1) Change Physical Alternatives for all Scenarios to "100% Capture Inlets".

-Ope	n Scenario Manager.						
3	Drainage and Utilities 🔹 🔻 🔞 💌 🕯	- 🔶 🔂 🖬 🖬	i 🖈 📌 🚍 🗢		pw:\\r	cdot-pw.bentl	ey.com:ncdot-pw-0
File	Home Layout Analysis	Components	Utilities View T	ools	Report Draw	ing Productior	n Drawing
<b>%</b>	Energy Dissipator Basin * P_HYD_Ri 9 * 🙀 0 * 🕎 2 *	o_Rap_Energy_Dissit *	¢- Civil Analysis -	<b>°</b> Q ∎ ▼ ®:	Element Selection	Scenarios	Alternatives Options Co
-14	Attributes		🕂 Model Analysis	Primary	Selection	😤 Scen	ario Manager
e 💡	No Feature Definition	🖂 e <sup>g</sup> 🥖 🖯	📥 🗛 🖌 🗾 .		🛛 🕶 🔂	🕂 👫 Scen	ario Comparison 9

-One Scenario at a time, right-click on a Scenario and select Properties.

Scenarios		
Drainage		
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NCDOT Design (Chan	ges Pipe Sizes & Inverts) (Set R our Analysis (Doesn't Change Pi	ainfall Runoff County in Properties) pe Sizes & Inverts)
⊡-¥ NCDOT 10-yr Ar	Make Current Compute Validate New Properties Rename Delete	& Inverts) (Set Rainfall Runoff County in Properties)
	Report	]

-Drainage and Utilities Properties will open. Choose the Drainage tab. Left-click on "Physical" row to access dropdown menu. Set to "100% Capture Inlets".

Properties (no selection)	× ⇒
Litilities Drainage	
	~ 🔍 🕄 75% ~
1 Add to Selection	
<show all=""></show>	
	0
Property Search	
✓ <general></general>	
ID	698
Label	NCDOT Design (Changes Pipe Sizes & Inverts) (Set Rainfall Runoff County in Properties)
Notes	
✓ Alternatives	
Active Topology	Base Active Topology
User Data Extensions	Base User Data Extensions
Physical	100% Capture Inlets
Boundary Condition	<new></new>
Initial Settings	100% Capture Inlets
Hydrology	Catalog Inlets
Output	Base Output
Infiltration and Inflow	Base Infiltration and Inflow
Rainfall Runoff	NCDOT Alamance 10yr
Water Quality	Base Water Quality
Sanitary Loading	Base Sanitary Loading
Headloss	Base Headloss
Operational	Base Operational
Design	Base Design
System Flows	Base System Flows
SCADA	Base SCADA
Energy Cost	Base Energy Cost
Surface Definition	Base Surface Definition
<ul> <li>Calculation Options</li> </ul>	
Solver Calculation Ontions	NCDOT Desian

\*\*\*Repeat for all Scenarios.\*\*\*

2) Delete the "Catalog Inlets" Physical Alternative.

-Open Alternatives.											
Drainage and Utilities	• 🖉 • 💼 🖶 🔂 🔶 •	* 🖈 🗎	Ŧ		C:\User	s\Bill.Ela	m\OneDriv	ve - AECOM	Documents\CAD	D Support	KCA
File Home Layout	Analysis Components	Utilities V	iew Tools	Report	Drawing Production	on D	Drawing	Utilities	Collaborate	View	н
None *	Default ((none)) *	°Q ■ - 0:	Element Selection	Scenarios	Alternatives	Compute	<ul> <li>Valida</li> <li>Calcu</li> <li>Notifi</li> </ul>	ite ilation Summ ications	🖺 Engineer	ring Standar	ds
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I [				~ 🛱 🖁	₹ -						

-Open "Physical" by double-clicking or clicking on +. Right-click on Catalog Inlets and Delete.



3) Modify "parent" Physical Alternative.

-Right-click on "100% Capture" and Rename "NCDOT - see Notes for Instructions (right-click and open



In this step, instructions will be pasted into the physical alternative that was just renamed. The instructions are for users to follow each time they switch between the 4" / Hour scenario, and either the Pipe Design scenario or the Pipe Analysis scenario.

-Right-click on newly-renamed Alternative and open Properties. Click on "Notes" and left-click on "..." at far right of field to open Notes. Copy/paste the following into Notes pop-up box:

Click Notes and click "..." at far right to open. Copy/Paste or Screenshot these Notes to follow step-by-step. This pop-up and the Properties pop-up will need to be closed before Step 1.

1) Open/Reopen Alternatives; 2) Double-click new "NCDOT" Alternative to open; 3) Select Catch Basin tab at top; 4) Right-click Inlet Type column header; 5) Use Global Edit to change Value before running Scenario (if running 4inch / hour Spread Analysis Scenario > set "Value" to "Catalog Inlet". If running Pipe Design or Pipe Analysis Scenario > set "Value" to "Full Capture" OR "Percent Capture". If using "Percent Capture", use Global Edit to change Capture Efficiency (%) column "Value" to 100.)

User MUST global edit the inlet type under the Catch Basin tab to Full Capture or 100% Capture when running a Pipe Analysis or Pipe Design Scenario. User MUST global edit the inlet type under the Catch Basin tab to Catalog Inlet when running the 4in/hour Spread Analysis Scenario. The Full / 100% Capture inlets ensure all water that reaches each surface inlet is added to the flow in the pipe, resulting in a conservative pipe design. The Catalog Inlets activate calculations that determine the flow captured by the inlet v/s the bypass flow.

-Select OK to close Notes pop-up box.

4) Follow Instructions to change Inlet Type. The steps below are an illustration of the instructions just pasted into the Notes field in the step above.

-Close Properties and open/reopen Alternatives.

-Double-click newly-renamed "NCDOT" Alternative to open.

## -Select Catch Basin tab.

80 <b>- %</b> -	0																		
Conduit	Lateral	Channel	🛅 Gutter 🖉	Pressure Pipe 🔲 Ca	atch Basin 🔲 Manhole	Property Connec	tion © Tap © Tra	insition © Cros	s Section 🔲 Ou	fall Pond	Pond Outlet St	ucture 🛄 Hea	dwall © Pump	© WetWell	Pressure Juncti	on Pump Sta	ation S Variable	e Speed Pump Ba	ntery P Air Valve
	•	ID	Label	Inlet Type	Flow (Maximum in) (cfs)	Capture Efficiency (%)	Inlet	MicroStation 3D ID	MicroStation 2D ID	Set Out X (US Survey Ft)	Set Out Y (US Survey Ft)	Set Out Elevation (ft)	Inflow-Capture Curve	Inlet Location	Longitudinal Slope (Inlet) (ft/ft)	Manning's n (Inlet)	Curb Opening Length (ft)	Grate Length (ft)	Clogging Factor (%)
1047: 0503		1047	0503	Catalog Inlet			2GI Grate 840.20, 84	7501	7199	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.144</td><td>0.015</td><td></td><td>3.67</td><td>0.0</td></collection:<>	On Grade	0.144	0.015		3.67	0.0
1048: 0504		1048	0504	Catalog Inlet			2GI Grate 840.20, 84	8526	8497	0.00	(N/A)	(N/A)	<collection:< td=""><td>In Sag</td><td></td><td></td><td></td><td>3.67</td><td>0.0</td></collection:<>	In Sag				3.67	0.0
1049: 0505		1049	0505	Catalog Inlet			CB 840.03, F, G	10441	10053	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.026</td><td>0.015</td><td></td><td>3.00</td><td>0.0</td></collection:<>	On Grade	0.026	0.015		3.00	0.0
1052: 0508		1052	0508	Catalog Inlet			2GI Grate 840.20, 84	11581	11553	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.140</td><td>0.015</td><td></td><td>3.67</td><td>0.0</td></collection:<>	On Grade	0.140	0.015		3.67	0.0
1054: 0510		1054	0510	Catalog Inlet			CB 840.03, F, G	13933	13830	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.026</td><td>0.015</td><td></td><td>3.00</td><td>0.0</td></collection:<>	On Grade	0.026	0.015		3.00	0.0
1055: 0511		1055	0511	Catalog Inlet			CB 840.03, F, G	14066	13963	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.014</td><td>0.015</td><td></td><td>3.00</td><td>0.0</td></collection:<>	On Grade	0.014	0.015		3.00	0.0
1056: 0512		1056	0512	Catalog Inlet			CB 840.03, F, G	14186	14083	0.00	(N/A)	(N/A)	<collection:< td=""><td>On Grade</td><td>0.014</td><td>0.015</td><td></td><td>3.00</td><td>0.0</td></collection:<>	On Grade	0.014	0.015		3.00	0.0

lect Catch Basin tab at top; 3) Right-click Inlet Type column header; 4) Use Global Edit to change Value before running Scenario (Catalog Inlet for 4inch / hour; Full Capture for Design or Ana

(\*Tip - leave this window open to quickly change Inlet Type when switching between Scenarios)

-Right-click Inlet Type column header and select "Global Edit...".

🤊 Pressure Pipe 🛄	Cat	ch Basin 🛅 Manhole	Ø Prop					
Inlet Type		Flow (Maximum in)	Capture					
		Global Edit						
Catalog Inlet	41	Cort						
Catalog Inlet	-+	SOIL	•					
Catalog Inlet		Filter	•					
Catalog Inlet		Reapply Sort/Filter						
Catalog Inlet		Select Column						
Catalog Inlet	-	Select column						

-If running 4inch / hour Spread Analysis Scenario > set "Value" to "Catalog Inlet". If running Pipe Design or Pipe Analysis Scenario > set "Value" to "Full Capture" OR "Percent Capture". If using "Percent Capture", use Global Edit to change Capture Efficiency (%) column "Value" to 100.

Global Edit	×	Global Edit ×
Operation:     Set       Value:     Catalog Inlet       WHERE:     Full Capture Inflow-Capture Curve Maximum Capacity Percent Capture       OK     Cancel	^ v	Operation: Set  Value: 100 WHERE:  Ono filter active> OK Cancel

-Run Scenario.

\*\*\*Please note: Be sure to change Inlet Type \*before\* running a different Scenario.\*\*\*