLE SEGMENTAL PAVEMENT</h2>	REVISION
SEAL N.T.S.		CAD FILE NAME S195.7